Transwestern Pipeline Company
P. O. Box 1188
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October 22, 2001

Mr. William C. Olson
Environmental Bureau
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

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Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Dr. East, Bldg. 1
Santa Fe, New Mexico 87505

RE: Work Plan for Excavation of Affected Soil
Roswell Compressor Station
Transwestern Pipeline Company

The enclosed work plan is submitted for your review and approval. Transwestern is ready to proceed with implementing the work plan upon approval from the NMOCD and the NMED HWB. Please call George Robinson at (713) 646-7327 if you have any questions or comments regarding the work plan.

Sincerely,

William A. Kendrick
Director, Environmental Affairs

xc: (with attachments)

Larry Campbell	Transwestern Pipeline Co.
George Robinson	Cypress Engineering
Tim Gum	OCD Artesia Office

Work Plan for Excavation and Removal of Affected Soil in the Former Surface Impoundment Areas

Transwestern Pipeline Company
Roswell Compressor Station
Chaves County, New Mexico

Submitted to:
New Mexico Oil Conservation Division
and
New Mexico Environment Department
Hazardous and Radioactive Materials Bureau

October 18, 2001

Prepared For:
Transwestern Pipeline Company
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Roswell, NM 88201

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Work Plan for Excavation and Removal of Affected Soil in the Former Surface Impoundment Areas

1. Work Plan Objectives

The subject of this work plan are two former surface impoundments located at the Transwestern Pipeline Company (Transwestern) Roswell, New Mexico, Compressor Station No. 9. This work plan is the first stage of active remediation measures designed to achieve a broader objective to remediate soil and groundwater affected by a release from the former impoundments.

The objectives of the proposed excavation activities are: 1) To reduce the health risk from potential future contact with affected soil to an acceptable level; and 2) To remove the potential for continued groundwater contamination from a residual source of petroleum hydrocarbons contained in affected soil. These objectives will be met by the excavation and removal of near-surface soil located in the immediate vicinity of the former impoundments.

This work plan will be implemented upon approval by the New Mexico Oil Conservation Division (OCD) and the New Mexico Environment Department Hazardous and Radioactive Materials Bureau (NMED HRMB).

2. Site Background

A thorough description of the facility and the history and operation of the former surface impoundments was provided in a previous report submitted to the OCD and the NMED HRMB. This report was titled "Corrective Action Plan for Roswell Compressor Station No. 9 Surface Impoundments", dated January 31, 1997. The location of the two impoundments relative to other facility features is indicated in Figure 1.

A brief physical description of the two former surface impoundments is presented as follows:

Impoundment	Approximate Dimensions	Date Constructed	Date Backfilled
Pit 1	40' x 70' (rectangular)	Between 7/61 & 10/72	6/86
Pit 2	70' diameter (circular)	Before 7/61	Before 2/77

It is estimated that the impoundments were at most 10 feet deep.

3. Waste Characterization Activities

3.1 Waste Characterization Objective

Waste characterization samples were collected on September 6, 2001, for the purpose of confirming that affected soil from within two former pit areas could be managed as non-hazardous oil and gas field waste. This was accomplished by collecting 22 soil samples from trenches excavated in the former pit areas. The soil samples were delivered to a laboratory for analysis for RCRA hazardous waste characteristics. Laboratory results indicate that affected soil may be managed as non-hazardous waste.

3.2 Pit Area Delineation

Prior to sampling activities, on September 5, 2001, two trenches were excavated across the length and width of each former pit area in an effort to confirm the location of the former pits. The Pit 2 area was found to be slightly smaller than what was indicated by aerial photographs and centered about 10 feet east of the location shown in previous figures. The Pit 1 area was found to have the anticipated dimensions and location. As a result, the location of sample trenches in the Pit 2 area were relocated so that they were centered over the actual pit area and the location of sample trenches in the Pit 1 area were located as planned.

3.3 Trenching Activities for Sampling

Three trenches were excavated within each former pit area in order to collect samples for RCRA waste characterization (six trenches total). The trenches were excavated using a trackhoe. Each trench was approximately 15 feet in length and excavated to a maximum depth of 12-14 feet bgs. The trenches in the Pit 1 area were oriented east-west and spaced equally along the long axis of the former pit area as indicated in Figure 2. The trenches in the Pit 2 area were oriented north-south and spaced equally within the former pit area.

In general, the soil profile encountered in all six trenches was very similar and consisted primarily of a loose sandy soil. Debris was encountered in all six trenches but was much more prevalent in the southernmost trench in the former Pit 1 area. The type of debris encountered included scrap metal pipe, crushed metal drums, rubber tires, rubber gaskets, wood products, and

other similar waste materials. Based on observations of hydrocarbon staining and hydrocarbon odor, the soil profile encountered in the former Pit 1 area appeared to be most heavily affected from near ground surface to about 12-14 feet bgs. The soil profile in the former Pit 2 area appeared to be most heavily affected from about 4 feet bgs to 10-12 feet bgs.

