

AP - 2

**STAGE 1 & 2
REPORTS**

DATE:

Nov. 1998

**WESTGATE SUBDIVISION,
GRIMES BATTERY and TASKER ROAD
STAGE 1 ABATEMENT PLAN INTERIM REPORT
(SITE ASSESSMENT INVESTIGATION)**

November 1998

**Shell Exploration and Production
Technology Company
Houston, Texas**

Prepared by

**Philip Services Corporation
Midland, Texas**

**BBC International Incorporated
Hobbs, New Mexico**

TABLE OF CONTENTS

1.0 INTRODUCTION.....	1
2.0 SITE HISTORY	1
2.1 WESTGATE SUBDIVISION.....	1
2.2 GRIMES BATTERY.....	1
2.3 TASKER ROAD.....	2
3.0 GEOLOGY AND HYDROGEOLOGY	4
4.0 FIELD ACTIVITIES AND METHODOLOGY.....	5
4.1 SOIL GAS SURVEY.....	5
4.2 INSTALLATION AND SAMPLING OF BOREHOLES	6
4.2 INSTALLATION AND SAMPLING OF MONITOR WELLS	8
5.0 LABORATORY ANALYTICAL RESULTS	9
5.1 SOIL GAS SURVEY ANALYTICAL RESULTS	9
5.2 SOIL SAMPLE ANALYTICAL RESULTS.....	9
5.3 GROUNDWATER SAMPLE ANALYTICAL RESULTS.....	10
6.0 HEALTH AND SAFETY	10
7.0 CONCLUSIONS.....	11
8.0 REFERENCES.....	12

LIST OF APPENDICES

APPENDIX I	AERIAL PHOTOGRAPHS
APPENDIX II	PREVIOUS ASSESSMENT WORK
APPENDIX III	LITHOLOGY LOGS
APPENDIX IV	PHOTOGRAPHS
APPENDIX V	LABORATORY ANALYTICAL RESULTS
APPENDIX VI	MONITOR WELL CONSTRUCTION DIAGRAMS
APPENDIX VII	SVE ANALYTICAL
APPENDIX VIII	LABORATORY QA/QC

1.0 INTRODUCTION

The subject site is located in west Hobbs, New Mexico. The Westgate Subdivision consists of developed and undeveloped property bordered by Tasker Road to the East, the Los Cuatro Land Development property to the West, Sanger Road to the South, and Princess Jeanne Drive to the North (**Figure 1**). The scope of this work also includes undeveloped property extending approximately 400 feet west of Cobb Drive (**Figure 2**). The Grimes site is a former tank battery location that was decommissioned in 1993. The Tasker site consists of two residential properties; one currently unoccupied and one undeveloped (**Figure 2**). Assessment activities were recently performed at the Grimes and Tasker sites, and the results of the assessment activities were submitted to the New Mexico Oil Conservation Division (NMOCD).

Figure 2 depicts the oil and gas lease holders within the Westgate Subdivisions and Los Cuatro Land Development property. The map shows all oil and gas leaseholders, and existing and plugged and abandoned wells within a one mile radius of the Grimes Battery.

Sources of aerial photography continue to be investigated in an effort to obtain additional aerial photographs. Aerial photographs identified and available spanning the time the lease has been operable are included in **Appendix I** (1949, 1954, 1964, 1967, 1978, and 1988).

2.0 SITE HISTORY

2.1 WESTGATE SUBDIVISION

The subject site consists of residential and undeveloped properties, and is bordered to the East by Tasker Road, the South by Sanger Street, and the North by Princess Jeanne Drive. The scope of this work includes the investigation of the undeveloped property owned by Los Cuatro Land Development which extends approximately 400 feet west of Cobb Street.

2.2 GRIMES BATTERY

The subject site is a former tank battery location on the Grimes Lease. The Grimes Lease is currently operated by Altura Energy LTD. According to Altura Energy LTD's remediation plan submitted for this property, the site has been in use as an oilfield tank battery since 1946. The tank battery was decommissioned in 1993. In September 1997, Altura Energy LTD. submitted a plan for the remediation of oil impacted soil at the subject site. Following removal of tanks and equipment at the battery location, Altura Energy LTD. representatives excavated soils in an area that was suspected to have been a former emergency pit. Soils were excavated to a depth of approximately 14 feet below ground surface (bgs). A total of 4,259.58 cubic yards of soil were excavated and transported to the Sundance Services, Inc., Parabo Disposal Facility located in

Eunice, New Mexico. According to Altura Energy LTD. personnel, the soils were screened on-site with a General Analysis Corporation Mega TPH analyzer for total petroleum hydrocarbons (TPH) using method 418.1 modified.

Philip representatives were on-site December 5 and December 8, 1997, to oversee the installation of a temporary monitor well designated as (TMW-1) and the monitor well designated as (MW-1) at the former battery site (**Appendix II**).

The groundwater sample collected from temporary monitor well TMW-1 exhibited concentrations in excess of Standards for groundwater as outlined in New Mexico Water Quality Control Commission, Title 20, Chapter 6, Part 2 (20 NMAC 6.2), section 3-103 for benzene (0.044 mg/L), methylene chloride (0.110 mg/L) and phenols (0.14 mg/L). The 20 NMAC 6.2 Standards for these constituents are 0.01 mg/L, 0.10 mg/L, and 0.005 mg/L, respectively. Methylene chloride is a commonly used cleaning agent for the decontamination of laboratory equipment.

The groundwater sample collected from monitor well MW-1 exhibited a phenols concentration of 0.15 mg/L, which is in excess of the 20 NMAC 6.2 3-103 standard of 0.005 mg/L.

No other analytes exhibited concentrations in excess of 20 NMAC 6.2 3-103 Standards in either of the groundwater samples.

NMOCD required analysis for many compounds that are not expected to be found in crude oil, or associated with oil and gas production activities (as examples: PCB's, pesticides, herbicides, and some chlorinated compounds). Naturally occurring inorganic analytes (metals, pH, chlorides, fluoride, nitrate, sulfate, TDS, and radium) were detected in the samples. The analytes detected in the samples are consistent with those compounds found in association with oil and gas production activities and natural occurrence of analytes.

Analytical results and details of assessment activities can be found in the report prepared by Philip Services Corporation entitled *Grimes Battery Soil and Groundwater Assessment Report*. A summary table of analytical results is included in this report in **Appendix II**.

2.3 TASKER ROAD

The subject site is located at 1331 and 1329 Tasker Road, Hobbs, New Mexico. The site consists of two residential properties; one currently unoccupied and one undeveloped. As a result of the construction activities, an asphalt-like layer was observed to be present at the site. The layer occurs at a depth of approximately one to two feet below ground surface (bgs) and varies in thickness from several inches to several feet across the properties. The asphalt-like substance appears to be crude oil that may have been spread on the ground in accordance with normal past operating practices.

Shell representatives sampled the material in November 1997, and analyzed the samples for total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, and xylenes (BTEX); total chlorides, and TCLP metals.

Analysis of TCLP metals indicates that all constituents analyzed are below detection limits. Total chlorides were detected at a concentration of 128 milligrams per kilogram (mg/kg). Benzene, toluene, and ethylbenzene concentrations were below detection limits, and minor concentrations of total xylenes were detected at a concentration of 0.017 mg/kg. TPH compounds were analyzed using GC/FID scan to identify and quantify the analytes present in the sample, providing a chemical fingerprint of the compounds. Analytical results indicate the presence of n-Alkanes C13-C40. The chromatographic analysis exhibited characteristics described by the laboratory as those of a weathered crude oil. The value for numerous branched alkanes and cyclic hydrocarbons (unresolved, 4122 mg/kg) are representative of USEPA Method 8015 analysis of non-halogenated volatile organics.

A subsurface investigation was performed by Philip representatives on January 20 and 26, 1998. As approved by the NMOCD, the scope of the subsurface investigation was to collect two samples at each of five sample locations (**Appendix II**). The sample locations consisted of each of the four corners and the center of the suspected area of asphaltic material. The sample locations were selected based on the use of a 1964 aerial photograph, and on accessibility of a backhoe. One sample was collected from the asphaltic material at a depth of approximately 1-2 feet bgs, and one sample was collected from soil beneath the asphaltic material at a depth of 5-6 feet bgs in each location.

Two soil samples were collected from each of the five sample locations and submitted for analysis to Trace Analysis in Lubbock, Texas. The samples were analyzed for the compounds listed in 20 NMAC 6.2, sections 1-101 and 3-103 as requested by NMOCD.

No pesticides, chlorinated compounds, polycyclic aromatic hydrocarbons (PAHs), or semi-volatile compounds (SVOCs) were detected. With the exception of tetrachloroethane, ethylbenzene and m&p-xylenes, no volatile organic compounds were detected. Metals identified in the samples include barium, nickel, zinc, aluminum, iron, manganese, copper, cadmium, selenium, and arsenic. Minor concentrations of radium 226 or radium 228 were detected in some of the samples.

TPH was detected in every sample with concentrations ranging from 1,800 to 200,000 mg/kg. Ethylbenzene was detected in six of the ten samples at concentrations ranging from 0.1 to 9.7 mg/kg. M&p-Xylenes were detected in six samples at concentrations ranging from 0.13 to 39 mg/kg. Tetrachloroethane was detected in sample SS-3, 5.5 feet at a concentration of 0.54 mg/kg.

NMOCD required analysis for many compounds that are not expected to be found in crude oil, or associated with oil and gas production activities (as examples: PCB's, pesticides, herbicides, and some chlorinated compounds). Naturally occurring inorganic analytes (metals, pH, chlorides, fluoride, nitrate, sulfate, TDS, and radium) were detected in the samples. The analytes detected in the samples are consistent with those compounds found in association with oil and gas production activities and natural occurrence of analytes.

In addition to the sampling performed at this site, the area was trenched using a backhoe in an effort to identify the horizontal extent of the asphaltic material. The extent of asphaltic material as observed in the field is shown in **Figure 3**.

Analytical results and details of assessment activities can be found in the report prepared by Philip Services Corporation entitled *Tasker Road Site Assessment Report*. A summary table of analytical results is included as **Appendix II**.

3.0 GEOLOGY AND HYDROGEOLOGY

The Ogallala Formation is the principal source of groundwater in the subject area. Depth to groundwater in Lea County ranges from approximately 12 feet below ground surface (bgs) to approximately 300 feet bgs. The Ogallala consists of predominantly coarse fluvial conglomerate and sandstone and fine-grained eolian siltstone and clay. Where present in the subject area, the Ogallala unconformably overlies triassic red-beds. The regional groundwater gradient is to the south/southeast.

Depth to groundwater at the subject site is approximately 65 feet bgs. Groundwater elevations measured in thirteen monitor wells are shown in **Figures 12 and 13** and **Table 1**.

Subsurface geology in the subject area consists of buff, hard limestone to a depth of approximately 15 feet bgs underlain by predominantly tan, fine-grained sandstone with minor amounts of red sandstone, chert, and limestone. Boring lithology logs are included in this report in **Appendix III**.

Table 1
LNAPL AND GROUNDWATER ELEVATIONS
WESTGATE SUBDIVISION
HOBBS, NEW MEXICO

MONITORING WELL	TOP OF CASING (feet)	DATE	DEPTH TO GROUNDWATER (feet)	DEPTH TO LNAPL (feet)	LNAPL THICKNESS (feet)	CORRECTED GROUNDWATER (feet)
GMW-1	3647.84	10/01/98	67.55	67.53	0.02	3580.30
GMW-2	3648.51	10/01/98	67.26	0.00	0.00	3581.25
GMW-3B	3648.26	10/01/98	67.52	Sheen	Sheen	3580.74
GMW-4	3647.79	10/01/98	67.03	0.00	0.00	3580.76
GMW-5	3648.41	10/01/98	68.39	62.20	6.19	3580.45
GMW-6	3648.22	10/01/98	68.02	0.00	0.00	3580.20
GMW-7	3644.98	10/01/98	65.55	0.00	0.00	3579.43
GMW-8	3645.66	10/01/98	66.08	0.00	0.00	3579.58
GMW-9	3646.27	10/01/98	66.14	0.00	0.00	3579.58
GMW-10	3645.65	10/01/98	64.21	0.00	0.00	3581.44
TMW-1	3646.18	10/01/98	66.94	0.00	0.00	3579.24
TMW-2	3643.94	10/01/98	65.07	0.00	0.00	3578.87
TMW-3	3643.50	10/01/98	64.58	0.00	0.00	3578.92

4.0 FIELD ACTIVITIES and METHODOLOGY

Field activities were conducted during the period of July 27, 1998 through October 7, 1998. Field activities included a soil vapor survey, drilling and soil sampling of twenty-four boreholes, drilling and sampling of thirteen monitor wells, auger sampling of eight auger borings, and delineation of observed surface staining using a backhoe. All field activities were performed in accordance with the Stage 1 Abatement Plan (Site Assessment Investigation) as modified and approved by the NMOCD. Photographs of field activities are included in **Appendix IV**.

4.1 SOIL GAS SURVEY

A soil gas survey utilizing Direct Push Technology (DPT) was conducted by BBC International, Inc. and Transglobal Environmental GeoSampling/GeoChemistry in the Westgate Subdivision (comprised of both developed and undeveloped land). The survey was conducted from July 27, 1998 to August 20, 1998. The sample locations were spaced at 100 foot intervals across the subject area and in areas of possible former operations (**Figures 4 and 5**).

A total of 268 soil vapor samples were collected at a depth of five feet below ground surface. The samples were analyzed in the field using a mobile laboratory for Volatile Aromatic and Halogenated Hydrocarbons (14 Analytes, EPA Method 8021) and TPH, Methane, Ethane, Propane, Butane, Pentane, and Hexane (EPA Method 8015 modified). Soil gas analytical results are discussed below in Section 5.1.

A Direct Push STRATAPROBE was used in collecting the soil vapor samples. The STRATAPROBE, a four-wheel-drive, one ton truck is equipped with a diesel-powered PTO hydraulic hammer system. The soil vapor probes are constructed of 1 ½ inch OD hardened steel, equipped with expendable tips. An inert nylaflow tube runs down the center of the probe to the expendable point holder above the tip.

The probe was driven into the ground by the force of the static weight and the high frequency hydraulic hammer. Once inserted to the desired depth, the probe was withdrawn ½ inch, which opens the tip and exposes the sampling port to the formation. The sampling train, attached to a post-run-tubing adapter, was then run into the open probe rod and screwed into the point holder.

Soil vapor was drawn from the nylaflow tubing using a syringe connected via an on-off valve. Three (3) dead space volumes (1 cc per foot of tubing) were drawn and discarded, ensuring that a representative sample from the formation was recovered. The next 20 cc's of gas were drawn into glass, airtight syringes, and immediately transferred to the mobile lab for analysis within minutes of collection.

The soil vapor sample holes were backfilled with granular bentonite to 6 inches below ground surface, hydrated, then backfilled to surface with native soil.

4.2 INSTALLATION AND SAMPLING OF BOREHOLES

The backyard of the residence located at 1341 North Cobb Street (**Figure 6**) was investigated using auguring techniques to delineate the horizontal and vertical extent of organic and inorganic constituents.. Auguring was employed rather than drilling of a borehole due to restricted access for a drilling rig. As necessary to delineate the extent of organic and inorganic constituents., soil samples were collected by auger, screened in the field for volatile organic compounds (VOC's) using a photoionization detector (PID), and were inspected for the presence of staining or odor. Sampling continued until no PID readings, staining, and odors were observed.

Seven samples were collected from backyard of the residence located at 1341 North Cobb Street (**Figure 6**) and were submitted for laboratory analysis. The sample exhibiting the highest PID reading (CSS #6) was submitted for laboratory analysis for compounds listed in New Mexico Water Quality Control Commission, Title 20, Chapter 6, Part 2, sections 3-103 and 1-101 (20 NMAC 6.2 3-103 and 1-101) as requested by the NMOCDD. Laboratory analysis of these compounds was performed using USEPA methods 8260, 8270, 8080, 8081A, 150.1, 160.1, 200.7, 245.1, 335.2, 340.2, 353.3, and 418.1.

In addition to the sampling described above, one sample (CSS # 8) was collected by auger from the front yard of the residence located at 1341 North Cobb Street. The sample was submitted for laboratory analysis for TPH using USEPA method 418.1, chlorides using USEPA method 160.1, and for agricultural general chemistry (soil macronutrients and micronutrients, **Appendix V**).

The area north of the tank battery where stained soil was observed (**Figure 3**) was investigated to delineate the horizontal and vertical extent of organic and inorganic constituents by trenching using a backhoe or other equipment. Three boreholes (GSB-5, GSB-6, and GSB-7) were drilled at this location. Soils were sampled at a depth of 2-3 feet bgs, and at five-foot intervals. Soil samples were screened in the field for VOCs using a PID, and were inspected for the presence of staining or odor. Drilling and sampling continued until no PID readings, staining, and odor were observed. The sample collected at a depth of 2-3 feet bgs, the sample exhibiting the highest PID reading, and the sample collected from the bottom of the borehole were submitted for laboratory analysis for compounds listed in New Mexico Water Quality Control Commission, Title 20, Chapter 6, Part 2, Sections 3-103 and 1-101 (20 NMAC 6.2 3-103 and 1-101) as requested by the NMOCD. Laboratory analysis of these compounds was performed using USEPA methods 8260, 8270, 8080, 8081A, 150.1, 160.1, 200.7, 245.1, 335.2, 340.2, 353.3, and 418.1.

A total of twenty-four boreholes were drilled and sampled. Eleven boreholes were placed in the area of the excavated former pit (Grimes Battery). Borehole locations GSB-1 through GSB-11 are shown in **Figures 7 and 8**. The boreholes were strategically placed in order to determine contaminant concentrations if present in the base and sidewalls of the pit excavation, and to delineate the horizontal and vertical extent of contamination. The former pit area has been partially filled with approximately 2-3 feet of clean backfill material. No samples were collected from the backfill material. When native soils beneath the backfill were encountered, the soils were sampled at a depth of 2-3 feet below the backfill and at five-foot intervals.

Soil samples in the Grimes tank battery area were screened in the field for volatile organic compounds (VOC's) using a photoionization detector (PID), and were inspected for the presence of staining or odor. Drilling and sampling continued until no PID readings, staining, and odors were observed. The sample exhibiting the highest PID reading and the sample collected from the bottom of the borehole were submitted for laboratory analysis for total petroleum hydrocarbons (TPH) using USEPA Method 418.1, benzene, toluene, ethylbenzene, and xylenes (BTEX) using USEPA Method 8020, and chlorides using USEPA Method 300. The sample collected at a depth of 2-3 feet below the backfill material was submitted to Trace Analysis in Lubbock, Texas and analyzed for the compounds listed in New Mexico Water Quality Control Commission (WQCC) sections 1-101 and 3-103 standards using USEPA methods 8260, 8270, 8080, 8081A, 150.1, 160.1, 200.7, 245.1, 335.2, 340.2, 353.3, and 418.1.

Thirteen boreholes (TSB-1 through TSB-13) were installed at the Tasker Road site in order to identify the horizontal and vertical extent of organic and inorganic constituents.. The borehole locations are shown in **Figures 7 and 9**. The locations were selected based on field observations

concerning the edge of the asphaltic material, and on proximity of the proposed sample location to the residential foundation.

The sample locations adjacent to the residential foundation were sampled at a depth of 2-3 feet bgs, five feet bgs, and ten feet bgs. Soil samples were screened in the field for volatile organic compounds (VOC's) using a photoionization detector (PID), and were inspected for the presence of staining or odor. Each sample was submitted for laboratory analysis for TPH (using USEPA Method 418.1) and for the compounds listed in 20 NMAC 6.2 3-103 and 1-101. Laboratory analysis of these compounds was performed using USEPA methods 8260, 8270, 8080, 8081A, 150.1, 160.1, 200.7, 245.1, 335.2, 340.2, and 353.3.

Drilling and sampling of each of the other borehole locations continued until no PID readings, staining, and odors were observed. The sample collected at a depth of 2-3 feet bgs, the sample collected at a depth of five feet bgs, the sample exhibiting the highest PID reading and the sample collected from the bottom of the borehole were submitted for laboratory analysis for TPH (using USEPA Method 418.1) and for the compounds listed in 20 NMAC 6.2 3-103 and 1-101 using USEPA methods 8260, 8270, 8080, 8081A, 150.1, 160.1, 200.7, 245.1, 335.2, 340.2, and 353.3.

