DRAFT
Revised Interim Removal Measure Work Plan

Gibson Environmental Site
Bakersfield, California

Prepared for:

The Gibson Environmental PRP Group
c/o de maximis, inc.
2203 Timberloch Place, Suite 213
The Woodlands, TX 77380

September 2006

Project No. 7721.000

Geomatrix

Geomatrix

September 29, 2006
Project 7721.000

Mr. Paul Ruffin
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

Subject: Revised Draft Interim Removal Measure Work Plan
Gibson Environmental Site
Bakersfield, California

Dear Mr. Ruffin:

Geomatrix Consultants, Inc., is pleased to submit this Revised Draft Interim Removal Measure (IRM) Work Plan for the subject site on behalf of the Gibson Environmental Site PRP Group. This work is being proposed in response to sections of the Imminent and/or Substantial Endangerment Order No. I&SE 99/00-002 issued by the Department of Toxic Substances Control on November 18, 1999 (as amended). This draft has been revised based on comments discussed with you during a July 31, 2006 conference call and supersedes the June 2006 IRM Work Plan.

Please call either of the undersigned if you have any questions or require additional information.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

//original signed by//

//original signed by//

Jennifer L. Patterson, PE #C59161
Senior Engineer

Susan M. Gallardo, PE # C038154
Principal Engineer

JLP/SEG/ldu
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Enclosure

cc: Gibson Environmental Site PRP Group (electronic copy)

2101 Webster Street, 12th Floor
Oakland, California 94612-3066
Tel 510.663.4100
Fax 510.663.4141
www.geomatrix.com

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Prepared by:

Geomatrix Consultants, Inc.
2101 Webster Street, 12th Floor
Oakland, California 94612
(510) 663-4100

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TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

2.0 SITE BACKGROUND 2
- 2.1 RELATED DOCUMENTS 2
- 2.2 SITE DESCRIPTION 3
- 2.3 GIBSON OPERATIONAL HISTORY 4
- 2.4 PREVIOUS ENVIRONMENTAL INVESTIGATIONS 4
  - 2.4.1 Soil Pile Investigation 4
  - 2.4.2 Summary of Shallow Subsurface Soil Analytical Results 5

3.0 SCOPE OF THE IRM 7
- 3.1 SOIL PILE REMOVAL 7
  - 3.1.1 Soil Disposal 10
  - 3.1.2 Unanticipated Conditions 10
- 3.2 SUBSURFACE PIPING REMOVAL AND CONCRETE PAD AND SUMP DEMOLITION AND REMOVAL 10
  - 3.2.1 Unanticipated Conditions 11
- 3.3 TRANSPORTATION PLAN 12

4.0 IRM IMPLEMENTATION 13
- 4.1 REGULATORY ISSUES 13
- 4.2 CONTRACTOR'S HEALTH AND SAFETY PLAN 13
- 4.3 STORM WATER POLLUTION PREVENTION PLAN 14
- 4.4 DUST CONTROL PLAN 14
- 4.5 ACCESS CONTROL 14
- 4.6 EQUIPMENT DECONTAMINATION 15
- 4.7 AIR MONITORING 15

5.0 REPORTING 16

6.0 SCHEDULE 16

7.0 REFERENCES 17

TABLES

Table 1 Summary of Chemicals Present in Soil Piles
Table 2 Summary of Lead Concentrations in Soil Piles
Table 3 Shallow Soil Analytical Results – Polychlorinated Biphenyls
Table 4 Shallow Soil Analytical Results – Organochlorine Pesticides
Table 5 Shallow Soil Analytical Results – Semivolatile Organic Compounds
Table 6 Shallow Soil Analytical Results – Polynuclear Aromatic Hydrocarbons
Table 7 Shallow Soil Analytical Results – Volatile Organic Compounds
Table 8 Shallow Soil Analytical Results – Metals
Table 9 Shallow Soil Analytical Results – Petroleum Hydrocarbons

DRAFT

TABLE OF CONTENTS
(Continued)

FIGURES

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Sample Location Map – Soil Piles
Figure 4	Pipe Inventory and Concrete Thickness
Figure 5	Truck Haul Route Overview
Figure 6	Truck Haul Route
Figure 7	IRM Project Schedule

APPENDIXES

Appendix A	Lead Composite Results – All Piles
Appendix B	Concrete Pad Piping Inventory
Appendix C	Air Monitoring Plan

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REVISED INTERIM REMOVAL MEASURE WORK PLAN

Gibson Environmental Site
Bakersfield, California

1.0 INTRODUCTION

This Revised Interim Removal Measure Work Plan (IRM Work Plan) is submitted on behalf of the Gibson Environmental Site PRP Group (PRP Group) to describe work to be conducted at the Gibson Environmental Site located at 2401 Gibson Street in Bakersfield, California (the Site; Figure 1). This document has been revised based on comments discussed with the Department of Toxic Substances Control (DTSC) during a July 31, 2006 conference call. This supersedes the June 2006 IRM Work Plan. The IRM Work Plan addresses specific tasks referenced in Imminent and/or Substantial Endangerment Determination and Order and Remedial Action Order, Docket No. I&SE 99/00-002 (the Order) issued by the DTSC in 1999 pursuant to the California Health and Safety Code Chapters 6.5 and 6.8, and the federal Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. §§9601, *et seq*. (CERCLA). The Order outlines the work DTSC requires to characterize and remediate the Site. The PRP Group is a group of companies and municipalities who were generators to the Site and was formed to respond to the Order. This IRM Work Plan outlines the work required to remove and appropriately dispose of aboveground soil piles that have been classified as non-RCRA California hazardous waste due to the lead content, a small amount of aboveground soil that is not classified as California hazardous waste, certain surface concrete, and subsurface piping. As a result of a meeting with DTSC on May 17, 2006, the PRP Group understands that, provided the Group and DTSC agree that the IRM described below will proceed, the preparation of a Feasibility Study (FS) and other administrative processes under the Order will be postponed until after completion of the IRM.

Following completion of the IRM, additional sampling will be conducted to address DTSC comments regarding the Health Risk Assessment (Geomatrix, 2005d). An FS will then be prepared to address subsurface soil and groundwater at the Site. Pending the outcome of the FS, a Remedial Action Plan (RAP) will be prepared and implemented upon DTSC approval. Additionally, a deed restriction will be executed restricting future Site use to industrial/commercial.

2.0 SITE BACKGROUND

This section presents background information for the Site, including a list of relevant documents, a brief description of Gibson's operational history, a Site description, and a summary of previous Site investigation activities to the extent they are relevant to the IRM.

2.1 RELATED DOCUMENTS

A detailed discussion of the Site, the environmental setting, previous removal actions, hydrogeology, health risk assessment, and previous investigation activities are provided in the following reports and correspondence:

- *Preliminary Tank Area Assessment* (Foster Wheeler, 2001a), approved by DTSC in 2001.
- *Emergency Action Summary Report* (Foster Wheeler, 2001b), approved by DTSC in 2001.
- *Subsurface Soils and Groundwater Remedial Investigation Work Plan* (Geomatrix, 2002), approved by DTSC for implementation on October 7, 2002.
- *Remedial Investigation Report* (for subsurface soil and groundwater) (Geomatrix, 2003b), superseded by *Final Site Wide Remedial Investigation Report* (Geomatrix, 2006), presently pending with DTSC.
- *Installation of Additional Monitoring Wells and Groundwater Sampling Report* (Geomatrix, 2004b).
- *Quarterly Groundwater Monitoring Reports* (Geomatrix, 2004d; 2005a,b,c).
- *Final Pile Remedial Investigation Report With Addendum* (2005) approved by DTSC on August 19, 2005.
- *DTSC's correspondence dated August 8, 2005* approving the discontinuance of the groundwater quarterly monitoring program.
- *Health Risk Assessment* (Geomatrix, 2005d), approved subject to stated conditions by DTSC on April 12, 2006.

These reports and correspondence have been prepared by the PRP Group and approved as noted above. The approved reports are available in the Site repository established by the public information plan for the Site located at the Kern County Library or through DTSC.

2.2 SITE DESCRIPTION

The Site consists of approximately 6.2 acres located at 2401 Gibson Street in Bakersfield, Kern County, California (Figure 1). In 2005, the PRP Group had its agent, *de maximis, inc.*, purchase the Site at a property tax foreclosure sale. The PRP Group has retained Geomatrix Consultants, Inc. (Geomatrix), of Oakland, California, as a contractor to assist with work at the Site. In order to implement the IRM the PRP Group will also lease property immediately south of the Site to provide an access road from Burr Street (Figure 6).

The main streets surrounding the Site are Rosedale Highway to the north, Gibson Street to the east, Burr Street to the south, and Case Street to the west. The Site is in an unincorporated area of Kern County designated for industrial use in the County's master plan and is zoned industrial. The Site is located near vacant lots and light to medium industrial and commercial activities. Those activities include a concrete mix operation, a restaurant, several oil production wells, a used oil field equipment storage yard, a gasoline station, and an equipment rental facility; all are located within ¼-mile of the Site.

The Site currently is abandoned and relatively flat except for the presence of aboveground soil stockpiles (North, South, East, West, and Oversize) on the southern portion of the Site. Survey results indicate that the piles contain a total of approximately 80,000 cubic yards of soil. There is a concrete pad that supported former above-grade equipment in the center of the soil pile area. The rest of the southern portion of the Site is unpaved. Two oil pump jacks are present in the southern portion of the Site among the soil piles.[1] The northern part of the Site contained a former tank farm. The tanks, liquids, and sludge were removed by the PRP Group's contractor, Foster Wheeler Corporation, in 2000 and 2001. All tanks, except a former water supply tank, have been removed from the Site; however, sections of the containment walls and concrete platforms associated with the tank farm remain. The northern portion of the Site is paved with concrete; subsurface piping associated with the former tank farm remains in place. Access to the Site is restricted; the Site perimeter is fenced and locked. A site plan is presented in Figure 2.

[1] Oil pump jacks are associated with former oil production activities that occurred at the Site before 1987, when the Site was permitted by DTSC as a hazardous waste disposal site (see Section 2.3).

2.3 GIBSON OPERATIONAL HISTORY

The Site was used for oil-related production activities as early as the 1940s. Gibson Oil purchased the northern part of the Site in 1978, and subsequently used it for oil refining and recycling operations intermittently until at least 1984. In 1987, Gibson Oil became Gibson Environmental and received an interim status permit from DTSC to operate a hazardous waste treatment, storage, and disposal facility for liquid waste. In June 1988, Gibson received a Part B Permit to operate a liquid hazardous waste treatment, storage, and disposal facility. Liquid wastes handled at the Site primarily consisted of crude and used oils, petroleum tank bottom wastes, and oily water. In 1989, Gibson purchased the southern part of the property and in 1990 received interim status to accept contaminated soils. Gibson ceased operations and abandoned the Site in 1995, leaving behind approximately 80,000 cubic yards of aboveground soil piles and 670,000 gallons of liquid and sludge in the tanks. In 1999, the DTSC sampled the tank contents and later that year issued the Order. Since 1999, the PRP Group has conducted the investigations and removals pursuant to the Order documented in the reports and correspondence identified in Section 2.1.

2.4 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Environmental investigations were conducted on behalf of the PRP Group by IT Corporation to assess chemicals present in the soil piles (IT, 2001) and by Geomatrix to assess the subsurface soil and groundwater (Geomatrix, 2003b; 2004b,d; 2005a,b,c; 2006), respectively. Because this IRM Work Plan addresses only the aboveground soil piles and specific surface and subsurface structures, only data collected from the soil piles and shallow soil beneath the northern portion of the Site are presented in this Section. Subsurface soil and groundwater will be addressed in an FS to be prepared after implementation of this IRM has been completed.

2.4.1 Soil Pile Investigation

The investigation conducted by IT Corporation identified chemicals in the aboveground soil piles for waste characterization purposes. Two hundred ninety-seven (297) discrete soil samples were collected from 57 boring locations (IT, 2001; Figure 3). From these samples, 113 composite samples were derived from sampling intervals located at similar elevations within respective piles and analyzed for total lead using U.S. Environmental Protection Agency (EPA) Method 6010B. A total of 89 of the 113 composite samples were analyzed for leaching potential using the California Waste Extraction Test (WET; Code of California Regulation [CCR], Title 22, Section 66261.10 et seq.) and the Toxicity Characteristic Leaching Procedure

(TCLP). In addition, 27 discrete samples were collected. The discrete sample locations were biased towards the interior portions of the piles and analyzed for a full suite of constituents, as listed below:

- Title 22 metals (including lead), using EPA Method 6000/7000 series;
- volatile organic compounds (VOCs) using EPA Method 8260B;
- semivolatile organic compounds (SVOCs) using EPA Method 8270C;
- total petroleum hydrocarbons (TPH) using EPA Method 8015M;
- polychlorinated biphenyls (PCBs) using EPA Method 8082;
- herbicides using EPA Method 8151A; and
- pesticides using EPA Method 8081A.

Table 1 presents a summary of the chemicals detected in the aboveground soil piles on the southern portion of the Site. Appendix A includes the total lead concentrations of all composite samples collected, the quadrants where the samples were collected, and the elevation range of sample collection.

The soil pile investigation was conducted in accordance with applicable state and federal protocols for characterization of hazardous wastes and hazardous substances and the Final Soil Pile Investigation Report, With Addendum, was approved by DTSC in August, 2005. The results of the investigation indicated that lead concentrations exceed California non-RCRA hazardous waste thresholds in the West, East, and North Piles. As a result, the soil in the West, East, and North piles will be considered non-RCRA California hazardous waste for purposes of transportation and disposition. Table 2 presents a summary of the lead concentrations in the soil piles. The South and Oversize Piles, consisting of approximately 1,600 cubic yards of soil, do not contain concentrations of chemicals exceeding federal or state hazardous waste thresholds (IT, 2001).

2.4.2 Summary of Shallow Subsurface Soil Analytical Results

Soil beneath the concrete pad in the tank farm area will be exposed during the piping and concrete removal activities. Therefore, a summary of analytical results for samples collected from 5 feet below ground surface or shallower from borings advanced in the northern portion of the Site is presented by chemical class below. In general, constituents detected beneath and

in the vicinity of the concrete pad primarily consist of fuel-related compounds, PCBs, and metals. These analytical data are also presented in Tables 3 through 9 and sampling locations are shown on Figure 4.

A total of 40 samples from 20 locations in the northern portion of the Site were analyzed for PCBs. PCB mixtures Aroclor 1242, Aroclor 1254, and/or Aroclor 1260 were detected in 16 soil samples from 11 of these locations at concentrations ranging from 27.4 (Aroclor 1260) to 501 micrograms per kilogram (µg/kg) (Aroclor 501).

A total of 49 samples from 21 locations in the northern portion of the Site were analyzed for organochlorine pesticides (OCPs). Five OCPs were detected in eight of the samples. As shown in Table 4, the concentrations of these OCPs ranged between 0.0106 (4,4'-DDT) and 0.107 milligrams per kilogram (mg/kg) (4,4'-DDT).

A total of 46 soil samples from 20 locations in the northern portion of the Site were analyzed for SVOCs. As shown in Table 5, only 3 SVOCs (2-methylnaphthalene, phenol, and bis(2-ethylhexyl)phthalate) were detected in 14 soil samples. The concentrations of these SVOCs ranged between 0.406 and 12.2 mg/kg.

A total of 40 soil samples from 20 boring locations in the northern portion of the Site were analyzed for PAHs. As shown in Table 6, 16 PAHs were detected in 28 soil samples. Concentrations of PAHs, where detected, ranged between 0.012 (acenaphthylene) and 9.55 mg/kg (naphthalene).[2]

A total of 35 soil samples from 19 boring locations in the northern portion of the Site were analyzed for VOCs; VOCs were detected in 25 of these soil samples. The analytical results for each sampling location and depth are presented in Table 7. As shown in Table 7, a total of 20 VOCs that are primarily alkylated aromatics (petroleum-related VOCs) were detected at concentrations ranging between 0.0068 mg/kg (toluene) and 19.2 (1,2,4-trimethylbenzene).

A total of 37 soil samples from 19 locations in the northern portion of the Site were analyzed for California Code of Regulations Title 22 metals. Fourteen (14) of these metals were

[2] The results presented in this section are from the PAH analyses using EPA Method 8270C SIM. PAHs were also detected using EPA Method 8270, which has higher detection limits. The PAH detections from EPA Method 8270C are reported in Table 5.

detected in soil samples. The analytical results for each sampling location and depth are presented in Table 8. Metals were detected at concentrations ranging between 0.418 (mercury) and 376 mg/kg (barium).

A total of 39 soil samples from 21 boring locations in the northern portion of the Site were analyzed for TPH quantified as gasoline (TPHg; $C_6 – C_{10}$ range) and TPHd quantified as diesel (TPHd) extended ($C_{10} – C_{34}$ range); TPHd extended and/or TPHg were detected in 33 samples. The analytical results for each sampling location and depth are presented on Table 9. As shown on Table 9, concentrations of TPHg were detected between 5.07 and 1720 mg/kg; TPHd detections ranged between 10.2 and 42,000 mg/kg.

3.0 SCOPE OF THE IRM

The primary objective of the IRM is to remove the aboveground soil piles that have been classified as non-RCRA California hazardous waste due to lead content, the concrete pad and platforms in the northern portion of the Site, and all subsurface piping associated with the former tank farm. While mobilized for the IRM, some additional aboveground soil that is not classified as non-RCRA California hazardous waste will also be removed from the Site. Details of the IRM are discussed in the following sections.

3.1 SOIL PILE REMOVAL

The IRM will remove aboveground soil piles containing approximately 77,400 cubic yards of soil classified as non-RCRA California hazardous waste (the East, West, and North piles; Figure 2) using conventional earthmoving equipment. As discussed in Section 2.4.1, the South and Oversize Piles (1,600 cubic yards) do not contain material classified as hazardous waste; however, they will also be removed during implementation of the IRM. Soil from the piles will be loaded into dump trucks and transported to an appropriate licensed waste disposal facility. The PRP Group's contractor will be responsible for handling, loading, and transporting soil from the existing aboveground piles. All site work will be conducted in accordance with industry standards; local, state, and federal environmental regulations; and the Order. It is anticipated that hours of operation will be from 7:30 a.m. to 5:30 p.m., 5 days per week and that approximately 90 trucks can be loaded and transported for disposal each work day. If those assumptions are correct, the soil pile removal can be accomplished in approximately 60 to 70 working days. A total of approximately 5,100 truck loads will be required to remove the

soil piles from the Site. Subsurface soil characterization or removal are not included as part of this IRM. Subsurface soil will be addressed in the subsequent FS.

Prior to conducting field activities, the contractor shall notify Underground Service Alert (USA) and procure appropriate permits. Soil pile removal activities will begin with the contractor mobilizing equipment, establishing on-site operations, and shaping the existing soil piles to ensure safe and efficient loading. A truck-loading and decontamination station will be constructed, and erosion control measures will be implemented (See Section 4.6 below). On-site equipment is expected to include weight scales to insure proper loading of trucks, rubber-tired front-end loaders, a water truck, and either a bulldozer or tracked excavator as appropriate to the operations. Dump trucks will be loaded on-site and will transport the soil to a licensed landfill in a manner consistent with the Transportation Plan described in Section 3.3 below.

All appropriate efforts will be made by the contractor to minimize the mobilization of airborne dust during soil pile removal and loading of the transport vehicles for off-site disposal. These measures will include the implementation of the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) Guidelines For Mitigating Air Quality Impacts (2002), including the following:

- areas not being actively utilized for construction purposes will be effectively stabilized from dust emissions using water, chemical stabilizer, or other suitable cover or vegetation, as required;
- unpaved roads will be effectively stabilized from dust emissions using water or chemical stabilizer/suppressant, as required;
- excavation, grading, and concrete demolition will be effectively controlled from fugitive dust emissions utilizing water, as required;
- all trucks will be covered and at least 6 inches of freeboard space from the top of the container will be maintained;
- equipment decontamination procedures will be implemented for equipment leaving the Site (See Section 4.5 below);
- traffic speeds will be limited on unpaved roads to 15 miles per hour (mph);
- erosion control measures to prevent silt runoff to adjacent roads or properties will be implemented; and

- an air monitoring plan will be implemented on Site to assure compliance with SJVUAPCD Regulation VIII (see Section 4.7 below). Based on that monitoring, excavation and grading activities may be suspended when wind speeds exceed 20 mph.

The above measures will be incorporated into a Dust Control Plan and an Air Monitoring Plan to be submitted to the SJVUAPCD (see Sections 4.4 and 4.7 below).

Public access to the Site during IRM activities will be restricted by maintaining the existing chain-link fence around the Site in all areas not required for truck access. Locked gates will control truck access routes onto the Site when removal activity is not occurring. Fencing and gating was recently upgraded to minimize opportunities for trespassers.