At the conclusion of sampling activities, excavated soil was pushed back into the trench from where the soil originated.

3.4 Sample Collection and Analysis

At least one sample was obtained from each trench at depths of 4 feet bgs, 8 feet bgs, and 12 feet bgs (that is, at least 3 samples from each trench). The sample depths were based upon prior assessment borings that indicate the base of the former impoundments was no more than 14 feet bgs. Based upon field observations, an attempt was made to obtain the most heavily affected material for characterization. In addition, several blind duplicate samples were collected for quality assurance purposes. This activity generated a total of 22 samples for waste characterization.

Laboratory analysis for RCRA waste characterization included TCLP volatiles, TCLP semi-volatiles, TCLP metals, and ignitability. In addition, the sample analysis plan included Total Petroleum Hydrocarbons (TPH) by method 8015mod (GRO & DRO). Laboratory analysis confirmed that samples collected in the course of this activity do not trigger RCRA hazardous waste criteria. A summary table of laboratory results is included as Table 1. Results for TPH analysis are also presented graphically in Figure 2.

4. Proposed Excavation Activities

4.1 General Approach

The general approach to the excavation activities is to excavate affected soil in the immediate vicinity of the former pit areas, remove the most heavily affected soil for off-site disposal, blend the less affected soil on-site prior to reuse as backfill material, and to backfill the remaining excavated area with clean soil from off-site.

The lateral limits of excavation in both former pit areas is divided into two areas. This is indicated in Figure 3 by the innermost dashed line to indicate the area that will be excavated for off-site disposal and the outermost dashed line to indicate the additional area that will be excavated and managed on-site. The area proposed for off-site disposal was determined by the lateral limits of the interior walls of the former impoundments. The intent is to include the most heavily affected soil for off-site disposal.

The area in Figure 3 that is bounded by the innermost dashed line and the solid line represents an area where excavated soil will consist mostly of relatively clean overburden soil. The lateral limit of excavation in this area was determined by establishing a perimeter that is 10 feet outside the area that will be removed for off-site disposal. Furthermore, the area in Figure 3 that is bounded by the solid line and the outermost dashed line represents an additional area where excavated soil will consist mostly of relatively clean overburden soil. This area will be excavated for excavation safety purposes in order to provide a sufficient sidewall slope down to the bottom of the excavation. Excavated soil from these areas will be stockpiled on-site around the perimeter of the excavation, blended in order to reduce the overall TPH concentration, and then utilized for backfill material. The criteria for blended soil used for backfill are a TPH concentration below 1000 mg/kg and a total BTEX concentration below 50 mg/kg. [Note: The final TPH and BTEX concentrations after blending are anticipated to be well below these criteria.]

4.2 Pit 1 Excavation

The anticipated lateral and vertical limit of excavation in the Pit 1 area is based upon information obtained from the recent waste characterization activities and from previous soil borings. For convenience, soil boring logs are attached for borings PIT 1 NW, PIT 1 SE, SVE-1A, SVE-2A, SVE-3, MW-1B, and MW-13. The location of these borings relative to the former impoundments is shown in Figure 4. It was determined from inspection of the boring logs that the outermost limit of excavation will be sufficient to ensure that all near-surface impacted soil has been removed and/or remediated to levels that are protective of human health.

Three areas are indicated in Figure 3 around the former Pit 1 location. The innermost area defines the lateral limit of excavation to a depth of 16 feet bgs that will be removed for off-site disposal at an OCD permitted landfarm facility. The purpose of this excavation is to remove any

remaining contents of the former impoundment and the most heavily affected soil beneath the former impoundment to the maximum depth practicable. All soil and debris removed from this area will be loaded into trucks for off-site disposal at an OCD permitted landfarm facility.

The area between the innermost dashed line and solid line defines the area of excavation to a depth of 16 feet bgs that will be removed, blended on-site, and then used for backfill material. The area between the solid line and the outermost dashed line defines the area of excavation that will provide for a sufficient sidewall slope from ground surface to the bottom of the excavation area. The purpose here is to remove affected soil from around the perimeter of the former impoundment to the maximum depth practicable. Much of the soil removed in the course of this excavation will be relatively clean overburden soil. Soil removed from this area will be stockpiled around the perimeter of the excavation. A procedure for managing stockpiled soil is presented in a subsequent section of this work plan.

