

**AP - 069**

**STAGE 1  
REPORT**

**03/28/2006**



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Via Federal Express

Oil Conservation Division  
Environmental Bureau

March 28, 2006

Mr. Glenn von Gonten  
Senior Hydrologist  
New Mexico Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

**Stage I Abatement Plan Interim Report – Investigation Update  
El Paso Natural Gas Company / Praxair Nitrogen Plant  
San Juan County, New Mexico**

Dear Mr. von Gonten;

El Paso Natural Gas Company (EPNG) has prepared this letter in response to New Mexico Oil Conservation Division's (NMOCD) January 23, 2006 approval of the *Proposed Workplan for a Phase I Investigation of Potential Hydrocarbon Impacts as Part of a Stage I Abatement Plan at the San Juan River Plant* (Workplan), submitted October 25, 2005. This letter has been developed following the field activities described in the Workplan, which were completed February 13-14, 2006.

**Correspondence History**

In a letter dated August 16, 2005 regarding the *El Paso Natural Gas – San Juan River Plant Final 2004 Annual Report and Request for Additional Information and Workplan, GW039R*, NMOCD requested additional information from EPNG related to the 2004 Annual Report and stated that it considers EPNG to be the responsible party for hydrocarbon contamination in groundwater near the Praxair lined pond. NMOCD rejected EPNG's previous proposal to monitor the Praxair wells and requested that EPNG submit a workplan to investigate the extent of contamination in the area of the Praxair pond.

EPNG proposed a phased approach to the investigation in a letter dated September 30, 2005. The first phase of work consisted of a review of existing information regarding operations and monitoring at the SJRP, interviews with employees of the former San Juan River Plant, and a summary report to present the rationale and scope for the next phase of work in support of this investigation.

NMOCD replied to this plan in a letter dated October 11, 2005 in which it required EPNG to submit a Stage I Abatement Plan by October 27, 2005. EPNG submitted the Workplan on October 25, 2005. In a letter dated November 10, 2005, NMOCD required EPNG to "issue the enclosed Stage I notice of publication in the Santa Fe New Mexican and the Farmington Daily Times", as well as "written notice of the Stage I proposal". EPNG complied with this requirement, and submitted the notarized affidavits of publication in both the Santa Fe New

Mexican and Farmington Daily Times, as well as certificate of mailings for all written notices required on December 7, 2005.

On January 23, 2006, NMOCD approved EPNG's Workplan with the additional requirements that EPNG (1) advance all geoprobe soil borings at least five feet into the top of the water table, (2) obtain soil samples at least every 10 feet or at every significant change in lithology, (3) analyze soil and groundwater samples collected for benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA SW-846 Method 8021B and analyze soil samples for total petroleum hydrocarbons (TPH) using EPA SW-846 Method 8915M, (4) submit a Stage 1 interim report within 30 days of receipt of analytical data, and (5) include a detailed phase 2 work plan for a permanent groundwater monitoring program and additional soil borings if the extent of soil and groundwater contamination cannot be defined.

### Site History

The SJRP is located in San Juan County, Township 29N, Range 15W, Section 1, near Kirtland, New Mexico. The SJRP was previously owned by EPNG, but has been owned and operated by Western Gas Resources (WGR) since June 1992. The plant is used to process natural gas collected from production wells located in the San Juan Basin of New Mexico and southern Utah. The SJRP is a 630-acre facility that has contained gas processing facilities, two raw water ponds (now closed), three wastewater evaporation ponds (now closed), a sulfur recovery plant, water and hydrocarbon tanks, a pigging station, flare pits, and several 16 to 24-inch diameter natural gas pipelines that cross the facility. Closure of the evaporation ponds, flare pits, and other potential hydrocarbon source areas was completed during a time period beginning in 1992 and ending in early 1996. Recently, the Praxair Nitrogen Plant was built in the area north of the SJRP, to the south of monitoring wells MW-8 and MW-9. Praxair constructed a lined evaporation pond in the location of the former EPNG raw water pond and installed five monitoring wells surrounding the pond. Monitoring wells MW-1, MW-2, MW-3 and MW-4 were installed in groundwater at total depths of 80 to 90 feet below ground surface (bgs). According to Praxair's field report, a perched zone was encountered during drilling MW-3 and therefore a second well, MW-5, was installed in the same boring as MW-3. Monitoring wells MW-3 and MW-5 were subsequently abandoned. Figure 1 presents a detailed site map of the SJRP.

Regional groundwater flow in the San Juan Basin is from the topographically high outcrop areas around the edges of the basin, towards the lower outcrop areas. A potentiometric surface map is presented on Figure 2 based on water-level measurements collected in November 2005. These measurements indicate a groundwater flow divide just north of the plant that directs flow to the southwest through the southern portion of the site, and to the northwest through the northern portion of the site, including the Praxair pond area. The San Juan River Valley is indicated as the main discharge area of the San Juan Basin (Stone, 1983). The San Juan River is located approximately two miles to the south of the SJRP site.

Dissolved-phase hydrocarbons have been observed in the northern portion of the site at MW-8 and MW-9. EPNG has been aggressively implementing active groundwater remediation in this area to reduce dissolved-phase hydrocarbons. The remediation consists of chemical oxygen enhancement and air sparging. Historic groundwater sampling conducted at the SJRP suggests that concentrations in monitoring well MW-8 have declined as a result of chemical oxygen enhancement using oxygen-releasing compound socks within this well. The air sparging system at MW-9 was shut down in February 2004, and has remained off through 2005, in order to assess groundwater conditions and pending additional investigation in the area.

Because elevated dissolved-phase hydrocarbon concentrations have been detected in EPNG wells MW-8 and MW-9 and free-product has been detected in shallow groundwater at Praxair well MW-5, which was subsequently abandoned, the investigation to assess the extent of hydrocarbons was focussed in these areas. In addition, a review of site history and site documents concluded that potential sources of the detected hydrocarbons included two natural gas lines, the 24-inch Barker Dome Line and the 16-inch Aneth-San Juan Line, and a pigging station, shown on Figure 3. Therefore, the Geoprobe investigation was designed to investigate these potential sources.

### **Fieldwork**

A truck-mounted, Geoprobe® rig was utilized to advance 15 soil borings and collect continuous soil cores. Geoprobe locations were labeled GPH-1 through GPH-15, and are shown on Figure 3. Soil samples were collected in polyethylene liners for visual inspection/logging and for soil headspace testing at all locations. Soils were sampled every 10 feet and at significant changes in lithology from the ground surface to the estimated depth of first groundwater. The field geologist logged soils in general accordance with Unified Soil Classification System (USCS) protocol. Soil headspace gas was monitored with a photoionization detector (PID) in all proposed borings from ground surface to total boring depth.

Each of the soil borings was advanced to either five feet below the estimated depth of groundwater or where refusal was met. All geoprobe borings met refusal at shallow depth; the greatest being GPH-12 which reached a depth of 15 ft. Geologic/lithologic logs for each soil boring are presented in Appendix A. As shown in the lithologic logs, most borings met refusal in either a hard shale layer or at sandstone. Due to the local geology, only four borings (GPH-6 through GPH-9) were able to penetrate below the depth of estimated first groundwater. One-inch piezometers were installed at these locations, of which only the piezometer located at GPH-7 produced enough water to sample. Soil samples were collected from all boring locations and submitted for total petroleum hydrocarbon analysis (TPH-GRO and TPH-DRO) using method EPA SW-846 8015M and for BTEX analysis using EPA SW-846 8021B. The groundwater collected from the piezometer installed in GPH-7 was analyzed for BTEX using method EPA SW-846 8021B. Visibly contaminated soil cuttings were collected for proper disposal; all other cuttings were spread out on the ground surface near the geoprobe location.

### **Analytical Results**

#### **Soil Results**

Analytical results for the soil samples collected are presented in Table 1, *2006 Praxair Geoprobe Investigation Soil Sample Analytical Data*. Laboratory reports are included in Appendix B.

#### **Total BTEX**

Of the 15 soil samples collected from depth interval 0 to 1 ft below ground surface (bgs), there was one detection located at GPH-6. Total BTEX at this location was above NMOCD standards of 50 mg/kg at a concentration of 75.3 mg/kg (consisting of 0.55 mg/kg toluene, 4.9 mg/kg ethylbenzene, and 69.8 mg/kg total xylenes). There were 16 locations with soil samples collected between the intervals of 8 to 11 ft bgs. Of the 16 locations, only two locations detected total BTEX of the standard of 50 mg/kg at GPH-6 with a concentration of 520.9 mg/kg (consisting of 0.34 mg/kg benzene, 4.95 mg/kg toluene, 58.6 mg/kg ethylbenzene, and 457 mg/kg total xylenes) between 9 to 9.5 bgs and GPH-10 at a concentration of 278.5 mg/kg (consisting of 0.47 mg/kg benzene, 1.5 mg/kg toluene, 19.5 mg/kg ethylbenzene, and 257 mg/kg total xylenes). There were 8 locations with samples collected between the interval of 11 to 15 ft bgs. Two soil samples

collected exhibited concentrations above the NMOCD standards collected from GPH-6 between the interval of 11 to 12.5 ft bgs at a concentration of 249.4 mg/kg (consisting of 3.6 mg/kg toluene, 30.8 mg/kg ethylbenzene, and 215 mg/kg total xylenes) and the sample collected from GPH-8 at a concentration of 813 mg/kg (consisting of 411 mg/kg benzene, 50.4 mg/kg toluene, 16.6 mg/kg ethylbenzene, and 335 mg/kg total xylenes). Additionally, the benzene concentration in GPH-8 was also above the NMOCD standard of 10 mg/kg between the interval of 11.5 and 12.5 ft bgs at a concentration of 411 mg/kg.

### TPH

There were 7 boring locations with TPH detected in the soil interval 0 to 1 ft, GPH-6, GPH-8, GPH-10, GPH-11, GPH-12, and GPH-15. Only GPH-6 was above the NMOCD standard of 100 mg/kg at a concentration of 1,789 mg/kg (consisting of 1,540 mg/kg GRO and 259 mg/kg DRO). TPH was detected in five boring locations (GPH-6 through GPH-10) within the depth interval of 8 to 11 ft bgs. Soil samples were detected above NMOCD standards at a concentration of 8,970 mg/kg in GPH-6 (consisting of 7,200 mg/kg GRO and 1,770 mg/kg DRO) in the interval 9 to 9.5 ft bgs and 189 mg/kg (consisting of 141 mg/kg GRO and 47.9 mg/kg DRO) between the interval of 10 to 11 ft, 579 mg/kg in GPH-8 (consisting of 242 mg/kg GRO and 337 mg/kg DRO) between the interval of 10 to 11 ft, 567 mg/kg in GPH-9 (consisting of 191 mg/kg GRO and 376 mg/kg DRO) in the interval of 10 to 11 ft, and a concentration of 3,663 mg/kg at GPH-10 (consisting of 2,750 mg/kg GRO and 913 mg/kg DRO) in the interval of 10 to 11 ft bgs. Of the 8 samples collected between 11 to 15 ft bgs, there were five locations detected with TPH (GPH-6, GPH-8 through GPH-10, and GPH-12). Samples collected from GPH-6, GPH-8, and GPH-10 were above standards with a concentration of 5,815 mg/kg (consisting of 5,680 mg/kg GRO and 135 mg/kg DRO) at GPH-6, 3,840 mg/kg (consisting of 1,890 mg/kg GRO and 1,950 mg/kg DRO) at GPH-8, and 503 mg/kg (consisting of 382 mg/kg GRO and 121 mg/kg DRO). Samples from GPH-6 and GPH-8 were collected between 11 to 12.5 ft bgs, the sample from GPH-10 was collected from 13.5 to 14.5 ft bgs.

PID readings tended to be positively correlated with TPH concentrations in the soil samples. PID readings were above 100 ppm in GPH-6, GPH-8, GPH-9, and GPH-10. The results are presented in Table 1.

### Groundwater Results

Only borings GPH-6 through GPH-9 were able to penetrate below the depth of first groundwater. This was estimated based on historical depth to water measurements collected in nearby monitoring wells. Temporary piezometers were installed at these locations in an attempt to collect groundwater samples; however, only the piezometer installed in GPH-7 produced enough water to collect a sample. The sample was collected from GPH-7 on February 16, 2006, the results of which are presented in Table 2, *2006 Praxair Geoprobe Investigation Groundwater Analytical Data*. The laboratory report is included in Appendix B. Benzene concentration in this sample was slightly above NMWQCC standards of 10 µg/L at a concentration of 10.5 µg/L. Toluene, ethylbenzene, and total xylenes concentrations were all below standards at 15.1 µg/L, 3.8 µg/L, and 46 µg/L, respectively.

### Stage I Interim Report Update

Based on the total BTEX, TPH, and PID data, it appears the most heavily impacted area is to the northeast of the Praxair pond; between GPH-11 to the south, GPH-8 to the north, GPH-6 to the west, and GPH-9 and GPH-10 to the east. This area encompasses monitoring wells MW-8 and MW-9, which has been the focus of previous monitoring and active remediation at the SJRP.

In preparation of the Stage I Interim Report, EPNG has included a Geospatial Report, prepared by Environmental Data Resources, Inc., in Appendix C. This report includes a map identifying all water wells registered with Federal and State agencies within a one mile radius of the site. As shown on the Physical Setting Source Map, there are only three wells potentially downgradient of the impacted area near the Praxair facility. The closest well, identified as 1 on the map, is directly west of the Praxair investigation area, and is identified as a well with "no use of right or POD". The other two wells are identified as A on the map, and are both exploration wells. All domestic use water wells identified within one mile of the site are located to the south of the SJRP, on the opposite side of the groundwater divide, and are therefore unlikely to be impacted by any contamination near the Praxair facility.

During this investigation, EPNG expected to find a near-surface source for the contamination observed at monitoring wells MW-8, MW-9, and MW-5; however, based on the results presented in Table 1, no obvious source has been identified. None of the borings to the southeast of the Praxair pond showed substantial levels of BTEX or TPH, and the only locations with appreciable levels of contaminants near the surface were to the northeast of MW-5 in the area near MW-8 and MW-9. Based on the groundwater flow direction in this area, to the northwest, it is unlikely that this area could be a source for the contamination detected in MW-5. To verify this, EPNG will install a boring between GPH-12 and MW-5 to see if there is any indication of contamination contributing to the impacts detected in MW-5.

Topographically, the southern portion of the site is much higher than the north, where most of the impact has been seen. It is possible that the area beneath the Aneth-San Juan and Barker Dome lines, which is topographically lower than the area surrounding it, has acted as a corridor for any contaminant migration that has occurred. The extremely low levels of BTEX and TPH detected in this area suggest that any migration of contaminants in this area is no longer occurring, at least near the surface. EPNG has identified Former Pond #1, Flare Hill, and a former pigging station located to the south of the WGR pigging station as possible source areas. Soil boring locations SB-1, SB-3, and SB-8, shown on Figure 4, have been selected to investigate these possibilities. Additional borings located to the northwest of the Praxair pond, and to the northwest of Former Pond #1 may be installed if there is sufficient evidence of hydrocarbon impact in these areas detected during the next phase of the field investigation. Isoconcentration maps were generated depicting the results of the geoprobe investigation for total BTEX and TPH and included as Figures 5 to 10.

Because the geoprobe investigation failed to reach a depth greater than 15 ft below ground surface, EPNG believes there is not enough information at this time to produce an accurate and detailed site conceptual model and cross-sections that adequately show the subsurface lithology and area of impact. Therefore, EPNG proposes additional soil borings be completed to define the extent of contamination and reach a depth suitable for producing cross-sections of the site.

### **Next Phase of Work**

Based on the results of the phase I geoprobe investigation, EPNG has identified 8 areas for further investigation with a hollow-stem auger rig, shown on Figure 4. This investigation will focus on the area to the north and northeast of the Praxair pond, in the area showing the most impact during the phase I geoprobe investigation. Additional soil borings are proposed to the northwest of Former Pond #1 and to the northwest of the Praxair pond to address possible upgradient sources in these areas as well as identifying the extent of contamination. The additional locations may be modified in the field based on observations of the level of impact in these areas. Temporary piezometers or monitoring wells will be installed in soil borings with obvious signs of contamination for further investigation and monitoring. All temporary wells will

be surveyed and groundwater elevation data will be gathered to generate a more accurate groundwater elevation map in this area.

A detailed workplan for this investigation, *Proposed Workplan for Additional Phase I Investigation of Potential Hydrocarbon Impacts as Part of a Stage I Abatement Plan at the San Juan River Plant*, has been included in Appendix D.

In addition, EPNG will produce an updated site map that shows all current and former structures in the area. All locations will be surveyed, including existing monitoring wells, to aid in the generation of the new map. At this time, geoprobe and hollow-stem soil boring locations will be surveyed for use in generating cross-sections of the site.

Once the results of the additional phase I investigation have been received, EPNG will prepare a detailed site conceptual model. This will be used in preparing a phase 2 workplan for a permanent groundwater monitoring program at the site. If necessary, the report will also address what additional information is necessary for implementation of a Stage 2 remediation program, as set forth by NMOCD.

If you have any questions, please call me at (719) 520-4761.

Sincerely,

*Chandler S. Cole*

for

Todd J. Muelhoefer, P.G.

Project Manager

Environmental Remediation

El Paso Corporation

cc: Mr. Denny Foust, NMOCD Aztec District Office  
Dr. Robert Sterrett, EMS  
Chandler Cole, MWH  
Todd Muelhoefer – General File  
SJRP Praxair File

TABLE 1  
 2006 PRAXAIR GEOPROBE INVESTIGATION  
 SOIL SAMPLE ANALYTICAL DATA  
 EPNG SAN JUAN RIVER PLANT SITE

Boring location	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)	PID
GPH 1	0-1	0.00084J	0.0019	0.0022	0.0023	0.0	<5.7	<8.9	<8.9	0
	8.5-9.5	<0.0011	0.00075J	<0.0011	0.0024	0.0	<6.2	<9.3	<9.3	0
GPH 2	0-1	0.00036J	0.0011	0.00064J	0.0050	0.0	<6.2	<9.3	<9.3	0
	7-8	<0.0011	0.00042J	<0.011	0.0015J	0.0	<5.8	<9.1	<9.1	0
GPH 3	0-1	0.00036J	0.00099J	0.00095J	0.0025	0.0	<5.3	<8.8	<8.8	0.1
	10-11	0.00034J	0.00081J	<0.0011	0.0024	0.0	<5.6	<9.0	<9.0	0.7
GPH 4	0-1	<0.0013	<0.0013	<0.0013	<0.0026	0.0	<8.1	<4.4	<4.4	0
	8-9	0.00084J	0.0025	0.0010J	0.0136J	0.0	<6.3	<9.4	<9.4	0
GPH 5	0-1	<0.0011	0.00051J	0.00069J	0.0015J	0.0	<5.8	<9.1	<9.1	0
	10-11	0.002	0.0055	0.0026	0.0151	0.0	<6.7	<10	<10	0
	13-14	0.0025	0.0027	0.0014	0.0066	0.0	<7.5	<10	<10	0
GPH 6	0-1	<0.067	0.552	4.900	69.800	75.3	1,540J	249	1,789	401
	9-9.5	0.339J	4.950J	58.600	457.000	520.9	7,200	1,770	8,970	842
	10-11	0.0046	0.0285	0.935	1.280	2.2	141	47.9	189	861
	11-12.5	<1.3	3.600	30.800	215.000	249.4	5,680	135	5,815	326
GPH 7	0-1	<0.0011	<0.0011	<0.0011	<0.0023	0.0	<3.2	<9.4	<9.4	0
	8-9	<0.0011	0.0014	<0.0011	0.0084	0.0	10.2	42.9	53	10
GPH 8	0-1	<0.0012	0.00061J	<0.0012	0.0032	0.0	7.13	391	398	120
	10-11	0.0252	0.070	0.465	9.290	9.9	242	337	579	1247
	11.5-12.5	411J	50,400	16,600	335,000	813	1890J	1,950	3,840	1262

TABLE 1  
 2006 PRAXAIR GEOPROBE INVESTIGATION  
 SOIL SAMPLE ANALYTICAL DATA  
 EPNG SAN JUAN RIVER PLANT SITE

Boring location	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total xylenes (mg/kg)	Total BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	TPH (mg/kg)	PID
GPH 9	0-1	<0.0054	0.0035J	<0.0054	0.0122	0.0	<6.1	<9.4	<9.4	9.3
	10-11	<0.067	0.0382	0.346	5.340	5.7	191	376	567	1013
	11-12	<0.057	0.0583	0.096	1.130	1.3	88.8J	10.3	99.1	915
GPH 10	0-1	<0.0012UJ	0.00024J	<0.0012UJ	0.0013J	0.0	<6.6UJ	4.70J	4.70J	5.6
	10-11	0.474	1.5	19.500	257.000	<b>278.5</b>	2,750	913	<b>3,663</b>	<b>1196</b>
	13.5-14.5	0.0505J	0.337	1.710	10.200	12.2	382J	121	<b>503</b>	<b>725</b>
GPH 11	0-1	<0.0010	<0.0010	<0.0010	0.00094J	0.0	<5.6	14.7	14.70	1.9
	10-11	0.00053J	0.00027J	0.0028	0.0024	0.0	<6.3	<9.4	<9.4	3.0
	13-14	0.0013J	0.0017J	0.0051J	0.0589J	0.1J	<6.8	<9.8	<9.8	5.6
GPH 12	0-1	<0.0010	<0.0010	<0.0010	<0.0021	0.0	<5.7	9.78	9.78	0
	10-11	<0.0013	0.00053J	0.0011J	0.0027	0.0	<7.3	<10	<10	0
	14-15	<0.0012	0.00040J	<0.0012	0.0021J	0.0	5.17	<9.9	5.17	0
GPH 13	0-1	<0.0011	<0.0011	<0.0011	<0.0022	0.0	<6.3	<9.3	<9.3	0
	8-9	<0.0012	<0.0012	<0.0012	<0.0024	0.0	<7.1	<10	<10	0.9
GPH 14	0-1	<0.0011	<0.0011	<0.0011	<0.0022	0.0	<6.0	<9.3	<9.3	0
	7.25-8.25	<0.0011	<0.0011	<0.0011	<0.0022	0.0	<6.0	<9.4	<9.4	0
GPH 15	0-1	<0.0011	0.00023J	<0.0011	<0.0022	0.0	5.57J	12.6	18.2	0
	10-11	<0.0012	<0.0012	<0.0012	0.0017J	0.0	<6.9	<10	<10	0
	13.5-14.5	<0.0012	<0.0012	<0.0012	0.0031	0.0	<7.1	<10	<10	0

< indicates the concentration is below the detection limit

J indicates the concentration is estimated

UJ indicates a possible false negative

Bolded values indicated the concentration exceeds the NMOCED Recommended Remediation Action Level

ft = feet

mg/kg = milligrams per kilogram

BTEX = benzene, toluene, ethylbenzene, and total xylenes

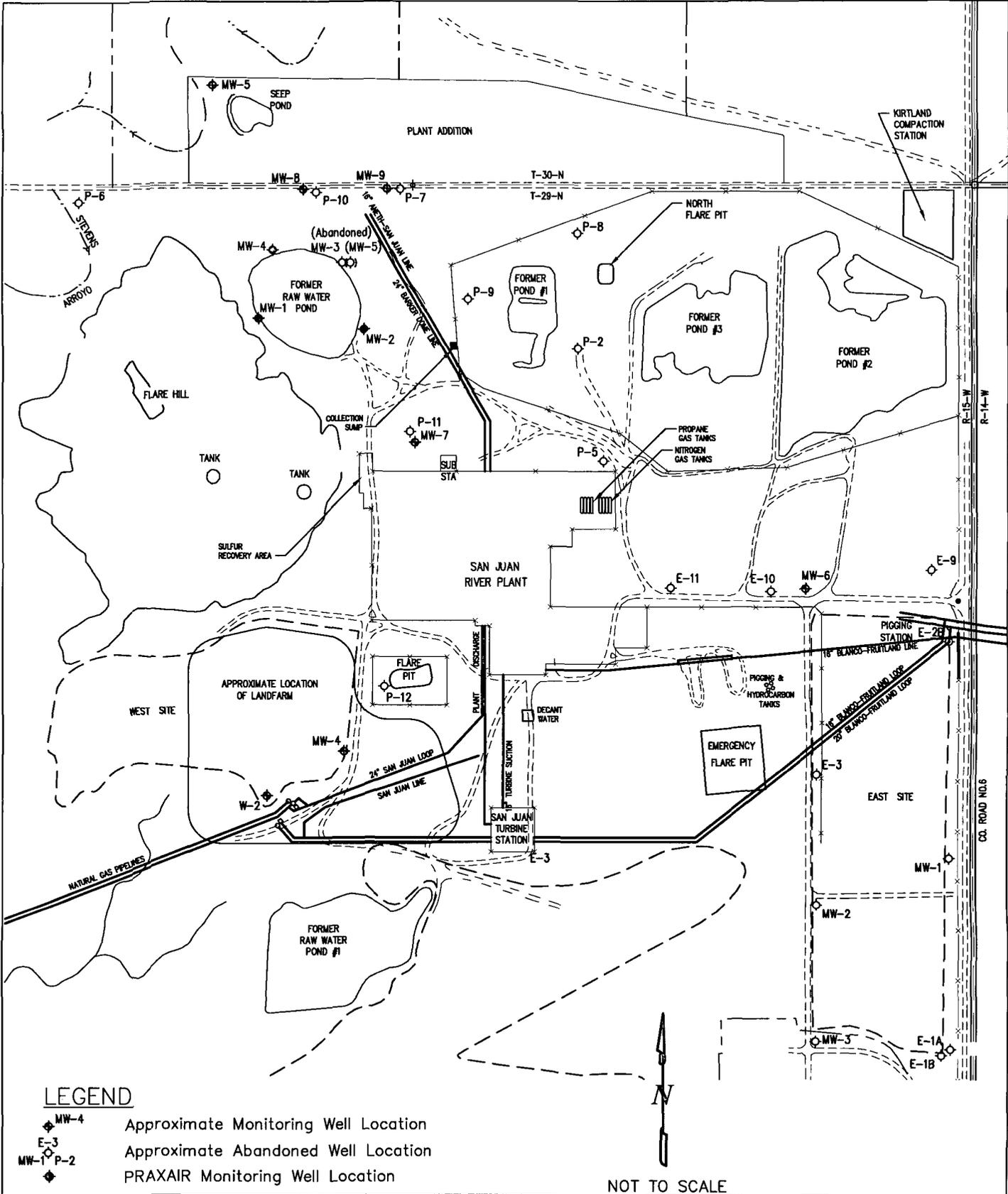
PID = photo ionization detector

TABLE 2  
 2006 PRAXAIR GEOPROBE INVESTIGATION  
 GROUNDWATER ANALYTICAL DATA  
 EPNG SAN JUAN RIVER PLANT SITE

Piezometer Location	Sample Depth (ft)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total xylenes (ug/L)
GPH-7	8.5-9	<b>10.5</b>	15.1	3.8	46

mg/L = milligrams per liter

*Bolded values indicated the concentration exceeds the NMWQCC Groundwater Standards*

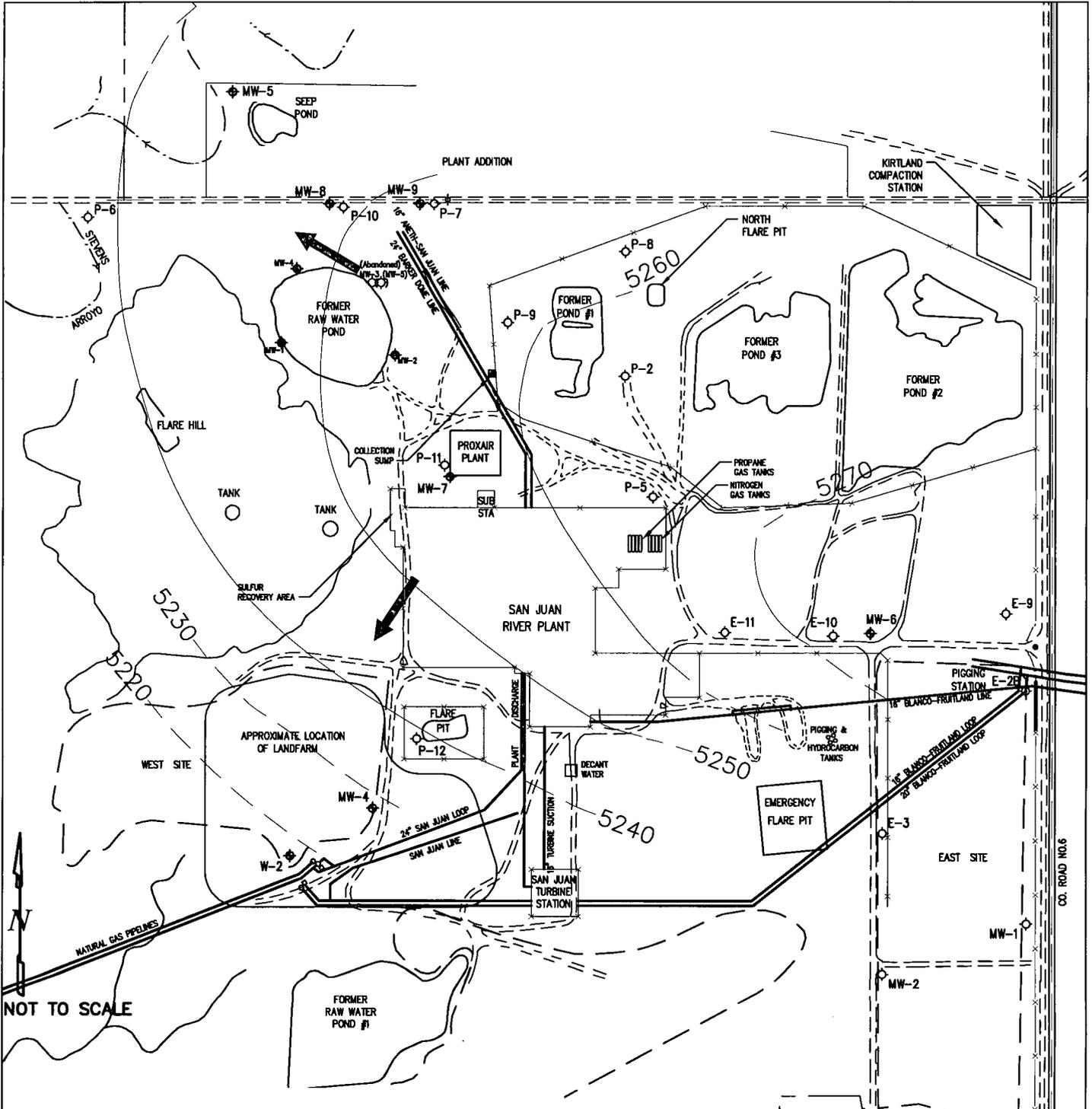


SITE LAYOUT MAP  
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 1

SURP\_01-ANREPORT



NOT TO SCALE

**LEGEND**

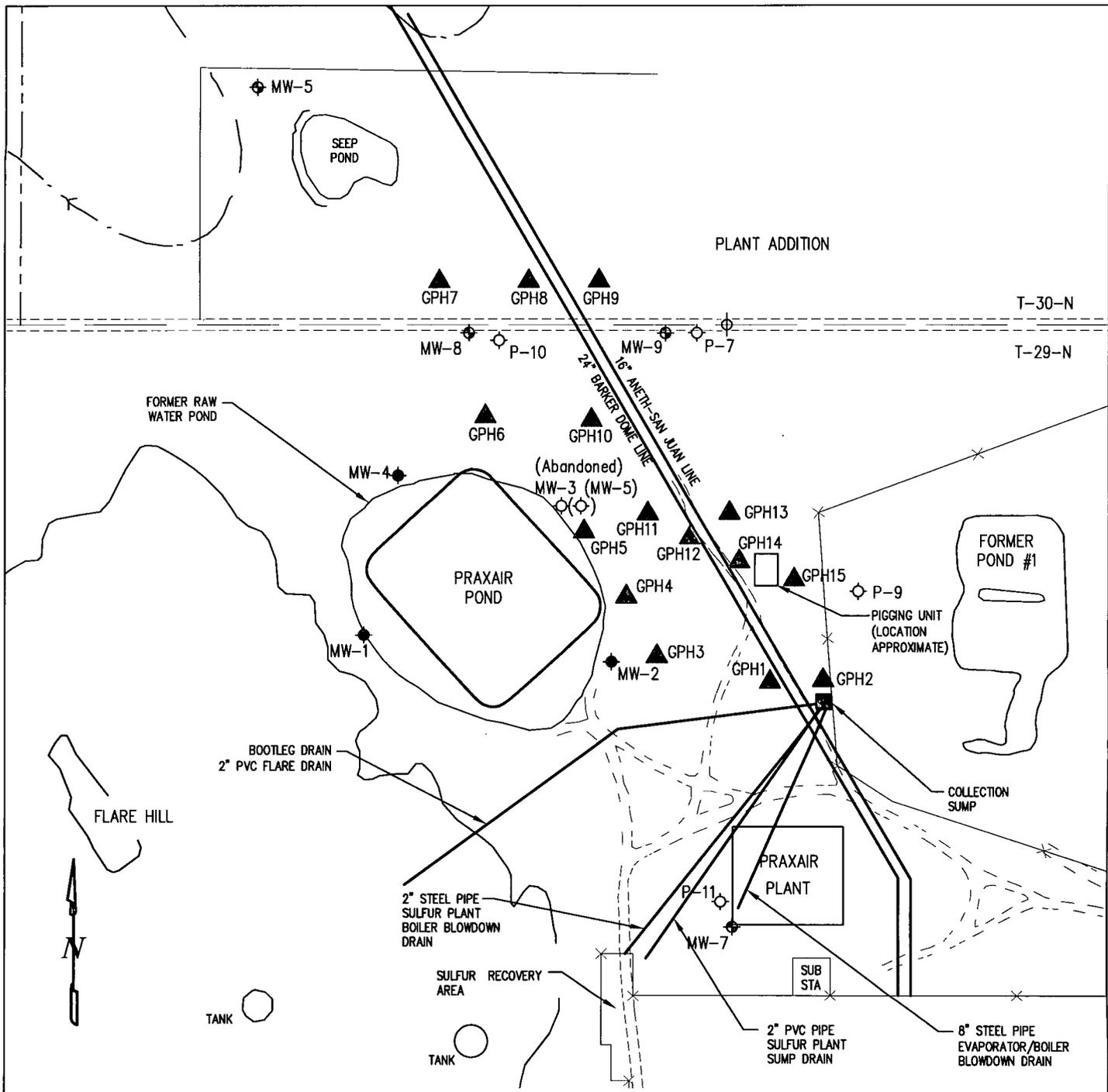
- MW-4 Approximate Monitoring Well Location
- P-2 Approximate Abandoned Well Location
- 5260 Potentiometric Surface (Approximate & Assumed Where Dashed)
- GWEL Groundwater Elevation (Feet Above Mean Sea Level Unless Noted Otherwise)
- TOC Top of Casing
- Direction of Groundwater Flow (Estimated)

