GW - 28

WORK PLANS

2006

REFINING COMPANY, L.P.

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December 1, 2006

Mr. John E. Kieling
Program Manager
N. M. Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

CERTIFIED MAIL/RETURN RECEIPT
7002 2030 0001 8349 4056

RE: Navajo Refining's Groundwater Monitoring Work Plan

Dear Mr. Kieling,

Enclosed, please find the replacement pages for Navajo's Revised *Groundwater Monitoring Work Plan.* This is submitted with changes as outlined in your letter dated October 20, 2006.

If there are any questions, please call me at 505-748-3311.

Respectfully,
NAVAJO REFINING COMPANY

Jefferson L. Byrd
Sr. Environmental Specialist

Encl.

cc: D. Cobrain, NMED HWB
C. Frischkorn, NMED HWB
H. Monseglio, NMED HWB
W. Price, OCD

cc: DGM; H. Monseglio, NMED HWB

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TABLE OF CONTENTS

Definition of Acronyms

BTEX	Benzene, Toluene, Ethyl-benzene, and Xylenes
NCL	An area situated north of Tanks 834 and 838 and containing tank 815 known as the North Colony Landfarm.
TEL	An impoundment located north and east of a former Tetra-ethyl Lead Tank and current Alky unit.
VOA(s)	Volatile Organic Aromatic(s)
WQCC	Water Quality Control Commission

TABLE OF CONTENTS

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4.0. INVESTIGATION METHODS

4.1 WELL PURGING

All zones in each monitoring well shall be purged by removing groundwater prior to sampling in order to ensure that formation water is being sampled. Purge volumes shall be determined by monitoring, at a minimum, groundwater pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation-reduction potential during purging. The volume of groundwater purged, the instruments used and the readings obtained at each interval shall be recorded on the field monitoring log. The Permittee may submit, to the Secretary for approval, a written request for a variance from the described methods of well purging for individual wells not later than 30 days prior to scheduled sampling activities. The Secretary will respond to the request, in writing, within 60 days of receipt of the variance request.

4.2 GROUNDWATER SAMPLE COLLECTION

Groundwater samples shall be obtained from each well after at least three well volumes of water have been removed from the well casing to ensure that the sample is representative of formation water. Groundwater samples shall be obtained using the submersible pump used to purge the well once the field parameters have been collected and within 24 hours of the completion of well purging. Sample collection methods shall be documented in the field monitoring reports. The samples shall be transferred to the appropriate, clean, laboratory-prepared containers provided by the analytical laboratory. Sample handling and chain-of-custody procedures are described in Sections 4.4 and 4.5b below. Decontamination procedures shall be established for reusable water sampling equipment as described in Section 4.6.

All purged groundwater and decontamination water shall be temporarily stored at satellite accumulation areas or transfer stations in labeled 55-gallon drums or other containers approved by the Secretary until disposed into the refinery waste water collection and treatment system. To determine the purge volumes, the following equation shall be used:

$$v = (3.14 * r^2 * d) * 7.48$$

v – Purge Volume (gallons)
r – Radius of the well (feet)
d – Water column (feet)

Groundwater samples intended for metals analysis shall be submitted to the laboratory as total metals samples. Groundwater samples also may be obtained for dissolved metals analysis and shall be filtered using disposable in-line filters with a mesh size approved by the Secretary.

4.3 GROUNDWATER SAMPLE TYPES

Collection of field parameters will be collected using a YSI 556 Multi Probe System utilizing a flow through cell or similar machine. The field data will be noted after the well has been sufficiently purged and prior to collection of samples for laboratory analysis. All field instruments will be calibrated and prepared for use as outlined in the manufactures supplied owners manual.

Field duplicates, field blanks, equipment rinseate blanks, reagent blanks, if necessary, and trip blanks shall be obtained for quality assurance during groundwater and surface water sampling activities. The samples shall be handled as described in Section 4.4 below.

Field duplicate surface water and groundwater samples shall be obtained at a frequency of ten percent. At a minimum, one duplicate sample per sampling event shall always be obtained.

Field blanks shall be obtained at a minimum frequency of one per day per site or unit. Field blanks shall be generated by filling sample containers in the field with deionized water and submitting the samples with the groundwater samples to the analytical laboratory for the appropriate analyses.

Equipment rinseate blanks shall be obtained for chemical analysis at the rate of ten percent or a minimum of one rinseate blank per sampling day. Equipment rinseate blanks shall be collected at a rate of one per sampling day if disposable sampling apparatus is used. Rinseate samples shall be generated by rinsing deionized water through unused or decontaminated sampling equipment and submitted with the groundwater samples to the analytical laboratory for the appropriate analyses.

Reagent blanks shall be obtained at a frequency of twenty percent or a minimum of one per day per unit if chemical analyses requiring the use of chemical reagents are conducted in the field during water sampling activities.

Trip blanks shall accompany laboratory sample bottles and shipping and storage containers intended for VOC analyses. Trip blanks shall consist of a sample of analyte-free deionized water prepared by the laboratory and placed in an appropriate sample container. The trip blank shall be prepared by the analytical laboratory prior to the sampling event and shall be kept with the shipping containers and placed with other water samples obtained from the site each day. Trip blanks shall be analyzed at a frequency of one for each shipping container of samples.

4.4 SAMPLE HANDLING

At a minimum, the following procedures shall be used at all times when collecting samples during monitoring activities.

1. Neoprene, nitrile or other protective gloves shall be worn when collecting samples. New disposable gloves shall be used to collect each sample.
2. All samples collected of each media for chemical analysis shall be transferred into clean sample containers supplied by the project analytical laboratory. Sample container volumes and preservation methods shall be in accordance with EPA SW-846 and established industry practices for use by accredited analytical laboratories. Sufficient sample volume shall be obtained for the laboratory to complete the method-specific QC analyses on a laboratory-batch basis.
3. Sample labels and documentation shall be completed for each sample. Immediately after the samples are collected, they shall be stored in a cooler with ice or other appropriate storage method until they are delivered to the analytical laboratory. Standard chain-of-custody procedures, as described in Section 4.5.b below, shall be followed for all samples collected. All samples shall be submitted to the laboratory soon enough to allow the laboratory to conduct the analyses within the method holding times. At a minimum, all samples shall be submitted to the laboratory within 48 hours after their collection.

4.5 DOCUMENTATION of FIELD ACTIVITIES

4.5.a General

Daily field activities, including observations and field procedures, shall be recorded on appropriate forms. The original field forms shall be maintained at the Facility. Copies of the completed forms shall be maintained in a bound and sequentially numbered field file for reference during field activities. Indelible ink shall be used to record all field activities. Photographic documentation of field activities shall be performed, as appropriate. The daily record of field activities shall include the following:

1. Site or unit designation.
2. Date.
3. Time of arrival and departure.
4. Field investigation team members including subcontractors and visitors.
5. Weather conditions.
6. Daily activities and times conducted.
7. Observations.
8. Record of samples collected with sample designations and locations specified.
9. Photographic log.
10. Field monitoring data, including health and safety monitoring.
11. Equipment used and calibration records, if appropriate.
12. List of additional data sheets and maps completed.
13. An inventory of the waste generated and the method of storage or disposal.
14. Signature of personnel completing the field record.

4.5.b Sample Custody

All samples collected for analysis shall be recorded in the field report or data sheets. Chain-of-custody forms shall be completed at the end of each sampling day, prior to the transfer of samples off site, and shall accompany the samples during shipment to the laboratory. A signed and dated custody seal shall be affixed to the lid of the shipping container. Upon receipt of the samples at the laboratory, the custody seals will be broken, the chain-of-custody form shall be signed as received by the laboratory and the conditions of the samples shall be recorded on the form. The original chain-of-custody form shall remain with the laboratory and copies shall be returned to the relinquishing party. Navajo shall maintain copies of all chain-of-custody forms generated as part of sampling activities. Copies of the chain-of-custody records shall be included with all draft and final laboratory reports submitted to NMED/OCD for review.

Shipment procedures will include the following:

1. Individual sample containers shall be packed to prevent breakage and transported in a sealed cooler with ice or other suitable coolant or other EPA or industry-wide accepted method. The drainage hole at the bottom of the cooler shall be sealed and secured in case of sample container leakage. Temperature blanks shall be included with each shipping container.
2. Each cooler or other container shall be delivered directly to the analytical laboratory.
3. Glass bottles shall be separated in the shipping container by cushioning material to prevent breakage.
4. Plastic containers shall be protected from possible puncture during shipping using cushioning material.
5. The chain-of-custody form and sample request form shall be shipped inside the sealed storage container to be delivered to the laboratory.
6. Chain-of-custody seals shall be used to seal the sample shipping container in conformance with EPA protocol.
7. Signed and dated chain-of-custody seals shall be applied to each cooler prior to transport of samples from the site.

4.6 DECONTAMINATION PROCEDURES

The objective of the decontamination procedures is to minimize the potential for cross-contamination. A designated decontamination area shall be established for decontamination of drilling equipment, reusable sampling equipment and well materials. The drilling rig shall be decontaminated prior to entering the site or unit. Drilling equipment or other exploration equipment that may come in contact with the borehole shall be decontaminated by steam cleaning, by hot-water pressure washing or by other method approved by the Secretary prior to advancing each new exploratory boring of excavation.

Sampling or measurement equipment, including but not limited to, stainless steel sampling tools, split-barrel or core samplers, well developing or purging equipment, groundwater quality measurement instruments and water level measurement instruments,

shall be decontaminated in accordance with the following procedures or other methods approved by the Secretary before each sampling attempt or measurement.

1. Brush equipment with a wire or other suitable brush, if necessary or practicable, to remove large particulate matter.

2. Rinse with potable tap water.
3. Wash with nonphosphate detergent or other detergent approved by the Secretary (examples include Liquinox,™ Alconox™ or Fantastik™) followed by a tap water rinse.

4. Rinse with potable tap water.

5. Double rinse with deionized or Reverse Osmosis water

All decontamination solutions shall be collected and stored temporarily as described in Section 4.2. Decontamination procedures and the cleaning agents used shall be documented in the daily field log.

5.0 MONITORING AND SAMPLING PROGRAM AND SCHEDULES

Table-1 showing previous sampling results available are provided in ATTACHMENT I. A map of the refinery (Figure 1) is provided in ATTACHMENT II. Navajo will conduct two groundwater monitoring events each year. These will be referred to as the "Annual" and "Semi-Annual" events. Table 1 shows the wells, when they will be sampled, field parameters, analytes to be sampled for from each well, and a description of the wells approximate location.

5.1 Blanks

The analytical results of field blanks and field rinseate blanks shall be reviewed to evaluate the adequacy of the field handling and equipment decontamination procedures and the possibility of cross-contamination caused by decontamination of sampling equipment. The analytical results of trip blanks shall be reviewed to evaluate the possibility for contamination caused by the analytical procedures. If contaminants are detected in field or laboratory blanks, the sample data shall be qualified, as appropriate.

5.2 Field Duplicates

Field duplicates shall consist of two samples either split from the same sample device or collected sequentially. Field duplicate samples shall be collected at a minimum frequency of ten percent of the total number of samples submitted for analysis. Relative percent differences for field duplicates shall be calculated. A precision of not less than 80 percent for duplicates shall be considered acceptable for soil sampling conducted at the Facility.

5.3 Method Reporting Limits

Method reporting limits for sample analyses for each media shall be established at the lowest level practicable for the method and analyte concentrations and shall not exceed soil, groundwater or vapor emissions background levels, cleanup standards and screening levels. Detection limits that exceed established soil, groundwater or air emissions cleanup standards, screening levels or background levels and are reported as "not detected" shall be considered data quality exceptions and an explanation for the exceedance and its acceptability for use shall be provided.