The proposed depth of excavation is based upon two factors. First, the soil boring log for boring Pit 1 SE indicates that native soil was encountered at a depth of 14 feet bgs. The proposed depth of the excavation is two feet below the depth to native soil. Second, the proposed depth of excavation is limited to the maximum depth that can be safely achieved using conventional excavation equipment.

The total volume of soil to be excavated from the Pit 1 area is estimated at 4,800 cubic yards of soil in-place (6,700 yards excavated). It is anticipated that approximately 1,700 cubic yards (2,300 yards excavated) will be transported off-site for disposal and approximately 3,100 cubic yards (4,400 yards excavated) will be stockpiled around the perimeter of the excavation, blended, and utilized for backfill material.

4.3 Pit 2 Excavation

The anticipated lateral and vertical limit of excavation in the Pit 2 area is based upon information obtained from the recent waste characterization activities and from previous soil borings. For convenience, soil boring logs are attached for borings PIT 2 NE, PIT 2 SW, and MW-2.

Three areas are indicated in Figure 3 around the former Pit 2 location. The innermost area defines the lateral limit of excavation to a depth of 12 feet bgs that will be removed for off-site disposal

at an OCD permitted landfarm facility. Soil removed in this area from ground surface to a depth of 4 feet bgs has been determined to be relatively unaffected and therefore will be stockpiled around the perimeter of the excavation for blending and reuse. Soil from a depth of 4 feet bgs to 12 feet bgs will be removed for off-site disposal at an OCD permitted landfarm facility. The purpose of this excavation is to remove any remaining contents of the former impoundment and the most heavily affected soil beneath the former impoundment to the maximum depth practicable. All soil and debris removed from this area will be loaded into trucks for off-site disposal at an OCD permitted landfarm facility.

The area between the innermost dashed line and solid line defines the area of excavation to a depth of 12 feet bgs that will be removed, blended on-site, and then used for backfill material. The area between the solid line and the outermost dashed line defines the area of excavation that will provide for a sufficient sidewall slope from ground surface to the bottom of the excavation area. The purpose here is to remove affected soil from around the perimeter of the former impoundment to the maximum depth practicable. Much of the soil removed in the course of this excavation will be relatively clean overburden soil. Soil removed from this area will be stockpiled around the perimeter of the excavation. A procedure for managing stockpiled soil is presented in a subsequent section of this work plan.

The proposed depth of excavation is based upon two factors. First, soil boring logs for borings Pit 2 NE and Pit 2 SW appear to indicate that native soil was encountered at a depth less than 10 feet bgs. Second, waste characterization results indicate that soil beneath the Pit 2 area at a depth of 12 feet bgs is not as heavily affected as that beneath the Pit 1 area.

The total volume of soil to be excavated from the Pit 2 area is estimated at 2,700 cubic yards of soil in-place (3,700 yards excavated). It is anticipated that approximately 600 cubic yards (800 yards excavated) will be transported off-site for disposal and approximately 2,100 cubic yards (2,900 yards excavated) will be stockpiled around the perimeter of the excavation, blended, and utilized for backfill material.

4.4 Bottom and Sidewall Soil Sampling

Soil samples will be collected from the bottom and sidewalls of the excavated areas for the purpose of assessing the level of contamination remaining beneath the excavated areas. This

information will be useful in the development of subsequent remediation efforts to address remaining soil and ground water contamination. At a minimum, 12 samples will be collected from the bottom of each excavation area. Similarly, at a minimum, 12 samples will be collected from the sidewalls (@ 6-8 feet bgs) of each excavation area. Sample locations will be randomly spaced across the open excavation areas.

Bottom and sidewall soil samples will be submitted to a laboratory for analysis for VOCs by method 8260 and TPH by method 8015mod (GRO & DRO).

5. Off-Site Disposal Activities

5.1 Off-Site Disposal Facility

Approximately 3,200 cubic yards of excavated soil will by loaded into trucks and transported off-site for disposal. Soil will be transported to the Gandy Marley Inc. landfarm facility (OCD permit No. NM-01-0019) located 33 miles west of Tatum, New Mexico. This facility is approximately 60 miles by road from the remediation site.

5.2 Means of Transportation

Excavated soil will be transported to the disposal facility by dump truck. Information from prior assessment activities indicate that some of the most heavily affected material in the Pit 1 area has a sludge-like consistency. When soil/waste material of this sort is encountered during excavation, plastic liners or other appropriate means will be utilized in order to keep waste material contained during transport.

6. Management of Stockpiled Soil

6.1 Blended Soil

It is anticipated that approximately 7,200 cubic yards of clean overburden soil and less affected soil from the perimeter of the former impoundments will be stockpiled in the course of excavation activities. This material will be stockpiled and blended on-site around the perimeter of the excavations. The soil will be blended in order to further reduce the concentration of

petroleum hydrocarbons in soil prior to reuse as backfill material. This soil will be characterized by laboratory analysis prior to using the soil as backfill material.