GROUNDWATER ELEVATION MAP  
MARCH 2006  
SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 2

SURP 3-06 GW ELEV



**LEGEND**

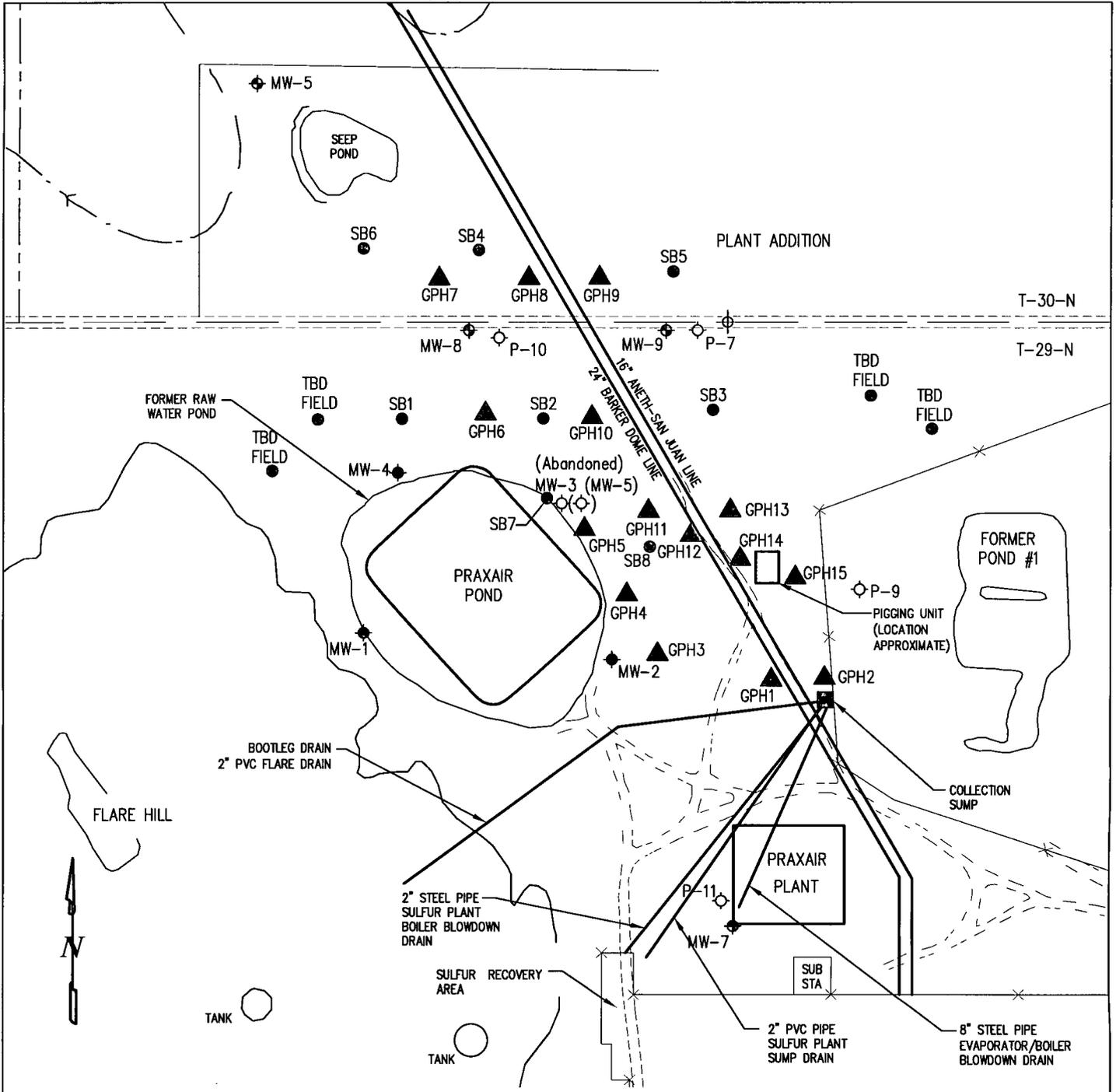
- MW-4 ◆ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◆ PERCHED WATER MONITORING LOCATION
- P-2 ○ ABANDONED WELL LOCATION
- ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 GEOPROBE SOIL BORING LOCATIONS

EL PASO NATURAL GAS

FIGURE 3

SURP DETAILED PONDS



**LEGEND**

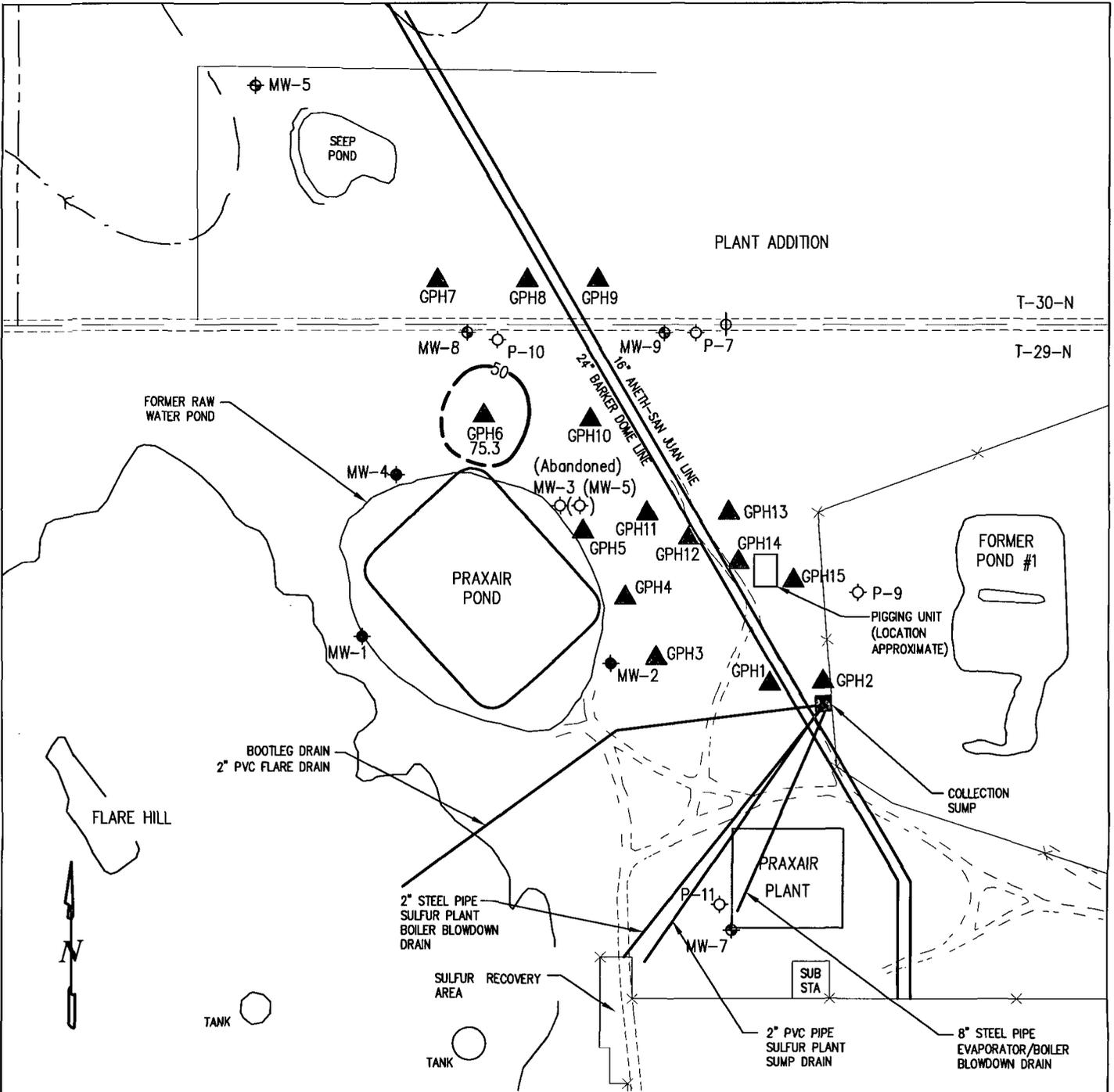
- MW-4 ◆ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◆ PERCHED WATER MONITORING LOCATION
- P-2 ◊ ABANDONED WELL LOCATION
- ▲ GEOPROBE SOIL BORING LOCATION (FEBRUARY, 2006)
- PROPOSED ADDITIONAL SOIL BORING LOCATIONS

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 PROPOSED ADDITIONAL SOIL BORING LOCATIONS

EL PASO NATURAL GAS

FIGURE 4

SIRP DETAILED PONDS



**LEGEND**

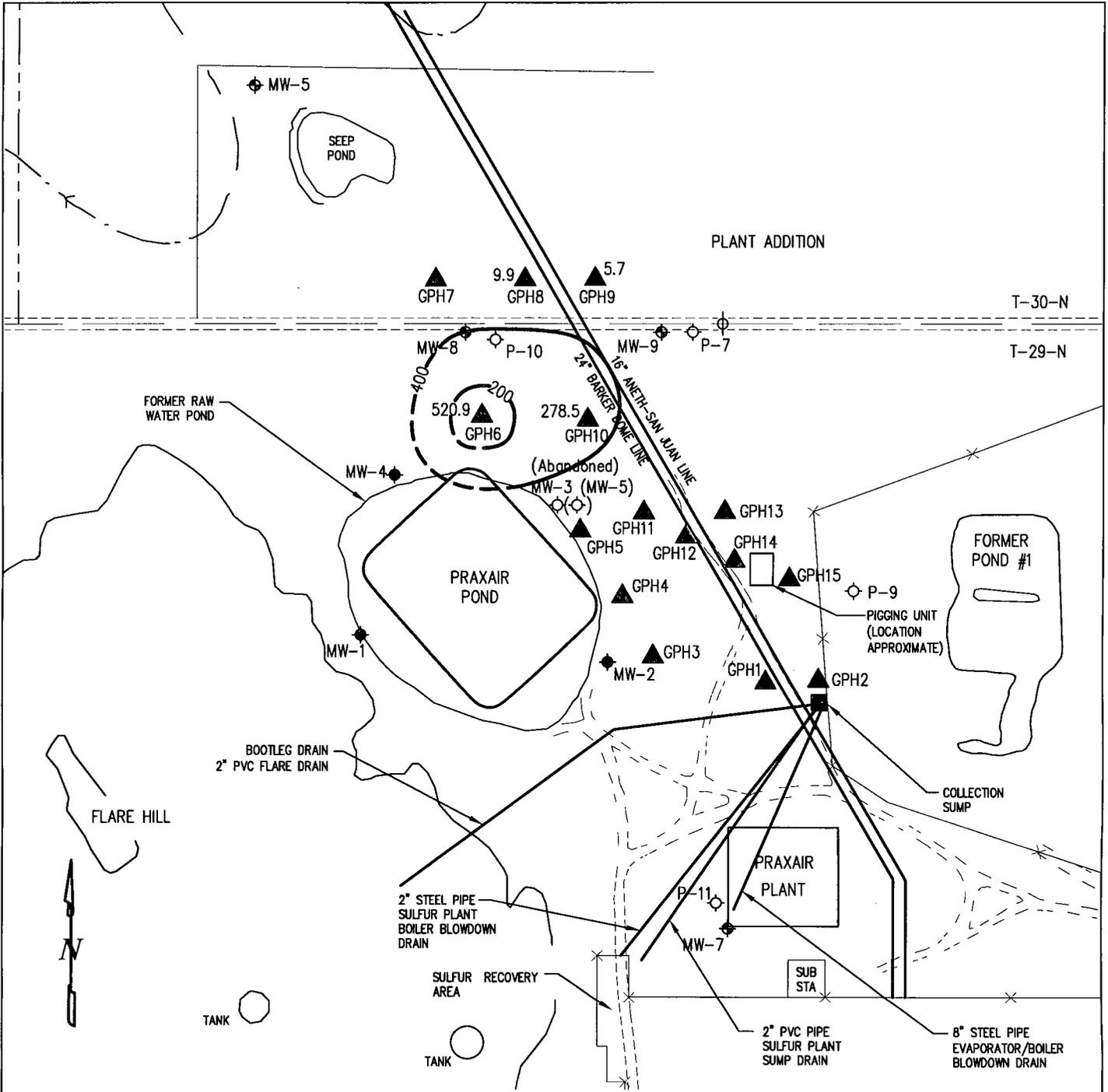
- MW-4 ◆ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◆ PERCHED WATER MONITORING LOCATION
- P-2 ○ ABANDONED WELL LOCATION
- GPH3 ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)
- 75.3 TOTAL BTEX CONCENTRATION (mg/L)
- TOTAL BTEX ISOCONCENTRATION (mg/L) - ESTIMATED AND ASSUMED WHERE DASHED

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 TOTAL BTEX ISOCONCENTRATION MAP  
 0-1 FT BELOW GROUND SURFACE

EL PASO NATURAL GAS

FIGURE 5

SJR DETAILED PONDS



**LEGEND**

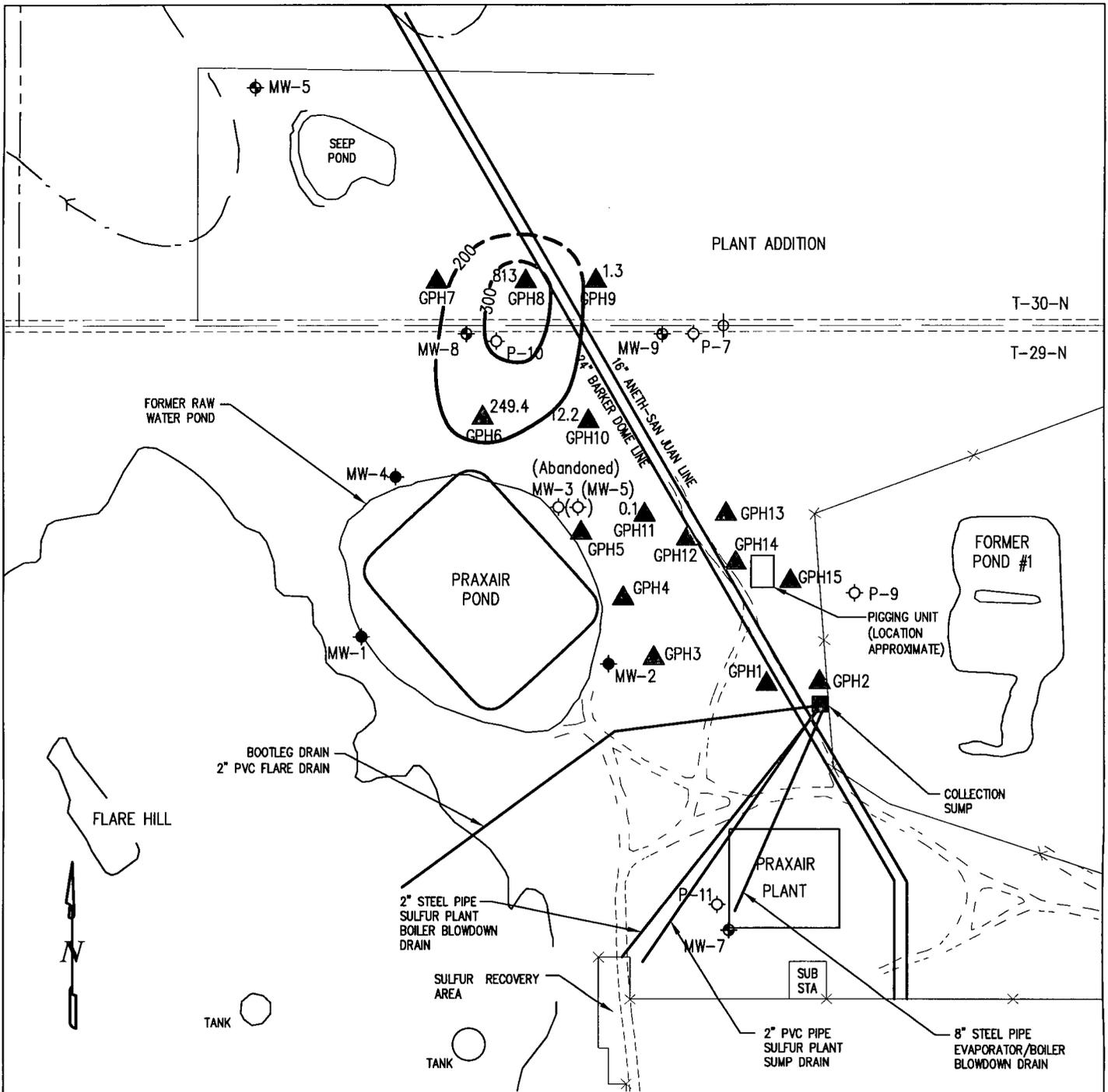
- MW-4 ◊ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◊ PERCHED WATER MONITORING LOCATION
- P-2 ◊ ABANDONED WELL LOCATION
- GPH3 ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)
- 75.3 TOTAL BTEX CONCENTRATION (mg/L)
- TOTAL BTEX ISOCONCENTRATION (mg/L) - ESTIMATED AND ASSUMED WHERE DASHED

SARP DETAILED PONDS

**PRAXAIR FACILITIES  
SAN JUAN RIVER PLANT  
TOTAL BTEX ISOCONCENTRATION MAP  
8-11 FT BELOW GROUND SURFACE**

EL PASO NATURAL GAS

**FIGURE 6**



**LEGEND**

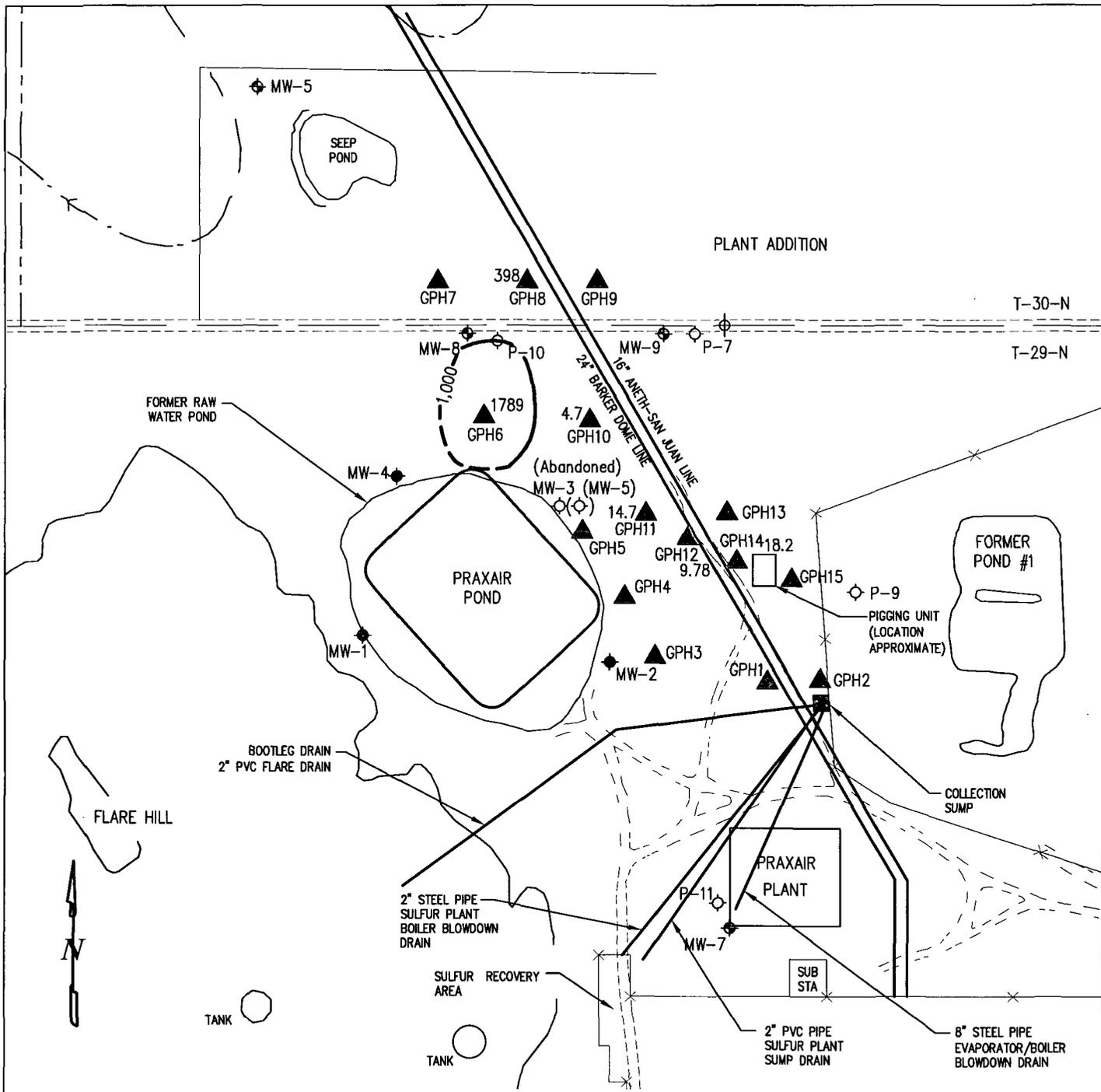
- MW-4 ◆ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◆ PERCHED WATER MONITORING LOCATION
- P-2 ○ ABANDONED WELL LOCATION
- GPH3 ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)
- 75.3 TOTAL BTEX CONCENTRATION (mg/L)
- TOTAL BTEX ISOCONCENTRATION (mg/L) - ESTIMATED AND ASSUMED WHERE DASHED

**PRAXAIR FACILITIES  
SAN JUAN RIVER PLANT  
TOTAL BTEX ISOCONCENTRATION MAP  
11-15 FT BELOW GROUND SURFACE**

EL PASO NATURAL GAS

**FIGURE 7**

SRRP DETAILED PONDS



**LEGEND**

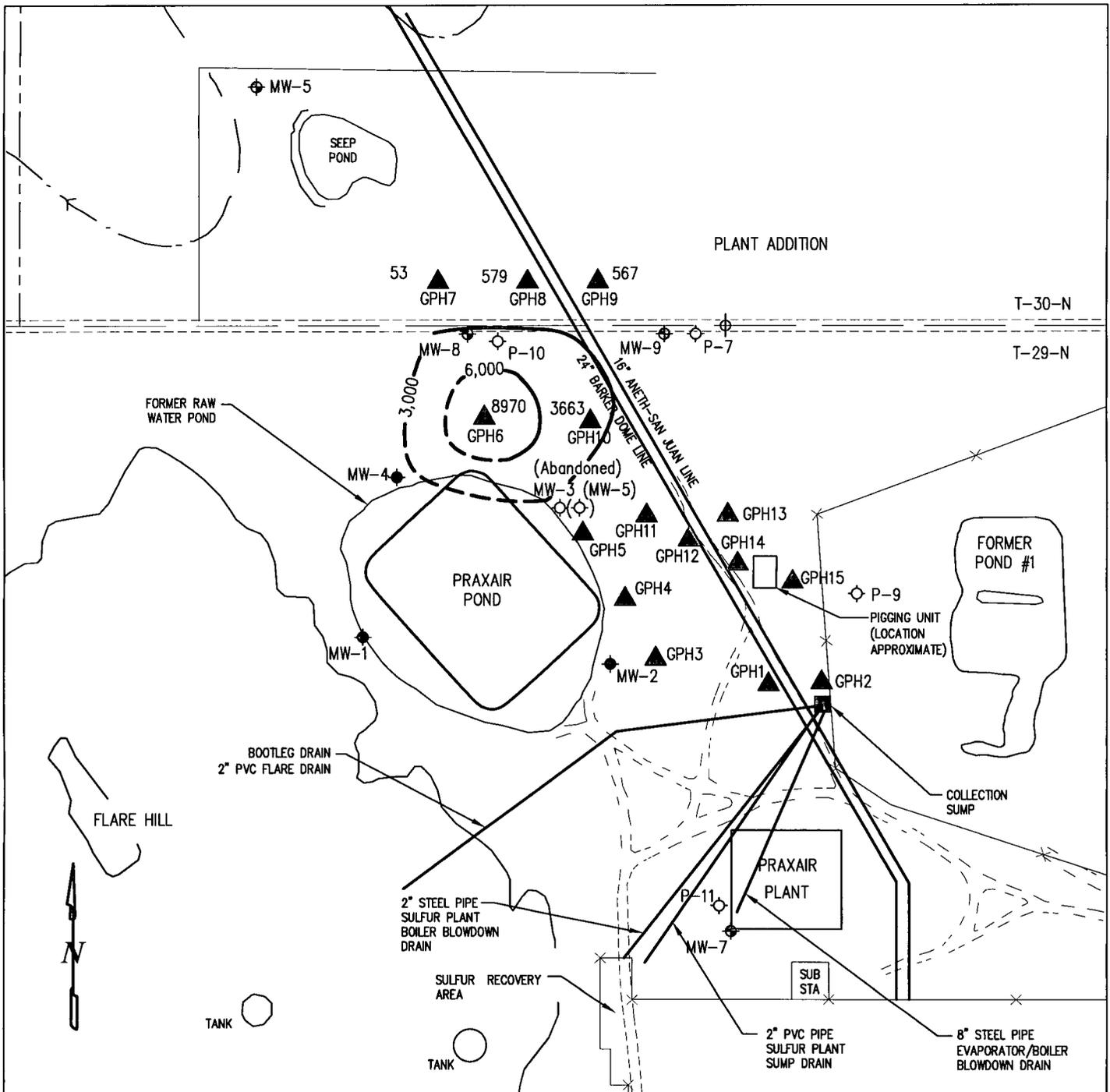
- MW-4 ● GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◈ PERCHED WATER MONITORING LOCATION
- P-2 ◊ ABANDONED WELL LOCATION
- GPH3 ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)
- 75.3 TOTAL PETROLEUM HYDROCARBONS (mg/L)
- TOTAL PETROLEUM HYDROCARBONS ISOCONCENTRATION (mg/L) – ESTIMATED AND ASSUMED WHERE DASHED

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 TPH ISOCONCENTRATION MAP  
 0-1 FT BELOW GROUND SURFACE

EL PASO NATURAL GAS

FIGURE 8

SARP DETAILED PONDS



**LEGEND**

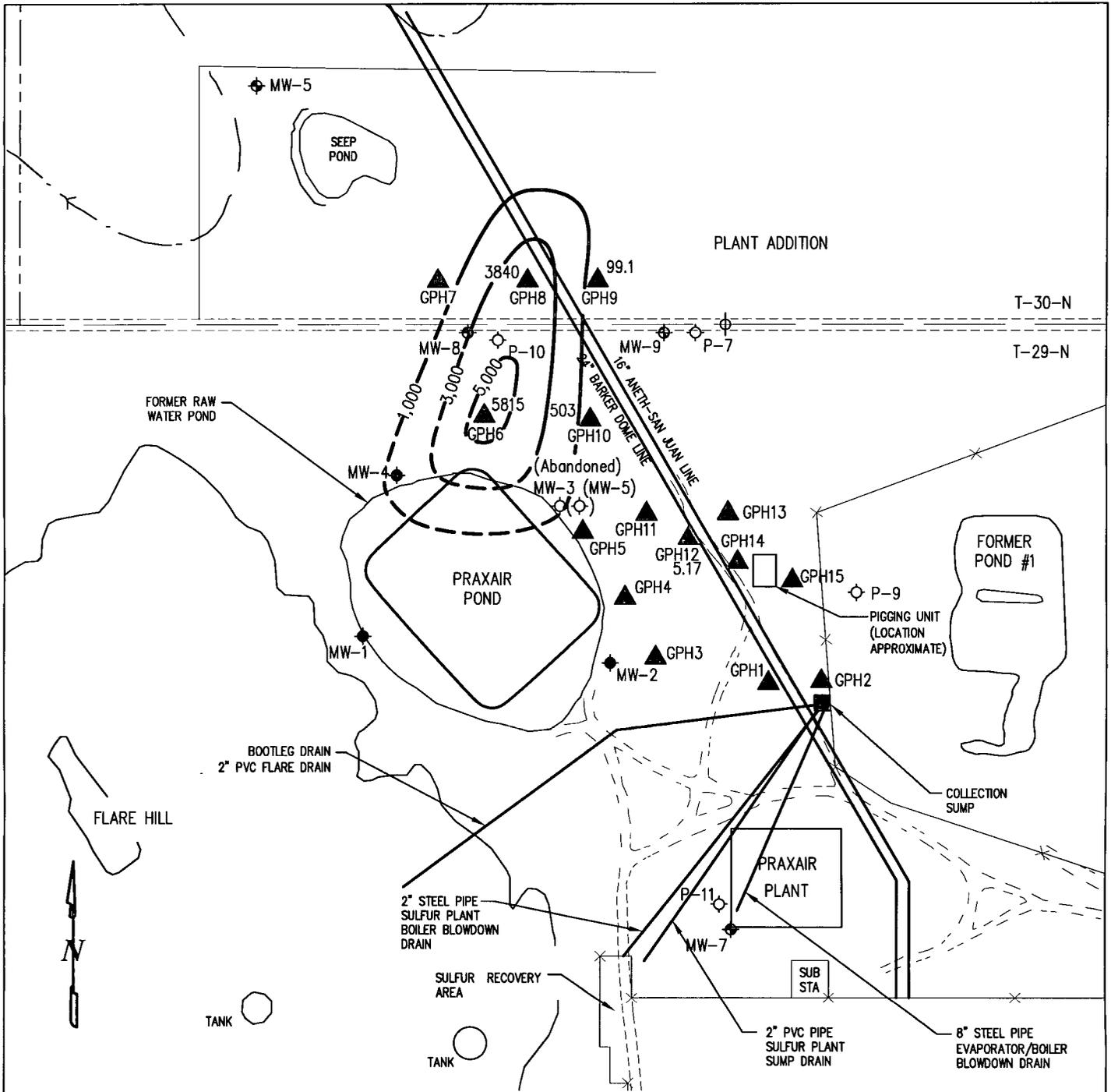
- MW-4 ◆ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◆ PERCHED WATER MONITORING LOCATION
- P-2 ○ ABANDONED WELL LOCATION
- GPH3 ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)
- 75.3 TOTAL PETROLEUM HYDROCARBONS (mg/L)
- TOTAL PETROLEUM HYDROCARBONS ISOCONCENTRATION (mg/L) - ESTIMATED AND ASSUMED WHERE DASHED

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 TPH ISOCONCENTRATION MAP  
 8-11 FT BELOW GROUND SURFACE

EL PASO NATURAL GAS

FIGURE 9

SLRP DETAILED PONDS



**LEGEND**

- MW-4 ● GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◈ PERCHED WATER MONITORING LOCATION
- P-2 ○ ABANDONED WELL LOCATION
- GPH3 ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)
- 75.3 TOTAL PETROLEUM HYDROCARBONS (mg/L)
- TOTAL PETROLEUM HYDROCARBONS ISOCONCENTRATION (mg/L) - ESTIMATED AND ASSUMED WHERE DASHED

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 TPH ISOCONCENTRATION MAP  
 11-15 FT BELOW GROUND SURFACE

EL PASO NATURAL GAS

FIGURE 10

SRP DETAILED PONDS

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3681  
Farmington, New Mexico 87499  
(505) 334-2791

Project Name El Paso San Juan River Plant  
Project Number Phase  
Project Location TAN RIZW SI BC SAN JUAN CO, NM

Elevation \_\_\_\_\_  
Borehole Location GPH 1  
GWL Depth 2.50 CST  
Logged By Lodestar  
Drilled By Direct Push  
Date/Time Started 2/14/06 1430  
Date/Time Completed 2/14/06 1510

Well Logged By Martin Nee LSI  
Personnel On-Site E. Meador Western Gas  
Contractors On-Site O. Brimley M. Porter Direct Push  
Client Personnel On-Site \_\_\_\_\_

Drilling Method Geoprobe  
Air Monitoring Method photo Vac PID

Depth (Feet)	Sample Interval (Feet)	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			0-1 road base						
0-5			clay to med. pebble gravel, unconsol, rounded to angular, poorly sorted, clay			0	0.0		0-5 easy
5-7			greyish orange 1-95 silty sand			0			5-7
7-7.5			very pale orange unconsolidated, mod well sorted, sub angular, occasional ss. chips clay			0	0		7-7.5 hard
7.5-9.5									refusal
9.5-10									dry
10-15									
15-20									
20-25									
25-30									
30-35									
35-40									

Comments: Backfilled 1/3 bag 3/8 bent. chips to surface hydrated 3/4 to 1/2

Geologist Signature MN 2/14/06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3661  
 Farmington, New Mexico 87496  
 (505) 334-2701

Project Name El Paso San Juan River Plant  
 Project Number Phase  
 Project Location T29W R12W S1 B1C