5.4 Holding Times

The sampling, extraction, and analysis dates shall be reviewed to confirm that extraction and analyses were completed within the recommended holding times as specified by EPA protocol. Appropriate data qualifiers shall be noted if holding times are exceeded.

5.5 Laboratory Reporting, Documentation, Data Reduction and Corrective Action

Upon receipt of each laboratory data package, data shall be evaluated against the criteria outlined in the previous sections. Any deviation from the established criteria shall be noted, and the data will be qualified, as appropriate. A full review and discussion of analytical data QA/QC and all data qualifiers shall be submitted as appendices or attachments to reports prepared in accordance with Appendix E of this Permit. Data validation procedures for all samples shall include checking the following, when appropriate:

1. Holding times,
2. Detection limits,
3. Field equipment rinseate blanks,
4. Field blanks,
5. Field Duplicates,
6. Trip blanks,
7. Reagent blanks,
8. Laboratory duplicates,
9. Laboratory blanks,
10. Laboratory matrix spikes,
11. Laboratory matrix spike, duplicates,
12. Laboratory blank spikes.
13. Laboratory blank spike duplicates, and
14. Surrogate recoveries.

If significant quality assurance problems are encountered, corrective action shall be implemented as appropriate. All corrective action shall be defensible, and the corrected data shall be qualified.

NAVAJO REFINING COMPANY, L.P.

2006 OCT 4 PM 2 05

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October 2, 2006

Mr. James P. Bearzi, Chief
N. M. Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

COPY

RE: Response to Letter Dated August 17, 2006: NOTICE OF DEFICIENCY GROUNDWATER MONITORING WORK PLAN
NAVAJO REFINING COMPANY, ARTESIA REFINERY
EPA ID No. NMD048918817
HWB-NRC-05-001

Dear Mr. Bearzi,

Enclosed, please find Navajo Refining's Revised *Groundwater Monitoring Work Plan.* This is submitted with changes as outlined in your letter dated August 17, 2006.

Comment 1 through Comment 9 were addressed within the Work Plan in their respective sections, with the exception of Comment 9a. Navajo will be submitting all available boring logs at a later date so as to include the wells that are currently being completed.

If there are any questions, please call me at 505-748-3311.

Respectfully,
NAVAJO REFINING COMPANY

Jefferson L. Byrd
Sr. Environmental Specialist

Attachment

cc. Hope Monzeglio, NMED; Wayne Price OCD; JER, DGM, DEW,

GROUNDWATER MONITORING WORK PLAN

For

NAVAJO REFINING COMPANY, L. P.
ARTESIA, NEW MEXICO

OCTOBER 2, 2006

Prepared for:

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Jefferson L. Byrd
Sr. Environmental Specialist

Darrell G. Moore
Project Manager, Water & Waste

TABLE OF CONTENTS

1.0 INTRODUCTION

This document is a Groundwater Monitoring Work Plan for the Navajo Refining's (Navajo) Artesia, New Mexico refinery. Navajo, and previous owners, have been in operation as a petroleum refinery at this location since the 1930's. Over the years, a series of onsite groundwater monitoring wells and oil recovery trenches have been installed throughout the facility. Also, quite a few wells and trenches have been installed in various locations on down and cross gradient off site property owners. This facility has a number of agricultural based businesses located next to the refinery. As a result, there are nine irrigation wells that are completed through the upper level affected vadose zone.

There are four specific Areas Of Concern (AOC). 1). The NCL landfill located on the northwest corner of the facility was previously used a landfarm for oil contaminated soils. This landfarm has not been in use since the early 1990's. 2). The TEL impoundment was a disposal pit that was capped in the mid 1980's. 3). The waste water Evaporation Ponds and associated ditch, which are located approximately three miles east of the refinery near the Pecos River. These ponds where taken out of service in 1998. 4) The impacted vados zone which exists starting at the Refinery and extending east along the direction of flow. There are a number of wells associated with each of these AOC.

The purpose of this Work Plan is to establish a program for conducting groundwater monitoring and sampling across the AOC.

2.0 BACKGROUND

Navajo has been conducting groundwater monitoring at the site within various groundwater monitoring programs. Up until the last half of 2003, groundwater monitoring was completed through four main sampling events: offsite wells sampled quarterly; irrigation wells sampled monthly during the growing season; AOC NCL/TEL impoundments sampled quarterly; and the evaporation ponds sampled quarterly. These samples were all analyzed for select VOA's only and pH, temperature, and specific conductivity collected in the field.

As per the New Mexico Oil Conservation Division Discharge Permit GW-028, dated April 17, 2003, groundwater sampling was separated into five separate events: irrigation wells sampled monthly; evaporation ponds with two sets of wells sampled every other year; AOC NCL/TEL sampled quarterly; select monitoring wells sampled semi-annually; and other select wells sampled annually. These sampling events have analysis covering BTEX/MTBE, select VOA's, select semi-VOA's, WQCC metals including major anions and cations, general chemistry and additional field parameters oxidation-reduction potential, and dissolved oxygen.

All of these sampling programs have been suspended indefinitely and incorporated into this one work plan.

The vadose zone is impacted with dissolved phase hydrocarbons across the refinery property and extending east along highway 82 for approximately one-half to one mile. The areas with phase separated hydrocarbons (PSHs) exists along this corridor and extends less than two hundred yards beyond Bolten Road as they are not found in monitoring well KWB-7. There is a separate impacted area that exists along three mile ditch and the former waste water evaporation ponds.

3.0 SITE CONDITIONS

3.1 Topography

The Navajo Refinery facility is located on the east side of the City of Artesia in the broad Pecos River Valley of Eastern New Mexico. The average elevation of the city is 3,380 feet above mean sea level. The plain, on which Artesia is located, slopes eastward at about 30 feet per mile. Surface drainage is dominated by small ephemeral creeks and arroyos that flow eastward to the Pecos River, located three miles east of the city.

Natural surface drainage at the facility is to the north and east. The major drainage in the immediate area of the site is Eagle Draw, an ephemeral watercourse normally flowing only following rain events, that runs southwest to northeast through the process area of the refinery and then eastward to the Pecos River. Upstream of the refinery, Eagle Draw functions as a major stormwater conveyance for the community. It also drains outlying areas west of the city and is periodically scoured by intense rain events.

The elevation of Eagle Draw is 3,360 feet at its entrance to the refinery and decreases to approximately 3,305 feet at its confluence with the Pecos River. A large portion of the refinery is within the 100-year floodplain of Eagle Draw. However, Eagle Draw has been channelized from west of Artesia to the Pecos River to help control and minimize flood events. In the vicinity of the refinery, the Eagle Draw channel has been cemented to provide further protection during flood events. A check dam was also constructed west of Artesia along Eagle Draw. At this time most of the city and the refinery have been effectively removed from the floodplain.

3.2 Climate

The Artesia New Mexico area has a semi=arid continental climate, characterized by hot summers and mild winters. Rainfall occurs on average 42 days per year, and annual snowfall averages 3 – 8 inches to yield an average annual precipitation of 10 – 14 inches, with 80% falling from May through October. Lake evaporation in the Eddy County area is 66 – 72 inches per year, of which two-thirds also takes place from may through October. Thus the net loss from evaporation ranges from 52 – 62 inches per year. Minimum temperatures are typically 44 - 49°F, but can fall below 0°F in winter and can exceed 100° in summer. The frost free season is generally April to October.

3.3 Soils

Soils at the refinery are primarily of the Pima and Karro series. Soils characterized for permitting the North Colony Landfarm were about 60% Pima and 40% Karro soils. The Pima and Karro soils have similar properties. Pima soils are deep, well drained, dark colored, calcareous soils, which occur on floodplains of narrow drainage ways (e.g. – Eagle Draw). These soils have moderate shrink-swell potential and were subject to periodic flooding. Runoff from Pima soils is slow, permeability is moderately low and

the water-holding capacity is high. The effective rooting depth is greater than five feet and the water table is deeper than five feet.

The Karro soils are highly calcareous. Calcium carbonate typically accumulates as caliche at a depth of about 45 inches. These soils are found on level to gently sloping terrains and are susceptible to wind erosion. Runoff is slow and water-holding capacity is high. Permeability is moderate and the effective rooting depth and depth to groundwater are both over five feet.

4.0. INVESTIGATION METHODS

4.1 WELL PURGING

All zones in each monitoring well shall be purged by removing groundwater prior to sampling in order to ensure that formation water is being sampled. Purge volumes shall be determined by monitoring, at a minimum, groundwater pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation-reduction potential during purging. The volume of groundwater purged, the instruments used and the readings obtained at each interval shall be recorded on the field monitoring log. The Permittee may submit, to the Secretary for approval, a written request for a variance from the described methods of well purging for individual wells not later than 30 days prior to scheduled sampling activities. The Secretary will respond to the request, in writing, within 60 days of receipt of the variance request.

4.2 GROUNDWATER SAMPLE COLLECTION

Groundwater samples shall be obtained from each well after a sufficient amount of water has been removed from the well casing to ensure that the sample is representative of formation water. Groundwater samples shall be obtained using methods approved by the Secretary within 24 hours of the completion of well purging. Sample collection methods shall be documented in the field monitoring reports. The samples shall be transferred to the appropriate, clean, laboratory-prepared containers provided by the analytical laboratory. Sample handling and chain-of-custody procedures are described in Sections 4.4 and 4.5b below. Decontamination procedures shall be established for reusable water sampling equipment as described in Section 4.6.

All purged groundwater and decontamination water shall be temporarily stored at satellite accumulation areas or transfer stations in labeled 55-gallon drums or other containers approved by the Secretary until disposed into the refinery waste water collection and treatment system.

Groundwater samples intended for metals analysis shall be submitted to the laboratory as total metals samples. Groundwater samples also may be obtained for dissolved metals analysis and shall be filtered using disposable in-line filters with a mesh size approved by the Secretary.

4.3 GROUNDWATER SAMPLE TYPES

Collection of field parameters will be collected using a YSI 556 Multi Probe System utilizing a flow through cell or similar machine. The field data will be noted after the well has been sufficiently purged and prior to collection of samples for laboratory analysis.

Field duplicates, field blanks, equipment rinseate blanks, reagent blanks, if necessary, and trip blanks shall be obtained for quality assurance during groundwater and surface water sampling activities. The samples shall be handled as described in Section C.2.j below.

Field duplicate surface water and groundwater samples shall be obtained at a frequency of ten percent. At a minimum, one duplicate sample per sampling event shall always be obtained.

Field blanks shall be obtained at a minimum frequency of one per day per site or unit. Field blanks shall be generated by filling sample containers in the field with deionized water and submitting the samples with the groundwater samples to the analytical laboratory for the appropriate analyses.

Equipment rinseate blanks shall be obtained for chemical analysis at the rate of ten percent or a minimum of one rinseate blank per sampling day. Equipment rinseate blanks shall be collected at a rate of one per sampling day if disposable sampling apparatus is used. Rinseate samples shall be generated by rinsing deionized water through unused or decontaminated sampling equipment and submitted with the groundwater samples to the analytical laboratory for the appropriate analyses.

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Trip blanks shall accompany laboratory sample bottles and shipping and storage containers intended for VOC analyses. Trip blanks shall consist of a sample of analyte-free deionized water prepared by the laboratory and placed in an appropriate sample container. The trip blank shall be prepared by the analytical laboratory prior to the sampling event and shall be kept with the shipping containers and placed with other water samples obtained from the site each day. Trip blanks shall be analyzed at a frequency of one for each shipping container of samples.

4.4 SAMPLE HANDLING

At a minimum, the following procedures shall be used at all times when collecting samples during monitoring activities.

