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REPORTS

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SITE RESTORATION AND ASSESSMENT SUMMARY REPORT

PRIDE PETROLEUM SERVICES, INC.
3857 SOUTH US HIGHWAY 16
(Between Mile Posts 67 and 68, Four Miles South of Lovington)
LOVINGTON, NEW MEXICO

Prepared For:
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TETRA TECH EM INC. PROJECT NO. 001-0594
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1.0 EXECUTIVE SUMMARY

Tetra Tech EM Inc. (Tetra Tech) has prepared the following summary based on recent site restoration and assessment developments. Restoration and assessment activities were conducted from the final week of May through August 1997. Work conducted to date was performed in accordance with the April 14, 1997, Site Restoration Workplan, which was verbally approved by Pride Petroleum Services, Inc. (Pride) on April 17, 1997.

Pride formerly operated and maintained an oil field services facility (on property owned by the City of Lovington) located at 3857 Lovington Highway, approximately 4 miles south of Lovington on U.S. Highway 18, between mile post markers 67 and 68, Lovington, Lea County, New Mexico. Site restoration and seepage pit assessment activities were performed as part of a property lease transfer between the City of Lovington and Pride. Assessment activities were performed to determine whether potential liabilities are associated with the seepage pits utilized for routine maintenance and oil field services, material handling units, and waste stream management. A seepage pit was located outside the maintenance building adjacent to the indoor mechanics pit; a second seepage pit was located adjacent to the wash pad area located near the northeast corner of the fenced portion of the maintenance building and parking lot.

Currently, the subject property is vacant; however, minor remaining bulk fluids, cleaners, and paints are still present. Arrangements are being made to schedule the collection of these materials by the proper parties. Land use in the vicinity of the subject property is primarily light industrial and agricultural, with some areas of vacant land. A water well survey of the area within a one-half-mile radius of the property was performed to determine the location of the nearest well and to identify the estimated depth to water. Within this area, the City of Lovington currently operates three municipal water wells with estimated depths to water ranging from 50 to 60 feet below ground surface (BGS).

As part of site restoration activities, E and E Enterprises (E & E) was contracted to remove petroleum fluids and water from the two aboveground storage tanks (ASTs) and the associated containment structure surrounding the ASTs. The fluids were transported off-site to the Controlled Recovery, Inc. (CRI) facility near Midway, New Mexico, for recycling.

E & E also transferred fluids from each seepage pit to an AST, known as a frac tank. Upon evacuation of all liquids from the seepage pits, a composite sample was collected from each pit and submitted for laboratory analysis and disposal characterization. All samples were submitted via overnight courier or hand delivered to Anachem, Inc. for laboratory analyses. Upon approval of the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division (OCD), the fluids will be transported to the CRI Parabo facility near Midway for fuel blending and recycling.

Site restoration activities also involved establishing proper waste management and disposal methods as necessary to eliminate potential environmental liabilities. Miscellaneous oil stained parking areas were identified during initial site inspection activities. The impacted soil was excavated and staged separately pending waste disposal characterization. Soil confirmation samples were collected following excavation activities and submitted for laboratory analysis. Various new and used products were identified during the initial site inspection. During the OCD site inspection, remaining products were documented. The OCD requested proper disposal documentation for items such as used oil, cleaners, paints, brake pads, antifreeze, grease, and miscellaneous by-products associated with routine oil field servicing and maintenance.

As part of seepage pit assessment activities, the overburden material from each pit was excavated and stockpiled independently of the impacted soil. A track-mounted excavator was utilized to remove the

impacted soils. A local mobile testing laboratory, equipped to perform total petroleum hydrocarbon (TPH) analysis (comparable to U.S. Environmental Protection Agency [EPA] Method 418.1), was used to determine excavation limits. Visual observations and olfactory indications assisted in determining excavation limits.

Upon establishing the excavation limits, Tetra Tech personnel collected appropriate soil samples from each seepage pit excavation area. As directed by the OCD, soil samples were collected to determine if hazardous constituents were present in the subsurface soils and to provide complete waste disposal characterization of the excavated soils.