The contractor will maintain written documentation and utilize procedures to track and record each soil pile through handling, loading, and off-site disposal. Prior to the work, the contractor will prepare a written Health and Safety Plan (see Section 4.2 below) and be required to specify to the PRP Group the methods and equipment that will be used to safely remove soil from the existing piles.

Two techniques will be implemented to confirm that the soil piles containing hazardous waste have been removed. First, visual confirmation will demonstrate that the piles have been removed to existing grade for native soil surrounding the piles. Second, confirmation testing will demonstrate that the pile removal is complete. Prior tests taken below the soil piles as part of the Pile Remedial Investigation demonstrate that the chemical constituents (particularly lead) found in the soil piles are either not present in native soils or not present at appreciable concentrations immediately below the piles (Geomatrix, 2003b). Therefore, new samples will be taken from the area previously occupied by the East, West, and North Piles to confirm that native soil has been reached and the soil pile IRM is complete. Three samples will be collected from each of the areas formerly occupied by the East and West Piles. Two samples will be collected from the smaller area previously occupied by the North Pile. Samples will be collected from the top 6 inches of soil in clean brass tubes sealed with Teflon® sheets, plastic end caps and silicon tape. Samples will be delivered to a California-certified analytical laboratory under Geomatrix chain-of-custody procedures for analysis for lead using U.S. Environmental Protection Agency (EPA Method 6010). If lead concentrations in the samples exceed 10 times the soluble threshold leaching concentrations (STLC) for lead, then a waste extraction test (WET) for lead will be performed. If the WET lead concentration exceeds the

STLC, additional delineation sampling may be conducted and an additional lift of 6 inches to 1 foot of soil will be excavated in the immediate area of the exceedance. Another round of confirmation testing will then be conducted. The procedure will be repeated until the confirmation testing demonstrates that lead concentrations in EPA method 6010 are less than 10 times the STLC for lead. Upon completion of the soil pile removal, the PRP Group will hydroseed the Site to minimize erosion and dust.

3.1.1 Soil Disposal

Based on analytical results of previous investigations, three existing soil piles (West, East, and North Piles) contain material designated as a non-RCRA California hazardous waste that will be transported for disposal at a Class I facility. The South and Oversize Piles do not have constituents exceeding federal or state hazardous waste thresholds and will be transported to an appropriate licensed disposal facility. Waste profile forms, waste manifests, and bills of lading will accompany all soil transported to the landfill.

3.1.2 Unanticipated Conditions

Should unanticipated conditions be encountered during soil pile removal activities, such as the presence of a drum, or other debris that does not appear inert; conditions will be stabilized and work will cease in this area. The PRP Group will then notify the DTSC. The characterization and disposal of this debris shall be carried out under the direction of the PRP Group and in accordance with DTSC and the disposal facility's requirements. Work shall proceed in other areas of the site until the unanticipated conditions have been evaluated and mitigated, as necessary.

3.2 Subsurface Piping Removal and Concrete Pad and Sump Demolition and Removal

The concrete pads, platforms, containment walls, sumps, and piping located in the former tank farm will be demolished and removed for appropriate disposal. These IRM activities will also include loading, transportation, demolition, and disposal of demolition waste/debris. It is anticipated that these activities will be conducted by the same contractor retained to perform the soil pile removal. The concrete slab in the southern portion of the Site will not be removed because there is no underground piping or environmental concerns associated with it.

Demolition activities will include the removal of the concrete slab in the former tank farm area and associated improvements, which includes sumps, drains, platforms, containment walls, subsurface piping, exposed pipe, steel reinforcement bars, and other features of the concrete pads. This concrete slab is approximately 265 feet by 270 feet and varies in thickness from 0.5 to 2.0 feet. Information regarding concrete pad thickness and surface expressions of piping in the former tank farm is shown in Figure 4 and summarized in Appendix B.

Since it is unknown whether the piping was drained or flushed of residual material, the piping will be inspected and drained, if required. Equipment and containment vessels will be available on site to drain the piping and to prevent the release of the material. The piping will either be disposed or recycled off-site. All recovered, residual materials drained from the piping will be contained and appropriately stored on site. To characterize the residual material left inside of piping for off-site disposal, samples will be collected and analyzed for VOCs, SVOCs, TPHg, TPHd extended, PCBs, and pesticides. Additional analytes may be requested by the intended off-site disposal facility.

Demolition of the concrete pad will be conducted in accordance with industry standards, and will include the dust control and air monitoring measures outlined above and in Sections 4.4 and 4.7. Concrete debris, steel reinforcement bars, subsurface piping, and other demolition wastes/debris will be separated, segregated, and stockpiled. Concrete debris will be sampled for VOCs, SVOCs, TPHg, TPHd extended, PCBs, pesticides, and Title 22 metals. Additional analyses may be requested by the intended off-site disposal facility. Demolition stockpiles will be off-hauled for disposal or concrete recycling based on the results of the post-demolition characterization.

Following completion of demolition activities, the areas where sumps were removed will be backfilled to grade using clean fill and the entire Site will be hydroseeded to minimize erosion and dust.

3.2.1 Unanticipated Conditions

Should unanticipated conditions be encountered during removal of the concrete pad and piping, conditions will be stabilized and work shall immediately cease in this area and the PRP Group will notify the DTSC of the unanticipated conditions. Note that the presence of petroleum hydrocarbons and other constituents are documented to be present in subsurface soil, and soil staining has been observed; this subsurface soil will be addressed in the FS and is not an

unanticipated condition, except as described below. The characterization and mitigation, if necessary, of the unanticipated condition shall be carried out under the direction of the PRP Group and in accordance with DTSC and the disposal facility's requirements. Work shall proceed in other areas of the site until the unanticipated conditions have been evaluated and mitigated, as necessary.

If stained soil is encountered in an area of the subsurface that has previously been sampled, no action will be taken. If stained soil is encountered in an area that has not been sampled, soil samples will be collected from near the surface. The results will be compared to existing data and addressed with other subsurface conditions in the FS. Subsurface soil removal will not be conducted as part of this IRM.

3.3 TRANSPORTATION PLAN

The PRP Group will arrange for disposal of soil pile materials from the North, East, and West piles at a facility licensed to receive non-RCRA California hazardous waste. The facility presently being proposed is Waste Management/Kettleman City, a CERCLA-approved, permitted, Class I landfill located northwest of the Site.

To reach Kettleman, trucks would leave the Site via Commercial Street, turn left on Gibson Street, turn right on Rosedale Highway, and turn left on Buck Owens Boulevard to State Highway 99. From Highway 99, trucks would exit onto State Highway 46 to reach Interstate 5. Returning from Kettleman, trucks would approach the Site using Interstate 5 and exit on Rosedale Highway. The general transportation route proposed for the IRM is shown on Figure 5.

Trucks arriving at the Site will turn right from Rosedale Highway onto Gibson Road, turn right from Gibson Road onto Burr Street and turn right from Burr Street onto a temporary access road to be constructed south of the Site. This route is shown on Figure 6. The temporary access road will be constructed by laying several inches of gravel on the ground surface to provide additional stability and minimize dust generation. This temporary access road will be removed after the completion of soil off-haul activities. The transportation routes described above have been discussed with the Kern County Department of Roads and California Department of Transportation (Caltrans). Kern County finds them acceptable, subject to reaching an agreement on mitigation measures to compensate for potential impact to the roads. Caltrans finds the routes acceptable.

Soil classified as non-hazardous waste will be disposed of at McKittrick Waste Treatment Site in McKittrick, California. It is anticipated that the concrete and piping can be recycled at Golden State Metals in Bakersfield, California. The volume of materials to be transported to McKittrick and/or Golden State Materials is anticipated to be less than 260 truckloads.

4.0 IRM IMPLEMENTATION

4.1 REGULATORY ISSUES

The following regulatory submittals and approvals will be required to implement the IRM:

- A Grading Permit issued by the Kern County Public Works Department;
- DTSC approval of this IRM Work Plan;
- Submittal of a Notice of Intent to Comply With the Storm Water General Permit (General Permit) to the California Regional Water Quality Control Board (Water Board) and preparation of a Storm Water Pollution Prevention Plan (SWPPP);
- Submittal of transportation plans to Caltrans Bakersfield Permitting Office and the Kern County Roads Department; and
- Submittal of a Dust Control Plan to the SJVUAPCD (per SJVUAPCD Regulation VIII – Fugitive PM10 Prohibitions, and Rule 8021).

On behalf of the PRP Group, Geomatrix and/or the contractor will complete all of the regulatory requirements listed above.

4.2 CONTRACTOR'S HEALTH AND SAFETY PLAN

A written Site-specific Health and Safety Plan (HASP) will be prepared prior to initiation of IRM work. The HASP will be prepared in accordance with Federal and State Occupational Safety and Health Administration (OSHA) standards for heavy equipment, subsurface construction, and hazardous waste operations. The HASP will address the health and safety responsibilities, required health and safety training, work zone monitoring, hazards associated with potential exposure to soil pile materials at the Site, and health and safety hazards associated with implementing the IRM.

4.3 STORM WATER POLLUTION PREVENTION PLAN

Storm water pollution controls will be implemented to minimize runoff of sediment in storm water. Storm water pollution controls at construction sites greater than 1 acre in size are regulated using the Water Board General Permit for Storm Water Discharges Associated with Construction Activity (99-08-DWQ; General Permit).

Prior to initiating IRM work, a Notice of Intent (NOI) to comply with the General Permit will be filed and storm water pollution prevention plans (SWPPPs) will be prepared that describe Best Management Practices (BMPs) to be implemented during the work. The objective of the SWPPP will be to prevent impairment of receiving waters by storm waters containing sediment, silt, or other pollutants. The SWPPP will be prepared in accordance with applicable local, state, and federal regulatory requirements.

4.4 DUST CONTROL PLAN

A Dust Control Plan (DCP) will describe measures that reduce ambient concentrations of fine particulate matter (PM_{10}) by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. These activities will include the SJVUAPCD construction mitigation measures described in Section 3.1 above.

The DCP will be prepared in accordance with Section 6.3 of SJVUAPCD Rule 8021, and will be submitted to the SJVUAPCD for review to assure that its construction mitigation requirements are adequately addressed before IRM work commences.

4.5 ACCESS CONTROL

Access to the Site will be limited. Visitors to the Site will be required to check in with the contractor's Health and Safety Officer and will be required to review and comply with the provisions of the site-specific HASPs. The perimeter of the Site is fenced and posted with no trespassing signs to prevent unauthorized entry. All access roads to the Site will be gated and locked during hours that IRM operations do not occur on Site. A project manager will be on Site during all hours of IRM operation. A local security firm patrols the perimeter of the Site during off hours.

4.6 EQUIPMENT DECONTAMINATION

Any equipment contacting soil pile material will be decontaminated prior to leaving the Site. Generally, loading and excavating equipment will be dedicated to the Site activities until the end of the IRM. Upon IRM completion, all loading and excavating equipment will be decontaminated prior to leaving the Site.

Trucks used to haul soil pile material will be routed to minimize contact between truck tires and soil pile material. In addition, temporary haul roads may be constructed with imported material to prevent contact with soil pile material.

If trucks are exposed to soil pile material, initial decontamination procedures will include removing loose soil from the vehicle exterior with brooms or brushes. Soil not removed by brushing will be removed using water (e.g., pressure washing).

A decontamination station will be created during site preparation. The location of the decontamination station may change as the work progresses. The decontamination area will be surrounded by a berm and covered with two layers of heavy plastic (6 mil) to allow for collection of decontamination wastes. All decontamination water will be pumped to a temporary storage tank pending characterization and final disposition.

4.7 AIR MONITORING

A perimeter air monitoring program will be implemented before and during the IRM activities to confirm that elevated PM_{10} and airborne chemical constituents are not present at the site perimeter in excess of concentrations that are protective of human health. An Air Monitoring Plan (AMP), is included with this Work Plan as Appendix C.

The AMP describes the procedures to be used during construction activities to monitor fugitive emissions during construction activities. Specific air monitoring measures include baseline air monitoring and real-time site perimeter air monitoring and sampling during the IRM activities. The plan also identifies indicator parameters and action levels at which additional engineering controls to suppress PM_{10} and airborne chemical constituents would need to be initiated.

5.0 REPORTING

After completion of IRM activities, a report will be prepared for submission to the DTSC. This report will include descriptions of field methods, observations, monitoring, disposal of soil piles and other materials described above, and a description of any deviations from the IRM Work Plan. All analytical results generated during the IRM activities will be included in this report. Copies of field documentation (e.g., any monitoring data, manifests, bills of lading) will be included. This report will be prepared and certified by Geomatrix.

6.0 SCHEDULE

It is the goal of the PRP Group to start excavation activities in December 2006. To facilitate this schedule, the PRP Group will continue its preparation work in parallel with the DTSC approval process. The PRP Group will arrange for the necessary permits, prepare contract documents, prescreen potential contractors and complete the bid process, develop the site-specific plans discussed herein, and other pre-field activities pending DTSC approval of the IRM Work Plan.

It is anticipated that actual on-site activities, including site mobilization and site preparation activities will require approximately 4 to 5 months. A conceptual project schedule to accomplish the start of field activity in December 2006 is attached as Figure 7. Actual field operations will not commence until required approvals are obtained.

7.0 REFERENCES

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San Joaquin Valley Unified Air Pollution Control District, 2002, Guide for Assessing and Mitigation Air Quality Impacts, January.

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TABLES

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TABLE 1

SUMMARY OF CHEMICALS PRESENT IN SOIL PILES [1]

Gibson Environmental Site
Bakersfield, California

Chemical	Count (n)	Number of Detects	Frequency of Detection	Minimum Detection	Maximum Detection	Minimum Detection Limit	Maximum Detection Limit
Volatile Organic Compounds (mg/kg)							
1,1,1-Trichloroethane	31	1	3%	0.0029	0.0029	0.0039	1.1
1,1-Dichloroethane	31	2	6.5%	0.0016	0.002	0.0039	1.1
2-Butanone (MEK)	31	3	10%	0.023	0.079	0.02	5.7
4-Methyl-2-pentanone (MIBK)	31	1	3%	0.018	0.018	0.02	5.7
Acetone	31	9	29%	0.032	3.4	0.02	5.7
Benzene	31	18	58%	0.0091	2.3	0.0045	0.68
Carbon disulfide	31	4	13%	0.0019	0.0036	0.0039	1.1
Chlorobenzene	31	1	3%	0.0036	0.0036	0.0039	1.1
cis-1,2-Dichloroethene	31	1	3%	0.0088	0.0088	0.0039	1.1
Ethylbenzene	31	23	74%	0.0022	17	0.0044	0.0066
Methyl tert-butyl ether (MTBE)	31	16	52%	0.031	5.3	0.0045	1.1
Methylene chloride	31	1	3%	0.49	0.49	0.0039	1.1
Tetrachloroethene (PCE)	31	10	32%	0.0022	2.1	0.0039	1.1
Toluene	31	22	71%	0.0028	16	0.0045	0.68
Trichloroethene (TCE)	31	4	13%	0.0027	0.53	0.0039	0.68
Xylenes (total)	31	18	58%	0.022	74	0.0039	0.31
Semi-Volatile Organic Compounds (mg/kg)							
2-Methylnaphthalene	27	16	59%	0.094	31	0.33	3.3
Bis (2-ethylhexyl)phthalate	27	19	70%	0.23	9.3	0.33	3.3
Di-n-butyl phthalate	27	1	4%	1	1	0.33	3.3
Di-n-octyl phthalate	27	3	11%	0.31	1.3	0.33	3.3
Dibenzofuran	27	2	7%	5.6	6.2	0.33	3.3
Phenol	27	1	4%	0.7	0.7	0.33	3.3
Polynuclear Aromatic Hydrocarbons (mg/kg)							
Acenaphthene	27	4	15%	1.7	8.5	0.33	3.3
Anthracene	27	8	30%	0.13	36	0.33	3.3
Benzo[a]anthracene	27	6	22%	0.44	6.7	0.33	3.3
Benzo[a]pyrene	27	3	11%	0.077	5.5	0.33	3.3
Benzo[b]fluoranthene	27	7	26%	0.14	8.9	0.33	3.3
Benzo[ghi]perylene	27	1	4%	2.7	2.7	0.33	3.3
Chrysene	27	12	44%	0.21	7.9	0.33	3.3
Fluoranthene	27	10	37%	0.081	9.6	0.33	3.3
Fluorene	27	11	41%	0.2	13	0.33	3.3
Indeno[1,2,3-cd]pyrene	27	1	4%	2.2	2.2	0.33	3.3
Naphthalene	27	16	59%	0.097	17	0.33	3.3
Phenanthrene	27	20	74%	0.085	25	0.33	3.3
Pyrene	27	18	67%	0.15	26	0.33	3.3
Pesticides (mg/kg)							
4,4'-DDD	15	3	20%	0.047	0.17	0.082	0.33
4,4'-DDE	15	3	20%	0.057	0.17	0.082	0.33
4,4'-DDT	15	8	53%	0.045	0.53	0.082	0.33
Aldrin	15	1	7%	0.14	0.14	0.042	0.17
alpha-BHC	15	1	7%	0.081	0.081	0.042	0.17
alpha-Chlordane	15	1	7%	0.064	0.064	0.042	0.17
Beta-BHC	15	1	7%	0.39	0.39	0.042	0.17

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TABLE 1

SUMMARY OF CHEMICALS PRESENT IN SOIL PILES [1]

Gibson Environmental Site
Bakersfield, California

Chemical	Count (n)	Number of Detects	Frequency of Detection	Minimum Detection	Maximum Detection	Minimum Detection Limit	Maximum Detection Limit
Delta-BHC	15	3	20%	0.094	0.11	0.042	0.17
Dieldrin	15	1	7%	0.1	0.1	0.042	0.17
Endosulfan II	15	1	7%	0.087	0.087	0.082	0.33
Endosulfan sulfate	15	1	7%	0.038	0.038	0.042	0.17
Endrin	15	1	7%	0.06	0.06	0.082	0.33
Endrin aldehyde	15	4	27%	0.096	0.13	0.082	0.33
gamma-Chlordane	15	2	13%	0.037	0.05	0.042	0.17
Heptachlor epoxide	15	4	27%	0.041	0.13	0.042	0.17
2,4-DB	15	1	7%	0.055	0.055	0.08	0.16
Dichlorprop	15	2	13%	0.01	0.024	0.08	0.16
Polychlorinated Biphenyls (µg/kg)							
Aroclor-1242	27	1	4%	420	420	33	330
Aroclor-1254	27	2	7%	470	620	33	330
Aroclor-1260	27	14	52%	33	3400	33	330
Metals							
Antimony	27	16	59%	0.25	7.2	6	24
Arsenic	27	27	100%	2.9	13.7	0	0
Barium	27	27	100%	99.4	3390	0	0
Beryllium	27	26	96%	0.29	0.99	0.5	0.5
Cadmium	27	24	89%	0.61	3.1	0.5	0.5
Chromium	27	27	100%	21.9	1320	0	0
Cobalt	27	27	100%	5.7	48.4	0	0
Copper	27	27	100%	18.6	841	0	0
Lead	27	27	100%	12	435	0	0
Molybdenum	27	27	100%	0.66	89.4	0	0
Nickel	27	27	100%	16.7	674	0	0
Selenium	27	17	63%	0.51	2.6	0.5	0.5
Silver	27	16	59%	0.24	1.5	1	2
Thallium	27	13	48%	0.57	1.9	1	4
Vanadium	27	27	100%	34.7	188	0	0
Zinc	27	27	100%	42.8	2190	0	0
Mercury	27	27	100%	0.056	1.3	0	0

Note:

[1] Samples collected by the IT Corporation between April & May 2001 (IT, 2001). Only detected chemicals from discrete samples are presented.