One composite soil sample will be prepared per 100 cubic yards of blended soil. Each composite sample will be submitted to a laboratory for analysis for BTEX by method 8021 and TPH by method 8015mod (GRO & DRO). This activity will generate approximately 72 soil samples for analysis.

Based upon laboratory results, stockpiled soil that exceeds OCD guideline concentrations for benzene of 10 mg/kg, total BTEX of 50 mg/kg, or TPH of 1000 mg/kg will not be used for backfill material.

6.2 Backfill Soil

Trucks used to haul affected soil to the landfarm facility for disposal will backhaul clean soil to the site for use as backfill material. This soil will be staged in the "backfill soil staging" area indicated in Figure 1 until needed. It is anticipated that approximately 3200 cubic yards of clean soil will be brought on-site for use as backfill material. A grab sample will be collected for every 500 cubic yards of clean soil brought on-site to confirm that the backfill soil is clean. The confirmation samples will be submitted to a laboratory for analysis for BTEX by method 8021 and TPH by method 8015mod (GRO & DRO). This activity will generate approximately 7 soil samples for analysis.

7. Backfill Activities

7.1 Preparation of Excavation Areas

Subsequent to excavation and final sampling activities, the open excavations will be prepared in a manner to facilitate the placement of a plastic liner near the bottom of the excavated areas. The purpose of the liner is twofold. First, the liner will minimize the infiltration of stormwater through contaminated soil remaining below the maximum depth of excavation. Second, the liner will facilitate subsequent remediation measures designed to address deeper soil. Subsequent remediation measures will include soil vapor extraction (SVE). The liner will provide a soil vapor barrier between the deeper affected soil and the clean backfill above. Without the barrier

soil vapor might "short circuit" through the clean backfill material above rather than pass through hydrocarbon affected regions of soil and thereby reduce the efficiency of the SVE system.

In the course of excavation activities, the sides of the excavation will be sloped toward the center of the excavation in order to create a safe work area at the bottom of the excavation. In addition, backfill material will be used to bring the bottom of the Pit 1 area excavation up to 14 feet bgs. Backfill material will be used to bring the bottom of the Pit 2 area excavation up to 10 feet bgs. Similarly, this will be done in order to create a safe work area within the excavation. The "new" bottom surface of each excavation will then be graded to slope toward the east. This direction is consistent with the natural grade of the ground surface.