Elevation \_\_\_\_\_  
 Borehole Location GPH2  
 GWL Depth 25' est  
 Logged By Lodestar  
 Drilled By Direct Push  
 Date/Time Started 2-14-06 1513  
 Date/Time Completed 2-14-06 1600

Well Logged By Martin Nee  
 Personnel On-Site C Meadors  
 Contractors On-Site D Bromberg, M Portier  
 Client Personnel On-Site \_\_\_\_\_

Drilling Method Cased probe  
 Air Monitoring Method Photo Vac PID

Depth (Feet)	Sample Interval (LAB)	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0		48	0-8 silty sand						
0-5		48	grayish orange to dusky yellow @ 2.5' silt to v. fine sand, well sorted, grades to weathered sandstone @ 7.5'						0 0-5 easy
5-7		48	unconsol. detrital at top well rounded, detrital @ 7.5'-8'						0 5-7
7-8		100							0 7-8 hard
8-15									refused @ 8' bgs day
15-20									
20-25									
25-30									
30-35									
35-40									

Comments: Back-filled w/ 3/8 inch chips, hydrated & flagged

Geologist Signature [Signature] 2/14/06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3681  
Farmington, New Mexico 87499  
(505) 334-2781

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_  
Phase \_\_\_\_\_  
Project Location T29N R12W S 1, b,c, San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location LPH 3  
GWL Depth 30'  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-13-06 0916  
Date/Time Completed 2-13-06 0947

Well Logged By Martin Nee  
Personnel On-Site C. Medina Wostenbaas  
Contractors On-Site J. Crowley M. Porter Direct Push  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval LAB	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0	0-1	53/60	0-6" mod. yllc brown, silt, clay soil, uncons. mod sorted.	CL					hard
5		48/60	5'-25" fill material pale yellowish brown clay to coarse rubble gravel 25-6" yellowish coarse weathered sandstone v fine grain, well sorted well consolidated subangular	GC		0		0.1	hard
10	10-11	12'	6-11 grayish orange weathered siltstone with varying degrees of clay well consolidated			0		0.4	hard
15						0		0.7	hard
20									refused @ 11' bgs dry
25									
30									
35									
40									

Comments: Refused 0947 in weathered siltstone. Back filled with 3/8 bentonite chips, hydrated & flagged

Geologist Signature MN 2-13-06

# RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3861  
Farmington, New Mexico 87499  
(505) 334-2791

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_ Phase \_\_\_\_\_  
Project Location T29N R12W S 1, b,c, San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location 1144  
GWL Depth 19.65'  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-13-06 1036  
Date/Time Completed 21306 1050

Well Logged By Martin Nee  
Personnel On-Site C. Meador, W. H. ...  
Contractors On-Site D. Ramsey, Mike Porter  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval (LAB)	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: MDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			0-5 yellowish gray silt. clay, unconsolidated, med. well sorted, .5-9 silt. clay / weathered shale, varying degrees of silt. 2" to 6" alternating bands of dark gray to light gray to orange with Fe staining (consolidated).	CL		0	0	0	0-5 easy 5-5 hard
5						0	0	0	5-9' hard refusal @ 9'
10									dry
15									
20									
25									
30									
35									
40									

Comments: Residual silt/clay/shale refusal 9' logs 1050' - 3 1/2" bentonite chips to surface

Geologist Signature MN 2-13-06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

PO Box 3681  
Farmington, New Mexico 87409  
(505) 334-2781

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_ Phase \_\_\_\_\_  
Project Location T28N R12W S 1, b,c, San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location GRH 5  
GWL Depth 25  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-13-06 1135  
Date/Time Completed 2-13-06 1215

Well Logged By Martin Nee  
Personnel On-Site C Meador  
Contractors On-Site D. Cronley Mike Paton DP  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval LAB	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0		43	0-5' silty clay soil pale yellow grey unconsol. med sorted 3-4" fill material clay to pebbly gravel	CL		0	0	0	Easy
5		58	2-4' silty, poorly sorted unconsolidated 4-14' shale, westward grey at the skin on			0	0	0	hard
10		52	Portia surfaces well consolidated w/ v-fine grained well cemented ss that is			0	0	0	hard
15		60	2" thick @ 8' bags on top of v-fine grained sand @ 12" thick, unconsolidated						refused @ 14' dry
20									
25									
30									
35									
40									

Comments:

Refused @ 14' bag, 13 bag 3/8 bent chips to surface, hydrated / 29928

Geologist Signature

MR 2-13-06

# RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

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PO Box 3681  
Farmington, New Mexico 87409  
(505) 334-2781

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_ Phase \_\_\_\_\_  
Project Location T29N R12W S 1, b,c, San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location CPH 10  
GWL Depth 6.31 @ MW-3  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 21506 1232  
Date/Time Completed 21300 1310

Well Logged By Martin Nee  
Personnel On-Site C Meador, Walter Boas  
Contractors On-Site D Cronley, M Porter  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval	Sample Type & Recovery (feet)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0									
0-1			0-5' clay moderate yellowish brown well sorted moderately consolidated moist			0		401	Easy
5			5-12.5' weathered shale grades from olive grey to light grey to dark grey @ 9.5'			0		786 942	Easy
9-9.5			then to pale brown @ 12.5'. 9-9.5' is moist w/strong HC odor.			0		826	hard
10-11								120	hole is dry
11.5-12.25									
15									refused @ 12.25 dry
20									
25									
30									
35									
40									

Comments: Set auger to T.D. = 1225 10' 0.010 screen  
12.25 2.25 PVC blank 25" x 24" A bent gravel  
10-20 silica sand + .5 lbs 3/8 chips to surface hydrated  
Geologist Signature [Signature] 2-13-06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

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PO Box 3881  
Farmington, New Mexico 87499  
(505) 334-2781

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_ Phase \_\_\_\_\_  
Project Location T26N R12W S 1, b.c. San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location GP17  
GWL Depth 4' CAS est  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-13-06 1335  
Date/Time Completed 2-13-06 1432

Well Logged By Martin Nee  
Personnel On-Site C. Meador, D. Brown, M. Kutz  
Contractors On-Site \_\_\_\_\_  
Client Personnel On-Site \_\_\_\_\_

Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval LAB	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NBU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0		42/60	0-1.25 clay mod. yellowish brown grading to v fine sand @ 1.25'	CL		0		0.0	Easy
5		58/60	1.25-4.5 Sand & clay light olive grey	CL		0		10'	hard
10			4.5-5. SS? med grey 6.25-5 w/acid Very hard highly consol. 5-9' weathered shale greenish grey. FC staining on posting surfaces.						refused @ 9' dry
15									
20									
25									
30									
35									
40									

Comments: 10' Screen to 10" above ground, sand to 6" below hole plus to surface. 7" PVC blank on top of screen to 17" above ground surface. Dry

Geologist Signature [Signature] 2-13-06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3881  
Farmington, New Mexico 87499  
(505) 334-2791

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_ Phase \_\_\_\_\_  
Project Location T28N R12W S 1, b,c, San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location GPH 8  
GWL Depth \_\_\_\_\_  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-13-06 1448  
Date/Time Completed 2-13-06 1518

Well Logged By Martin Nee  
Personnel On-Site \_\_\_\_\_  
Contractors On-Site D. Bromley, M. Pota  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval (LAB)	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0		42	0-1.5' clay pale yellowish brown white alkaline parting throughout dry					12 <sup>00</sup>	ECSY
5		36	1.5-11' weckland shal clay olive gray Fe staining on parting surfaces, moist					12 <sup>47</sup>	Mod
10		32	11-12.5 silt sand light gray silt to very fine sand, mod well sorted subangular mod well consolidated					12 <sup>52</sup>	hard Refusal 12.5 dry
15		60							
20									
25									
30									
35									
40									

Comments: 52.5" Risers 78.5" above gravel; sand to 17.5' bgs  
1-7.5' to gravel surface 3/8" round chips, 1" ID .010 size  
PVC screen 10' long

Geologist Signature 2-13-06 

# RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

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PO Box 3681  
Farmington, New Mexico 87409  
(505) 334-2781

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_ Phase \_\_\_\_\_  
Project Location T29N R12W S 1, b,c, San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location 69PH9  
GWL Depth 10.25  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-13-06 15:40  
Date/Time Completed 2-13-06 16:37

Well Logged By Martin Nee  
Personnel On-Site \_\_\_\_\_  
Contractors On-Site D. Brantley M. Porter  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval LAB	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0									
4.5		45	0-1' clay, pale yellowish brown, white > kalic on partings & through out, dry	CL		0		9.3	easy
5		60							
5.8		58	1-11' weathered shale clay, olive green, Fe staining on parting surfaces moist			0		6.9	5-7 easy
10		60						9.13	7-9 mod
10		60						9.11	9-11 mod
11		58	11-12' weathered SS silty sand, light gray, silt to fine sand mod well sorted sub ang. mod well consol. dry			0		10.13	11-12' hard
15								9.15	Refused dry
20									
25									
30									
35									
40									

Comments: 40' riser 29" above ground sand to 1.5 hrs  
3/8 inch chips to surface. 10' 100 screen 1" ID

Geologist Signature [Signature] 2-13-06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

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PO Box 3681  
Farmington, New Mexico 87499  
(505) 334-2781

Project Name El Paso San Juan River Plant  
Project Number Phase  
Project Location T28N R12W S 1, b.c. San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location Grid 10  
GWL Depth 15 EST  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-14-06 0842  
Date/Time Completed 2-14-06 0747

Well Logged By Martin Nee  
Personnel On-Site Charlie Meador, Weston Lars  
Contractors On-Site D Complex M Porter  
Client Personnel On-Site \_\_\_\_\_  
Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval (feet)	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0	0-1.5'	38/60	0-1.5' <u>ELL mod yellow brown, fine sand to clay, poorly sorted minor pebble gravel rounded, unconsol.</u>			0		5.0	0-5' <u>E25V</u>
5	1.5-9'	48/60	1.5-9' <u>sandy clay mod yellow to brown well sorted, fine sand to clay, subing. med consol. mica</u>	CL		0		14.1 18.2 119.0	5-7' <u>E25V</u> 7-9' 9-11'
10	9-14.5'	35/54	9-14.5' <u>weathered shale olive gray to 9.5' grayish black to 10.5' 10.5-14' green to olive gray, dry, very well consolidated</u>			0		122.5 72.5	11-13' 13-14.5' <u>Refused @ 14.5' bgs dry</u>
15									
20									
25									
30									
35									
40									

Comments: backfilled with 3/8 chips to surface  
3 hydrated, flagged

Geologist Signature [Signature] 2-14-06

# RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3681  
Farmington, New Mexico 87409  
(505) 334-2791

Project Name El Paso San Juan River Plant  
Project Number Phase  
Project Location T28N R12W S 1, b.c. San Juan Co. NM

Elevation \_\_\_\_\_  
Borehole Location APM11  
GWL Depth 20' est  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 2-14-06 0951  
Date/Time Completed 2-14-06 1038

Well Logged By Martin Nee  
Personnel On-Site C. Meador western GCS  
Contractors On-Site D Bromby M Porter DP  
Client Personnel On-Site \_\_\_\_\_

Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval (ft)	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			fill, mod. yllsh. brown, clay to med. sand, poorly sorted unconsolidated to rounded minor pebbles gravel dry						1.9 0-5 very
5		33/60	1-7.5' clay dark yllsh orange abundant alkali mod well consol 7.5-14' weathered shale	CL					2.2 5-7 2.1 7.9 mod 3.0 9-11
10		55/60	light olive brown to 9' grayish black to 10' olive brown to 14' dry, well consolidated Fe staining on parting surfaces						2.1 11-13 mod 5.6 13-14 hard retained 14' dry
15		44/48							
20									
25									
30									
35									
40									

Comments: No hydrocarbon indication, 1/3 test 3/8 test chips to surface, hydrated & pugged

Geologist Signature MN 2-14-06

**RECORD OF SUBSURFACE EXPLORATION**

Lodestar Services, Inc

Page 1 of 1

PO Box 3681  
Farmington, New Mexico 87499  
(505) 334-2791

Project Name El Paso San Juan River Plant  
Project Number Phase  
Project Location T29N R12W S 1, b.c, San Juan Co. NM

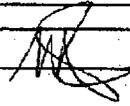
Elevation \_\_\_\_\_  
Borehole Location CPH 12  
GWL Depth 20 east  
Logged By Lodestar Services  
Drilled By Direct Push  
Date/Time Started 21306 1042  
Date/Time Completed 21306 1130

Well Logged By Martin Nee  
Personnel On-Site C Meador West-concess  
Contractors On-Site D Bromley M Patten DP  
Client Personnel On-Site \_\_\_\_\_

Drilling Method GEOPROBE  
Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval LAB	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0		33 1.2	0-1.5 Fill pale yellowish brown clay to pebble gravel angular to rounded, unconsol. poorly sorted, dry						0 0-5 east
5		53 60	1.5-2.5 clay pale yellowish brown to light olive brown @ 7.5', moist from 5-7'	cl					.2 5-7 0 7-9 east 0 9-11
10		58 60	alkali throughout from 3-5', mod consol.						0 11-13
15		60	2.5-15 weathered shell light olive gray moist to 11', FC stain on peeling surfaces 13-15', mod well consol.						0 13-15 hard Refused 15' dry
20									
25									
30									
35									
40									

Comments: 3/8 bent chips to surface. Hy dated 4/1/99

Geologist Signature 

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3681  
 Farmington, New Mexico 87499  
 (505) 334-2791

Project Name El Paso San Juan River Plant  
 Project Number Phase  
 Project Location T29N R12W S 1, b.c, San Juan Co. NM

Elevation \_\_\_\_\_  
 Borehole Location GPH13  
 GWL Depth 121.5'  
 Logged By Lodestar Services  
 Drilled By Direct Push  
 Date/Time Started 2/14/06 1135  
 Date/Time Completed 2/14/06 1210

Well Logged By Martin Nee  
 Personnel On-Site medon weston GWS  
 Contractors On-Site D Cronley, M Porter DP  
 Client Personnel On-Site \_\_\_\_\_

Drilling Method GEOPROBE  
 Air Monitoring Method Photo Vac 2020

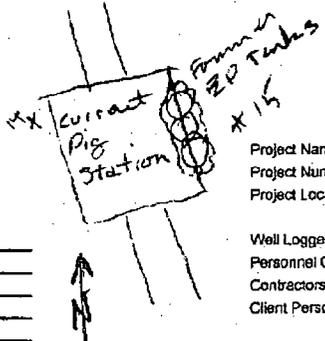
Depth (Feet)	Sample Interval (LAB)	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0		41	0-5' fill material clay to pebbles round angular to rounded poorly sorted, unconsolidated, pale yellow brown						0-5 easy
5		46	5-8' clay light olive green, moist, mod consolidated	CL					3-2 5-7 mod
10		48	8-9' silt, sandy clay						09 7-9 mod hard
15			light olive green poorly sorted, poorly consolidated sub angular						Refused @ 9' bgs dry
20			9- sand streaked gray very hard highly cemented v. fine grained may be siltstone or claystone, conoidal like structure, resists w/ HCL vigorous						
25									
30									
35									
40									

Comments: 1/3 bag 3/8" bent chips to surface, hydrated & bagged

Geologist Signature [Signature] 2-14-06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc  
 PO Box 3681  
 Farmington, New Mexico 87499  
 (505) 334-2791



Page 1 of 1

Project Name El Paso San Juan River Plant  
 Project Number \_\_\_\_\_  
 Project Location T29N R12W S 1, b.c. San Juan Co. NM

Elevation \_\_\_\_\_  
 Borehole Location GPH14  
 GWL Depth 25 est  
 Logged By Lodestar Services  
 Drilled By Direct Push  
 Date/Time Started 2-14-06 1221  
 Date/Time Completed 2-14-06 1320

Well Logged By Martin Nee  
 Personnel On-Site C. Muecke  
 Contractors On-Site D. Bromley M. Porter  
 Client Personnel On-Site \_\_\_\_\_  
 Drilling Method GEOPROBE  
 Air Monitoring Method Photo Vac 2020

Depth (Feet)	Sample Interval LAB	Sample Type & Recovery (Inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			0-.5' road base						
5	43/60		clay to pebbleground angular, to rounded unconsol, poor to solid			0	0		hard
10	58/42		1.5-1' shale, highly weathered, unconsol. light olive gray			0	0		5-7 7-8 hard
15			1-3' sand stone highly weathered No look in cemented moderate yellow brown						refused 8" dry
20			grades to yellowish gray @ 3' unconsol well sorted silty to v. fine sand may be up to 50% silt						
25			3-3.5' sand stone yellowish gray highly cemented, well indurated well sorted silt to v. fine sand						
30			3.5-8' weathered shale olive gray grading to grayish orange						
35			8' v. fine sand contact increasing to 8'						
40									

Comments:

1/3 bag 3/8 bent chips to surface, hydrated  
3/ logged

Geologist Signature

M. Nee 2-14-06

RECORD OF SUBSURFACE EXPLORATION

Lodestar Services, Inc

Page 1 of 1

PO Box 3681  
Farmington, New Mexico 87498  
(505) 334-2791

Project Name El Paso San Juan River Plant  
Project Number \_\_\_\_\_  
Phase \_\_\_\_\_  
Project Location TEAN RIVER SOIL UNITS b,c

Elevation \_\_\_\_\_  
Borehole Location CPH15  
GWL Depth 20' CST  
Logged By Lodestar  
Drilled By U. next post  
Date/Time Started 2-14-06 12:38  
Date/Time Completed 2-14-06 1:40

Well Logged By Martin Nee  
Personnel On-Site C. Meador Western Gas  
Contractors On-Site D. Kronley M. Porter DP  
Client Personnel On-Site \_\_\_\_\_

Drilling Method Geoprobe  
Air Monitoring Method PhotoVac PID

Depth (feet)	Sample Interval LAB	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			0-1 no. base						
3	31	60	clay to very coarse pebble gravel, mod. yllsh. brnc, uncom sol, poorly sorted angular to rounded drs			0		0	easy
5	58	60	1-8.5 silt. sand pale yllsh. brnc, well sorted, uncom solid sand, sub rounded			0		0	5-7 MOD
10								0	7-9 9-11
15	48	54	8.5-14.5 weathered shale, light olive gray, mod well indurated, damp			0		0	11-13 hard
20								0	13-15 Refused 14:50 dry
25									
30									
35									
40									

Comments:

1/3 bag 3/8 bentonite pellets to surface hydrated 3/12/99

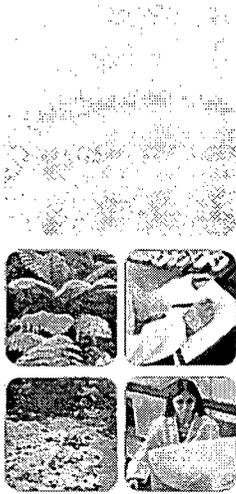
Geologist Signature

MN 2-14-06



IT'S ALL IN THE CHEMISTRY

02/27/06



**Technical Report for**

Montgomery Watson  
San Juan River Plant (SJRP)  
D-ALAB-GROUNDREM-004  
Accutest Job Number: T12660

Sampling Date: 02/14/06

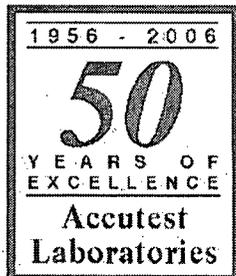
Report to:

MWH Americas, Inc.

[jennifer.a.hurley@mwhglobal.com](mailto:jennifer.a.hurley@mwhglobal.com)

ATTN: Ms. Jennifer Hurley

Total number of pages in report: 34



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino  
Laboratory Manager

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### Sample Summary

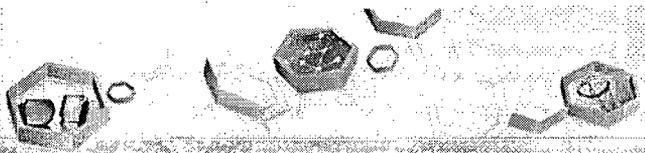
Montgomery Watson

Job No: T12660

San Juan River Plant (SJR)  
Project No: D-ALAB-GROUNDREM-004

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T12660-1	02/14/06	14:32	02/16/06	SO	Soil	GPH1-S(0-1)1432
T12660-2	02/14/06	14:46	02/16/06	SO	Soil	GPH1-S(8-5-9.5)1446
T12660-3	02/14/06	15:20	02/16/06	SO	Soil	GPH2-S(0-1)1520
T12660-4	02/14/06	15:35	02/16/06	SO	Soil	GPH2-S(7-8)1535

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



IT STARTS IN THE CHEMISTRY

**2**

**Sample Results**

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**Report of Analysis**

---

# Report of Analysis

Client Sample ID:	GPH1-S(0-1)1432	Date Sampled:	02/14/06
Lab Sample ID:	T12660-1	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	93.6
Method:	SW846 8015		
Project:	San Juan River Plant (SJR)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023848.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2	EE023810.D	1	02/21/06	JH	n/a	n/a	GEE1056

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2	5.19 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	59%	94%	56-139%
98-08-8	aaa-Trifluorotoluene	78%	89%	46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID: GPH1-S(0-1)1432	Date Sampled: 02/14/06
Lab Sample ID: T12660-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 93.6
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11364.D	1	02/25/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.03 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.84	1.1	0.32	ug/kg	J
108-88-3	Toluene	1.9	1.1	0.21	ug/kg	
100-41-4	Ethylbenzene	2.2	1.1	0.32	ug/kg	
1330-20-7	Xylenes (total)	2.3	2.1	0.64	ug/kg	
95-47-6	o-Xylene	0.79	1.1	0.32	ug/kg	J
	m,p-Xylene	1.5	2.1	0.64	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%		43-154%
98-08-8	aaa-Trifluorotoluene	84%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

2.1  
2

Client Sample ID:	GPH1-S(0-1)1432		Date Sampled:	02/14/06
Lab Sample ID:	T12660-1		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	93.6
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJR)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11338.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.9	3.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		41-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH1-S(8.5-9.5)1446	Date Sampled: 02/14/06
Lab Sample ID: T12660-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.4
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023849.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2	EE023811.D	1	02/21/06	JH	n/a	n/a	GEE1056

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2	5.23 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.2	3.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	51% <sup>a</sup>	73%	56-139%
98-08-8	aaa-Trifluorotoluene	74%	89%	46-136%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

---

ND = Not detected      MDL - Method Detection Limit RL = Reporting Limit E = Indicates value exceeds calibration range	J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
--	--

### Report of Analysis

Client Sample ID: GPH1-S(8.5-9.5)1446	Date Sampled: 02/14/06
Lab Sample ID: T12660-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.4
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11365.D	1	02/25/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.08 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.33	ug/kg	
108-88-3	Toluene	0.75	1.1	0.22	ug/kg	J
100-41-4	Ethylbenzene	ND	1.1	0.33	ug/kg	
1330-20-7	Xylenes (total)	2.4	2.2	0.66	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.33	ug/kg	
	m,p-Xylene	2.1	2.2	0.66	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	68%		43-154%
98-08-8	aaa-Trifluorotoluene	79%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH1-S(8.5-9.5)1446	Date Sampled: 02/14/06
Lab Sample ID: T12660-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.4
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11339.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.3	3.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH2-S(0-1)1520	Date Sampled: 02/14/06
Lab Sample ID: T12660-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.2
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023850.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2	EE023812.D	1	02/21/06	JH	n/a	n/a	GEE1056

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2	5.04 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.2	3.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	50% <sup>a</sup>	58%	56-139%
98-08-8	aaa-Trifluorotoluene	75%	70%	46-136%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GPH2-S(0-1)1520	Date Sampled:	02/14/06
Lab Sample ID:	T12660-3	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	89.2
Method:	SW846 8021B		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11366.D	1	02/25/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.36	1.1	0.34	ug/kg	J
108-88-3	Toluene	1.1	1.1	0.22	ug/kg	
100-41-4	Ethylbenzene	0.64	1.1	0.34	ug/kg	J
1330-20-7	Xylenes (total)	5.0	2.2	0.67	ug/kg	
95-47-6	o-Xylene	0.57	1.1	0.34	ug/kg	J
	m,p-Xylene	4.4	2.2	0.67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	79%		43-154%
98-08-8	aaa-Trifluorotoluene	83%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.3  
 2

# Report of Analysis

2.3  
2

Client Sample ID:	GPH2-S(0-1)1520		Date Sampled:	02/14/06
Lab Sample ID:	T12660-3		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	89.2
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11340.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.3	3.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	75%		41-153%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH2-S(7-8)1535	Date Sampled: 02/14/06
Lab Sample ID: T12660-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 91.6
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023813.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.08 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	67%		56-139%
98-08-8	aaa-Trifluorotoluene	85%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	GPH2-S(7-8)1535		Date Sampled:	02/14/06
Lab Sample ID:	T12660-4		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	91.6
Method:	SW846 8021B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11367.D	1	02/25/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.01 g	5.0 ml
Run #2		

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.33	ug/kg	
108-88-3	Toluene	0.42	1.1	0.22	ug/kg	J
100-41-4	Ethylbenzene	ND	1.1	0.33	ug/kg	
1330-20-7	Xylenes (total)	1.5	2.2	0.65	ug/kg	J
95-47-6	o-Xylene	ND	1.1	0.33	ug/kg	
	m,p-Xylene	1.3	2.2	0.65	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	68%		43-154%
98-08-8	aaa-Trifluorotoluene	76%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH2-S(7-8)1535	Date Sampled: 02/14/06
Lab Sample ID: T12660-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 91.6
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11341.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

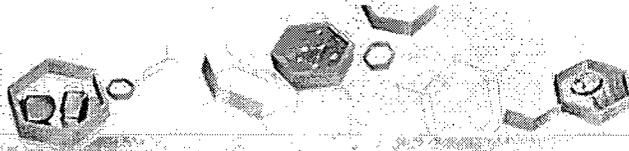
CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.1	3.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

24  
2



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### Misc. Forms

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### Custody Documents and Other Forms

---

Includes the following where applicable:

- Chain of Custody





T12660

and this portion can be returned for recipient's records  
ID: 31506 FedEx Tracking Number 854638306090  
Sender's Name Martin N. Lee Phone 305 234-2721  
Company Lockstar  
Address 2606 K 5500  
City Eliza Vista State NM Zip 87415  
per Internal Billing Reference

T12660: Chain of Custody  
Page 3 of 3



IT'S ALL IN THE CHEMISTRY

## GC Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12660  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1056-MB	EE023792.D 1		02/21/06	JH	n/a	n/a	GEE1056

The QC reported here applies to the following samples:

Method: SW846 8015

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	93%	56-139%
98-08-8	aaa-Trifluorotoluene	107%	46-136%

# Method Blank Summary

Job Number: T12660  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1057-MB	EE023823.D	1	02/22/06	JH	n/a	n/a	GEE1057

4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12660-1, T12660-2, T12660-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	80%	56-139%
98-08-8	aaa-Trifluorotoluene	99%	46-136%

# Method Blank Summary

Job Number: T12660  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK749-ME	KK11342.D	1	02/24/06	JH	n/a	n/a	GKK749

The QC reported here applies to the following samples:

Method: SW846 8021B

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
108-88-3	Toluene	ND	1.0	0.20	ug/kg	
1330-20-7	Xylenes (total)	ND	2.0	0.60	ug/kg	
	m,p-Xylene	ND	2.0	0.60	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.30	ug/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	106% 43-154%
98-08-8	aaa-Trifluorotoluene	107% 46-151%

# Blank Spike Summary

Job Number: T12660  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1056-BS	EE023793.D	1	02/21/06	JH	n/a	n/a	GEE1056

4.2  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.5	93	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	108%	56-139%
98-08-8	aaa-Trifluorotoluene	113%	46-136%

# Blank Spike Summary

Job Number: T12660  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1057-BS	EE023824.D 1		02/22/06	JH	n/a	n/a	GEE1057

The QC reported here applies to the following samples:

Method: SW846 8015

T12660-1, T12660-2, T12660-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	17.2	86	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	56-139%
98-08-8	aaa-Trifluorotoluene	99%	46-136%

# Blank Spike/Blank Spike Duplicate Summary

Job Number: T12660  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK749-BS	KK11340.D	1	02/24/06	JH	n/a	n/a	GKK749
GKK749-BSD	KK11341.D	1	02/24/06	JH	n/a	n/a	GKK749

4.3  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	20.1	101	19.4	97	4	46-150/30
100-41-4	Ethylbenzene	20	21.4	107	20.4	102	5	69-134/30
108-88-3	Toluene	20	20.6	103	19.9	100	3	67-132/30
1330-20-7	Xylenes (total)	60	63.1	105	60.4	101	4	67-134/30
	m,p-Xylene	40	42.3	106	40.4	101	5	68-135/30
95-47-6	o-Xylene	20	20.8	104	20.0	100	4	66-133/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	103%	99%	43-154%
98-08-8	aaa-Trifluorotoluene	106%	100%	46-151%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12660  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12659-6MS	EE023800.D	1	02/21/06	JH	n/a	n/a	GEE1056
T12659-6MSD	EE023801.D	1	02/21/06	JH	n/a	n/a	GEE1056
T12659-6	EE023799.D	1	02/21/06	JH	n/a	n/a	GEE1056

The QC reported here applies to the following samples:

Method: SW846 8015

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	T12659-6 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	26.9	22.7	84	23.0	85	1	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12659-6	Limits
460-00-4	4-Bromofluorobenzene	90%	90%	71%	56-139%
98-08-8	aaa-Trifluorotoluene	96%	96%	83%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12660  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12661-6MS	EE023831.D	1	02/22/06	JH	n/a	n/a	GEE1057
T12661-6MSD	EE023832.D	1	02/22/06	JH	n/a	n/a	GEE1057
T12661-6	EE023830.D	1	02/22/06	JH	n/a	n/a	GEE1057

4.4  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12660-1, T12660-2, T12660-3

CAS No.	Compound	T12661-6 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		27.5	22.8	83	23.8	86	4	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12661-6	Limits
460-00-4	4-Bromofluorobenzene	87%	92%	72%	56-139%
98-08-8	aaa-Trifluorotoluene	92%	97%	81%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12660  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12659-4MS	KK11347.D	1	02/24/06	JH	n/a	n/a	GKK749
T12659-4MSD	KK11348.D	1	02/24/06	JH	n/a	n/a	GKK749
T12659-4	KK11346.D	1	02/24/06	JH	n/a	n/a	GKK749

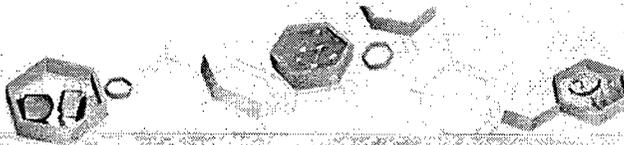
The QC reported here applies to the following samples:

Method: SW846 8021B

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	T12659-4 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.84	J	22.2	17.6	75	18.0	77	2	46-140/15
100-41-4	Ethylbenzene	1.0	J	22.2	17.7	75	18.4	78	4	69-122/11
108-88-3	Toluene	2.5		22.2	18.1	70	18.5	72	2	64-125/14
1330-20-7	Xylenes (total)	13.6		66.7	54.7	62*	56.3	64*	3	66-124/13
	m,p-Xylene	11.4		44.5	36.8	57*	38.0	59*	3	67-124/12
95-47-6	o-Xylene	2.2		22.2	17.9	71	18.3	72	2	62-124/15

CAS No.	Surrogate Recoveries	MS	MSD	T12659-4	Limits
460-00-4	4-Bromofluorobenzene	75%	76%	75%	43-154%
98-08-8	aaa-Trifluorotoluene	79%	82%	87%	46-151%



## GC Semi-volatiles

5

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12660  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-MB	CC11323.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.2	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	64% 41-153%

# Blank Spike Summary

Job Number: T12660  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-BS	CC11324.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12660-1, T12660-2, T12660-3, T12660-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.2	28.3	85	55-131

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	77%	41-153%

5.2  
5

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12660  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-MS	CC11351.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
OP5520-MSD	CC11352.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
T12659-1	CC11325.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

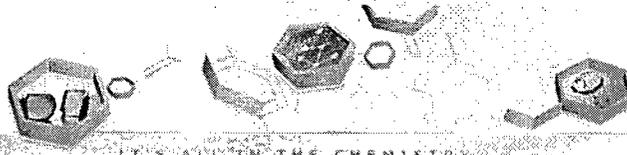
The QC reported here applies to the following samples:

Method: SW846 8015 M

T12660-1, T12660-2, T12660-3, T12660-4

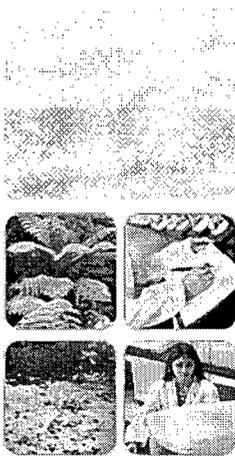
CAS No.	Compound	T12659-1 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	35.1	31.2	89	33.5	95	7	49-139/24

CAS No.	Surrogate Recoveries	MS	MSD	T12659-1	Limits
84-15-1	o-Terphenyl	75%	81%	73%	41-153%