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TABLE 2

SUMMARY OF LEAD CONCENTRATIONS IN SOIL PILES

Gibson Environmental Site
Bakersfield, California

Concentrations in milligrams per kilogram (mg/kg)

General Statistics	Depth Discrete Samples	Composite Samples					
		All Piles Combined	West Pile	East Pile	North Pile	South Pile	Oversize Pile
Count (n)	27	113	65	33	11	2	2
Minimum Concentration	12	5.6	5.6	64.8	220	59.6	118
Mean Concentration	135	157.7	121	203.2	260.5	67.7	123.5
Maximum Concentration	435.0	2150.0	2150	739.0	306.0	75.8	129

Notes:

n = Number of samples
Mean = The average concentration of the sample population

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TABLE 3

SHALLOW SOIL ANALYTICAL RESULTS[1]
POLYCHLORINATED BIPHENYLS

Gibson Environmental Site
Bakersfield, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample Point	Bottom Depth	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
GMX-01	1	10/28/02	<250	<500	<250	<250	<250	<250	<250	<250	<250
	5	10/28/02	<25	<50	<25	<25	<25	<25	**82.2**	<25	<25
GMX-02	1	10/29/02	<25	<50	<25	<25	<25	<25	**80.1**	<25	<25
	5	10/29/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
GMX-03	2	10/29/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
GMX-04	2	10/29/02	<25	<50	<25	<25	<25	<25	**78.8**	<25	<25
	5	10/29/02	<25	<50	<25	<25	<25	<25	**43.9**	<25	<25
GMX-05	1	10/31/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
	5	10/31/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
GMX-06	1	10/30/02	<25	<50	<25	<25	<25	**97.2**	<25	<25	<25
	5	10/30/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
GMX-07	1.5	10/28/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
	5	10/28/02	<25	<50	<25	<25	<25	**42.9**	**47.5**	<25	<25
GMX-08	1	10/17/02	<50 UJ	<100 UJ	<50 UJ	<50 UJ	<50 UJ	<50 UJ	<50 UJ	<50 UJ	<50 UJ
	5	10/17/02	<50	<100	<50	<50	<50	<50	<50	<50	<50
GMX-09	1.5	10/18/02	<250	<500	<250	<250	<250	**501**	<250	<250	<250
	5	10/18/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
GMX-10	1	10/17/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
	5	10/17/02	<50	<100	<50	<50	<50	<50	<50	<50	<50
GMX-11	3	10/17/02	<50	<100	<50	<50	<50	<50	<50	<50	<50
	5	10/17/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
GMX-12	1	10/17/02	<125	<250	<125	<125	<125	<125	<125	<125	<125
	5	10/17/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
	5	10/17/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
GMX-14	1	10/30/02	<25	<50	<25	<25	<25	<25	**31.8**	<25	<25
	5	10/30/02	<25	<50	<25	**66.4** J	<25	<25	<25	<25	<25

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TABLE 3

SHALLOW SOIL ANALYTICAL RESULTS[1]
POLYCHLORINATED BIPHENYLS

Gibson Environmental Site
Bakersfield, California

Concentrations reported in micrograms per kilogram (µg/kg)

Sample Point	Bottom Depth	Sample Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268
GMX-29	1.5	07/09/03	< 25 UJ	< 50 UJ	< 25 UJ	< 25 UJ	< 25 UJ	< 25 UJ	**28.3** J	< 25 UJ	< 25 UJ
	3	07/09/03	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25
	5	07/09/03	< 25	< 50	< 25	< 25	< 25	< 25	< 25	< 25	< 25
GMX-30	1	07/09/03	< 25 UJ	< 50 UJ	< 25 UJ	< 25 UJ	< 25 UJ	< 25 UJ	**38.6** J	< 25 UJ	< 25 UJ
	5	07/09/03	< 25 UJ	< 50 UJ	< 25 UJ	< 25 UJ	< 25 UJ	< 25 UJ	< 25 UJ	< 25 UJ	< 25 UJ
GMX-31	1	07/24/03	< 25	< 50	< 25	< 25	< 25	< 25	**38**	< 25	< 25
	5	07/24/03	< 25	< 50	< 25	< 25	< 25	< 25	**27.4**	< 25	< 25
GMX-32	1	07/24/03	< 25	< 50	< 25	**53.7**	< 25	< 25	**111**	< 25	< 25
	5	07/24/03	< 25	< 50	< 25	**32.6**	< 25	< 25	< 25	< 25	< 25
MW-01	1	10/16/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
MW-02	1.5	10/18/02	<25	<50	<25	<25	<25	<25	<25	<25	<25
	5	10/18/02	<25	<50	<25	<25	<25	<25	<25	<25	<25

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by North Creek Analytical of Bothell, Washington, for polychlorinated biphenyls using EPA Method 8082.

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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TABLE 4

SHALLOW SOIL ANALYTICAL RESULTS[1]
ORGANOCHLORINE PESTICIDES

Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	4,4´-DDD	4,4´-DDE	4,4´-DDT	Aldrin	alpha-BHC	alpha-Chlordane	beta-BHC	Chlordane (tech)	delta-BHC	Dieldrin	Endo-sulfan I	Endo-sulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma-BHC (Lindane)	gamma-Chlordane	Heptachlor	Heptachlor epoxide	Metho-xychlor	Toxaphene
GMX-01	1	10/28/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/28/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-02	1	10/29/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/29/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-03	2	10/29/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-04	2	10/29/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/29/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-05	1	10/31/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/31/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-06	1	10/30/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/30/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-07	1.5	10/28/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	**0.0298** J	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/28/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-08	1	10/17/2002	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.004	<0.02	<0.002	<0.004	<0.002	<0.004	<0.004	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02	<0.1
	1	10/17/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/17/2002	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.004	<0.02	<0.002	<0.004	<0.002	<0.004	<0.004	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02	<0.1
	5	10/17/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-09	1.5	10/18/2002	<0.02	<0.02	**0.069** J	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	**0.0247** J	**0.0208** J	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	1.5	10/18/2002	<0.02	<0.02	**0.107** J	<0.01	<0.01	**0.0177** J	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	**0.0317** J	<0.02	<0.02	<0.01	**0.0353** J	<0.01	<0.01	<0.1	<0.5
	5	10/18/2002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.01	<0.001	<0.002	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05
	5	10/18/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-10	1	10/17/2002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.01	<0.001	<0.002	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05
	1	10/17/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/17/2002	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.004	<0.02	<0.002	<0.004	<0.002	<0.004	<0.004	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02	<0.1
	5	10/17/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-11	3	10/17/2002	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.004	<0.02	<0.002	<0.004	<0.002	<0.004	<0.004	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02	<0.1
	3	10/17/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/17/2002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.01	<0.001	<0.002	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05
	5	10/17/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-12	1	10/17/2002	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.05	<0.25
	1	10/17/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/17/2002	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.01 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	**0.00202** J	<0.002 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.01 UJ	<0.05 UJ
	5	10/17/2002	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.02 UJ	<0.1 UJ	<0.01 UJ	<0.02 UJ	<0.01 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.1 UJ	<0.5 UJ
GMX-14	1	10/30/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/30/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
GMX-29	1.5	7/9/2003	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.01 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.01 UJ	<0.05 UJ
	3	7/9/2003	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.002 UJ	<0.01 UJ	<0.001 UJ	<0.002 UJ	<0.001 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.01 UJ	<0.05 UJ
	5	7/9/2003	<0.04 UJ	<0.04 UJ	<0.04 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.04 UJ	<0.2 UJ	<0.02 UJ	<0.04 UJ	<0.02 UJ	<0.04 UJ	<0.04 UJ	<0.04 UJ	<0.04 UJ	<0.04 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.2 UJ	<1 UJ
GMX-30	1	7/9/2003	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.1 UJ	<0.5 UJ	<0.05 UJ	<0.1 UJ	<0.05 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.1 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.05 UJ	<0.5 UJ	<2.5 UJ
	5	7/9/2003	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.02 UJ	<0.1 UJ	<0.01 UJ	<0.02 UJ	<0.01 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.1 UJ	<0.5 UJ
GMX-31	1	7/24/2003	<0.004 UJ	<0.004 UJ	**0.0547** J	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.004	<0.02	<0.002	<0.004	<0.002	<0.004 UJ	<0.004 UJ	<0.004 UJ	<0.004	<0.004 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.002 UJ	<0.02 UJ	<0.1
	5	7/24/2003	<0.002	<0.002	**0.00539** J	<0.001	<0.001	<0.001	<0.002	<0.01	<0.001	<0.002	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05
GMX-32	1	7/24/2003	<0.01	<0.01	**0.0106** J	<0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.01	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.05	<0.25
	5	7/24/2003	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.004	<0.02	<0.002	<0.004	<0.002	<0.004	<0.004	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.002	<0.02	<0.1
MW-01	1	10/16/2002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.01	<0.001	<0.002	<0.001	<0.002	<0.002	<0.002	**0.00224**	<0.002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05
MW-02	1.5	10/18/2002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.01	<0.001	<0.002	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05
	1.5	10/18/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5
	5	10/18/2002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.002	<0.01	<0.001	<0.002	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.05
	5	10/18/2002	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.02	<0.1	<0.01	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.1	<0.5

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by North Creek Analytical of Bothell, Washington, for organochlorine pesticides using EPA Method 8081A.

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 5

DRAFT

SHALLOW SOIL ANALYTICAL RESULTS[1]
SEMIVOLATILE ORGANIC COMPOUNDS
Gibson Envrionmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	1,2,4-Trichloro-benzene	1,2-Dichloro-benzene	1,3-Dichloro-benzene	1,4-Dichloro-benzene	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	2,4-Dichloro-phenol	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloronaph-thalene	2-Chloro-phenol	2-Methyl naph thalene	2-Methyl-phenol	2-Nitro-aniline	2-Nitro-phenol
GMX-01	1	10/28/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/28/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ
GMX-02	1	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
GMX-03	2	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
GMX-04	2	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
GMX-05	1	10/31/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	**5.35**	< 3.3	< 5	< 3.3
	5	10/31/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
GMX-06	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ
	5	10/30/2002	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ
	5	10/30/2002	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ
GMX-07	1.5	10/28/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/28/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
GMX-08	1	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	**6.07**	< 3.3	< 5	< 3.3
	5	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
GMX-09	1.5	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/18/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
GMX-10	1	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
GMX-11	3	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
	3	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
	5	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
GMX-12	1	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/17/2002	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 2.5	< 2.5	< 1.65	< 1.65	**6.91**	< 1.65	< 2.5	< 1.65
GMX-14	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ
	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ
	5	10/30/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
GMX-29	1.5	7/9/2003	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 2.5	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65
	3	7/9/2003	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	**3**	< 0.33	< 0.5	< 0.33
	5	7/9/2003	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 2.5	< 2.5	< 1.65	< 1.65	**2.4**	< 1.65	< 2.5	< 1.65
GMX-30	1	7/9/2003	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	**6.75**	< 3.3	< 5	< 3.3
	5	7/9/2003	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 2.5	< 2.5	< 1.65	< 1.65	**3.33**	< 1.65	< 2.5	< 1.65
GMX-31	1	7/24/2003	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
	5	7/24/2003	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	**0.909**	< 0.33	< 0.5	< 0.33
GMX-32	1	7/24/2003	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 25	< 25	< 25	< 16.5	< 16.5	< 16.5	< 16.5	< 25	< 16.5
	5	7/24/2003	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	**9.65**	< 3.3	< 5	< 3.3
MW-01	1	10/16/2002	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 10	< 10	< 10	< 6.6	< 6.6	< 6.6	< 6.6	< 10	< 6.6
MW-02	1.5	10/18/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/18/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
	5	10/18/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33
MW-03	1	10/24/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3
	5	10/24/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33

TABLE 5

DRAFT

SHALLOW SOIL ANALYTICAL RESULTS[1]
SEMIVOLATILE ORGANIC COMPOUNDS
Gibson Envrionmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	3 & 4-Methyl-phenol	3,3´-Dichloro-benzidine	3-Nitro-aniline	4,6-Dinitro-2-methyl-phenol	4-Bromo-phenyl-phenyl-ether	4-Chloro-3-methyl-phenol	4-Chloro-aniline	4-Chloro-phenyl-phenyl-ether	4-Nitro-aniline	4-Nitro-phenol	Acenaph-thene	Acenaph-thylene	Aniline	Anthra-cene	Benzo(a)-anthra-cene	Benzo(a)-pyrene	Benzo(b)-fluoran-thene
GMX-01	1	10/28/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/28/2002	< 3.3 UJ	< 50 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
GMX-02	1	10/29/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/29/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-03	2	10/29/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-04	2	10/29/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/29/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-05	1	10/31/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/31/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-06	1	10/30/2002	< 3.3 UJ	< 50 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	5	10/30/2002	< 0.33 UJ	< 5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ	< 0.5 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ
	5	10/30/2002	< 0.33 UJ	< 5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ	< 0.5 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ
GMX-07	1.5	10/28/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/28/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-08	1	10/17/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-09	1.5	10/17/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/18/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-10	1	10/17/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-11	3	10/17/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	3	10/17/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	10/17/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-12	1	10/17/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 1.65	< 25	< 2.5	< 2.5	< 1.65	< 1.65	< 2.5	< 1.65	< 2.5	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
GMX-14	1	10/30/2002	< 3.3 UJ	< 50 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	1	10/30/2002	< 3.3 UJ	< 50 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 5 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	5	10/30/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-29	1.5	7/9/2003	< 1.65	< 25	< 2.5	< 2.5	< 1.65	< 1.65	< 2.5	< 1.65	< 2.5	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
	3	7/9/2003	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	7/9/2003	< 1.65	< 25	< 2.5	< 2.5	< 1.65	< 1.65	< 2.5	< 1.65	< 2.5	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
GMX-30	1	7/9/2003	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	7/9/2003	< 1.65	< 25	< 2.5	< 2.5	< 1.65	< 1.65	< 2.5	< 1.65	< 2.5	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
GMX-31	1	7/24/2003	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	7/24/2003	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-32	1	7/24/2003	< 16.5	< 250	< 25	< 25	< 16.5	< 16.5	< 25	< 16.5	< 25	< 25	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5
	5	7/24/2003	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
MW-01	1	10/16/2002	< 6.6	< 100	< 10	< 10	< 6.6	< 6.6	< 10	< 6.6	< 10	< 10	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6
MW-02	1.5	10/18/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/18/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	10/18/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
MW-03	1	10/24/2002	< 3.3	< 50	< 5	< 5	< 3.3	< 3.3	< 5	< 3.3	< 5	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/24/2002	< 0.33	< 5	< 0.5	< 0.5	< 0.33	< 0.33	< 0.5	< 0.33	< 0.5	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33

TABLE 5

DRAFT

SHALLOW SOIL ANALYTICAL RESULTS[1]
SEMIVOLATILE ORGANIC COMPOUNDS
Gibson Envrionmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	Benzo-(ghi)-perylene	Benzo(k)-fluoran-thene	Benzoic Acid	Benzyl alcohol	Bis(2-chloro-ethoxy)-methane	Bis(2-chloro-ethyl)-ether	Bis(2-chloroiso-propyl) ether	Bis(2-ethylhexyl) phthalate	Butyl-benzy-l phthalate	Carbazole	Chrysene	Dibenz-(a,h) anth racene	Diben-zofuran	Diethyl-phthalate	Dimethyl-phthalate	Di-n-butyl-phthalate
GMX-01	1	10/28/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/28/2002	< 3.3 UJ	< 3.3 UJ	< 10 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
GMX-02	1	10/29/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/29/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-03	2	10/29/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	**5.09**	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-04	2	10/29/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/29/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-05	1	10/31/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/31/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-06	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 10 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	**4.91** J	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	5	10/30/2002	< 0.33 UJ	< 0.33 UJ	< 1 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ
	5	10/30/2002	< 0.33 UJ	< 0.33 UJ	< 1 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	**0.628** J	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ
GMX-07	1.5	10/28/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	**4.79**	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/28/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-08	1	10/17/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-09	1.5	10/17/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/18/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-10	1	10/17/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-11	3	10/17/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	3	10/17/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	10/17/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-12	1	10/17/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 1.65	< 1.65	< 5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
GMX-14	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 10 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 10 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	5	10/30/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
GMX-29	1.5	7/9/2003	< 1.65	< 1.65	< 5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
	3	7/9/2003	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	**0.561**	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	7/9/2003	< 1.65	< 1.65	< 5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
GMX-30	1	7/9/2003	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	7/9/2003	< 1.65	< 1.65	< 5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65
GMX-31	1	7/24/2003	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	**0.604**	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	7/24/2003	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
GMX-32	1	7/24/2003	< 16.5	< 16.5	< 50	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5
	5	7/24/2003	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
MW-01	1	10/16/2002	< 6.6	< 6.6	< 20	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6
MW-02	1.5	10/18/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/18/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
	5	10/18/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33
MW-03	1	10/24/2002	< 3.3	< 3.3	< 10	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3
	5	10/24/2002	< 0.33	< 0.33	< 1	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33

TABLE 5

DRAFT

SHALLOW SOIL ANALYTICAL RESULTS[1]
SEMIVOLATILE ORGANIC COMPOUNDS
Gibson Envrionmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	Di-n-octyl phthalate	Fluoran-thene	Fluorene	Hexa-chloro-benzene	Hexa-chlorobu-tadiene	Hexa-chlorocy-clopen-tadiene	Hexa-chloro-ethane	Indeno-(1,2,3-cd)-pyrene	Iso-phorone	Naph-thalene	Nitro-benzene	N-Nitro-sodi-n-propy-lamine	N-Nitro-sodipheny-lamine	Penta-chloro-phenol	Phenan-threne	Phenol	Pyrene
GMX-01	1	10/28/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/28/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
GMX-02	1	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
GMX-03	2	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
GMX-04	2	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/29/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
GMX-05	1	10/31/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	**7.56**	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/31/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
GMX-06	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	5	10/30/2002	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ
	5	10/30/2002	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ	< 0.5 UJ	< 0.33 UJ	< 0.33 UJ	< 0.33 UJ
GMX-07	1.5	10/28/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/28/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
GMX-08	1	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	**12.2**	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
GMX-09	1.5	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/18/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
GMX-10	1	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
GMX-11	3	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
	3	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
	5	10/17/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
GMX-12	1	10/17/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/17/2002	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65
GMX-14	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	1	10/30/2002	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 5 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ
	5	10/30/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
GMX-29	1.5	7/9/2003	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65
	3	7/9/2003	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	**1.24**	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
	5	7/9/2003	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65
GMX-30	1	7/9/2003	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	**3.4**	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	7/9/2003	< 1.65	< 1.65	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65	**1.94**	< 1.65	< 1.65	< 1.65	< 2.5	< 1.65	< 1.65	< 1.65
GMX-31	1	7/24/2003	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
	5	7/24/2003	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	**0.406**	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
GMX-32	1	7/24/2003	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 25	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 16.5	< 25	< 16.5	< 16.5	< 16.5
	5	7/24/2003	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	**5.17**	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
MW-01	1	10/16/2002	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 10	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 6.6	< 10	< 6.6	< 6.6	< 6.6
MW-02	1.5	10/18/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/18/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33
	5	10/18/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	**0.483**	< 0.33
MW-03	1	10/24/2002	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 3.3	< 5	< 3.3	< 3.3	< 3.3
	5	10/24/2002	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.33	< 0.5	< 0.33	< 0.33	< 0.33

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by North Creek Analytical of Bothell, Washington, for Semivolatile Organic Compounds using EPA Method 8270C.