As a result of the data collected during restoration and assessment activities, Tetra Tech concludes that no further action is necessary and requests a "Case Closure" designation from the OCD.

2.0 CHRONOLOGY OF EVENTS

May 8, 1997: Tetra Tech employee Anthony Herald, performed a site inspection and identified potential environmental liabilities. A work plan and cost estimate were developed based on observed site conditions and regulatory requirements.

May 30, 1997: John Harrie, a Tetra Tech employee, visited the site to meet with contractors and uncover the seepage pits associated with the mechanics pit and the wash bay. Tires, batteries, stained surface soil, used oil products, and other miscellaneous waste streams were removed and properly disposed of as nonhazardous materials. Water and soil samples were collected to characterize the various waste streams. Remaining regulated products were to be transported to a nearby Dawson Production facility.

June 2, 1997: Anachem, Inc. received water and soil samples for laboratory analysis.

June 6, 1997: The laboratory report was received and data organized to submit OCD Form C-138 requesting authorization for fluids and soil disposal.

July 7, 1997: OCD submitted a letter to CRI denying the request for fluids disposal. OCD also denied the Rhino Environmental Services Goo Yea Landfarm request for soil disposal. Chain-of-custody discrepancies were noted, and OCD requested an on-site inspection.

July 18, 1997: Anthony Herald met with Wayne Price from the OCD's Hobbs District office to perform an on-site inspection. Numerous remaining waste streams were identified; OCD requested proper disposal and associated manifesting of paints, cleaners, grease, brake pads, and miscellaneous drums containing de-ionized antifreeze and methanol.

July 16, 1997: CRI initiated excavation of the seepage pits.

July 18, 1997: Anthony Herald performed an inspection of the excavation progress and directed continued excavation based on visual observations, mobile laboratory data, and olfactory indications.

August 1, 1997: Anthony Herald returned to the subject property and terminated excavation activities. Wayne Price and Anthony Herald developed a characterization/sample plan.

Seepage pit floor and wall composite soil samples were collected for characterization purposes and to determine the horizontal and vertical extent of delineated petroleum hydrocarbon contamination. Samples were hand delivered to Anachem, Inc. on Monday, August 4, 1997.

Mr. Bob Carter, City Manager of Lovington, visited the site to discuss restoration activities. Mr. Carter requested the plugging and grouting of the mechanics seepage drain lines in order to decommission the mechanics pit and render it unavailable for future use. Mr. Carter also offered clean select fill at no charge to Pride for backfilling of the excavations.

August 11, 1997: Fluids stored on-site in a frac tank were sampled and submitted for waste characterization.

August 19, 1997: CRI submitted OCD Form C-138 requesting OCD disposal authorization for fluids.

August 20, 1997 The laboratory report for the water sample collected from the on-site frac tank was received.

August 22, 1997: The laboratory report for soil samples collected from the seepage pits and the waste characterization samples collected from the stockpiled soils was received.

August 23, 1997: OCD authorizes CRI's C-138 request for fluid disposal.

August 25, 1997: Goo Yea Land Farm re-submitted the OCD Form C-138 requesting disposal authorization for excavated soils.

September 2, 1997: OCD authorized GooYea Land Farm's OCD Form C-138 request for soil disposal at the Parebo facility.

September 10, 1997: The Site Restoration and Assessment Report, requesting no further action, was submitted to the Santa Fe and Hobbs District offices of the OCD.

3.0 PURPOSE AND SCOPE OF WORK

The purpose of the restoration project is to (1) document the current subsurface soil conditions in the immediate vicinity of the seepage pits, classified as EPA Class V Injection Wells; (2) record the removal of hydrocarbon-impacted surface soil; and (3) facilitate the proper disposal of the various waste streams left at the subject property (see Figures 1 and 2). Activities performed for this project included the removal of the following items:

- 19 empty 55-gallon drums
- 6 uncharged fire extinguishers

- 5 empty 5-gallon grease containers
- 30 tires
- 1,200 gallons of waste oil and water (mixture) from the AST containment area
- Portions of hydrocarbon-impacted surface soils from various locations across the site

As part of the seepage pit assessment, Tetra Tech excavated and exposed two independent seepage pits. One seepage pit, referred to as the "Mechanics Pit/Leach Field," was located south and adjacent to the existing maintenance shop. A 4-inch diameter polyvinyl chloride (PVC) pipe was connected to an approximately 2-foot by 2-foot sump located in the mechanics pit/trench within the shop. The drain piping was connected to a 5-foot diameter, 7-foot deep seepage pit constructed of concrete blocks. The top of the seepage pit was approximately 5 feet BGS and was used to collect discharged fluids from within the indoor mechanics pit.