7.2 Placement of Plastic Liner

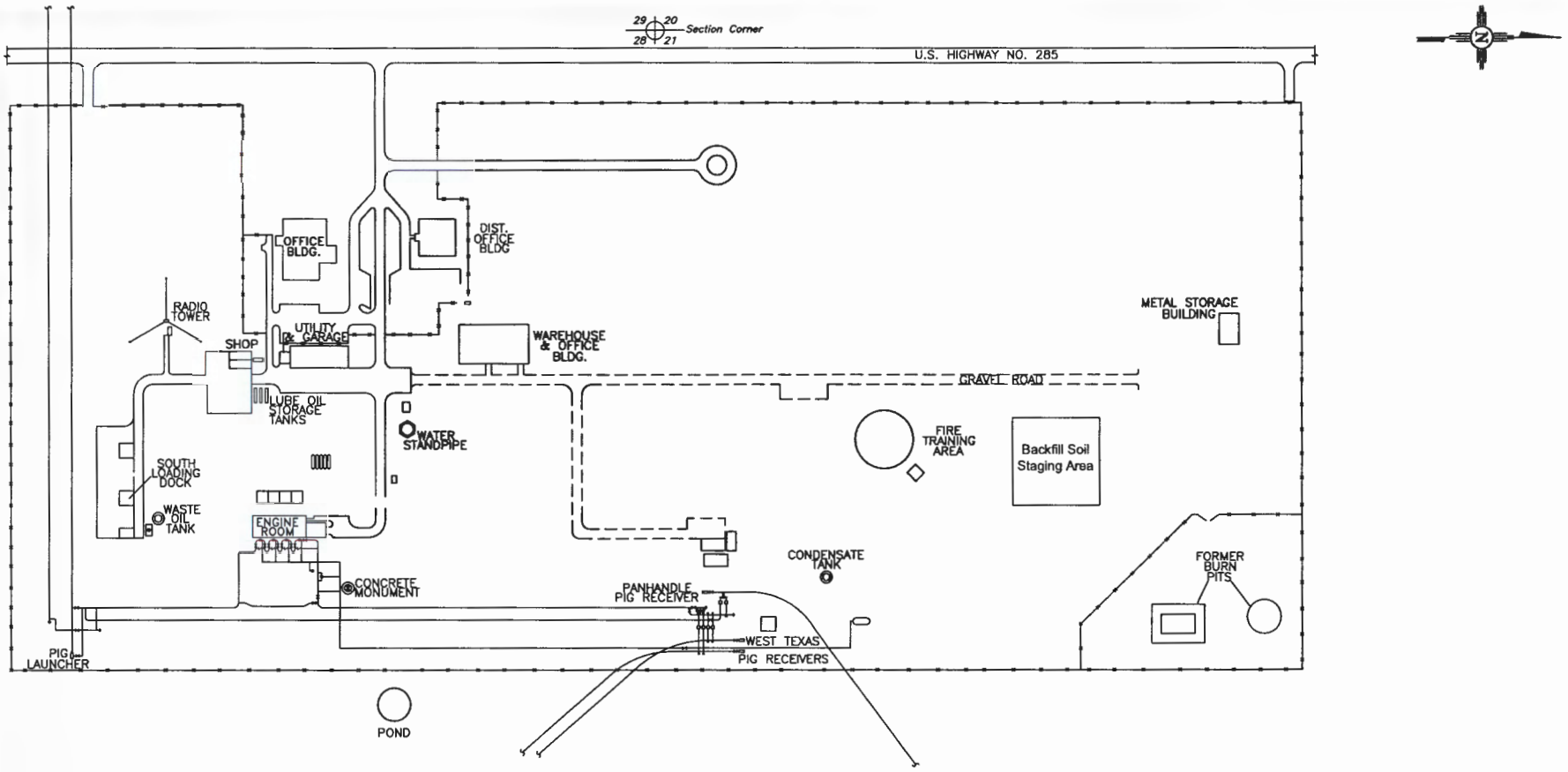
A plastic liner material will be placed across the entire flat surface area created at the bottom of the excavations. An attempt will be made to minimize the number of seams between individual sheets of plastic liner. In addition, the length of the liner material will be oriented east-west in order that overlapping edges of the liner will run down grade and thereby minimize water escaping through the liner. Overlapping edges of the liner will not be sealed.

7.3 Placement of Backfill

Backfill material will be placed into the excavation in order to bring the ground surface to a level slightly above natural grade. Blended stockpiled soil generated in the course of excavation activities will be utilized first. Backfill material brought in from off-site will then be used to complete this activity.

8. Reporting

A completion report will be generated and submitted to the OCD and the NMED HRMB within 60 days of completion of excavation activities. The report will describe the activities completed and will present the results of all confirmatory soil sampling.