1. Neoprene, nitrile or other protective gloves shall be worn when collecting samples. New disposable gloves shall be used to collect each sample.
2. All samples collected of each media for chemical analysis shall be transferred into clean sample containers supplied by the project analytical laboratory. Sample container volumes and preservation methods shall be in accordance with EPA SW-846 and established industry practices for use by accredited analytical laboratories. Sufficient sample volume shall be obtained for the laboratory to complete the method-specific QC analyses on a laboratory-batch basis.

3. Sample labels and documentation shall be completed for each sample. Immediately after the samples are collected, they shall be stored in a cooler with ice or other appropriate storage method until they are delivered to the analytical laboratory. Standard chain-of-custody procedures, as described in Section 4.5.b below, shall be followed for all samples collected. All samples shall be submitted to the laboratory soon enough to allow the laboratory to conduct the analyses within the method holding times. At a minimum, all samples shall be submitted to the laboratory within 48 hours after their collection.

4.5 DOCUMENTATION of FIELD ACTIVITIES

4.5.a General

Daily field activities, including observations and field procedures, shall be recorded on appropriate forms. The original field forms shall be maintained at the Facility. Copies of the completed forms shall be maintained in a bound and sequentially numbered field file for reference during field activities. Indelible ink shall be used to record all field activities. Photographic documentation of field activities shall be performed, as appropriate. The daily record of field activities shall include the following:

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5. Weather conditions.
6. Daily activities and times conducted.
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9. Photographic log.
10. Field monitoring data, including health and safety monitoring.
11. Equipment used and calibration records, if appropriate.
12. List of additional data sheets and maps completed.
13. An inventory of the waste generated and the method of storage or disposal.
14. Signature of personnel completing the field record.

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All samples collected for analysis shall be recorded in the field report or data sheets. Chain-of-custody forms shall be completed at the end of each sampling day, prior to the transfer of samples off site, and shall accompany the samples during shipment to the laboratory. A signed and dated custody seal shall be affixed to the lid of the shipping container. Upon receipt of the samples at the laboratory, the custody seals will be broken, the chain-of-custody form shall be signed as received by the laboratory and the conditions of the samples shall be recorded on the form. The original chain-of-custody form shall remain with the laboratory and copies shall be returned to the relinquishing party. Navajo shall maintain copies of all chain-of-custody forms generated as part of

sampling activities. Copies of the chain-of-custody records shall be included with all draft and final laboratory reports submitted to NMED/OCD for review.

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All decontamination solutions shall be collected and stored temporarily as described in Section 4.2. Decontamination procedures and the cleaning agents used shall be documented in the daily field log.

5.0 MONITORING AND SAMPLING PROGRAM AND SCHEDULES

Table-1 showing previous sampling results available are provided in ATTACHMENT I. A map of the refinery (Figure 1) is provided in ATTACHMENT II. Navajo will conduct two groundwater monitoring events each year. These will be referred to as the "Annual" and "Semi-Annual" events. Table 1 shows the wells, when they will be sampled, field parameters, analytes to be sampled for from each well, and a description of the wells approximate location.

5.1 Blanks

The analytical results of field blanks and field rinseate blanks shall be reviewed to evaluate the adequacy of the field handling and equipment decontamination procedures and the possibility of cross-contamination caused by decontamination of sampling equipment. The analytical results of trip blanks shall be reviewed to evaluate the possibility for contamination caused by the analytical procedures. If contaminants are detected in field or laboratory blanks, the sample data shall be qualified, as appropriate.

5.2 Field Duplicates

Field duplicates shall consist of two samples either split from the same sample device or collected sequentially. Field duplicate samples shall be collected at a minimum frequency of ten percent of the total number of samples submitted for analysis. RPDs for field duplicates shall be calculated. A precision of not less than 80 percent for duplicates shall be considered acceptable for soil sampling conducted at the Facility. The analytical DQO for precision shall be used for water duplicates.

5.3 Method Reporting Limits

Method reporting limits for sample analyses for each media shall be established at the lowest level practicable for the method and analyte concentrations and shall not exceed soil, groundwater or vapor emissions background levels, cleanup standards and screening levels. Detection limits that exceed established soil, groundwater or air emissions cleanup standards, screening levels or background levels and are reported as "not detected" shall be considered data quality exceptions and an explanation for the exceedance and its acceptability for use shall be provided.

5.4 Holding Times

The sampling, extraction, and analysis dates shall be reviewed to confirm that extraction and analyses were completed within the recommended holding times as specified by EPA protocol. Appropriate data qualifiers shall be noted if holding times are exceeded.

5.5 Laboratory Reporting, Documentation, Data Reduction and Corrective Action

Upon receipt of each laboratory data package, data shall be evaluated against the criteria outlined in the previous sections. Any deviation from the established criteria shall be noted, and the data will be qualified, as appropriate. A full review and discussion of analytical data QA/QC and all data qualifiers shall be submitted as appendices or attachments to reports prepared in accordance with Appendix E of this Permit. Data validation procedures for all samples shall include checking the following, when appropriate:

1. Holding times,
2. Detection limits,
3. Field equipment rinseate blanks,
4. Field blanks,
5. Field Duplicates,
6. Trip blanks,
7. Reagent blanks,
8. Laboratory duplicates,
9. Laboratory blanks,
10. Laboratory matrix spikes,
11. Laboratory matrix spike, duplicates,
12. Laboratory blank spikes.
13. Laboratory blank spike duplicates, and
14. Surrogate recoveries.

If significant quality assurance problems are encountered, corrective action shall be implemented as appropriate. All corrective action shall be defensible, and the corrected data shall be qualified.

Table 1
Navajo Refinery Company Monitoring Schedule

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
MW-1R	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	W. of the EPs
MW-2A[1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	W. of the EPs
MW-3[1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EP 1 & 2
MW-4A[1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EP 1 & 2
MW-5A[1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EP 2
MW-6A[1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EP 1
MW-7A[1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EP 3 Rp't of MW-7

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Navajo Refining Company, L. P.
Table 1 September 21, 2006

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
MW-8	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	TMD, S. of E. draw btw B and H Rd
MW-10 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EPs
MW-11A [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82 btw B & H Rd
MW-15 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	W. of EP 1
MW-16	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of H Rd and S. of E draw
MW-18 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	N. Portion of Refinery E. of the NCL
MW-18A [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EPs
MW-20	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of B. Rd, S. of E. draw

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
MW-21	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of E. draw, btw B & H Rd.
MW-22A [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EPs
MW-23	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	W. of TEL
MW-25	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EP, W. of Pecos River, E. of H Rd.
MW-26	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of EP, W. of Pecos River, E. of H Rd.
MW-27	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of H Rd and S. of E. draw
MW-28	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of the SE. Tank Farm Area
MW-29	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	In refinery N. of TEL

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
MW-39	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of the TEL
MW-41	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of the TEL
MW-42	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of the TEL
MW-43	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. of the TEL
MW-45 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of Refinery, S. of E draw
MW-46	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of Refinery, S. of E draw
MW-48	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of SE Tank farm Area
MW-49 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO, GRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of Refinery, midpoint btw E. draw and U.S. Hwy 82

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3]= Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Navajo Refining Company, L. P.
Table 1 September 21, 2006

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
MW-50	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	W. of Refinery, E. of U.S. Hwy 285 and N. of U.S. Hwy 82
MW-52	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of the Refinery, S. of U.S Hwy 82
MW-53 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	W. of Refinery btw U.S. Hwy 285 and RR tracks
MW-54A [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. of NCL
MW-55 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of NCL
MW-56 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE of the Refinery
MW-58	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of U.S. Hwy 82 and W. of B Rd

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
MW-61 [5]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	SW of TEL
MW-62 [5]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	SW of TEL
MW-63 [5]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	SW of TEL
MW-64 [5]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	In Refinery area, N. of U.S. HWY 82
MW-65 [5]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of the SE Tank Farm Area
MW-66 [5]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of the SE Tank Farm Area
MW-67 [5]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of the Diesel Tank Farm Area
MW-68	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of E draw, btw D and H Rd.

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
MW-70 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of Eps; Renamed from MW-19
KWB-1A	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of E draw, W. of B Rd.
KWB-1C	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), RCRA metals, major cations & anions, nitrates/nitrites	S. of E draw, W. of B Rd.
KWB-P2	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of D Rd, N. of U.E. Hwy 82
KWB-2R	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of U.S. Hwy 82 on G.G. Armstrong & Son
KWB-3R	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	Replacement well for KWB-3A. S. of U.S. Hwy 82 btw B & D Rd.
KWB-4	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82, W. of B Rd.

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
KWB-5	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82, W. of B Rd.
KWB-6	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82, W. of B Rd.
KWB-7	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82 btw B & D Rd
KWB-8	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82 btw B & D Rd.
KWB-9	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of U.S. Hwy 82, E. of B Rd.
KWB-10	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of Refinery, S. of E. draw, N. of U.S. Hwy 82
KWB-11A	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82 btw B & D Rd

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
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Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
KWB-12A	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of U.S. Hwy 82, E. of B Rd.
KWB-13	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of U.S. Hwy 82, W. of B Rd
NP-1	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs)	S. of E. draw, W. of B Rd.
NP-2	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs)	Directly E. of B Rd., S. of E draw
NP-3	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	Directly N. of E. draw, NE. of B Rd.
NP-5	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of Richey Rd, N. of E. Draw, W. of B Rd.
NP-6	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of E. draw, W. of B Rd.

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
NP-7	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of E draw, btw D & H Rd.
NP-9	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	S. of Richey Rd, N. of E. Draw, W. of B Rd.
OCD-1 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. of EP 6
OCD-2A [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	N. of EP 6
OCD-3 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE. of EP 6
OCD-4 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE. of EP 6
OCD-5 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE of EP-6
OCD-6 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	E. of EP-6

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
OCD-7A [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	SE. of EP-6 Replacement well for OCD-7AR
OCD-8A [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	SE. of EP 3
NCL-32 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. Portion of the Refinery
NCL-33 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. Portion of the Refinery
NCL-34 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. Portion of the Refinery
NCL-44 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. Portion of the Refinery
NCL-49 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (DRO), RCRA metals, major cations & anions, nitrates/nitrites	NW. Portion of the Refinery
TEL-1 [1]	Semi – annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE. Portion of the Refinery

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
[4] = Annual groundwater monitoring event must be conducted in the spring.
[5] = New monitoring wells installed during the SWMU/AOC Group 1 Corrective Action Investigation

Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Navajo Refining Company, L. P.
Table 1 September 21, 2006

Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
TEL-2 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE. Portion of the Refinery
TEL-3 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE. Portion of the Refinery
TEL-4 [1]	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), EPA Method 8015B (GRO, DRO), RCRA metals, major cations & anions, nitrates/nitrites	NE. Portion of the Refinery
RW-1 [2]	Annual [4] (Spring of each year)	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), RCRA metals, major cations & anions, nitrates/nitrites	[3] North Portion of the Refinery
RW-18 [2]	Annual [4] (Spring of each year	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), RCRA metals, major cations & anions, nitrates/nitrites	[3] S. of E draw & W. of B Rd.
RA 313	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82, W. of B Rd.
RA 314	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82, W. of B Rd.
RA 3723	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82, W. of B Rd.