IT'S ALL IN THE CHEMISTRY

02/27/06



**Technical Report for**

**Montgomery Watson**

**San Juan River Plant (SJRP)**

**D-ALAB-SANJUAN-003**

**Accutest Job Number: T12659**

**Sampling Date: 02/13/06**

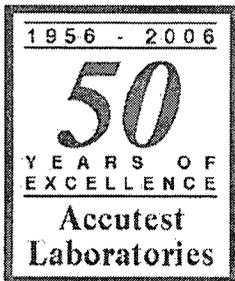
**Report to:**

**MWH Americas, Inc.**

**jennifer.a.hurley@mwhglobal.com**

**ATTN: Ms. Jennifer Hurley**

**Total number of pages in report: 52**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

*Ron Martino*  
**Ron Martino**  
**Laboratory Manager**

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### Sample Summary

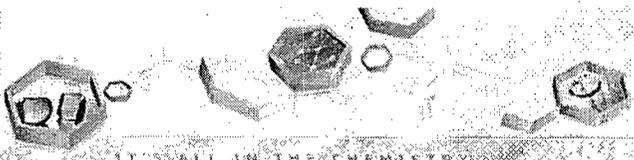
Montgomery Watson

Job No: T12659

San Juan River Plant (SJRP)  
Project No: D-ALAB-SANJUAN-003

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T12659-1	02/13/06	09:41 MN	02/16/06	SO	Soil	GPH3-S(0-1) 0941
T12659-2	02/13/06	09:45 MN	02/16/06	SO	Soil	GPH3-S(10-11) 0945
T12659-3	02/13/06	10:40 MN	02/16/06	SO	Soil	GPH4-S(0-1) 1040
T12659-4	02/13/06	10:50 MN	02/16/06	SO	Soil	GPH4-S(8-9) 1050
T12659-5	02/13/06	11:15 MN	02/16/06	SO	Soil	GPH5-S(0-1) 1115
T12659-6	02/13/06	11:25 MN	02/16/06	SO	Soil	GPH5-S(10-11) 1125
T12659-7	02/13/06	11:32 MN	02/16/06	SO	Soil	GPH5-S(13-14) 1132
T12659-8	02/13/06	12:40 MN	02/16/06	SO	Soil	GPH6-S(0-1) 1240
T12659-9	02/13/06	12:47 MN	02/16/06	SO	Soil	GPH6-S(9-9.5) 1247
T12659-10	02/13/06	12:50 MN	02/16/06	SO	Soil	GPH6-S(10-11) 1250

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



IT'S ALL IN THE CHEMISTRY

**Sample Results**

**Report of Analysis**

Report of Analysis

2.1  
2

Client Sample ID: GPH3-S(0-1) 0941	Date Sampled: 02/13/06
Lab Sample ID: T12659-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 95.0
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023794.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	2.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	72%		56-139%		
98-08-8	aaa-Trifluorotoluene	84%		46-136%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.1  
2

Client Sample ID: GPH3-S(0-1) 0941	Date Sampled: 02/13/06
Lab Sample ID: T12659-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 95.0
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11343.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2	KK11354.D	1	02/24/06	JH	n/a	n/a	GKK749

Run #	Initial Weight	Final Volume
Run #1	5.26 g	5.0 ml
Run #2	1.08 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.36	1.0	0.30	ug/kg	J
108-88-3	Toluene	0.99	1.0	0.20	ug/kg	J
100-41-4	Ethylbenzene	0.95	1.0	0.30	ug/kg	J
1330-20-7	Xylenes (total)	2.5	2.0	0.60	ug/kg	
95-47-6	o-Xylene	1.0	1.0	0.30	ug/kg	
	m,p-Xylene	1.5	2.0	0.60	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%	87%	43-154%
98-08-8	aaa-Trifluorotoluene	98%	88%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH3-S(0-1) 0941	Date Sampled: 02/13/06
Lab Sample ID: T12659-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 95.0
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11325.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.8	3.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	73%		41-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH3-S(10-11) 0945		
Lab Sample ID: T12659-2	Date Sampled: 02/13/06	
Matrix: SO - Soil	Date Received: 02/16/06	
Method: SW846 8015	Percent Solids: 92.5	
Project: San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023795.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.23 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	69%		56-139%
98-08-8	aaa-Trifluorotoluene	82%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GPH3-S(10-11) 0945		
Lab Sample ID:	T12659-2	Date Sampled:	02/13/06
Matrix:	SO - Soil	Date Received:	02/16/06
Method:	SW846 8021B	Percent Solids:	92.5
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11344.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2	KK11368.D	1	02/25/06	JH	n/a	n/a	GKK749

Run #	Initial Weight	Final Volume
Run #1	5.11 g	5.0 ml
Run #2	1.28 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.34	1.1	0.32	ug/kg	J
108-88-3	Toluene	0.81	1.1	0.21	ug/kg	J
100-41-4	Ethylbenzene	ND	1.1	0.32	ug/kg	
1330-20-7	Xylenes (total)	2.4	2.1	0.63	ug/kg	
95-47-6	o-Xylene	0.36	1.1	0.32	ug/kg	J
	m,p-Xylene	2.1	2.1	0.63	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%	85%	43-154%
98-08-8	aaa-Trifluorotoluene	94%	86%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH3-S(10-11) 0945 Lab Sample ID: T12659-2 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: San Juan River Plant (SJRP)	Date Sampled: 02/13/06 Date Received: 02/16/06 Percent Solids: 92.5
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11326.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.0	3.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	69%		41-153%		

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL - Method Detection Limit J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
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2.2  
2

### Report of Analysis

Client Sample ID: GPH4-S(0-1) 1040	Date Sampled: 02/13/06
Lab Sample ID: T12659-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 75.9
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023796.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	8.1	4.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	76%		56-139%		
98-08-8	aaa-Trifluorotoluene	93%		46-136%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

2.3  
2

Client Sample ID: GPH4-S(0-1) 1040	Date Sampled: 02/13/06
Lab Sample ID: T12659-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 75.9
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11345.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.06 g	5.0 ml
Run #2		

### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.3	0.39	ug/kg	
108-88-3	Toluene	ND	1.3	0.26	ug/kg	
100-41-4	Ethylbenzene	ND	1.3	0.39	ug/kg	
1330-20-7	Xylenes (total)	ND	2.6	0.78	ug/kg	
95-47-6	o-Xylene	ND	1.3	0.39	ug/kg	
	m,p-Xylene	ND	2.6	0.78	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%		43-154%
98-08-8	aaa-Trifluorotoluene	89%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.3  
2

Client Sample ID: GPH4-S(0-1) 1040	
Lab Sample ID: T12659-3	Date Sampled: 02/13/06
Matrix: SO - Soil	Date Received: 02/16/06
Method: SW846 8015 M SW846 3550B	Percent Solids: 75.9
Project: San Juan River Plant (SJRP)	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11327.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	11	4.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		41-153%		

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID:	GPH4-S(8-9) 1050	Date Sampled:	02/13/06
Lab Sample ID:	T12659-4	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8015		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023797.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	3.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	78%		56-139%
98-08-8	aaa-Trifluorotoluene	80%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID:	GPH4-S(8-9) 1050	Date Sampled:	02/13/06
Lab Sample ID:	T12659-4	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	88.5
Method:	SW846 8021B		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11346.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.84	1.1	0.34	ug/kg	J
108-88-3	Toluene	2.5	1.1	0.23	ug/kg	
100-41-4	Ethylbenzene	1.0	1.1	0.34	ug/kg	J
1330-20-7	Xylenes (total)	13.6	2.3	0.68	ug/kg	
95-47-6	o-Xylene	2.2	1.1	0.34	ug/kg	
	m,p-Xylene	11.4	2.3	0.68	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	75%		43-154%
98-08-8	aaa-Trifluorotoluene	87%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH4-S(8-9) 1050	Date Sampled: 02/13/06
Lab Sample ID: T12659-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.5
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11328.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	3.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID:	GPH5-S(0-1) 1115	Date Sampled:	02/13/06
Lab Sample ID:	T12659-5	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	91.6
Method:	SW846 8015		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023798.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.8	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	68%		56-139%
98-08-8	aaa-Trifluorotoluene	84%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID: GPH5-S(0-1) 1115	Date Sampled: 02/13/06
Lab Sample ID: T12659-5	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 91.6
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11351.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.07 g	5.0 ml
Run #2		

### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.32	ug/kg	
108-88-3	Toluene	0.51	1.1	0.22	ug/kg	J
100-41-4	Ethylbenzene	0.69	1.1	0.32	ug/kg	J
1330-20-7	Xylenes (total)	1.5	2.2	0.65	ug/kg	J
95-47-6	o-Xylene	0.52	1.1	0.32	ug/kg	J
	m,p-Xylene	0.97	2.2	0.65	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		43-154%
98-08-8	aaa-Trifluorotoluene	92%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

25  
 2

## Report of Analysis

2.5  
2

Client Sample ID: GPH5-S(0-1) 1115		Date Sampled: 02/13/06
Lab Sample ID: T12659-5		Date Received: 02/16/06
Matrix: SO - Soil		Percent Solids: 91.6
Method: SW846 8015 M SW846 3550B		
Project: San Juan River Plant (SJR)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11329.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.1	3.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		41-153%		

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

## Report of Analysis

26  
2

Client Sample ID: GPH5-S(10-11) 1125	Date Sampled: 02/13/06
Lab Sample ID: T12659-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 83.1
Method: SW846 8015	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023799.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.27 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.7	3.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	71%		56-139%
98-08-8	aaa-Trifluorotoluene	83%		46-136%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID:	GPH5-S(10-11) 1125		Date Sampled:	02/13/06
Lab Sample ID:	T12659-6		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	83.1
Method:	SW846 8021B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11352.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.11 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.0	1.2	0.35	ug/kg	
108-88-3	Toluene	5.5	1.2	0.24	ug/kg	
100-41-4	Ethylbenzene	2.6	1.2	0.35	ug/kg	
1330-20-7	Xylenes (total)	15.1	2.4	0.71	ug/kg	
95-47-6	o-Xylene	1.4	1.2	0.35	ug/kg	
	m,p-Xylene	13.7	2.4	0.71	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	75%		43-154%
98-08-8	aaa-Trifluorotoluene	86%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.6  
2

Client Sample ID: GPH5-S(10-11) 1125	Date Sampled: 02/13/06
Lab Sample ID: T12659-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 83.1
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11388.D	1	02/19/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	4.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	76%		41-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID: GPH5-S(13-14) 1132	Date Sampled: 02/13/06
Lab Sample ID: T12659-7	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 79.6
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023804.D	1	02/21/06	JH	n/a	n/a	GEE1056
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.07 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.5	3.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	72%		56-139%		
98-08-8	aaa-Trifluorotoluene	87%		46-136%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID: GPH5-S(13-14) 1132	Date Sampled: 02/13/06
Lab Sample ID: T12659-7	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 79.6
Method: SW846 8021B	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11353.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.09 g	5.0 ml
Run #2		

### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.5	1.2	0.37	ug/kg	
108-88-3	Toluene	2.7	1.2	0.25	ug/kg	
100-41-4	Ethylbenzene	1.4	1.2	0.37	ug/kg	
1330-20-7	Xylenes (total)	6.6	2.5	0.74	ug/kg	
95-47-6	o-Xylene	0.84	1.2	0.37	ug/kg	J
	m,p-Xylene	5.8	2.5	0.74	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%		43-154%
98-08-8	aaa-Trifluorotoluene	89%		46-151%

ND = Not detected    MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH5-S(13-14) 1132	Date Sampled: 02/13/06
Lab Sample ID: T12659-7	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 79.6
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11331.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	4.2	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	72%		41-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH6-S(0-1) 1240	
Lab Sample ID: T12659-8	Date Sampled: 02/13/06
Matrix: SO - Soil	Date Received: 02/16/06
Method: SW846 8015	Percent Solids: 84.2
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023806.D	10	02/21/06	JH	n/a	n/a	GEE1056
Run #2	EE023873.D	50	02/23/06	JH	n/a	n/a	GEE1058

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2	5.19 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1540 <sup>a</sup>	330	170	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	363% <sup>b</sup>	153% <sup>b</sup>	56-139%
98-08-8	aaa-Trifluorotoluene	101%	94%	46-136%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



# Report of Analysis

28  
2

Client Sample ID: GPH6-S(0-1) 1240	Date Sampled: 02/13/06
Lab Sample ID: T12659-8	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 84.2
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11355.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2	KK11356.D	20	02/24/06	JH	n/a	n/a	GKK749

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2	5.19 g	5.0 ml	100 ul

### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	67	20	ug/kg	
108-88-3	Toluene	552	67	13	ug/kg	
100-41-4	Ethylbenzene	4900	67	20	ug/kg	
1330-20-7	Xylenes (total)	69800 <sup>a</sup>	2700	800	ug/kg	
95-47-6	o-Xylene	1970 <sup>a</sup>	1300	400	ug/kg	
	m,p-Xylene	67800 <sup>a</sup>	2700	800	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	127%	115%	43-154%
98-08-8	aaa-Trifluorotoluene	119%	100%	46-151%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH6-S(0-1) 1240	Date Sampled: 02/13/06
Lab Sample ID: T12659-8	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 84.2
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11332.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2	CC11389.D	10	02/19/06	RC	02/17/06	OP5520	GCC529

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2	30.0 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	249 <sup>a</sup>	99	40	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	89%	80%	41-153%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.8  
2

Report of Analysis

2.9  
2

Client Sample ID:	GPH6-S(9-9.5) 1247		
Lab Sample ID:	T12659-9	Date Sampled:	02/13/06
Matrix:	SO - Soil	Date Received:	02/16/06
Method:	SW846 8015	Percent Solids:	76.6
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023874.D	200	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7200	1600	800	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	120%		56-139%
98-08-8	aaa-Trifluorotoluene	94%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH6-S(9-9.5) 1247	Date Sampled: 02/13/06
Lab Sample ID: T12659-9	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 76.6
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11357.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2	KK11358.D	20	02/24/06	JH	n/a	n/a	GKK749

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.01 g	5.0 ml	100 ul
Run #2	5.01 g	5.0 ml	100 ul

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	339	80	24	ug/kg	
108-88-3	Toluene	4950	80	16	ug/kg	
100-41-4	Ethylbenzene	58600 <sup>a</sup>	1600	480	ug/kg	
1330-20-7	Xylenes (total)	457000 <sup>a</sup>	3200	970	ug/kg	
95-47-6	o-Xylene	2090 <sup>a</sup>	1600	480	ug/kg	
	m,p-Xylene	455000 <sup>a</sup>	3200	970	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%	125%	43-154%
98-08-8	aaa-Trifluorotoluene	2081% <sup>b</sup>	106%	46-151%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GPH6-S(9-9.5) 1247		Date Sampled:	02/13/06
Lab Sample ID:	T12659-9		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	76.6
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11336.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2	CC11390.D	100	02/19/06	RC	02/17/06	OP5520	GCC529

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2	30.1 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1770 <sup>a</sup>	1100	430	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	111%	90%	41-153%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

2.10  
2

Client Sample ID: GPH6-S(10-11) 1250	Date Sampled: 02/13/06
Lab Sample ID: T12659-10	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 84.3
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023875.D	10	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.15 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	141	67	33	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	100%		56-139%
98-08-8	aaa-Trifluorotoluene	75%		46-136%

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GPH6-S(10-11) 1250	Date Sampled:	02/13/06
Lab Sample ID:	T12659-10	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	84.3
Method:	SW846 8021B		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11359.D	1	02/24/06	JH	n/a	n/a	GKK749
Run #2	KK11360.D	1	02/24/06	JH	n/a	n/a	GKK749

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.07 g	5.0 ml	
Run #2	5.15 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	4.6	5.5	1.7	ug/kg	J
108-88-3	Toluene	28.5	5.5	1.1	ug/kg	
100-41-4	Ethylbenzene	935	5.5	1.7	ug/kg	
1330-20-7	Xylenes (total)	1280	11	3.3	ug/kg	
95-47-6	o-Xylene	28.8	5.5	1.7	ug/kg	
	m,p-Xylene	1250	11	3.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	74.2% <sup>a</sup>	83.7% <sup>a</sup>	43-154%
98-08-8	aaa-Trifluorotoluene	82.7% <sup>a</sup>	71% <sup>a</sup>	46-151%

(a) %Recovery adjusted for adding wrong spiking solution. Spike added is ten times the amount.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH6-S(10-11) 1250	Date Sampled: 02/13/06
Lab Sample ID: T12659-10	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 84.3
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11337.D	1	02/17/06	RC	02/17/06	OP5520	GCC529
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

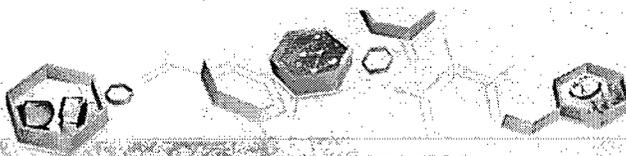
CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	47.9	9.9	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound





**Misc. Forms**

**Custody Documents and Other Forms**

Includes the following where applicable:

- Chain of Custody

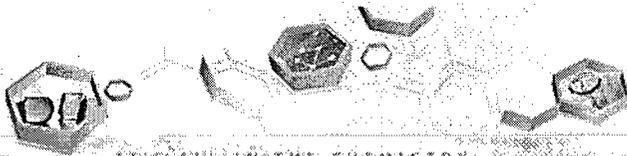




T12659

All This system may be returned for Participant's records.  
No. 21500      FedEx Tracking Number      854638306190  
Lab's      Maria Nish      Phone 708 334 2741  
and      Company      Indiana  
by      Address      2606 E 3500  
Flora Nish      State      IN      Zip      46145  
No Internet Billing Reference

T12659: Chain of Custody  
Page 3 of 3



## GC Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1056-MB	EE023792.D 1		02/21/06	JH	n/a	n/a	GEE1056

The QC reported here applies to the following samples: Method: SW846 8015

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	93%	56-139%
98-08-8	aaa-Trifluorotoluene	107%	46-136%

# Method Blank Summary

Job Number: T12659  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-MB	EE023858.D	1	02/23/06	JH	n/a	n/a	GEE1058

4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12659-8, T12659-9, T12659-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	70%	56-139%
98-08-8	aaa-Trifluorotoluene	95%	46-136%

# Method Blank Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK749-MB	KK11342.D	1	02/24/06	JH	n/a	n/a	GKK749

The QC reported here applies to the following samples:

Method: SW846 8021B

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8, T12659-9, T12659-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
108-88-3	Toluene	ND	1.0	0.20	ug/kg	
1330-20-7	Xylenes (total)	ND	2.0	0.60	ug/kg	
	m,p-Xylene	ND	2.0	0.60	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.30	ug/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	106% 43-154%
98-08-8	aaa-Trifluorotoluene	107% 46-151%

# Blank Spike Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1056-BS	EE023793.D	1	02/21/06	JH	n/a	n/a	GEE1056

4.2  
4

The QC reported here applies to the following samples: Method: SW846 8015

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.5	93	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	108%	56-139%
98-08-8	aaa-Trifluorotoluene	113%	46-136%

# Blank Spike Summary

Job Number: T12659  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-BS	EE023859.D	1	02/23/06	JH	n/a	n/a	GEE1058

The QC reported here applies to the following samples:

Method: SW846 8015

T12659-8, T12659-9, T12659-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	16.0	80	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	56-139%
98-08-8	aaa-Trifluorotoluene	100%	46-136%

# Blank Spike/Blank Spike Duplicate Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK749-BS	KK11340.D	1	02/24/06	JH	n/a	n/a	GKK749
GKK749-BSD	KK11341.D	1	02/24/06	JH	n/a	n/a	GKK749

4.3  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8, T12659-9, T12659-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	20.1	101	19.4	97	4	46-150/30
100-41-4	Ethylbenzene	20	21.4	107	20.4	102	5	69-134/30
108-88-3	Toluene	20	20.6	103	19.9	100	3	67-132/30
1330-20-7	Xylenes (total)	60	63.1	105	60.4	101	4	67-134/30
	m,p-Xylene	40	42.3	106	40.4	101	5	68-135/30
95-47-6	o-Xylene	20	20.8	104	20.0	100	4	66-133/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	103%	99%	43-154%
98-08-8	aaa-Trifluorotoluene	106%	100%	46-151%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12659-6MS	EE023800.D	1	02/21/06	JH	n/a	n/a	GEE1056
T12659-6MSD	EE023801.D	1	02/21/06	JH	n/a	n/a	GEE1056
T12659-6	EE023799.D	1	02/21/06	JH	n/a	n/a	GEE1056

The QC reported here applies to the following samples:

Method: SW846 8015

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8

CAS No.	Compound	T12659-6 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	26.9	22.7	84	23.0	85	1	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12659-6	Limits
460-00-4	4-Bromofluorobenzene	90%	90%	71%	56-139%
98-08-8	aaa-Trifluorotoluene	96%	96%	83%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12664-2MS	EE023861.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2MSD	EE023862.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2	EE023860.D	1	02/23/06	JH	n/a	n/a	GEE1058

4.4  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12659-8, T12659-9, T12659-10

CAS No.	Compound	T12664-2 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	25.9	21.7	84	21.8	84	0	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12664-2	Limits
460-00-4	4-Bromofluorobenzene	88%	90%	63%	56-139%
98-08-8	aaa-Trifluorotoluene	89%	92%	82%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12659-4MS	KK11347.D	1	02/24/06	JH	n/a	n/a	GKK749
T12659-4MSD	KK11348.D	1	02/24/06	JH	n/a	n/a	GKK749
T12659-4	KK11346.D	1	02/24/06	JH	n/a	n/a	GKK749

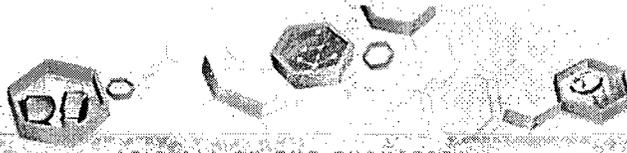
The QC reported here applies to the following samples;

Method: SW846 8021B

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8, T12659-9, T12659-10

CAS No.	Compound	T12659-4 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.84	J	22.2	17.6	75	18.0	77	2	46-140/15
100-41-4	Ethylbenzene	1.0	J	22.2	17.7	75	18.4	78	4	69-122/11
108-88-3	Toluene	2.5		22.2	18.1	70	18.5	72	2	64-125/14
1330-20-7	Xylenes (total)	13.6		66.7	54.7	62*	56.3	64*	3	66-124/13
	m,p-Xylene	11.4		44.5	36.8	57*	38.0	59*	3	67-124/12
95-47-6	o-Xylene	2.2		22.2	17.9	71	18.3	72	2	62-124/15

CAS No.	Surrogate Recoveries	MS	MSD	T12659-4	Limits
460-00-4	4-Bromofluorobenzene	75%	76%	75%	43-154%
98-08-8	aaa-Trifluorotoluene	79%	82%	87%	46-151%



IT'S ALL IN THE CHEMISTRY

## GC Semi-volatiles

5

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12659  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-MB	CC11323.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8, T12659-9, T12659-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.2	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	64% 41-153%

# Blank Spike Summary

Job Number: T12659  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-BS	CC11324.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

The QC reported here applies to the following samples; Method: SW846 8015 M

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8, T12659-9, T12659-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.2	28.3	85	55-131

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	77%	41-153%

5.2  
5

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12659  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-MS	CC11351.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
OP5520-MSD	CC11352.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
T12659-1	CC11325.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

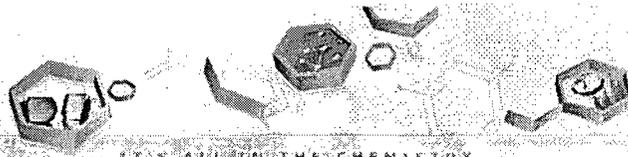
The QC reported here applies to the following samples:

Method: SW846 8015 M

T12659-1, T12659-2, T12659-3, T12659-4, T12659-5, T12659-6, T12659-7, T12659-8, T12659-9, T12659-10

CAS No.	Compound	T12659-1 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	35.1	31.2	89	33.5	95	7	49-139/24

CAS No.	Surrogate Recoveries	MS	MSD	T12659-1	Limits
84-15-1	o-Terphenyl	75%	81%	73%	41-153%



IT'S ALL IN THE CHEMISTRY

02/27/06

Technical Report for

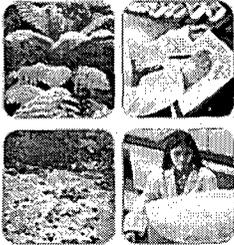
Montgomery Watson

San Juan River Plant (SJR)

D-ALAB-SANJUAN-003

Accutest Job Number: T12664

Sampling Date: 02/13/06



Report to:

MWH Americas, Inc.

jennifer.a.hurley@mwhglobal.com

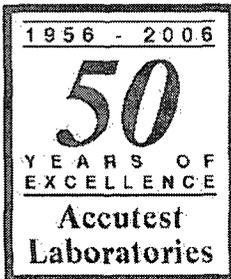
ATTN: Ms. Jennifer Hurley

Total number of pages in report: 50



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino  
Laboratory Manager



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## Sample Summary

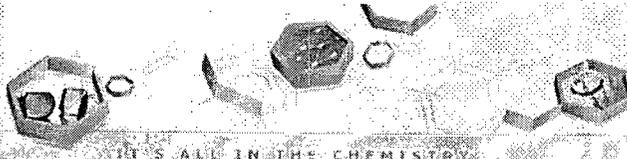
Montgomery Watson

Job No: T12664

San Juan River Plant (SJR)  
 Project No: D-ALAB-SANJUAN-003

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T12664-1	02/13/06	12:56 MN	02/16/06	SO	Soil	GPH6-S(11.5-12.5) 1256
T12664-2	02/13/06	14:02 MN	02/16/06	SO	Soil	GPH7-S(0-1) 1402
T12664-3	02/13/06	14:10 MN	02/16/06	SO	Soil	GPH7-S(8-9) 1410
T12664-4	02/13/06	14:53 MN	02/16/06	SO	Soil	GPH8-S(0-1) 1453
T12664-5	02/13/06	15:00 MN	02/16/06	SO	Soil	GPH8-S(10-11) 1500
T12664-6	02/13/06	15:10 MN	02/16/06	SO	Soil	GPH8-S(11.5-12.5) 1510
T12664-7	02/13/06	16:00 MN	02/16/06	SO	Soil	GPH9-S(0-1) 1600
T12664-8	02/13/06	16:18 MN	02/16/06	SO	Soil	GPH9-S(10-11) 1618
T12664-9	02/13/06	16:28 MN	02/16/06	SO	Soil	GPH9-S(11-12) 1628
T12664-10	02/13/06	07:00 MN	02/16/06	AQ	Trip Blank Soil	TRIP BLANK 130206TB01

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



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**Sample Results**

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**Report of Analysis**

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# Report of Analysis

2.1  
2

Client Sample ID: GPH6-S(11.5-12.5) 1256	Date Sampled: 02/13/06
Lab Sample ID: T12664-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.9
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023876.D	200	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5680	1300	640	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	128%		56-139%
98-08-8	aaa-Trifluorotoluene	111%		46-136%

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH6-S(11.5-12.5) 1256	Date Sampled: 02/13/06
Lab Sample ID: T12664-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.9
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11404.D	20	02/26/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1300	380	ug/kg	
108-88-3	Toluene	3600	1300	250	ug/kg	
100-41-4	Ethylbenzene	30800	1300	380	ug/kg	
1330-20-7	Xylenes (total)	215000	2500	760	ug/kg	
95-47-6	o-Xylene	4100	1300	380	ug/kg	
	m,p-Xylene	211000	2500	760	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	131%		43-154%
98-08-8	aaa-Trifluorotoluene	104%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID:	GPH6-S(11.5-12.5) 1256		Date Sampled:	02/13/06
Lab Sample ID:	T12664-1		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	86.9
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11372.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2	CC11403.D	5	02/20/06	FO	02/17/06	OP5528	GCC530

Run #	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2	30.9 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	135 <sup>a</sup>	47	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	90%	79%	41-153%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH7-S(0-1) 1402	Date Sampled: 02/13/06
Lab Sample ID: T12664-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.7
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023860.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	3.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	63%		56-139%
98-08-8	aaa-Trifluorotoluene	82%		46-136%

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

2.2  
2

Client Sample ID: GPH7-S(0-1) 1402	Date Sampled: 02/13/06
Lab Sample ID: T12664-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.7
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11397.D	1	02/26/06	JH	n/a	n/a	GKK751
Run #2	KK11398.D	1	02/26/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume
Run #1	5.09 g	5.0 ml
Run #2	1.26 g	5.0 ml

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.34	ug/kg	
108-88-3	Toluene	ND	1.1	0.23	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.34	ug/kg	
1330-20-7	Xylenes (total)	ND	2.3	0.68	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.34	ug/kg	
	m,p-Xylene	ND	2.3	0.68	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	73%	88%	43-154%
98-08-8	aaa-Trifluorotoluene	79%	89%	46-151%

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH7-S(0-1) 1402 Lab Sample ID: T12664-2 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: San Juan River Plant (SJRP)	Date Sampled: 02/13/06 Date Received: 02/16/06 Percent Solids: 86.7
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11373.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	3.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

23  
2

Client Sample ID: GPH7-S(8-9) 1410	Date Sampled: 02/13/06
Lab Sample ID: T12664-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 87.3
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023863.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.18 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	10.2	6.3	3.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	81%		56-139%		
98-08-8	aaa-Trifluorotoluene	84%		46-136%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH7-S(8-9) 1410	Date Sampled: 02/13/06
Lab Sample ID: T12664-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 87.3
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11399.D	1	02/26/06	JH	n/a	n/a	GKK751
Run #2	KK11400.D	1	02/26/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2	1.26 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.34	ug/kg	
108-88-3	Toluene	1.4	1.1	0.23	ug/kg	
100-41-4	Ethylbenzene	1.1	1.1	0.34	ug/kg	
1330-20-7	Xylenes (total)	8.4	2.3	0.69	ug/kg	
95-47-6	o-Xylene	1.4	1.1	0.34	ug/kg	
	m,p-Xylene	7.1	2.3	0.69	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%	79%	43-154%
98-08-8	aaa-Trifluorotoluene	89%	88%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.3  
2

Client Sample ID: GPH7-S(8-9) 1410	Date Sampled: 02/13/06
Lab Sample ID: T12664-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 87.3
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11374.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	42.9	9.4	3.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	80%		41-153%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH8-S(0-1) 1453	Date Sampled: 02/13/06
Lab Sample ID: T12664-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 85.4
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023890.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.14 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	7.13	6.6	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		56-139%
98-08-8	aaa-Trifluorotoluene	86%		46-136%

ND = Not detected    MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID: GPH8-S(0-1) 1453	Date Sampled: 02/13/06
Lab Sample ID: T12664-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 85.4
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11401.D	1	02/26/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume
Run #1	4.98 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.2	0.35	ug/kg	
108-88-3	Toluene	0.61	1.2	0.24	ug/kg	J
100-41-4	Ethylbenzene	ND	1.2	0.35	ug/kg	
1330-20-7	Xylenes (total)	3.2	2.4	0.71	ug/kg	
95-47-6	o-Xylene	0.90	1.2	0.35	ug/kg	J
	m,p-Xylene	2.3	2.4	0.71	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	73%		43-154%
98-08-8	aaa-Trifluorotoluene	78%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH8-S(0-1) 1453	Date Sampled: 02/13/06
Lab Sample ID: T12664-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 85.4
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11385.D	1	02/19/06	RC	02/17/06	OP5528	GCC529
Run #2	CC11375.D	10	02/18/06	RC	02/17/06	OP5528	GCC529

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2	30.1 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	391 <sup>a</sup>	97	39	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	133%		41-153%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

2.5  
2

Client Sample ID: GPH8-S(10-11) 1500	Date Sampled: 02/13/06
Lab Sample ID: T12664-5	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.6
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023870.D	20	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.12 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	242	120	62	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		56-139%
98-08-8	aaa-Trifluorotoluene	78%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH8-S(10-11) 1500	Date Sampled: 02/13/06
Lab Sample ID: T12664-5	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.6
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11428.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.12 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	25.6	62	18	ug/kg	J
108-88-3	Toluene	70.0	62	12	ug/kg	
100-41-4	Ethylbenzene	465	62	18	ug/kg	
1330-20-7	Xylenes (total)	9290	120	37	ug/kg	
95-47-6	o-Xylene	1580	62	18	ug/kg	
	m,p-Xylene	7710	120	37	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	117%		43-154%
98-08-8	aaa-Trifluorotoluene	90%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.5  
 2

Report of Analysis

Client Sample ID: GPH8-S(10-11) 1500	Date Sampled: 02/13/06
Lab Sample ID: T12664-5	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.6
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11376.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2	CC11404.D	10	02/20/06	FO	02/17/06	OP5528	GCC530

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	337 <sup>a</sup>	93	37	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	92%	78%	41-153%		

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH8-S(11.5-12.5) 1510 Lab Sample ID: T12664-6 Matrix: SO - Soil Method: SW846 8015 Project: San Juan River Plant (SJRP)	Date Sampled: 02/13/06 Date Received: 02/16/06 Percent Solids: 86.5
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023871.D	20	02/23/06	JH	n/a	n/a	GEE1058
Run #2	EE023877.D	100	02/23/06	JH	n/a	n/a	GEE1058

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.04 g	5.0 ml	100 ul
Run #2	5.04 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	1890	130	65	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	160% <sup>a</sup>	131%	56-139%
98-08-8	aaa-Trifluorotoluene	108%	119%	46-136%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.6  
2

Report of Analysis

Client Sample ID: GPH8-S(11.5-12.5) 1510	Date Sampled: 02/13/06
Lab Sample ID: T12664-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.5
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11433.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2	KK11434.D	20	02/27/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.04 g	5.0 ml	100 ul
Run #2	5.04 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	411	65	20	ug/kg	
108-88-3	Toluene	50400 <sup>a</sup>	1300	260	ug/kg	
100-41-4	Ethylbenzene	16600 <sup>a</sup>	1300	390	ug/kg	
1330-20-7	Xylenes (total)	335000 <sup>a</sup>	2600	780	ug/kg	
95-47-6	o-Xylene	65500 <sup>a</sup>	1300	390	ug/kg	
	m,p-Xylene	269000 <sup>a</sup>	2600	780	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	150%	114%	43-154%
98-08-8	aaa-Trifluorotoluene	1332% <sup>b</sup>	94%	46-151%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.6  
2

Client Sample ID:	GPH8-S(11.5-12.5) 1510		Date Sampled:	02/13/06
Lab Sample ID:	T12664-6		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	86.5
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11377.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2	CC11406.D	50	02/20/06	FO	02/17/06	OP5528	GCC530

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.1 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	1950 <sup>a</sup>	480	190	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	118%	93%	41-153%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.7  
2

Client Sample ID: GPH9-S(0-1) 1600	Date Sampled: 02/13/06
Lab Sample ID: T12664-7	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.6
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023864.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.1	3.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	59%		56-139%		
98-08-8	aaa-Trifluorotoluene	73%		46-136%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	GPH9-S(0-1) 1600	Date Sampled:	02/13/06
Lab Sample ID:	T12664-7	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8021B		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11415.D	1	02/26/06	JH	n/a	n/a	GKK751
Run #2	KK11414.D	1	02/26/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume
Run #1	1.05 g	5.0 ml
Run #2	5.04 g	5.0 ml

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.4	1.6	ug/kg	
108-88-3	Toluene	3.5	5.4	1.1	ug/kg	J
100-41-4	Ethylbenzene	ND	5.4	1.6	ug/kg	
1330-20-7	Xylenes (total)	12.2	11	3.2	ug/kg	
95-47-6	o-Xylene	3.7	5.4	1.6	ug/kg	J
	m,p-Xylene	8.6	11	3.2	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%	52%	43-154%
98-08-8	aaa-Trifluorotoluene	81%	67%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GPH9-S(0-1) 1600	Date Sampled:	02/13/06
Lab Sample ID:	T12664-7	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	88.6
Method:	SW846 8015 M SW846 3550B		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11381.D	1	02/19/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	3.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	77%		41-153%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH9-S(10-11) 1618 Lab Sample ID: T12664-8 Matrix: SO - Soil Method: SW846 8015 Project: San Juan River Plant (SJRP)	Date Sampled: 02/13/06 Date Received: 02/16/06 Percent Solids: 85.8
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023872.D	20	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.99 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	191	130	67	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	81%		56-139%
98-08-8	aaa-Trifluorotoluene	68%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.8  
2

## Report of Analysis

Client Sample ID:	GPH9-S(10-11) 1618	Date Sampled:	02/13/06
Lab Sample ID:	T12664-8	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	85.8
Method:	SW846 8021B		
Project:	San Juan River Plant (SJR)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11435.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.99 g	5.0 ml	100 ul
Run #2			

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	67	20	ug/kg	
108-88-3	Toluene	38.2	67	13	ug/kg	J
100-41-4	Ethylbenzene	346	67	20	ug/kg	
1330-20-7	Xylenes (total)	5340	130	40	ug/kg	
95-47-6	o-Xylene	122	67	20	ug/kg	
	m,p-Xylene	5220	130	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	107%		43-154%
98-08-8	aaa-Trifluorotoluene	88%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH9-S(10-11) 1618	Date Sampled: 02/13/06
Lab Sample ID: T12664-8	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 85.8
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11382.D	10	02/19/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	376	97	39	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%		41-153%

ND = Not detected    MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH9-S(11-12) 1628	Date Sampled: 02/13/06
Lab Sample ID: T12664-9	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 93.2
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023865.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2	EE023892.D	4	02/23/06	JH	n/a	n/a	GEE1058

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2	5.05 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	88.8	5.7	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	323% <sup>a</sup>	232% <sup>a</sup>	56-139%
98-08-8	aaa-Trifluorotoluene	92%	113%	46-136%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH9-S(11-12) 1628	Date Sampled: 02/13/06
Lab Sample ID: T12664-9	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 93.2
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11437.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.05 g	5.0 ml	100 ul
Run #2			

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	57	17	ug/kg	
108-88-3	Toluene	58.3	57	11	ug/kg	
100-41-4	Ethylbenzene	95.9	57	17	ug/kg	
1330-20-7	Xylenes (total)	1130	110	34	ug/kg	
95-47-6	o-Xylene	321	57	17	ug/kg	
	m,p-Xylene	804	110	34	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	120%		43-154%
98-08-8	aaa-Trifluorotoluene	99%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH9-S(11-12) 1628	Date Sampled: 02/13/06
Lab Sample ID: T12664-9	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 93.2
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11387.D	1	02/19/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	10.3	8.9	3.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		41-153%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: TRIP BLANK 130206TB01	Date Sampled: 02/13/06
Lab Sample ID: T12664-10	Date Received: 02/16/06
Matrix: AQ - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11191.D	1	02/18/06	JH	n/a	n/a	GKK744
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

### Purgeable Aromatics

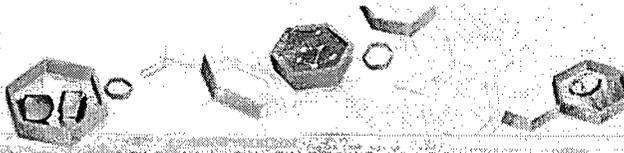
CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.38	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		56-136%
98-08-8	aaa-Trifluorotoluene	101%		50-144%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound.