One background sample was collected from a depth of 2-3 feet bgs. The sample was collected from GMW-2. The sample was analyzed for metals to identify background concentrations in native soils in this area.

All boreholes were plugged to surface with a cement grout containing a minimum of 3-5% bentonite.

4.2 INSTALLATION AND SAMPLING OF MONITOR WELLS

A total of thirteen monitor wells were installed in the subject area. Ten monitor wells (GMW-1 through GMW-10) were installed in the former Grimes battery area in order to identify the groundwater gradient at the site and identify the downgradient extent of groundwater impacts. Three monitor wells (TMW-1 through TMW-3) were drilled at the Tasker road location to identify if groundwater has been impacted at this location. Monitor well locations are shown in **Figures 7, 8, and 9**.

Soil samples were collected at five-foot intervals and were screened in the field for volatile organic compounds (VOC's) using a photoionization detector (PID), and were inspected for the presence of staining or odor. The sample exhibiting the highest PID reading and the sample collected from the interval where groundwater was encountered were submitted for laboratory analysis for compounds listed in New Mexico Water Quality Control Commission, Title 20, Chapter 6, Part 2, sections 3-103 and 1-101 (20 NMAC 6.2 3-103 and 1-101) as requested by the NMOCB. Laboratory analysis of these compounds was performed using USEPA methods 8260, 8270, 8080, 8081A, 150.1, 160.1, 200.7, 245.1, 335.2, 340.2, 353.3, and 418.1.

Monitor wells were constructed using 4-inch inside-diameter schedule 40 PVC casing. The wells were constructed with fifteen feet of slotted PVC casing, 10 feet below top of groundwater, and five feet above top of groundwater. The wells were sand-packed with a two-foot bentonite plug placed immediately above the sand pack. The wells were grouted above the bentonite plug with cement containing 3-5% bentonite, and completed with a flush mounted or four-inch locking monument sleeve cover. Monitor well construction diagrams are included in **Appendix VI**.

5.0 LABORATORY ANALYTICAL RESULTS

All soil and groundwater samples were submitted for laboratory analysis to Trace Analysis, in Lubbock, Texas. Analytical results are shown in **Tables 3 and 4**, and are included in **Appendix V**. Soil borings identified on chain-of-custody records and analytical results as SB-1, SB-2, MW-1, MW-2, etc. have been renamed in this report and for future reference as GSB-1, GSB-2, etc. All sampling and analyses were performed in accordance with the standards outlined in 20 NMAC 6.3107 B.

5.1 SOIL GAS SURVEY ANALYTICAL RESULTS

Soil gas survey analytical results are summarized in **Table 2**. QA/QC, chain-of-custody, and field log documentation are included in this report in **Appendix VII**.

Of the 268 soil vapor samples collected and analyzed, greater than 75% of analytes analyzed were not detected. Methane was found in each of the samples, and likely represents naturally occurring organic decomposition conditions as indicated by the TEG chemist. Sample location SV-158, located in the alley between Tasker Drive and San Andres Drive, exhibited concentrations of TPH, methane, ethane, propane, butane, pentane, hexane, benzene and total xylenes. This sample point was the source of a natural gas leak from a line owned by the natural gas utility, Zia Natural Gas Company. Site personnel reported a mercaptan odor during the sampling process, and after analysis the leak was reported to the utility. The utility responded to repair the leak.

5.2 SOIL SAMPLE ANALYTICAL RESULTS

Soil sample analytical results are summarized in **Table 3**. Laboratory analytical results are included in **Appendix V**. QA/QC, and chain-of-custody documentation are included in **Appendix VIII**. Soil borings identified on chain-of-custody records and analytical results as SB-1, SB-2, MW-1, MW-2, etc. have been renamed in this report and for future reference as GSB-1, GSB-2, etc.

TPH and BTEX analytical results are shown on **Figures 10 and 11**.

NMOCD required analysis for many compounds that are not expected to be found in crude oil, or associated with oil and gas production activities (as examples: PCB's, pesticides, herbicides, and some chlorinated compounds). Naturally occurring inorganic analytes (metals, pH, chlorides, fluoride, nitrate, sulfate, TDS, and radium) were detected in the samples. The analytes detected in the samples are consistent with those compounds found in association with oil and gas production activities and natural occurrence of analytes.

5.3 GROUNDWATER SAMPLE ANALYTICAL RESULTS

Groundwater analytical results are summarized in **Table 4**. Laboratory analytical results are included in **Appendix V**. QA/QC, and chain-of-custody reports are included in this report in **Appendix VIII**.

TPH and BTEX analytical results are shown on **Figures 12 and 13**.

NMOCD required analysis for many compounds that are not expected to be found in crude oil, or associated with oil and gas production activities (as examples: PCB's, pesticides, herbicides, and some chlorinated compounds).

Naturally occurring inorganic analytes (metals, pH, chlorides, fluoride, nitrate, sulfate, TDS, and radium) were detected in the groundwater samples. Iron, aluminum, fluoride, manganese (three samples), cobalt (one sample), and chromium (two samples) were detected above 20 NMAC 6.2 3-103 drinking water and irrigation standards.

Benzene, toluene, and ethylbenzene were not detected in any of the groundwater samples at concentrations above 20 NMAC 6.2 3-103 standards. Xylenes were detected at a concentration above the 20 NMAC 6.2 3-103 standard of 0.62 mg/L in the samples collected from GMW-1, GMW-3, and GMW-5.

Polycyclic Aromatic Hydrocarbons (total napthelene plus monomethylnaphthalenes) were detected above the 20 NMAC 6.2 3-103 standard of 0.03 mg/L in the samples collected from GMW-3 and GMW-5. Phenols were detected above the 20 NMAC 6.2 3-103 standard of 0.005 mg/L in the samples collected from TMW-2, TMW-3, GMW-2, GMW-4, and GMW-6.

No other organic compounds analyzed were detected above 20 NMAC 6.2 3-103 standards.

The analytes detected in the samples are consistent with those compounds found in association with oil and gas production activities and natural occurrence of analytes.

6.0 HEALTH AND SAFETY

All site activities were performed in accordance with Occupational Safety and Health Administration (OSHA) standards. All on site personnel were required to wear a hard hat, safety

glasses, and steel-toe shoes during work activities. In addition to OSHA worker protection requirements, on site air monitoring was performed during site activities by placing a PID in the downwind direction during drilling and sampling activities.

7.0 CONCLUSIONS

Of the 268 soil vapor samples collected and analyzed, greater than 75% of analytes analyzed were not detected. Methane was found in each of the samples, and likely represents naturally occurring organic decomposition conditions as indicated by the TEG chemist. Sample location SV-158, located in the alley between Tasker Drive and San Andres Drive, exhibited concentrations of TPH, methane, ethane, propane, butane, pentane, hexane, benzene and total xylenes. This sample point was the source of a natural gas leak from a line owned by the natural gas utility, Zia Natural Gas Company.

The analytes detected in the soil and groundwater samples are consistent with those compounds found in association with oil and gas production activities and natural occurrence of analytes. NMOCD required analysis for many compounds that are not expected to be found in crude oil, or associated with oil and gas production activities (as examples: PCB's, pesticides, herbicides, and some chlorinated compounds). Naturally occurring inorganic analytes (metals, pH, chlorides, fluoride, nitrate, sulfate, TDS, and radium) were detected in the soil and groundwater samples.

Iron, aluminum, fluoride, manganese (three samples), cobalt (one sample), and chromium (two samples) were detected in the groundwater samples above 20 NMAC 6.2 3-103 drinking standards.

Benzene, toluene, and ethylbenzene were not detected in any of the groundwater samples at concentrations above 20 NMAC 6.2 3-103 standards. Xylenes were detected at a concentration above the 20 NMAC 6.2 3-103 standard of 0.62 mg/L in the samples collected from GMW-1, GMW-3, and GMW-5.

Polycyclic Aromatic Hydrocarbons (total napthelene plus monomethylnaphthalenes) were detected above the 20 NMAC 6.2 3-103 standard of 0.03 mg/L in the samples collected from GMW-3 and GMW-5. Phenols were detected above the 20 NMAC 6.2 3-103 standard of 0.005 mg/L in the samples collected from TMW-2, TMW-3, GMW-2, GMW-4, and GMW-6.

No other organic compounds analyzed were detected above 20 NMAC 6.2 3-103 standards.

8.0 REFERENCES

Grimes Battery Soil and Groundwater Assessment Report; Philip Services Corporation; February, 1998

Groundwater Handbook; United States Environmental Protection Agency, Office of Research and Development, Center for Environmental Research Information; 1992

Hydrology and Hydrochemistry of the Ogallala Aquifer, Southern High Plains, Texas Panhandle and Eastern New Mexico; Report Number 177; Bureau of Economic Geology; 1988

Hydrogeochemistry and Water Resources of the Lower Dockum Group in the Texas Panhandle and Eastern New Mexico; Report Number 161; Bureau of Economic Geology; 1986

New Mexico Water Quality Control Commission, Title 20 Chapter 6, Part 2, Subpart I

Tasker Road Site Assessment Report; Philip Services Corporation; February, 1998

Westgate Subdivision, Grimes Battery and Tasker Road Stage 1 Abatement Plan (Site Assessment Investigation); Philip Services Corporation; May 1998

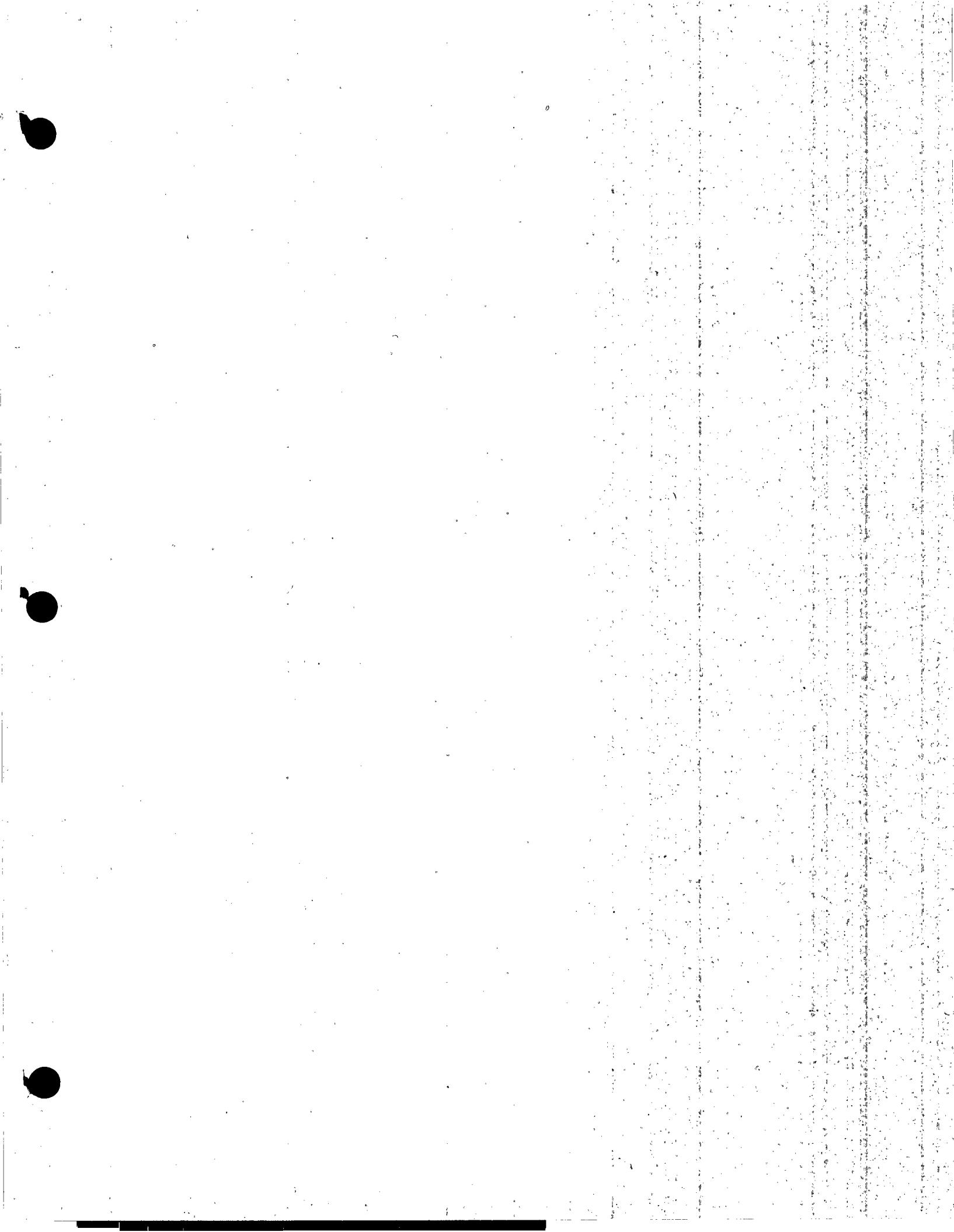


Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	BLANK	SV-13	SV-14	SV-15	SV-63	SV-16	SV-17	SV-18	SV-19	SV-44
DEPTH (FT)	—	5	5	5	5	5	5	5	5	5
PURGE (CC)	—	60	60	60	60	60	60	60	60	60
DATE ANALYZED	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98
TIME ANALYZED	10:39	11:02	11:27	11:50	12:16	12:40	13:03	13:26	13:50	14:18
<hr/>										
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
<hr/>										
Method 8015										
TPH	ND									
Methane	3	3	4	16	27	16	56	9	8	5
Ethane	ND									
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED

ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-43	SV-42	SV-41	SV-54	SV-40	SV-55	BLANK	SV-1	SV-2	SV-3
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98	7/27/98	7/28/98	7/28/98	7/28/98	7/28/98
TIME ANALYZED	14:41	15:06	15:30	15:55	16:20	16:42	7:06	8:33	9:09	9:46
<hr/>										
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	2	27	17	5	2	9	3	17	45	7
Ethane	ND	2	ND	ND	ND	ND	ND	ND	3	ND
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.
" " INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2

Soil Gas Survey Results
BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-4	SV-5	SV-6	SV-7	SV-8	SV-9	SV-10	SV-11	SV-12	SV-20
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	7/28/98	7/28/98	7/28/98	7/28/98	7/28/98	7/28/98	7/28/98	7/28/98	7/28/98	7/28/98
TIME ANALYZED	10:11	10:34	10:57	11:20	11:46	12:42	13:12	13:26	14:02	14:24
<hr/>										
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	2	4	2	3	3	2	5	2	4	5
Ethane	ND									
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-21	SV-39	SV-53	SV-238	BLANK	SV-22	SV-23	SV-24	SV-25	SV-26
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	7/28/98	7/28/98	7/28/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98
TIME ANALYZED	14:47	15:16	15:48	16:40	6:58	8:38	9:04	9:29	9:58	10:24
Method 8021										
Benzene	ND	ND	1	ND						
Toluene	ND	ND	35	ND						
Chlorobenzene	ND	ND	10	ND						
Ethylbenzene	ND	ND	65	ND	7	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	1	ND						
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND	600	7	200	ND	ND	700	137	7	7
Methane	5	16	10	200	4	7	4	3	5	20
Ethane	ND	1	1	5	ND	ND	ND	ND	ND	1
Propane	ND	ND	ND	2	ND	ND	ND	ND	ND	ND
Butane	ND	ND	ND	4	ND	ND	ND	ND	ND	ND
Pentane	ND	ND	ND	17	ND	ND	ND	ND	ND	ND
Hexane	ND	ND	19	ND						

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results
BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-52	SV-51	SV-50	SV-49	SV-48	SV-47	SV-46	SV-45	SV-59	SV-58
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98	7/29/98
TIME ANALYZED	10:49	11:16	11:38	12:03	12:56	13:33	13:56	14:20	14:43	15:05
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	3	3	3	4	2	1	1	ND	ND	ND
Methane	5	3	6	20	5	7	3	1	4	4
Ethane	ND									
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

TEG Project #T3-980727

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBBS, NEW MEXICO

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-57	SV-56	SV-60	SV-61	BLANK	SV-27	SV-28	SV-29	SV-30	SV-31
DEPTH (FT)	5	5	5	5	--	5	5	5	5	5
PURGE (CC)	60	60	60	60	--	60	60	60	60	60
DATE ANALYZED	7/29/98	7/29/98	7/29/98	7/29/98	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98
TIME ANALYZED	15:29	15:50	16:13	16:35	7:16	8:49	9:14	9:40	10:03	10:28
<hr/>										
Method 8021	ND									
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
<hr/>										
Method 8015	ND									
TPH	8	4	2	5	8	3	3	4	3	3
Methane	ND									
Ethane	ND									
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED

ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
 Soil Gas Survey Results
BBC INTERNATIONAL, INC.
 HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-33	SV-32	SV-34	SV-35	SV-36	SV-37	SV-38	SV-62	SV-63	SV-64
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98	7/30/98
TIME ANALYZED	10:50	11:15	11:44	12:06	13:08	13:34	13:56	14:18	14:44	15:06
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl Chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	5	6	9	8	8	3	3	5	2	3
Ethane	ND									
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
 ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-65	SV-66	SV-79	SV-78	SV-77	BLANK	SV-76	SV-75	SV-74	SV-73
DEPTH (FT)	5	5	5	5	—	—	5	5	5	5
PURGE (CC)	60	60	60	60	—	—	60	60	60	60
DATE ANALYZED	7/30/98	7/30/98	7/30/98	7/30/98	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98
TIME ANALYZED	15:29	15:52	16:17	16:39	17:00	7:20	8:41	9:02	9:24	9:45
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	5	6	4	2	4	6	12	9	12	6
Ethane	ND									
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-92	SV-91	SV-90	SV-89	SV-88	SV-87	SV-86	SV-85	SV-84	SV-83
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98	7/31/98
TIME ANALYZED	10:10	10:32	10:55	11:18	11:41	13:46	14:09	14:31	14:53	15:14
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	7	2	4	5	8	3	1	9	7	4
Ethane	ND									
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	BLANK	SV-164	SV-167	SV-178	SV-181	SV-192	SV-195	SV-206	SV-209
DEPTH (FT)	—	5	5	5	5	5	5	5	5
PURGE (CC)	—	60	60	60	60	60	60	60	60
DATE ANALYZED	8/3/98	8/3/98	8/3/98	8/3/98	8/3/98	8/3/98	8/3/98	8/3/98	8/3/98
TIME ANALYZED	6:04	8:39	9:06	9:30	10:04	10:31	11:42	12:05	13:38
Method 8021									
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Method 8015									
TPH	ND	37 ^a	1 ^a	3 ^a	ND	ND	ND	ND	ND
Methane	3	4	3	10	3	9	4	4	3
Ethane	ND	ND	ND	ND	ND	1	ND	ND	ND
Propane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	ND	ND	ND	ND	ND	ND	ND	ND	ND

"ND" INDICATES NOT DETECTED AT OR BELOW 1 ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1 PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-220	SV-222	SV-234	SV-233	SV-223	SV-219	BLANK	SV-205	SV-210	SV-196
DEPTH (FT)	5	5	5	5	5	5	--	5	5	5
PURGE (CC)	60	60	60	60	60	60	--	60	60	60
DATE ANALYZED	8/3/98	8/3/98	8/3/98	8/3/98	8/3/98	8/3/98	8/4/98	8/4/98	8/4/98	8/4/98
TIME ANALYZED	14:02	14:28	14:55	15:57	16:14	16:41	7:37	8:58	9:30	9:56
<hr/>										
Method 8021	ND									
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethybenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015	ND									
TPH	ND									
Methane	8	2	3	4	4	5	2	5	3	5
Ethane	1	ND								
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2

Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-191A	SV-191	SV-191B	SV-191C	SV-191D	SV-182	SV-177	SV-168	SV-163	BLANK
DEPTH (FT)	5	5	5	5	5	5	5	5	5	—
PURGE (CC)	60	60	60	60	60	60	60	60	60	—
DATE ANALYZED	8/4/98	8/4/98	8/4/98	8/4/98	8/4/98	8/4/98	8/4/98	8/4/98	8/4/98	8/5/98
TIME ANALYZED	10:24	10:49	11:18	11:46	12:13	13:50	14:20	14:47	15:13	7:34
Method 8021										
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Method 8015										
TPH	ND	1	ND	ND	ND	30	2	1	ND	ND
Methane	3	5	3	4	4	7	6	6	3	7
Ethane	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Propane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED

ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
 Soil Gas Survey Results
BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-154	SV-153	SV-152	SV-165	SV-166	SV-179	SV-180	SV-193	SV-194	SV-207
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98	8/5/98
TIME ANALYZED	8:53	9:21	9:47	10:13	10:41	11:06	11:33	12:02	13:36	14:10
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	1	ND	ND	ND	1	1	4	1	1	ND
Methane	4	7	5	5	6	7	3	8	3	3
Ethane	ND	ND	ND	ND	ND	1	ND	1	ND	ND
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	2	ND								

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
 ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
 Soil Gas Survey Results
BBC INTERNATIONAL, INC.
 HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-208	SV-221	SV-235	BLANK	SV-236	SV-225	SV-217	SV-212	SV-203	SV-198	
DEPTH (FT)	5	5	5	—	5	5	5	5	5	5	
PURGE (CC)	60	60	60	—	60	60	60	60	60	60	
DATE ANALYZED	8/5/98	8/5/98	8/5/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	
TIME ANALYZED	14:49	15:22	15:54	7:29	8:58	9:27	9:54	10:22	10:49	11:16	
<hr/>											
Method 8021											
Benzene	ND	ND									
Toluene	ND	ND									
Chlorobenzene	ND	ND									
Ethylbenzene	ND	ND									
Total Xylenes	ND	ND									
Vinyl chloride	ND	ND									
1,1-Dichloroethene	ND	ND									
Trans-1,2-dichloroethene	ND	ND									
Cis-1,2-Dichloroethene	ND	ND									
Chloroform	ND	ND									
1,1,1-Trichloroethane	ND	ND									
Carbon Tetrachloride	ND	ND									
Trichloroethene	ND	ND									
Tetrachloroethene	ND	ND									
<hr/>											
Method 8015											
TPH	ND	ND									
Methane	5	3	3	4	2	4	3	3	3	4	4
Ethane	ND	ND									
Propane	ND	ND									
Butane	ND	ND									
Pentane	ND	ND									
Hexane	ND	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015

** INDICATES TENTATIVELY IDENTIFIED
 ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-189	SV-184	SV-175	SV-170	SV-161	SV-156	BLANK	SV-226	SV-216	SV-213
DEPTH (FT)	5	5	5	5	5	5	—	5	5	5
PURGE (CC)	60	60	60	60	60	60	—	60	60	60
DATE ANALYZED	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/6/98	8/7/98	8/7/98	8/7/98	8/7/98
TIME ANALYZED	11:45	13:43	14:09	14:36	15:13	15:45	7:21	7:45	9:16	9:42
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND	1.2	1.2	ND	1.2	ND	ND	ND	ND	ND
Methane	3	2	3	6	4	2	8	2	3	2
Ethane	ND	ND	ND	1	ND	ND	ND	ND	ND	ND
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND	4	ND							

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-202	SV-199	SV-188	SV-185	SV-174	SV-171	SV-157	SV-146	SV-143	BLANK
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/7/98	8/10/98
TIME ANALYZED	10:10	10:38	11:06	11:33	13:30	14:12	15:11	15:36	16:00	7:25
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	6	3	2	8	4	20	2	4	2	18
Ethane	ND	ND	ND	ND	ND	3	ND	ND	ND	ND
Propane	ND	ND	ND	ND	ND	1	ND	ND	ND	ND
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
 Soil Gas Survey Results
BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-228	SV-158	SV-159	SV-172	SV-173	SV-186	SV-197	SV-200	SV-201	SV-202	SV-203	SV-214
DEPTH (FT)	5	5	2	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98	8/10/98
TIME ANALYZED	9:06	9:34	10:22	10:51	11:19	11:45	14:01	14:27	14:54	15:22		
Method 8021												
Benzene	ND											
Toluene	ND											
Chlorobenzene	ND											
Ethylbenzene	ND											
Total Xylenes	ND											
Vinyl chloride	ND											
1,1-Dichloroethene	ND											
Trans-1,2-dichloroethene	ND											
Cis-1,2-Dichloroethene	ND											
Chloroform	ND											
1,1,1-Trichloroethane	ND											
Carbon Tetrachloride	ND											
Trichloroethene	ND											
Tetrachloroethene	ND											
Method 8015												
TPH	ND											
Methane	5	30000	20	3	4	3	7	130	4	3	4	3
Ethane	ND	1000	3	ND	1	ND						
Propane	ND	800	1	ND								
Butane	ND	140	ND									
Pentane	ND	24	ND									
Hexane	ND	6	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
 ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-215	SV-227	BLANK	SV-138	SV-97	SV-98	SV-112	SV-113	SV-120	SV-121
DEPTH (FT)	5	5	--	5	5	5	5	5	5	5
PURGE (CC)	60	60	--	60	60	60	60	60	60	60
DATE ANALYZED	8/10/98	8/10/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98
TIME ANALYZED	15:49	16:20	6:38	8:31	9:00	9:23	9:48	10:14	10:42	11:07
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	9	24	4	4	2	4	3	13	6	2
Ethane	ND	3	ND	ND	ND	ND	ND	4	ND	ND
Propane	ND	1	ND	ND						
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

** INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-128	SV-129	SV-136	SV-137	SV-144	SV-145	SV-155	SV-162	SV-169	BLANK
DEPTH (FT)	5	5	5	5	5	5	5	5	5	—
PURGE (CC)	60	60	60	60	60	60	60	60	60	—
DATE ANALYZED	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/11/98	8/12/98
TIME ANALYZED	11:33	11:58	13:29	13:58	14:27	14:52	15:17	15:44	16:10	6:45
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	3	2	9	4	6	1	2	10	4	4
Ethane	ND	ND	1	ND	ND	ND	ND	3	ND	ND
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED

ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-176	SV-183	SV-190	SV-197	SV-204	SV-211	SV-218	SV-224	SV-237	SV-232
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/12/98	8/12/98	8/12/98	8/12/98	8/12/98	8/12/98	8/12/98	8/12/98	8/12/98	8/12/98
TIME ANALYZED	8:33	9:02	9:28	9:53	10:18	10:49	11:18	11:45	13:24	13:52
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	8	4	6	3	4	2	1	1	10	2
Ethane	ND	2	ND							
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

..*.. INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-231	SV-230	SV-229	SV-96	SV-99	BLANK	SV-103	SV-106	SV-111	SV-114
DEPTH (FT)	5	5	5	5	5	--	5	5	5	5
PURGE (CC)	60	60	60	60	60	--	60	60	60	60
DATE ANALYZED	8/12/98	8/12/98	8/12/98	8/12/98	8/12/98	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98
TIME ANALYZED	14:18	14:44	15:10	15:36	16:01	6:55	8:52	9:17	9:42	10:08
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	3	3	3	7	4	2	3	3	2	3
Ethane	ND	ND	ND	2	ND	ND	ND	ND	ND	ND
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-119	SV-122	SV-127	SV-130	SV-135	SV-95	SV-100	SV-102	SV-107	SV-108	SV-110
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98	8/13/98
TIME ANALYZED	10:33	10:59	11:25	13:10	13:36	14:01	14:25	14:50	15:18	15:43	
<hr/>											
Method 8021	ND										
Benzene	ND										
Toluene	ND										
Chlorobenzene	ND										
Ethylbenzene	ND										
Total Xylenes	ND										
Vinyl chloride	ND										
1,1-Dichloroethene	ND										
Trans-1,2-dichloroethene	ND										
Cis-1,2-Dichloroethene	ND										
Chloroform	ND										
1,1,1-Trichloroethane	ND										
Carbon Tetrachloride	ND										
Trichloroethene	ND										
Tetrachloroethene	ND										
<hr/>											
Method 8015	ND										
TPH	3	2	3	5	8	5	5	3	5	1	ND
Methane	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND
Ethane	ND										
Propane	ND										
Butane	ND										
Pentane	ND										
Hexane	ND										

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
 Soil Gas Survey Results
BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-115	BLANK	SV-118	SV-123	SV-128	SV-131	SV-134	SV-139	SV-93	SV-94	SV-95	SV-101
DEPTH (FT)	5	--	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	--	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/13/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98
TIME ANALYZED	16:05	6:33	8:31	8:56	9:18	9:40	10:02	10:27	10:54	11:20	13:22	
Method 8021												
Benzene	ND											
Toluene	ND											
Chlorobenzene	ND											
Ethylbenzene	ND											
Total Xylenes	ND											
Vinyl chloride	ND											
1,1-Dichloroethene	ND											
Trans-1,2-dichloroethene	ND											
Cis-1,2-Dichloroethene	ND											
Chloroform	ND											
1,1,1-Trichloroethane	ND											
Carbon Tetrachloride	ND											
Trichloroethene	ND											
Tetrachloroethene	ND											
Method 8015												
TPH	ND											
Methane	2	4	4	7	4	6	2	4	4	5	3	1
Ethane	ND											
Propane	ND											
Butane	ND											
Pentane	ND											
Hexane	ND											

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
 ANALYSES PERFORMED BY : Richard Rodriguez

Table 2

Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-108	SV-109	SV-116	SV-117	SV-124	SV-125	SV-132	BLANK	TSV	TSVM	TSVN	TSVG
DEPTH (FT)	5	5	5	5	5	5	5	—	7	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	—	60	60	60	60
DATE ANALYZED	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/14/98	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98
TIME ANALYZED	13:51	14:20	14:44	15:09	15:33	15:56	16:18	6:44	9:42	10:18	10:48	11:30
Method 8021												
Benzene	ND											
Toluene	ND											
Chlorobenzene	ND											
Ethylbenzene	ND											
Total Xylenes	ND											
Vinyl chloride	ND											
1,1-Dichloroethene	ND											
Trans-1,2-Dichloroethene	ND											
Cis-1,2-Dichloroethene	ND											
Chloroform	ND											
1,1,1-Trichloroethane	ND											
Carbon Tetrachloride	ND											
Trichloroethene	ND											
Tetrachloroethene	ND											
Method 8015												
TPH	ND											
Methane	3	2	1	2	1	2	2	2	6	1000	1000	1000
Ethane	ND	1	1	ND								
Propane	ND											
Butane	ND											
Pentane	ND											
Hexane	ND											

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	DEPTH (FT)	TSVH	TSVF	TSVE	TSVC	TSVB	TSVL	TSVK	TSVA
	5	5	5	5	5	5	5	5	7
	60	60	60	60	60	60	60	60	60
PURGE (CC)									
DATE ANALYZED	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98	8/17/98
TIME ANALYZED	11:55	13:18	14:11	14:37	15:04	15:50	16:15	16:41	
<hr/>									
Method 8021									
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
<hr/>									
Method 8015									
TPH	ND	2	ND	ND	2000	10	3	3000	
Methane	5	3	1	6	4000	4	2	8000	
Ethane	ND	ND	ND	ND	ND	ND	ND	ND	
Propane	ND	ND	ND	ND	ND	ND	ND	ND	
Butane	ND	ND	ND	ND	ND	ND	ND	ND	
Pentane	ND	ND	ND	ND	ND	ND	ND	ND	
Hexane	ND	ND	ND	ND	ND	ND	ND	ND	12

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
 Soil Gas Survey Results
BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	BLANK	TSV.J	TSVP	TSVO	TSVQ	SV-104	SV-105	SV-147	SV-142	SV-148
DEPTH (FT)	—	7	1	1	5	5	5	5	5	5
PURGE (CC)	—	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98
TIME ANALYZED	7:50	8:31	8:55	9:59	10:22	10:48	11:12	11:39	12:04	13:26
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	2	4	7	6	4	4	11	1	8	5
Ethane	ND	3	ND	ND	ND	ND	3	ND	ND	1
Propane	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Butane	ND	ND	ND	ND	ND	ND	1	ND	ND	ND
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
 ANALYSES PERFORMED BY : Richard Rodriguez

Table 2

Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-141	SV-140	SV-139	SV-167	SV-151	SV-150	BLANK	SV-239	SV-240	SV-149
DEPTH (FT)	5	5	5	5	5	5	—	5	5	5
PURGE (CC)	60	60	60	60	60	60	—	60	60	60
DATE ANALYZED	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98	8/18/98	8/19/98	8/19/98	8/19/98	8/19/98
TIME ANALYZED	13:54	14:18	14:43	15:09	15:33	15:58	7:01	8:20	8:49	9:15
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-Dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	1	ND	ND	ND	ND	ND	ND	200	3	ND
Methane	3	1	2	2	2	2	4	4	3	6
Ethane	ND	1								
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND	2	ND	ND						

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2

Soil Gas Survey Results

BBC INTERNATIONAL, INC.
HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	SV-80	SV-81	SV-69	SV-70	SV-71	SV-72	TSVS	TSVT	TSVW	TSVU
DEPTH (FT)	5	5	5	5	5	5	5	5	5	5
PURGE (CC)	60	60	60	60	60	60	60	60	60	60
DATE ANALYZED	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98	8/19/98
TIME ANALYZED	9:39	10:01	10:22	10:45	11:08	11:32	14:03	14:29	14:51	15:20
Method 8021										
Benzene	ND									
Toluene	ND									
Chlorobenzene	ND									
Ethylbenzene	ND									
Total Xylenes	ND									
Vinyl chloride	ND									
1,1-Dichloroethene	ND									
Trans-1,2-dichloroethene	ND									
Cis-1,2-Dichloroethene	ND									
Chloroform	ND									
1,1,1-Trichloroethane	ND									
Carbon Tetrachloride	ND									
Trichloroethene	ND									
Tetrachloroethene	ND									
Method 8015										
TPH	ND									
Methane	7	2	1	2	2	1	300	7	2	4
Ethane	2	ND								
Propane	ND									
Butane	ND									
Pentane	ND									
Hexane	ND									

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

"*" INDICATES TENTATIVELY IDENTIFIED
ANALYSES PERFORMED BY : Richard Rodriguez

Table 2
 Soil Gas Survey Results
BBC INTERNATIONAL, INC.
 HOBBS, NEW MEXICO

TEG Project #T3-980727

(USEPA Method 8021/8015 Modified) ANALYSES OF VAPORS

SAMPLE ID	TSVR	TSVY	TSVZ	BLANK	TSVAA	TSVX
DEPTH (FT)	5	5	5	—	5	3
PURGE (CC)	60	60	60	—	60	60
DATE ANALYZED	8/19/98	8/19/98	8/19/98	8/20/98	8/20/98	8/20/98
TIME ANALYZED	15:43	16:10	16:43	8:11	8:34	9:23
Method 8021						
Benzene	ND	ND	4	ND	ND	11
Toluene	ND	15	24	ND	ND	60
Chlorobenzene	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	10	ND	ND	14
Total Xylenes	ND	3	38	ND	ND	54
Vinyl chloride	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND
Trichloroethylene	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ND	ND	ND	ND	ND	ND
Method 8015						
TPH	2	50	100	ND	17	4500
Methane	9	51	80	3	15	6000
Ethane	ND	2	2	ND	2	4
Propane	ND	1	ND	ND	ND	1
Butane	ND	ND	ND	ND	ND	1
Pentane	ND	ND	ND	ND	ND	1
Hexane	ND	ND	ND	ND	ND	6

"ND" INDICATES NOT DETECTED AT OR BELOW 1ug/L FOR EACH ANALYTE FOR METHOD 8021 AND 1PPMV FOR METHOD 8015.

** INDICATES TENTATIVELY IDENTIFIED
 ANALYSES PERFORMED BY : Richard Rodriguez

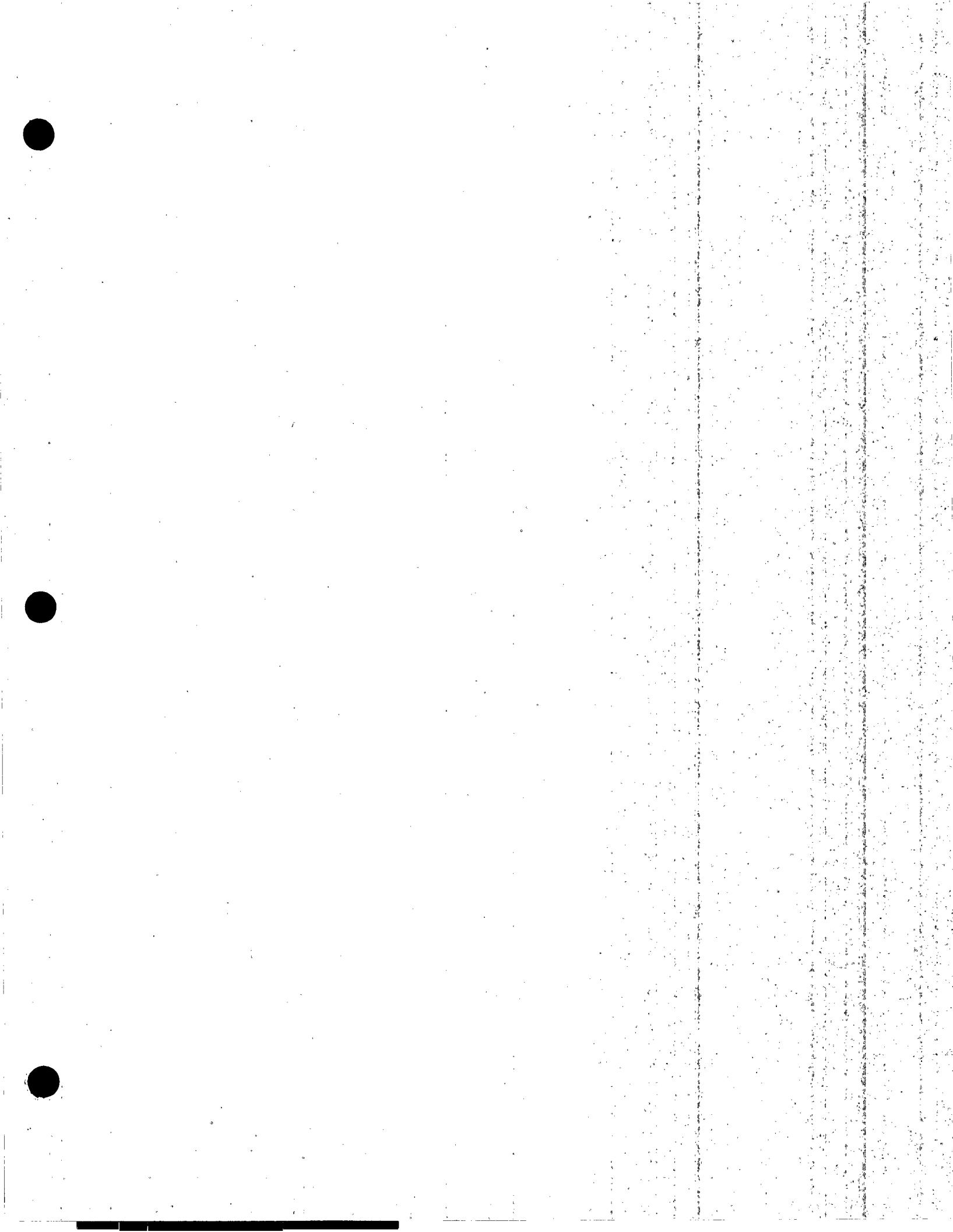


Table 3 - Soil Laboratory Results

Analyte	Method	GMW-2 3'	GMW-2 13-15'	GMW-2 58-60	GMW-2 62-64D	GMW-3 53-55'	GMW-3 63-65'	GMW-4 18-20'	GMW-4 63-65'	GMW-4 58-60'	GMW-5 63-65'	GMW-5 3-5'	GW-6 63-65'	GMW-6 63-65'	GMW-7 48-50'	GMW-7 63-65'	GMW-8 28-30'	GMW-8 63-65'	GMW-9 8-10'	GMW-9 63-65'	GMW-10 9D 63-65'	GMW-10 3-5'
		Sample: 106823	Sample: 103766	Sample: 103765	Sample: 103764	Sample: 104147	Sample: 104148	Sample: 104099	Sample: 104100	Sample: 104339	Sample: 104340	Sample: 104533	Sample: 104532	Sample: 104633	Sample: 104634	Sample: 104635	Sample: 104947	Sample: 104948	Sample: 106457	Sample: 106459	Sample: 106342	Sample: 106343
		mg/Kg	mg/Kg																			
Acrolein	S-8260B	ND	ND																			
Acrylonitrile	S-8260B	ND	ND																			
Benzene	S-8260B	ND	ND																			
Carbon tetrachloride	S-8260B	ND	ND																			
Chlorobenzene	S-8260B	ND	ND																			
1,2-dichloroethane	S-8260B	ND	ND																			
1,1,2,2-tetrachloroethane	S-8260B	ND	ND																			
1,1,1-trichloroethane	S-8260B	ND	ND																			
1,1,2-trichloroethane	S-8260B	ND	ND																			
1,1,2-trichloroethylene	S-8260B	ND	ND																			
Chloroform	S-8260B	ND	ND																			
Dichlorobenzene	S-8260B	ND	ND																			
1,1,2-dichloroethylene	S-8260B	ND	ND																			
Dichloropropanes	S-8260B	ND	ND																			
Ethylbenzene	S-8260B	ND	ND																			
Bromodichloromethane	S-8260B	ND	ND																			
Bromomethane	S-8260B	ND	ND																			
Chloromethane	S-8260B	ND	ND																			
Dichlorodifluoromethane	S-8260B	ND	ND																			
Dichloromethane	S-8260B	ND	ND																			
Trichlorofluoromethane	S-8260B	ND	ND																			
Tetrachloroethylene	S-8260B	ND	ND																			
Toluene	S-8260B	ND	ND																			
Trichloroethylene	S-8260B	ND	ND																			
Vinyl chloride	S-8260B	ND	ND																			
m,p-xylene	S-8260B	ND	ND																			
o-xylene	S-8260B	ND	ND																			
1,1-dichloroethane	S-8260B	ND	ND																			
Ethylene dibromide	S-8260B	ND	ND																			
cis-1,2-dichloroethylene	S-8260B	ND	ND																			
trans-1,2-dichloroethylene	S-8260B	ND	ND																			
Methylene chloride	S-8260B	ND	ND																			

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.
 GMW-2 is metals background sample, not analyzed for other compounds.