The second seepage pit, referred to as the "Northeast Wash Bay/Leach Field," was located north of the wash pad area, near the northeast corner of the fenced property and consisted of a 5-foot diameter, 9.5-foot deep seepage pit. The top of the structure was buried approximately 2 feet below the ground surface. Both pits contained liquids and were observed to be at near capacity during the May 1997 field inspection.

The OCD has determined that the seepage pits are classified by the EPA as Class V Injection Wells. A closure report is required to document the remediation of these pits. The OCD performed a site inspection of the seepage pits both before and after excavation.

During a meeting with Wayne Price of the OCD Hobbs District office on July 18, 1997, four independent waste streams were identified and established based on restoration and assessment-derived wastes. This material, currently staged on-site, was also sampled for waste disposal characterization purposes. The OCD requested a complete toxicity characteristic leaching procedure (TCLP) analysis; hazardous waste determination; reactivity, corrosivity and ignitability (RCI) analysis; and TPH gasoline range organics (GRO) analysis (EPA method 8015).

In order to determine if the seepage pits pose a threat to groundwater, the OCD requested a complete TCLP screening. Additionally, analyses for semivolatiles and volatiles (EPA methods 8270 and 8260) were requested. Volatile and semivolatile analyses include all parameters defined in the State of New Mexico, Water Quality Control Commission (WQCC) Guidance, Permitting and Groundwater Standards. Although the established Human Health Standards for Groundwater are only applicable to groundwater, analyses of soil samples collected from the excavation floors and walls for these parameters will assist in determining if released contaminants associated with the seepage pits are a potential threat to groundwater. Characterization analyses also included analysis for TPH-GRO; TPH-diesel range organics (DRO); and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA method 8020, methanol extraction. Sample locations are illustrated on Figure 3.

The following EPA analyses were performed on the seepage pit floor and wall samples:

- BTEX/TPH (EPA 8020)
- TPH-DRO (Modified EPA 8015)
- TCLP Volatile Organics (EPA 1311)
- Ignitability (ASTM D92)
- TCLP Mercury Digestion (EPA 7470)
- TCLP Microwave Digestion (EPA 3015)
- TCLP Nonvolatiles Extraction (EPA 1311)
- TCLP Pesticides (EPA 8080A)
- TCLP Semivolatiles (EPA 8270)
- TCLP Volatiles (EPA 8260)
- Corrosivity (EPA 9040)
- Semivolatiles (EPA 8270)
- Volatiles (Expanded EPA 8260)
- Reactivity (full)
- TCLP Herbicides (EPA 8015A)
- TCLP RCRA Metals (EPA 6010)

The investigative derived waste streams identified as a result of assessment activities consist of the following:

- Northeast Wash Bay/Leach Field - This area contained the former wash bay utilized to clean oil field servicing vehicles.

- Mechanics Pit/Leach Field - This area contained the seepage pit utilized for the mechanics pit within the maintenance garage.

- Surficial Oil-Stained Soils - Stained surface soils were identified during the initial site inspection and subsequently excavated, staged, and stockpiled. Native soil samples were collected of native material following excavation activities.

- Frac Tank Liquids - Stored liquids were vacuumed from each seepage pit prior to excavation activities.

4.0 SITE OVERVIEW

The subject property is located approximately 4 miles south of Lovington City limits on U.S. Highway 18, Lea County, New Mexico. Land use in the vicinity is primarily light industrial and agricultural, with some areas of vacant land. A water well survey of the area within a one-half-mile radius of the property was performed to determine the location of the nearest well and to identify the estimated depth to water. Within this area, the City of Lovington currently operates three municipal water wells with estimated depths to water ranging from 50 to 60 feet BGS. The closest well, L-53-AA, is located 1,100 feet south-southwest of the subject property. The two other wells (L-4058-S-17 and L-4058-S-14) are located respectively 1,600 feet south southwest and 1900 feet due west of the subject property. A complete review of the water well survey can be viewed in Appendix A.