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Geomatrix

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TABLE 6

SHALLOW SOIL ANALYTICAL RESULTS[1]
POLYNUCLEAR AROMATIC HYDROCARBONS

Gibson Environmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (ghi) perylene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Fluoran-thene	Fluorene	Indeno (1,2,3-cd) pyrene	Naph-thalene	Phenan-threne	Pyrene
GMX-01	1	10/28/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	5	10/28/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.113**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GMX-02	1	10/29/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.22**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	5	10/29/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.14**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GMX-03	2	10/29/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.113**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GMX-04	2	10/29/2002	<0.1	<0.1	<0.1	<0.1 UJ	**0.147**	**0.107**	**0.267**	<0.1	**0.153** J	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.22** J
	5	10/29/2002	<0.1	<0.1	<0.1	<0.1	**0.107**	**0.1**	**0.207**	<0.1	**0.127**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.107**	**0.193**
GMX-05	1	10/31/2002	**1.79**	<0.1	**0.28**	**0.147**	<0.1	<0.1	<0.1	<0.1	**0.193**	<0.1	**0.24**	**1.15**	<0.1	**4.89 / 7.56**	**1.48**	**0.427**
	5	10/31/2002	**0.014**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
GMX-06	1	10/30/2002	<0.01	<0.01	**0.014**	**0.0487**	**0.0647**	**0.0607**	**0.0547**	**0.0287**	**0.062**	**0.0213**	**0.0727**	<0.01	**0.0467**	<0.01	**0.036**	**0.0673**
	5	10/30/2002	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ
	5	10/30/2002	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01	<0.01 UJ
GMX-07	1.5	10/28/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.16**	<0.1	<0.1	<0.1	<0.1	**0.313**	**0.113**	**0.233**
	5	10/28/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.42**	**0.12**	<0.1
GMX-08	1	10/17/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**9.55 / 12.2**	<0.1	<0.1
	5	10/17/2002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	**0.0113**	<0.01	<0.01
GMX-09	1.5	10/18/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.139**	<0.1	<0.1
	5	10/18/2002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
GMX-10	1	10/17/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	5	10/17/2002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
GMX-11	3	10/17/2002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	5	10/17/2002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
GMX-12	1	10/17/2002	<0.1 UJ	<0.1 UJ	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 UJ	<0.1	<0.1	<0.1	<0.1
	5	10/17/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**4.43**	<0.1	<0.1
GMX-14	1	10/30/2002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.0667	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	5	10/30/2002	**0.107**	**0.0533**	**<0.05**	**0.0733**	**0.0833**	<0.05	**0.0933**	<0.05	**0.167**	<0.05	**0.223**	**0.14**	**0.0567**	**0.18**	**0.483**	**0.367**
GMX-29	1.5	7/9/2003	< 0.1	**0.12**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.133**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.187**
	3	7/9/2003	**0.0867**	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	**0.217**	< 0.05	**1.39**	**0.23**	**0.0967**
	5	7/9/2003	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.113**	< 0.1	**0.127**	< 0.1	< 0.1	< 0.1	**0.28**	< 0.1	**0.753**	**0.18**	**0.233**
GMX-30	1	7/9/2003	< 0.2	< 0.2	< 0.2	**0.36**	**0.213**	**0.253**	< 0.2	**0.347**	**0.347**	< 0.2	< 0.2	**0.76**	< 0.2	**2.93 / 3.4**	**0.707**	**0.787**
	1	7/9/2003	< 0.25	< 0.25	< 0.25	**0.4** J	**0.667** J	< 0.25	**0.5**	**0.3**	**0.583** J	< 0.25	**0.7** J	**0.667** J	< 0.25	**2.27 J / 1.94**	**1.3** J	**0.917** J
	5	7/9/2003	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.207**	< 0.1	**1.93**	**0.113**	**0.107**
GMX-31	1	7/24/2003	< 0.01	< 0.01	< 0.01	< 0.01	**0.0427**	**0.0393**	**0.0253**	**0.0293**	**0.046**	**0.0173**	< 0.01	< 0.01	**0.0113**	< 0.01	< 0.01	**0.167**
	5	7/24/2003	**0.101**	< 0.01	< 0.01	< 0.01	< 0.01	**0.0367**	**0.0167**	**0.0387**	**0.0913**	**0.0253**	< 0.01	**0.18**	**0.0167**	**0.378 / 0.406**	< 0.01	**0.136**
GMX-32	1	7/24/2003	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**0.733**	< 0.5	< 0.5	**1.03**	< 0.5	**4.93**	**1.97**	**1**
	5	7/24/2003	**0.607**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.653**	< 0.1	< 0.1	**1.37**	**0.133**	**7.71 / 5.17**	**2.65**	**0.893**
MW-01	1	10/16/2002	<0.1	<0.1	<0.1	<0.1	**0.107**	<0.1	**0.127**	<0.1	<0.1	<0.1	<0.1	<0.1	**0.147**	<0.1	<0.1	**0.14**
MW-02	1.5	10/18/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	5	10/18/2002	<0.01	<0.01	<0.01	<0.01	<0.01	**0.0167**	<0.01	<0.01	**0.01**	<0.01	<0.01	<0.01	<0.01	<0.01	**0.014**	<0.01
MW-06	2.5	4/27/2004	**0.86**	<0.18	**0.68**	**0.46**	**0.24**	**0.44**	**0.29**	<0.18	**1.3**	**0.22**	**0.3**	**0.75**	**0.19**	**0.3**	**1.1**	**1.8**

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by North Creek Analytical of Bothell, Washington, for polynuclear aromatic hydrocarbons using EPA Method 8270C with selected ion monitoring (SIM).

/ = denotes samples for which there was a PAH detection uisng EPA Method 8270 (results for this method are presented on Table 5 for semivolatile organic compounds).

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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TABLE 7

DRAFT

SHALLOW SOIL ANALYTICAL RESULTS[1]
VOLATILE ORGANIC COMPOUNDS
Gibson Environmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane (EDB)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane
GMX-01	5	10/28/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
GMX-02	5	10/29/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
GMX-04	5	10/29/2002	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	**1.31** J	<0.746	<0.00746	<0.149	<0.149	<0.149	**0.358** J	<0.149	<0.149	<0.149	<0.149
	5	10/29/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	**0.0737** J	<0.01	<0.005	<0.005	<0.00125	<0.005	**0.0211** J	<0.005	<0.005	<0.005	<0.01
GMX-05	1	10/29/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.005	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	1	10/31/2002	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	**19.2**	<5.85	<0.0585	<1.17	<1.17	<1.17	**6.82**	<1.17	<1.17	<1.17	<1.17
	5	10/31/2002	<0.025	<0.0125	<0.025	<0.00625	<0.01	<0.015	<0.025	<0.025	<0.025	<0.025	**0.187** J	<0.05	<0.025	<0.025	<0.00625	<0.025	**0.0368** J	<0.025	<0.025	<0.025	<0.05
GMX-06	1	10/30/2002	<0.00672	<0.00336	<0.00672	<0.00168	<0.00269	<0.00403	<0.00672	<0.00672	<0.00672	<0.00672	<0.00672	<0.0134	<0.00672	<0.00672	<0.00168	<0.00672	<0.00672	<0.00672	<0.00672	<0.00672	<0.0134
	5	10/30/2002	<0.00916	<0.00458	<0.00916	<0.00229	<0.00366	<0.00549	<0.00916	<0.00916	<0.00916	<0.00916	<0.00916	<0.0183	<0.00916	<0.00916	<0.00229	<0.00916	<0.00916	<0.00916	<0.00916	<0.00916	<0.0183
GMX-07	1.5	10/28/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**1.67** J	<0.5	<0.005	<0.1	<0.1	<0.1	**0.892 J**	<0.1	<0.1	<0.1	<0.1
	5	10/28/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**0.45**	<0.5	<0.005	<0.1	<0.1	<0.1	**0.199**	<0.1	<0.1	<0.1	<0.1
GMX-08	1	10/17/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**9.81** J	<0.5	<0.005	<0.1	<0.1	<0.1	**3.15**	<0.1	<0.1	<0.1	<0.1
	1	10/17/2002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.83** J	<2.5	<0.025	<0.5	<0.5	<0.5	**2.37**	<0.5	<0.5	<0.5	<0.5
	5	10/17/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	**0.026**	<0.01	<0.005	<0.005	<0.00125	<0.005	**0.00663**	<0.005	<0.005	<0.005	<0.01
GMX-09	1.5	10/18/2002	<0.00674	<0.00337	<0.00674	<0.00168	<0.0027	<0.00404	<0.00674	<0.00674	<0.00674	<0.00674	<0.00674	<0.0135	<0.00674	<0.00674	<0.00168	<0.00674	<0.00674	<0.00674	<0.00674	<0.00674	<0.0135
	5	10/18/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
GMX-10	1	10/17/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
	5	10/17/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
GMX-11	3	10/17/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
	5	10/17/2002	<0.00776	<0.00388	<0.00776	<0.00194	<0.00311	<0.00466	<0.00776	<0.00776	<0.00776	<0.00776	<0.00776	<0.0155	<0.00776	<0.00776	<0.00194	<0.00776	<0.00776	<0.00776	<0.00776	<0.00776	<0.0155
GMX-12	1	10/17/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
	5	10/17/2002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	**3.06**	<0.5	<0.005	<0.1	<0.1	<0.1	**1.39**	<0.1	<0.1	<0.1	<0.1
GMX-14	5	10/30/2002	<0.00758	<0.00379	<0.00758	<0.00189	<0.00303	<0.00455	<0.00758	<0.00758	<0.00758	<0.00758	**0.19** J	<0.0152	<0.00758	<0.00758	<0.00189	<0.00758	<0.00758	<0.00758	<0.00758	<0.00758	<0.0152
	5	10/30/2002	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.57	<0.0057	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114
GMX-29	3	7/9/2003	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	3	7/9/2003	< 0.005	< 0.0025	< 0.005	< 0.00125	< 0.002	< 0.003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.00125	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01
	5	7/9/2003	< 0.1	< 0.1	< 0.1	< 0.1	**0.117**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**3.94**	< 0.5	< 0.1	< 0.1	< 0.1	< 0.1	**1.08**	< 0.1	< 0.1	< 0.1	< 0.1
GMX-30	5	7/9/2003	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	**8.56**	< 1.22	< 0.244	< 0.244	< 0.244	< 0.244	**0.541**	< 0.244	< 0.244	< 0.244	< 0.244
GMX-31	5	7/24/2003	< 0.00558	< 0.00279	< 0.00558	< 0.0014	**0.00658**	< 0.00335	< 0.00558	< 0.00558	< 0.00558	< 0.00558	**1.05** J	< 0.0112	< 0.00558	< 0.00558	< 0.0014	< 0.00558	**0.342** J	< 0.00558	< 0.00558	< 0.00558	< 0.0112
	5	7/24/2003	< 0.25	< 0.125	< 0.25	< 0.0625	< 0.1	< 0.15	< 0.25	< 0.25	< 0.25	< 0.25	**1.77**	< 0.5	< 0.25	< 0.25	< 0.0625	< 0.25	**0.539**	< 0.25	< 0.25	< 0.25	< 0.5
GMX-32	5	7/24/2003	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**33.1** J	< 0.5	< 0.1	**0.743**	< 0.1	< 0.1	**4.82** J	< 0.1	< 0.1	< 0.1	< 0.1
MW-01	1	10/16/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
MW-02	1.5	10/18/2002	<0.00623	<0.00312	<0.00623	<0.00156	<0.00249	<0.00374	<0.00623	<0.00623	<0.00623	<0.00623	<0.00623	<0.0125	<0.00623	<0.00623	<0.00156	<0.00623	<0.00623	<0.00623	<0.00623	<0.00623	<0.0125
	5	10/18/2002	<0.005	<0.0025	<0.005	<0.00125	<0.002	<0.003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.00125	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
MW-06	2.5	4/272004	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

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TABLE 7

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SHALLOW SOIL ANALYTICAL RESULTS[1]
VOLATILE ORGANIC COMPOUNDS
Gibson Environmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	2-Butanone	2-Chloro-toluene	2-Hexanone	4-Chloro-toluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromo-benzene	Bromo-chloro-methane	Bromo-dichloro-methane	Bromo-form	Bromo-methane	Carbon disulfide	Carbon tetra-chloride	Chloro-benzene	Chloro-ethane	Chloro-form	Chloro-methane	cis-1,2-Dichloro-ethene	cis-1,3-Dichloro-propene	Dibromo-chlorome-thane	Dibromo-methane
GMX-01	5	10/28/2002	<0.015	<0.005	<0.02	<0.005	<0.02	**0.0766** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
GMX-02	5	10/29/2002	<0.015	<0.005	<0.02	<0.005	<0.02	<0.03	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
GMX-04	5	10/29/2002	<1.49	<0.149	<1.49	<0.149	<1.49	<1.49	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.149	<0.746	<0.149	<0.149	<0.149	<0.149
	5	10/29/2002	**0.0278** J	<0.005	<0.02	<0.005	<0.02	**0.239** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	**0.00435** J	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
GMX-05	1	10/29/2002	<1	<0.1	<1	<0.1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1
	1	10/31/2002	<11.7	<1.17	<11.7	<1.17	<11.7	<11.7	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<1.17	<5.85	<1.17	<1.17	<1.17	<1.17
	5	10/31/2002	<0.075	<0.025	<0.1	<0.025	<0.1	<0.15	<0.0075	<0.025	<0.025	<0.025	<0.025	<0.05	<0.015	<0.025	<0.01	<0.025	<0.0125	<0.05	<0.015	<0.025	<0.025	<0.025
GMX-06	1	10/30/2002	<0.0202	<0.00672	<0.0269	<0.00672	<0.0269	**0.046**	<0.00202	<0.00672	<0.00672	<0.00672	<0.00672	<0.0134	<0.00403	<0.00672	<0.00269	<0.00672	<0.00336	<0.0134	<0.00403	<0.00672	<0.00672	<0.00672
	5	10/30/2002	<0.0275	<0.00916	<0.0366	<0.00916	<0.0366	<0.0549	<0.00275	<0.00916	<0.00916	<0.00916	<0.00916	<0.0183	<0.00549	<0.00916	<0.00366	<0.00916	<0.00458	<0.0183	<0.00549	<0.00916	<0.00916	<0.00916
GMX-07	1.5	10/28/2002	<1	<0.1	<1	<0.1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1
	5	10/28/2002	<1	<0.1	<1	<0.1	<1	<1	**0.261**	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1
GMX-08	1	10/17/2002	<1	<0.1	<1	<0.1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1
	1	10/17/2002	<5	<0.5	<5	<0.5	<5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5
	5	10/17/2002	<0.015	<0.005	<0.02	<0.005	<0.02	**0.131** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
GMX-09	1.5	10/18/2002	<0.0202	<0.00674	<0.027	<0.00674	<0.027	<0.0404	<0.00202	<0.00674	<0.00674	<0.00674	<0.00674	<0.0135	<0.00404	<0.00674	<0.0027	<0.00674	<0.00337	<0.0135	<0.00404	<0.00674	<0.00674	<0.00674
	5	10/18/2002	<0.015	<0.005	<0.02	<0.005	<0.02	<0.03	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
GMX-10	1	10/17/2002	<0.015	<0.005	<0.02	<0.005	<0.02	<0.03	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
	5	10/17/2002	<0.015	<0.005	<0.02	<0.005	<0.02	**0.0457** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
GMX-11	3	10/17/2002	<0.015	<0.005	<0.02	<0.005	<0.02	**0.0489** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
	5	10/17/2002	<0.0233	<0.00776	<0.0311	<0.00776	<0.0311	<0.0466	<0.00233	<0.00776	<0.00776	<0.00776	<0.00776	<0.0155	<0.00466	<0.00776	<0.00311	<0.00776	<0.00388	<0.0155	<0.00466	<0.00776	<0.00776	<0.00776
GMX-12	1	10/17/2002	**0.0552** J	<0.005	<0.02	<0.005	<0.02	**0.255** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
	5	10/17/2002	<1	<0.1	<1	<0.1	<1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1
GMX-14	5	10/30/2002	**0.0364** J	<0.00758	<0.0303	<0.00758	<0.0303	**0.194** J	**0.00372** J	<0.00758	<0.00758	<0.00758	<0.00758	<0.0152	**0.00753** J	<0.00758	<0.00303	<0.00758	<0.00379	<0.0152	<0.00455	<0.00758	<0.00758	<0.00758
	5	10/30/2002	<1.14	<0.114	<1.14	<0.114	<1.14	<1.14	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.57	<0.114	<0.114	<0.114	<0.114
GMX-29	3	7/9/2003	< 1	< 0.1	< 1	< 0.1	< 1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.1	< 0.1	< 0.1	< 0.1
	3	7/9/2003	< 0.015	< 0.005	< 0.02	< 0.005	< 0.02	**0.0608**	**0.0024**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01	< 0.003	< 0.005	< 0.002	< 0.005	< 0.0025	< 0.01	< 0.003	< 0.005	< 0.005	< 0.005
	5	7/9/2003	< 1	< 0.1	< 1	< 0.1	< 1	< 1	**0.644**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.1	< 0.1	< 0.1	< 0.1
GMX-30	5	7/9/2003	< 2.44	< 0.244	< 2.44	< 0.244	< 2.44	< 2.44	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244	< 1.22	< 0.244	< 0.244	< 0.244	< 0.244
GMX-31	5	7/24/2003	< 0.0167	< 0.00558	< 0.0223	< 0.00558	< 0.0223	**0.0797**	**0.112** J	< 0.00558	< 0.00558	< 0.00558	< 0.00558	< 0.0112	< 0.00335	< 0.00558	< 0.00223	< 0.00558	< 0.00279	< 0.0112	< 0.00335	< 0.00558	< 0.00558	< 0.00558
	5	7/24/2003	< 0.75	< 0.25	< 1	< 0.25	< 1	< 1.5	**0.0854**	< 0.25	< 0.25	< 0.25	< 0.25	< 0.5	< 0.15	< 0.25	< 0.1	< 0.25	< 0.125	< 0.5	< 0.15	< 0.25	< 0.25	< 0.25
GMX-32	5	7/24/2003	< 1	< 0.1	< 1	< 0.1	< 1	< 1	**1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.5	< 0.1	< 0.1	< 0.1	< 0.1
MW-01	1	10/16/2002	<0.015	<0.005	<0.02	<0.005	<0.02	**0.225** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	**0.028** J	<0.005	<0.002	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
MW-02	1.5	10/18/2002	<0.0187	<0.00623	<0.0249	<0.00623	<0.0249	**0.113** J	<0.00187	<0.00623	<0.00623	<0.00623	<0.00623	<0.0125	<0.00374	<0.00623	**0.00262** J	<0.00623	<0.00312	<0.0125	<0.00374	<0.00623	<0.00623	<0.00623
	5	10/18/2002	**0.0168**	<0.005	<0.02	<0.005	<0.02	**0.0668** J	<0.0015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.003	<0.005	**0.00397**	<0.005	<0.0025	<0.01	<0.003	<0.005	<0.005	<0.005
MW-06	2.5	4/272004	NA	<0.2	NA	<0.2	NA	<3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	NA	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Geomatrix