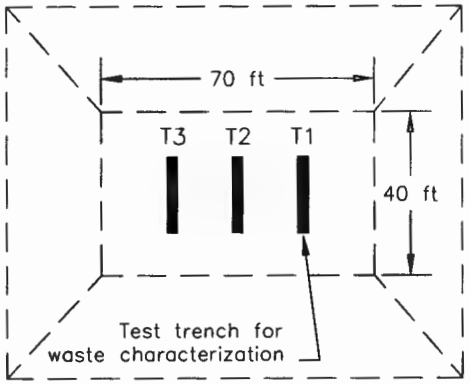


FACILITY SITE MAP

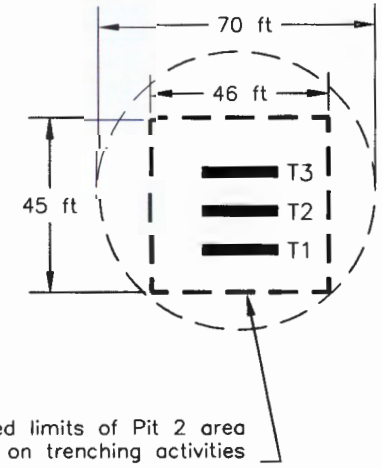
ROSWELL COMPRESSOR STATION
TRANSWESTERN PIPELINE COMPANY

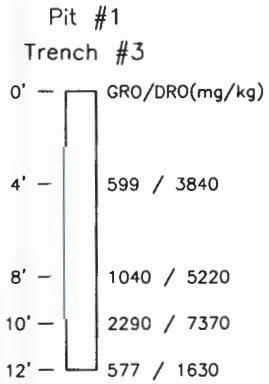
Figure 1

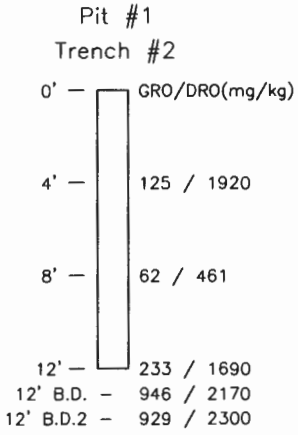
Pit 1

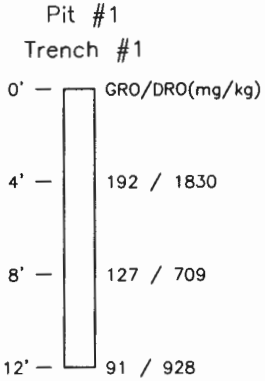


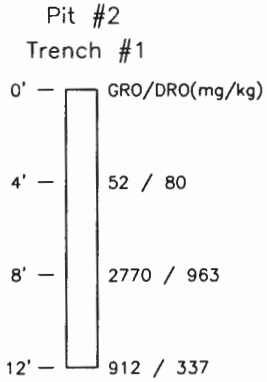
Pit 2

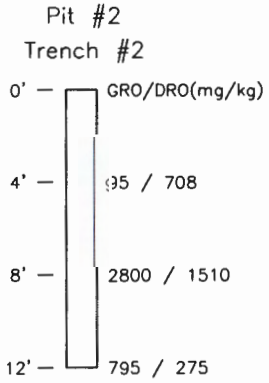