Table 3 - Soil Laboratory Results

Analyte	Method	GMW-2																	
		3'	13-15'	58-60'	62-64D	53-55'	63-65'	63-65'	58-60'	63-65'	63-65'	58-60'	63-65'	58-60'	63-65'	58-60'	63-65'	58-60'	63-65'
		Sample:																	
Benzidine	S-8270C	mg/Kg																	
Hexachlorobenzene	S-8270C	ND																	
Pentachlorobenzene	S-8270C	ND																	
1,2,4,5-tetrachlorobenzene	S-8270C	ND																	
Hexachloroethane	S-8270C	ND																	
2,4-dichlorophenol	S-8270C	ND																	
2,4,5-trichlorophenol	S-8270C	ND																	
2,4,6-trichlorophenol	S-8270C	ND																	
bis (2-chloroethyl) ether	S-8270C	ND																	
bis (2-chloroisopropyl) ether	S-8270C	ND																	
bis (chloromethyl) ether	S-8270C	ND																	
3,3-dichlorobenzidine	S-8270C	ND																	
2,4-dinitrotoluene	S-8270C	ND																	
Diphenylhydrazine	S-8270C	ND																	
Hexachlorobutadiene	S-8270C	ND																	
Hexachlorocyclopentadiene	S-8270C	ND																	
Isophorone	S-8270C	ND																	
Nitrobenzene	S-8270C	ND																	
2,4-dinitro-o-cresol	S-8270C	ND																	
2,4-dinitrophenols	S-8270C	ND																	
n-nitrosodiethylamine	S-8270C	ND																	
N-nitrosodimethylamine	S-8270C	ND																	
N-nitrosodibutylamine	S-8270C	ND																	
N-nitrosodiphenylamine	S-8270C	ND																	
Dibutyl phthalate	S-8270C	ND																	
di-2-ethylhexyl phthalate	S-8270C	ND																	
Diethyl phthalate	S-8270C	ND																	
Dimethyl phthalate	S-8270C	ND																	
Anthracene	S-8270C	ND																	
3,4-benzofluoranthene	S-8270C	ND																	

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.
 GMW-2 is metals background sample, not analyzed for other compounds.

Table 3 - Soil Laboratory Results

Analyte	Method	GMW-2	GMW-2	GMW-2	GMW-2	GMW-2	GMW-2	GMW-3	GMW-3	GMW-4	GMW-4	GMW-4	GMW-4	GMW-5	GMW-5	GMW-5	GMW-5	GMW-6	GMW-6	GMW-6	GMW-6	GMW-7	GMW-7	GMW-7	GMW-7	GMW-8	GMW-8	GMW-8	GMW-8	GMW-9	GMW-9	GMW-9	GMW-9	GMW-10	GMW-10	GMW-10
		3'	13-15'	58-60	62-64D	53-55'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	63-65'	3-5'	3-5'	3-5'	
		Sample:																																		
		mg/Kg	mg/Kg																																	
Benzofluoranthene	S-8270C	ND																																		
Fluoranthene	S-8270C	ND																																		
Fluorene	S-8270C	ND																																		
Phenanthrene	S-8270C	ND																																		
Pyrene	S-8270C	ND																																		
Naphthalene	S-8270C	ND																																		
1-methylnaphthalene	S-8270C	ND																																		
2-methylnaphthalene	S-8270C	ND																																		
Benzo-a-pyrene	S-8270C	ND																																		
Phenol	S-8270C	ND																																		
Aldrin	S-8080	ND																																		
Chlordane	S-8080	ND																																		
DDT	S-8080	ND																																		
Dieldrin	S-8080	ND																																		
Endosulfan	S-8080	ND																																		
Endrin	S-8080	ND																																		
PCB's	S 8082	ND																																		
Arsenic	S 6010B	2.7	ND	ND	ND	0.79	ND	ND	1.1	ND	ND	1.8	ND	ND	0.68	ND	ND	0.2	ND	ND	0.59	ND														
Barium	S 6010B	(514)	65	7.4	64	20	29	(100)	8.2	ND	ND	320	9.7	6.5	4.3	490	13	230	15	19	(618)	17	ND													
Cadmium	S 6010B	0.19	0.16	0.14	0.15	(0.64)	(0.61)	(0.52)	(0.58)	ND	ND	(0.32)	(0.23)	0.14	0.14	(0.23)	ND	ND	0.12	ND	(0.21)	(0.5)	(0.42)	ND												
Chromium	S 6010B	3.0	2.3	2.3	4.4	(5.4)	(3.7)	(3.7)	ND	ND	ND	5.4	(4.5)	(4.5)	(4.5)	(4.5)	ND																			
Lead	S 6010B	0.91	1.0	(1.8)	(2.1)	(1.7)	(1.7)	(1.7)	(1.9)	(1.7)	(2.7)	(2.1)	(2.1)	(2.1)	(2.1)	(2.1)	ND																			
Total Mercury	S 7471	ND																																		

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.
 GMW-2 is metals background sample, not analyzed for other compounds.

Table 3 - Soil Laboratory Results

		GMW-2 3'	GMW-2 13-15'	GMW-2 58-60	GMW-2 62-64D	GMW-3 63-65'	GMW-3 63-65'	GMW-4 63-65'	GMW-4 58-60'	GMW-5 63-65'	GMW-5 63-65'	GMW-6 63-65'	GMW-6 48-50'	GMW-7 63-65'	GMW-7 28-30'	GMW-8 63-65'	GMW-9 63-65'	GMW-9 8-10'	GMW-10 63-65'	GMW-10 3-5'
Analyte	Method	Sample: 106823	Sample: 103766	Sample: 103764	Sample: 104148	Sample: 104098	Sample: 104100	Sample: 104339	Sample: 104340	Sample: 104533	Sample: 104634	Sample: 104633	Sample: 104949	Sample: 104948	Sample: 106458	Sample: 106459	Sample: 106342	Sample: 106342	Sample: 106343	
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Selenium	S 6010B	ND	0.93	ND	ND	ND	0.76	0.78	ND	ND	ND									
Silver	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Uranium	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Copper	S 6010B	1.8	ND	1.3	2.2	2.3	5.6	1.6	ND	2.1	ND	1.3	ND	1.9	1.5	1.3	ND	1.0	1.6	
Iron	S 6010B	1,800	2,600	3,600	2,400	2,600	2,300	2,600	ND	3,210	1,880	1,790	1,200	2,600	3,200	4,300	2,000	2,300	2,200	
Manganese	S 6010B	25	20	25	18	23	40	22	ND	25	21	21	8.7	15	25	37	19	23	20	
Zinc	S 6010B	11	11	11	7.0	9.3	7.3	5.2	ND	20	8	3.7	2.8	7.2	6.3	12	4.6	5.1	6.8	
Aluminum	S 6010B	2,400	2,200	2,700	2,000	2,100	3,800	2,200	ND	4,940	1,620	1,550	1,390	3,100	2,700	7,100	1,630	1,900	4,000	
Boron	S 6010B	ND	ND	ND	6.3	6.9	9.2	6.6	ND	ND	12	ND	ND	ND	ND	ND	15	ND	ND	
Cobalt	S 6010B	5.0	2.8	3.4	2.5	2.9	5.0	2.7	ND	ND	6.2	2.3	2.8	1.5	4.3	4.1	7.1	2.5	5.9	
Molybdenum	S 6010B	2.5	1.1	1.7	1.3	1.9	3.0	1.6	ND	ND	1.6	ND	ND	2.4	1.6	2.1	ND	ND	1.6	
Nickel	S 6010B	5.1	2.7	3.3	2.1	2.6	4.5	2.0	ND	ND	8.6	4.9	2.4	1.7	4.3	4.2	6.8	2.2	2.4	
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Cyanide	Sm 4500 CN,CE	0.08	0.02	ND	0.02	0.01	0.01	0.07	ND	ND	0.02	ND	0.01	0.02	ND	ND	ND	ND	ND	
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Fluoride	E 300.0	3.4	0.78	0.84	0.96	1.1	2.9	0.81	0.77	0.83	8.3	0.75	0.79	0.75	2.9	1.0	9.9	1.2	1.3	
Nitrate	E 300.0	6.2	1.4	1.5	1.2	ND	2.4	1.2	1.1	ND	4.2	2.1/1.3	1.2	1.3	1.2	1.7	1.7	ND	8.6	
Chloride	E 300.0	170	28	35	28	37	85	29	18	37	22	13	10	12	85	18	16	25	21	
Sulfate	E 300.0	340	26	36	7.6	6.1	85	18	38	35	96	30	8.8	6.0	92	4.9	140	7.2	9.8	
		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
TDS	E 160.1	2500	400	570	330	310	160	240	280	260	3,900	220	200	280	530	170	880	150	252	
pH	E 150.1	8.3	8.6	8.7	9.6	9.0	8.7	8.8	10.3	8.9	8.7	8.5	8.8	8.7	9.1	8.1	8.9	8.7	7.9	
TRPHC	S 418.1	ND	ND	ND	10.6	3,000	3,820	ND	ND	ND	3,170	1,950	15.6	ND	ND	ND	ND	1,900	206	

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.
 GMW-2 is metals background sample, not analyzed for other compounds.

Table 3 - Soil Laboratory Results

	GMW-2	GMW-2	GMW-2	GMW-2	GMW-3	GMW-3	GMW-4	GMW-4	GMW-5	GMW-5	GMW-6	GMW-6	GMW-7	GMW-7	GMW-8	GMW-8	GMW-9	GMW-9	GMW-9	GMW-9	GMW-10	GMW-10
	3'	13-15'	58-60'	62-64D	53-55'	63-65'	63-65'	63-65'	58-60'	63-65'	35'	63-65'	48-50'	63-65'	28-30'	63-65'	8-10'	63-65'	8-10'	63-65'	9D	35'
Method	Sample: 106823	Sample: 103766	Sample: 103764	Sample: 104147	Sample: 104099	Sample: 104100	Sample: 104339	Sample: 104340	Sample: 104532	Sample: 104533	Sample: 104633	Sample: 104634	Sample: 104657	Sample: 104659	Sample: 104948	Sample: 104949	Sample: 104950	Sample: 104951	Sample: 106342	Sample: 106343		
Analyte	mg/Kg	mg/Kg	mg/Kg																			
SM 5530	0.25	11	3.8	9.5	6.5	2.75	7.5	6.5	7.8	ND	ND	ND	ND	ND	4.0	3.5	1.5	2.4	3.8	1.8	5.1	23.4
Total Phenols A,D																						
Total Activity	pCi/gm	pCi/gm	pCi/gm																			
E 901.1M	13.32	40.61	11.48	4.80	4.34	1.67	13.32	4.33	4.33	3.59	2.38	17.62	6.55	4.13	6.14	14.47	5.84	4.92	3.08	7.04		

**** NOTE: Samples extracted past holding times. Middle and closing CCVs were out of acceptance criteria, biased high. Relative Percent Difference between MS and MSD out of acceptance criteria.

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.
GMW-2 is metals background sample, not analyzed for other compounds.

Table 3 - Soil Laboratory Results

Sample	Method	Sample	GSB-1	GSB-2	GSB-3	GSB-4	GSB-5	GSB-6	GSB-7	GSB-8
			58-50	63-65	55-57	48-50	57-59	18-20	38-40	58-60
Analyte	Method	Sample	GSB-1B	GSB-2B	GSB-3B	GSB-4B	GSB-5B	GSB-6B	GSB-7B	GSB-8B
			Sample: 105072	Sample: 105073	Sample: 105226	Sample: 107013	Sample: 107014	Sample: 107005	Sample: 106263	Sample: 106260
			mg/Kg							
MTBE	S 8021B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	S 8021B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	S 8021B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	S 8021B	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p,o-xylene	S 8021B	0.857	0.075	ND	1.25	2.62	7.20	8.0	18.4	21.3
TRPHC	S 418.1	770	274	1,340	870	4,020	771	1,890	2,909	5,349
Chloride	E 300.0	ND	13	11	26	37	140	37	52	40
TRPHC	S 418.1	4,030	6,380	2,050	2,310	3,960	2,920	704	1,100	1,990
Chloride	E 300.0	140	140	32	96	150	54	22	140	7.6

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TMW-1 2-3	TMW-1A 63-65*	TMW-2 53-55*	TMW-3 2-3	TMW-3 3-5*	TMW-3 23-25*	TMW-3 63-65*	GSB-1 2-3*	GSB-2 5-6*	GSB-3 2-3*	GSB-4 2-3*	GSB-5 2-3*	GSB-6 2-3*	GSB-7 2-3*	GSB-8 2-3*	GSB-9 2-3*	GSB-10 2-3*	GSB-11 2-3*
		Sample: 105742	Sample: 105743	Sample: 105614	Sample: 105615	Sample: 108238	Sample: 108239	Sample: 108240	Sample: 108241	Sample: 105071	Sample: 105224	Sample: 107012	Sample: 106282	Sample: 106288	Sample: 106344	Sample: 107016	Sample: 106786	Sample: 106789	Sample: 107159
		mg/kg																	
Acrolein	S-8260B	ND																	
Acrylonitrile	S-8260B	ND																	
Benzene	S-8260B	ND																	
Carbon tetrachloride	S-8260B	ND																	
Chlorobenzene	S-8260B	ND																	
1,2-dichloroethane	S-8260B	ND																	
1,1,2,2-tetrachloroethane	S-8260B	ND																	
1,1,1-trichloroethane	S-8260B	ND																	
1,1,2-trichloroethane	S-8260B	ND																	
1,1,2-trichloroethylene	S-8260B	ND																	
Chloroform	S-8260B	ND																	
Dichlorobenzene	S-8260B	ND																	
1,1,2-trichloroethylene	S-8260B	ND																	
Dichloropropenes	S-8260B	ND																	
Ethylbenzene	S-8260B	ND																	
Bromodichloromethane	S-8260B	ND																	
Bromomethane	S-8260B	ND																	
Chloromethane	S-8260B	ND																	
Dichlorodifluoromethane	S-8260B	ND																	
Dichloromethane	S-8260B	ND																	
Trichlorofluoromethane	S-8260B	ND																	
Tetrachloroethylene	S-8260B	ND																	
Toluene	S-8260B	ND																	
Trichloroethylene	S-8260B	ND																	
Vinyl chloride	S-8260B	ND																	
m,p-xylene	S-8260B	ND																	
o-xylene	S-8260B	ND																	
1,1-dichloroethane	S-8260B	ND																	
Ethylene dibromide	S-8260B	ND																	
cis-1,2-dichlorethylene	S-8260B	ND																	
trans-1,2-dichloroethylene	S-8260B	ND																	

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TMW-1	TMW-1A	TMW-2	TMW-2	TMW-3	TMW-3	TMW-3	TMW-3	GSB-1	GSB-2	GSB-3	GSB-4	GSB-5	GSB-6	GSB-7	GSB-8	GSB-9	GSB-10	GSB-11
		2,3'	63-65'	53-55'	63-65'	2,3'	3,5'	2,3'	63-65'	2,3'	2,3'	2,3'	2,3'	2,3'	2,3'	2,3'	2,3'	2,3'	2,3'	2,3'
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzidine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-tetrachlorobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dichlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-trichlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-trichlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroethyl) ether	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroisopropyl) ether	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (chloromethyl) ether	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3-dichlorobenzidine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dinitrotoluene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diphenylhydrazine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dinitro-o-cresol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dinitrophenoisols	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-nitrosodiethylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodimethylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodibutylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosopyrrolidine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,4-benzofluoranthene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TMW-1	TMW-1A	TMW-2	TMW-3	TMW-4	TMW-5	TMW-6	TMW-7	TMW-8	TMW-9	GSB-1	GSB-2	GSB-3	GSB-4	GSB-5	GSB-6	GSB-7	GSB-8	GSB-9	GSB-10	GSB-11
		63-65'	63-65	63-65	2-3'	2-3'	3-5'	2-3'	2-3'	2-3'	2-3'	5-6'	2-3'	2-3'	2-3'	2-3'	2-3'	2-3'	2-3'	2-3'	2-3'	2-3'
		Sample:																				
		105742	105743	105744	105614	105615	105239	105240	105241	105224	105071	105072	105262	105259	105244	105238	105235	105234	105233	105232	105231	
		mg/kg																				
Benz[<i>k</i>]Fluoranthene	S-8270C	ND																				
Fluoranthene	S-8270C	ND																				
Fluorene	S-8270C	ND																				
Phenanthrene	S-8270C	ND																				
Pyrene	S-8270C	ND																				
Naphthalene	S-8270C	ND																				
1-methylnaphthalene	S-8270C	ND																				
2-methylnaphthalene	S-8270C	ND																				
Benzo-a-pyrene	S-8270C	ND																				
		mg/kg																				
Aldrin	S-8080	ND																				
Chlordane	S-8080	ND																				
DDT	S-8080	ND																				
Dieldrin	S-8080	ND																				
Endosulfan	S-8080	ND																				
Endrin	S-8080	ND																				
Hepachlor	S-8080	ND																				
		mg/kg																				
PCBs	S 8082	ND																				
		mg/kg																				
Arsenic	S 6010B	0.68	ND	0.88	ND	3.6	2.0	0.54	ND	(4.2)	(4.1)	<4.5	(2.9)	(2.1)	(1.6)	ND	ND	(5.3)	2.6	0.75	(3.9)	
Barium	S 6010B	(150)	5.5	29	34	(152)	(285)	10	(370)	(170)	(375)	(166)	(312)	(730)	(187)	11	(276)	(100)	(315)	(274)	ND	
Cadmium	S 6010B	0.14	ND	0.13	ND	ND	0.14	0.14	ND	0.14	ND	0.16	0.1	0.22	0.31	0.63	ND	0.17	0.13	ND		
Chromium	S 6010B	(3.3)	(3.5)	(4.1)	(3.5)	(3.7)	(4.2)	(2.6)	(3.3)	(4.9)	(2.7)	(3.8)	(5.4)	2.1	(6.3)	(4.9)	2.6	(3.8)	(5.3)	(3.4)		
Lead	S 6010B	(1.1)	0.85	(1.2)	0.67	(1.3)	(1.4)	(1.3)	0.69	(1.0)	(1.8)	0.72	(1.7)	(2.7)	0.78	(3.2)	(1.5)	(1.6)	(1.3)	(2.2)	(1.7)	
		mg/kg																				
Total Mercury	S 7471	ND																				