5.0 SITE BACKGROUND/OPERATING HISTORY

The subject property is currently owned by the City of Lovington and is leased to Pride. Pride

occupied a maintenance building and an office building, and operated an underground storage tank (UST) system consisting of one unleaded petroleum UST and two diesel fuel USTs. The UST system was removed in April 12, 1995 and received a designation of no further action from the New Mexico Environment Department (NMED). The UST system was located near the southeast property boundary.

One metal and one fiberglass AST, with estimated capacities of 500 gallons each, were located along the southern wall of the maintenance building. The ASTs were placed within a concrete containment system. The ASTs were utilized to contain bulk oil and used oil products. All fluids within the containment structure and within the ASTs have been removed. Various oil field support equipment such as grout hoppers, roll-off boxes, construction machinery, and miscellaneous servicing equipment was located throughout the subject property boundaries. Currently, the property is vacant; however, minor remaining bulk fluids, cleaners, and paints are still present. Arrangements are being made to schedule the collection of these materials by the proper parties.

6.0 ENVIRONMENTAL SETTING

6.1 Regional Geologic Setting

Hobbs, New Mexico, is located within the Pecos Plains Region and the Pecos River Valley physiographic province of southeastern New Mexico. The subject area is located along the Paleozoic Mescalero Escarpment and bordered to the west by the Guadalupe Mountains, Sacramento Mountains, Capitan Mountains, Jicarilla Mountains, and the Gallinas Mountains, all part of the Sangre De Cristo and San Andreas Ranges. These mountain ranges represent the easternmost edge of the Rio Grande Rift.

The eastern New Mexico farmland and prairie soils are composed of alluvial sediments. Near-surface sediments consist primarily of Pliocene alluvial and lacustrine deposits in the form of sands, gravel, and caliche beds. (Sources: Roadside Geology of New Mexico, Mountain Press Publishing Company, Halka Chrinic, 1987; Geologic Highway Map, Southern Rocky Mountain Region, American Association of Petroleum Geologists).

6.2 Local Hydrogeology

Subsurface deposits at the subject property consist of consolidated, well sorted sands and gravel that range from fine to coarse in size and contain intermittent zones of caliche. Lithology encountered during excavation activities revealed solidified layers of caliche, gravel, and sands. Resistant caliche bedding was encountered at approximately 8 feet BGS during excavation of the Northeast Wash Bay/Leach Field.

Groundwater was not encountered during excavation activities. The depth to groundwater in this area is estimated to be greater than 50 feet BGS based on water well information reviewed at the New Mexico State Engineer's Office in Santa Fe. The depth to groundwater is also based on

information obtained from Bob Carter, Manager of the City of Lovington. The City of Lovington currently operates three municipal water wells within one half mile of the subject property. Note: There is a plugged/abandoned well due north of the subject property (Source: Bob Carter); the New Mexico State Engineer's office has no records for this well.

A water well survey of the area within a one-half-mile radius of the subject property was performed to determine the location of the nearest well and to identify the estimated depth to water. The information from this survey, which took place at the New Mexico State Engineer's Office in Santa Fe, is detailed in Table 1.

TABLE 1
WATER WELL SURVEY DATA

Well No.	Well ID.	Owner	Year Completed	Total Depth (ft)	Depth To Water (ft)	Status
1	L-53-AA	Lovington	1959	126	60	Active
2	L-4058-S-17	Lovington	1965	266	50	Active
3	L-4058-S-14	Lovington	1965	260	50	Active
4	L-2507	Warren & Bradshaw	1954	110	41	Plugged (1955)
5	L-3699	B.L. McFarland, Inc.	1957	100	NA	Plugged (1957)
6	L-4058-S-21	Lovington	1981	251	67	Active
7	L-2300	Makin Drilling Company	NA	100	NA	Capped (1958)
8	L-3031	Velma Petroleum Corporation	1955	115	58	Active
9	L-6566[a]	NA	NA	NA	NA	NA
10	L-4058-S-15	Lovington	1965	260	50	Active