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
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Monitoring Well ID	Sampling Frequency	Water Quality Parameters	Analytical Suite	Approximate Well location
RA 3156	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	S. of U.S. Hwy 82 and E. of B Rd.
RA 3353	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	S. of U.S. Hwy 82 and E. of B Rd
RA 4196	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	N. of U.S. Hwy 82 and E. of B Rd
RA 4798	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	E. of B Rd, N. of U. S. Hwy 82
Larue well	Semi - annual [3]	pH, Cond, Temp, ORP, DO	EPA Method 8260 (VOCs), major cations & anions, nitrates/nitrites	

The Analyte list for EPA Method 8260 must include MTBE

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Note: All Recovery Trenches and all wells with phase-separated hydrocarbons (PSH's) must be checked at a minimum of once per month and recorded on a spreadsheet. The data must be presented in table form containing all of the recovery wells, date inspected, product thickness measured to .01 of a foot, and amount of product/water recovered. If product is observed in a monitoring well, recovery well or trench, then appropriate steps must be taken to recover product using the best available technology. This information must be provided in the annual groundwater report.

Table date: June 28, 2006.

N = North; S = South; E = East; W = West; NE = Northeast; NW = Northwest; SW = Southwest; SE = Southeast; Btw = between

B Rd = Bolton Road; H Rd = Haldeman Road; D Rd = Dirt Road; Hwy = highway;

EP = Evaporation Ponds; TMD = Three Mile Ditch; E. draw = Eagle Draw;

NCL = North Colony Landfarm; TEL = Tetra Ethyl Lead Impoundment

DO = dissolved oxygen; ORP = oxygen reduction potential; temp = temperature; Cond = specific conductivity

VOCs – volatile organic compounds; SVOCs – semi volatile organic compounds; DRO – diesel range organics,

BTEX – benzene, toluene, ethylbenzene, xylene; MTBE – Methyl Tertiary-Butyl Ether

The Analyte list for EPA Method 8260 must include MTBE

[1]= Wells requiring monitoring under the RCRA Post Closure Permit.
[2]= Recovery Wells must be sampled if they do not contain measurable phase-separated hydrocarbons.
[3] = Semi-Annual groundwater monitoring event must be completed no more than 30 days prior to the start of the irrigation season but no later than April 30 of each year and no later than 30 days after the conclusion of the irrigation season or November 15 of each year
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6.0 Reporting

An annual report will be submitted by February 28th of each year. The annual report will contain:

i. A description of the monitoring and remediation activities which occurred during the year including conclusions and recommendations.

ii. Summary tables listing past and present laboratory analytic results of all water quality sampling for each monitoring point and plots of concentration vs. time for contaminants of concern (Benzene, Toluene, Eythelbenzene, and Xylens where applicable) from each monitoring point. Any WQCC constituent found to exceed the groundwater standard shall be highlighted and noted in the annual report. Copies of the reporting years laboratory analytical data sheets will also be attached and submitted.

iii. An annual water table portentiometric elevation map using the water table elevation of the ground water in all refinery monitor wells will be generated for each sampling event. A corrected water table elevation shall be determined for all wells containing phase-separated hydrocarbons. This map shall show well locations, pertinent site features, and the direction and magnitude of the hydraulic gradient.

iv. A product thickness map based on the thickness of free phase product gauged on the groundwater in all measured monitoring wells and recovery trenches will be presented if applicable. This map shall include isopleths lines for the products and contaminants of concern.

v. The volume of product recovered in the remediation/treatment system during each quarter and the total recovered to date.

vi. The volume of total fluids pumped from all recovery wells and trenches during each quarter and the total volume recovered to date.

ATTACHMENT I

TABLE AI
Navajo Refinery Company
Previous Monitoring Results

TABLE A1
PREVIOUS ANNUAL and SEMI-ANNUAL ANALYSIS RESULTS

		METALS (mg/l))				VOLATILES (µg/l)				ANIONS (mg/L)	
	Date	Boron	Iron	Lead	Manganese	Benzene	Ethylbenzene	Xylenes	Toluene	Chloride	Sulfate
WQCC		0.75	1	0.05	0.2	10	750	620	750	250	600
KWB-1A	3/14/2000	BDL	BDL	BDL	BDL	BDL	3.74	BDL	BDL	BDL	BDL
	9/19/2000	BDL	BDL	BDL	BDL	BDL	3.74	BDL	BDL	BDL	BDL
	4/10/2001	BDL	BDL	BDL	BDL	2.71	3.15	BDL	BDL	BDL	BDL
	7/19/2001	BDL	BDL	BDL	BDL	**22.8**	7.6	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/30/2003	**0.95**	0.9	BDL	**0.256**	BDL	BDL	BDL	BDL	233	**2160**
	10/15/2004	**0.931**	2.08	BDL	**0.261**	BDL	BDL	BDL	BDL	**395**	**2480**
	4/7/2005	**0.787**	1.37	BDL	**0.222**	BDL	BDL	BDL	BDL	229	**2250**
KWB-1C	9/19/2000	BDL	BDL	BDL	BDL	BDL	3.43	BDL	BDL	BDL	BDL
	4/10/2001	BDL	BDL	BDL	BDL	1.73	2.3	BDL	BDL	BDL	BDL
	7/19/2001	BDL	BDL	BDL	BDL	3.16	1.01	BDL	BDL	BDL	BDL
	10/10/2001	BDL	BDL	BDL	BDL	1.03	BDL	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/30/2003	**0.781**	**2.03**	BDL	**0.357**	BDL	BDL	BDL	BDL	**272**	**2210**
	10/15/2004	**0.884**	**1.97**	BDL	**0.33**	BDL	BDL	BDL	BDL	**321**	**2360**
	4/7/2005	**0.766**	**1.77**	BDL	**0.325**	BDL	BDL	BDL	BDL	236	**2120**
KWB-2R	9/19/2000	BDL	BDL	BDL	BDL	**932**	**1129**	348	BDL	BDL	BDL
	4/10/2001	BDL	BDL	BDL	BDL	**1341**	**888**	61.1	BDL	BDL	BDL
	7/19/2001	BDL	BDL	BDL	BDL	**2464**	668	67.3	BDL	BDL	BDL
	10/10/2001	BDL	BDL	BDL	BDL	**1750**	**1410**	**754**	BDL	BDL	BDL
	1/10/2002	BDL	BDL	BDL	BDL	**39**	7.8	BDL	BDL	BDL	BDL
	3/14/2002	BDL	BDL	BDL	BDL	**7200**	**5800**	**12700**	**5400**	BDL	BDL
	7/15/2002	BDL	BDL	BDL	BDL	**6900**	**9800**	**12900**	**2800**	BDL	BDL
	9/30/2003	0.421	**3.3**	0.0132	**0.784**	**1600**	**1200**	**730**	29	**480**	492
	6/29/2004	BDL	BDL	BDL	BDL	**1500**	**2400**	2.5	BDL	BDL	BDL
	4/28/2005	0.493	**1.77**	0.0117	**0.65**	**1100**	**2300**	190	6.3	**490**	404
KWB-3a	9/19/2000	BDL	BDL	BDL	BDL	1.23	BDL	BDL	BDL	BDL	BDL
	4/10/2001	BDL	BDL	BDL	BDL	1.23	BDL	BDL	BDL	BDL	BDL
	7/19/2001	BDL	BDL	BDL	BDL	**14.5**	4.06	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
KWB-3R	9/30/2003	0.316	**3.26**	BDL	0.0737	**20**	31	18	BDL	**396**	**2660**
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/19/2004	0.445	**1.94**	BDL	BDL	BDL	BDL	BDL	BDL	**449**	**2680**
	4/7/2005	0.394	**4**	BDL	BDL	BDL	BDL	BDL	BDL	**523**	**2620**
	4/26/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
KWB-7'	4/10/2001	BDL	BDL	BDL	BDL	3.39	3.98	BDL	BDL	BDL	BDL
	1/10/2002	BDL	BDL	BDL	BDL	1.86	BDL	BDL	BDL	BDL	BDL
	7/9/2002	BDL	BDL	BDL	BDL	**53.1**	BDL	BDL	BDL	BDL	BDL
	9/23/2002	BDL	BDL	BDL	BDL	7.86	BDL	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/28/2003	BDL	BDL	BDL	BDL	**22**	10	13	5.4	BDL	BDL
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/26/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
KWB-9	9/19/2000	BDL	BDL	BDL	BDL	2.19	5.43	BDL	BDL	BDL	BDL
	4/10/2001	BDL	BDL	BDL	BDL	**33.6**	11.7	BDL	BDL	BDL	BDL
	7/19/2001	BDL	BDL	BDL	BDL	**28.9**	9.48	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/6/2003	0.403	**1.62**	BDL	0.011	7.1	BDL	BDL	BDL	**349**	**1,260**
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/19/2004	0.435	**1.19**	BDL	0.0194	BDL	BDL	BDL	BDL	227	**1290**
	4/7/2005	0.428	**2.61**	BDL	0.0211	BDL	BDL	BDL	BDL	248	**1260**
	4/26/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

TABLE A1
PREVIOUS ANNUAL and SEMI-ANNUAL ANALYSIS RESULTS

		METALS (mg/l))				VOLATILES (µg/l)				ANIONS (mg/L)	
	Date	Boron	Iron	Lead	Manganese	Benzene	Ethylbenzene	Xylenes	Toluene	Chloride	Sulfate
WQCC		0.75	1	0.05	0.2	10	750	620	750	250	600
KWB-10	9/30/2003	0.3	**1.67**	**0.0574**	**0.609**	**23**	20	11	BDL	164	8
	10/15/2004	0.319	**1.27**	**0.0739**	**0.464**	BDL	BDL	BDL	BDL	151	6
	4/7/2005	0.318	**1.28**	0.0276	**0.431**	BDL	BDL	BDL	BDL	156	8
KWB-11A'	4/10/2001	BDL	BDL	BDL	BDL	6.57	5.67	BDL	BDL	BDL	BDL
	7/9/2002	BDL	BDL	BDL	BDL	1.24	BDL	BDL	BDL	BDL	BDL
	9/25/2002	BDL	BDL	BDL	BDL	BDL	2.17	BDL	BDL	BDL	BDL
	4//22/03	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/28/2003	BDL	BDL	BDL	BDL	9.1	9.2	11	4.5	BDL	BDL
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/26/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
KWB-12a	9/19/2000	BDL	BDL	BDL	BDL	2.39	5.79	BDL	BDL	BDL	BDL
	7/9/2002	BDL	BDL	BDL	BDL	1.94	BDL	BDL	BDL	BDL	BDL
	9/25/2002	BDL	BDL	BDL	BDL	6.35	2.31	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
KWB-13'	1/10/2002	BDL	BDL	BDL	BDL	1.04	BDL	BDL	1.04	BDL	BDL
	12/18/2003	BDL	BDL	BDL	BDL	8.62	BDL	3.65	1.94	BDL	BDL
	4/25/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/28/2003	BDL	BDL	BDL	BDL	**18**	13	15	7.6	BDL	BDL
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/27/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MW-18	1/11/2001	BDL	BDL	BDL	BDL	**16.4**	BDL	BDL	BDL	BDL	BDL
	4/18/2001	BDL	BDL	BDL	BDL	1.04	BDL	BDL	BDL	BDL	BDL
	1/10/2002	BDL	BDL	BDL	BDL	3.93	4.24	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/6/2003	0.465	**1.55**	BDL	0.114	BDL	BDL	BDL	BDL	193	**1,150**
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/6/2004	0.498	**1.34**	BDL	0.113	BDL	BDL	BDL	BDL	203	**1120**
	4/12/2005	0.436	**0.464**	BDL	BDL	BDL	BDL	BDL	BDL	175	**1040**
	4/26/2005	BDL	BDL	BDL	BDL	9.1	5.1	BDL	BDL	BDL	BDL
MW-28	6/28/2000	BDL	BDL	BDL	BDL	**10.85**	BDL	BDL	BDL	BDL	BDL
	9/19/2000	BDL	BDL	BDL	BDL	**27.6**	BDL	BDL	BDL	BDL	BDL
	1/11/2001	BDL	BDL	BDL	BDL	**30.5**	BDL	BDL	BDL	BDL	BDL
	4/18/2001	BDL	BDL	BDL	BDL	8.1	BDL	BDL	BDL	BDL	BDL
	7/31/2001	BDL	BDL	BDL	BDL	**67.2**	BDL	BDL	BDL	BDL	BDL
	10/11/2001	BDL	BDL	BDL	BDL	**114**	BDL	BDL	BDL	BDL	BDL
	3/14/2002	BDL	BDL	BDL	BDL	**1800**	185	154	BDL	BDL	BDL
	7/15/2002	BDL	BDL	BDL	BDL	**1760**	143	BDL	BDL	BDL	BDL
	9/25/2002	BDL	BDL	BDL	BDL	**982**	BDL	238	BDL	BDL	BDL
	12/19/2002	BDL	BDL	BDL	BDL	BDL	BDL	BDL	**1750**	BDL	BDL
	4/29/2003	BDL	BDL	BDL	BDL	**362**	BDL	BDL	BDL	BDL	BDL
	10/6/2003	**1.45**	**1.84**	0.00863	0.0721	**1700**	220	280	39	167	**1,360**
	10/19/2004	**1.45**	**1.13**	0.0125	0.0688	**690**	55	170	21	163	**978**
	4/12/2005	**1.34**	0.516	0.0109	0.0614	**700**	62	210	21	162	**1,310**
MW-29	1/25/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/7/2003	**1.39**	**1.01**	BDL	**0.434**	BDL	BDL	BDL	BDL	**400**	**1,870**
	10/6/2004	0.725	**1.32**	BDL	**0.313**	BDL	BDL	BDL	BDL	**395**	**1,160**
	4/12/2005	**1.65**	0.731	BDL	**0.446**	BDL	BDL	BDL	BDL	**634**	**2,950**