IT'S ALL IN THE CHEMISTRY

### Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody





THOMAS

All This section can be removed for shipping & receipt

in 21500 FedEx Tracking Number 8546698170

order's name Martin Nee Phone 708 334 2711

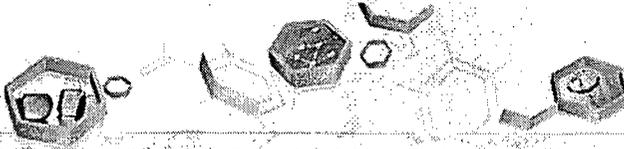
Company Lakota

Address 26 CK 3500

Flora Vista State WI 53415

for Internal Billing Reference

T12664: Chain of Custody  
Page 3 of 3



## GC Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12664  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-MB	EE023858.D 1		02/23/06	JH	n/a	n/a	GEE1058

The QC reported here applies to the following samples:

Method: SW846 8015

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	70%	56-139%
98-08-8	aaa-Trifluorotoluene	95%	46-136%

# Method Blank Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK744-MB	KK11178.D	1	02/18/06	JH	n/a	n/a	GKK744

4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12664-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Result	Limits
460-00-4	4-Bromofluorobenzene	93%	56-136%
98-08-8	aaa-Trifluorotoluene	95%	50-144%

# Method Blank Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK751-MB	KK11394.D	1	02/26/06	JH	n/a	n/a	GKK751

The QC reported here applies to the following samples: Method: SW846 8021B

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
108-88-3	Toluene	ND	1.0	0.20	ug/kg	
1330-20-7	Xylenes (total)	ND	2.0	0.60	ug/kg	
	m,p-Xylene	ND	2.0	0.60	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.30	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	105%	43-154%
98-08-8	aaa-Trifluorotoluene	105%	46-151%

# Blank Spike Summary

Job Number: T12664  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-BS	EE023859.D	1	02/23/06	JH	n/a	n/a	GEE1058

4.2  
4

The QC reported here applies to the following samples: Method: SW846 8015

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	16.0	80	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	56-139%
98-08-8	aaa-Trifluorotoluene	100%	46-136%

# Blank Spike Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK744-BS	KK11179.D	1	02/18/06	JH	n/a	n/a	GKK744

The QC reported here applies to the following samples:

Method: SW846 8021B

T12664-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.5	98	72-125
100-41-4	Ethylbenzene	20	18.3	92	76-125
108-88-3	Toluene	20	17.7	89	74-125
1330-20-7	Xylenes (total)	60	55.8	93	78-124
95-47-6	o-Xylene	20	18.7	94	78-124
	m,p-Xylene	40	37.1	93	78-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	56-136%
98-08-8	aaa-Trifluorotoluene	90%	50-144%

# Blank Spike/Blank Spike Duplicate Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK751-BS	KK11395.D	1	02/26/06	JH	n/a	n/a	GKK751
GKK751-BSD	KK11396.D	1	02/26/06	JH	n/a	n/a	GKK751

4.3  
4

The QC reported here applies to the following samples: Method: SW846 8021B

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	18.5	93	18.1	91	2	46-150/30
100-41-4	Ethylbenzene	20	19.3	97	19.0	95	2	69-134/30
108-88-3	Toluene	20	19.0	95	18.6	93	2	67-132/30
1330-20-7	Xylenes (total)	60	57.2	95	56.6	94	1	67-134/30
	m,p-Xylene	40	38.1	95	37.7	94	1	68-135/30
95-47-6	o-Xylene	20	19.1	96	18.9	95	1	66-133/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	96%	96%	43-154%
98-08-8	aaa-Trifluorotoluene	94%	89%	46-151%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12664-2MS	EE023861.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2MSD	EE023862.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2	EE023860.D	1	02/23/06	JH	n/a	n/a	GEE1058

The QC reported here applies to the following samples:

Method: SW846 8015

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	T12664-2 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	25.9	21.7	84	21.8	84	0	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12664-2	Limits
460-00-4	4-Bromofluorobenzene	88%	90%	63%	56-139%
98-08-8	aaa-Trifluorotoluene	89%	92%	82%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12625-11MS	KK11199.D	10	02/18/06	JH	n/a	n/a	GKK744
T12625-11MSD	KK11200.D	10	02/18/06	JH	n/a	n/a	GKK744
T12625-11	KK11197.D	1	02/18/06	JH	n/a	n/a	GKK744
T12625-11	KK11198.D	10	02/18/06	JH	n/a	n/a	GKK744

4.4  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12664-10

CAS No.	Compound	T12625-11 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	200	195	98	192	96	2	45-137/21
100-41-4	Ethylbenzene	7.5	200	179	86	178	85	1	68-126/15
108-88-3	Toluene	ND	200	171	86	169	85	1	63-130/22
1330-20-7	Xylenes (total)	5.9	600	528	87	523	86	1	72-125/19
95-47-6	o-Xylene	4.4	200	184	90	183	89	1	70-128/20
	m,p-Xylene	1.5	J 400	344	86	341	85	1	63-136/19

CAS No.	Surrogate Recoveries	MS	MSD	T12625-11	T12625-11	Limits
460-00-4	4-Bromofluorobenzene	90%	89%	82%	96%	56-136%
98-08-8	aaa-Trifluorotoluene	99%	99%	89%	88%	50-144%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12664-7MS	KK11416.D	1	02/27/06	JH	n/a	n/a	GKK751
T12664-7MSD	KK11417.D	1	02/27/06	JH	n/a	n/a	GKK751
T12664-7	KK11415.D	1	02/26/06	JH	n/a	n/a	GKK751
T12664-7	KK11414.D	1	02/26/06	JH	n/a	n/a	GKK751

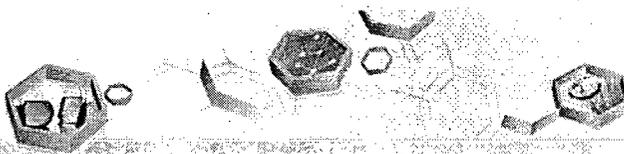
The QC reported here applies to the following samples:

Method: SW846 8021B

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	T12664-7 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		116	98.1	84	98.7	86	1	46-140/15
100-41-4	Ethylbenzene	ND		116	99.1	85	100	87	1	69-122/11
108-88-3	Toluene	3.5	J	116	103	86	103	86	0	64-125/14
1330-20-7	Xylenes (total)	12.2		349	320	88	317	88	1	66-124/13
	m,p-Xylene	8.6	J	233	215	89	213	89	1	67-124/12
95-47-6	o-Xylene	3.7	J	116	104	86	104	87	0	62-124/15

CAS No.	Surrogate Recoveries	MS	MSD	T12664-7	T12664-7	Limits
460-00-4	4-Bromofluorobenzene	82%	83%	80%	52%	43-154%
98-08-8	aaa-Trifluorotoluene	78%	83%	81%	67%	46-151%



## GC Semi-volatiles



### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12664  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-MB	CC11356.D	1	02/18/06	RC	02/17/06	OP5528	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.2	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	84% 41-153%

# Blank Spike Summary

Job Number: T12664  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-BS	CC11357.D	1	02/18/06	RC	02/17/06	OP5528	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	32.2	97	55-131

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	89%	41-153%

5.2  
5

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12664  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-MS	CC11399.D	10	02/20/06	FO	02/17/06	OP5528	GCC530
OP5528-MSD	CC11400.D	10	02/20/06	FO	02/17/06	OP5528	GCC530
T12664-9	CC11387.D	1	02/19/06	RC	02/17/06	OP5528	GCC529

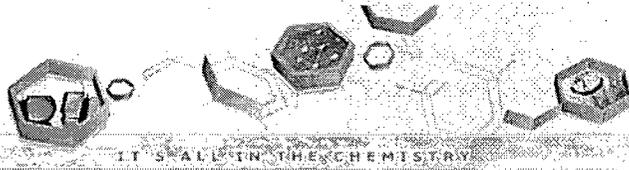
The QC reported here applies to the following samples:

Method: SW846 8015 M

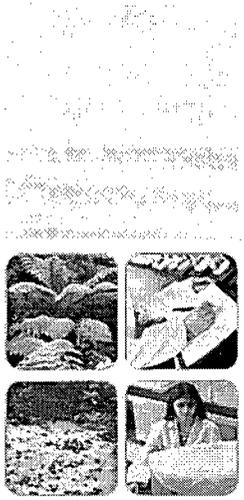
T12664-1, T12664-2, T12664-3, T12664-4, T12664-5, T12664-6, T12664-7, T12664-8, T12664-9

CAS No.	Compound	T12664-9 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	10.3	35.7	151	394*	149	389*	1	49-139/24

CAS No.	Surrogate Recoveries	MS	MSD	T12664-9	Limits
84-15-1	o-Terphenyl	135%	135%	74%	41-153%



02/27/06



**Technical Report for**

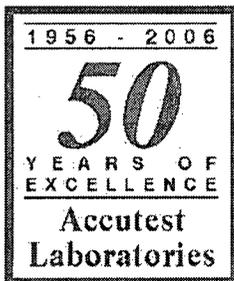
**Montgomery Watson**  
**San Juan River Plant (SJRP)**  
**D-ALAB-SANJUAN-003**  
**Accutest Job Number: T12663**

**Sampling Date: 02/14/06**

**Report to:**

**MWH Americas, Inc.**  
  
**jennifer.a.hurley@mwhglobal.com**  
**ATTN: Ms. Jennifer Hurley**

**Total number of pages in report: 53**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

*Ron Martino*  
**Ron Martino**  
**Laboratory Manager**

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## Sample Summary

Montgomery Watson

Job No: T12663

San Juan River Plant (SJRP)  
Project No: D-ALAB-SANJUAN-003

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T12663-1	02/14/06	07:00 MN	02/16/06	AQ	Trip Blank Soil	I40206TB01 (TRIP)
T12663-2	02/14/06	09:00 MN	02/16/06	SO	Soil	GPH10-S(0-1) 0900
T12663-3	02/14/06	09:10 MN	02/16/06	SO	Soil	GPH10-S(10-11) 0910
T12663-4	02/14/06	09:16 MN	02/16/06	SO	Soil	GPH10-S(13.5-14.5) 0916
T12663-5	02/14/06	10:16 MN	02/16/06	SO	Soil	GPH11-S(0-1) 1016
T12663-6	02/14/06	10:20 MN	02/16/06	SO	Soil	GPH11-S(10-11) 1020
T12663-7	02/14/06	10:25 MN	02/16/06	SO	Soil	GPH11-S(13-14) 1025
T12663-8	02/14/06	11:06 MN	02/16/06	SO	Soil	GPH12-S(0-1) 1106
T12663-9	02/14/06	11:15 MN	02/16/06	SO	Soil	GPH12-S(10-11) 1115
T12663-10	02/14/06	11:23 MN	02/16/06	SO	Soil	GPH12-S(14-15) 1123

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



IT'S ALL IN THE CHEMISTRY

**Sample Results**

**Report of Analysis**

---

Report of Analysis

Client Sample ID: 140206TB01 (TRIP)	Date Sampled: 02/14/06
Lab Sample ID: T12663-1	Date Received: 02/16/06
Matrix: AQ - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11192.D	1	02/18/06	JH	n/a	n/a	GKK744
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.38	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		56-136%
98-08-8	aaa-Trifluorotoluene	105%		50-144%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.2  
2

Client Sample ID: GPH10-S(0-1) 0900 Lab Sample ID: T12663-2 Matrix: SO - Soil Method: SW846 8015 Project: San Juan River Plant (SJRP)	Date Sampled: 02/14/06 Date Received: 02/16/06 Percent Solids: 86.4
---	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023836.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2	EE023851.D	1	02/22/06	JH	n/a	n/a	GEE1057

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2	5.02 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.6	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	52% <sup>a</sup>	61%	56-139%
98-08-8	aaa-Trifluorotoluene	72%	83%	46-136%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH10-S(0-1) 0900	Date Sampled: 02/14/06
Lab Sample ID: T12663-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.4
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11442.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2	KK11443.D	1	02/27/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2	1.25 g	5.0 ml

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.2	0.35	ug/kg	
108-88-3	Toluene	0.24	1.2	0.23	ug/kg	J
100-41-4	Ethylbenzene	ND	1.2	0.35	ug/kg	
1330-20-7	Xylenes (total)	1.3	2.3	0.69	ug/kg	J
95-47-6	o-Xylene	ND	1.2	0.35	ug/kg	
	m,p-Xylene	1.0	2.3	0.69	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	42% <sup>a</sup>	85%	43-154%
98-08-8	aaa-Trifluorotoluene	51%	85%	46-151%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

22  
2

Client Sample ID: GPH10-S(0-1) 0900	Date Sampled: 02/14/06
Lab Sample ID: T12663-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.4
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11361.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	4.70	9.6	3.8	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	97%		41-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.3  
2

Client Sample ID: GPH10-S(10-11) 0910	Date Sampled: 02/14/06
Lab Sample ID: T12663-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 78.9
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023879.D	100	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.11 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2750	750	380	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	123%		56-139%		
98-08-8	aaa-Trifluorotoluene	98%		46-136%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.3  
2

Client Sample ID: GPH10-S(10-11) 0910	Date Sampled: 02/14/06
Lab Sample ID: T12663-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 78.9
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11439.D	2	02/27/06	JH	n/a	n/a	GKK751
Run #2	KK11440.D	20	02/27/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.12 g	5.0 ml	100 ul
Run #2	5.12 g	5.0 ml	100 ul

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	474	150	45	ug/kg	
108-88-3	Toluene	1520	150	30	ug/kg	
100-41-4	Ethylbenzene	19500	150	45	ug/kg	
1330-20-7	Xylenes (total)	257000 <sup>a</sup>	3000	900	ug/kg	
95-47-6	o-Xylene	19800 <sup>a</sup>	1500	450	ug/kg	
	m,p-Xylene	237000 <sup>a</sup>	3000	900	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	124%	116%	43-154%
98-08-8	aaa-Trifluorotoluene	113%	90%	46-151%

(a) Result is from Run# 2

ND = Not detected    MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.3  
2

Client Sample ID:	GPH10-S(10-11) 0910		Date Sampled:	02/14/06
Lab Sample ID:	T12663-3		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	78.9
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJR)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11383.D	1	02/19/06	RC	02/17/06	OP5528	GCC529
Run #2	CC11401.D	20	02/20/06	FO	02/17/06	OP5528	GCC530

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	913 <sup>a</sup>	210	84	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	108%	80%	41-153%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.4  
2

Client Sample ID: GPH10-S(13.5-14.5) 0916	Date Sampled: 02/14/06
Lab Sample ID: T12663-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 82.2
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023880.D	10	02/23/06	JH	n/a	n/a	GEE1058
Run #2	EE023854.D	20	02/22/06	JH	n/a	n/a	GEE1057

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2	5.02 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	382	71	36	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	154% <sup>a</sup>	105%	56-139%
98-08-8	aaa-Trifluorotoluene	97%	84%	46-136%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID: GPH10-S(13.5-14.5) 0916	Date Sampled: 02/14/06
Lab Sample ID: T12663-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 82.2
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11426.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	50.5	71	21	ug/kg	J
108-88-3	Toluene	337	71	14	ug/kg	
100-41-4	Ethylbenzene	1710	71	21	ug/kg	
1330-20-7	Xylenes (total)	10200	140	43	ug/kg	
95-47-6	o-Xylene	1230	71	21	ug/kg	
	m,p-Xylene	8970	140	43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	121%		43-154%
98-08-8	aaa-Trifluorotoluene	82%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

24  
2

Client Sample ID: GPH10-S(13.5-14.5) 0916	Date Sampled: 02/14/06
Lab Sample ID: T12663-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 82.2
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11363.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2	CC11402.D	5	02/20/06	FO	02/17/06	OP5528	GCC530

Run #	Initial Weight	Final Volume
Run #1	30.8 g	1.0 ml
Run #2	30.8 g	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	121 <sup>a</sup>	49	20	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%	78%	41-153%

(a) Result is from Run# 2

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID:	GPH11-S(0-1) 1016		Date Sampled:	02/14/06
Lab Sample ID:	T12663-5		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	92.2
Method:	SW846 8015			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023852.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2	EE023839.D	1	02/22/06	JH	n/a	n/a	GEE1057

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	100 ul
Run #2	5.25 g	5.0 ml	100 ul

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.6	2.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	80%	79%	56-139%
98-08-8	aaa-Trifluorotoluene	80%	81%	46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH11-S(0-1) 1016	
Lab Sample ID: T12663-5	Date Sampled: 02/14/06
Matrix: SO - Soil	Date Received: 02/16/06
Method: SW846 8021B	Percent Solids: 92.2
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11408.D	1	02/26/06	JH	n/a	n/a	GKK751
Run #2	KK11409.D	1	02/26/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume
Run #1	5.22 g	5.0 ml
Run #2	1.04 g	5.0 ml

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.31	ug/kg	
108-88-3	Toluene	ND	1.0	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/kg	
1330-20-7	Xylenes (total)	0.94	2.1	0.62	ug/kg	J
95-47-6	o-Xylene	ND	1.0	0.31	ug/kg	
	m,p-Xylene	0.80	2.1	0.62	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	66%	82%	43-154%
98-08-8	aaa-Trifluorotoluene	73%	83%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.5  
2

## Report of Analysis

Client Sample ID: GPH11-S(0-1) 1016	Date Sampled: 02/14/06
Lab Sample ID: T12663-5	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 92.2
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11364.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	14.7	9.0	3.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.6  
2

Client Sample ID: GPH11-S(10-11) 1020	Date Sampled: 02/14/06
Lab Sample ID: T12663-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.5
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023885.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.19 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	3.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	65%		56-139%
98-08-8	aaa-Trifluorotoluene	81%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID: GPH11-S(10-11) 1020	Date Sampled: 02/14/06
Lab Sample ID: T12663-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.5
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11410.D	1	02/26/06	JH	n/a	n/a	GKK751
Run #2	KK11411.D	1	02/26/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume
Run #1	5.15 g	5.0 ml
Run #2	1.27 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.53	1.1	0.34	ug/kg	J
108-88-3	Toluene	0.27	1.1	0.22	ug/kg	J
100-41-4	Ethylbenzene	2.8	1.1	0.34	ug/kg	
1330-20-7	Xylenes (total)	2.4	2.2	0.67	ug/kg	
95-47-6	o-Xylene	0.95	1.1	0.34	ug/kg	J
	m,p-Xylene	1.5	2.2	0.67	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	67%	84%	43-154%
98-08-8	aaa-Trifluorotoluene	83%	86%	46-151%

ND = Not detected    MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH11-S(10-11) 1020	Date Sampled: 02/14/06
Lab Sample ID: T12663-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 86.5
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11365.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	3.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: GPH11-S(13-14) 1025	Date Sampled: 02/14/06
Lab Sample ID: T12663-7	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 84.0
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023886.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.11 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.8	3.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	61%		56-139%		
98-08-8	aaa-Trifluorotoluene	81%		46-136%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	GPH11-S(13-14) 1025	Date Sampled:	02/14/06
Lab Sample ID:	T12663-7	Date Received:	02/16/06
Matrix:	SO - Soil	Percent Solids:	84.0
Method:	SW846 8021B		
Project:	San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11412.D	1	02/26/06	JH	n/a	n/a	GKK751
Run #2	KK11413.D	1	02/26/06	JH	n/a	n/a	GKK751

Run #	Initial Weight	Final Volume
Run #1	5.06 g	5.0 ml
Run #2	1.09 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.3	1.2	0.35	ug/kg	
108-88-3	Toluene	1.7	1.2	0.24	ug/kg	
100-41-4	Ethylbenzene	5.1	1.2	0.35	ug/kg	
1330-20-7	Xylenes (total)	58.9	2.4	0.71	ug/kg	
95-47-6	o-Xylene	7.7	1.2	0.35	ug/kg	
	m,p-Xylene	51.2	2.4	0.71	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	39% <sup>a</sup>	69%	43-154%
98-08-8	aaa-Trifluorotoluene	65%	80%	46-151%

(a) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.7  
 2

Report of Analysis

Client Sample ID:	GPH11-S(13-14) 1025		Date Sampled:	02/14/06
Lab Sample ID:	T12663-7		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	84.0
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11368.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.8	3.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	56%		41-153%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

2.8  
2

Client Sample ID: GPH12-S(0-1) 1106	Date Sampled: 02/14/06
Lab Sample ID: T12663-8	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 93.4
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023887.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.98 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.7	2.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	61%		56-139%
98-08-8	aaa-Trifluorotoluene	83%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID: GPH12-S(0-1) 1106	Date Sampled: 02/14/06
Lab Sample ID: T12663-8	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 93.4
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11420.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.21 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.31	ug/kg	
108-88-3	Toluene	ND	1.0	0.21	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.31	ug/kg	
1330-20-7	Xylenes (total)	ND	2.1	0.62	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.31	ug/kg	
	m,p-Xylene	ND	2.1	0.62	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	67%		43-154%
98-08-8	aaa-Trifluorotoluene	76%		46-151%

ND = Not detected    MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.8  
2

Client Sample ID: GPH12-S(0-1) 1106	Date Sampled: 02/14/06
Lab Sample ID: T12663-8	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 93.4
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11384.D	1	02/19/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	9.78	8.9	3.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	97%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID: GPH12-S(10-11) 1115	Date Sampled: 02/14/06
Lab Sample ID: T12663-9	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 80.0
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023888.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.13 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.3	3.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	79%		56-139%		
98-08-8	aaa-Trifluorotoluene	83%		46-136%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH12-S(10-11) 1115	Date Sampled: 02/14/06
Lab Sample ID: T12663-9	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 80.0
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11422.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2		

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.3	0.38	ug/kg	
108-88-3	Toluene	0.53	1.3	0.25	ug/kg	J
100-41-4	Ethylbenzene	1.1	1.3	0.38	ug/kg	J
1330-20-7	Xylenes (total)	2.7	2.5	0.75	ug/kg	
95-47-6	o-Xylene	0.62	1.3	0.38	ug/kg	J
	m,p-Xylene	2.0	2.5	0.75	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	63%		43-154%
98-08-8	aaa-Trifluorotoluene	77%		46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.9  
2

Client Sample ID: GPH12-S(10-11) 1115		Date Sampled: 02/14/06
Lab Sample ID: T12663-9		Date Received: 02/16/06
Matrix: SO - Soil		Percent Solids: 80.0
Method: SW846 8015 M SW846 3550B		
Project: San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11370.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	4.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	84%		41-153%		

---

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH12-S(14-15) 1123	Date Sampled: 02/14/06
Lab Sample ID: T12663-10	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 83.0
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023889.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.26 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5.17	6.8	3.4	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	84%		56-139%
98-08-8	aaa-Trifluorotoluene	76%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.10  
 2

### Report of Analysis

Client Sample ID: GPH12-S(14-15) 1123	Date Sampled: 02/14/06
Lab Sample ID: T12663-10	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 83.0
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11424.D	1	02/27/06	JH	n/a	n/a	GKK751
Run #2							

Run #	Initial Weight	Final Volume
Run #1	5.07 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.2	0.36	ug/kg	
108-88-3	Toluene	0.40	1.2	0.24	ug/kg	J
100-41-4	Ethylbenzene	ND	1.2	0.36	ug/kg	
1330-20-7	Xylenes (total)	2.1	2.4	0.71	ug/kg	J
95-47-6	o-Xylene	ND	1.2	0.36	ug/kg	
	m,p-Xylene	1.7	2.4	0.71	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	65%		43-154%
98-08-8	aaa-Trifluorotoluene	76%		46-151%

ND = Not detected    MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

2.10  
2

Client Sample ID: GPH12-S(14-15) 1123 Lab Sample ID: T12663-10 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: San Juan River Plant (SJRP)	Date Sampled: 02/14/06 Date Received: 02/16/06 Percent Solids: 83.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11371.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.9	3.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		41-153%

---

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL - Method Detection Limit J = Indicates an estimated value B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound
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## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody





T12663

400 This section can be returned for Participant's records.  
to 21500 PALS Tracking Number 8546383061190  
Name's Martin Nee Phone 505 334-2791  
Company Lodestar  
Address 2600 E 3500  
City Flora Vista State NM Zip 87415  
or Internal Billing Reference



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## GC Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12663  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1057-MB	EE023823.D 1		02/22/06	JH	n/a	n/a	GEE1057

The QC reported here applies to the following samples:

Method: SW846 8015

T12663-2, T12663-4, T12663-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	80%	56-139%
98-08-8	aaa-Trifluorotoluene	99%	46-136%

# Method Blank Summary

Job Number: T12663  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-MB	EE023858.D	1	02/23/06	JH	n/a	n/a	GEE1058

4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12663-3, T12663-4, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	70%	56-139%
98-08-8	aaa-Trifluorotoluene	95%	46-136%

# Method Blank Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK744-MB	KK11178.D	1	02/18/06	JH	n/a	n/a	GKK744

The QC reported here applies to the following samples:

Method: SW846 8021B

T12663-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	93% 56-136%
98-08-8	aaa-Trifluorotoluene	95% 50-144%

# Method Blank Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK751-MB	KK11394.D	1	02/26/06	JH	n/a	n/a	GKK751

4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12663-2, T12663-3, T12663-4, T12663-5, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
108-88-3	Toluene	ND	1.0	0.20	ug/kg	
1330-20-7	Xylenes (total)	ND	2.0	0.60	ug/kg	
	m,p-Xylene	ND	2.0	0.60	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.30	ug/kg	

CAS No.	Surrogate Recoveries	Result	Limits
460-00-4	4-Bromofluorobenzene	105%	43-154%
98-08-8	aaa-Trifluorotoluene	105%	46-151%

# Blank Spike Summary

Job Number: T12663  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1057-BS	EE023824.D	1	02/22/06	JH	n/a	n/a	GEE1057

The QC reported here applies to the following samples:

Method: SW846 8015

T12663-2, T12663-4, T12663-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	17.2	86	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	56-139%
98-08-8	aaa-Trifluorotoluene	99%	46-136%

# Blank Spike Summary

Job Number: T12663  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-BS	EE023859.D 1		02/23/06	JH	n/a	n/a	GEE1058

4.2  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12663-3, T12663-4, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	16.0	80	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	56-139%
98-08-8	aaa-Trifluorotoluene	100%	46-136%

# Blank Spike Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK744-BS	KK11179.D	1	02/18/06	JH	n/a	n/a	GKK744

The QC reported here applies to the following samples:

Method: SW846 8021B

T12663-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.5	98	72-125
100-41-4	Ethylbenzene	20	18.3	92	76-125
108-88-3	Toluene	20	17.7	89	74-125
1330-20-7	Xylenes (total)	60	55.8	93	78-124
95-47-6	o-Xylene	20	18.7	94	78-124
	m,p-Xylene	40	37.1	93	78-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	56-136%
98-08-8	aaa-Trifluorotoluene	90%	50-144%

# Blank Spike/Blank Spike Duplicate Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK751-BS	KK11395.D	1	02/26/06	JH	n/a	n/a	GKK751
GKK751-BSD	KK11396.D	1	02/26/06	JH	n/a	n/a	GKK751

The QC reported here applies to the following samples:

Method: SW846 8021B

T12663-2, T12663-3, T12663-4, T12663-5, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	18.5	93	18.1	91	2	46-150/30
100-41-4	Ethylbenzene	20	19.3	97	19.0	95	2	69-134/30
108-88-3	Toluene	20	19.0	95	18.6	93	2	67-132/30
1330-20-7	Xylenes (total)	60	57.2	95	56.6	94	1	67-134/30
	m,p-Xylene	40	38.1	95	37.7	94	1	68-135/30
95-47-6	o-Xylene	20	19.1	96	18.9	95	1	66-133/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	96%	96%	43-154%
98-08-8	aaa-Trifluorotoluene	94%	89%	46-151%

4.3  
4

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12661-6MS	EE023831.D	1	02/22/06	JH	n/a	n/a	GEE1057
T12661-6MSD	EE023832.D	1	02/22/06	JH	n/a	n/a	GEE1057
T12661-6	EE023830.D	1	02/22/06	JH	n/a	n/a	GEE1057

The QC reported here applies to the following samples:

Method: SW846 8015

T12663-2, T12663-4, T12663-5

CAS No.	Compound	T12661-6 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	27.5	22.8	83	23.8	86	4	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12661-6	Limits
460-00-4	4-Bromofluorobenzene	87%	92%	72%	56-139%
98-08-8	aaa-Trifluorotoluene	92%	97%	81%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12664-2MS	EE023861.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2MSD	EE023862.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2	EE023860.D	1	02/23/06	JH	n/a	n/a	GEE1058

4.4  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12663-3, T12663-4, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	T12664-2 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	25.9	21.7	84	21.8	84	0	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12664-2	Limits
460-00-4	4-Bromofluorobenzene	88%	90%	63%	56-139%
98-08-8	aaa-Trifluorotoluene	89%	92%	82%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12625-11MS	KK11199.D	10	02/18/06	JH	n/a	n/a	GKK744
T12625-11MSD	KK11200.D	10	02/18/06	JH	n/a	n/a	GKK744
T12625-11	KK11197.D	1	02/18/06	JH	n/a	n/a	GKK744
T12625-11	KK11198.D	10	02/18/06	JH	n/a	n/a	GKK744

The QC reported here applies to the following samples:

Method: SW846 8021B

T12663-1

CAS No.	Compound	T12625-11 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	200	195	98	192	96	2	45-137/21
100-41-4	Ethylbenzene	7.5	200	179	86	178	85	1	68-126/15
108-88-3	Toluene	ND	200	171	86	169	85	1	63-130/22
1330-20-7	Xylenes (total)	5.9	600	528	87	523	86	1	72-125/19
95-47-6	o-Xylene	4.4	200	184	90	183	89	1	70-128/20
	m,p-Xylene	1.5	J 400	344	86	341	85	1	63-136/19

CAS No.	Surrogate Recoveries	MS	MSD	T12625-11	T12625-11	Limits
460-00-4	4-Bromofluorobenzene	90%	89%	82%	96%	56-136%
98-08-8	aaa-Trifluorotoluene	99%	99%	89%	88%	50-144%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12664-7MS	KK11416.D	1	02/27/06	JH	n/a	n/a	GKK751
T12664-7MSD	KK11417.D	1	02/27/06	JH	n/a	n/a	GKK751
T12664-7	KK11415.D	1	02/26/06	JH	n/a	n/a	GKK751
T12664-7	KK11414.D	1	02/26/06	JH	n/a	n/a	GKK751

The QC reported here applies to the following samples:

Method: SW846 8021B

T12663-2, T12663-3, T12663-4, T12663-5, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	T12664-7 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		116	98.1	84	98.7	86	1	46-140/15
100-41-4	Ethylbenzene	ND		116	99.1	85	100	87	1	69-122/11
108-88-3	Toluene	3.5	J	116	103	86	103	86	0	64-125/14
1330-20-7	Xylenes (total)	12.2		349	320	88	317	88	1	66-124/13
	m,p-Xylene	8.6	J	233	215	89	213	89	1	67-124/12
95-47-6	o-Xylene	3.7	J	116	104	86	104	87	0	62-124/15

CAS No.	Surrogate Recoveries	MS	MSD	T12664-7	T12664-7	Limits
460-00-4	4-Bromofluorobenzene	82%	83%	80%	52%	43-154%
98-08-8	aaa-Trifluorotoluene	78%	83%	81%	67%	46-151%



## GC Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12663  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-MB	CC11356.D	1	02/18/06	RC	02/17/06	OP5528	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12663-2, T12663-3, T12663-4, T12663-5, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.2	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	84% 41-153%

5.1  
5

# Blank Spike Summary

Job Number: T12663  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-BS	CC11357.D	1	02/18/06	RC	02/17/06	OP5528	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12663-2, T12663-3, T12663-4, T12663-5, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	32.2	97	55-131

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	89%	41-153%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12663  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-MS	CC11399.D	10	02/20/06	FO	02/17/06	OP5528	GCC530
OP5528-MSD	CC11400.D	10	02/20/06	FO	02/17/06	OP5528	GCC530
T12664-9	CC11387.D	1	02/19/06	RC	02/17/06	OP5528	GCC529

The QC reported here applies to the following samples:

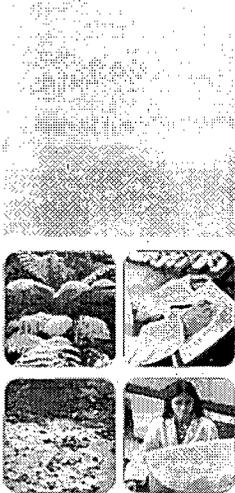
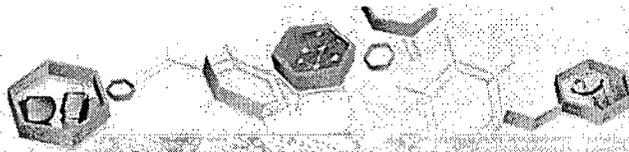
Method: SW846 8015 M

T12663-2, T12663-3, T12663-4, T12663-5, T12663-6, T12663-7, T12663-8, T12663-9, T12663-10

CAS No.	Compound	T12664-9 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	10.3	35.7	151	394*	149	389*	1	49-139/24

CAS No.	Surrogate Recoveries	MS	MSD	T12664-9	Limits
84-15-1	o-Terphenyl	135%	135%	74%	41-153%

5.3  
5



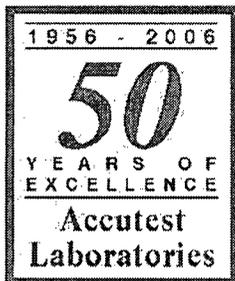
**Technical Report for**

Montgomery Watson  
San Juan River Plant (SJRP)  
D-ALAB-SANJUAN-003  
Accutest Job Number: T12661  
  
Sampling Date: 02/14/06

Report to:

MWH Americas, Inc.  
  
jennifer.a.hurley@mwhglobal.com  
ATTN: Ms. Jennifer Hurley

Total number of pages in report: 49



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino  
Laboratory Manager

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### Sample Summary

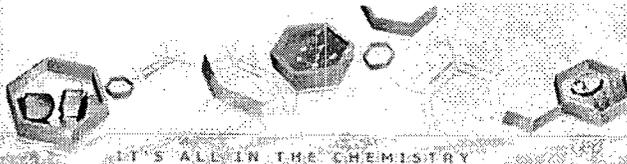
Montgomery Watson

Job No: T12661

San Juan River Plant (SJR)  
Project No: D-ALAB-SANJUAN-003

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
T12661-1	02/14/06	11:53 MN	02/16/06	SO	Soil	GPH13-S(0-1) 1153
T12661-2	02/14/06	12:00 MN	02/16/06	SO	Soil	GPH13-S(8-9) 1200
T12661-3	02/14/06	13:00 MN	02/16/06	SO	Soil	GPH14-S(0-1) 1300
T12661-4	02/14/06	13:15 MN	02/16/06	SO	Soil	GPH14-S(7.25-8.25) 1315
T12661-5	02/14/06	13:48 MN	02/16/06	SO	Soil	GPH15-S(0-1) 1348
T12661-6	02/14/06	13:59 MN	02/16/06	SO	Soil	GPH15-S(10-11) 1359
T12661-7	02/14/06	14:02 MN	02/16/06	SO	Soil	GPH15-S(13.5-14.5) 1402

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



**Sample Results**

**Report of Analysis**

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# Report of Analysis

2.1  
2

Client Sample ID:	GPH13-S(0-1) 1153		Date Sampled:	02/14/06
Lab Sample ID:	T12661-1		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	88.3
Method:	SW846 8015			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023825.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.03 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.3	3.1	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	70%		56-139%		
98-08-8	aaa-Trifluorotoluene	84%		46-136%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.1  
2

Client Sample ID: GPH13-S(0-1) 1153	Date Sampled: 02/14/06
Lab Sample ID: T12661-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.3
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11449.D	1	02/27/06	JH	n/a	n/a	GKK752
Run #2	KK11374.D	1	02/25/06	JH	n/a	n/a	GKK750

Run #	Initial Weight	Final Volume
Run #1	5.16 g	5.0 ml
Run #2	4.98 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.33	ug/kg	
108-88-3	Toluene	ND	1.1	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.33	ug/kg	
1330-20-7	Xylenes (total)	ND	2.2	0.66	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.33	ug/kg	
	m,p-Xylene	ND	2.2	0.66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	69%	66%	43-154%
98-08-8	aaa-Trifluorotoluene	78%	79%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

2.1  
2

Client Sample ID: GPH13-S(0-1) 1153	Date Sampled: 02/14/06
Lab Sample ID: T12661-1	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.3
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11342.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.3	3.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	76%		41-153%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH13-S(8-9) 1200	Date Sampled: 02/14/06
Lab Sample ID: T12661-2	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 81.8
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023826.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.12 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.1	3.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	66%		56-139%
98-08-8	aaa-Trifluorotoluene	80%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID:	GPH13-S(8-9) 1200		Date Sampled:	02/14/06
Lab Sample ID:	T12661-2		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	81.8
Method:	SW846 8021B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11450.D	1	02/27/06	JH	n/a	n/a	GKK752
Run #2	KK11375.D	1	02/25/06	JH	n/a	n/a	GKK750

Run #	Initial Weight	Final Volume
Run #1	5.05 g	5.0 ml
Run #2	5.11 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.2	0.36	ug/kg	
108-88-3	Toluene	ND	1.2	0.24	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.36	ug/kg	
1330-20-7	Xylenes (total)	ND	2.4	0.73	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.36	ug/kg	
	m,p-Xylene	ND	2.4	0.73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	59%	67%	43-154%
98-08-8	aaa-Trifluorotoluene	68%	78%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH13-S(8-9) 1200 Lab Sample ID: T12661-2 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: San Juan River Plant (SJRP)	Date Sampled: 02/14/06 Date Received: 02/16/06 Percent Solids: 81.8
---	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11343.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	4.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

22  
2

Report of Analysis

2.3  
2

Client Sample ID: GPH14-S(0-1) 1300	Date Sampled: 02/14/06
Lab Sample ID: T12661-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.8
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023827.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.11 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	3.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	66%		56-139%		
98-08-8	aaa-Trifluorotoluene	85%		46-136%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH14-S(0-1) 1300		Date Sampled: 02/14/06
Lab Sample ID: T12661-3		Date Received: 02/16/06
Matrix: SO - Soil		Percent Solids: 89.8
Method: SW846 8021B		
Project: San Juan River Plant (SJRP)		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11451.D	1	02/27/06	JH	n/a	n/a	GKK752
Run #2	KK11376.D	1	02/25/06	JH	n/a	n/a	GKK750

Run #	Initial Weight	Final Volume
Run #1	5.06 g	5.0 ml
Run #2	5.05 g	5.0 ml

### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.33	ug/kg	
108-88-3	Toluene	ND	1.1	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.33	ug/kg	
1330-20-7	Xylenes (total)	ND	2.2	0.66	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.33	ug/kg	
	m,p-Xylene	ND	2.2	0.66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	69%	64%	43-154%
98-08-8	aaa-Trifluorotoluene	78%	78%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

2.3  
2

Client Sample ID: GPH14-S(0-1) 1300	Date Sampled: 02/14/06
Lab Sample ID: T12661-3	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.8
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11344.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.3	3.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		41-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH14-S(7.25-8.25) 1315 Lab Sample ID: T12661-4 Matrix: SO - Soil Method: SW846 8015 Project: San Juan River Plant (SJR)	Date Sampled: 02/14/06 Date Received: 02/16/06 Percent Solids: 88.8
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023828.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.27 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.0	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	68%		56-139%
98-08-8	aaa-Trifluorotoluene	82%		46-136%

---

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range	MDL - Method Detection Limit B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound	J = Indicates an estimated value
--	--	----------------------------------

24  
2

### Report of Analysis

Client Sample ID:	GPH14-S(7.25-8.25) 1315	
Lab Sample ID:	T12661-4	Date Sampled: 02/14/06
Matrix:	SO - Soil	Date Received: 02/16/06
Method:	SW846 8021B	Percent Solids: 88.8
Project:	San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11452.D	1	02/27/06	JH	n/a	n/a	GKK752
Run #2	KK11377.D	1	02/25/06	JH	n/a	n/a	GKK750

Run #	Initial Weight	Final Volume
Run #1	5.20 g	5.0 ml
Run #2	5.30 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.32	ug/kg	
108-88-3	Toluene	ND	1.1	0.22	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	0.32	ug/kg	
1330-20-7	Xylenes (total)	ND	2.2	0.65	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.32	ug/kg	
	m,p-Xylene	ND	2.2	0.65	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	53%	62%	43-154%
98-08-8	aaa-Trifluorotoluene	65%	85%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH14-S(7.25-8.25) 1315	Date Sampled: 02/14/06
Lab Sample ID: T12661-4	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 88.8
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11345.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.4	3.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID: GPH15-S(0-1) 1348	Date Sampled: 02/14/06
Lab Sample ID: T12661-5	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.9
Method: SW846 8015	
Project: San Juan River Plant (SJR)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023829.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.22 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	5.57	5.9	2.9	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	79%		56-139%		
98-08-8	aaa-Trifluorotoluene	85%		46-136%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID: GPH15-S(0-1) 1348	Date Sampled: 02/14/06
Lab Sample ID: T12661-5	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 89.9
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11455.D	1	02/27/06	JH	n/a	n/a	GKK752
Run #2	KK11456.D	1	02/27/06	JH	n/a	n/a	GKK752

Run #	Initial Weight	Final Volume
Run #1	5.06 g	5.0 ml
Run #2	1.06 g	5.0 ml

**Purgeable Aromatics**

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.1	0.33	ug/kg	
108-88-3	Toluene	0.23	1.1	0.22	ug/kg	J
100-41-4	Ethylbenzene	ND	1.1	0.33	ug/kg	
1330-20-7	Xylenes (total)	ND	2.2	0.66	ug/kg	
95-47-6	o-Xylene	ND	1.1	0.33	ug/kg	
	m,p-Xylene	ND	2.2	0.66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	62%	76%	43-154%
98-08-8	aaa-Trifluorotoluene	69%	82%	46-151%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

Client Sample ID:	GPH15-S(0-1) 1348		Date Sampled:	02/14/06
Lab Sample ID:	T12661-5		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	89.9
Method:	SW846 8015 M SW846 3550B			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11348.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	12.6	9.3	3.7	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	86%		41-153%		

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH15-S(10-11) 1359	Date Sampled: 02/14/06
Lab Sample ID: T12661-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 83.3
Method: SW846 8015	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023830.D	1	02/22/06	JH	n/a	n/a	GEE1057
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.10 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	3.4	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		56-139%
98-08-8	aaa-Trifluorotoluene	81%		46-136%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

26  
2

### Report of Analysis

Client Sample ID:	GPH15-S(10-11) 1359	
Lab Sample ID:	T12661-6	Date Sampled: 02/14/06
Matrix:	SO - Soil	Date Received: 02/16/06
Method:	SW846 8021B	Percent Solids: 83.3
Project:	San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11453.D	1	02/27/06	JH	n/a	n/a	GKK752
Run #2	KK11378.D	1	02/25/06	JH	n/a	n/a	GKK750

Run #	Initial Weight	Final Volume
Run #1	5.06 g	5.0 ml
Run #2	5.17 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.2	0.36	ug/kg	
108-88-3	Toluene	ND	1.2	0.24	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.36	ug/kg	
1330-20-7	Xylenes (total)	1.7	2.4	0.71	ug/kg	J
95-47-6	o-Xylene	ND	1.2	0.36	ug/kg	
	m,p-Xylene	1.4	2.4	0.71	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	58%	64%	43-154%
98-08-8	aaa-Trifluorotoluene	70%	78%	46-151%

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH15-S(10-11) 1359	Date Sampled: 02/14/06
Lab Sample ID: T12661-6	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 83.3
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11350.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	4.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		41-153%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

2.6  
 2

### Report of Analysis

Client Sample ID:	GPH15-S(13.5-14.5) 1402		Date Sampled:	02/14/06
Lab Sample ID:	T12661-7		Date Received:	02/16/06
Matrix:	SO - Soil		Percent Solids:	82.4
Method:	SW846 8015			
Project:	San Juan River Plant (SJRP)			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EE023884.D	1	02/23/06	JH	n/a	n/a	GEE1058
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.02 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	7.1	3.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4	4-Bromofluorobenzene	75%		56-139%		
98-08-8	aaa-Trifluorotoluene	85%		46-136%		

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: GPH15-S(13.5-14.5) 1402	Date Sampled: 02/14/06
Lab Sample ID: T12661-7	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 82.4
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11454.D	1	02/27/06	JH	n/a	n/a	GKK752
Run #2	KK11383.D	1	02/25/06	JH	n/a	n/a	GKK750

Run #	Initial Weight	Final Volume
Run #1	5.00 g	5.0 ml
Run #2	5.11 g	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.2	0.36	ug/kg	
108-88-3	Toluene	ND	1.2	0.24	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	0.36	ug/kg	
1330-20-7	Xylenes (total)	3.1	2.4	0.73	ug/kg	
95-47-6	o-Xylene	ND	1.2	0.36	ug/kg	
	m,p-Xylene	2.8	2.4	0.73	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	54%	63%	43-154%
98-08-8	aaa-Trifluorotoluene	68%	88%	46-151%

ND = Not detected      MDL - Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

2.7  
2

Client Sample ID: GPH15-S(13.5-14.5) 1402	Date Sampled: 02/14/06
Lab Sample ID: T12661-7	Date Received: 02/16/06
Matrix: SO - Soil	Percent Solids: 82.4
Method: SW846 8015 M SW846 3550B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CC11360.D	1	02/18/06	RC	02/17/06	OP5528	GCC529
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	4.0	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	79%		41-153%		

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ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound



## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody





T12661

All This portion can be removed for recipient's records.  
 No. 21500 Field/Tracking Number 854638306190  
 Order's Name Martin Aker Phone 306 334 2731  
 Country Canada  
 Address 2601 E 3500  
 by Flora Visk State ONT Zip 97415  
 For Internal Billing Reference



## GC Volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1057-MB	EE023823.D 1		02/22/06	JH	n/a	n/a	GEE1057

4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	80%	56-139%
98-08-8	aaa-Trifluorotoluene	99%	46-136%

# Method Blank Summary

Job Number: T12661  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-MB	EE023858.D 1		02/23/06	JH	n/a	n/a	GEE1058

The QC reported here applies to the following samples:

Method: SW846 8015

T12661-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	70%	56-139%
98-08-8	aaa-Trifluorotoluene	95%	46-136%

# Method Blank Summary

Job Number: T12661  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK750-MB	KK11371.D	1	02/25/06	JH	n/a	n/a	GKK750

4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12661-1, T12661-2, T12661-3, T12661-4, T12661-6, T12661-7

CAS No.	Compound	Result	RL	MDL	Units	Q
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CAS No.	Surrogate Recoveries	Limits	
460-00-4	4-Bromofluorobenzene	95%	43-154%
98-08-8	aaa-Trifluorotoluene	94%	46-151%

# Method Blank Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK752-MB	KK11446.D	1	02/27/06	JH	n/a	n/a	GKK752

The QC reported here applies to the following samples:

Method: SW846 8021B

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6, T12661-7.

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/kg	
108-88-3	Toluene	ND	1.0	0.20	ug/kg	
1330-20-7	Xylenes (total)	ND	2.0	0.60	ug/kg	
	m,p-Xylene	ND	2.0	0.60	ug/kg	
95-47-6	o-Xylene	ND	1.0	0.30	ug/kg	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	100% 43-154%
98-08-8	aaa-Trifluorotoluene	92% 46-151%

# Blank Spike Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1057-BS	EE023824.D	1	02/22/06	JH	n/a	n/a	GEE1057

4.2  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	17.2	86	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	93%	56-139%
98-08-8	aaa-Trifluorotoluene	99%	46-136%

# Blank Spike Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GEE1058-BS	EE023859.D 1		02/23/06	JH	n/a	n/a	GEE1058

The QC reported here applies to the following samples:

Method: SW846 8015

T12661-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	16.0	80	70-119

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	87%	56-139%
98-08-8	aaa-Trifluorotoluene	100%	46-136%

# Blank Spike/Blank Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK750-BS	KK11372.D	1	02/25/06	JH	n/a	n/a	GKK750
GKK750-BSD	KK11373.D	1	02/25/06	JH	n/a	n/a	GKK750

4.3  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12661-1, T12661-2, T12661-3, T12661-4, T12661-6, T12661-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
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CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	87%	87%	43-154%
98-08-8	aaa-Trifluorotoluene	83%	79%	46-151%

# Blank Spike/Blank Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK752-BS	KK11447.D	1	02/27/06	JH	n/a	n/a	GKK752
GKK752-BSD	KK11448.D	1	02/27/06	JH	n/a	n/a	GKK752

The QC reported here applies to the following samples:

Method: SW846 8021B

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6, T12661-7

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	20	18.5	93	17.9	90	3	46-150/30
100-41-4	Ethylbenzene	20	19.8	99	19.1	96	4	69-134/30
108-88-3	Toluene	20	19.2	96	18.6	93	3	67-132/30
1330-20-7	Xylenes (total)	60	58.6	98	56.8	95	3	67-134/30
	m,p-Xylene	40	39.0	98	37.7	94	3	68-135/30
95-47-6	o-Xylene	20	19.6	98	19.1	96	3	66-133/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
460-00-4	4-Bromofluorobenzene	97%	95%	43-154%
98-08-8	aaa-Trifluorotoluene	91%	88%	46-151%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12661-6MS	EE023831.D	1	02/22/06	JH	n/a	n/a	GEE1057
T12661-6MSD	EE023832.D	1	02/22/06	JH	n/a	n/a	GEE1057
T12661-6	EE023830.D	1	02/22/06	JH	n/a	n/a	GEE1057

4.4  
4

The QC reported here applies to the following samples:

Method: SW846 8015

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6

CAS No.	Compound	T12661-6 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	27.5	22.8	83	23.8	86	4	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12661-6	Limits
460-00-4	4-Bromofluorobenzene	87%	92%	72%	56-139%
98-08-8	aaa-Trifluorotoluene	92%	97%	81%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJR)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12664-2MS	EE023861.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2MSD	EE023862.D	1	02/23/06	JH	n/a	n/a	GEE1058
T12664-2	EE023860.D	1	02/23/06	JH	n/a	n/a	GEE1058

The QC reported here applies to the following samples:

Method: SW846 8015

T12661-7

CAS No.	Compound	T12664-2 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD	
	TPH-GRO (C6-C10)	ND		25.9	21.7	84	21.8	84	0	66-122/21

CAS No.	Surrogate Recoveries	MS	MSD	T12664-2	Limits
460-00-4	4-Bromofluorobenzene	88%	90%	63%	56-139%
98-08-8	aaa-Trifluorotoluene	89%	92%	82%	46-136%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12661-6MS	KK11379.D	1	02/25/06	JH	n/a	n/a	GKK750
T12661-6MSD	KK11380.D	1	02/25/06	JH	n/a	n/a	GKK750
T12661-6	KK11378.D	1	02/25/06	JH	n/a	n/a	GKK750

4.4  
4

The QC reported here applies to the following samples:

Method: SW846 8021B

T12661-1, T12661-2, T12661-3, T12661-4, T12661-6, T12661-7

CAS No.	Compound	T12661-6 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
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CAS No.	Surrogate Recoveries	MS	MSD	T12661-6	Limits
460-00-4	4-Bromofluorobenzene	69%	64%	64%	43-154%
98-08-8	aaa-Trifluorotoluene	75%	70%	78%	46-151%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12685-9MS	KK11463.D	1	02/27/06	JH	n/a	n/a	GKK752
T12685-9MSD	KK11464.D	1	02/27/06	JH	n/a	n/a	GKK752
T12685-9	KK11462.D	1	02/27/06	JH	n/a	n/a	GKK752

The QC reported here applies to the following samples:

Method: SW846 8021B

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6, T12661-7

CAS No.	Compound	T12685-9 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	1.2	23.8	21.8	87	23.3	92	7	46-140/15
100-41-4	Ethylbenzene	4.3	23.8	25.6	90	31.5	114	21*	69-122/11
108-88-3	Toluene	6.3	23.8	27.3	88	29.8	98	9	64-125/14
1330-20-7	Xylenes (total)	44.9	71.3	83.5	54*	112	93	29*	66-124/13
	m,p-Xylene	25.1	47.5	57.2	68	78.7	112	32*	67-124/12
95-47-6	o-Xylene	19.8	23.8	26.3	27*	33.0	55*	23*	62-124/15

CAS No.	Surrogate Recoveries	MS	MSD	T12685-9	Limits
460-00-4	4-Bromofluorobenzene	90%	97%	88%	43-154%
98-08-8	aaa-Trifluorotoluene	83%	89%	93%	46-151%



IT'S ALL IN THE CHEMISTRY

## GC Semi-volatiles

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### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12661  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-MB	CC11323.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.2	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	64% 41-153%

# Method Blank Summary

Job Number: T12661  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-MB	CC11356.D	1	02/18/06	RC	02/17/06	OP5528	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12661-7

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	8.2	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	84% 41-153%

5.1  
5

# Blank Spike Summary

Job Number: T12661  
Account: MWHS LCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-BS	CC11324.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.2	28.3	85	55-131

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	77%	41-153%

# Blank Spike Summary

Job Number: T12661  
Account: MWHSLCUT Montgomery Watson  
Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-BS	CC11357.D	1	02/18/06	RC	02/17/06	OP5528	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12661-7

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	32.2	97	55-131

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	89%	41-153%

5.2

5

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5520-MS	CC11351.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
OP5520-MSD	CC11352.D	1	02/18/06	RC	02/17/06	OP5520	GCC529
T12659-1	CC11325.D	1	02/17/06	RC	02/17/06	OP5520	GCC529

The QC reported here applies to the following samples:

Method: SW846 8015 M

T12661-1, T12661-2, T12661-3, T12661-4, T12661-5, T12661-6

CAS No.	Compound	T12659-1 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	35.1	31.2	89	33.5	95	7	49-139/24

CAS No.	Surrogate Recoveries	MS	MSD	T12659-1	Limits
84-15-1	o-Terphenyl	75%	81%	73%	41-153%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12661  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5528-MS	CC11399.D	10	02/20/06	FO	02/17/06	OP5528	GCC530
OP5528-MSD	CC11400.D	10	02/20/06	FO	02/17/06	OP5528	GCC530
T12664-9	CC11387.D	1	02/19/06	RC	02/17/06	OP5528	GCC529

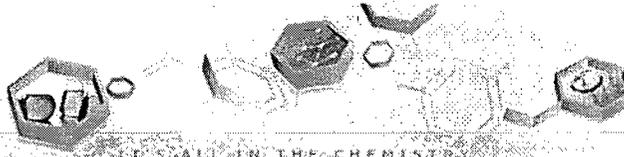
The QC reported here applies to the following samples:

Method: SW846 8015 M

T12661-7

CAS No.	Compound	T12664-9 mg/kg	Spike Q mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	10.3	35.7	151	394*	149	389*	1	49-139/24

CAS No.	Surrogate Recoveries	MS	MSD	T12664-9	Limits
84-15-1	o-Terphenyl	135%	135%	74%	41-153%



02/21/06

**Technical Report for**

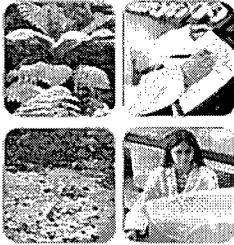
**Montgomery Watson**

**San Juan River Plant (SJRP)**

**D-ALAB-SANJUAN-003**

**Accutest Job Number: T12681**

**Sampling Date: 02/16/06**



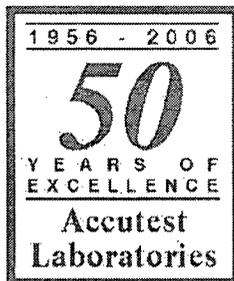
**Report to:**

**MWH Americas, Inc.**

**jennifer.a.hurley@mwhglobal.com**

**ATTN: Ms. Jennifer Hurley**

**Total number of pages in report: 14**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

**Ron Martino**  
**Laboratory Manager**

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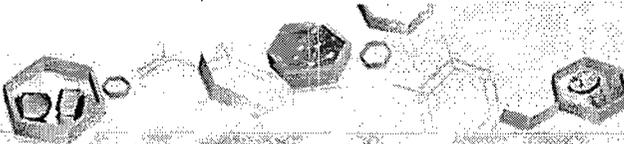
### Sample Summary

Montgomery Watson

Job No: T12681

San Juan River Plant (SJRP)  
Project No: D-ALAB-SANJUAN-003

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
T12681-1	02/16/06	13:00 MN	02/17/06	AQ	Trip Blank Water	160206TB01
T12681-2	02/16/06	14:43 MN	02/17/06	AQ	Ground Water	GPH7-GW(8:5-9)



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**Sample Results**

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**Report of Analysis**

---

### Report of Analysis

Client Sample ID: 160206TB01	Date Sampled: 02/16/06
Lab Sample ID: T12681-1	Date Received: 02/17/06
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11240.D	1	02/21/06	JH	n/a	n/a	GKK745
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.38	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		56-136%
98-08-8	aaa-Trifluorotoluene	106%		50-144%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

# Report of Analysis

Client Sample ID: GPH7-GW(8.5-9)	Date Sampled: 02/16/06
Lab Sample ID: T12681-2	Date Received: 02/17/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8021B	
Project: San Juan River Plant (SJRP)	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	KK11241.D	1	02/21/06	JH	n/a	n/a	GKK745
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

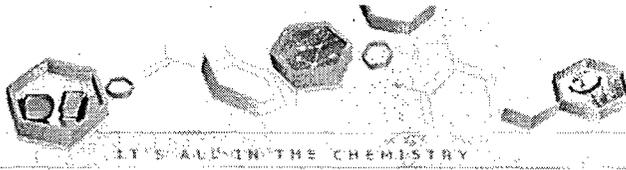
### Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	10.5	1.0	0.38	ug/l	
108-88-3	Toluene	15.1	1.0	0.36	ug/l	
100-41-4	Ethylbenzene	3.8	1.0	0.35	ug/l	
1330-20-7	Xylenes (total)	46.0	2.0	0.72	ug/l	
95-47-6	o-Xylene	5.7	1.0	0.42	ug/l	
	m,p-Xylene	40.3	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		56-136%
98-08-8	aaa-Trifluorotoluene	102%		50-144%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound



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**Misc. Forms**

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**Custody Documents and Other Forms**

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Includes the following where applicable:

- Chain of Custody





ACCUTEST LABORATORIES CUSTODY SEAL  
ACCUTEST LABORATORIES CUSTODY SEAL  
DATE / TIME SEALED: 2/16/06 1630 INITIALS: MN

T12681

4th This portion can be removed for Recipient's records

Order's ID# 21606 Field Testing Number 85438900189

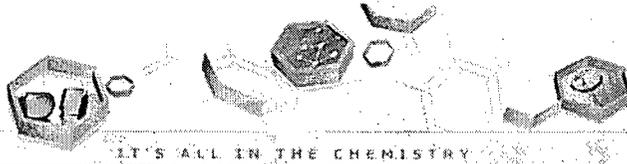
Company Martin Nee Phone 555-334-5771

Address Box CR 3500

City/State/Zip El Paso TX 79915

Internal Billing Reference

T12681: Chain of Custody  
Page 3 of 3



IT'S ALL IN THE CHEMISTRY

## GC Volatiles

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

Job Number: T12681  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK745-MB	KK11214.D	1	02/20/06	JH	n/a	n/a	GKK745

The QC reported here applies to the following samples:

Method: SW846 8021B

T12681-1, T12681-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.38	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l	
95-47-6	o-Xylene	ND	1.0	0.42	ug/l	
	m,p-Xylene	ND	2.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Limits
460-00-4	4-Bromofluorobenzene	111% 56-136%
98-08-8	aaa-Trifluorotoluene	119% 50-144%

# Blank Spike Summary

Job Number: T12681  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GKK745-BS	KK11215.D	1	02/20/06	JH	n/a	n/a	GKK745

4.2  
4

The QC reported here applies to the following samples;

Method: SW846 8021B

T12681-1, T12681-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	20	19.8	99	72-125
100-41-4	Ethylbenzene	20	19.7	99	76-125
108-88-3	Toluene	20	19.7	99	74-125
1330-20-7	Xylenes (total)	60	59.8	100	78-124
95-47-6	o-Xylene	20	19.9	100	78-124
	m,p-Xylene	40	39.9	100	78-125

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	95%	56-136%
98-08-8	aaa-Trifluorotoluene	101%	50-144%

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number: T12681  
 Account: MWHSLCUT Montgomery Watson  
 Project: San Juan River Plant (SJRP)

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12615-4MS	KK11234.D	20	02/20/06	JH	n/a	n/a	GKK745
T12615-4MSD	KK11235.D	20	02/21/06	JH	n/a	n/a	GKK745
T12615-4	KK11232.D	1	02/20/06	JH	n/a	n/a	GKK745
T12615-4	KK11233.D	20	02/20/06	JH	n/a	n/a	GKK745

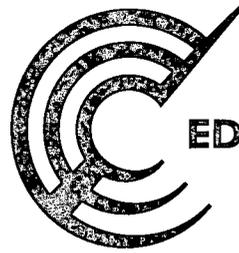
The QC reported here applies to the following samples:

Method: SW846 8021B

T12681-1, T12681-2

CAS No.	Compound	T12615-4 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	400	367	92	354	89	4	45-137/21	
100-41-4	Ethylbenzene	ND	400	363	91	352	88	3	68-126/15	
108-88-3	Toluene	ND	400	364	91	354	89	3	63-130/22	
1330-20-7	Xylenes (total)	ND	1200	1100	92	1070	89	3	72-125/19	
95-47-6	o-Xylene	ND	400	370	93	360	90	3	70-128/20	
	m,p-Xylene	ND	800	733	92	713	89	3	63-136/19	

CAS No.	Surrogate Recoveries	MS	MSD	T12615-4	T12615-4	Limits
460-00-4	4-Bromofluorobenzene	89%	87%	93%	88%	56-136%
98-08-8	aaa-Trifluorotoluene	88%	85%	106%	76%	50-144%



**EDR**® Environmental  
Data Resources Inc

# The EDR GeoCheck® Report

**San Juan River Plant  
99 County Road 6500  
Kirtland, NM 87417**

**Inquiry Number: 1634487.1s**

**March 15, 2006**

**The Standard in  
Environmental Risk  
Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

**Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://www.edrnet.com)

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*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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# GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

## TARGET PROPERTY ADDRESS

SAN JUAN RIVER PLANT  
99 COUNTY ROAD 6500  
KIRTLAND, NM 87417

## TARGET PROPERTY COORDINATES

Latitude (North):	36.76000 - 36° 45' 36.0"
Longitude (West):	108.3679 - 108° 22' 4.4"
Universal Transverse Mercator:	Zone 12
UTM X (Meters):	734957.2
UTM Y (Meters):	4071277.5
Elevation:	5289 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