Notes: [a] Well log missing from the New Mexico State Engineer's Office in Santa Fe.
NA Not available

7.0 SUBSURFACE INVESTIGATION

7.1 Leach Field/Seepage Pit Excavation

A track-mounted excavator was used to remove the concrete seepage pits and the soil material immediately surrounding the seepage pits. A local mobile testing laboratory, equipped to perform TPH analysis (comparable to EPA method 418.1), was used to determine excavation limits. Visual observations and hydrocarbon odors assisted in determining excavation limits. A copy of the field laboratory results is included in Appendix B.

Undisturbed soil above each seepage pit was excavated and segregated from the impacted soil material. Excavation limits were guided by field laboratory testing as well as visual and olfactory indications. Composite soil samples were collected from the floor and wall areas of each excavation. Soil samples are identified on the chain of custody as Wash Bay Floor Composite, Wash Bay Wall Composite, Mechanics Pit Floor Composite, and Mechanics Pit Wall Composite.

Prior to the initiation of excavation activities, all fluids were removed by a vacuum truck. E & E (EPA ID No. TXD982 75 6868) removed the petroleum fluids and water from the two seepage pits. The fluid was

then transferred to a 22,000-gallon frac tank. Approximately 1,200 gallons of fluids were also removed from the two ASTs and transported off-site to the E & E Brownfield, Texas, facility (TNRCC Facility Reg No. 41398). Manifest information is provided in Appendix C.

Samples were placed in laboratory-provided glass jars or brass sleeves. Floor and wall samples were each composited from numerous points and placed into a sealable gallon-size plastic bag. The soil was then mixed within the bag to composite the sample. Samples were placed into required brass sleeves or laboratory-provided sample jars; the sleeves were capped and taped on each end, labeled, and placed on ice. All soil samples were hand delivered (due to a freight shipping strike) to Anachem, Inc. in Allen, Texas. Soils remaining in each bag were described using the Unified Soil Classification System (USCS).

Final excavation limits for each seepage pit are illustrated on Figures 4 and 5. Photographic documentation of site conditions, excavation activities, and site restoration activities are contained in Appendix D.

7.2 Stained Surface Soil Excavation

During initial site inspection activities, various areas of soil stained with petroleum hydrocarbons from parked vehicles and minor spills were documented. Arrangements were made to excavate the stained areas and to collect confirmation samples of remaining in-situ soils. This soil material was staged separately from other assessment-derived soils. Dimensions of the various stained surface soils and the confirmation sampling locations are illustrated on Figure 3. Samples were collected and analyzed by the laboratory for TPH using EPA method 418.1. Table 2 presents the sample results which are also provided in Appendix E.

Based on complete TCLP, semi-volatile and volatile analysis of both the stockpiled soil and the seepage pit characterization samples, results obtained from the surfaced stained soils and confirmation sampling of in-situ soils, additional excavation of stained soils is not necessary. Complete TCLP screening, hazardous waste determination and RCI analyses from the stained surface spoil pile and included all parameters defined in the State of New Mexico, WQCC Guidance, Permitting and Groundwater Standards. Additionally, since a toxicity value for TPH is not established, remaining hydrocarbons in the surfaced stained soils do not pose a threat.

TABLE 2
SURFACE STAINED SOIL CONFIRMATION ANALYSIS

Sample ID	Sample Date	TPH (ppm)
SP SE1 (0.3")	05-30-97	32
SP SE2 (0.2")	05-30-97	4,800
SP N (O.2")	05-30-97	2,500
SP S1 (0.2")	05-30-97	480
SP S2 (0.2")	05-30-97	12,000
SP S3 (0.2")	05-30-97	72
SP S4 (0.2")	05-30-97	13,000

Note: ppm = parts per million (equivalent to milligrams per liter [mg/L])

All sampling equipment was decontaminated prior to sample collection using a solution of trisodium phosphate (Liquinox™) and potable water, followed by a rinse in potable water. All brass sleeves and sample jars were provided by the laboratory. Miscellaneous trash and decontamination water were disposed of properly.