TABLE A1
PREVIOUS ANNUAL and SEMI-ANNUAL ANALYSIS RESULTS

	Date	METALS (mg/l))				VOLATILES (µg/l)				ANIONS (mg/L)	
		Boron	Iron	Lead	Manganese	Benzene	Ethylbenzene	Xylenes	Toluene	Chloride	Sulfate
WQCC		0.75	1	0.05	0.2	10	750	620	750	250	600
MW-45	9/19/2000	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.72	BDL	BDL
	1/11/2001	BDL	BDL	BDL	BDL	BDL	9.79	4.19	1.97	BDL	BDL
	4/18/2001	BDL	BDL	BDL	BDL	BDL	1.8	6.68	1.64	BDL	BDL
	7/31/2001	BDL	BDL	BDL	BDL	BDL	BDL	2.59	1.45	BDL	BDL
	10/11/2001	BDL	BDL	BDL	BDL	BDL	BDL	13.7	BDL	BDL	BDL
	1/10/2002	BDL	BDL	BDL	BDL	BDL	BDL	12.8	BDL	BDL	BDL
	3/14/2002	BDL	BDL	BDL	BDL	6.58	1.36	15.82	BDL	BDL	BDL
	7/15/2002	BDL	BDL	BDL	BDL	**10.3**	2.67	4.93	1.37	BDL	BDL
	9/25/2002	BDL	BDL	BDL	BDL	**11.8**	BDL	17.04	BDL	BDL	BDL
	12/18/2003	BDL	BDL	BDL	BDL	**21.7**	4.67	14.53	2.03	BDL	BDL
	1/24/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/14/2003	0.519	**1.3**	0.0119	**0.394**	BDL	BDL	BDL	BDL	**320**	**1,960**
	10/6/2004	0.57	**1.48**	BDL	**0.305**	BDL	BDL	BDL	BDL	**375**	**1,710**
	4/12/2005	0.513	**1.1**	BDL	**0.484**	BDL	BDL	BDL	BDL	**473**	**2,360**
	4/26/2005	BDL	BDL	BDL	BDL	7.3	6.8	BDL	BDL	BDL	BDL
MW-48	10/14/2003	0.689	0.997	BDL	**2.44**	**1500**	110	90	49	212	152
	10/19/2004	**0.769**	0.881	BDL	**2.01**	**1400**	24	66	36	**404**	290
	4/12/2005	**1.08**	0.595	BDL	**0.767**	**120**	BDL	26	BDL	**458**	**1,050**
MW-49	11/3/2003	**0.767**	**0.752**	BDL	**0.438**	**1900**	110	180	62	**480**	462
	4/12/2005	0.647	0.815	BDL	**0.365**	**2800**	110	360	88	**350**	**616**
MW-52[1]	10/28/2003	BDL	BDL	BDL	BDL	**34**	17	28	11	BDL	BDL
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/26/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MW-57	10/14/2003	0.406	**2.83**	BDL	**0.724**	**12000**	**1900**	**3800**	**5100**	**280**	194
	10/15/2004	0.452	**12.9**	0.011	**1.18**	**100**	160	26	BDL	103	219
	4/14/2005	0.215	**3.67**	BDL	**0.817**	**9700**	**1500**	**2200**	120	**370**	115
MW-58	10/15/2004	0.403	**6.94**	0.00517	**0.765**	**4800**	610	530	490	**366**	146
	4/14/2005	0.332	**3.64**	BDL	**1.11**	**34**	230	62	BDL	107	224
NP-1[1]	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/28/2003	BDL	BDL	BDL	BDL	7.9	8.7	11	4.1	BDL	BDL
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/26/2005	BDL	BDL	BDL	BDL	8.8	5.2	BDL	BDL	BDL	BDL
NP-2[1]	4/18/2001	BDL	BDL	BDL	BDL	1.45	BDL	BDL	BDL	BDL	BDL
	4/22/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/28/2003	BDL	BDL	BDL	BDL	9.1	9.6	12	4.7	BDL	BDL
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/26/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NP-5	11/6/2003	**1.39**	0.86	BDL	BDL	**11**	7.3	BDL	BDL	203	**3,900**
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/27/2005	BDL	BDL	BDL	BDL	6.3	5.4	BDL	BDL	BDL	BDL
NP-9	11/6/2003	**1.04**	0.89	BDL	BDL	**15**	9.3	BDL	BDL	**275**	**2,420**
	6/29/2004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	4/27/2005	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
RW-1	4/15/2005	0.35	**2.23**	BDL	0.167	**1400**	150	180	77	**260**	**2130**
RW-2	4/15/2005	0.551	**1.15**	BDL	0.0138	**13000**	**1700**	**790**	360	**408**	**1040**

TABLE A1
PREVIOUS ANNUAL and SEMI-ANNUAL ANALYSIS RESULTS

	Date	METALS (mg/l))				VOLATILES (µg/l)				ANIONS (mg/L)	
		Boron	Iron	Lead	Manganese	Benzene	Ethylbenzene	Xylenes	Toluene	Chloride	Sulfate
WQCC		0.75	1	0.05	0.2	10	750	620	750	250	600
RW-3	10/27/2003	**1.22**	0.573	BDL	**0.209**	**6900**	**2000**	**2200**	**1200**	**1120**	45
	10/19/2004	0.259	**1.18**	BDL	0.192	**560**	92	390	31	167	**611**
	4/15/2005	0.0969	**1.02**	BDL	**0.258**	**110**	58	270	10	**533**	**813**
RW-7	10/27/2003	0.636	0.674	BDL	**0.335**	**19**	BDL	BDL	BDL	185	345
	4/15/2005	0.313	**1.15**	BDL	0.129	**66**	21	20	BDL	187	242
RW-9	10/7/2003	0.731	**1.64**	BDL	0.016	BDL	BDL	BDL	BDL	**372**	**257**
	10/19/2004	0.482	0.474	BDL	**0.209**	**2600**	9.7	190	BDL	170	366
	4/15/2005	0.537	0.792	BDL	**0.581**	**1800**	21	110	BDL	**291**	**792**
RW-10	10/27/2003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	10/18/2004	0.358	**1.39**	BDL	**0.273**	**41**	BDL	14	BDL	165	**1410**
	4/15/2005	0.278	**1.74**	BDL	**0.294**	**25**	19	17	6.1	162	**1430**
RW-11	10/16/2003	0.21	**1.23**	0.00638	**0.695**	**1300**	**2400**	**1100**	76	102	118
	10/20/2004	0.389	**8.04**	BDL	**0.52**	**490**	550	150	13	109	49
RW-12	10/16/2003	0.299	0.725	BDL	**0.397**	**5000**	140	430	54	188	**1,280**
	10/20/2004	0.435	**1.7**	BDL	**0.217**	**3400**	68	330	37	191	**1,060**
	4/15/2005	0.295	**540**	BDL	**2.78**	**500**	44	39	7.6	235	**2,080**
RW-13	10/16/2003	0.329	0.403	BDL	**0.711**	**3500**	540	530	230	**282**	164
	10/7/2004	**1.11**	**2.21**	BDL	**0.292**	BDL	BDL	BDL	BDL	**450**	**2,280**
RW-16	10/15/2003	0.569	**1.02**	BDL	**0.958**	**42**	19	36	35	**534**	**1,990**
	10/19/2004	**1.15**	**2.61**	BDL	**0.95**	**12**	BDL	BDL	BDL	**818**	**3,200**
	4/15/2005	**1.79**	**2.29**	0.00527	**0.494**	**7.2**	9	BDL	BDL	**634**	**4,680**
RW-17	10/15/2003	**0.807**	0.466	BDL	**0.663**	**48**	6.5	33	22	**259**	**3,000**
	10/19/2004	**0.774**	**1.24**	BDL	**0.304**	6.7	BDL	BDL	BDL	111	**1,960**
	4/15/2005	**1.2**	**3.62**	BDL	**0.933**	**25**	19	12	BDL	**1110**	**4,110**
RW-18	9/30/2003	**0.881**	**3.41**	BDL	**1.45**	BDL	BDL	BDL	BDL	**412**	**3,140**
	10/20/2004	**1.13**	**2.41**	BDL	**0.982**	**19**	8.1	11	BDL	**478**	**3,200**
	4/7/2005	**1.07**	**2.04**	BDL	**1.09**	BDL	BDL	BDL	BDL	**428**	**3,220**

Notes:

[1] Semi Annual; sampled only for BTEX and MTBE.