TABLE 7

DRAFT

SHALLOW SOIL ANALYTICAL RESULTS[1]
VOLATILE ORGANIC COMPOUNDS
Gibson Environmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	Dichloro-difluoro-methane	Ethyl-benzene	Hexa-chloro-butadiene	Isopropyl-benzene	Methyl tert-butyl ether	Methylene chloride	Naph-thalene	n-Butyl-benzene	n-Propyl-benzene	p-Isopropyl-toluene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetra-chloro-ethene	Toluene	Total Xylenes	trans-1,2-Dichloro-ethene	trans-1,3-Dichloro-propene	Trichloro-ethene	Trichloro-fluorome-thane	Vinyl chloride
GMX-01	5	10/28/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
GMX-02	5	10/29/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
GMX-04	5	10/29/2002	<0.149	<0.149	<0.149	<0.149	<0.00149	<1.49	<0.149	**0.688** J	<0.149	**0.224** J	<0.149	<0.149	<0.149	<0.149	<0.149	<0.0149	<0.149	<0.149	<0.149	<0.149	<0.149
	5	10/29/2002	<0.005	<0.004	<0.005	<0.005	<0.001	**0.0149** J	**0.0116** J	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
GMX-05	1	10/29/2002	<0.1	<0.1	<0.1	<0.1	<0.001	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1
	1	10/31/2002	<1.17	**3.2**	<1.17	**1.56**	<0.0117	<11.7	**2.3**	**3.11**	**2.41**	**2.06**	<1.17	<1.17	<1.17	<1.17	<1.17	**1.22**	<1.17	<1.17	<1.17	<1.17	<1.17
	5	10/31/2002	<0.025	**0.248** J	<0.025	**0.122** J	**0.0297** J	<0.0175	**0.0504** J	<0.025	**0.123** J	<0.025	**0.0916** J	<0.005	<0.025	<0.01	<0.0075	**0.0765** J	<0.0125	<0.00625	<0.0125	<0.025	<0.0125
GMX-06	1	10/30/2002	<0.00672	<0.00538	<0.00672	<0.00672	<0.00134	<0.0047	<0.00672	<0.00672	<0.00672	<0.00672	<0.00672	<0.00134	<0.00672	<0.00269	<0.00202	<0.0134	<0.00336	<0.00168	<0.00336	<0.00672	<0.00336
	5	10/30/2002	<0.00916	<0.00733	<0.00916	<0.00916	<0.00183	<0.00641	<0.00916	<0.00916	<0.00916	<0.00916	<0.00916	<0.00183	<0.00916	<0.00366	<0.00275	<0.0183	<0.00458	<0.00229	<0.00458	<0.00916	<0.00458
GMX-07	1.5	10/28/2002	<0.1	**0.874** J	<0.1	**0.328** J	<0.001	<1	**0.66** J	**0.484** J	**0.423** J	**0.608** J	<0.1	<0.1	<0.1	<0.1	<0.1	**1.64** J	<0.1	<0.1	<0.1	<0.1	<0.1
	5	10/28/2002	<0.1	**0.3**	<0.1	<0.1	**0.431**	<1	**0.14**	<0.1	<0.1	**0.123**	<0.1	<0.1	<0.1	<0.1	**0.292**	**0.9**	<0.1	<0.1	<0.1	<0.1	<0.1
GMX-08	1	10/17/2002	<0.1	**0.243**	<0.1	**0.224**	<0.001	<1	**5**	**1.12**	**0.765**	**0.56**	**0.319**	<0.1	<0.1	<0.1	<0.1	**0.96**	<0.1	<0.1	<0.1	<0.1	<0.1
	1	10/17/2002	<0.5	<0.5	<0.5	<0.5	<0.005	<5	**7.19**	**1.74**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.216**	<0.5	<0.5	<0.5	<0.5	<0.5
	5	10/17/2002	<0.005	<0.004	<0.005	<0.005	**0.037**	<0.0035	**0.00992**	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
GMX-09	1.5	10/18/2002	<0.00674	<0.00539	<0.00674	<0.00674	<0.00135	<0.00472	<0.00674	<0.00674	<0.00674	<0.00674	<0.00674	<0.00135	<0.00674	<0.0027	<0.00202	<0.0135	<0.00337	<0.00168	<0.00337	<0.00674	<0.00337
	5	10/18/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
GMX-10	1	10/17/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
	5	10/17/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
GMX-11	3	10/17/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
	5	10/17/2002	<0.00776	<0.00621	<0.00776	<0.00776	<0.00155	<0.00543	<0.00776	<0.00776	<0.00776	<0.00776	<0.00776	<0.00155	<0.00776	<0.00311	<0.00233	<0.0155	<0.00388	<0.00194	<0.00388	<0.00776	<0.00388
GMX-12	1	10/17/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	**0.0828** J	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
	5	10/17/2002	<0.1	**0.41**	<0.1	**0.417**	<0.001	<1	<0.1	**2.55**	**0.913**	**1.48**	**0.903**	<0.1	<0.1	<0.1	<0.1	**0.0862**	<0.1	<0.1	<0.1	<0.1	<0.1
GMX-14	5	10/30/2002	<0.00758	<0.00606	<0.00758	<0.00758	<0.00152	<0.0053	**0.0156** J	**0.05** J	<0.00758	**0.0716** J	**0.0207** J	<0.00152	<0.00758	<0.00303	**0.00815** J	**0.044** J	<0.00379	<0.00189	<0.00379	<0.00758	<0.00379
	5	10/30/2002	<0.114	<0.114	<0.114	<0.114	<0.00114	<1.14	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.114	<0.0114	<0.114	<0.114	<0.114	<0.114	<0.114
GMX-29	3	7/9/2003	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
	3	7/9/2003	< 0.005	**0.00682**	< 0.005	< 0.005	< 0.001	< 0.0035	**0.027**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.001	< 0.005	< 0.002	< 0.0015	< 0.01	< 0.0025	< 0.00125	< 0.0025	< 0.005	< 0.0025
	5	7/9/2003	< 0.1	**1.1**	< 0.1	**0.348**	**0.211**	< 1	**1.82**	**0.893**	**0.691**	**1.04**	**0.292**	< 0.1	< 0.1	< 0.1	**0.771**	**3.51**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
GMX-30	5	7/9/2003	< 0.244	**2.06**	< 0.244	**0.902**	< 0.244	< 2.44	**2.83**	**1.69**	**1.58**	**0.909**	**0.727**	< 0.244	< 0.244	< 0.244	< 0.244	**2.52**	< 0.244	< 0.244	< 0.244	< 0.244	< 0.244
GMX-31	5	7/24/2003	< 0.00558	**0.285** J	< 0.00558	< 0.00558	**0.0389**	< 0.0558	**0.405** J	**0.145** J	**0.234** J	< 0.00558	< 0.00558	< 0.00112	< 0.00558	< 0.00223	**1.04** J	**1.17** J	< 0.00279	< 0.0014	< 0.00279	< 0.00558	< 0.00279
	5	7/24/2003	< 0.25	**0.506**	< 0.25	< 0.25	< 0.05	< 2.5	**1.07**	**0.306**	**0.3**	< 0.25	< 0.25	< 0.05	< 0.25	< 0.1	**0.98**	**2.33**	< 0.125	< 0.0625	< 0.125	< 0.25	< 0.125
GMX-32	5	7/24/2003	< 0.1	**10.1** J	< 0.1	**3.08**	< 0.5	< 1	**7.54** J	**5.72** J	**5.63** J	**4.26**	**1.98**	< 0.1	< 0.1	< 0.1	**0.241**	**17.5** J	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
MW-01	1	10/16/2002	<0.005	**0.00719** J	<0.005	**0.00681** J	<0.001	<0.0035	<0.005	<0.005	**0.0164** J	**0.0465** J	**0.0222** J	<0.001	<0.005	<0.002	**0.0039** J	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
MW-02	1.5	10/18/2002	<0.00623	<0.00499	<0.00623	<0.00623	<0.00125	<0.00436	<0.00623	<0.00623	<0.00623	<0.00623	<0.00623	<0.00125	<0.00623	**0.0068** J	<0.00187	<0.0125	<0.00312	<0.00156	<0.00312	<0.00623	<0.00312
	5	10/18/2002	<0.005	<0.004	<0.005	<0.005	<0.001	<0.0035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.002	<0.0015	<0.01	<0.0025	<0.00125	<0.0025	<0.005	<0.0025
MW-06	2.5	4/272004	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.3	<0.2	<0.2	<0.2	<0.2	<0.2

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. and analyzed by North Creek Analytical of Bothell, Washington for volatile organic compounds using EPA Method 8260B.

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ = Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit

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TABLE 8

SHALLOW SOIL ANALYTICAL RESULTS[1]
METALS

Gibson Environmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molyb-denum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
GMX-01	1	10/28/02	<1.5 UJ	3.2	71 J	<0.5	<0.5	8.5	2.87	8.09	17.4	<0.2 UJ	<2.5	5.7	<0.5	<0.5 UJ	<0.5	15	52.2
	5	10/28/02	<1.5 UJ	2.84	90.5 J	<0.5	<0.5	9.64	2.92	14.3	24.4	<0.2 UJ	<2.5	7.01	<0.5	<0.5 UJ	<0.5	14.9	57.5
GMX-02	1	10/29/02	<1.5 UJ	4.39	98.6 J	<0.5	<0.5	8.24	4.84	12.4	24.4	<0.2 UJ	<2.5	6.23	<0.5	<0.5 UJ	<0.5	22.7	48.3
	5	10/29/02	<1.69 UJ	5.36	634 J	<0.562	1.23	25.3	2.97	57.2	195	<0.2 UJ	5.08	15.7	0.708	<0.562 UJ	<0.562	14.6	219
GMX-03	2	10/29/02	<1.5 UJ	1.91	63.3 J	<0.5	<0.5	5.01	3.16	5.11	2.33	<0.2 UJ	<2.5	3.59	<0.5	<0.5	<0.5	16.9	26.8
GMX-04	2	10/29/02	<1.7 UJ	5.53	268 J	<0.568	<0.568	11.9	5.2	23.7	86.5	<0.2 UJ	<2.84	9.09	<0.568	<0.568 UJ	<0.568	25.7	125
	5	10/29/02	<1.5 UJ	6.88	114 J	<0.5	<0.5	12.6	4.27	14.7	52	<0.2 UJ	<2.5	7.44	<0.5	<0.5 UJ	<0.5	20.7	133
GMX-05	1	10/31/02	<1.5 UJ	5.68	91.4	<0.5	<0.5	9.24	5.13	17.1	3.55 J	<0.2	<2.5	7.03	<0.5	<0.5	<0.5	29.9	44.4
	5	10/31/02	<1.5 UJ	3.11	71.8	<0.5	<0.5	7.58	2.93	8.55	5.51 J	<0.2	<2.5	4.65	<0.5	<0.5	<0.5	19	47.7
GMX-06	1	10/30/02	<1.5 UJ	3.08 J	47.3	<0.5	<0.5	7.15	1.56	78.2	21.4	<0.2	<2.5	2.61	<0.5	<0.5	<0.5	6.98	42.2 J
	5	10/30/02	<1.5 UJ	2.4 J	129	<0.5	<0.5	5.09	3.07	14.2	1.72	<0.2	<2.5	3.58	<0.5	<0.5	<0.5	17.2	26.8 J
GMX-07	1.5	10/28/02	<1.5 UJ	12.4	77.9 J	<0.5	<0.5	8.58	2.6	11.7	17.2	<0.2 UJ	<2.5	6.81	<0.5	<0.5 UJ	<0.5	20.6	48.4
	5	10/28/02	<1.5 UJ	6.27	75.3 J	<0.5	<0.5	8.28	3.82	11.1	11.6	<0.2 UJ	<2.5	6.21	<0.5	<0.5 UJ	<0.5	19.9	39.1
GMX-08	1	10/17/02	<1.5	5.33	94.6	<0.5	<0.5	14.1	3.83	12.5	23.8 J	<0.2	<2.5	6.96	<0.5	<0.5 UJ	<0.5	22.5	80.8
	5	10/17/02	<1.5	3.47	86.3	<0.5	<0.5	5.66	2.76	9.61	11.1 J	<0.2	<2.5	3.92	<0.5	<0.5 UJ	<0.5	14.4	34.1
GMX-09	1.5	10/18/02	<1.5 UJ	5.3	153	<0.5	0.543	11.2	5.24	27.9	36.1	0.686	<2.5	11.4	<0.5	<0.5	<0.5	29	68.2
	5	10/18/02	<1.5 UJ	2.27	28.1	<0.5	<0.5	2.8	2.06	2.15	0.979	<0.2	<2.5	1.73	<0.5	<0.5	<0.5	10.6	16.5
GMX-10	1	10/17/02	<1.5	6.14	64.7	<0.5	0.674	7.24	3.03	13	7.75 J	<0.2	<2.5	5.04	<0.5	<0.5 UJ	<0.5	17.6	36.7
	5	10/17/02	<1.5	6.57	178	<0.5	<0.5	13.2	6.88	21.1	23.9 J	<0.2	<2.5	10.7	<0.5	<0.5 UJ	<0.5	35.8	81.4
GMX-11	3	10/17/02	<1.5	5.27	100	<0.5	1.22	9.39	4.55	21	22.7 J	0.418	<2.5	10.5	<0.5	<0.5 UJ	<0.5	25.3	56.7
	5	10/17/02	<1.5	2.28	109	<0.5	<0.5	10.4	6.52	11.2	3.03 J	<0.2	<2.5	7.02	<0.5	<0.5 UJ	<0.5	33.4	51.7
GMX-12	1	10/17/02	<1.5 UJ	3.69	79.6	<0.5	<0.5	8.34	4.06	8.62	10.8	<2	<2.5	6.48	<0.5	<0.5	<0.5	21.2	54.8
	5	10/17/02	<1.5 UJ	8.45	204	0.651	<0.5	16.7	9.49	17.5	6.54	<0.2	<2.5	13	<0.5	<0.5	<0.5	43.8	67.2
GMX-14	1	10/30/02	<1.5 UJ	4.13 J	259	<0.5	<0.5	18.6	5.17	17	32.4	<0.2	<2.5	38.1	0.601	<0.5	<0.5	83	77.5 J
	5	10/30/02	<1.5 UJ	4.34 J	118	<0.5	<0.5	14.5	4.59	11.3	36.6	<0.2	<2.5	19.5	<0.5	<0.5	<0.5	35.2	95 J
GMX-29	1.5	07/09/03	< 1.97	2.2	44.1	<0.658	<0.658	4.2	2.61	20.6	2.8	<0.2	<3.29	3.09	<0.658	<0.658	<0.658	14.8	36.1
	3	07/09/03	< 1.7	3.09	34.4	<0.568	<0.568	6.44	1.49	7.59	3.22	<0.2	<2.84	3.05	<0.568	<0.568	<0.568	8.35	16.5
	5	07/09/03	< 2.5	2.89	52.5	<0.833	<0.833	5.35	2.11	7.02	5.71	<0.2	<4.17	4.28	<0.833	<0.833	<0.833	12	22.3
GMX-30	1	07/09/03	< 1.5	3.71	77.6	<0.5	0.59	12.5	2.95	11.1	35.9	<0.2	<2.5	7.68	<0.5	<0.5	<0.5	18.3	71.4
	5	07/09/03	< 2.27	0.758	15.6	<0.758	<0.758	2.52	1.32	2.19	1.08	<0.2	<3.79	1.89	<0.758	<0.758	<0.758	9.88	13.2
GMX-31	1	07/24/03	< 2.17	3.41	47.4	<0.725	<0.725	4.47	2.55	4.42	2.28	<0.2	<3.62	3.68	<0.725	<0.725	<0.725	15.9	31.4
	5	07/24/03	< 1.67	3.56	126	<0.556	<0.556	9.85	2.81	9.12	13	<0.2	<2.78	6.72	<0.556	<0.556	<0.556	17.1	37.8
GMX-32	1	07/24/03	< 2.21	3.65	108	<0.735	<0.735	12.6	2.82	13.9	56.4	<0.2	<3.68	8.09	<0.735	<0.735	<0.735	17	76.2
	5	07/24/03	< 1.5	0.675	25.7	<0.5	<0.5	2.78	1.68	2.4	1.78	<0.2	<2.5	2.18	<0.5	<0.5	<0.5	13.5	12.7
MW-01	1	10/16/02	<1.5	3.66	259	<0.5	<0.5	9.62	3.41	12.2	21.2 J	<0.2	<2.5	10.1	<0.5	<0.5 UJ	<0.5	22.2	46.7
MW-02	1.5	10/18/02	<1.5 UJ	6.17	376	<0.5	0.559	15.6	4.68	28.9	46.6	<0.2	<2.5	24.6	<0.5	<0.5	<0.5	25.8	88.3
	5	10/18/02	<1.5 UJ	4.39	91	<0.5	<0.5	9.74	5.73	9	3.37	<0.2	<2.5	7.03	<0.5	<0.5	<0.5	26	38.3

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by North Creek Analytical of Bothell, Washington, for metals using EPA Methods 6000/7000 Series.

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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TABLE 9

SHALLOW SOIL ANALYTICAL RESULTS
PETROLEUM HYDROCARBONS[1]

Gibson Environmental Site
Bakersfield, California

Concentrations reported in milligrams per kilogram (mg/kg)

Sample Point	Bottom Depth	Sample Date	Extended TPHd (C_{10}-C_{34})		TPHg (C_6-C_{10})	
GMX-01	1	10/28/02	**1950**	J	< 5	
	5	10/28/02	**3090**	J	**5.07**	J
GMX-02	1	10/29/02	**2930**	J	< 5	
	5	10/29/02	**4440**	J	< 5	
GMX-03	2	10/29/02	**904**	J	**1010**	J
GMX-04	2	10/29/02	**2340**	J	< 5	
	5	10/29/02	**5590**	J	**103**	J
GMX-05	1	10/31/02	**8840**	J	**1720**	J
	5	10/31/02	**499**	J	**38.2**	J
GMX-06	1	10/30/02	**10.2**		< 5	
	5	10/30/02	< 10		< 5	
GMX-07	1.5	10/28/02	**14000**	J	**251**	J
	5	10/28/02	**3120**	J	**228**	J
GMX-08	1	10/17/02	**2170**		**1280**	J
	5	10/17/02	**687**		**28.5**	J
GMX-09	1.5	10/18/02	**9770**	J	< 5	
	5	10/18/02	< 10		< 5	
GMX-10	1	10/17/02	**1450**		< 5	
	5	10/17/02	< 10		< 5	
GMX-11	3	10/17/02	< 10		< 5	
	5	10/17/02	< 10		< 5	
GMX-12	1	10/17/02	**10100**	J	**338**	J
	5	10/17/02	**12900**	J	**3050**	J
GMX-14	1	10/30/02	**519**	J	< 5	
	5	10/30/02	**2920**	J	< 5	
GMX-29	1.5	07/09/03	**6810**	J	**74.6**	J
	3	07/09/03	**2870**	J	**400**	J
	5	07/09/03	**6190**	J	**273**	J
GMX-30	1	07/09/03	**5900**	J	**856**	J
	5	07/09/03	**4080**	J	**653**	J
GMX-31	1	07/24/03	**5750**	J	**89.5**	J
	5	07/24/03	**4370**	J	< 5	
GMX-32	1	07/24/03	**12900**	J	**735**	J
	5	07/24/03	**13100**	J	**991**	J
MW-01	1	10/16/02	**1240**		**11.9**	J
MW-01R	10	10/21/02	**1310**	J	**11.1**	J
MW-02	1.5	10/18/02	**2870**	J	**8.18**	J
	5	10/18/02	< 10		< 5	
MW-06	2.5	04/27/04	**42000**	J	<1	UJ

Notes:

[1] Samples collected by Geomatrix Consultants, Inc., and analyzed by North Creek Analytical of Bothell, Washington, for extended TPHd (C_{10} - C_{34}) and TPHg using EPA Method 8015 Modified.

TPHd = Total petroleum hydrocarbons quantified as diesel

TPHg = Total petroleum hydrocarbons quantified as gasoline

J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ = Analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

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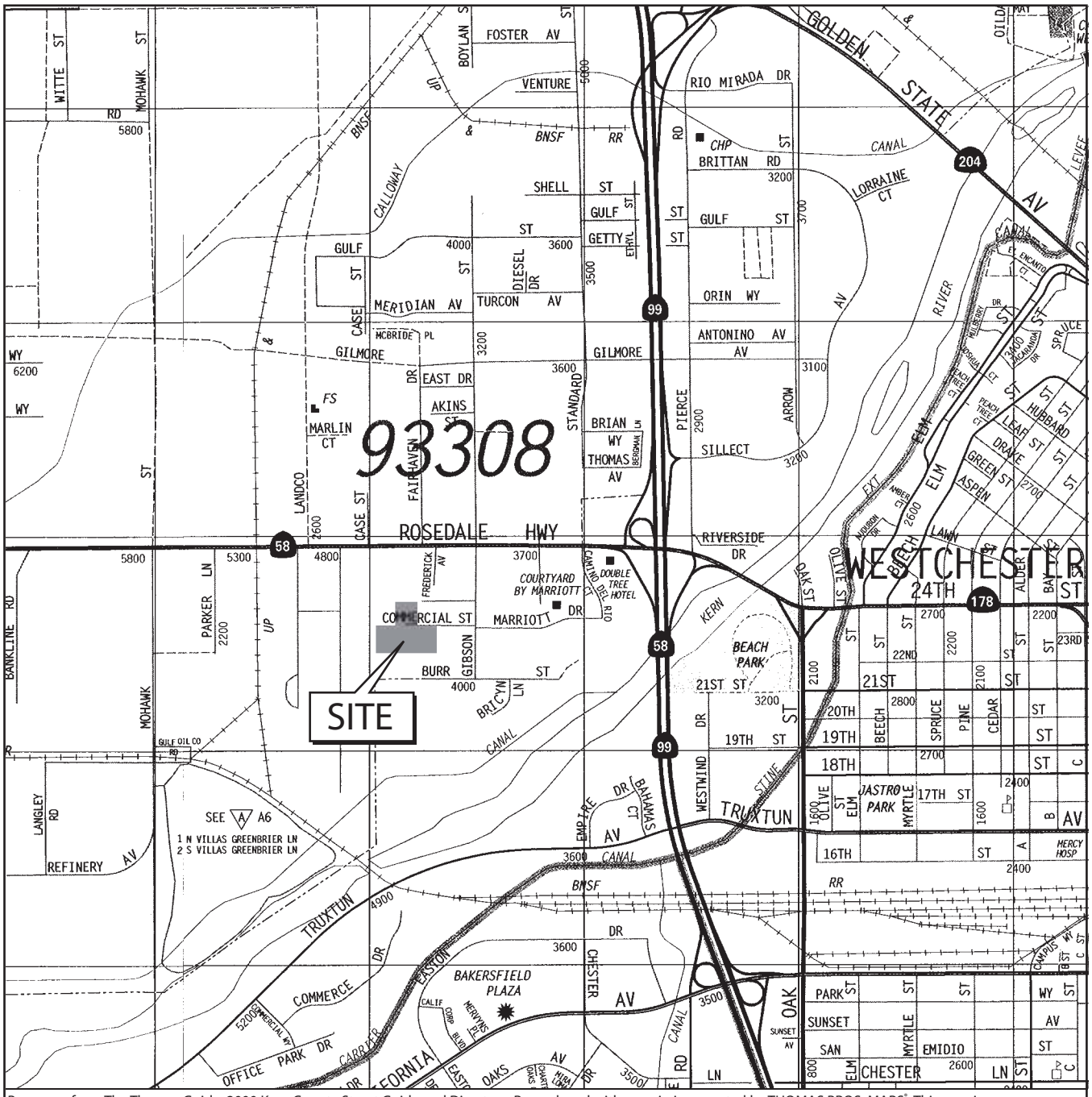
FIGURES