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Sample:	TMW-1	TMW-1A	TMW-2	TMW-2'	TMW-3	TMW-3'	TMW-4	TMW-5	TMW-6	TMW-7	TMW-8	TMW-9	TMW-10	TMW-11
Analyte	Method	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Selenium	Sample: 105742	2.3	63-65*	53-55*	63-65*	3-5*	23-25*	63-65*	2-3*	5.6*	2-3*	3-35*	2-3*	2-3*
Silver	Sample: 105743	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Uranium	Sample: 105614	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Sample: 105224	0.52	(1.3)	ND	(2.3)	ND	ND	0.66	ND	(0.85)	ND	(0.86)	ND	ND
Iron	Sample: 105740	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Sample: 105610	2.6	ND	1.1	ND	ND	3.5	1.3	2.0	1.1	1.9	2.9	3.1	2.5
Zinc	Sample: 105610	11	4	4	5	6	5	8	8	4	7	9	13	6.2
Aluminum	Sample: 105600	3,800	1,790	2,240	1,900	2,300	3,800	5,100	1,800	2,000	6,600	3,500	4,400	5,900
Boron	Sample: 105600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	Sample: 105600	4	ND	1	1	2	5	6	4	3	8	6	3.1	7.6
Molybdenum	Sample: 105600	1.7	ND	ND	ND	ND	ND	1.1	ND	2.8	2.6	2.6	1.1	2.5
Nickel	Sample: 105600	4.4	ND	0.79	1.5	1.5	6.4	7.0	3.9	2.4	8.6	6.1	6.9	7.9
Cyanide	Sample: 4500 CN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoride	Sample: E 300.0	2.1	0.84	1.0	0.98	0.99	3.4	7.4	2.4	1.5	13	6.1	5.9	6
Nitrate	Sample: E 300.0	1.5	2	1.9	1.8	ND	ND	ND	ND	ND	ND	9.8	2.2	1.7
Chloride	Sample: E 300.0	94	82	(240)	18	27	81	41	42	31	8.9	41	87	(1,200)
Sulfate	Sample: E 300.0	34	9.1	13	12	12	180	63	17	9.0	29	240	(600)	350
TDS	Sample: E 160.1	(2,790)	170	510	140	130	460	470	200	170	300	880	(1,100)	(2,700)
pH	Sample: E 150.1	10	8.7	8.7	9	8.4	8.2	8.4	8.6	9.2	8.5	8.3	8.5	8.7
TRPHC	Sample: S 418.1	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

	TMW-1	TMW-1A	TMW-2	TMW-3	TMW-3'	TMW-3	TMW-3'	GSB-1	GSB-2	GSB-3	GSB-4	GSB-5	GSB-6	GSB-7	GSB-8	GSB-9	GSB-10	GSB-11			
Analyte	2.3	63-65*	53-55*	63-65*	2-3*	3-5*	23-25*	63-65*	2-3*	2-3*	2-3*	2-3*	2-3*	2-3*	2-3*	2-3*	2-3*	2-3*			
Method	Sample: 105742	Sample: 105743	Sample: 105614	Sample: 105615	Sample: 108238	Sample: 108239	Sample: 108240	Sample: 105071	Sample: 105224	Sample: 107012	Sample: 107002	Sample: 106299	Sample: 106282	Sample: 106262	Sample: 10628	Sample: 107016	Sample: 106786	Sample: 106789			
	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg																
Total Phenols	M 5530 A	(0.04)	(18.1)	ND	/2.25	ND	ND	ND	ND	ND	(4.0)	(1.8)	(2.9)	(0.64)	(2.9)	(1.9)	(1.8)	(2.8)			
	pCi/gm	pCi/gm	pCi/gm	pCi/gm	pCi/gm																
Total Activity	E 901.1M	11.3	11.3	7.59	0.74	7.54	14.14	1.91	10.60	4.8	1.67	21.20	7.48	0.96	19.43	5.3	11.55	3.80	11.01	2.98	2.85

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TSB-1		TSB-2		TSB-3		TSB-4		TSB-5		TSB-6		TSB-7		TSB-8	
		2.3'	3.5'	2.3'	3.5'	2.3'	3.5'	2.3'	3.5'	2.3'	3.5'	2.3'	3.5'	2.3'	3.5'	2.3'	3.5'
		mg/Kg															
Acrolein		ND															
Acrylonitrile		ND															
Benzene		ND															
Carbon tetrachloride		ND															
Chlorobenzene		ND															
1,2-dichloroethane		ND															
1,1,2,2-tetrachloroethane		ND															
1,1,1-trichloroethane		ND															
1,1,2-trichloroethylene		ND															
1,1,2,2-tetrachloroethylene		ND															
Chloroform		ND															
Dichlorobenzene		ND															
1,1,2-trichloroethylene		ND															
Dichloropropenes		ND															
Ethylbenzene		ND															
Bromodichloromethane		ND															
Bromoform		ND															
Chloromethane		ND															
Dichlorodifluoromethane		ND															
Dichloromethane		ND															
Trichlorofluoromethane		ND															
Tetrachloroethylene		ND															
Toluene		ND															
Trichloroethylene		ND															
Vinyl chloride		ND															
m,p-xylene		ND															
o-xylene		ND															
1,1-dichloroethane		ND															
Ethylene dibromide		ND															
cis-1,2-dichloroethylene		ND															
trans-1,2-dichloroethylene		ND															
Methylene chloride		ND															

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TSB-1 2-3'		TSB-1 3-5'		TSB-2 8-10' 2-3'		TSB-2 3-5'		TSB-3 18-20' 2-3'		TSB-4 3-5'		TSB-4 18-20' 2-3'		TSB-5 3-5'		TSB-5 2-3'		TSB-6 3-5'		TSB-6 18-20' 2-3'		TSB-7 3-5'		TSB-7 8-10' 3-5'		TSB-8 3-5'	
		Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzidine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-tetrachlorobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dichlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-trichlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-trichlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroethyl) ether	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis (chloromethyl) ether	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3-dichlorobenzidine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dinitrotoluene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diphenylhydrazine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dinitro-o-cresol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-dinitrophénols	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-nitrosodiethylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodimethylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodibutylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosodiphenylamine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-nitrosopyrrolidine	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibutyl phthalate	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
di-2-ethylhexyl phthalate	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,4-benzoquinanthrene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	TSB-1	TSB-2	TSB-3	TSB-4	TSB-5	TSB-6	TSB-7	TSB-8
	2-3' 3-5'	8-10' 2-3'	18-20' 3-5'	18-20' 2-3'	18-20' 2-3'	18-20' 2-3'	18-20' 2-3'	18-20' 3-5'
Method	Sample: 105955	Sample: 105957	Sample: 105959	Sample: 106196	Sample: 106197	Sample: 106091	Sample: 106093	Sample: 106095
	mg/kg							
Benz(a)fluoranthene	ND							
Fluoranthene	ND							
Fluorene	ND							
Phenanthrene	ND							
Pyrene	ND							
Naphthalene	ND							
1-methylnaphthalene	ND							
2-methylnaphthalene	ND							
Benzo-a-pyrene	ND							
Phenol	ND							
Aldrin	ND							
Chlordane	ND							
DDT	ND							
Dieldrin	ND							
Endosulfan	ND							
Endrin	ND							
Heptachlor	ND							
PCB's	S 8082	ND						
	mg/kg							
Arsenic	ND	(2.9)	ND	ND	(2.5)	ND	ND	ND
Barium	90	105	(439)	82	93	80	(109)	(315)
Cadmium	0.32	(0.23)	0.15	(0.33)	(0.26)	0.14	(0.23)	0.15
Chromium	8.6	6.0	2.7	(9.2)	6.1	1.9	4	2.7
Lead	5.5	(3.9)	1.2	(5.6)	(7.9)	(1.3)	(1.6)	(2.8)
Total Mercury	S 7471	ND						
	mg/kg							

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	TSB-1		TSB-2		TSB-3		TSB-4		TSB-5		TSB-6		TSB-7		TSB-8	
	2.3'	3.5'	8.10'	2.3'	3.5'	18.20'	2.3'	3.5'	18.20'	2.3'	3.5'	18.20'	2.3'	3.5'	18.20'	3.5'
Method	105956	105956	105957	105958	105959	105960	106196	106197	106198	106091	106092	106093	106094	106095	106096	106097
Selenium	0.517	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Uranium	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	S 6010B	5.4	3.3	4.2	5.4	5.3	3.5	2.1	3.9	2.7	2.9	3.5	2.9	2.5	5.3	5.9
Iron	S 6010B	7,000	4,800	1,860	8,200	4,900	1300	2600	1900	5100	1700	3500	3600	12000	12000	16000
Manganese	S 6010B	77	64	29	126	143	65	9.6	25	21	45	26	26	37	21	79
Zinc	S 6010B	34	14	5.0	21	23	13	3.9	6.6	5.1	17	5	5	9	9.2	4.1
Aluminum	S 6010B	10,000	3,600	10,000	10,000	7,500	2200	5200	3300	8700	3000	5700	6000	20000	4300	15000
Boron	S 6010B	17	12	10	17	17	14	ND	12	ND	16	ND	10	11	ND	26
Cobalt	S 6010B	7.8	7.1	5.2	8.3	8.0	6.5	3.5	5.2	4	8.1	4.6	5	6.4	4.1	11
Molybdenum	S 6010B	2.9	2.0	1.6	2.5	2.4	2	ND	3.7	1.5	2.2	1.5	1.5	1.7	2.9	1.8
Nickel	S 6010B	8.6	7.9	ND	8.3	8.4	6.8	4.3	8.2	3.4	8.3	26	26	5.8	6.2	4.1
<hr/>																
Cyanide	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg	
Sm 4500 CN,CE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TDS	E 160.1	6,900	280	830	1,400	1,500	300	630	400	540	620	570	500	1400	1100	710
pH	E 150.1	8.1	8.4	8.6	8.2	8.8	s.u.									
TRPHC	S 418.1	10.20	(37.10)	12	ND	ND	ND	11.7	ND							

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TSB-1		TSB-2		TSB-3		TSB-4		TSB-5		TSB-6		TSB-7		TSB-8	
		2.3'	3.5'	8.10'	2.3'	3.5'	18.20'	2.3'	3.5'	18.20'	2.3'	3.5'	18.20'	2.3'	3.5'	18.20'	3.5'
Total Phenols	SM 5530 A,D	6.25	4.25	5.5	4.25	1.75	3.0	ND	0.99	ND							
Total Activity	E 901.1M	8.4	3.29	2.95	12.03	30.66	5.81	1.31	2.81	9.63	4.39	11.53	3.95	2.32	5.24	6.17	3.01
		pcU/gm															

** NOTE: Samples extracted past holding times. Middle and closing CCVs were out of acceptance criteria, biased high. Relative Percent Difference between MS and MSD out of acceptance criteria.

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TSB-4D	TSB-8	TSB-8	TSB-9	TSB-9	TSB-9	TSB-10	TSB-10	TSB-10	TSB-11	TSB-11	TSB-11	TSB-12	TSB-12	TSB-13	TSB-13	TSB-13	TSB-13	
		3-5'	8-10'	40-42'	2-3'	3-5'	18-20'	2-3'	3-5'	8-10'	2-3'	3-5'	18-20'	2-3'	3-5'	48-50'	2-3'	3-5'	48-50'	2-3'
Acrolein	Sample: 107007	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	Sample: 107008	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	Sample: 106097	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	Sample: 107009	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	Sample: 106098	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	Sample: 106029	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-trichloroethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-trichloroethylene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobenzene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethylene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloropropenes	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	Sample: S-8260B	mg/kg	12.0	2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-xylene	Sample: S-8260B	mg/kg	40.0	9.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-xylene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylene dibromide	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-dichlorethylene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-dichloroethylene	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	Sample: S-8260B	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TSB-8D	TSB-8	TSB-8	TSB-9	TSB-9	TSB-10	TSB-10	TSB-10	TSB-11	TSB-11	TSB-11	TSB-12	TSB-12	TSB-13	TSB-13	TSB-13
		3-5'	8-10'	40-42'	2-3'	3-5'	18-20'	2-3'	3-5'	2-3'	18-20'	2-3'	29-31'	3-5'	18-20'	2-3'	2-3'
Benzidine	S-8270C	ND															
Hexachlorobenzene	S-8270C	ND															
Pentachlorobenzene	S-8270C	ND															
1,2,4,5-tetrachlorobenzene	S-8270C	ND															
Hexachloroethane	S-8270C	ND															
2,4-dichlorophenol	S-8270C	ND															
2,4,5-trichlorophenol	S-8270C	ND															
2,4,6-trichlorophenol	S-8270C	ND															
bis (2-chloroethyl) ether	S-8270C	ND															
bis (2-chloroisopropyl) ether	S-8270C	ND															
bis (chloromethyl) ether	S-8270C	ND															
3,3-dichlorobenzidine	S-8270C	ND															
2,4-dinitrotoluene	S-8270C	ND															
Diphenylhydrazine	S-8270C	ND															
Hexachlorobutadiene	S-8270C	ND															
Hexachlorocyclopentadiene	S-8270C	ND															
Isophorone	S-8270C	ND															
Nitrobenzene	S-8270C	ND															
2,4-dinitro-o-cresol	S-8270C	ND															
2,4-dinitrophenols	S-8270C	ND															
n-nitrosodimethylamine	S-8270C	ND															
N-nitrosodibutylamine	S-8270C	ND															
N-nitrosodiphenylamine	S-8270C	ND															
N-nitrosopyrrolidine	S-8270C	ND															
Pentachlorophenol	S-8270C	ND															
Dibutyl phthalate	S-8270C	ND															
di-2-ethylhexyl phthalate	S-8270C	ND															
Diethyl phthalate	S-8270C	ND															
Dimethyl phthalate	S-8270C	ND															
Anthracene	S-8270C	ND															
3,4-benzoquinathione	S-8270C	ND															

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TSB-8D	TSB-8	TSB-8	TSB-9	TSB-9	TSB-9	TSB-10	TSB-10	TSB-10	TSB-11	TSB-11	TSB-11	TSB-12	TSB-12	TSB-13	TSB-13	TSB-13
		3-5'	8-10'	40-42'	2-3'	3-5'	18-20'	2-3'	8-10'	2-3'	3-5'	18-20'	2-3'	3-5'	18-20'	40-50'	2-3'	3-5'
Benzo(k)fluoranthene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-methylnaphthalene	S-8270C	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(6.31)	ND
2-methylnaphthalene	S-8270C	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	(5.45)	ND	ND
Benzo-a-pyrene	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	S-8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND***	ND***	ND
Chlordane	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND***	ND***	ND
DDT	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND***	ND***	ND
Dieldrin	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND***	ND***	ND
Endosulfan	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND***	ND***	ND
Endrin	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND***	ND***	ND
Heptachlor	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND***	ND***	ND
PCB's	S 8082	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	S 6010B	2.3	ND	1.6	(1.6)	(1.4)	(3.8)	(1.5)	ND	(1.1)	(2)	(1.4)	ND	(2.6)	ND	ND	ND	ND
Barium	S 6010B	160	99	(730)	230	161	146	125	127	146	256	350	87	30	277	328	105	10
Cadmium	S 6010B	ND	ND	(0.22)	0.15	0.12	0.19	0.53	(0.37)	0.46	0.14	0.17	0.16	(0.21)	0.16	0.25	0.17	0.12
Chromium	S 6010B	4.7	(7.3)	(6.3)	(4.2)	(4.2)	2.8	(4.8)	(8)	(4.5)	(6.9)	(3.8)	(3.8)	(4.5)	2.2	(3.5)	(4)	(4.1)
Lead	S 6010B	2.7	(3.4)	(3.2)	(2.1)	(2.1)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.8)	(1.7)	(1.7)	(1.1)	(0.92)
Total Mercury	S 7471	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Analyte	Method	TSB-8D	TSB-8	TSB-8	TSB-9	TSB-9	TSB-9	TSB-10	TSB-10	TSB-10	TSB-11	TSB-11	TSB-11	TSB-12	TSB-12	TSB-12	TSB-13	TSB-13	TSB-13	TSB-13
		3-5'	8-10'	40-42'	2-3'	3-5'	18-20'	2-3'	3-5'	8-10'	2-3'	3-5'	18-20'	2-3'	3-5'	18-20'	2-3'	3-5'	18-20'	2-3'
Selenium	Sample: 107007	mg/Kg	1.4	ND	(1.6)	ND	ND	ND	ND	ND	0.89	ND								
Silver	Sample: 107008	mg/Kg	ND	ND	0.94	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Uranium	Sample: 106097	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	Sample: 106099	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	Sample: 106098	mg/Kg	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	Sample: 106100	mg/Kg	58	44	35	15	23	139	31	37	36	23	14	2	21	93	25	24	27	48
Zinc	Sample: 106101	mg/Kg	11	14	12	10	7	8	68	8	15	10	8	4	5	6	13	5	7	11
Aluminum	Sample: 106102	mg/Kg	4,900	7,700	2,100	4,900	3,600	3,300	7,700	5,700	8,800	5,200	6,600	2,400	2,400	3,900	4,900	3,000	2,100	4,800
Boron	Sample: 106103	mg/Kg	16	21	16	12	ND	ND	19	13	19	ND	13	ND	ND	10	ND	ND	12	12
Cobalt	Sample: 106104	mg/Kg	7	8.2	8.7	6.4	4.6	4	7.7	6.1	7.8	6.4	6.5	2.7	2.1	5.5	6.2	4.8	2.9	6.1
Molybdenum	Sample: 106105	mg/Kg	1.8	2.2	2.6	1.8	1.5	1.6	2.8	2.2	2.9	1.5	2.3	1	ND	1.2	1.6	1.3	ND	1.5
Nickel	Sample: 106106	mg/Kg	7.2	8.8	11	6	4.8	4.1	16	ND	ND	7	8.3	2.3	5.8	836	4.5	2	6.3	7
Cyanide		Sm 4500 CN,CE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoride	E 300.0	mg/Kg	8.1	17	1.5	1	11	3.8	1.4	11	16	2	6.5	1.3	2.4	4.7	9	4.5	1.1	13
Nitrate	E 300.0	mg/Kg	6	1.7	3.8	1.8	ND	1.9	3.8	2	ND	ND	1.8	(10)	1.7	1.7	ND	ND	1.7	2.3
Chloride	E 300.0	mg/Kg	<660	1,900	<550	22	18	260	70	52	66	35	45	180	120	33	27	160	56	21
Sulfate	E 300.0	mg/Kg	180	19	62	18	170	270	420	42	300	180	12	20	460	360	71	14	150	56
TDS	E 160.1	mg/Kg	9,600	<3,200	<1,000	400	440	850	<2,100	<3,000	<2,500	716	770	450	150	890	930	770	270	550
pH	E 150.1	s.u.	7.8	8.6	8.4	8.4	8.5	8.4	8.8	9.4	9	8.1	8.3	8.8	9.3	8.1	8.1	9	8.8	8.2
TRPHC	S 418.1	mg/Kg	21300	15.6	15.6	97.2	ND	117	18500	16000	12100	19400	/5580	22700	127	11600	14700	20.3	10800	15900

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

Table 3 - Soil Laboratory Results

Sample	Method	TSB-8D	TSB-8	TSB-9	TSB-9	TSB-10	TSB-10	TSB-11	TSB-11	TSB-12	TSB-12	TSB-13	TSB-13
Analyte		3-5'	8-10'	2-3'	3-5'	2-3'	8-10'	2-3'	3-5'	2-3'	48-50'	3-5'	8-10'
Total Phenols	SM 5530 A,D	6.2	2.8	0.64	ND	ND	3.5	22.8	4.3	ND	ND	1.5	6.08
Total Activity	E 901.1M	6.23	6.23	19.93	0.66	1.19	7.38	3.28	4.75	9.37	6.9	0.35	2.51
		pCi/gm											
		ND											

*** NOTE: Samples extracted past holding times. Middle and closing CCVs were out of acceptance criteria, biased high.

Relative percent difference between MS & MSD out of acceptance criteria.

ND = Not Detected. See Laboratory Analysis in Appendix V for detection limits.