TABLE A1
PREVIOUS NCL/TEL GROUNDWATER WELL ANALYTICAL DATA

		METALS (mg/L)						Volatiles (µg/L)			ANIONS (mg/L)	
	Date	Aluminum	Boron	Copper	Iron	Lead	Manganese	Benzene	Ethylbenzen	Xylenes	Chloride	Sulfate
WQCC		5	0.75	1	1	0.05	0.2	10	750	620	250	600
NCL-32	12/9/1997	BDL	0.0927	BDL	0.409	BDL	**0.647**	BDL	BDL	BDL	BDL	BDL
	9/30/2002	BDL	0.278	0.328	0.231	BDL	**0.848**	BDL	BDL	BDL	BDL	BDL
	12/26/2002	BDL	0.25	BDL	0.85	BDL	**0.606**	BDL	BDL	BDL	BDL	BDL
	8/11/2003	BDL	0.285	0.0056	**1.25**	BDL	**0.899**	BDL	BDL	BDL	238	**1280**
	11/4/2003	BDL	0.268	0.00736	**1.05**	BDL	**0.884**	9.1	5.6	BDL	226	**1140**
	1/12/2004	BDL	0.292	0.693	**2.69**	BDL	**0.95**	BDL	BDL	BDL	224	**1210**
	4/12/2004	0.457	0.234	0.00222	0.367	BDL	**0.792**	BDL	BDL	BDL	214	**1240**
	2/22/2005	0.346	0.253	0.00201	**2.35**	BDL	**0.568**	BDL	BDL	BDL	172	**1090**
	11/4/2004	0.209	0.222	BDL	**1.86**	BDL	**0.645**	BDL	BDL	BDL	166	**1180**
	5/4/2005	0.0762	0.235	BDL	**0.478**	BDL	**0.671**	12	6.6	BDL	170	**1080**
	8/18/2005	0.11	0.265	BDL	**0.663**	BDL	**0.758**	BDL	BDL	BDL	183	**1140**
	11/8/2005	0.286	0.307	BDL	**0.66**	BDL	**0.738**	BDL	BDL	BDL	196	**1190**
NCL-33	12/10/1997	5.88	0.229	BDL	**7.61**	0.0138	0.198	BDL	BDL	BDL	BDL	BDL
	10/1/2002	2.83	0.511	**3.33**	**3.18**	BDL	0.086	BDL	BDL	BDL	BDL	BDL
	12/27/2002	0.961	0.434	BDL	**1.44**	BDL	0.14	BDL	BDL	BDL	BDL	BDL
	8/12/2003	0.592	0.531	0.00611	**2.31**	BDL	0.132	BDL	BDL	BDL	**304**	315
	11/6/2003	0.0255	0.471	BDL	**2.3**	BDL	0.0832	**11**	6.8	BDL	**297**	2.66
	1/12/2004	0.0447	0.631	**1.42**	**4.34**	BDL	0.0867	BDL	BDL	BDL	**302**	307
	4/13/2004	0.0177	0.597	0.00253	**2.08**	BDL	0.074	BDL	BDL	BDL	**314**	315
	7/19/2004	0.0121	0.491	BDL	**1.53**	BDL	0.0782	BDL	BDL	BDL	**289**	377
	2/22/2005	BDL	0.595	BDL	2.04	BDL	0.0862	7.5	BDL	BDL	245	**600**
	11/4/2004	BDL	0.555	BDL	**2.15**	BDL	0.0719	BDL	BDL	BDL	**302**	462
	5/4/2005	0.0148	0.658	BDL	**0.299**	BDL	0.113	7.7	9.7	BDL	229	843
	8/19/2005	BDL	0.578	BDL	**1.24**	BDL	0.104	BDL	BDL	BDL	243	764
	11/8/2005	0.104	0.563	BDL	**1.64**	BDL	0.107	BDL	BDL	BDL	**271**	**733**
NCL-34	12/10/1997	43.8	153	BDL	**31.2**	**0.0619**	**0.47**	**5010**	**2500**	**1950**	BDL	BDL
	10/1/2002	BDL	0.287	**8.73**	BDL	0.0091	0.0892	**1640**	96.9	27.9	BDL	BDL
	12/27/2002	0.321	0.296	BDL	0.438	BDL	0.0943	**957**	154	44.3	BDL	BDL
	8/12/2003	0.0211	0.35	0.00378	**1.18**	BDL	0.146	**2400**	500	190	**359**	221
	11/6/2003	0.026	0.261	BDL	**0.865**	BDL	0.14	**2800**	400	240	**368**	174
	1/12/2004	BDL	0.316	0.538	**1.98**	BDL	0.108	**4200**	280	240	**369**	178
	4/13/2004	0.0142	0.413	BDL	0.323	BDL	0.117	**1400**	230	130	**324**	181
	7/19/2004	0.0532	0.277	BDL	0.292	BDL	0.109	**2600**	200	240	**364**	154
	11/4/2004	BDL	0.293	BDL	**1.32**	BDL	0.107	**2300**	200	180	77	139
	2/22/2005	0.014	0.342	BDL	**1.02**	BDL	0.108	**1400**	190	110	**290**	156
	5/4/2005	BDL	0.275	BDL	BDL	BDL	0.0834	**3600**	140	230	**487**	150
	8/22/2005	BDI	0.313	BDL	**0.272**	BDL	0.102	**1200**	120	150	**275**	156
	11/8/2005	0.0177	0.354	BDL	0.447	BDL	0.122	**2100**	350	160	**291**	146

TABLE A1
PREVIOUS NCL/TEL GROUNDWATER WELL ANALYTICAL DATA

		METALS (mg/L)						Volatiles (µg/L)			ANIONS (mg/L)	
	Date	Aluminum	Boron	Copper	Iron	Lead	Manganese	Benzene	Ethylbenzen	Xylenes	Chloride	Sulfate
WQCC		5	0.75	1	1	0.05	0.2	10	750	620	250	600
NCL-44	12/10/1997	0.564	0.137	BDL	0.901	BDL	0.564	BDL	BDL	BDL	BDL	BDL
	9/30/2003	0.53	0.301	1.12	1.89	BDL	0.622	BDL	BDL	BDL	BDL	BDL
	12/26/2002	BDL	0.237	BDL	BDL	BDL	0.79	BDL	BDL	BDL	BDL	BDL
	8/11/2003	0.191	0.3	0.00465	1.79	BDL	0.737	BDL	BDL	BDL	247	539
	11/4/2003	0.0296	0.316	0.00859	1.56	BDL	0.753	6.8	BDL	BDL	224	464
	1/12/2004	0.0111	0.327	0.328	3.3	BDL	0.719	BDL	BDL	BDL	210	458
	4/12/2004	0.59	0.272	0.0376	1.36	BDL	0.742	BDL	BDL	BDL	250	478
	11/4/2004	BDL	0.288	BDL	1.97	BDL	0.743	BDL	BDL	BDL	296	99
	2/22/2005	BDL	0.291	BDL	1.7	BDL	0.692	BDL	BDL	BDL	189	497
	5/4/2005	BDL	0.316	BDL	1.27	BDL	0.711	32	11	BDL	182	464
	8/19/2005	BDL	0.278	BDL	1.28	BDL	0.76	BDL	BDL	BDL	200	554
	11/8/2005	0.025	0.33	BDL	1.18	BDL	0.723	BDL	BDL	BDL	221	575
NCL-49	12/9/1997	0.324	BDL	BDL	0.669	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	9/30/2002	BDL	0.244	0.538	0.352	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	12/26/2002	BDL	0.21	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	8/11/2003	0.0267	0.256	0.00704	0.941	BDL	BDL	BDL	BDL	BDL	182	1,810
	11/4/2003	BDL	0.257	0.00672	1	BDL	BDL	BDL	5.6	BDL	183	1,600
	1/12/2004	0.0132	0.281	0.31	2.53	BDL	BDL	BDL	BDL	BDL	185	1,660
	4/12/2004	0.0117	0.24	0.0021	BDL	BDL	0.00671	BDL	BDL	BDL	195	1,760
	11/4/2004	BDL	0.528	BDL	1.61	BDL	0.48	BDL	BDL	BDL	270	1,940
	2/22/2005	BDL	0.287	0.0021	1.86	BDL	BDL	BDL	BDL	BDL	198	1,540
	5/4/2005	BDL	0.3	BDL	BDL	BDL	BDL	11	6.6	BDL	193	1,560
	8/17/2005	BDL	0.254	BDL	BDL	BDL	BDL	BDL	BDL	BDL	204	1,650
	11/8/2005	0.0112	0.348	BDL	BDL	BDL	BDL	BDL	BDL	BDL	219	1,700
MW-53	12/9/1997	29	0.226	BDL	21.9	0.0175	4.55	BDL	BDL	BDL	BDL	BDL
	9/30/2002	6.55	0.376	0.0329	3.37	BDL	3.37	BDL	BDL	BDL	BDL	BDL
	12/26/2002	BDL	0.305	BDL	0.107	BDL	1.98	BDL	BDL	BDL	BDL	BDL
	8/11/2003	1.1	0.34	0.00782	1.11	BDL	2.42	BDL	BDL	BDL	68.5	1,300
	11/3/2003	BDL	0.404	0.00521	0.567	BDL	1.99	47	13	16	57.9	1,180
	1/12/2004	0.0111	0.396	0.0038	1.4	BDL	0.778	BDL	BDL	BDL	52.8	1
	4/12/2004	0.0412	0.287	BDL	BDL	BDL	1.75	BDL	BDL	BDL	48.5	1,110
	7/14/2004	0.0204	0.337	BDL	BDL	BDL	1.76	BDL	BDL	BDL	56.5	943
	2/21/2005	BDL	0.331	0.00207	1.11	BDL	2.03	BDL	BDL	BDL	145	1,220
	5/4/2005	0.0105	0.31	BDL	BDL	BDL	1.53	5.5	6	BDL	112	1,210
	8/17/2005	BDL	0.285	BDL	BDL	BDL	2.08	BDL	BDL	BDL	79.2	1,170
	11/8/2005	0.0319	0.386	BDL	BDL	BDL	2.1	BDL	BDL	BDL	94.5	1,270
MW-54A	12/10/1997	4.34	0.187	BDL	3.25	BDL	0.302	BDL	BDL	BDL	BDL	BDL
	9/30/2002	0.376	0.287	0.521	BDL	0.741	0.346	BDL	BDL	BDL	BDL	BDL
	12/26/2002	BDL	0.234	BDL	0.355	BDL	0.328	BDL	BDL	BDL	BDL	BDL
	8/12/2003	0.281	0.309	0.00458	1.25	BDL	0.427	BDL	BDL	BDL	190	604
	11/3/2003	0.0269	BDL	0.00434	1.03	BDL	0.481	12	6.4	BDL	174	629
	1/12/2004	0.0227	0.305	0.695	2.35	BDL	0.417	BDL	BDL	BDL	170	624
	4/12/2004	0.0183	0.434	0.00237	0.257	BDL	1.26	BDL	BDL	BDL	267	1,870
	7/14/2004	BDL	0.337	BDL	0.387	BDL	0.461	BDL	BDL	BDL	173	627
	2/22/2005	BDL	0.326	BDL	1.67	BDL	0.44	BDL	BDL	BDL	171	687
	5/4/2005	BDL	0.269	BDL	0.241	BDL	0.459	6.9	6.2	BDL	182	691
	8/17/2005	0.018	0.263	BDL	0.394	BDL	0.464	BDL	BDL	BDL	202	742
	11/8/2005	0.0235	0.353	BDL	0.52	BDL	0.476	BDL	BDL	BDL	208	749