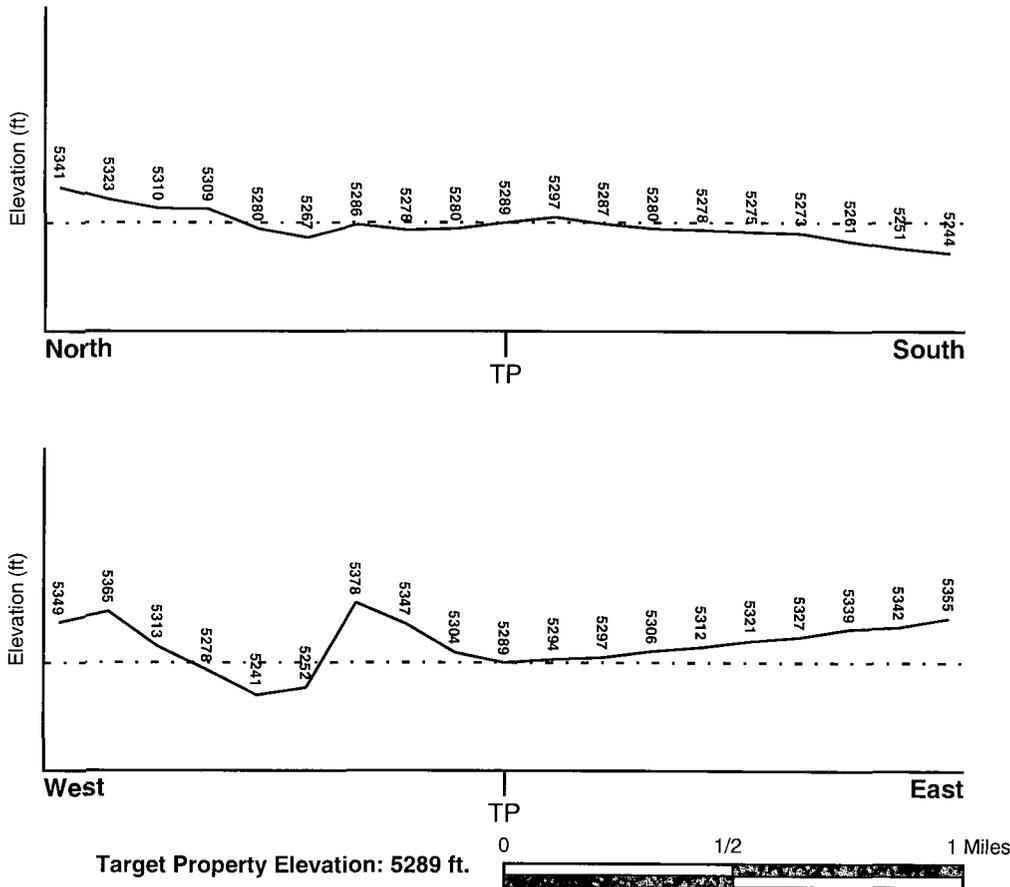
## TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

## TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: TP | 1979 | 36108-G3 YOUNGS LAKE, NM  
 General Topographic Gradient: General East  
 Source: USGS 7.5 min quad index

## SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

## FEMA FLOOD ZONE

<u>Target Property County</u>	FEMA Flood
SAN JUAN, NM	<u>Electronic Data</u>
	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	NWI Electronic
NOT AVAILABLE	<u>Data Coverage</u>
	Not Available

## HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### *Site-Specific Hydrogeological Data\*:*

Search Radius:	1.25 miles
Status:	Not found

## AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

\*©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

## GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

### **ROCK STRATIGRAPHIC UNIT**

Era: Mesozoic  
System: Cretaceous  
Series: Navarro Group  
Code: uK4 (*decoded above as Era, System & Series*)

### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

## **DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: FRUITLAND

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: HIGH

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 60 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 8.40 Min: 7.40
2	7 inches	60 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 6.00 Min: 2.00	Max: 8.40 Min: 7.40

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: clay loam  
loam  
fine sandy loam

Surficial Soil Types: clay loam  
loam  
fine sandy loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: clay loam  
very gravelly - loamy sand  
stratified  
silt loam

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	1.000
State Database	1.000

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

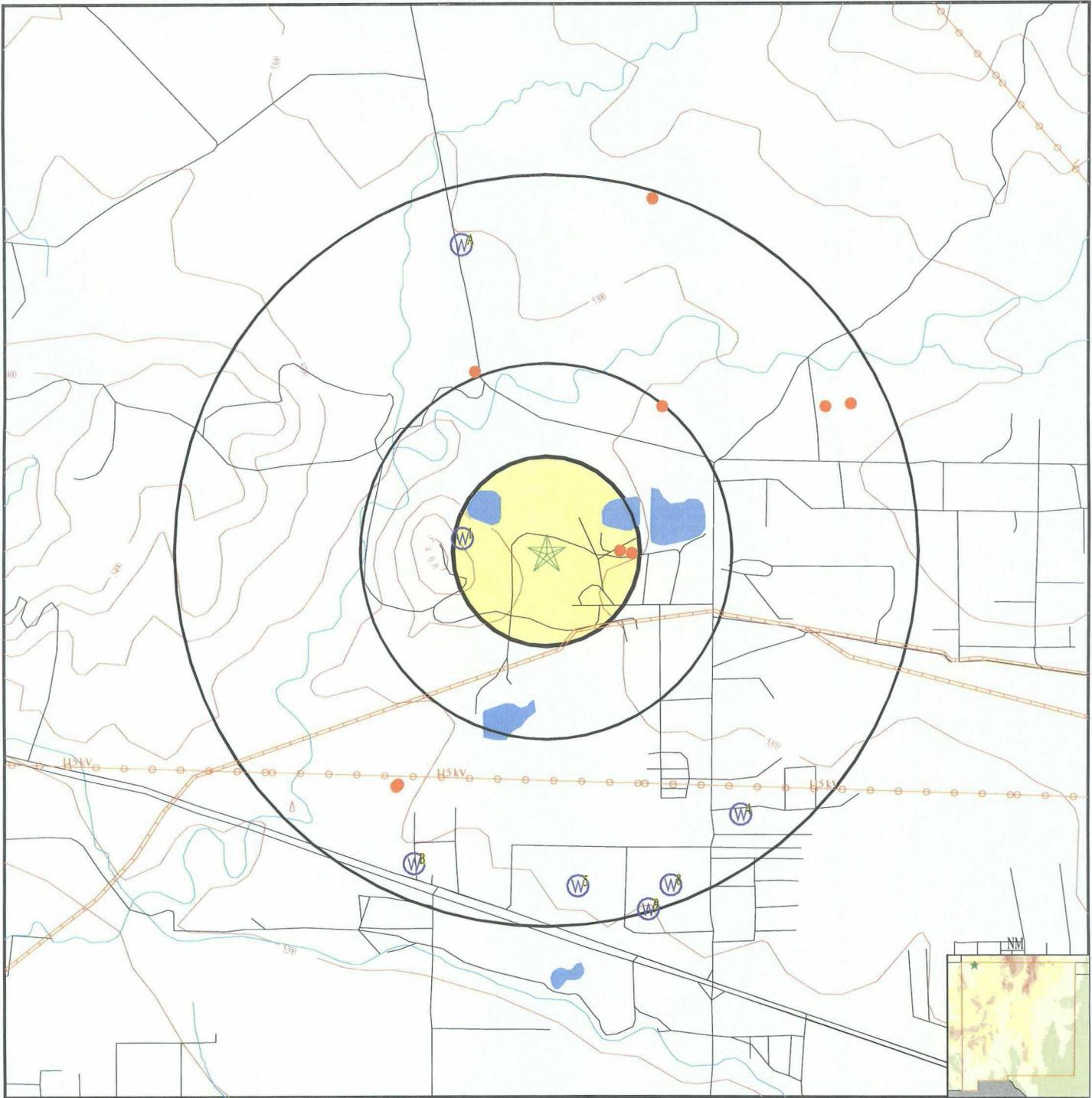
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	NM1000000099530	1/8 - 1/4 Mile West
A2	NM1000000100647	1/2 - 1 Mile NNW
A3	NM1000000100732	1/2 - 1 Mile NNW
4	NM1000000101365	1/2 - 1 Mile SE
5	NM1000000099813	1/2 - 1 Mile South
B6	NM1000000102042	1/2 - 1 Mile SSW
B7	NM1000000102033	1/2 - 1 Mile SSW
8	NM1000000100907	1/2 - 1 Mile SSE
9	NM1000000099769	1/2 - 1 Mile SSE

## OTHER STATE DATABASE INFORMATION

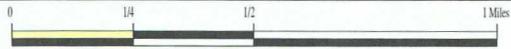
## STATE OIL/GAS WELL INFORMATION

<u>DISTANCE FROM TP (Miles)</u>	<u>DISTANCE FROM TP (Miles)</u>
1/2 - 1 Mile NNE	1/2 - 1 Mile NNW
1/2 - 1 Mile ENE	1/4 - 1/2 Mile NE
1/2 - 1 Mile ENE	1/8 - 1/4 Mile East
1/8 - 1/4 Mile East	1/8 - 1/4 Mile East
1/2 - 1 Mile SSW	1/2 - 1 Mile SSW

# PHYSICAL SETTING SOURCE MAP - 1634487.1s



- County Boundary
- Major Roads
- Contour Lines
- Power transmission lines
- Oil & Gas pipelines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons



- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



<p><b>SITE NAME:</b> San Juan River Plant  <b>ADDRESS:</b> 99 County Road 6500                  Kirtland NM 87417  <b>LAT/LONG:</b> 36.7600 / 108.3679</p>	<p><b>CLIENT:</b> MWH  <b>CONTACT:</b> Jen Hurley  <b>INQUIRY #:</b> 1634487.1s  <b>DATE:</b> March 15, 2006</p>
--	--

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**1**  
**West**      **NM WELLS**      **NM1000000099530**  
**1/8 - 1/4 Mile**  
**Higher**

Objectid:	14694	Id:	136112
X coord:	198986	Y coord:	4073611
Db file nb:	SJ 00027		
Use:	NO USE OF RIGHT OR POD		
Diversion:	0	Pod rec nb:	136112
Well numbe:	SJ 00027	Tws:	29N
Rng:	15W	Sec:	1
Q:	1	Q2:	2
Q3:	3	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	199035	Northing:	4073406
Start date:	19500914	Finish dat:	19501017
Depth well:	1005	Depth wate:	0

**A2**  
**NNW**      **NM WELLS**      **NM1000000100647**  
**1/2 - 1 Mile**  
**Higher**

Objectid:	15791	Id:	135253
X coord:	199028	Y coord:	4074868
Db file nb:	SJ 00971		
Use:	EXPLORATION		
Diversion:	0	Pod rec nb:	135253
Well numbe:	SJ 00917 EXPLORE-1	Tws:	30N
Rng:	15W	Sec:	36
Q:	1	Q2:	4
Q3:	3	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	199077	Northing:	4074663
Start date:	19780404	Finish dat:	19780412
Depth well:	532	Depth wate:	101

**A3**  
**NNW**      **NM WELLS**      **NM1000000100732**  
**1/2 - 1 Mile**  
**Higher**

Objectid:	15871	Id:	135321
X coord:	199028	Y coord:	4074868
Db file nb:	SJ 00971		
Use:	EXPLORATION		
Diversion:	0	Pod rec nb:	135321
Well numbe:	SJ 00971 EXPLORE-2	Tws:	30N
Rng:	15W	Sec:	36
Q:	1	Q2:	4
Q3:	3	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	199077	Northing:	4074663
Start date:	19780407	Finish dat:	19780411
Depth well:	524	Depth wate:	131

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**4**  
**SE**  
 1/2 - 1 Mile  
 Higher  
NM WELLS      NM1000000101365

Objectid:	16499	Id:	135510
X coord:	200151	Y coord:	4072384
Db file nb:	SJ 01407		
Use:	72-12-1 DOMESTIC ONE HOUSEHOLD		
Diversion:	3	Pod rec nb:	135510
Well numbe:	SJ 01407	Tws:	29N
Rng:	14W	Sec:	6
Q:	3	Q2:	3
Q3:	3	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	200200	Northing:	4072179
Start date:	19810701	Finish dat:	19810705
Depth well:	70	Depth wate:	52

**5**  
**South**  
 1/2 - 1 Mile  
 Lower  
NM WELLS      NM1000000099813

Objectid:	14967	Id:	134042
X coord:	199433	Y coord:	4072103
Db file nb:	SJ 00291		
Use:	72-12-1 DOMESTIC ONE HOUSEHOLD		
Diversion:	3	Pod rec nb:	134042
Well numbe:	SJ 00291	Tws:	29N
Rng:	15W	Sec:	12
Q:	2	Q2:	1
Q3:	Not Reported	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	199482	Northing:	4071898
Start date:	19770804	Finish dat:	19770811
Depth well:	0	Depth wate:	110

**B6**  
**SSW**  
 1/2 - 1 Mile  
 Lower  
NM WELLS      NM1000000102042

Objectid:	17173	Id:	134916
X coord:	198726	Y coord:	4072224
Db file nb:	SJ 02081		
Use:	72-12-1 DOMESTIC ONE HOUSEHOLD		
Diversion:	3	Pod rec nb:	134916
Well numbe:	SJ 02081	Tws:	29N
Rng:	15W	Sec:	12
Q:	1	Q2:	1
Q3:	2	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	198775	Northing:	4072019
Start date:	19861110	Finish dat:	19861111
Depth well:	42	Depth wate:	30

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**B7**  
**SSW**      NM WELLS      NM1000000102033  
 1/2 - 1 Mile  
 Lower

Objectid:	17164	Id:	135570
X coord:	198726	Y coord:	4072224
Db file nb:	SJ 02071		
Use:	72-12-1 DOMESTIC ONE HOUSEHOLD		
Diversion:	3	Pod rec nb:	135570
Well numbe:	SJ 02071	Tws:	29N
Rng:	15W	Sec:	12
Q:	1	Q2:	1
Q3:	2	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	198775	Northing:	4072019
Start date:	19861029	Finish dat:	19861030
Depth well:	51	Depth wate:	32

**8**  
**SSE**      NM WELLS      NM1000000100907  
 1/2 - 1 Mile  
 Lower

Objectid:	16046	Id:	134174
X coord:	199836	Y coord:	4072092
Db file nb:	SJ 01136		
Use:	72-12-1 DOMESTIC ONE HOUSEHOLD		
Diversion:	3	Pod rec nb:	134174
Well numbe:	SJ 01136	Tws:	29N
Rng:	15W	Sec:	12
Q:	2	Q2:	2
Q3:	Not Reported	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	199885	Northing:	4071887
Start date:	19800318	Finish dat:	19800326
Depth well:	150	Depth wate:	40

**9**  
**SSE**      NM WELLS      NM1000000099769  
 1/2 - 1 Mile  
 Lower

Objectid:	14923	Id:	133868
X coord:	199735	Y coord:	4071991
Db file nb:	SJ 00225		
Use:	72-12-1 DOMESTIC ONE HOUSEHOLD		
Diversion:	0	Pod rec nb:	133868
Well numbe:	SJ 00225	Tws:	29N
Rng:	15W	Sec:	12
Q:	2	Q2:	2
Q3:	3	Zone:	Not Reported
X:	Not Reported	Y:	Not Reported
Easting:	199784	Northing:	4071786
Start date:	0	Finish dat:	0
Depth well:	0	Depth wate:	0

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction \_\_\_\_\_ Database \_\_\_\_\_ EDR ID Number \_\_\_\_\_  
 Distance \_\_\_\_\_

**NNE**  
**1/2 - 1 Mile**

**OIL\_GAS**      **NMOG104219**

Api ID:	3004530069	Pool ID:	71629
Pool Name:	BASIN FRUITLAND COAL (GAS)	Well ID:	002
Well Name:	WF STATE 36	County ID:	45
County Name:	San Juan	Operator ID:	19219
Op. Name:	RICHARDSON OPERATING CO		
Latitude:	36.77358		
Longitude:	-108.36209	Section:	36
Township:	30.0N	Range:	15W
Unit ID:	H	Ft. N/S Dist:	1600
Ft. N/S dir:	N	Ft. E/W Dist:	960
Ft. E/W Dir:	E	Elevation:	5320 GL
Depth:	800	Compdate:	2000-03-24
Plugdate:	Not Reported	Datasource:	Ongard

**NNW**  
**1/2 - 1 Mile**

**OIL\_GAS**      **NMOG104433**

Api ID:	3004530358	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	003
Well Name:	WF STATE 36	County ID:	45
County Name:	San Juan	Operator ID:	19219
Op. Name:	RICHARDSON OPERATING CO		
Latitude:	36.76693		
Longitude:	-108.37072	Section:	36
Township:	30.0N	Range:	15W
Unit ID:	3	Ft. N/S Dist:	1385
Ft. N/S dir:	S	Ft. E/W Dist:	1805
Ft. E/W Dir:	W	Elevation:	5275 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

**ENE**  
**1/2 - 1 Mile**

**OIL\_GAS**      **NMOG094524**

Api ID:	3004520398	Pool ID:	96928
Pool Name:	WC D3;PICTURED CLIFFS	Well ID:	002
Well Name:	MAYRE	County ID:	45
County Name:	San Juan	Operator ID:	6515
Op. Name:	DUGAN PRODUCTION CORP		
Latitude:	36.76566		
Longitude:	-108.35251	Section:	31
Township:	30.0N	Range:	14W
Unit ID:	N	Ft. N/S Dist:	840
Ft. N/S dir:	S	Ft. E/W Dist:	1850
Ft. E/W Dir:	W	Elevation:	5308 GL
Depth:	749	Compdate:	1969-02-01
Plugdate:	Not Reported	Datasource:	Aztec

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction \_\_\_\_\_ Database \_\_\_\_\_ EDR ID Number \_\_\_\_\_  
 Distance \_\_\_\_\_

**NE**  
 1/4 - 1/2 Mile

**OIL\_GAS**      **NMOG104060**

Api ID:	3004529947	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	001
Well Name:	WF STATE 36	County ID:	45
County Name:	San Juan	Operator ID:	19219
Op. Name:	RICHARDSON OPERATING CO		
Latitude:	36.76557		
Longitude:	-108.36163	Section:	36
Township:	30.0N	Range:	15W
Unit ID:	1	Ft. N/S Dist:	805
Ft. N/S dir:	S	Ft. E/W Dist:	820
Ft. E/W Dir:	E	Elevation:	5296 GL
Depth:	802	Compdate:	1999-12-20
Plugdate:	Not Reported	Datasource:	Ongard

**ENE**  
 1/2 - 1 Mile

**OIL\_GAS**      **NMOG102342**

Api ID:	3004528291	Pool ID:	71629
Pool Name:	BASIN FRUITLAND COAL (GAS)	Well ID:	090
Well Name:	MAYRE	County ID:	45
County Name:	San Juan	Operator ID:	6515
Op. Name:	DUGAN PRODUCTION CORP		
Latitude:	36.76556		
Longitude:	-108.35374	Section:	31
Township:	30.0N	Range:	14W
Unit ID:	3	Ft. N/S Dist:	805
Ft. N/S dir:	S	Ft. E/W Dist:	1490
Ft. E/W Dir:	W	Elevation:	5325 GL
Depth:	760	Compdate:	1993-07-07
Plugdate:	Not Reported	Datasource:	Ongard

**East**  
 1/8 - 1/4 Mile

**OIL\_GAS**      **NMOG104035**

Api ID:	3004529946	Pool ID:	Not Reported
Pool Name:	Not Reported	Well ID:	001
Well Name:	SALTY DOG SWD	County ID:	45
County Name:	San Juan	Operator ID:	19219
Op. Name:	RICHARDSON OPERATING CO		
Latitude:	36.76002		
Longitude:	-108.36369	Section:	1
Township:	29.0N	Range:	15W
Unit ID:	2	Ft. N/S Dist:	1200
Ft. N/S dir:	N	Ft. E/W Dist:	1380
Ft. E/W Dir:	E	Elevation:	5291 GL
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Ongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction \_\_\_\_\_ Database \_\_\_\_\_ EDR ID Number \_\_\_\_\_  
 Distance \_\_\_\_\_

**East**  
 1/8 - 1/4 Mile

**OIL\_GAS**      **NMOG097840**

Api ID:	3004523906	Pool ID:	71629
Pool Name:	BASIN FRUITLAND COAL (GAS)	Well ID:	001
Well Name:	PITTAM POND	County ID:	45
County Name:	San Juan	Operator ID:	19219
Op. Name:	RICHARDSON OPERATING CO		
Latitude:	36.75993		
Longitude:	-108.36312	Section:	1
Township:	29.0N	Range:	15W
Unit ID:	1	Ft. N/S Dist:	1235
Ft. N/S dir:	N	Ft. E/W Dist:	1215
Ft. E/W Dir:	E	Elevation:	5301 GL
Depth:	660	Complate:	2000-03-25
Plugdate:	Not Reported	Datasource:	Ongard

**East**  
 1/8 - 1/4 Mile

**OIL\_GAS**      **NMOG097792**

Api ID:	3004523906	Pool ID:	86620
Pool Name:	TWIN MOUNDS FRUITLAND SAND PC (GAS)	Well ID:	001
Well Name:	PITTAM POND	County ID:	45
County Name:	San Juan	Operator ID:	19219
Op. Name:	RICHARDSON OPERATING CO		
Latitude:	36.75993		
Longitude:	-108.36312	Section:	1
Township:	29.0N	Range:	15W
Unit ID:	1	Ft. N/S Dist:	1235
Ft. N/S dir:	N	Ft. E/W Dist:	1215
Ft. E/W Dir:	E	Elevation:	5301 GL
Depth:	660	Complate:	2000-03-25
Plugdate:	Not Reported	Datasource:	Ongard

**SSW**  
 1/2 - 1 Mile

**OIL\_GAS**      **NMOG099483**

Api ID:	3004525176	Pool ID:	11880
Pool Name:	CHA CHA GALLUP	Well ID:	004
Well Name:	PITTAM POND	County ID:	45
County Name:	San Juan	Operator ID:	6515
Op. Name:	DUGAN PRODUCTION CORP		
Latitude:	36.75101		
Longitude:	-108.37447	Section:	1
Township:	29.0N	Range:	15W
Unit ID:	M	Ft. N/S Dist:	690
Ft. N/S dir:	S	Ft. E/W Dist:	690
Ft. E/W Dir:	W	Elevation:	5320 GL
Depth:	4726	Complate:	1981-11-15
Plugdate:	Not Reported	Datasource:	Aztec

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Direction  
Distance

Database EDR ID Number

SSW  
1/2 - 1 Mile

OIL\_GAS NMOG023356

Api ID:	3054502421	Pool ID:	11880
Pool Name:	CHA CHA GALLUP	Well ID:	004
Well Name:	PITTAM POND	County ID:	45
County Name:	San Juan	Operator ID:	0
Op. Name:	Not Reported		
Latitude:	36.75093		
Longitude:	-108.37458	Section:	1
Township:	29.0N	Range:	15W
Unit ID:	M	Ft. N/S Dist:	660
Ft. N/S dir:	S	Ft. E/W Dist:	660
Ft. E/W Dir:	W	Elevation:	Not Reported
Depth:	0	Compdate:	Not Reported
Plugdate:	Not Reported	Datasource:	Preongard

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: NM Radon

### Radon Test Results

Zip	Total Sites	Pct. < 4 Pci/L	4 < 10 Pci/L	10 < 20 Pci/L	> 20 Pci/L
87417	9	88.9	11.1	0.0	0.0

Federal EPA Radon Zone for SAN JUAN County: 2

Note: Zone 1 indoor average level > 4 pCi/L.  
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 87417

Number of sites tested: 13

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.577 pCi/L	92%	8%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	10.400 pCi/L	0%	100%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

### **USGS 7.5' Digital Elevation Model (DEM)**

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>®</sup> Information System**

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

### **Geologic Age and Rock Stratigraphic Unit**

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **STATSGO: State Soil Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

## LOCAL / REGIONAL WATER AGENCY RECORDS

### **FEDERAL WATER WELLS**

#### **PWS: Public Water Systems**

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## **PWS ENF:** Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

## **USGS Water Wells:** USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

## **STATE RECORDS**

### **Water Well Database**

Source: Office of the State Engineer

Telephone: 505-827-6175

## **OTHER STATE DATABASE INFORMATION**

### **Oil and Gas Well Locations**

Source: New Mexico Institute of Mining and Technology

Telephone: 505-835-5142

## **RADON**

### **State Database: NM Radon**

Source: Environment Department

Telephone: 505-827-1093

Radon Test Results

### **Area Radon Information**

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

### **EPA Radon Zones**

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

## **OTHER**

### **Airport Landing Facilities:** Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

### **Epicenters:** World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## STREET AND ADDRESS INFORMATION

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**PROPOSED WORKPLAN FOR ADDITIONAL  
PHASE I INVESTIGATION OF POTENTIAL HYDROCARBON  
IMPACTS AS PART OF  
A STAGE I ABATEMENT PLAN AT THE  
SAN JUAN RIVER PLANT  
SAN JUAN RIVER BASIN, NEW MEXICO**

*March 2006*

**Prepared for:  
El Paso Natural Gas Company  
2 North Nevada Avenue  
Colorado Springs, Colorado  
80903**

**Prepared by:  
MWH  
1801 California Street, Suite 2900  
Denver, Colorado**

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**LIST OF ACRONYMS**

bgs	Below ground surface
btc	Below top of casing
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
EPNG	El Paso Natural Gas Company
HSP	Health and Safety Plan
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
µg/L	Micrograms per liter
NMOCD	New Mexico Oil Conservation Division
NMWQCC	New Mexico Water Quality Control Commission
SJRP	San Juan River Plant
TPH	Total petroleum hydrocarbons
WGR	Western Gas Resources, Inc

## 1.0 INTRODUCTION

### 1.1 PURPOSE AND SCOPE

This document presents El Paso Natural Gas Company's (EPNG) proposed workplan for additional investigation as part of the first phase of a Stage I Abatement Plan to be conducted in the vicinity of the Praxair Nitrogen Plant evaporation pond and at other areas on the San Juan River Plant (SJRP). Dissolved and free-phase hydrocarbons have been detected on the east side of the evaporation pond and the source of this hydrocarbon impact remains unknown. This workplan presents the scope of work and field and laboratory methods to be implemented to further investigate the source of, and the lateral extent of, potential hydrocarbon impacts. After the source(s) of hydrocarbons have been identified the extent of hydrocarbon impacts will be assessed in a second phase of investigations. The second phase of the Stage I Abatement Plan will consist of permanent monitoring well installations to assess and monitor groundwater quality, as well as completion of the remaining Stage I Abatement Plan requirements. Because the sources and extent of hydrocarbon impacts are unknown, a monitoring well network cannot be proposed at this time. Following completion of the second phase of work, a final site investigation report will be submitted to the Director for approval.

SJRP is located in the San Juan River Basin of New Mexico in San Juan County, Township 29N, Range 15W, Section 1, near Kirtland, New Mexico. The SJRP was previously owned by EPNG, but has been owned and operated by Western Gas Resources, Inc (WGR) since June 1992. The plant is used to process natural gas collected from production wells located in the San Juan Basin of New Mexico and southern Utah. Recently, the Praxair Nitrogen Plant was built in the area north of the SJRP and a lined evaporation pond was constructed in the location of the former EPNG raw water pond. During installation of four groundwater monitoring wells around Praxair's pond, hydrocarbon impacts were encountered in a limited area on the east side of the pond.

A Geoprobe investigation was conducted in the area east and north of the Praxair pond to assess the extent of hydrocarbon impacts in the area of the pond, as well as to investigate potential sources. The Geoprobe investigation consisted of soil sampling and groundwater sampling through temporary Geoprobe boreholes. Results of the Geoprobe investigation were inconclusive with respect to both the source and extent of the contamination; therefore, this additional

investigation has been proposed. Once the source and extent of contamination have been identified, a monitoring well network will be proposed and installed to assess and monitor the areas of hydrocarbon impacts

A Site-Specific Health and Safety Plan (HSP) (MWH, 2005) was written for groundwater monitoring, operations and maintenance (O&M), drilling and hand augering activities for the San Juan River Basin Projects. A copy of this plan must be on Site at all times while work is being conducted. This HSP applies to MWH Americas, Inc. (MWH) employees, MWH's subcontractor employees, and visitors at the sites.

## 1.2 DOCUMENT ORGANIZATION

Following this section, the document is organized as follows:

- Section 1.0 – Introduction
- Section 2.0 – Site Background
- Section 3.0 – Scope of Work
- Section 4.0 – Field Methods
- Section 5.0 – Laboratory Testing
- Section 6.0 – Data Evaluation and Reporting
- Section 7.0 – Schedule
- Section 8.0 – References

## 2.0 SITE BACKGROUND

The sections below present a description of the site and the site remediation history.

### 2.1 SITE DESCRIPTION

SJRP is located in San Juan County, Township 29N, Range 15W, Section 1, near Kirtland, New Mexico. A site map is shown in Figure 1. The SJRP was previously owned by EPNG, but has been owned and operated by WGR since June 1992. The plant is used to process natural gas collected from production wells located in the San Juan Basin of New Mexico and southern Utah. The SJRP is a 630-acre facility that has contained gas processing facilities, two raw water ponds

(now closed), three wastewater evaporation ponds (now closed), a sulfur recovery plant, water and hydrocarbon tanks, a pigging station, flare pits, and several 16 to 24-inch diameter natural gas pipelines that cross the facility. Closure of the evaporation ponds, flare pits, and other potential hydrocarbon source areas was completed during a time period beginning 1992 and ending in early 1996. Recently, the Praxair Nitrogen Plant was built in the area north of the SJRP, to the south of monitoring wells MW-8 and MW-9. Praxair constructed a lined evaporation pond in the location of the former EPNG raw water pond and installed five monitoring wells surrounding the pond. Monitoring wells MW-1, MW-2, MW-3 and MW-4 were installed in groundwater at total depths of 80 to 90 feet below ground surface (bgs). According to Praxair's field report, a perched zone was encountered during drilling MW-3 and therefore a second well, MW-5, was installed in the same boring as MW-3. Monitoring wells MW-3 and MW-5 were subsequently abandoned. Figure 1 presents a detailed site map of SJRP.

## 2.2 SITE GEOLOGY AND HYDROGEOLOGY

The following description of site geology and hydrogeology is based on reports prepared by Philip Environmental for EPNG in 1998 (Philip Environmental, June 1998), and K.W. Brown and Associates in 1987 (KWBA, 1987), and the Geoprobe investigation performed by EPNG in February 2006.

### 2.2.1 Site Geology

Based on drilling logs from 1995 and prior activities, the soils consist of fine sand to fine sandy clay, with some gravel and cobbles. The soil samples from borings located in the valley or alluvial fans (such as P-10, P-7, P-9, MW-5, MW-8 and MW-9) consist of fine sand to clay. The soil samples from the borings located on the mesas, plateaus and terraces (such as E-10, E-11, E-9, MW-6 and MW-7) consist of fine sand with some gravel and cobble layers and some unconsolidated sandstone and shales. The uppermost and most prevalent lithology at the site is alluvial sediments, consisting of fluvial deposits and, to a lesser extent, terrace deposits of gravel and cobbles. Beneath the alluvium are the consolidated sedimentary units of the Kirtland Shale Formation, which includes both shales and sandstone members. The portion of the site to the north of the SJRP plant, itself, is underlain by a shale member of the Kirtland Formation. The plant and the flare hill are underlain by a sandstone member of the Kirtland Formation. During

remediation of the south flare pit in September 1992, a distinct clay layer was encountered at a depth of approximately 15 feet below the original bottom of the pit.

During the Geoprobe investigation performed by EPNG February 13-14, 2006, refusal was met in hard shale, siltstone, a silty sand mix, and sandstone at interval depths of 8 to 15 ft bgs. Lithology generally changed from a clay soil near the surface to alternating weathered shale and sandstone. This is consistent with previous assessments of the geology, and it is likely the majority of the soil borings met refusal in the Kirtland Formation.

### 2.2.2 Site Hydrogeology

Regional groundwater flow in the San Juan Basin is from the topographically high outcrop areas around the edges of the basin, towards the lower outcrop areas. The San Juan River Valley is indicated as the main discharge area of the San Juan Basin (Stone, 1983). The San Juan River is located approximately two miles to the south of the SJRP site.

A potentiometric surface map is presented on Figure 2 based on water-level measurements collected in November 2005. These measurements indicate a groundwater flow divide just north of the plant that directs flow to the southwest through the southern portion of the site, and to the northwest through the northern portion of the site, including the Praxair pond area.

Based on Praxair's well construction logs for monitoring wells near the Praxair pond, groundwater was encountered during drilling at approximately 60 to 70 feet bgs. These wells were screened between the interval of 58 to 83 feet bgs, and static groundwater levels in these wells have been measured at approximately 28 to 43 feet bgs. Based on the Praxair well log for MW-3 (recently abandoned), there may be a perched water zone at approximately 30 feet bgs. Praxair installed MW-5 within the same boring as MW-3, and screened the well from 30 to 45 feet bgs. In 2004, the water-level elevation in well MW-5 was measured at 5258.15 feet above mean sea level (msl); the corresponding water-level elevation in the deeper-screened well MW-3 was 5258.59 feet msl. Given these water-level elevations, it appears that the water table is at a higher potential than the so-called perched zone. This situation does not appear to be technically valid, and thus, the theory of a perched water table needs to be tested. This testing will be undertaken in this proposed workplan.

During the February 2006 Geoprobe investigation, groundwater was not encountered in any of the boreholes during drilling. Temporary piezometers were installed in the four borings that reached the estimated depth to water based on nearby wells MW-8 and MW-9 (GPH-6 through GPH-9, shown in Figure 3), of which only one (GPH-7) yielded enough water to collect a sample. Moist soils were encountered in the other three locations, however an appreciable amount of water was never recovered in these wells.

### 2.3 PREVIOUS SITE PROJECT HISTORY

Dissolved-phase hydrocarbons have been observed in the northern portion of the site at MW-8 and MW-9. EPNG has been aggressively implementing active groundwater remediation in this area to reduce dissolved-phase hydrocarbons. The remediation consists of chemical oxygen enhancement and air sparging. Due to the investigation in the area, the air sparging system is not operating.