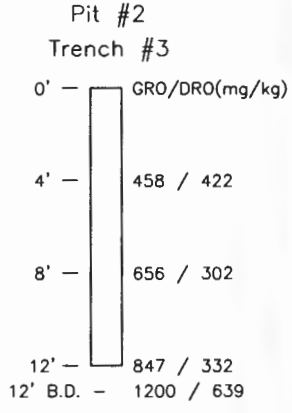






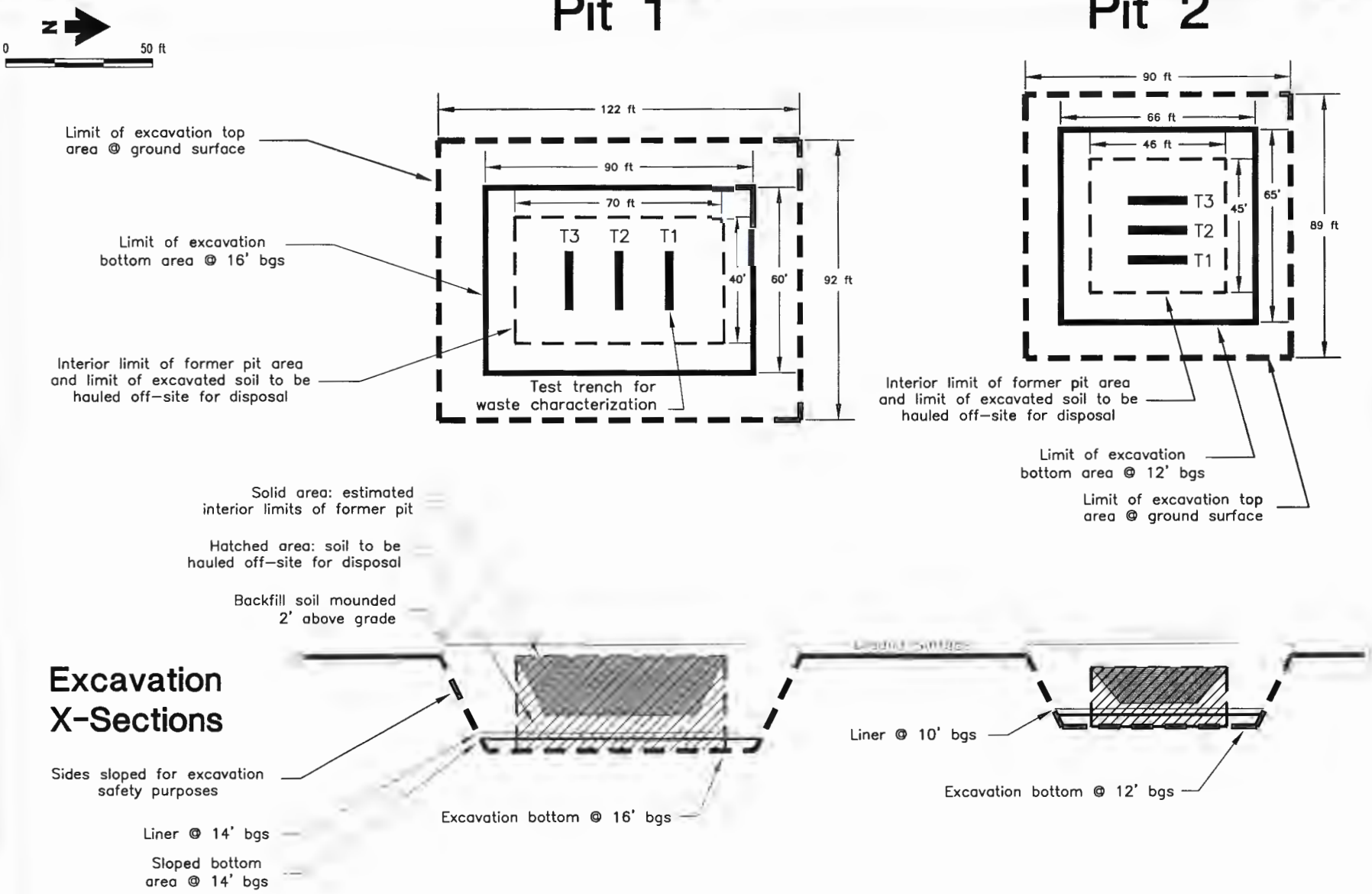






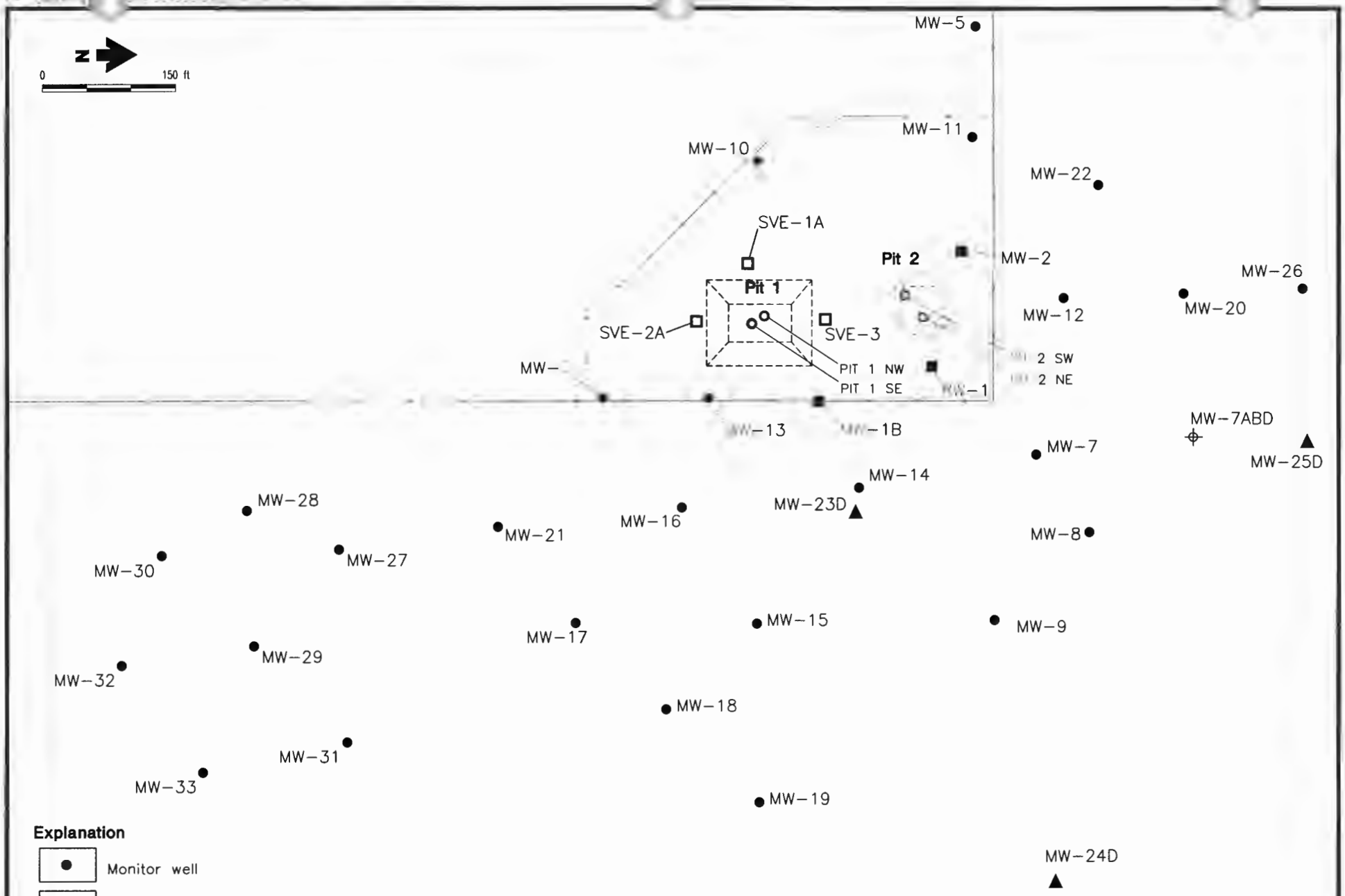
ROSWELL COMPRESSOR STATION

Trench Locations & TPH Profile



ROSWELL COMPRESSOR STATION

Proposed Pit Excavations



ROSWELL COMPRESSOR STATION

Monitor Well and Soil Boring Locations

CYPRESS ENGINEERING SERVICES, INC.