TABLE A1
PREVIOUS NCL/TEL GROUNDWATER WELL ANALYTICAL DATA

		METALS (mg/L)						Volatiles (µg/L)			ANIONS (mg/L)	
	Date	Aluminum	Boron	Copper	Iron	Lead	Manganese	Benzene	Ethylbenzen	Xylenes	Chloride	Sulfate
WQCC		5	0.75	1	1	0.05	0.2	10	750	620	250	600
MW-55	12/10/1997	1.9	0.335	BDL	**1.32**	BDL	**0.212**	BDL	BDL	BDL	BDL	BDL
	10/1/2003	0.372	0.525	0.702	0.312	BDL	**0.43**	BDL	BDL	BDL	BDL	BDL
	12/26/2003	BDL	0.441	BDL	BDL	BDL	**0.412**	BDL	BDL	BDL	BDL	BDL
	8/12/2003	BDL	0.565	0.00685	0.936	BDL	**0.595**	BDL	BDL	BDL	**276**	**1,540**
	11/3/2003	0.0298	0.474	0.0072	0.766	BDL	**0.562**	**14**	6.7	BDL	**268**	**1,510**
	1/12/2004	0.0236	0.513	0.541	**2.2**	BDL	**0.488**	BDL	BDL	BDL	**258**	**1,470**
	4/12/2004	0.015	0.382	BDL	BDL	BDL	**0.425**	BDL	BDL	BDL	246	**1,440**
	7/14/2004	BDL	0.484	BDL	BDL	BDL	**0.485**	BDL	BDL	BDL	**290**	**1,560**
	2/21/2005	BDL	0.602	0.00257	1.61	BDL	**0.459**	BDL	BDL	BDL	**274**	**1,570**
	5/4/2005	BDL	0.527	BDL	BDL	BDL	**0.489**	5.1	5.3	BDL	**256**	**1,690**
	8/17/2005	0.0516	0.411	BDL	BDL	BDL	**0.264**	BDL	BDL	BDL	**300**	**1,690**
	11/8/2005	0.0147	0.643	BDL	BDL	BDL	**0.531**	BDL	BDL	BDL	**272**	**1,960**
MW-59	11/6/2003	0.261	0.242	0.00931	**1.12**	BDL	**0.523**	**370**	56	18	177	**1,600**
	1/12/2004	0.102	0.49	0.793	**4.81**	BDL	**0.688**	BDL	BDL	BDL	204	**1,630**
	2/1/2004	0.232	0.33	0.00579	**1.08**	BDL	**0.407**	**3800**	380	56	168	**1,430**
	4/21/2004	BDL	0.271	0.00612	0.954	BDL	**0.346**	**190**	15	BDL	163	**1,630**
	7/19/2004	0.0143	0.229	BDL	0.301	BDL	**0.341**	**190**	35	BDL	143	**1,520**
	11/4/2004	BDL	0.321	BDL	**1.68**	BDL	**0.37**	**830**	85	BDL	158	**1,720**
	2/22/2005	BDL	0.294	0.00356	**1.28**	BDL	**0.303**	**500**	45	BDL	182	**1,420**
	5/5/2005	BDL	0.25	0.00229	0.322	BDL	BDL	**260**	27	BDL	178	**1,590**
	8/22/2005	0.039	0.31	BDL	0.316	BDL	**0.349**	**1000**	98	78	202	**1,430**
	11/8/2005	0.014	0.286	BDL	0.432	BDL	**0.378**	**260**	15	BDL	174	**1,630**
MW-60	11/6/2003	0.0892	0.404	0.0108	**2.27**	BDL	**0.764**	**27**	15	BDL	219	**1,540**
	4/13/2004	0.367	0.525	0.00795	**2.57**	BDL	**0.702**	**13**	5.4	BDL	186	**1,670**
	7/19/2004	0.028	0.477	BDL	**2.77**	BDL	**0.722**	**160**	120	BDL	181	**1,660**
	11/4/2004	0.051	0.418	BDL	**3.46**	BDL	**0.694**	9	7.2	BDL	171	**1,830**
	2/22/2005	0.0154	0.404	0.00384	**3.17**	BDL	**0.647**	5.8	BDL	BDL	164	**1,520**
	5/5/2005	0.0356	0.676	0.00575	BDL	BDL	**0.615**	**210**	270	22	243	**2,300**
	8/22/2005	BDL	**0.754**	BDL	**2.08**	BDL	**0.604**	**100**	150	BDL	240	**2,290**
	11/8/2005	0.104	**0.408**	BDL	**2.36**	BDL	**0.676**	**38**	23	BDL	182	**1,640**
TEL-1	12/10/1997	0.94	0.395	BDL	**1.1**	BDL	BDL	BDL	BDL	13.5	BDL	BDL
	10/1/2002	BDL	0.632	BDL	0.13	BDL	0.0575	**13.6**	3.63	11.7	BDL	BDL
	12/30/2002	BDL	0.605	BDL	0.114	BDL	0.0591	**18.7**	4.25	17.1	BDL	BDL
	8/13/2003	BDL	**0.795**	0.00327	**1.16**	BDL	0.0796	9.1	BDL	BDL	189	**1,780**
	11/13/2003	BDL	0.668	BDL	BDL	BDL	0.108	**20**	8.4	19	188	**1,970**
	2/2/2004	BDL	0.667	0.00276	0.417	BDL	0.0613	**34**	7.3	17	178	**1,320**
	4/21/2004	BDL	0.568	0.00409	0.868	BDL	0.132	**39**	6.8	17	195	**1,770**
	11/5/2004	BDL	0.627	BDL	**1.42**	BDL	0.0893	**11**	BDL	BDL	206	**1,120**
	2/23/2005	BDL	0.53	BDL	BDL	BDL	0.152	BDL	BDL	BDL	190	**1,600**
	5/5/2005	BDL	0.413	0.00302	BDL	BDL	0.172	9.8	22	BDL	198	**1,820**
	8/29/2005	0.0124	0.519	BDL	BDL	BDL	0.198	**16**	BDL	11	203	**1,810**
	11/9/2005	0.011	0.61	BDL	BDL	BDL	0.0791	**14**	BDL	BDL	216	**946**

TABLE A1
PREVIOUS NCL/TEL GROUNDWATER WELL ANALYTICAL DATA

		METALS (mg/L)						Volatiles (µg/L)			ANIONS (mg/L)	
	Date	Aluminum	Boron	Copper	Iron	Lead	Manganese	Benzene	Ethylbenzen	Xylenes	Chloride	Sulfate
WQCC		5	0.75	1	1	0.05	0.2	10	750	620	250	600
TEL-2	12/10/1997	0.975	0.384	BDL	**1.41**	0.0208	0.0358	**2090**	176	367	BDL	BDL
	10/1/2002	BDL	0.657	BDL	BDL	BDL	0.0196	**1120**	25.9	203	BDL	BDL
	12/30/2002	BDL	0.611	BDL	BDL	BDL	**17.1**	**1290**	36.6	214	BDL	BDL
	8/13/2003	BDL	**0.881**	0.00399	0.779	BDL	0.0299	**1100**	29	200	212	**802**
	11/11/2003	BDL	0.615	BDL	BDL	BDL	0.0183	**1700**	39	240	233	572
	2/2/2004	BDL	0.739	0.00333	0.279	BDL	0.0244	**1500**	45	210	202	**700**
	4/21/2004	BDL	0.664	0.00382	0.354	BDL	0.0306	**1900**	54	230	196	**779**
	8/4/2004	BDL	0.611	0.00224	0.436	BDL	0.0264	**1400**	40	230	208	**730**
	11/5/2004	BDL	0.584	BDL	0.574	BDL	0.0306	**1500**	39	220	242	**842**
	2/23/2005	BDL	0.604	BDL	BDL	BDL	BDL	**920**	52	230	222	582
	5/5/2005	BDL	0.52	0.00555	BDL	BDL	0.0168	**1200**	48	210	231	**640**
	8/29/2005	0.0115	0.558	BDL	BDL	BDL	0.0232	**1300**	36	240	248	**681**
	11/9/2005	0.0138	0.629	BDL	BDL	BDL	0.0342	**1100**	35	200	**311**	**678**
TEL-3	12/10/1997	0.302	0.747	BDL	0.258	0.00373	BDL	**464**	48.9	283	BDL	BDL
	10/1/2002	BDL	**0.935**	0.102	BDL	BDL	BDL	**387**	13.8	161	BDL	BDL
	12/30/2002	BDL	**0.771**	BDL	BDL	BDL	BDL	**200**	12.6	145	BDL	BDL
	8/13/2003	BDL	**0.832**	0.00598	**2.28**	BDL	0.00901	**110**	8.4	87	113	**1,900**
	11/11/2003	BDL	0.727	0.00425	0.412	BDL	0.0141	**150**	13	88	72.4	**1,910**
	2/2/2004	0.0383	**0.799**	0.00345	0.602	BDL	BDL	**160**	**905**	58	137	**998**
	4/21/2004	0.032	0.589	0.00538	**1.03**	BDL	0.00784	**120**	11	79	80.6	**1,560**
	8/4/2004	BDL	0.578	0.00271	**1.49**	BDL	0.00992	**80**	BDL	56	80.8	**1,670**
	11/5/2004	BDL	0.493	BDL	**1.49**	BDL	0.00527	**78**	BDL	46	98.7	**1,730**
	2/23/2005	BDL	0.541	BDL	BDL	BDL	BDL	**73**	BDL	48	85.4	**1,520**
	5/5/2005	BDL	0.406	BDL	BDL	BDL	0.00818	**110**	11	55	63.6	**1,690**
	8/29/2005	BDL	0.508	BDL	BDL	BDL	0.0124	**73**	BDL	45	60.2	**1,750**
	11/9/2005	0.0101	0.687	BDL	BDL	BDL	0.00581	**240**	5.1	36	**274**	**1,170**
TEL-4	12/10/1997	0.586	0.396	BDL	**1.4**	0.00971	**0.88**	**141**	411	163	BDL	BDL
	10/1/2002	BDL	0.756	BDL	0.127	BDL	**0.39**	**28.4**	84.6	147	BDL	BDL
	12/30/2003	BDL	0.696	BDL	BDL	BDL	**0.205**	**2110**	95.1	250	BDL	BDL
	8/13/2003	0.0129	**0.714**	0.00562	**1.85**	0.00317	**0.264**	**2800**	190	340	**558**	188
	11/11/2003	BDL	**0.896**	BDL	BDL	BDL	0.185	**2800**	180	370	**594**	128
	2/2/2004	0.0344	0.693	0.0177	0.451	BDL	**0.227**	**2900**	200	351	**481**	198
	4/21/2004	0.0446	0.67	0.00656	0.56	BDL	**0.291**	**3100**	190	390	**601**	**619**
	7/22/2004	BDL	0.568	0.00287	0.871	BDL	**0.39**	**820**	150	290	**413**	493
	11/4/2004	BDL	0.578	BDL	0.975	BDL	**0.509**	**530**	96	200	**416**	506
	2/23/2005	BDL	0.602	BDL	BDL	BDL	**0.375**	**1500**	93	250	**484**	393
	5/5/2005	BDL	0.446	0.0027	BDL	BDL	**0.537**	**220**	49	140	**370**	486
	8/29/2005	BDL	0.52	BDL	0.277	BDL	**0.597**	**160**	52	140	**402**	472
	11/9/2005	BDL	0.544	BDL	0.383	BDL	**0.641**	**160**	58	120	**427**	410

NOTES:

BDL Below Detection Limit

NA Not Analyzed

TABLE A1
PREVIOUS EVAPORATION PONDS MONITORING WELL ANALYTICAL

		Field Parameters			Metals (mg/L)						VOLATILES (Ug/L)			ANIONS (mg/L)	
	Date	pH	Cond.	Temp. °C	Arsenic	Boron	Cadmium	Chromium	Iron	Manganese	Benzene	thylbenzen	Xylenes	Chloride	Sulfate
WQCC					0.1	0.75	0.01	0.05	1	0.2	10	750	620	250	600
MW-1	6/25/2003	7.01	850	21	0.00584	0.369	BDL	0.195	7.52	2.75	BDL	BDL	BDL	2040	2750
	5/25/2005	7.91	2025	16.8	0.00856	0.344	BDL	BDL	4.38	1.94	BDL	BDL	BDL	1440	2380
MW-2	7/6/2004	BDL	BDL	BDL	0.032	0.495	BDL	0.00564	3.42	1.58	BDL	BDL	BDL	2180	2140
MW-3	5/31/2001	7.5	8100	20.8	0.032	0.41	BDL	BDL	3	0.401	BDL	BDL	BDL	629	1190
	6/25/2003	6.91	900	20.8	0.0535	0.71	BDL	0.00237	3.79	2.3	BDL	BDL	BDL	1020	1990
	5/24/2005	8.19	2859	18.3	0.0403	0.672	BDL	BDL	1.06	3.55	7.8	BDL	BDL	1650	2620
MW-4	7/6/2004	BDL	BDL	BDL	0.124	0.505	BDL	BDL	4.71	1.58	BDL	BDL	BDL	923	1370
MW-5	5/31/2001	7.88	1100	21.2	0.258	0.65	413	BDL	13	3.12	BDL	BDL	BDL	4500	7850
	6/25/2003	6.89	750	21.2	0.0412	1.93	BDL	0.0141	6.14	1.82	BDL	BDL	BDL	4780	8980
	6/26/2005	7.78	1524	18	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
MW-6	7/6/2004	BDL	BDL	BDL	0.0352	0.394	BDL	BDL	6.46	0.671	BDL	BDL	BDL	846	2170
MW-7	5/31/2001	7.59	1310	21.3	0.195	0.61	BDL	BDL	10	2.25	BDL	BDL	BDL	2530	3720
	6/25/2003	6.79	1100	20.5	0.0329	1.01	BDL	0.0137	8.6	0.502	BDL	BDL	BDL	2490	3210
	5/26/2005	7.89	774	17.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
OCD-1	5/31/2001	8.1	9000	21.6	0.262	0.46	BDL	BDL	7.6	2.39	BDL	BDL	BDL	2390	3540
	6/26/2003	7.01	1250	20.8	0.112	0.499	BDL	0.00166	13.3	2.88	BDL	BDL	BDL	3240	3430
	5/25/2005	7.87	3365	17.5	0.0396	0.407	BDL	BDL	2.04	2.92	BDL	BDL	BDL	5370	3740
OCD-2	7/7/2004	BDL	BDL	BDL	BDL	0.455	BDL	BDL	8.89	1.48	BDL	BDL	BDL	2150	2250
OCD-3	5/31/2001	8.4	8950	20.4	0.012	0.76	BDL	BDL	3.9	0.268	BDL	BDL	BDL	1120	1860
	6/26/2003	6.81	900	20.9	0.00352	0.481	BDL	0.00108	4.3	0.242	BDL	BDL	BDL	789	1460
	5/25/2005	7.98	2966	18.6	0.0106	0.644	BDL	BDL	1.58	0.42	BDL	BDL	BDL	1640	2170
OCD-4	7/7/2004	BDL	BDL	BDL	BDL	1.43	BDL	BDL	10.3	0.249	BDL	BDL	BDL	4660	2950
OCD-5	5/31/2001	8.51	1000	19.9	0.026	1.2	BDL	BDL	6.5	0.224	BDL	BDL	BDL	4790	3030
	6/26/2003	6.88	1150	21	0.00589	1.3	BDL	0.000866	7.14	0.259	BDL	BDL	BDL	4790	3080
	5/25/2005	7.93	4087	17.8	0.0223	1.06	BDL	BDL	4.16	0.382	BDL	BDL	BDL	4970	3050
OCD-6	7/6/2004	BDL	BDL	BDL	0.109	0.759	BDL	BDL	11.9	2.44	BDL	BDL	BDL	3380	4300
OCD-7	6/4/2001	7.1	1100	21.2	0.207	1.5	BDL	BDL	8.1	1.37	BDL	BDL	BDL	2060	3130
	6/26/2003	6.92	1000	21.8	0.00436	0.678	0.000914	0.00374	6.06	1.14	BDL	BDL	BDL	724	2540
	5/24/2005	8.42	2125	19.3	0.0102	0.449	BDL	0.00785	6.54	0.475	8	5.8	BDL	871	1960
OCD-8	7/7/2004	BDL	BDL	BDL	0.0862	0.862	BDL	0.00587	11.1	3.45	BDL	BDL	BDL	2450	3500

NOTES
BDL -Below detection Limit

TABLE A1
PREVIOUS IRRIGATION WELL ANALYTICAL

					ANIONS (mg/L)	
	Date	Boron	Iron	Manganese	Chloride	Sulfate
WQCC		**0.75**	1	0.2	250	600
RA 304	6/7/2004	0.0844	0.828	0.0216	222	**1110**
RA 307	7/8/2003	BDL	0.876	0.00206	146	**1,130**
	8/6/2003	BDL	**1.05**	0.0587	152	**2,360**
	9/15/2003	BDL	**4.2**	0.0831	153	**1,090**
	5/12/2004	0.0795	BDL	BDL	**661**	**1,180**
	7/12/2004	0.0963	**3.19**	BDL	**274**	**1,080**
	8/23/2004	0.102	**1.07**	BDL	240	**1,070**
	5/4/2005	0.0677	BDL	BDL	**858**	**1,240**
	6/20/2005	0.0857	BDL	BDL	**322**	**1,180**
	7/29/2005	0.0757	BDL	BDL	**347**	**1,080**
	8/15/2005	0.0727	0.254	BDL	**257**	**1,080**
	9/28/2005	0.0899	0.245	BDL	**371**	**1,120**
RA 313	7/17/2003	BDL	**2.08**	0.0432	17	534
	8/7/2003	BDL	0.81	0.0256	207	507
	6/7/2004	0.0426	0.345	BDL	16.5	534
	7/22/2004	0.0523	0.607	BDL	15.6	481
	8/3/2004	0.0448	0.498	BDL	15.7	447
	6/24/2005	0.0433	BDL	BDL	18.1	490
	7/14/2005	0.0903	BDL	BDL	17	486
	8/15/2005	0.0358	BDL	BDL	15.1	487
RA 314	7/8/2003	BDL	0.901	BDL	225	**690**
	8/18/2003	BDL	1.12	0.0012	79.2	578
	6/7/2004	0.0458	0.413	BDL	238	687
	7/12/2004	0.0427	**2**	BDL	220	**628**
	8/23/2004	0.0537	0.703	BDL	232	**644**
	9/7/2004	0.0502	**1.08**	BDL	202	584
	5/4/2005	0.0423	0.473	0.0116	123	559
	7/22/2005	0.0437	**1.91**	0.03	57.9	511
RA 1227	7/2/2003	BDL	**2.02**	BDL	130	**1,580**
	8/6/2003	BDL	**1.17**	0.00265	121	**1,500**
	6/23/2004	BDL	0.00891	BDL	128	**1,350**
	7/12/2004	0.254	**3.66**	BDL	124	**1,350**
	8/3/2004	0.217	0.944	BDL	120	**1,350**
	6/20/2005	0.212	BDL	BDL	124	**1,470**
	7/14/2005	0.266	BDL	BDL	132	**1,530**
	8/15/2005	0.226	BDL	BDL	118	**1,460**

TABLE A1
PREVIOUS IRRIGATION WELL ANALYTICAL

					ANIONS (mg/L)	
	Date	Boron	Iron	Manganese	Chloride	Sulfate
WQCC		0.75	1	0.2	250	600
RA 3723		BDL	BDL	BDL	BDL	BDL
RA 3156	7/21/2003	BDL	2.15	0.0179	232	1,720
	8/29/2003	BDL	4.14	0.0238	236	1,600
	9/29/2003	BDL	6.09	0.18	236	1,650
	5/24/2004	0.111	BDL	0.0294	166	1,080
	6/28/2004	BDL	1.59	0.0097	226	1,510
	7/14/2004	0.216	BDL	0.00646	207	1,440
	8/16/2004	0.213	1.69	BDL	213	1,470
	9/16/2004	0.226	1.42	BDL	250	1,850
	7/22/2005	0.218	BDL	BDL	209	1,490
	8/8/2005	0.186	BDL	BDL	237	1,550
	9/29/2005	0.174	0.252	BDL	228	1,570
RA 3333	6/28/2004	0.101	1.11	BDL	168	1,040
	7/22/2004	0.11	2.48	BDL	152	954
	8/23/2004	0.113	1.31	BDL	174	1,060
	7/29/2005	0.0954	0.532	0.0956	188	1,100
	8/29/2005	0.0793	1.95	0.531	194	1,090
	9/29/2005	0.0925	1.04	0.0876	192	1,010
RA 3353	4/24/2003	BDL	BDL	BDL	BDL	BDL
	7/21/2003	BDL	1.5	0.00705	170	1,180
	8/18/2003	BDL	2.37	0.0121	169	1,080
	9/29/2003	BDL	1.89	0.00838	173	1,210
RA 3356	5/24/2004	0.201	1.6	0.017	216	1,420
RA 4196	7/8/2003	BDL	5.7	0.175	305	1,400
	8/18/2003	BDL	11.3	0.282	217	1,390
	9/15/2003	BDL	13.7	0.223	198	1,450
	5/12/2004	0.199	1.59	BDL	130	1,480
	7/27/2004	0.152	4.91	0.0688	198	1,260
	8/25/2004	0.177	6.36	0.0816	162	1,320
	9/7/2004	0.0675	22.8	0.336	272	1,240
	9/22/2004	0.148	4.93	0.0888	144	1,300
	5/5/2005	0.172	3.54	0.0724	188	1,310
	6/20/2005	0.0979	3.64	0.0862	301	1,350
	9/28/2005	0.139	2.72	0.0711	198	1,320

TABLE A1
PREVIOUS IRRIGATION WELL ANALYTICAL

					ANIONS (mg/L)	
	Date	Boron	Iron	Manganese	Chloride	Sulfate
WQCC		0.75	1	0.2	250	600
RA 4798	3/6/2003	BDL	BDL	BDL	BDL	BDL
	4/9/2003	BDL	BDL	BDL	BDL	BDL
	6/29/2003	BDL	BDL	BDL	BDL	BDL
	7/17/2003	BDL	1.1	0.00365	145	1,720
	8/18/2003	BDL	3.21	0.0066	138	1,560
	9/15/2003	BDL	7.46	0.0378	148	1,580
	5/12/2004	0.0844	3.54	0.0441	653	1,380
	6/28/2004	BDL	5.5	0.0173	208	1,470
	7/27/2004	0.183	14.8	0.0267	132	1,390
	8/25/2004	0.208	3.63	0.00929	133	1,380
	9/22/2004	0.171	2.06	0.0133	129	1,380
	6/20/2005	0.162	0.207	0.00737	130	1,400
	7/29/2005	0.156	1.43	0.00865	126	1,320
	8/29/2005	0.158	4.64	0.00972	133	1,350
	9/28/2005	0.188	2.67	0.0206	135	1,390
Larue	7/2/2003	BDL	2.29	0.0218	112	1,480
	8/29/2003	BDL	2.47	0.00899	122	1,430
	9/29/2003	BDL	2.32	0.0108	120	1,460
	6/23/2004	BDL	0.829	0.00918	119	1,350
	7/14/2004	0.252	BDL	0.00703	111	1,330
	8/16/2004	0.252	1.56	0.00722	108	1,350
	9/16/2004	0.248	1.73	0.00919	112	1,540
	7/22/2005	0.242	5.83	0.0562	115	1,420
	8/8/2005	0.208	0.204	0.00618	120	1,460
	9/29/2005	0.202	0.505	0.00804	118	1,450

NOTES:
BDL -Below Detection Limit

ATTACHMENT II

FIGURE I
Site Map

LEGEND

- △ IRRIGATION WELL
- ⌖ MONITOR WELL
- ■ RECOVERY WELL LOCATION
- ⊠ PIEZOMETER LOCATION

"MW-70" NEW WELL DESIGNATION

"(MW-19)" OLD WELL DESIGNATION

NOTES	REFERENCE DRAWINGS

NO.	REVISIONS	BY	CHK.	DATE	APPR.	APPR.
2	REVISED PER JLB	YSF		9/20/06		
1	GENERAL REVISION	RCH		11/3/05		
0		RCH		9/23/05		

DRAWING TITLE

FIGURE 1
AREA MAP
NAVAJO REFINING

NAVAJO REFINING CO.
ENGINEERING DEPARTMENT
P.O. DRAWER 159
ARTESIA, NEW MEXICO

DRAWN BY	CHK'D BY	SCALE	
RCH			
DATE	APPR BY	DRAWING NUMBER	REV.
09/23/05		90-49-E	2