In general, the most elevated hydrocarbon concentrations have been detected in shallow groundwater at Praxair well MW-5 and EPNG wells MW-8 and MW-9, with only slightly elevated concentrations in groundwater in Praxair wells MW-2 and MW-3. Therefore, hydrocarbon impacts to the east of the pond, in the vicinity of Praxair MW-5 were the focus of the previous phase I Geoprobe investigation. Because free product is confined to one well and the well is screened in shallow groundwater, the source of the hydrocarbons is likely to be local.

As part of the first phase of investigation for a Stage I Abatement Plan, a Geoprobe soil boring investigation was conducted February 13-14, 2006. This investigation consisted of 15 soil borings at various locations to the north and east of the Praxair pond (shown on Figure 3). The majority of soil contamination was encountered in the area to the northeast of the Praxair pond, in the vicinity of MW-8 and MW-9. One groundwater sample was collected at GPH-7, where the benzene concentration was just above New Mexico Water Quality Control Commission (NMWQCC) standards at 10.5 µg/L. The areas to the southeast of the pond showed little or no hydrocarbon impacts. However, this investigation failed to reach adequate depth for all but four of the attempted locations, and it was determined that additional investigation was necessary.

### 3.0 SCOPE OF WORK

A hollow-stem auger investigation will be conducted in the area north and east of the Praxair pond in order to further investigate the extent of hydrocarbon impacts, as well as to investigate potential sources in the vicinity. Based on the results of the phase I geoprobe investigation, EPNG has identified 8 areas for further investigation with a hollow-stem auger rig, shown on Figure 4. This investigation will focus on the area to the north and northeast of the Praxair pond, in the area showing the most impact during the Phase I geoprobe investigation. Additional soil borings are proposed to the northwest of Former Pond #1 and to the northwest of the Praxair pond to address possible upgradient sources in these areas as well as identifying the extent of contamination. The additional locations may be modified in the field based on observations of the level of impact in these areas.

Hollow-stem soil cores will be sampled and logged as described in Section 4.1, below. Logging will include soil descriptions and measurements of headspace vapor photoionization detector (PID) readings. The borings will be advanced to the depth of first encountered groundwater. Soil samples will be collected at least every 10 ft, or at every significant change in lithology of each boring for laboratory analysis for BTEX by EPA SW-846 Method 8021B and TPH by EPA SW-846 Method 8015M. Soil samples will be collected at the depth of the highest PID measurement (depths may be modified based on field conditions). However, if there are no elevated PID measurements, the soil sample will be collected from immediately above the saturated zone, or in the case of a dry hole, at the terminus of the boring.

Shallow groundwater samples will be collected from each boring using a peristaltic pump and dedicated tubing. All groundwater samples will be submitted to an analytical laboratory for analysis of BTEX compounds by EPA SW-846 Method 8021B. Following sample collection, borings will be abandoned by backfilling to the surface with bentonite chips and hydrating. If the soil boring logs indicate significant moisture, but water does not readily accumulate for sampling, temporary well points may be installed in borings using 1-inch polyvinyl chloride (PVC) pipe with screened intervals at depths where the moist soils were encountered. If water is collected, water levels will be taken and these temporary well points will be surveyed.

Temporary well points will be installed in soil borings with obvious signs of contamination for further investigation and monitoring. All temporary wells will be surveyed and groundwater

elevation data will be gathered to generate a more accurate groundwater elevation map in this area. Following surveying and sampling, the temporary points will be abandoned by removing the casing (if possible) and backfilling the boring with bentonite chips and hydrating.

#### **4.0 FIELD METHODS**

The sections below present details for the soil and perched groundwater field investigations.

##### **4.1 HOLLOW STEM AUGER SOIL INVESTIGATION**

A truck-mounted, hollow stem rig will be utilized to advance soil borings and collect soil samples. Soil samples will be collected in a split-spoon sampler. The soil cores will be collected for visual inspection/logging and for soil headspace testing at all locations. Soils will be logged and sampled from the ground surface to the depth of groundwater, estimated to be between 10 and 35 feet bgs. The field geologist will log soils in general accordance with Unified Soil Classification System (USCS) protocol. Soil headspace gas will be monitored with a PID in all proposed borings from ground surface to total boring depth. Soil cores will be split in half after collection. Soil composites will be collected from ½ of the sliced core for headspace gas analysis. Soil composites will be collected from 1-foot or 2-foot intervals from each core and placed into zip-lock bags. After waiting at least 10 minutes the headspace gas reading will be noted. Soil samples will be placed in 4 or 8 ounce jars and analyzed for BTEX by EPA SW-846 Method 8021B and TPH by EPA SW-846 Method 8015M. Soil samples for laboratory analysis will be labeled, handled and shipped according to the procedures outlined below.

##### **4.2 SHALLOW GROUNDWATER INVESTIGATION**

###### **4.2.1 Shallow Groundwater Sampling**

Each of the soil borings will be advanced to the depth of first encountered groundwater. Water will be recovered with a peristaltic pump and clean, dedicated polyethylene tubing. Groundwater samples will be collected in VOA vials for delivery to the analytical laboratory and analyzed for BTEX by EPA SW-846 Method 8021B. Groundwater samples will be labeled, handled and shipped according to the procedures outlined below. Following completion of groundwater sampling, the borings will be abandoned by backfilling with bentonite and hydrating.

#### 4.2.2 Temporary Groundwater Monitoring Points

Temporary groundwater monitoring points may be installed in some of the borings. Temporary points will be constructed of 1-inch Schedule 40 PVC screen (typically 5 to 10 feet in length) and blank casing. The well screen will be installed at the depth where shallow groundwater is likely to occur, based on the soil boring log and/or adjacent well locations. The PVC blank casing will extend from the top of the well screen to about two feet above the ground surface. The annular space adjacent to the PVC well screen will be filled with silica sand from the bottom of the borehole to two feet above the top of the well screen. Hydrated bentonite will be placed above the silica sand to prevent downward migration of surface water. Groundwater samples will be collected from temporary monitoring points using clean, dedicated polyethylene bailers and/or clean, dedicated polyethylene tubing. After the temporary monitoring points have been sampled, surveyed and a stabilized water elevation collected, the borings will be abandoned by removing the PVC casing, backfilling the boring with bentonite, and hydrating.

#### 4.3 GENERAL INVESTIGATION PROTOCOLS

This section presents a discussion of documentation procedures, location identification, sampling methods, and other procedures to be performed as part of the investigation.

##### 4.3.1 Documentation Procedures

Data generated during the field investigation will be recorded on sampling logs that are specific to the type of sampling being performed or the type of samples collected. Each soil sample will be generally classified according to the USCS procedures. The soil samples will be classified based on visual evaluation of grain size, degree of sorting, and consistency. The visual soil description also will include color, soil particle angularity, plasticity, and moisture content.

In addition, the field hydrogeologist/environmental scientist will maintain daily field reports. At the end of each field day, the daily reports will be dated and signed by the field person performing the work. Daily field reports will include:

- Date
- Name and location of the work activities
- Weather conditions

- Personnel and visitors on Site
- Sample locations and methods (including sampling equipment), time of sample collection, and sample depths
- Samples submitted to the laboratory for analyses
- Sample type (soil, groundwater, duplicate, blank)
- Name of carrier transporting the sample (e.g., name of laboratory and shipping agent)
- Photograph numbers and descriptions (if applicable)
- Description of decontamination activities (if applicable)
- Schematic drawings of sample locations
- Any deviations from the Work Plan
- Other relevant observations as the field work progresses
- Problems and corrective actions

#### **4.3.2 Boring Locations and Utility Identification**

Proposed boring locations will be marked in the field prior to initiation of fieldwork. The "One-Call" Service will be contacted a minimum of 48 hours prior to drilling for clearance, and the necessary Right-of-Way clearances will be obtained.

#### **4.3.3 Sample Labeling**

A sample label will be placed on each sample container submitted for analysis and will include the project name and location, sample designation (including depth interval, if appropriate), date and time of collection, preservative (if applicable), sampler's initials, and required analyses. Sample designations are presented below in Section 4.3.5. Labels will be sufficiently durable to remain legible and attached to the sample container when wet. Sample labels will be completed with indelible ink.

#### **4.3.4 Chain-of-Custody**

A project-specific chain-of-custody form will be completed and will accompany each sample cooler. The chain-of-custody form includes project identification, project location, sample designation, analysis type, and shipping account information. In addition, there are spaces for entry of the sample collection date and time, sample depth, signature of the persons relinquishing

and receiving samples, and the status of the samples upon receipt by the laboratory. The chain-of-custody form will be in duplicate. The original of the form will be shipped to the laboratory with the samples, one duplicate copy will be reviewed and filed with the EPNG project. Each form will be completed properly in the field at the time of collection to ensure that sample custody is documented, appropriate amount of sample has been collected, and that scheduled analyses are properly assigned. All entries will be made using indelible ink on the chain-of-custody form. Any errors will be corrected by drawing a single line through the incorrect entry, entering the correct information, and then initialing and dating the change. Unused portions of the chain-of-custody form will be crossed out and initialed. All samples will be transported by field personnel or via a commercial carrier (e.g., Federal Express Priority Service). The signed shipping tracking number and receipt will serve as evidence of custody transfer between the field sampler and carrier, and the carrier and laboratory. The sampler will retain and file copies of the chain-of-custody record and the shipping tracking number and carrier name after the samples are shipped. The carrier will relinquish samples to the laboratory upon arrival, and the laboratory personnel will then complete the chain-of-custody form. The original completed chain-of-custody form will be returned to EPNG and filed in the project files.

**Sample Handling and Shipping.** All laboratory samples will be shipped or transported in coolers containing ice and maintained at  $4^{\circ} \pm 2^{\circ} \text{C}$ . Each cooler will contain a temperature blank consisting of a 40 ml vial. Upon receipt, the laboratory will record the temperature of the temperature blank on the chain-of-custody form. All samples will be either hand delivered, or will be shipped via a commercial carrier. Sampling personnel will prepare air-courier waybill identification labels in strict accordance with the U.S. Department of Transportation procedures.

**Sample Packing.** Sample containers will be placed in clean protective foam or bubble pack sleeves. The caps of all sample bottles shall be checked for tightness to prevent sample leakage during transport. Care will be taken to prevent over-tightening and breakage of bottle caps. Sample containers will be immediately placed on ice in a waterproof hard plastic ice chest. Samples will be stored and shipped on ice to maintain the samples at  $4^{\circ} \pm 2^{\circ} \text{C}$ . The ice will be double wrapped in re-sealable plastic bags. Sufficient packing material will be placed in each ice chest to minimize the potential for sample bottles to shift and become damaged or broken during shipment. Packing material may include bubble pack or foam material. Samples should be thoroughly cooled before placing in packing material so the packing material serves to insulate

the pre-cooled sample. The drain plug on the shipping container will be closed and sealed on the inside and outside with duct tape.

Sampling personnel will inventory the sample bottles from the Site prior to shipment to ensure that all samples listed on the chain-of-custody form are present. All bottles collected from a specific sampling interval will be packed and shipped together in the same shipping container.

The originals of the analysis request and chain-of-custody forms will be sealed in a waterproof plastic bag and placed inside the shipping container prior to sealing of the container. The cooler will be taped shut using strapping tape over the hinges and custody seals placed across the top and sides of the cooler lid. Clear tape will be placed over the custody seals to prevent inadvertent damage during shipping. The tape should not allow the seals to be lifted off with the tape and then reattach without breaking the seal.

#### **4.3.5 Sample Designation**

For this program, each sample will have a unique sample identification, and will consist of a boring identifier, sample type identifier, and depth identifier, if appropriate. Hollow stem borings will be given a numeric identifier (1 - #). Samples will be labeled with the soil boring number (SB #), the type of sample (soil (SS) or water (GW)) and depth of sample (in feet). For example:

Sample Designation: SB 1 - GW(12)

indicates a groundwater sample collected at a depth of 12 feet bgs from the soil boring number 1.

#### **4.3.6 Equipment Decontamination**

Prior to collecting any sample and between sampling locations, all sampling equipment will be decontaminated using a non-phosphate detergent (e.g., Alconox) or by steam cleaning. Prior to the drilling, all downhole equipment will be steam-cleaned or scrubbed with a non-phosphate detergent (e.g., Alconox). If appropriate and feasible, several sets of decontaminated equipment (e.g., sampling trowels, or core barrels) may be used to minimize downtime during decontamination if multiple samples are to be collected from the same area. Where feasible, equipment to be decontaminated will be disassembled to permit adequate cleaning of the internal

portions of the equipment. Equipment to be steam cleaned will be placed on metal cleaning racks that support the equipment for cleaning, rinsing, and air drying. Heavy waterproof gloves will be worn during steam cleaning to reduce the potential for cross-contamination between samples and to protect against skin contact with steam and potential constituents. These gloves will be steam cleaned or replaced each time the equipment is decontaminated.

#### 4.3.7 Investigation-Derived Waste

**Introduction.** The types of investigation-derived waste (IDW) that are expected to be generated during this sampling program include soil, decontamination water, personal protective equipment (PPE), disposable field equipment, and groundwater. This section describes the activities that will generate each of these wastes and the methods that will be used to minimize the volume of IDW generated whenever possible.

**Soil.** During the field investigation, excess soil generated from sampling activities will be spread onto the ground surface. If soils appear to be impacted with hydrocarbons, they will be placed into a 55-gallon drum for proper disposal.

**Groundwater and Decontamination Water.** Groundwater will be generated primarily through the purging and sampling of temporary groundwater monitoring points. In general, very little excess purge water is anticipated to be collected during this investigation. Purge water will be disposed of at the Rio Vista facility.

**Disposable Equipment and PPE.** Waste generated during the field investigation, including rope, disposable bailers, latex gloves, Tyvek suits, and etc. will be disposed in standard industrial "dumpsters." In the event the equipment or PPE is grossly contaminated, it will be decontaminated before disposal.

#### 4.3.8 Field Equipment Calibration Procedures

##### Organic Vapor Meters

Field personnel will use a PID for screening for the presence of organic vapors and for soil sample screening measurements. This instrument will be calibrated prior to use according to the

manufacturer's specifications. The instrument calibration will be checked at the beginning of each day of use and any time meter drift is suspected. All calibration information will be recorded on the daily field records.

### **Electric Water-Level Indicator**

Electric water-level indicators will be checked before the beginning of field activities by comparing the scale on the water-level tape against an engineering measurement tape. If more than one water-level indicator is used on Site, they will be calibrated to assure the depth-to-water readings are consistent between all probes. Water-level measurements will be recorded to the nearest one hundredth (0.01) of a foot.

#### **4.3.9 Survey**

A licensed surveyor will be used to determine the coordinates and elevations of ground surface and top of casing for the temporary monitoring points. Field activities associated with the survey will be documented. Entries will include the date, time, personnel on Site, work performed, problems, and corrective actions.

## **5.0 LABORATORY TESTING**

### **5.1 Soil Samples**

Soil samples will be collected and analyzed in a laboratory for the following parameters:

- BTEX by EPA SW-846 Method 8021B
- TPH (GRO and DRO) by EPA SW-846 Method 8015M

### **5.2 Groundwater Samples**

Groundwater samples will be collected for laboratory analysis of the following parameters:

- BTEX by EPA SW-846 Method 8021B

## 6.0 DATA EVALUATION AND REPORTING

Following completion of the hollow stem investigation, an interim report will be submitted to provide the data results, an interpretation of the nature and extent of hydrocarbon impacts, and conclusions with regard to potential sources. Hydrocarbon isoconcentration maps will be presented based on data collected during this investigation and previous groundwater sampling events. The report will also provide recommendations for monitoring well installations, a monitoring schedule, and any additional site investigation tasks to fulfill the Stage I Abatement Plan requirements. After completion of the second phase of field investigation, a Site Investigation Report will be issued that presents a site conceptual model. This work will be followed by a Stage 2 Abatement Plan which will select and design, if necessary, an abatement option that when implemented will result in attainment of groundwater concentrations in compliance with NMWQCC standards.

## 7.0 SCHEDULE

This investigation is tentatively scheduled for April 2006, pending access agreements with WGR and Praxair, and other scheduling considerations. NMOCD will be notified one week prior to initiation of the field work. Results of the investigation will be provided to NMOCD with recommendations for further activities within 45 days of receipt of analytical data. A schedule for subsequent activities will be provided in that report. EPNG will work with NMOCD to expedite completion of field activities and reporting for the submittal of the final site investigation report pursuant to the Stage I Abatement Plan.

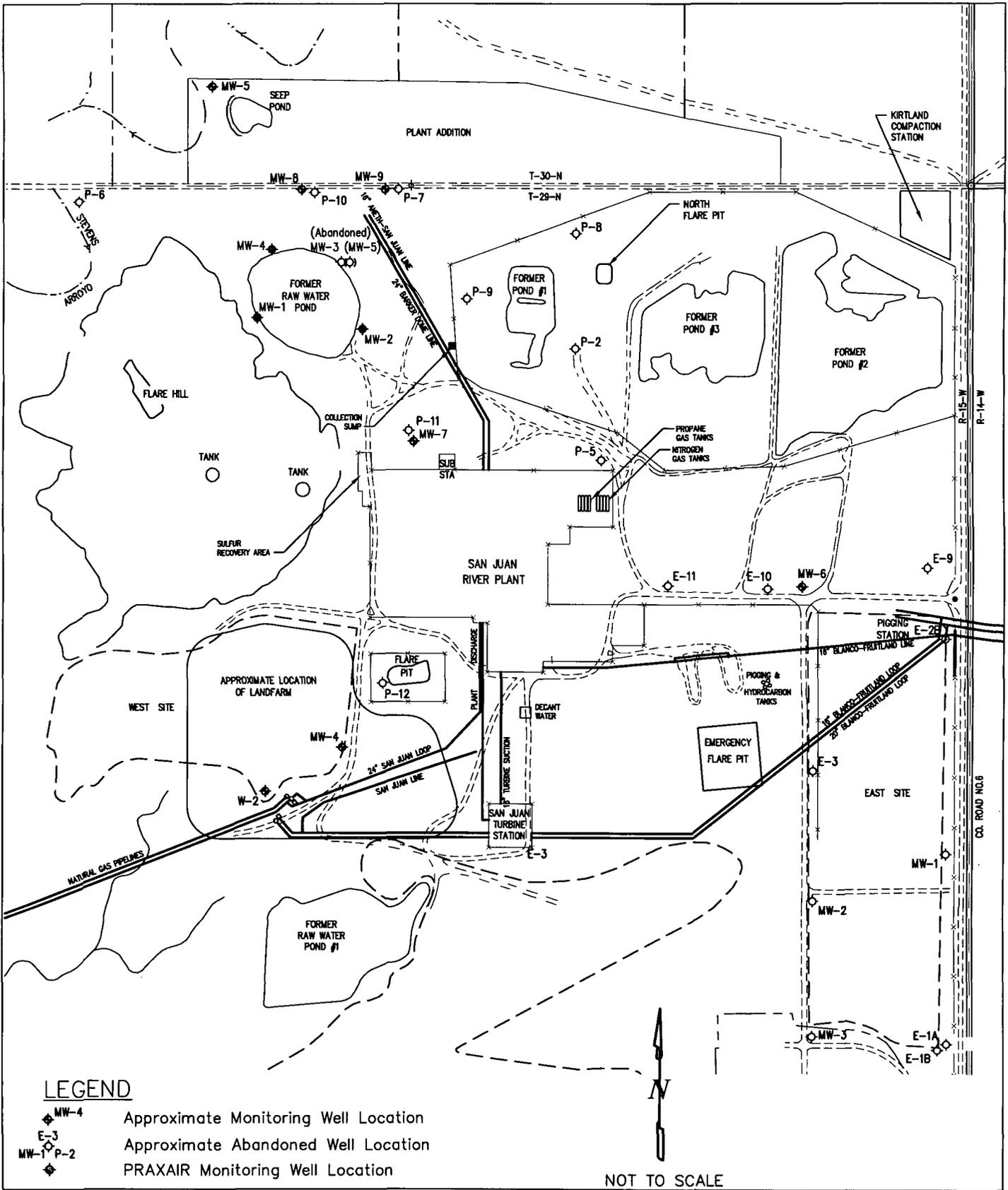
## 8.0 REFERENCES

K.W. Brown and Associates (KWBA), 1987. *Land Application Feasibility Study, San Juan River Plant, Phase I Final Report*, August 1987.

Philip Environmental, 1998. *Summary of Investigations at the San Juan River Plant, Kirtland, New Mexico*. June 1998. Prepared for El Paso Natural Gas Company.

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H. and Padgett, E.T., 1983. *Hydrogeology and Water Resources of the San Juan Basin, New Mexico*. New Mexico Bureau of Mines and Mineral Resources, 1983.

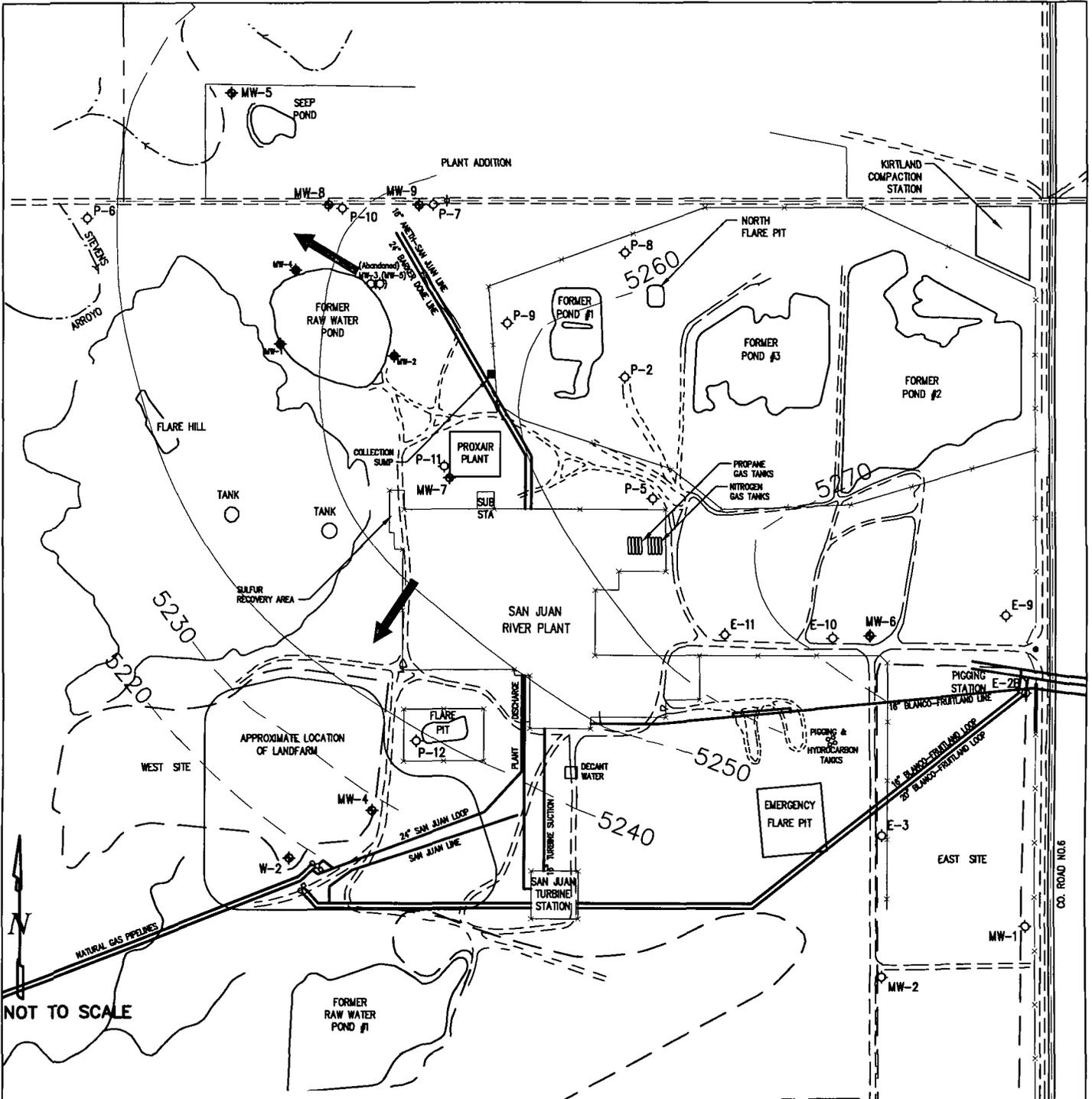
**FIGURES**



SITE LAYOUT MAP  
SAN JUAN RIVER PLANT

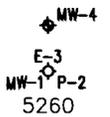
EL PASO NATURAL GAS

FIGURE 1



NOT TO SCALE

**LEGEND**



MW-4 Approximate Monitoring Well Location  
 E-3 Approximate Abandoned Well Location  
 MW-1 P-2 Potentiometric Surface (Approximate & Assumed Where Dashed)



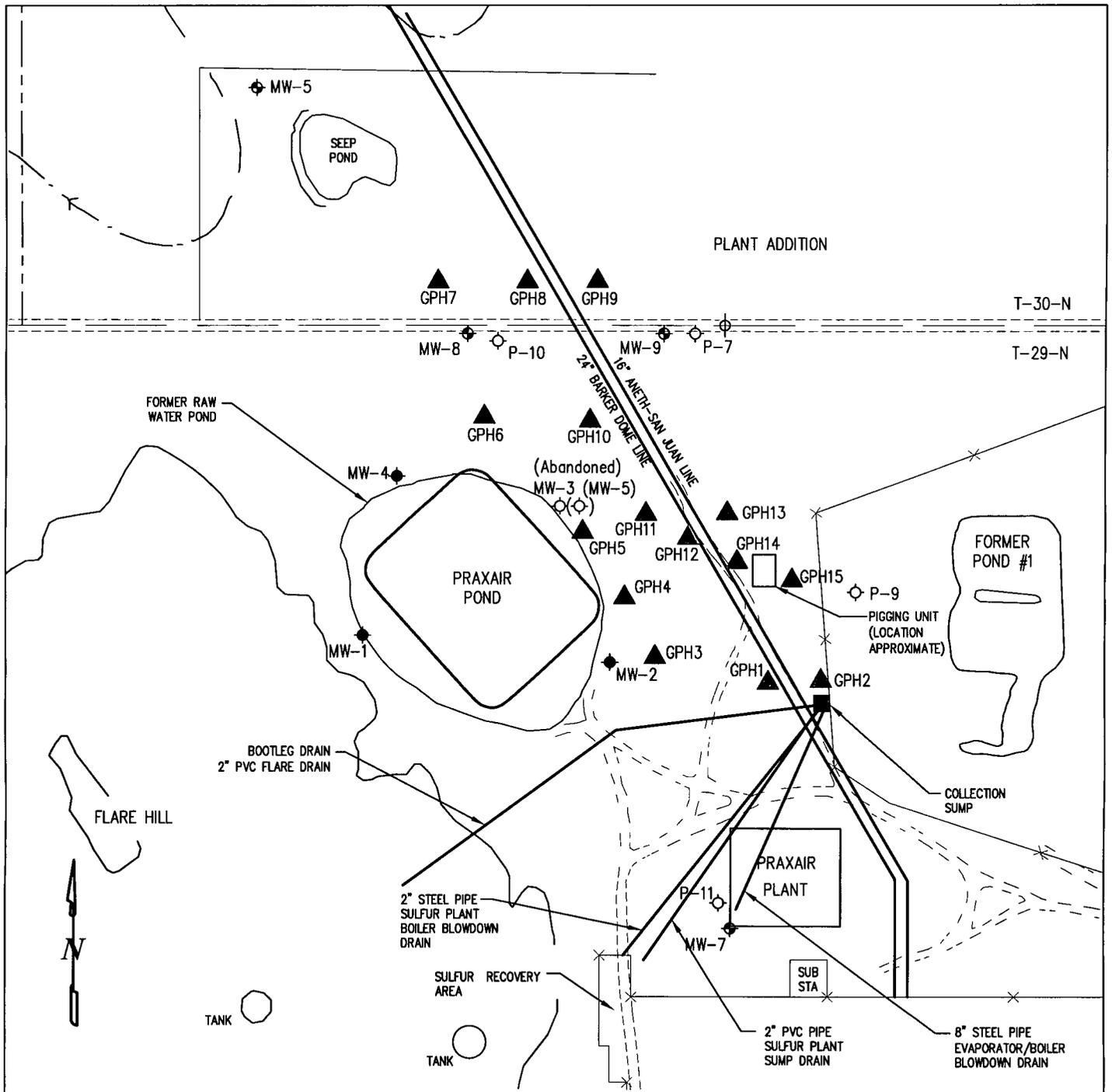
GWEL Groundwater Elevation (Feet Above Mean Sea Level Unless Noted Otherwise)  
 TOC Top of Casing  
 → Direction of Groundwater Flow (Estimated)

GROUNDWATER ELEVATION MAP  
 MARCH 2006  
 SAN JUAN RIVER PLANT

EL PASO NATURAL GAS

FIGURE 2

SARP 3-06 GW ELEV



**LEGEND**

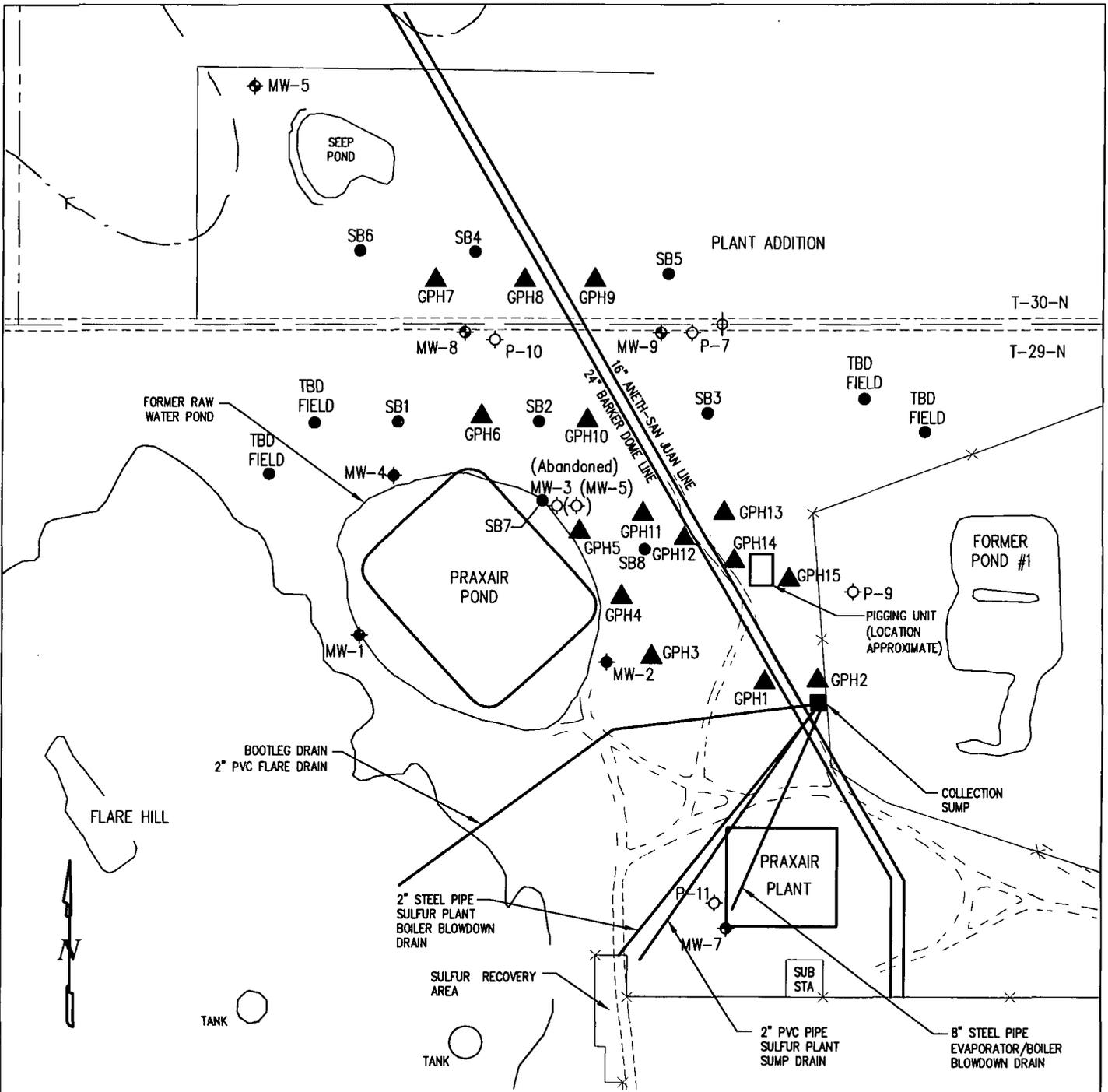
- MW-4 ◆ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◆ PERCHED WATER MONITORING LOCATION
- P-2 ○ ABANDONED WELL LOCATION
- ▲ GEOPROBE SOIL BORING LOCATION AND WATER SAMPLE LOCATION (FEBRUARY 2006)

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 GEOPROBE SOIL BORING LOCATIONS

EL PASO NATURAL GAS

FIGURE 3

SARP DETAILED PONDS



**LEGEND**

- MW-4 ◆ GROUNDWATER MONITORING WELL LOCATION (PRAXAIR)
- MW-8 ◆ PERCHED WATER MONITORING LOCATION
- P-2 ◊ ABANDONED WELL LOCATION
- ▲ GEOPROBE SOIL BORING LOCATION (FEBRUARY, 2006)
- PROPOSED ADDITIONAL SOIL BORING LOCATIONS

PRAXAIR FACILITIES  
 SAN JUAN RIVER PLANT  
 PROPOSED ADDITIONAL SOIL BORING LOCATIONS

EL PASO NATURAL GAS

FIGURE 4

SJR DETAILED PONDS