Figure 4

Table 1. Summary of Analytical Results for RCRA Waste Characterization of the Pit 1 and Pit 2 Areas
Compressor Station No. 9 - Roswell, NM

Sample ID	Sampling Date	Ignitability (F)	pH (units)	TPH, GRO+DRO (mg/kg)	Reactivity cyanide (mg/kg)	Reactivity sulfide (mg/kg)	TCLP Metals (mg/L)								TCLP VOCs (mg/L)											TCLP SVOCs (mg/L)									
							Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	1,1-Dichloroethene	1,2-Dichloroethane	1,4-Dichlorobenzene	2-Butanone (MEK)	Benzene	Carbon Tetrachloride	Chlorobenzene	Chloroform	Tetrachloroethene	Trichloroethene	Vinyl Chloride	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dinitrotoluene	2-Methylphenol	3&4-Methylphenol	Hexachlorobenzene	Hexachlorobutadiene	Hexachloroethane	Nitrobenzene	Pentachlorophenol	Pyridine
RCRA Regulatory Levels:		**<140**	**<2.0 >12.5**	**—**	**<250**	**<500**	**5.0**	**100**	**1.0**	**5.0**	**5.0**	**0.2**	**1.0**	**5.0**	**0.7**	**0.5**	**7.5**	**200.0**	**0.5**	**0.5**	**100.0**	**6.0**	**0.7**	**0.5**	**0.2**	**400.0**	**2.0**	**0.13**	**200.0**	**200.0**	**0.1**	**0.5**	**3.0**	**2.0**	**100.0**	**5.0**
Pit #2 - Trench #1 @ 4'	09/06/01	NI	7.4	131	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #1 @ 8'	09/06/01	NI	7.1	3733	<10	160	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #1 @ 12'	09/06/01	NI	7.1	1249	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #2 @ 4'	09/06/01	NI	7.2	803	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #2 @ 8'	09/06/01	NI	7.6	4310	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #2 @ 12'	09/06/01	NI	7.8	1070	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #2 B.D.	09/06/01	NI	7.6	1839	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #3 @ 4'	09/06/01	NI	7.4	880	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #3 @ 8'	09/06/01	NI	7.5	958	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #2 - Trench #3 @ 12'	09/06/01	NI	7.7	1179	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #1 @ 4'	09/06/01	NI	7.2	2022	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #1 @ 8'	09/06/01	NI	7.4	836	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #1 @ 12'	09/06/01	NI	7.2	1019	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #2 @ 4'	09/06/01	NI	7.5	2045	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #2 @ 8'	09/06/01	NI	7.1	523	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #2 @ 12'	09/06/01	NI	7.0	1923	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #2 @ B.D.	09/06/01	NI	7.0	3116	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #2 B.D. #2	09/06/01	NI	6.9	3229	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #3 @ 4'	09/06/01	NI	7.5	4439	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #3 @ 8'	09/06/01	NI	9.1	6260	<10	<20	1.41	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #3 @ 10'	09/06/01	NI	8.0	9660	<10	<20	2.18	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0
Pit #1 - Trench #3 @ 12'	09/06/01	NI	7.5	2207	<10	<20	<0.5	<5	<0.1	<0.5	<0.2	<0.04	<0.1	<0.2	<0.5	<0.2	<1.0	<5.0	<0.2	<0.2	<0.05	<1.0	<0.5	<0.2	<0.1	<5.0	<1.0	<0.1	<1.0	<1.0	<0.1	<0.2	<1.0	<1.0	<1.0

Notes:
NI - Not Ignitable
"—" - No applicable RCRA regulatory limit
TPH - Total Petroleum Hydrocarbons by method 8015mod (GRO+DRO)
"B.D." - Blind Duplicate

TW Roswell Station
Surface Impoundment Sampling - September 6, 2001

Excavating trench #3 in the former Pit #2 area.

Collecting a sample for lab analysis from a trench in the Pit #1 area.

TW Roswell Station
Surface Impoundment Sampling - September 6, 2001

Collecting a sample for lab analysis from a trench in the Pit #1 area.

Soil and debris excavated from the east trench in the former Pit #1 area.