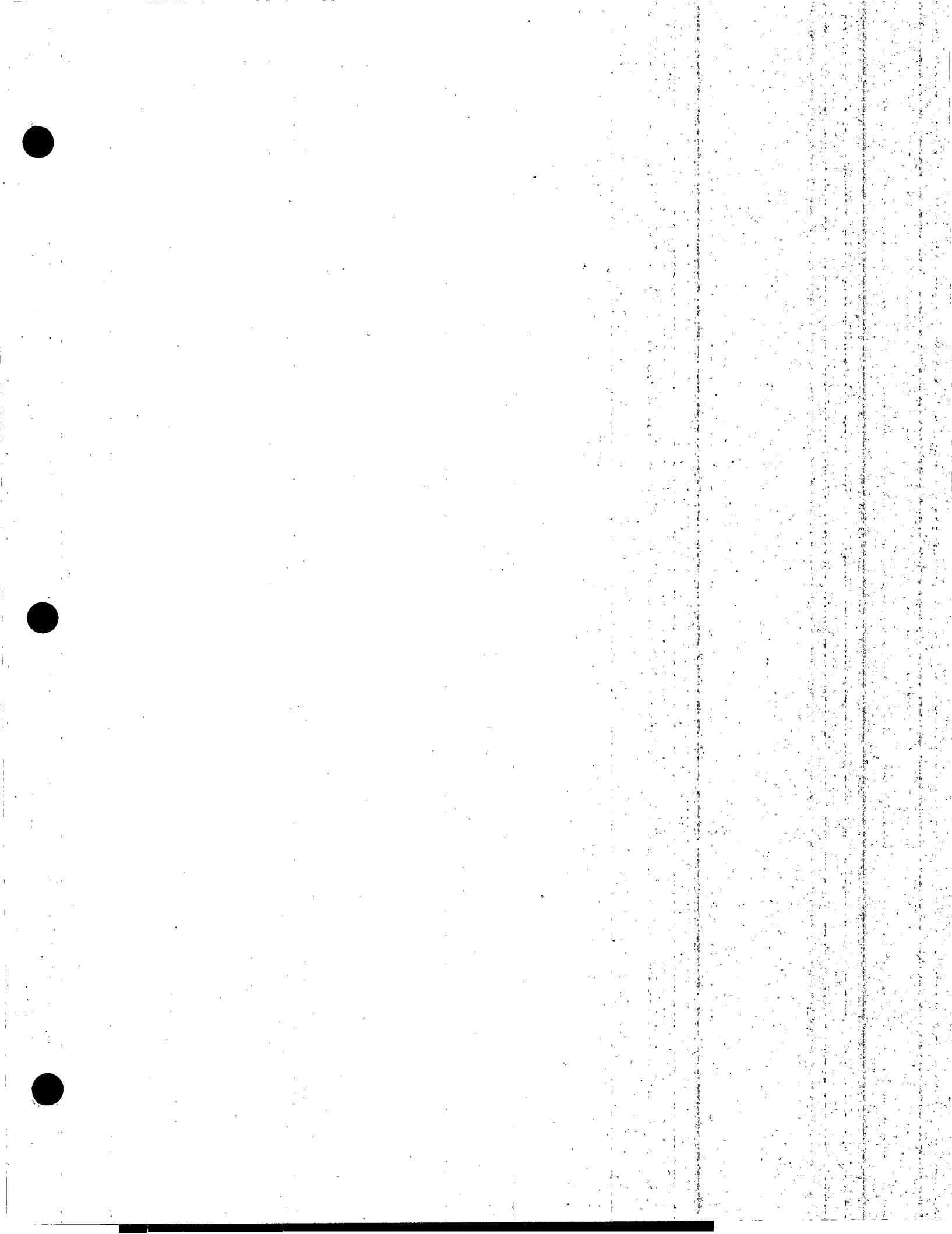


Table 4 - Groundwater Laboratory Results

Analyte	Method	Sample: TMW-1 mg/L	Sample: TMW-2 mg/L	Sample: TMW-3 mg/L	Sample: GMW-1 mg/L	Sample: GMW-2 mg/L	Sample: GMW-3 mg/L	Sample: GMW-4 mg/L	Sample: GMW-5 mg/L	Sample: GMW-6 mg/L	Sample: GMW-7 mg/L	Sample: GMW-8 mg/L	Sample: GMW-9 mg/L	Sample: GMW-10 mg/L
Acrolein	S 8260B	ND												
Acrylonitrile	S 8260B	ND												
Benzene	S 8260B	0.002	0.002	ND										
Carbon tetrachloride	S 8260B	ND												
Chlorobenzene	S 8260B	ND												
1,2-dichloroethane	S 8260B	ND												
1,1,2,2-tetrachloroethane	S 8260B	ND												
1,1,1-trichloroethane	S 8260B	ND												
1,1,2-trichloroethane	S 8260B	ND												
1,1,2-trichloroethylene	S 8260B	ND												
Chloroform	S 8260B	ND												
Dichlorobenzene	S 8260B	ND												
1,1-dichloroethylene	S 8260B	ND												
Dichloropropenes	S 8260B	ND												
Ethylbenzene	S 8260B	ND	ND	0.001	0.200	ND	ND	0.19	ND	ND	ND	ND	0.018	ND
Bromodichloromethane	S 8260B	ND												
Bromomethane	S 8260B	ND												
Chloromethane	S 8260B	ND												
Dichlorodifluoromethane	S 8260B	ND												
Dichloromethane	S 8260B	ND												
Trichlorofluoromethane	S 8260B	ND												
Tetrachloroethylene	S 8260B	ND												
Toluene	S 8260B	ND	ND	ND	ND	0.001	ND							
Trichloroethylene	S 8260B	ND												
Vinyl chloride	S 8260B	ND												
m,p-xylene	S 8260B	0.001	ND	0.005	0.720	0.002	0.580	ND	1.229	0.007	ND	0.080	0.082	ND
o-xylene	S 8260B	ND	ND	0.002	0.170	ND	0.120	ND	0.275	0.002	ND	0.027	0.027	ND
1,1-dichloroethane	S 8260B	ND												
Ethylene dibromide	S 8260B	ND												
cis-1,2-dichloroethylene	S 8260B	ND												
trans-1,2-dichloroethylene	S 8260B	ND												
Methylene chloride	S 8260B	ND												

ND = Not Detected See Laboratory Analysis in Appendix V for detection limits
GMW-1, GMW-3, GMW-5 contained free product.

Table 4 - Groundwater Laboratory Results

Analyte	Method	TMW-1		TMW-2		TMW-3		GMW-1		GMW-2		GMW-3		GMW-4		GMW-5		GMW-6		GMW-7		GMW-8		GMW-9		GMW-10			
		Sample:	109052	Sample:	109054	Sample:	109056	Sample:	109439	Sample:	109059	Sample:	109440	Sample:	109061	Sample:	109441	Sample:	109063	Sample:	109065	Sample:	109067	Sample:	109069	Sample:	109073	Sample:	109071
		mg/L	mg/L			mg/L	mg/L			mg/L	mg/L			mg/L	mg/L			mg/L	mg/L			mg/L	mg/L			mg/L	mg/L		
Benzidine	S 8270C	ND	ND																										
Pentachlorobenzene	S 8270C	ND	ND																										
1,2,4,5-tetrachlorobenzene	S 8270C	ND	ND																										
Hexachloroethane	S 8270C	ND	ND																										
2,4-dichlorophenol	S 8270C	ND	ND																										
2,4,5-trichlorophenol	S 8270C	ND	ND																										
2,4,6-trichlorophenol	S 8270C	ND	ND																										
bis (2-chloroethyl) ether	S 8270C	ND	ND																										
bis (2-chloroisopropyl) ether	S 8270C	ND	ND																										
bis (chloromethyl) ether	S 8270C	ND	ND																										
3,3-dichlorobenzidine	S 8270C	ND	ND																										
2,4-dinitrotoluene	S 8270C	ND	ND																										
Diphenylhydrazine	S 8270C	ND	ND																										
Hexachlorobutadiene	S 8270C	ND	ND																										
Isophorone	S 8270C	ND	ND																										
Nitrobenzene	S 8270C	ND	ND																										
2,4-dinitro-o-cresol	S 8270C	ND	ND																										
2,4-dinitrophenols	S 8270C	ND	ND																										
n-nitrosodiethylamine	S 8270C	ND	ND																										
N-nitrosodimethylamine	S 8270C	ND	ND																										
N-nitrosodibutylamine	S 8270C	ND	ND																										
N-nitrosodiphenylamine	S 8270C	ND	ND																										
N-nitrosopyrrolidine	S 8270C	ND	ND																										
Pentachlorophenol	S 8270C	ND	ND																										
Diбуyl phthalate	S 8270C	ND	ND																										
bis-2-ethylhexyl phthalate	S 8270C	ND	ND																										
Diethyl phthalate	S 8270C	ND	ND																										
Dimethyl phthalate	S 8270C	ND	ND																										
Anthracene	S 8270C	ND	ND																										
3,4-benzofluoranthene	S 8270C	ND	ND																										
Benzo(k)fluoranthene	S 8270C	ND	ND																										
Fluoranthene	S 8270C	ND	ND																										

ND = Not Detected See Laboratory Analysis in Appendix V for detection limits
 GMW-1, GMW-3, GMW-5 contained free product.

Table 4 - Groundwater Laboratory Results

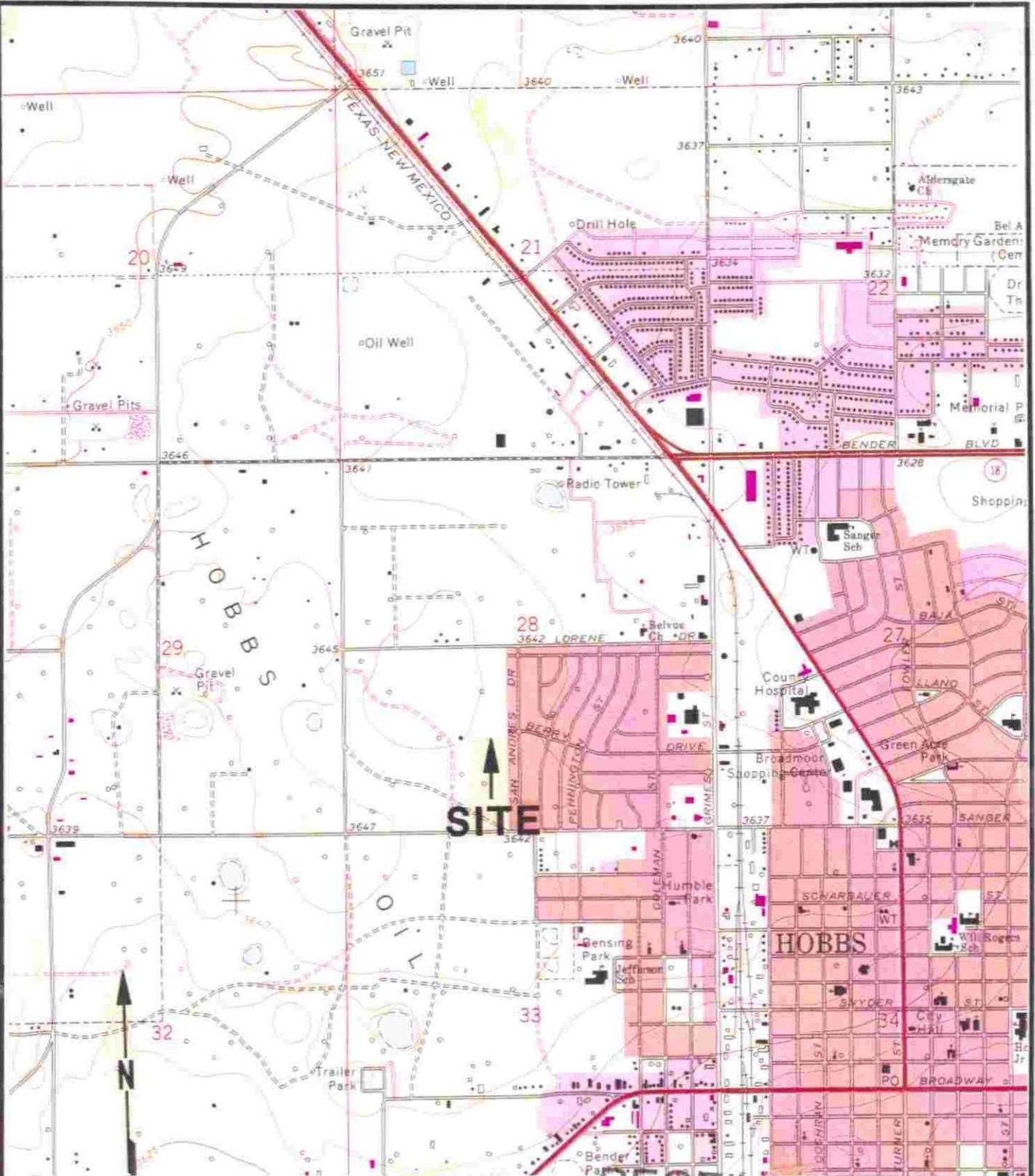
Analyte	TMW-1		TMW-2		TMW-3		GMW-1		GMW-2		GMW-3		GMW-4		GMW-5		GMW-6		GMW-7		GMW-8		GMW-9		GMW-10	
	Method	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:	Sample:
Fluorene	Method	109052	Sample: 109054	Sample: 109056	Sample: 109439	Sample: 109059	Sample: 109440	Sample: 109061	Sample: 109441	Sample: 109063	Sample: 109065	Sample: 109067	Sample: 109069	Sample: 109073	Sample: 109071	Sample: 109073										
Phenanthrene	S 8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	S 8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	S 8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-methylnaphthalene	S 8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-methylnaphthalene	S 8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo-a-pyrene	S 8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	S 8270C	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<hr/>																										
Aldrin	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
DDT	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	S-8080	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
<hr/>																										
PCB's	S-8082	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	S 6010B	0.19	0.26	0.21	0.26	0.21	0.26	0.25	0.61	0.31	0.31	0.61	0.31	0.25	0.41	0.41	0.14	0.14	0.28	0.28	0.42	0.42	0.43	0.43	0.43	0.43
Cadmium	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Mercury	S 6010B	0.0017	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	ND	ND																
Selenium	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Uranium	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	S 6010B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	S 6010B	5.9	2.2	2.3	2.3	2.3	2.3	2.3	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	

ND = Not Detected See Laboratory Analysis in Appendix V for detection limits
 GMW-1, GMW-3, GMW-5 contained free product.

Table 4 - Groundwater Laboratory Results

		TMW-1	TMW-2	TMW-3	GMW-1	GMW-2	GMW-3	GMW-4	GMW-5	GMW-6	GMW-7	GMW-8	GMW-9	GMW-10
Analyte	Method	Sample: 109052	Sample: 109054	Sample: 109056	Sample: 109439	Sample: 109059	Sample: 109440	Sample: 109061	Sample: 109441	Sample: 109063	Sample: 109065	Sample: 109067	Sample: 109069	Sample: 109073
		mg/L												
Manganese	S 6010B	0.14	0.10	0.16	0.38	0.28	0.25	0.17	0.19	0.42	ND	0.18	0.16	0.14
Zinc	S 6010B	ND	0.16	ND	ND									
Aluminum	S 6010B	40	40	45	31	39	22	24	56	51	11	66	40	5
Boron	S 6010B	0.37	0.44	0.33	0.22	0.21	0.42	0.16	0.37	0.23	0.19	0.41	0.24	0.23
Cobalt	S 6010B	ND												
Molybdenum	S 6010B	ND												
Nickel	S 6010B	ND												
Cyanide	SM 4500 C.	ND												
Fluoride	E 300.0	1.7	1.5	2.1	1.8	2.3	1.8	2.0	1.7	4.9	2.0	2.1	2.3	4.7
Nitrate	M 4500 NO3	0.16	0.41	1.03	ND	2.17	3.4	2.30	3.6	4.81	1.97	0.59	2.39	1.66
Chloride	E 300.0	250	230	150	110	51	160	42	150	46	41	170	57	64
Sulfate	E 300.0	58	51	110	100	87	160	72	160	79	74	68	85	87
TDS	E 160.1	830	880	930	550	450	840	470	790	500	430	750	540	640
pH	E 150.1	7.0	7.0	6.9	7.5	7.4	7.3	7.4	7.1	7.4	7.2	7.0	7.1	7.2
TRPHC	E 418.1	ND	ND	16.9	ND	27	0.533	218	ND	ND	ND	7.28	4.76	ND
Total Phenols	S 5530 A,D	ND	0.1	0.5	ND	0.1	0.0	0.7	ND	0.1	ND	ND	ND	ND
Total Activity	E 901.1M	17.07	3.93	6.23	5.27	3.42	2.13	2.74	4.51	2.5	2.27	2.62	3.43	3.73

ND = Not Detected See Laboratory Analysis in Appendix V for detection limits
 GMW-1, GMW-3, GMW-5 contained free product.



HOBBS WEST QUADRANGLE

NEW MEXICO - LEA Co

7.5 Minute Series (Topographic)
1969

Photo Revised 1979

RECEIVED

NOV 09 1998

ENVIRONMENTAL BUREAU

oIL CONSERVATION DIVISION

PROJECT NO.: 18906

TASKER ROAD
Hobbs, New Mexico



TITLE:
SHELL EXPLORATION & TECHNOLOGY COMPANY

SITE LOCATION MAP

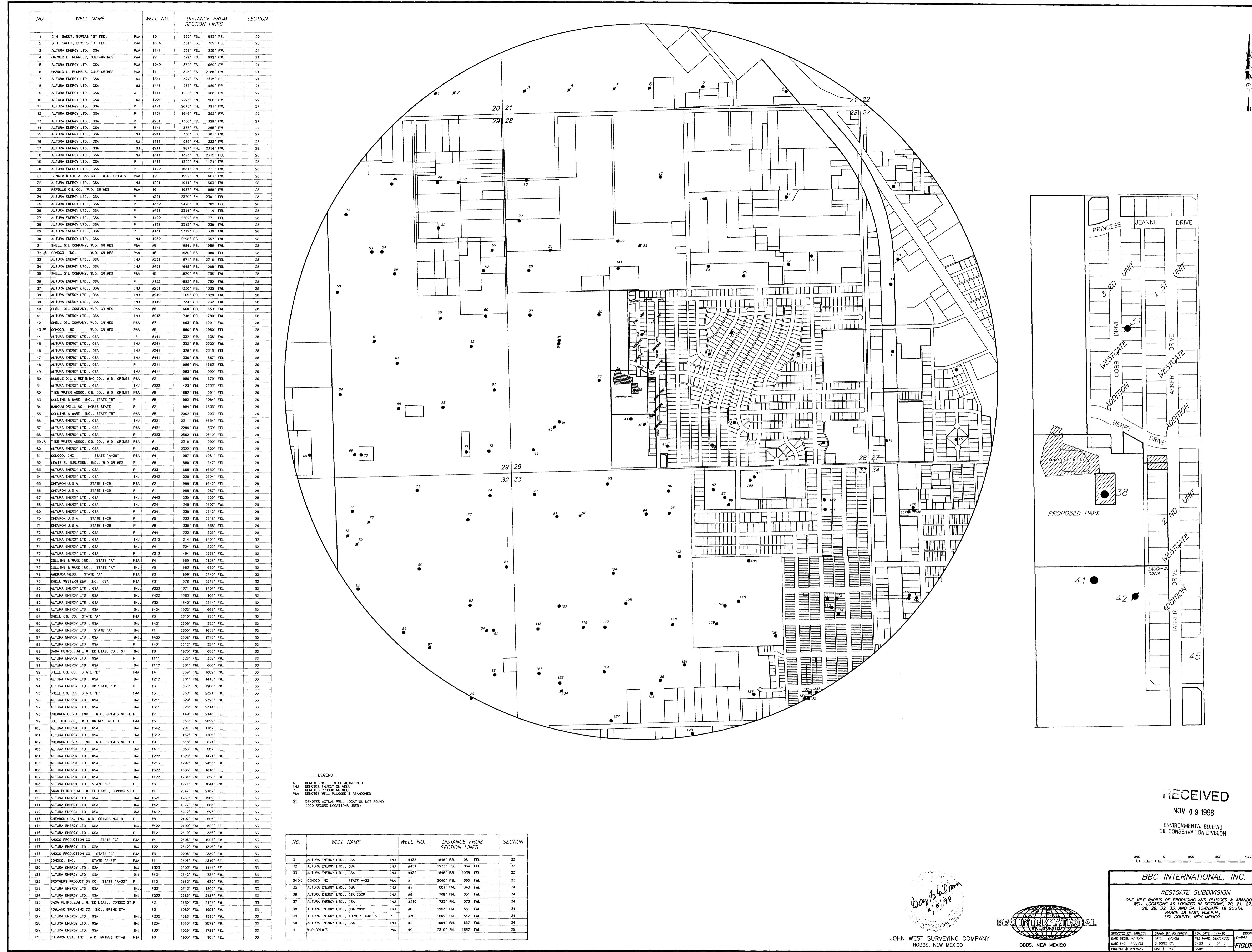
CHKD: APPD:

seh seh

DATE: REV.:

FEB. 1998 1

FIGURE 1



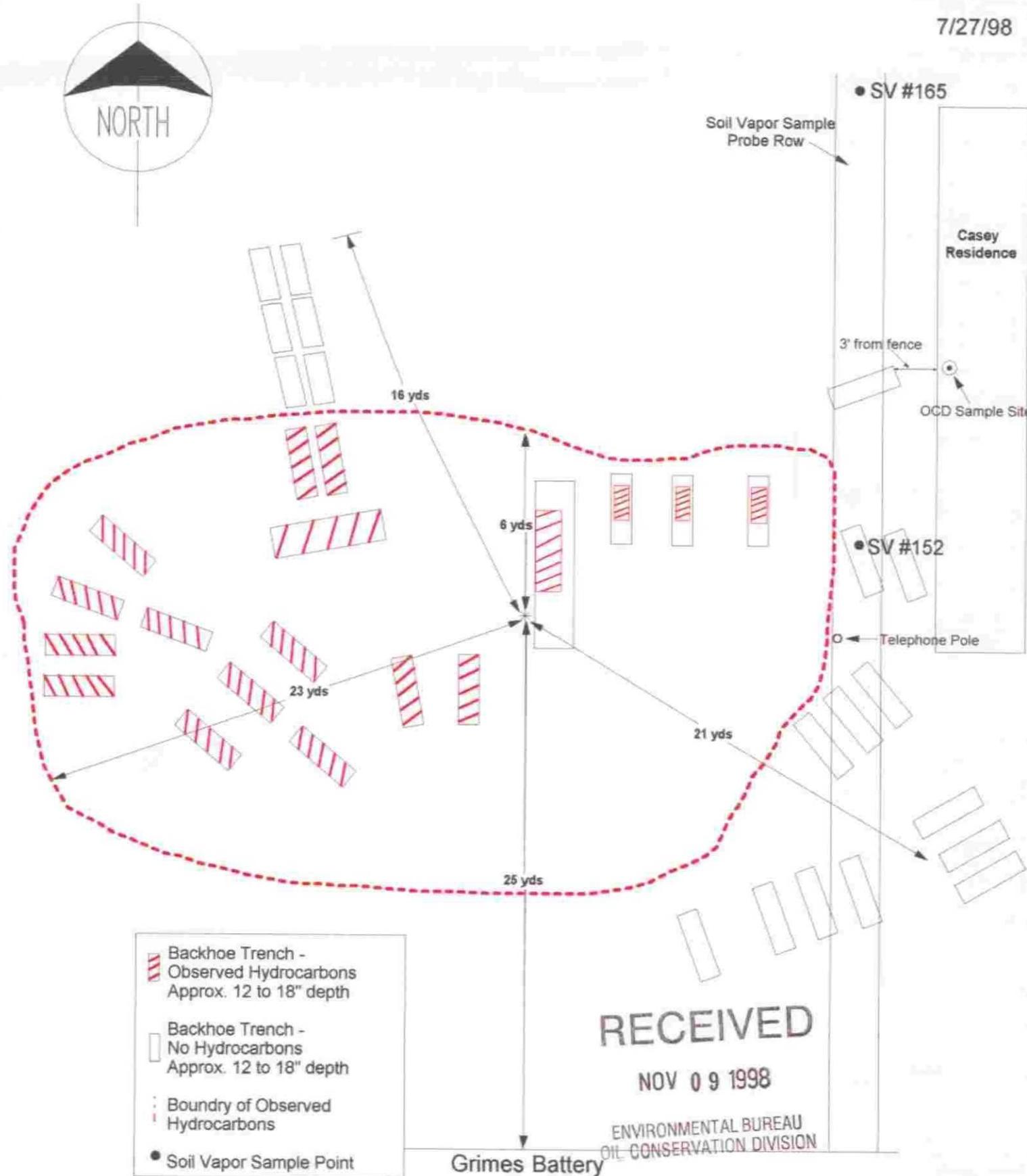
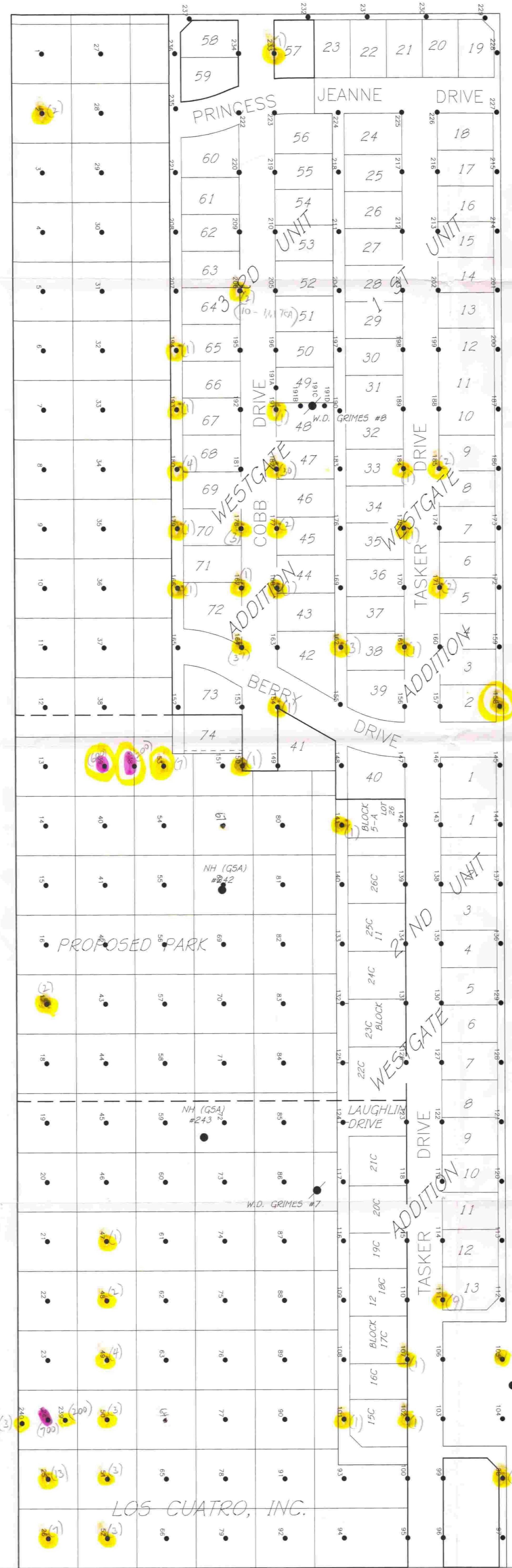


Figure 3

North of Grimes Battery Site
Assessment Map



Hobbs, New Mexico
(505) 397-6388



SANGER

STREET

JOHN WEST SURVEYING COMPANY
HOBBS, NEW MEXICO



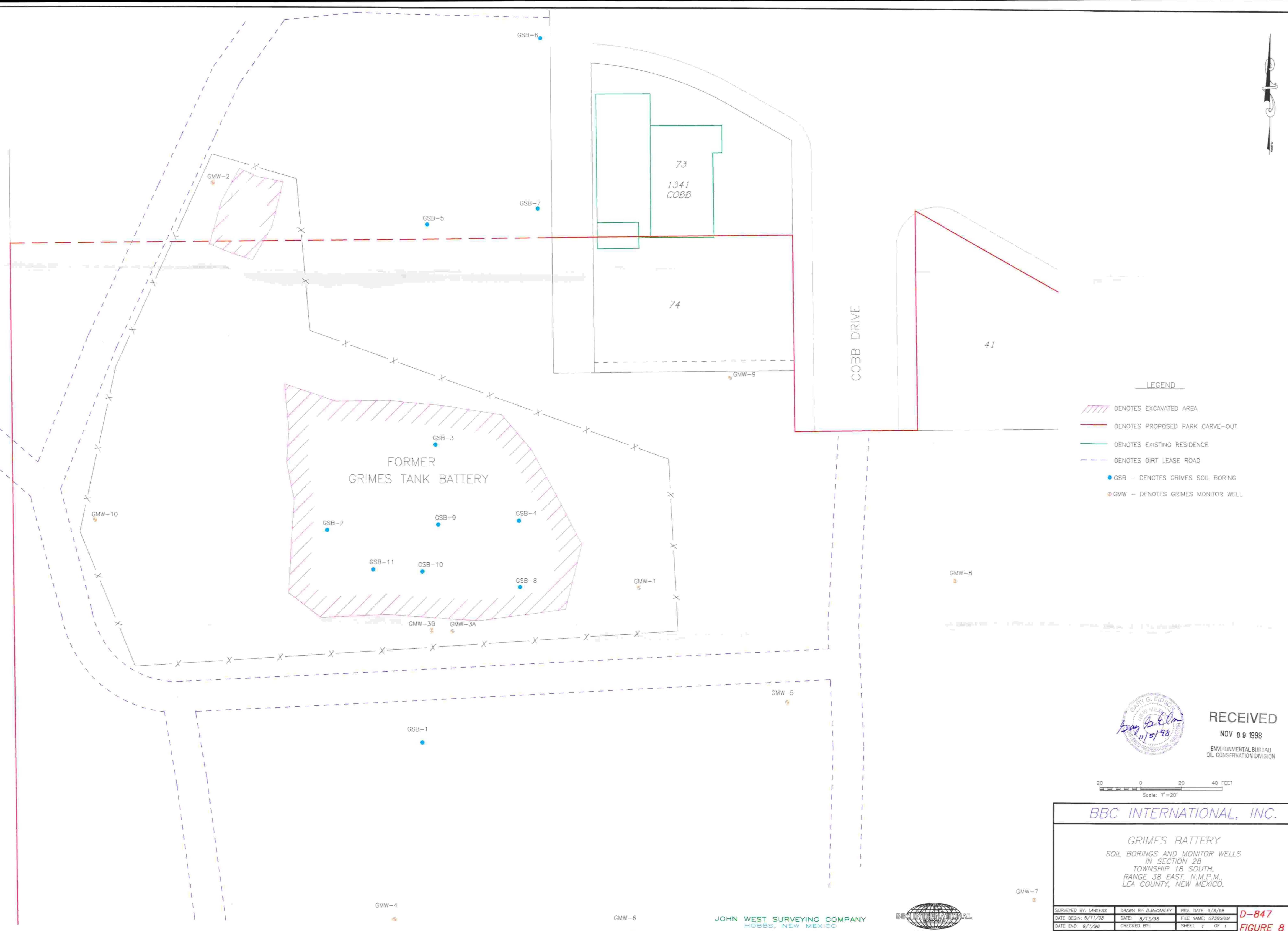
BBC INTERNATIONAL INC.

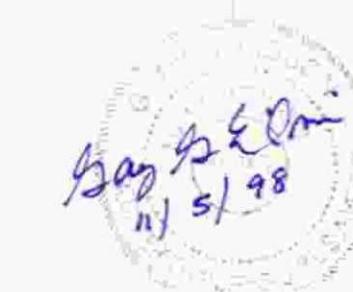
SOIL VAPOR SURVEY SAMPLE POINTS-100 FOOT GRID SPACING
FIRST, SECOND, AND THIRD UNITS OF RESIDENTIAL ADDITIONS
LOCATED IN THE WEST HALF OF SECTION 36
TOWNSHIP 18 SOUTH, RANGE 38 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO

Surveyed By: LAWLESS	Drawn By: J.P./PHC	Last Rev.: 3/9/98
Date Begn: 2/11/98	Date End: 3/12/98	Sheet No.: 1
Project #: 69411038	Volume: 0000-48	Scale: 1" = 60'
FIGURE 4		







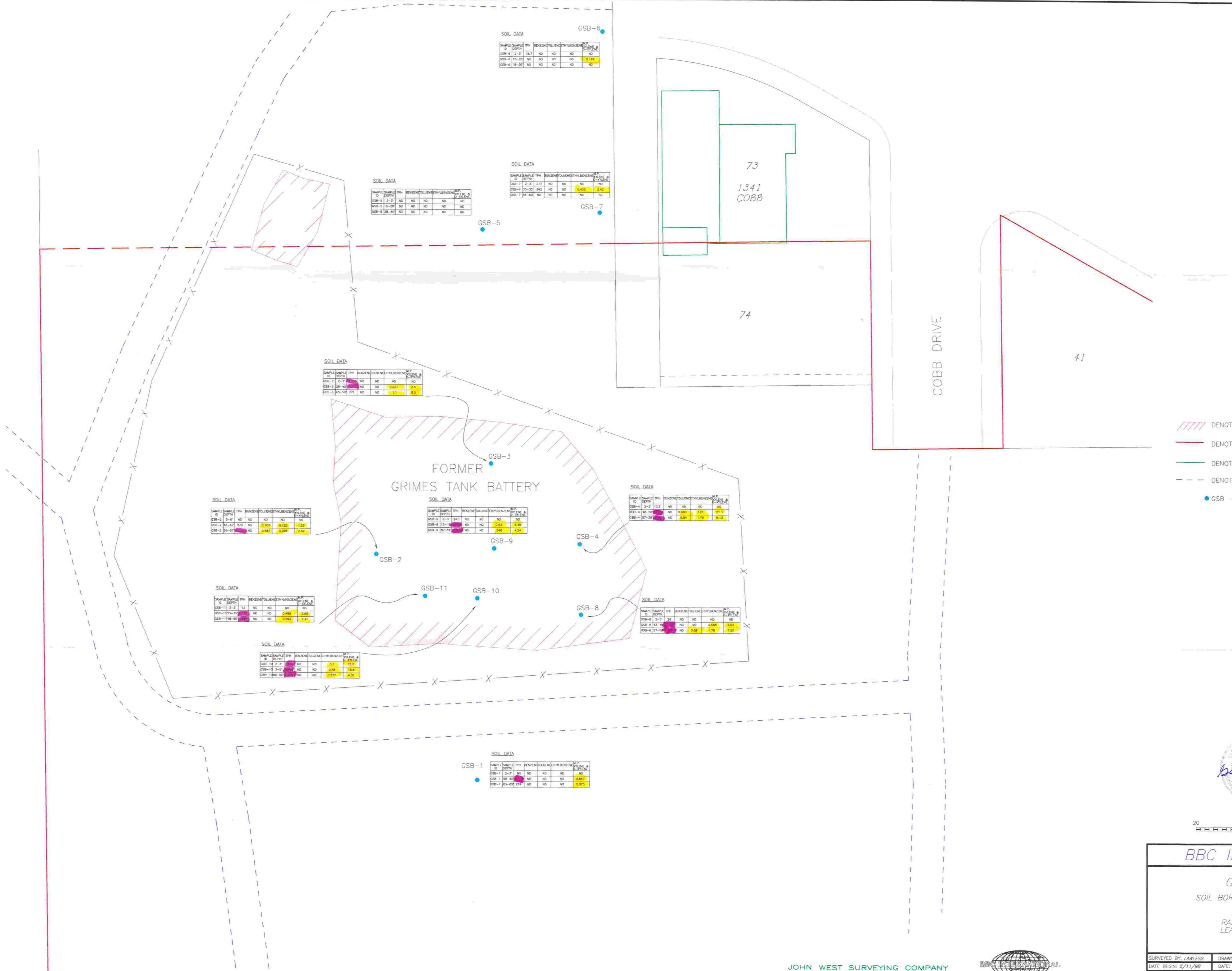


JOHN WEST SURVEYING COMPANY
HOBBS, NEW MEXICO



BBC INTERNATIONAL, INC.		
TASKER ROAD		
SOIL BORINGS AND MONITOR WELLS IN SECTION 28 TOWNSHIP 18 SOUTH, RANGE 38 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.		
SURVEYED BY: LAWLESS	DRAWN BY: D.McCARLEY	REV. DATE: 9/8/98
DATE BEGIN: 5/11/98	DATE: 8/13/98	FILE NAME: 0738TASK
DATE END: 9/1/98	CHECKED BY:	SHEET 1 OF 1
PROJECT #: 88110738	DISK #: BBC	Scale: 1"=10'

FIGURE 9



RECEIVED

NOV 6 8 1990

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

BBC INTERNATIONAL INC

GRIMES BATTERY

SOIL BORINGS WITH TPH & BTEX DATA
IN SECTION 28
TOWNSHIP 18 SOUTH,
RANGE 38 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

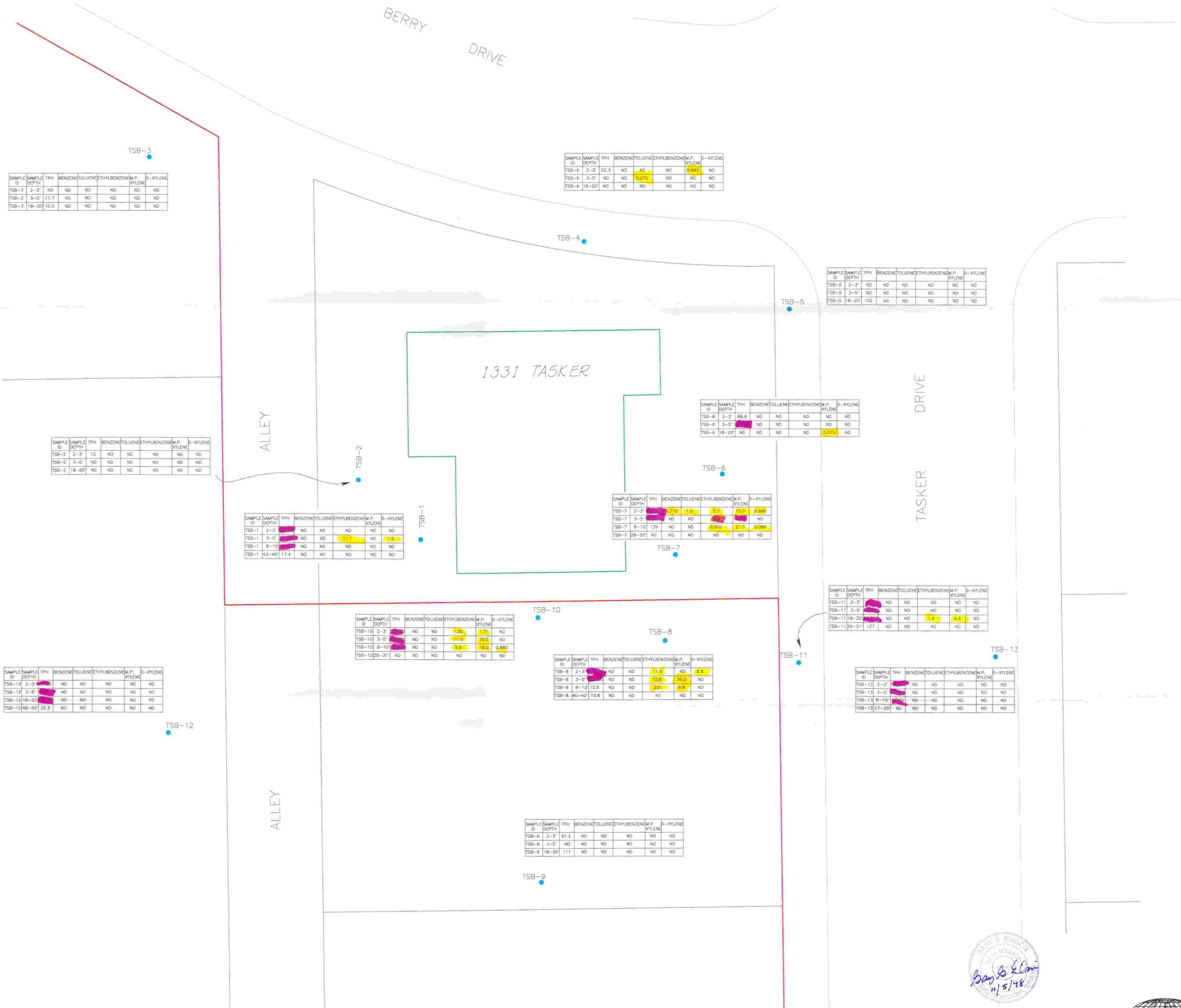
JOHN WEST SURVEYING COMPANY
HOBBS, NEW MEXICO



SURVEYED BY: LAWLESS	DRAWN BY: D.MCCARLEY	REV. DATE: 9/8/98	D-847
DATE BEGIN: 5/11/98	DATE: 8/13/98	FILE NAME: 0738GRIM	
DATE END: 9/1/98	CHECKED BY:	SHEET 1 OF 1	FIGURE 10
PROJECT #: 2016CETD	DISK #: 236	Serial #:	

10 / 10

D-847



RECEIVED NOV 09 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

LEGEND

- Denotes Existing Residence
- Denotes Proposed Park Carve-Out
- Denotes Tasker Soil Boring

BBC INTERNATIONAL, INC.