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N

0 0.5 mile

SITE LOCATION MAP
Gibson Environmental Site
Bakersfield, California

By: _	Date: _	Project No. 7721.000
Geomatrix		Figure 1

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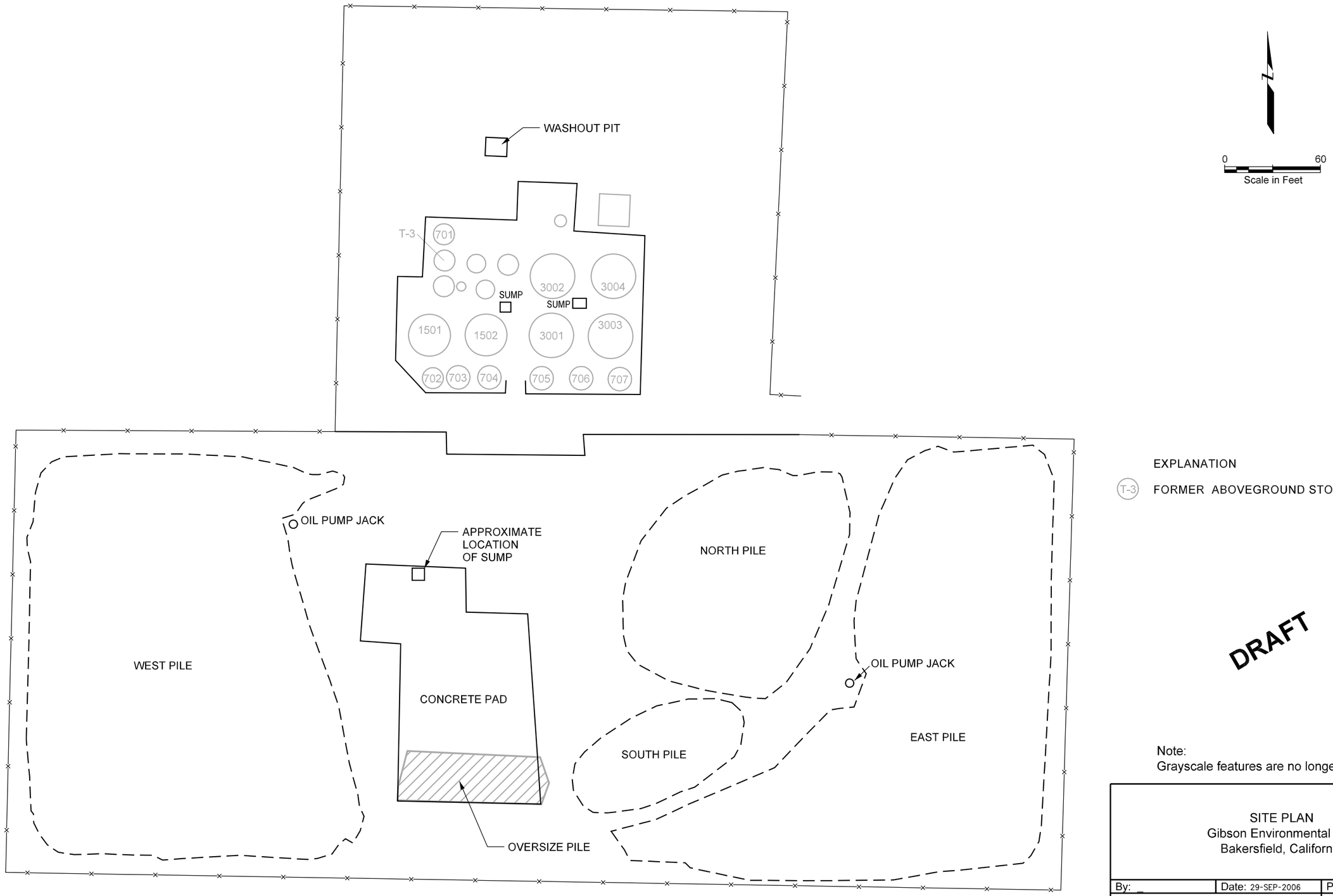

EXPLANATION

T-3 FORMER ABOVEGROUND STORAGE TANK

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Note:
Grayscale features are no longer present.

SITE PLAN
Gibson Environmental Site
Bakersfield, California

By: _	Date: 29-SEP-2006	Project No. 7721.000
Geomatrix		Figure 2

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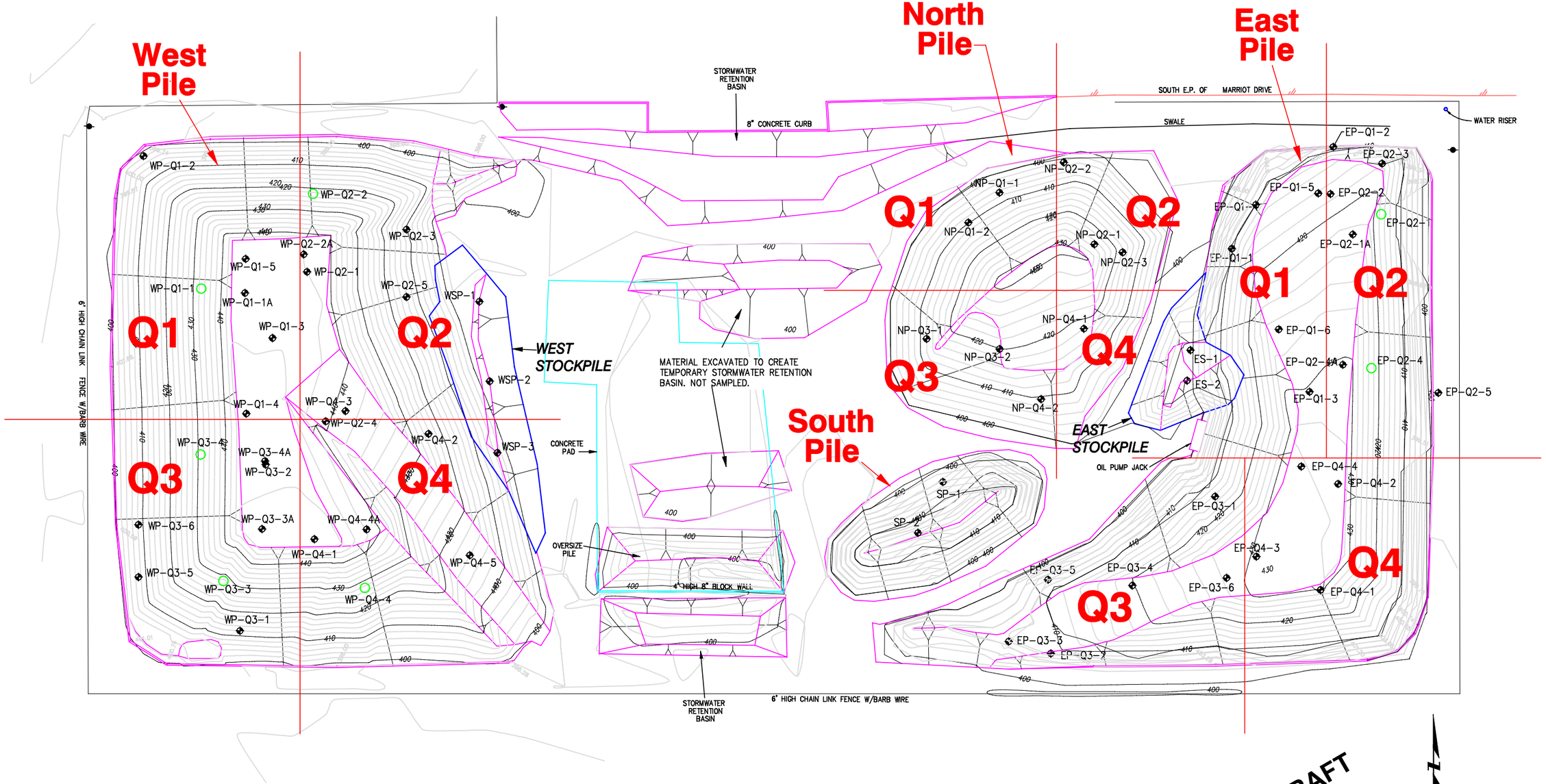

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0 60 Feet

LEGEND:

- LOCATION ACCESSED DIRECTIONALLY FROM TOP OF PILE AT CORRESPONDING "A" LOCATION
- SOIL BORING LOCATION
- EXISTING POWER POLE
- EXISTING WATER RISER
- EXISTING CHAIN LINK FENCE W/BARB WIRE
- EXISTING EDGE OF PAVEMENT
- EXISTING GROUND ELEVATION
- EXISTING 10' CONTOUR INTERVAL LINE
- Q3 SAMPLE LOCATION QUADRANT

REFERENCE:

McINTOSH & ASSOCIATES FOR FOSTER WHEELER, MARCH 2000; FOR IT CORP, APRIL 2001

Note: Figure taken from IT Corporation Pile Remedial Investigation, November 2001.

SAMPLE LOCATION MAP - SOIL PILES
Gibson Environmental Site
Bakersfield, California

By: _	Date: _	Project No. 7721.000
Geomatrix		Figure 3

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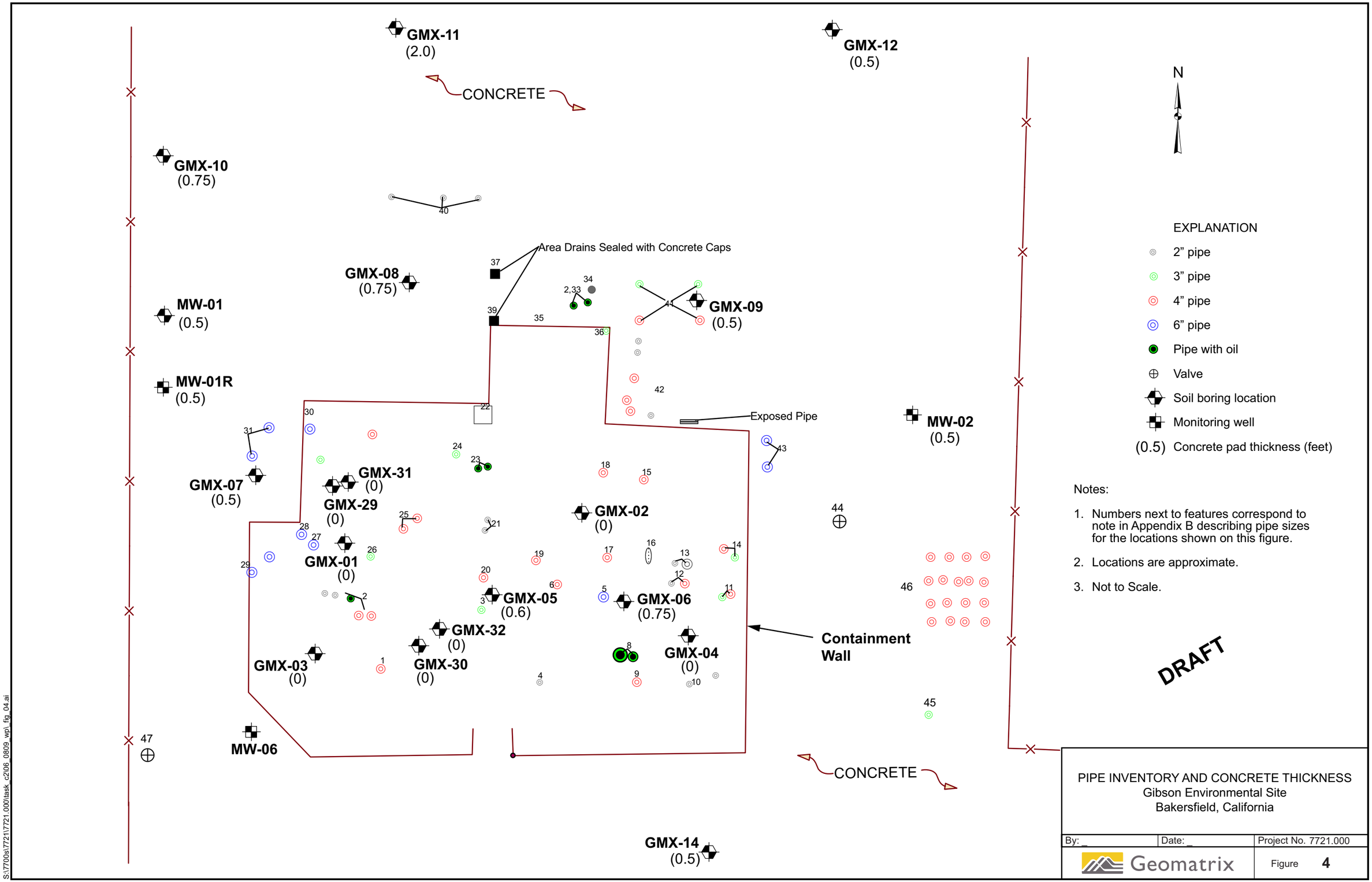
GMX-11
(2.0)
GMX-12
(0.5)
CONCRETE
N
GMX-10
(0.75)
40
Area Drains Sealed with Concrete Caps
37
GMX-08
(0.75)
34
2,33
39
35
36
41
GMX-09
(0.5)
MW-01
(0.5)
MW-01R
(0.5)
42
22
30
Exposed Pipe
MW-02
(0.5)
31
24
23
43
18
15
GMX-07
(0.5)
GMX-31
(0)
GMX-29
(0)
25
21
GMX-02
(0)
44
28
27
26
16
14
13
19
17
29
GMX-01
(0)
20
12
6
5
11
46
2
3
GMX-05
(0.6)
GMX-06
(0.75)
GMX-32
(0)
8
GMX-04
(0)
Containment
Wall
GMX-03
(0)
1
GMX-30
(0)
9
10
4
45
47
MW-06
CONCRETE
GMX-14
(0.5)
EXPLANATION
2” pipe
3” pipe
4” pipe
6” pipe
Pipe with oil
Valve
Soil boring location
Monitoring well
(0.5) Concrete pad thickness (feet)
Notes:
1. Numbers next to features correspond to note in Appendix B describing pipe sizes for the locations shown on this figure.
2. Locations are approximate.
3. Not to Scale.
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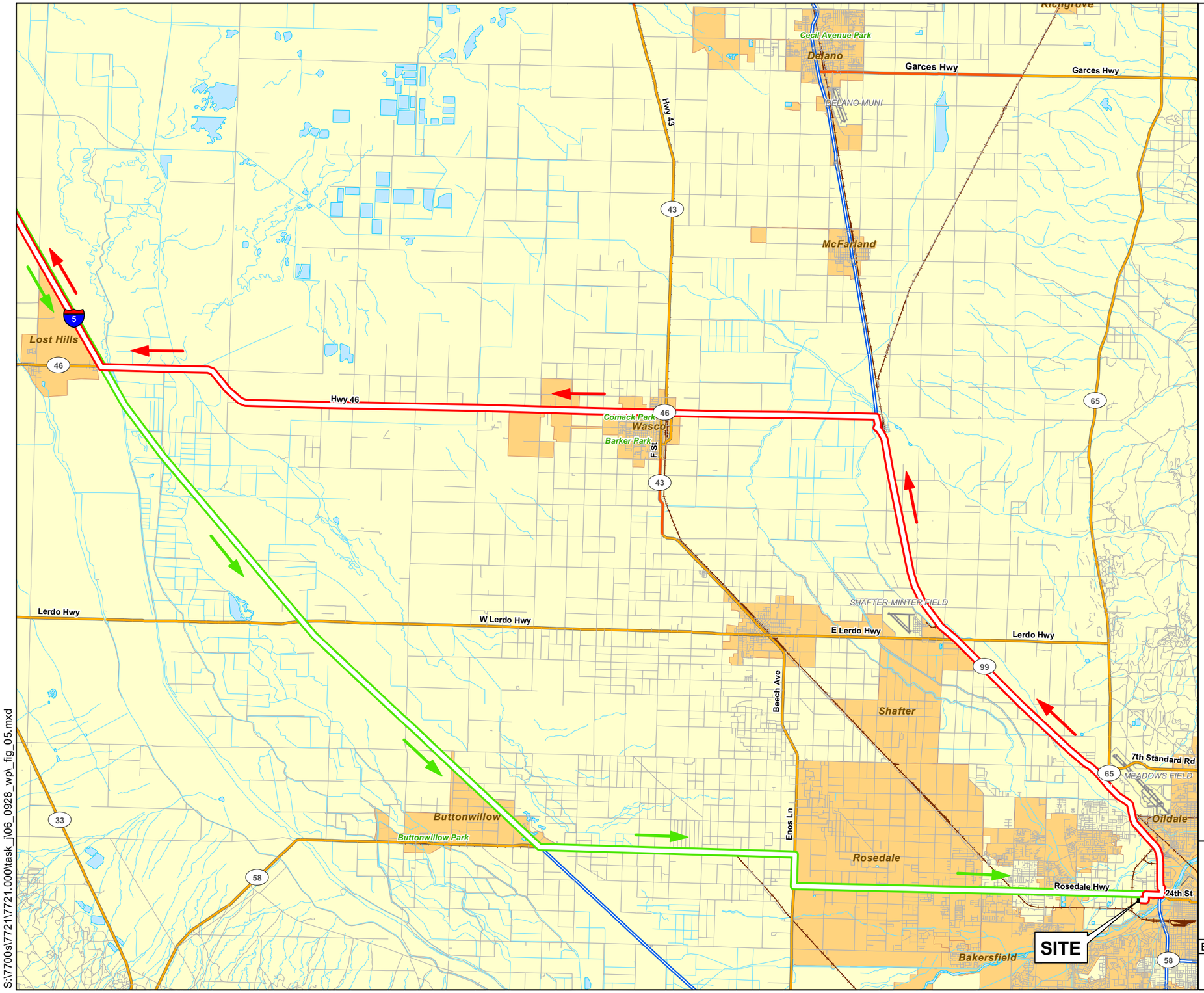
PIPE INVENTORY AND CONCRETE THICKNESS
Gibson Environmental Site
Bakersfield, California
By: _
Date: _
Project No. 7721.000
Geomatrix
Figure 4
S:\7700s\7721\7721.000\task_c2\06_0809_wp_fig_04.ai



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Explanation

Into Facility

Out of Facility

N

0 20,000 Feet

TRUCK HAUL ROUTE OVERVIEW
Gibson Environmental Site
Bakersfield, California

By:	Date:	Project No. 7721.000
Geomatrix		Figure 5

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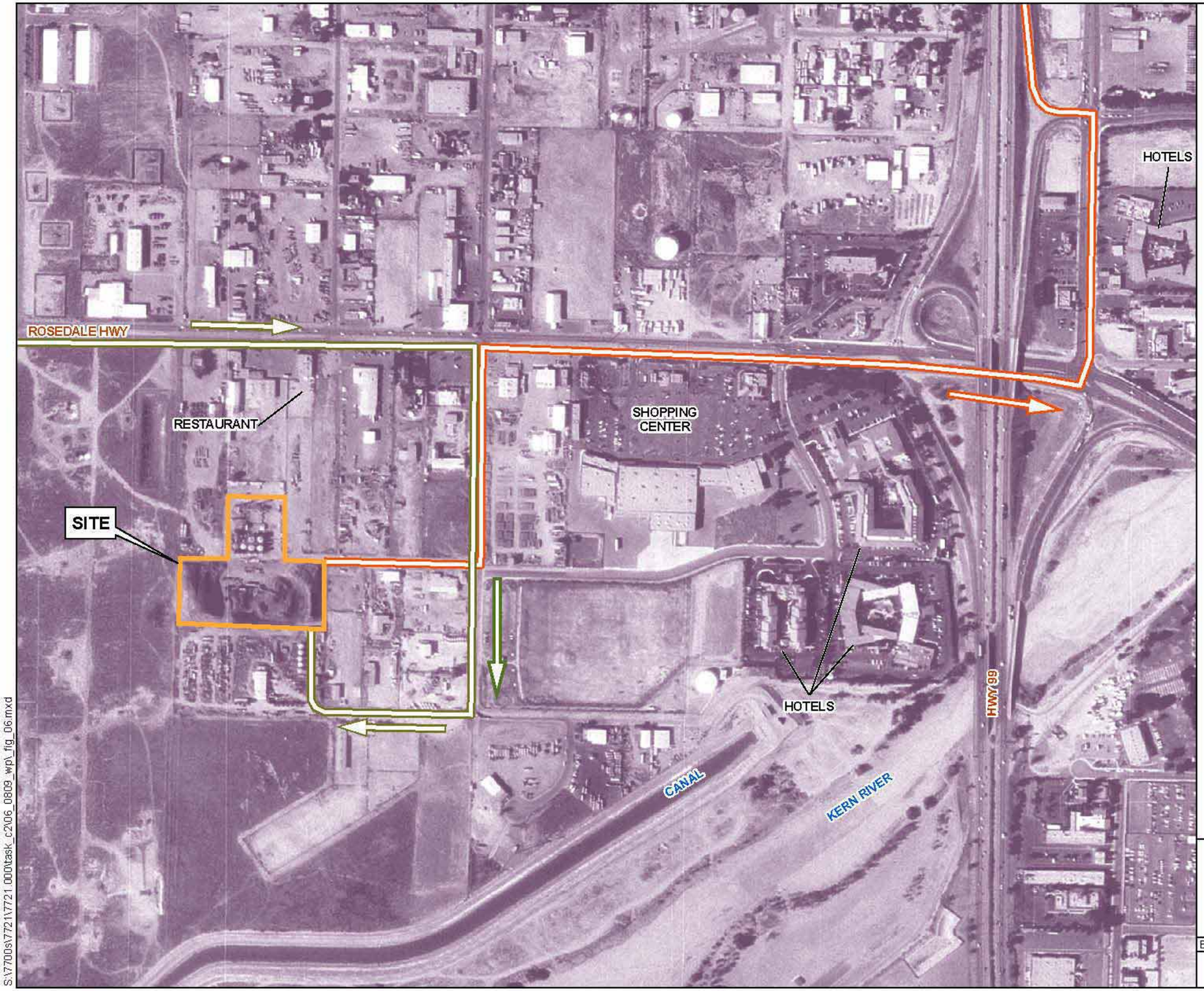

DRAFT

Explanation

Into Facility

Out of Facility

N

0 400 800 Feet

Note: Image from U.S.G.S. 1-m DOQQ, taken June 1, 1994.