TASKER ROAD

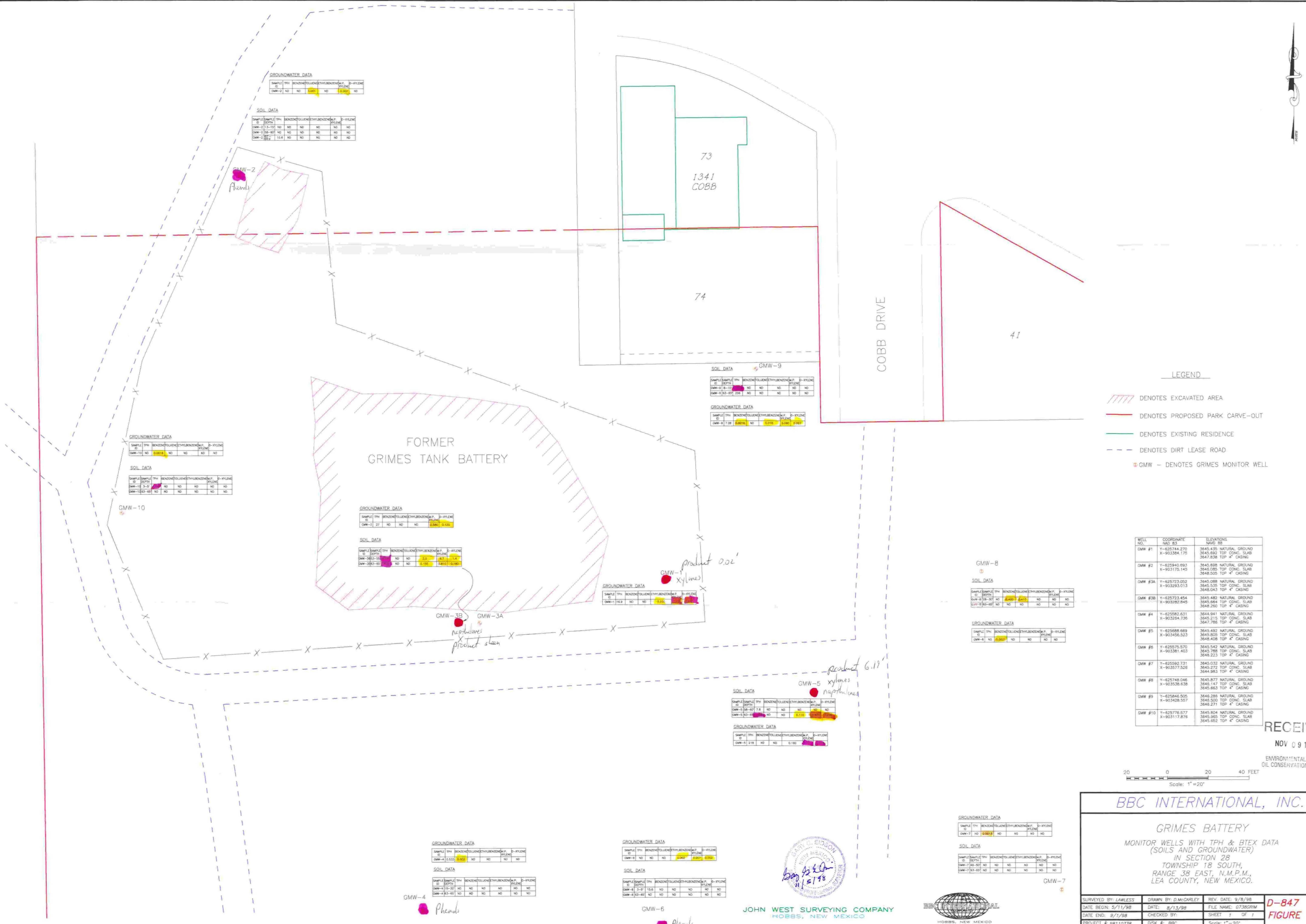
SOIL BORINGS WITH TPH & BTEX DATA
IN SECTION 28
TOWNSHIP 18 SOUTH,
RANGE 38 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

JOHN WEST SURVEYING COMPANY
HOBBS, NEW MEXICO

BBC INTERNATIONAL

Surveyed By: LAWLESS Drawn By: D.M.CARLEY Rev. Date: 9/8/98
Date Begin: 5/11/98 Date End: 8/13/98 File Name: 0738TASK
Date End: 8/1/98 Checked By: Sheet 1 of 1
Project #: 9810738 Disk #: BBC Scale: 1"=10'

FIGURE 11





WELL NO.	COORDINATE NAD 83	ELEVATIONS NAVD 88
TMW #1	Y-625761.137 X-903649.459	3646.314 NATURAL GROUND 3646.502 TOP CONC. SLAB 3644.294 TOP 4" CASING 3643.936 TOP 4" CASING
TMW #2	Y-625718.461 X-903735.981	3644.026 NATURAL GROUND 3644.294 TOP CONC. SLAB 3643.733 TOP 4" CASING 3643.498 TOP 4" CASING
TMW #3	Y-625782.703 X-903739.665	3643.645 NATURAL GROUND 3643.733 TOP CONC. SLAB 3643.498 TOP 4" CASING

- LEGEND**
- DENOTES EXISTING RESIDENCE
 - DENOTES PROPOSED PARK CARVE-OUT
 - TMW — DENOTES MONITOR WELL

RECEIVED
NOV 09 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

BBC INTERNATIONAL, INC.

TASKER ROAD

MONITOR WELLS WITH TPH & BTEX DATA
(SOILS AND GROUNDWATER)
IN SECTION 28
TOWNSHIP 18 SOUTH,
RANGE 38 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



JOHN WEST SURVEYING COMPANY
HOBBES, NEW MEXICO

SURVEYED BY: LAWLESS	DRAWN BY: DMCARLEY	REV. DATE: 9/8/98	Drawing Number: D-847
DATE BEGIN: 5/11/98	DATE: 8/13/98	FILE NAME: 07387ASK	
DATE END: 9/7/98	CHECKED BY:	SHEET 1 OF 1	
PROJECT #: 98110738	DISK #: BBC	Scale: 1"=10'	

FIGURE 13



RECEIVED

NOV 09 1988

ENVIRONMENT
OIL COAGSEPA

DATE PHOTOGRAPHY 7-2-98

NOMINAL ALT 1200

1978 1" = 200'

RECEIVED

NOV 09 1998

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION



2/14/1967 1"-500'

NOV 09 1998

ENVIRONMENTAL BUREAU
DIL CONSTRUCTION DIVISION

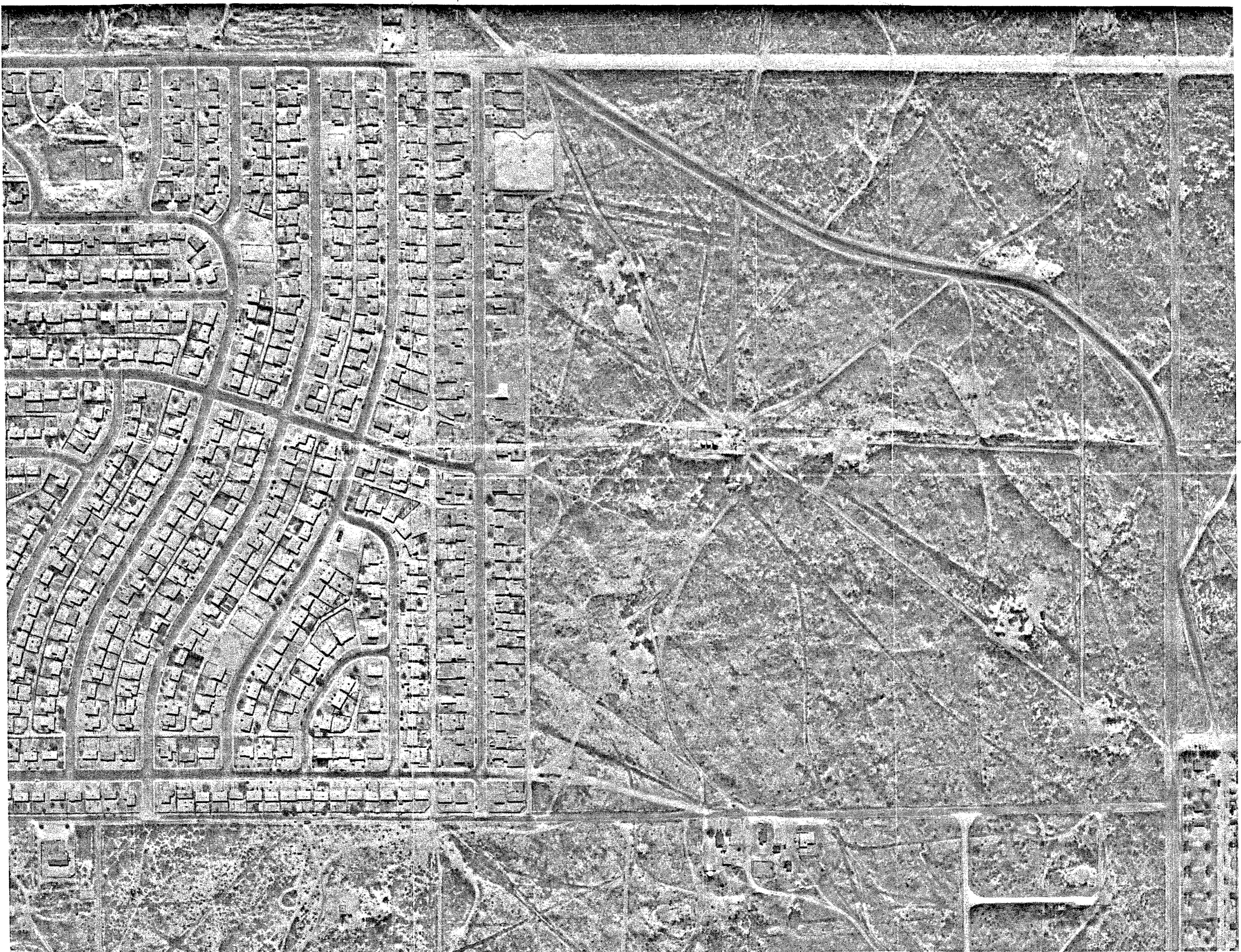
2/14/1967 1"=500'

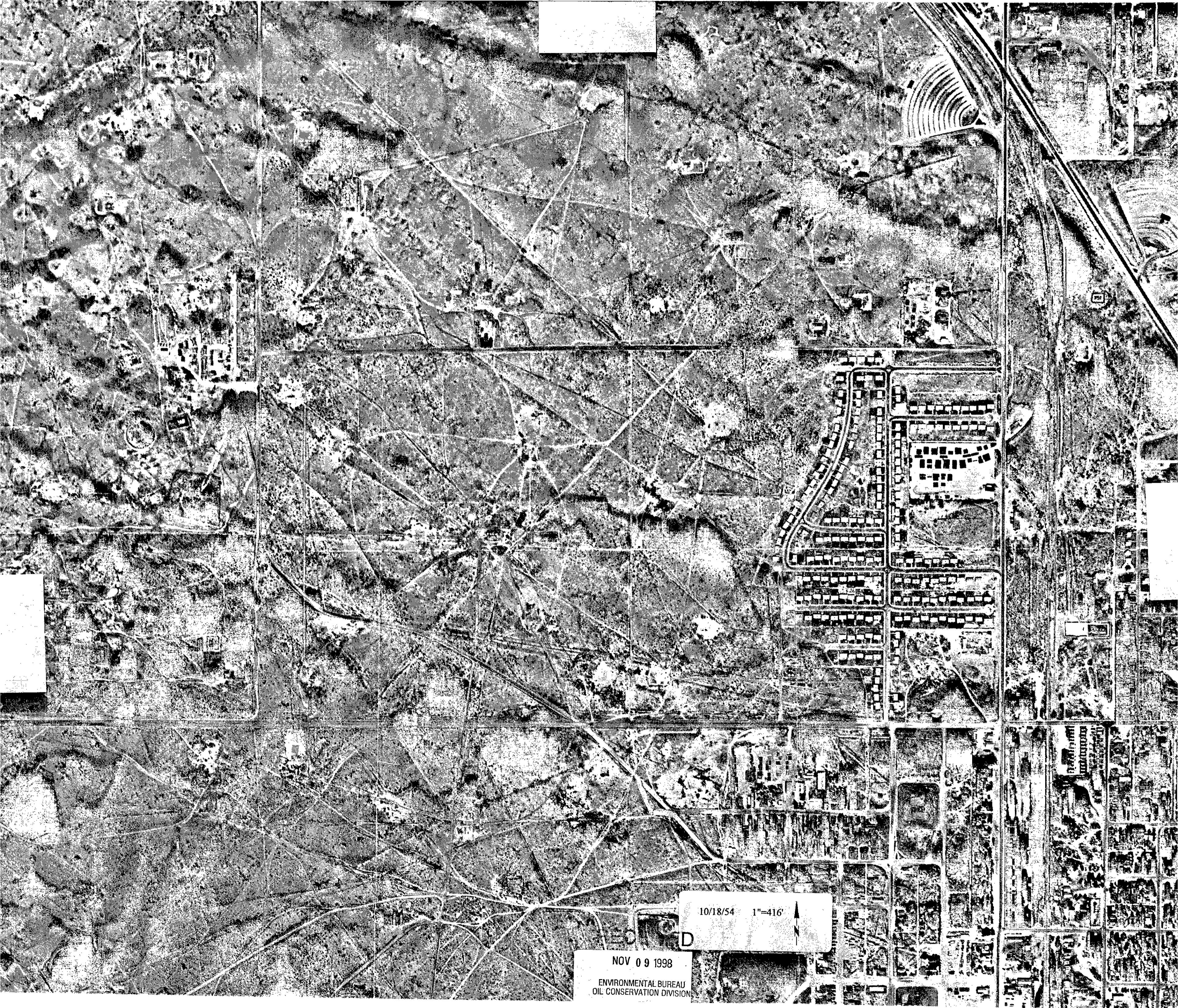
RECEIVED

NOV 09 1998

1964 1" = 200'

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

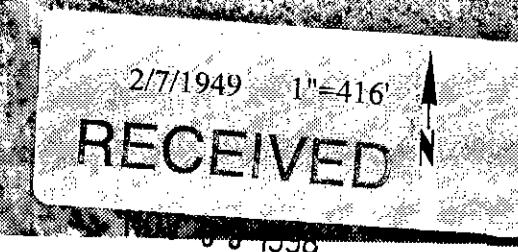




10/18/54 1"=416'

NOV 09 1998

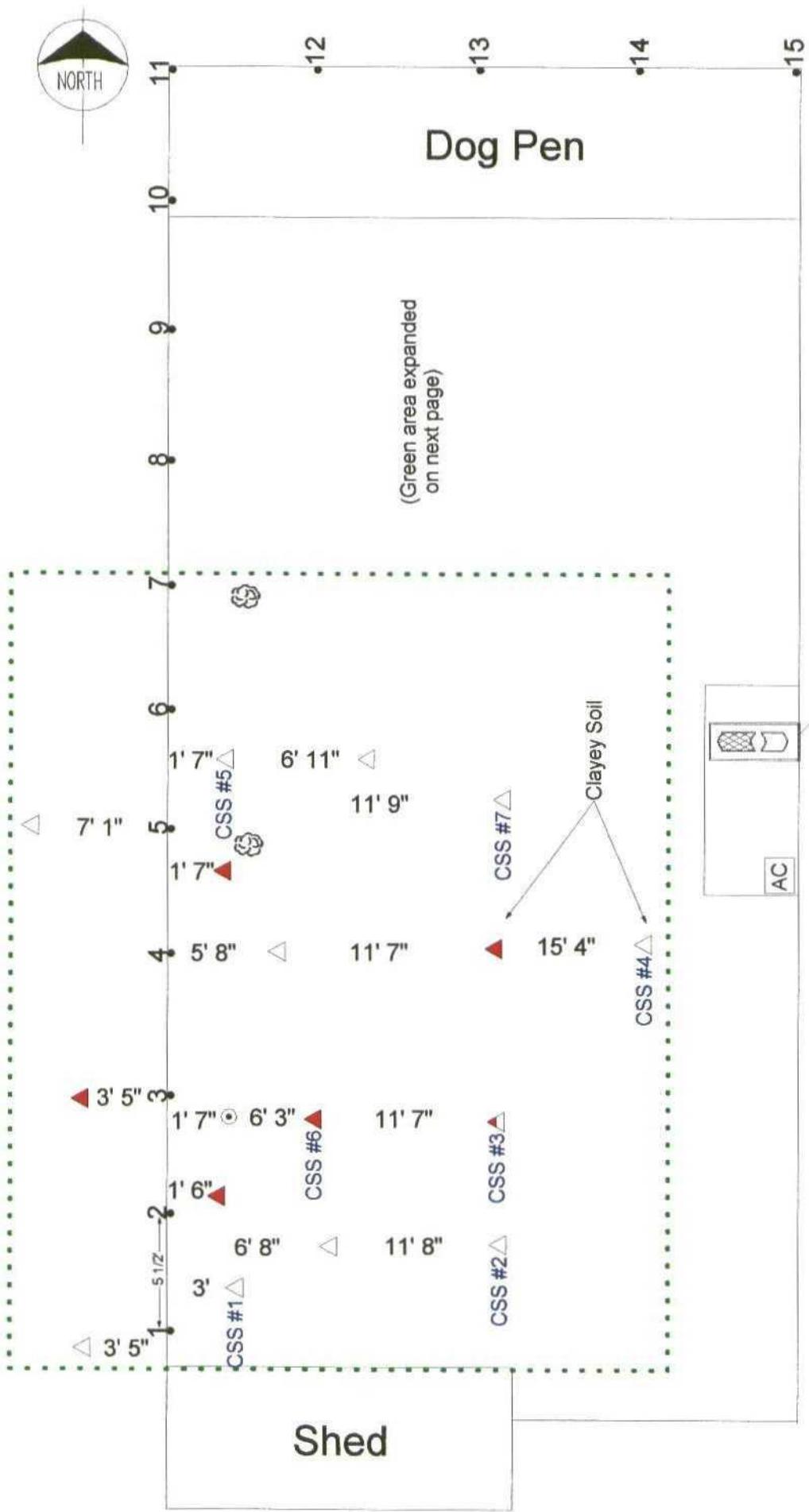
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION



ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Appendix I

Aerial Photographs



△ No Hydrocarbons	CSS = Sample Point
▲ Hydrocarbons	#1 - TPH, BTEX
● OCD Sample Site	#2 - TPH, BTEX
● Fence Post	#3 - TPH, BTEX
● Bush	#4 - TPH, BTEX
	#5 - TPH, BTEX
	#6 - Full Suite of Tests
	#7 - TPH, BTEX

Measurements = Distance from boring to fence
Average Depth of Boring = 3 feet
Depth of Hydrocarbon Layer = 8-12 inches from Surface
Average Hydrocarbon Layer Thickness = 1-2 inches

Casey Home (Backyard)

RECEIVED

NOV 09 1998
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION
Hobbs, New Mexico
(505) 397-6388

Figure 6