TRUCK HAUL ROUTE

Gibson Environmental Site
Bakersfield, California

By:	Date:	Project No. 7721.000
Geomatrix		Figure 6

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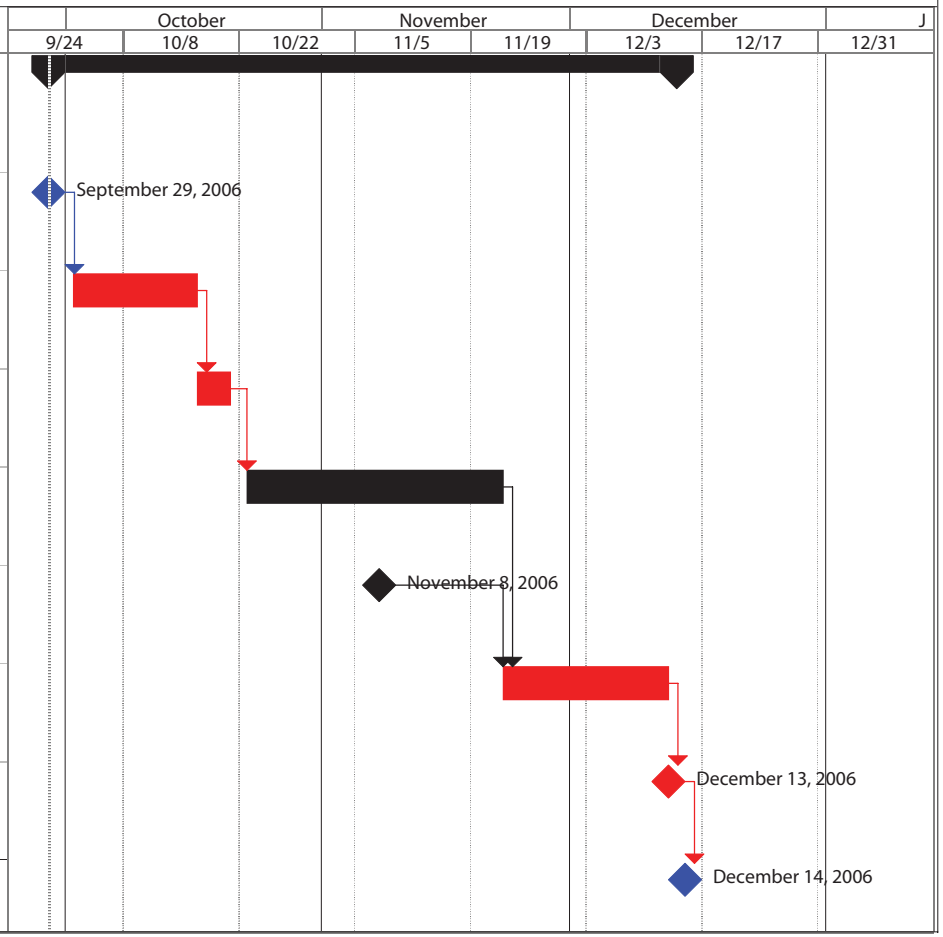
DTSC Activities - Red

PRP Group Activities - Blue

Public Activities - Black

ID	Task Name	Calendar Days	Start	Finish
1	IRM Work Plan, Initial Study, and MND	76 days	Fri 9/29/06	Wed 12/13/06
2	PRPs Submit Revised Drafts of IRM Work Plan, Initial Study, and MND to DTSC	1 day	Fri 9/29/06	Fri 9/29/06
3	DTSC and PRPs finalize IRM Work Plan, Initial Study, and MND	15 days	Mon 10/2/06	Mon 10/16/06
4	DTSC Prepares Documents for Public Comment	4 days	Tue 10/17/06	Fri 10/20/06
5	Public Comment Period on Work Plan and MND	31 days	Mon 10/23/06	Wed 11/22/06
6	Public Meeting on Work Plan and MND	1 day	Wed 11/8/06	Wed 11/8/06
7	DTSC Finalizes Responsiveness Summary	20 days	Thu 11/23/06	Tue 12/12/06
8	IRM Work Plan and MND Approved by DTSC; Notice of Determination Issued	1 day	Wed 12/13/06	Wed 12/13/06
9	PRPs Start IRM Field Activities	0 days	Thu 12/14/06	Thu 12/14/06



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IRM PROJECT SCHEDULE
Gibson Environmental Site
Bakersfield, California

By: _ | Date: _ | Project No. 7721.000

Geomatrix

Figure 7

Geomatrix

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APPENDIX A

Lead Composite Results – All Piles

Table 5-1. Lead Composite Results - All Piles

Composite Sample ID	Sample Date	Quadrant(s)	Elevation	Location Code	Total Lead Concentration (mg/kg)	
WPC-22	05/04/01	1,1,3	10.2-21.0	West Pile	2150	
				Composites > 1000 mg/kg		**1**
EPC-26	05/08/01	3,3,3	0.5-2.5	East Pile	739	
EPC-4	05/14/01	1,2,3	25.5-27.5	East Pile	549	
EPC-18	05/02/01	3,3,3	5.5-11.0	East Pile	365	
EPC-11	05/14/01	1,2,3	15.5-17.5	East Pile	358	
				Composites > 350 < 1,000 mg/kg		**4**
EPC-21	05/01/01	1,1,1	5.5-6.0	East Pile	336	
WPC-55	05/07/01	1,2,4	0.5	West Pile	321	
NPC-11	05/03/01	3,4	1.5-3.5	North Pile	306	
NPC-10	05/03/01	1,1,2	0.5-1.5	North Pile	291	
NPC-9	05/14/01	2,2,4	0.5	North Pile	286	
NPC-6	05/14/01	2,2,4	5.5	North Pile	276	
NPC-7	05/03/01	1,1,3	5.5-7.5	North Pile	276	
EPC-29	04/30/01	1,2,3	0.5-3.0	East Pile	274	
WPC-30	05/09/01	1,1,1	12.5-16.5	West Pile	274	
EPC-9	05/02/01	3,4,4	15.5-16.0	East Pile	273	
EPC-3	04/30/01	1,4,4	25.0-28.5	East Pile	250	
NPC-8	05/04/01	3,3,4	6.5-8.5	North Pile	249	
NPC-1	05/14/01	2,2	20.5-25.5	North Pile	246	
NPC-4	05/11/01	2,3,4	10.5-12.5	North Pile	246	
WPC-7	05/04/01	1,1,2	36.0-37.0	West Pile	243	
NPC-5	05/04/01	1,3,4	11.5	North Pile	239	
NPC-2	05/04/01	3,4	15.5-16.5	North Pile	231	
NPC-3	05/14/01	2,2,2	10.5-15.5	North Pile	220	
EPC-27	05/08/01	1,1,1	0.5-3.0	East Pile	213	
EPC-7	05/14/01	1,2,2	20.5-21.5	East Pile	200	
EPC-5	05/02/01	3,4,4	20.5-21.0	East Pile	196	
EPC-17	05/14/01	3,3,3	5.5-10.5	East Pile	190	
WPC-21	05/08/01	2,3,4	20.5-21.0	West Pile	189	
EPC-8	05/02/01	1,2,2	15.5-17.5	East Pile	185	
WPC-35	05/07/01	4,4,4	12.0-12.5	West Pile	183	
EPC-20	05/08/01	3,4,4	5.0-6.0	East Pile	179	
WSP-1-5.5	5/11/01	N/A	5.5	West Stockpile	177	
WPC-8	05/08/01	2,2,4	32.5-36.5	West Pile	175	
ES-3	05/04/01	N/A	N/A	East Stockpile	175	
EPC-1	04/30/01	1,4,4	30.0-31.5	East Pile	173	
WPC-9	05/03/01	1,3,3	32.5-35.0	West Pile	171	
WPC-41	05/07/01	2,2,4	8.5	West Pile	167	
ES-2	05/04/01	N/A	N/A	East Stockpile	165	
WPC-4	05/04/01	1,1,2	40.5	West Pile	161	
WPC-24	05/07/01	1,3,4	20.5	West Pile	160	
WPC-43	05/07/01	4,4,4	4.5-8.5	West Pile	154	
EPC-14	05/11/01	1,1,1	10.0-11.5	East Pile	151	
EPC-25	05/02/01	3,4,4	0.5-1.5	East Pile	151	
EPC-22	05/11/01	3,4,4	5.5	East Pile	151	
EPC-19	05/02/01	1,2,2	5.5-9.5	East Pile	150	
WPC-29	05/07/01	2,4,4	16.5	West Pile	150	

Table 5-1. Lead Composite Results - All Piles

Composite Sample ID	Sample Date	Quadrant(s)	Elevation	Location Code	Total Lead Concentration (mg/kg)	
WSP-1-4.5	5/11/01	N/A	4.5	West Stockpile	144	
EPC-2	05/08/01	4,4,4	25.0-30.5	East Pile	143	
EPC-12	05/02/01	1,2,2	10.0-10.5	East Pile	143	
EPC-23	05/11/01	1,2,2	5.5-6.5	East Pile	137	
WSP-1-5.0	5/11/01	N/A	5.0	West Stockpile	136	
EPC-30	5/11/01	1,2,2	3.0-5.0	East Pile	135	
WPC-48	05/07/01	1,2,2	4.5	West Pile	131	
WPC-6	05/02/01	4,4,4	36.5-40.5	West Pile	129	
OP-2-4	05/08/01	N/A	4.0	Oversize Pile	129	
WPC-03	05/07/01	3,4	40.5	West Pile	128	
WPC-10	05/04/01	1,1,2	32.5-33.5	West Pile	124	
WPC-15	05/07/01	1,2,2	24.5-28.5	West Pile	118	
OP-1-4	05/08/01	N/A	4.0	Oversize Pile	118	
EPC-13	05/02/01	3,4,4	10.5-13.0	East Pile	115	
WPC-45	05/04/01	1,1,3	4.5-5.0	West Pile	112	
WPC-54	05/07/01	2,2	0.5	West Pile	106	
WPC-2	05/03/01	1,1,1	44.5	West Pile	104	
EPC-6	04/30/01	1,4,4	21.0-24.0	East Pile	101	
				Composites > 100 < 350 mg/kg		**59**
WSP-3-10.5	5/11/01	N/A	10.5	West Stockpile	99.1	
EPC-28	05/11/01	3,4,4	0.5-1.5	East Pile	98.6	
WPC-34	05/07/01	2,2,2	12.5	West Pile	96.4	
EPC-10	04/30/01	1,4,4	15.0-19.5	East Pile	95.9	
EPC-15	05/11/01	3,4,4	10.0-10.5	East Pile	93.5	
WPC-5	05/03/01	1,1,3	36.5-41.0	West Pile	91.5	
WPC-49	05/11/01	1,1	5.5	West Pile	89	
WPC-13	05/08/01	2,3,4	28.5	West Pile	85.2	
EPC-24	05/08/01	2,2	0.5-2.0	East Pile	80.5	
WPC-16	05/10/01	3,3,4	24.5-28.5	West Pile	78.7	
SPC-2	05/11/01	1,2,2	0.5-5.5	South Pile	75.8	
ES-1	05/04/01	N/A	N/A	East Stockpile	75.8	
WPC-50	05/07/01	3,3,3	0.5-4.5	West Pile	75.2	
WPC-46	05/07/01	3,3,3	4.5-6.5	West Pile	74.0	
WPC-17	05/08/01	2,3,4	24.5	West Pile	73.1	
EPC-16	04/30/01	1,2,2	13.5-14.5	East Pile	64.8	
WPC-26	05/07/01	1,1,3	16.5-17.5	West Pile	62.8	
WPC-25	05/08/01	2,3,4	16.5	West Pile	62.4	
WPC-20	5/10/01	4,4,4	10.5-26.5	West Pile	61.1	
SPC-1	05/11/01	2,2,2	10.5-15.5	South Pile	59.6	
WPC-12	05/02/01	4,4,4	28.5-32.5	West Pile	58.6	
WPC-52	05/04/01	1,1,3	0.5-1.5	West Pile	57.6	
WPC-1	05/03/01	3,4,4	44.5	West Pile	56.5	
WPC-39	05/07/01	3,3,4	8.5	West Pile	55.9	
WSP-3-10	5/11/01	N/A	10.0	West Stockpile	55.6	
WPC-56	05/07/01	4,4	0.5	West Pile	53.1	
WPC-44	05/08/01	2,3,4	4.5	West Pile	52.6	
				Composites > 50 < 100 mg/kg		**27**
WPC-38	05/07/01	1,3	8.5	West Pile	46.3	

Table 5-1. Lead Composite Results - All Piles

Composite Sample ID	Sample Date	Quadrant(s)	Elevation	Location Code	Total Lead Concentration (mg/kg)	
WPC-42	05/03/01	4,4,4	4.5-8.5	West Pile	46.3	
WPC-51	05/08/01	2,3,4	0.5	West Pile	46.3	
WPC-53	05/07/01	3,3,4	0.5-1.0	West Pile	43.5	
WPC-14	05/04/01	1,1,3	28.5-30.5	West Pile	40.4	
WSP-2-8.0	5/11/01	N/A	8.0	West Stockpile	40.3	
WPC-11	05/09/01	1,1,1	28.5-32.5	West Pile	39.5	
WPC-28	05/10/01	3,4,4	16.5	West Pile	39.5	
WPC-23	05/07/01	1,2,2	20.5	West Pile	38.1	
WPC-33	05/07/01	3,4	12.5	West Pile	31.4	
WPC-31	05/08/01	2,3,4	12.5	West Pile	30.6	
WPC-37	05/08/01	2,3,4	8.5	West Pile	27.0	
WSP-3-9.5	5/11/01	N/A	9.5	West Stockpile	25.4	
WPC-47	05/07/01	1,2,2	2.5-4.5	West Pile	23.5	
WPC-32	05/04/01	1,1,3	12.5	West Pile	18.6	
WPC-40	05/09/01	1,1,2	8.5	West Pile	17.0	
WPC-18	05/09/01	1,1,3	24.5-26.5	West Pile	16.8	
WPC-19	05/07/01	1,2	24.5	West Pile	13.5	
WSP-2-8.5	5/11/01	N/A	8.5	West Stockpile	12.3	
WPC-36	05/07/01	1,2,2	7.0-12.5	West Pile	10.4	
WSP-2-9.0	5/11/01	N/A	9.0	West Stockpile	9.7	
WPC-27	05/07/01	1,2,2	16.5-17.5	West Pile	5.6	
					Composites < 50 mg/kg	**22**
		Total Number of Composites:			**113**	

N/A = Not Applicable

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APPENDIX B

Concrete Pad Piping Inventory

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APPENDIX B

CONCRETE PAD PIPING INVENTORY
Gibson Environmental Site
Bakersfield, California

Pipe No.	Size and Condition of Pipe Surface Expressions
1	4" exposed pipe.
2	Two 4", two 2", one 3" pipe. 3" pipe contains oil.
3	3" pipe clogged with oily substance.
4	2" pipe, appears grouted.
5	5. 6" pipe, appears pinched.
6	4" pipe, appears pinched.
8	12" pipe, appears pinched and contains oil.
9	4", 6", 12" pipes. 12" and 6" pipes contain oil.
10	2" pipe.
11	3" and 4" pipe, 4" pipe broken off under-ground, appears to be an open hole.
12	4" and 2" pipe. 4" pipe clogged with oily substance.
13	2" and 5" pipe, appears grouted.
14	3" and 4" pipe, 3" pipe appears grouted.
15	4" pipe, crushed.
16	1.5 foot oval pipe filled with cement.
17	4" pipe, crushed
18	4" pipe, crushed
19	4" pipe, crushed.
20	4" pipe, crushed.
21	2" pipe, 3" pipe, 2" pipe clogged with oil.
22	1' x 1' plate.
23	Two 3" pipes, one contains oil.
24	3" pipe.
25	Two 4" pipes, one pipe is clogged with oily substance.
26	3" pipe.
27	6" pipe, pinched.
28	6" pipe, pinched.
29	6" pipe, pinched.
30	3" and 6" pipe.
31	Two 6" pipes on inclined portion of pad.
32	3" pipe with oil inside, adjacent to drain area.
33	3" pipe with oil inside, adjacent to drain area.
34	Wires protruding from pipe.
35	Wet area in former drain area. Adjacent pipes contain oil.
36	Bent pipe on raised concrete area.
37	Appears to be a concrete cap. Sealing area drains.
38	Tank on north-west area of site.
39	Appears to be a concrete cap. Sealing area drains.
40	Three 2" pipes along cinder block wall north-west area of site.
41	Two 4" and two 3" pipes in concrete pad.
42	Concrete slab, exposed pipe approximately four feet long, two 2" pipes at ground level, three 4" pipes ground level and 2 manhole covers.
43	Two 6" pipes outside north-east corner of cinder block wall.
44	Valve east of cinder block wall, possibly old gas valve
45	4" pipe along east edge of property boundary.
46	Seventeen 4" pipes located on east edge of property boundary.
47	Valve at presumed natural gas line.

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APPENDIX C

Air Monitoring Plan

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Air Monitoring Plan

Gibson Environmental Site
Bakersfield, California

Prepared for:

The Gibson Environmental PRP Group
c/o de maximis, inc.
2203 Timberloch Place, Suite 213
The Woodlands, TX 77380

June 2006

Project No. 7721.000

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DRAFT
Air Monitoring Plan

Gibson Environmental Site
Bakersfield, California

Prepared for:

The Gibson Environmental PRP Group
c/o de maximis, inc.
2203 Timberloch Place, Suite 213
The Woodlands, TX 77380

Prepared by:

Geomatrix Consultants, Inc.
2101 Webster Street, 12th Floor
Oakland, California 94612
(510) 663-4100

June 2006

Project No. 7721.000

Geomatrix

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TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

2.0 CONSTITUENTS OF INTEREST 1

3.0 AIR MONITORING PROGRAM 2
- 3.1 BACKGROUND MONITORING AND SAMPLING 2
- 3.2 REAL-TIME PERIMETER AIR MONITORING 2
- 3.3 PERIMETER AIR SAMPLING 3
  - 3.3.1 Chain-Of-Custody Procedures 4

4.0 ACTION LEVELS 5

5.0 REFERENCES 7

TABLES

Table 1 Perimeter Air Monitoring Requirements
Table 2 Perimeter Action Levels and Response Actions

FIGURES

Figure 1 Site Location Map
Figure 2 Site Plan

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AIR MONITORING PLAN
Gibson Environmental Site
Bakersfield, California

1.0 INTRODUCTION

This Air Monitoring Plan (AMP) has been developed for implementing an Interim Removal Measure (IRM) at the Gibson Environmental Site located in Bakersfield, California (the Site; Figure 1). The IRM will consist of the removal of approximately 77,700 cubic yards of aboveground soil piles and the demolition and removal of surface concrete and subsurface piping at the Site. A Site plan is presented on Figure 2. Details regarding the aboveground soil piles, concrete, and piping removals are presented in the IRM work plan. This AMP addresses perimeter air monitoring for the proposed IRM activities at the Site; work zone monitoring will be the responsibility of the contractor, as outlined in its Health and Safety Plan.

The objectives of this AMP are to:

1. Provide real-time data that can be used to modify work practices, as necessary.

2. Collect scientifically valid data using standard industrial hygiene practices to provide correlative information on particulate and vapor emissions resulting from the removal of aboveground soil piles and surface concrete and subsurface piping.

This AMP describes the constituents of interest for the air monitoring program, monitoring procedures and methodologies, and levels at which additional site management activities would be triggered during the IRM implementation.

2.0 CONSTITUENTS OF INTEREST

The chemicals detected during investigations of the soil piles and subsurface soil below the concrete pads are tabulated in the Health Risk Assessment (Geomatrix, 2005). Based on the data, the constituents of interest with respect to air monitoring are lead, because of its prevalence in the soil piles, and petroleum-related volatile organic compounds (VOCs), because of the presence of petroleum in the subsurface.

Additionally, the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) has visible dust emissions (VDE) requirements for construction projects. Based on its requirements, additional parameters relevant to this AMP are total dust and opacity.

3.0 AIR MONITORING PROGRAM

The air monitoring program will consist of pre-construction background monitoring and sampling, periodic and continuous real-time perimeter air monitoring, and perimeter air sampling. Each of these monitoring and sampling activities is discussed below.

Additionally, monitoring of the work zone will be performed by the contractor during IRM implementation. Work zone monitoring will be described in the contractor's health and safety plan..

3.1 BACKGROUND MONITORING AND SAMPLING

Air monitoring and sampling activities will be conducted at the Site prior to the start of IRM implementation activities to establish baseline conditions. A wind sock will be installed at the Site prior to commencement of activities and will remain throughout implementation of the IRM to monitor wind direction. During the week prior to the start of field activities, one upwind and one downwind perimeter air monitoring station will be established. On two days during that week, air monitoring and sampling will be conducted for a full day. During these monitoring events, periodic measurements of VOC concentrations will be collected and dust will be continuously monitored using real-time direct reading instruments. Additionally, air samples will be collected from each station for lead, dust, and petroleum-related VOCs (benzene and naphthalene) analyses by an analytical laboratory. Monitoring and sample collection methods used for the background sampling will be the same as those employed during implementation air monitoring and are described in sections 3.2 and 3.3 below.

3.2 REAL-TIME PERIMETER AIR MONITORING

Real-time air monitoring will be performed at the perimeter of the Site for the duration of the IRM activities. Perimeter air monitoring will be conducted to monitor and record the levels of dust, opacity, and VOCs and to determine whether work operations need modification to prevent the off-site migration of significant levels of constituents.

Real-time perimeter air monitoring data for dust and VOCs will be collected using direct-reading instruments, as described below. At least two upwind and two downwind sampling stations will be set up for periodic and continuous perimeter air monitoring during the soil pile, concrete, and subsurface piping removal activities. Sampling station locations will be determined each day based on wind direction as indicated by the wind sock and relative to the work area for that day. Sampling station locations will be recorded in field notes and on a Site plan. At each station, sampling devices will be set with the air intake elevated approximately 4 to 5 feet off the ground to collect a representative breathing zone sample.

A hand-held PID (an OVM Model 580 B or equivalent) will be used to monitor VOC concentrations. Readings will be collected and recorded at each station approximately every 2 hours during the work day. Readings will be recorded on a daily log.

The contractor will continuously monitor airborne dust at the perimeter monitoring locations using direct-reading instruments (e.g., Mini-Ram pDR 1000™) for measurement of total dust. Electronic data logs of real-time measurements will be used to determine the maximum and average dust concentrations at the upwind and downwind perimeter monitoring locations.

Opacity will be observed to determine compliance with the SJVUAPCD's VDE requirements. Observations will be made by an individual who has received certification as a qualified observer using the visual determination methods described in Appendix A of Rule 8011 of Regulation VIII (Rules and Regulations of the SJVUAPCD, November, 2001, amended August, 2004). Observations will be made and recorded when visible dust is observed as a result of activities at the Site, such as vehicles traveling on unpaved surfaces or operation of earth-moving equipment.

Table 1 presents a summary of perimeter air monitoring methods.

3.3 PERIMETER AIR SAMPLING

Perimeter air samples will be collected for laboratory analysis to verify and re-calibrate, as necessary, the real-time sampling results. Air samples will be collected at the same upwind and downwind stations identified for the perimeter monitoring. Samples will be collected on a daily basis for the first week of soil pile removal and concrete and piping removal activities. Sampling will occur on a less frequent basis (i.e., once per week) thereafter if initial data indicate that off-site migration of unacceptable concentrations of chemicals is not occurring.

Daily ambient sampling times will coincide with remediation activities, which are presently estimated to occur between 7:00 am and 5:30 pm.

Perimeter air samples for lead and total dust analyses will be collected using a Gillian HFS-513A air pump, or equivalent, operating at a flow rate of 2 to 4 liters per minute (L/min) over 8 hours. Samples will be collected on matched-weight MCE filter cassettes. Samples will be delivered under Geomatrix chain-of-custody procedures (see Section 3.3.1) to an American Industrial Hygiene Association (AIHA)-accredited analytical laboratory for analysis for total dust using National Institute for Occupational Safety and Health (NIOSH) 0500 and for lead using NIOSH 7300.

If VOCs are detected above action levels using a PID during perimeter air monitoring, perimeter air samples will be collected for VOC analysis. Samples will be collected in pre-cleaned, 6-liter, evacuated Summa™ canisters coupled with a flow controller to collect passive integrated samples over a 8-hour time period. Samples will be delivered under Geomatrix chain-of-custody procedures (see Section 3.3.1) to an AIHA-accredited analytical laboratory for analysis for benzene and naphthalene using U.S. Environmental Protection Agency (EPA) Method TO-15.

All samples collected will be analyzed on a 24-hour turnaround basis so that dust control practices at the Site may be modified in a timely manner, if necessary. Table 1 presents a summary of perimeter air sampling analytical methods.

3.3.1 Chain-Of-Custody Procedures

A Chain-of-Custody record will be maintained from the time the sample is taken to its final deposition. Every transfer of custody will be noted and signed by the receiving party. A copy of this record will be kept by each individual who has signed. When samples (or groups of samples) are not under direct control of the individual responsible for them, they must be stored in a locked container sealed with a Custody Seal.

The Chain-of-Custody record will contain (at the minimum) the following:

- Sample identification number
- Sample volume
- Sample date

- Analysis required
- Name(s) and signature(s) of sampler(s)
- Signature(s) of any individual(s) with control over samples

Each of the samples will be uniquely labeled with the sample location and date. Samples will be securely packaged with the Chain-of-Custody and shipped via overnight carrier (e.g. FedEx) or delivered via courier to the analytical laboratory.

4.0 ACTION LEVELS

Determinations of when to employ additional dust control methods or stop work will be made based on the real-time perimeter monitoring data. Perimeter sampling laboratory data will be used to document concentrations of dust and lead at the perimeter of the site and to re-evaluate the real-time action levels, if necessary.

Perimeter VOC concentrations will be monitored using a PID. A PID reading of 5 ppm sustained over a period of 5 minutes will be used as the real-time perimeter action level for VOCs. If this action-level is exceeded, perimeter air samples will be collected (as described below) to quantify the concentrations of benzene and naphthalene present during excavation activities. If the action level is exceeded, vapor controls, such as covering the subject soil with clean soil, slowing down the work, reducing the size of the area being excavated, or applying vapor suppressants to the soil, will be implemented.

California Air Resource Board (CARB) specifies an ambient air quality standard of 0.05 mg/m^3 for particulate matter less than 10 micrometers in diameter (PM_{10}). However, since Bakersfield is located in a non-attainment zone, IRM activities will use an action level of 0.05 mg/m^3 above background for total dust at the property boundaries. The SJVAPCD specifies an action level for VDE of 20% opacity. If these action levels are exceeded, additional engineering controls will be implemented to further reduce dust concentrations (i.e., increased watering). Work will stop if engineering controls cannot limit dust emissions to acceptable levels.

The Agency for Toxic Substances and Disease Registry (ATSDR) has developed Minimal Risk Levels (MRLs) for substances that are commonly found at Superfund sites. An MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse health effects over a specified duration of exposure—chronic, intermediate, and acute. MRLs are based on noncarcinogenic effects only. The intermediate

MRL for benzene is 0.006 parts per million (ppm) and the MRL for naphthalene is 0.0007 ppm (intermediate, chronic, and acute are not specified for this chemical). IRM activities will use action levels of 0.006 ppm above background for benzene and 0.0007 ppm above background for naphthalene. If these action levels are exceeded, the PID-based action level will be revised accordingly.

In its *Risk Management Guidelines for New, Modified, and Existing Sources of Lead*, the CARB specifies an acceptable 30-day average concentration for lead exposure of 0.3 micrograms per cubic meter ($\mu g/m^3$). This is applicable given the conditions surrounding the Site (i.e., no residential receptors nearby). If concentrations in the samples collected exceed this level, the action level for real-time monitoring will be revised accordingly. The allowable total dust concentration using this action level and the maximum concentration of lead detected at the site can be calculated as follows:

$$\text{Total dust action level} = \frac{\text{Contaminant Action Level (mg/m}^3\text{)}}{\text{Contaminant Soil Concentration (mg/kg)}} \times 10^6$$

$$\text{Site-specific lead dust action level} = \frac{0.0003}{435} \times 10^6 = 0.69 \text{ mg/m}^3$$

Therefore, the dust action level of 50 $\mu g/m^3$ (equal to 0.05 mg/m^3) that will be used for the real-time monitoring, as discussed above, is an order of magnitude less than the lead-based allowable total dust concentration and is sufficiently protective to prevent lead exposure.

Table 2 presents a summary of action levels and responses to exceedances for perimeter monitoring.

5.0 REFERENCES

California Air Resources Board, 2001, Risk Management Guidelines for New, Modified, and Existing Sources of Lead, March.

Geomatrix Consultants, Inc. (Geomatrix), 2005, Health Risk Assessment, Gibson Environmental Site, Bakersfield, California, October.

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TABLES

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TABLE 1

PERIMETER AIR MONITORING REQUIREMENTS

Gibson Environmental Site
Bakersfield, California

Contaminant and Equipment	Method (Method Detection Limit)	Frequency and Location
REAL-TIME MONITORING		
VOCs PID	Direct-reading instrument (0.5 ppm)	Periodically on the site perimeter during applicable work and whenever odors or visibly affected soils are encountered. Readings will be recorded in field notes at least once every 2 hours.
Particulates and Dust DataRAM, MiniRAM, or HAM portable aerosol monitor	Direct-reading instrument (0.001 mg/m^3)	At the site perimeter during IRM activities. Readings will be recorded in field notes at least once per hour and daily averages will be calculated at the end of each work day.
Opacity No equipment required	Visual observation by certified individual	Periodically during generation of visible dust emissions.
PERIMETER SAMPLING		
Lead and Total Dust Air sampling pump with 37 mm matched-weight MCE filter cassettes	NIOSH 0500 (50 $\mu g/m^3$ for dust) NIOSH 7300 (1 $\mu g/m^3$ for lead)	Two upwind and two downwind samples per work day for first week; minimum of two upwind and two downwind one day per week for remainder of work.
VOCs Summa canister	EPA TO-15 (5 to 50 $\mu g/m^3$)	Two upwind and two downwind samples per work day for first week, then available for use if strong odors or high PID readings are encountered.

Abbreviations:

EPA = U.S. Environmental Protection Agency

IRM = interim removal measure

mg/m^3 = milligrams per cubic meter
$\mu g/m^3$ = microgram per cubic meter
NIOSH = National Institute of Occupational Safety and Health
ppm = parts per million
VOCs = volatile organic compounds

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TABLE 2

PERIMETER ACTION LEVELS AND RESPONSE ACTIONS

Gibson Environmental Site
Bakersfield, California

Contaminant and Equipment	Action Level	Response to Exceedance
REAL-TIME MONITORING[1]		
VOCs PID	Readings in perimeter breathing zone sustained for 5 minutes at 5 ppm.	Implement vapor controls, such as covering the subject soil with clean soil, slowing down the work, reducing the size of the area being excavated, or applying vapor suppressants to the soil.
Particulates and Dust DataRAM, MiniRAM, or HAM portable aerosol monitor	50 ug/m^3 above background	Stop work and implement dust controls, such as water spray, slowing of work, etc., until engineering controls are sufficient to bring the measured concentration below action level.
Opacity Visual observation by certified individual	20%	Stop work and implement dust controls, such as water spray, slowing of work, etc., until engineering controls are sufficient to bring the measured concentration below action level.
PERIMETER SAMPLING[2]		
Lead and Total Dust Air sampling pump with 37 mm matched-weight MCE filter cassettes	Lead = 0.3 µg/m^3 Total Dust = 50 ug/m^3 above background	Response based on real-time perimeter monitoring; adjust real-time action levels accordingly.
VOCs Summa canisters	Benzene = 0.006 ppm Naphthalene = 0.0007 ppm	Response based on PID readings; adjust PID action level accordingly.

Notes:

[1] Real-time monitoring will provide a screening-level assessment of perimeter conditions during IRM implementation and will be used to evaluate the need for additional engineering controls.

[2] Samples collected for perimeter monitoring will be sent to an analytical laboratory and used to verify, and re-calibrate, as necessary, the real-time air monitoring results.

Abbreviations:
µg/m^3 = microgram per cubic meter
ppm = parts per million
VOCs = volatile organic compounds

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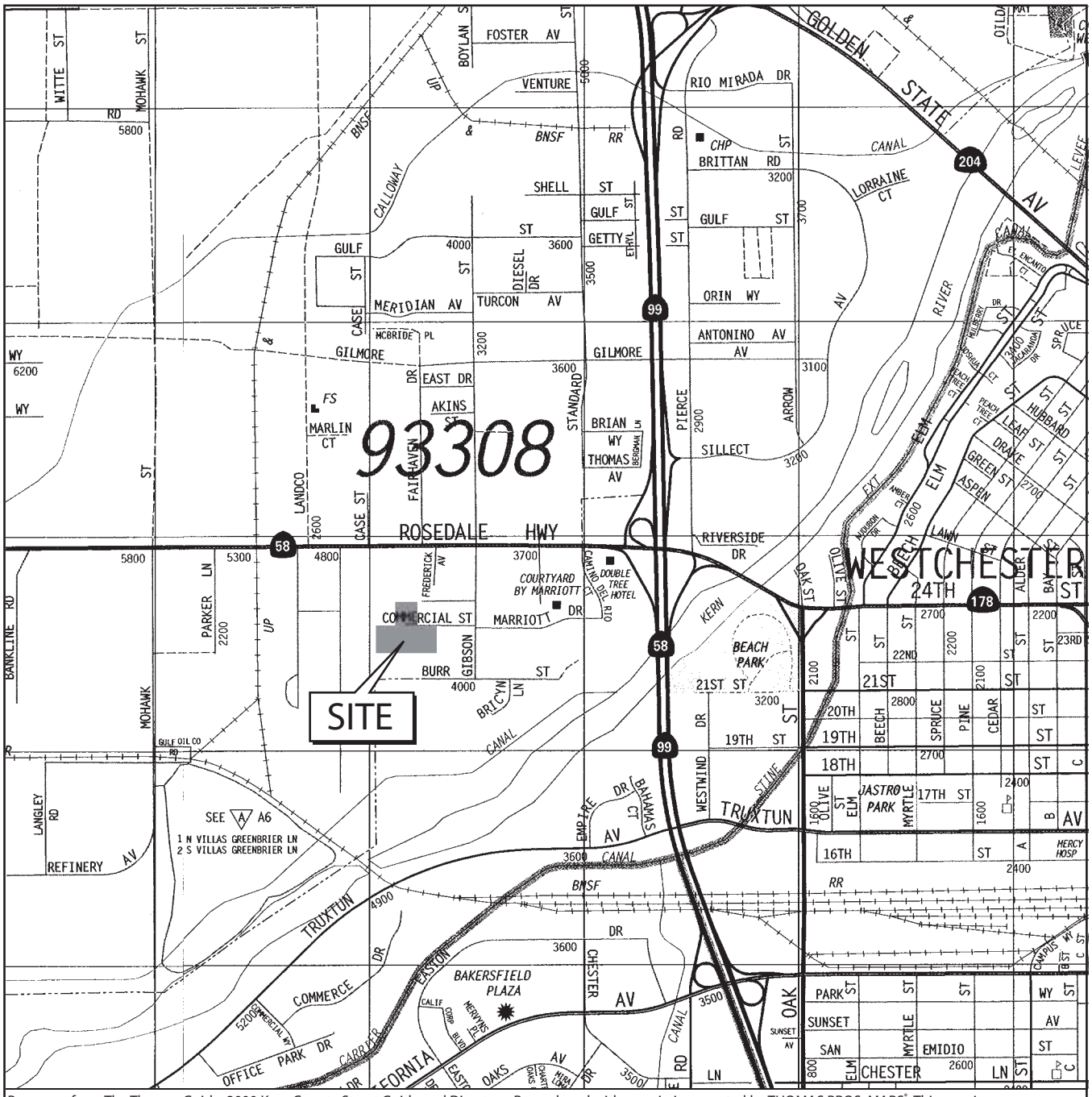
FIGURES



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0 0.5 mile

SITE LOCATION MAP
Gibson Environmental Site
Bakersfield, California

By: _	Date: _	Project No. 7721.000
Geomatrix		Figure 1

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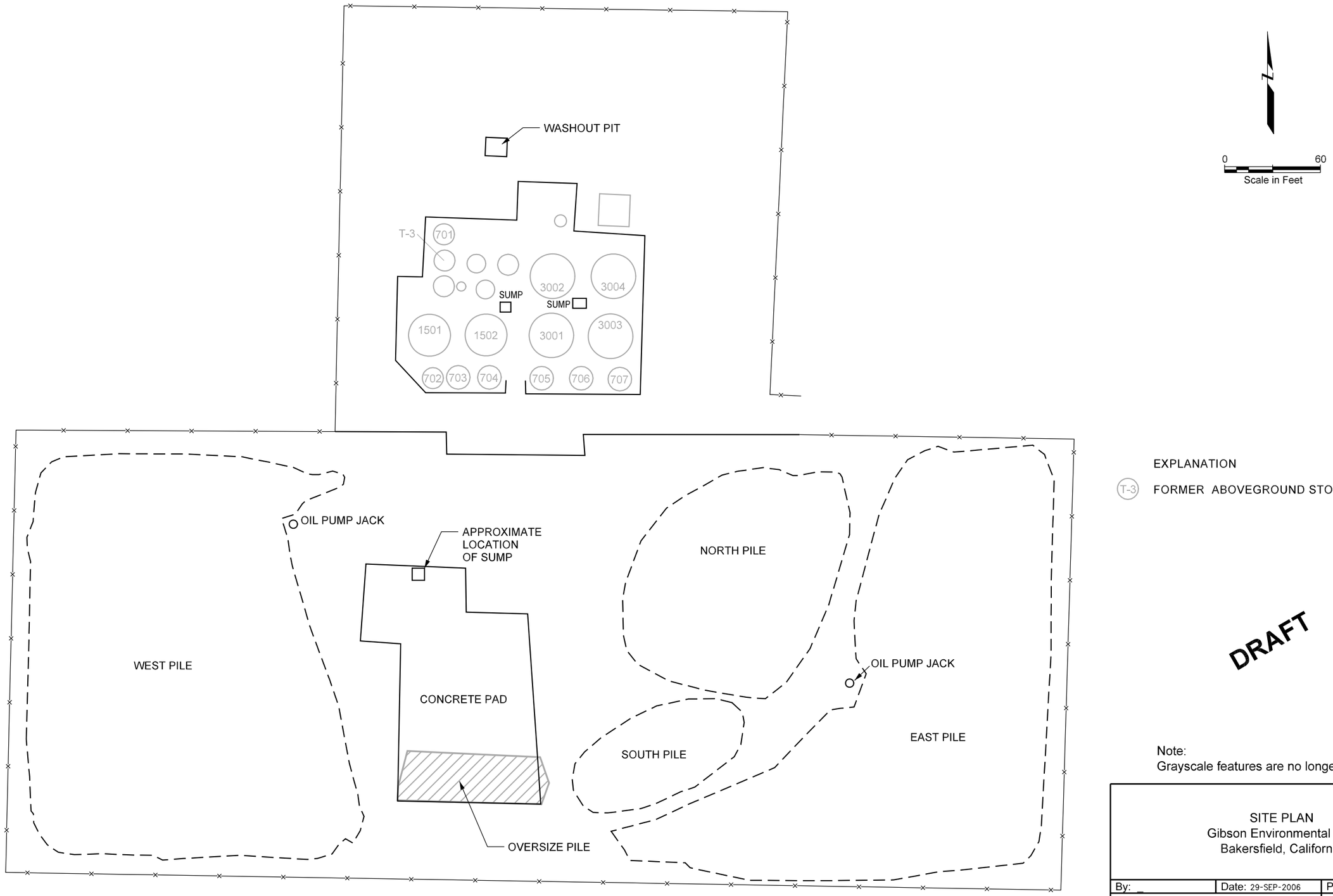

EXPLANATION

T-3 FORMER ABOVEGROUND STORAGE TANK

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Note:
Grayscale features are no longer present.

SITE PLAN
Gibson Environmental Site
Bakersfield, California

By: _	Date: 29-SEP-2006	Project No. 7721.000
Geomatrix		Figure 2

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