8.0 ANALYTICAL SUMMARY

8.1 Soil Chemistry

As required by the OCD, characterization of each assessment-derived waste stream and analytical confirmation of in-situ soils collected from the excavation floors and walls were required. As part of seepage pit assessment activities, composite soil samples from the floor and wall of areas of each excavation were collected.

Upon establishing the limits of excavation, Tetra Tech personnel collected appropriate soil samples from each seepage pit excavation area. As directed by the OCD, soil samples were collected to determine if hazardous constituents were present in the subsurface soils. In order to determine if the seepage pits may pose a threat to groundwater, a complete TCLP screening, hazardous waste determination and RCI analyses were performed. Additionally, semivolatiles analysis (EPA method 8270) and volatiles analysis (EPA method 8260) was requested. Volatile and semivolatile analyses include all parameters defined in the State of New Mexico, WQCC Guidance, Permitting and Groundwater Standards. Although the established Human Health Standards for Groundwater are only applicable to groundwater, analyses of soil samples collected from the excavation floors and walls for these parameters indicates that the remaining soils are not a potential threat. All semivolatile and volatile parameters analyzed were reported below detection limits (BDL) for samples collected from the mechanics pit floor and walls. The northeast wash bay/seepage pit floor and walls contained minor amounts of butyl benzene, ranging from 31 to 94 parts per billion (ppb); P-isopropyl toluene, ranging from 40 to 71 ppb; and trimethylbenzenes, ranging from 35 to 60 ppb. All other analytes tested were reported as BDL. Analyses of floor and wall confirmation samples also included TPH-DRO and BTEX using EPA method 8020, methanol extraction. A review of the laboratory analyses indicates that TPH-DRO ranged from BDL to 62 parts per million (ppm). All BTEX constituents were reported BDL. Laboratory results of soil confirmation sample analyses are presented in Table 3.

TABLE 3
SEEPAGE PIT SOIL CONFIRMATION SAMPLE ANALYTICAL RESULTS

Sample ID	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Xylenes (ppb)	Total BTEX (ppb)	TPH-DRO (ppm)	Semi-volatiles (ppb)	Volatiles (ppb)
Wash Bay Floor Composite	08-01-97	<5.0	<3.0	<8.0	<10.0	BDL	62.0	BDL	94-Butyl Benzene 71-P-Iso Benzene 60-Trimethyl Benzene
Wash Bay Wall Composite	08-01-97	<5.0	<3.0	<8.0	<10.0	BDL	21.0	BDL	31-Butyl Benzene 40-P-Iso Benzene 35-Trimethyl Benzene
Mechanics Pit Floor Composite	08-01-97	<5.0	<3.0	<8.0	<10.0	BDL	<5.0	BDL	BDL
Mechanics Pit Wall Composite	08-01-97	<5.0	<3.0	<8.0	<10.0	BDL	7.0	BDL	BDL

Notes: ppm: = Parts Per Million (equivalent to mg/L)
ppb = Parts Per Billlion (Equivalent to ug/kg)
BDL = Below Detection Limits

In order to determine if the soil material excavated from stained surface areas as well as the soil excavated from the seepage pits were considered a hazardous waste, the OCD requested complete TCLP, RCI, TPH, and BTEX analysis. Pesticides, herbicides, TPH-GRO, BTEX, TCLP volatiles, TCLP semivolatiles, TCLP silver, and TCLP cadmium analytes were reported as BDL from all soil pile samples. Additionally, reactivity for all soil pile samples were reported as negative, and ignitability was reported as non-hazardous. Corrosivity ranged from 6.0 to 7.0. Minor levels of metals were reported; however, these levels are well below regulatory action levels and are considered representative of natural background levels. Table 4 presents results for these samples.

TABLE 4
STOCKPILED SOIL SAMPLE ANALYTICAL RESULTS

Sample ID	Sample Date	TPH-GRO (ppm)	T BTEX (ppm)	Pesticides/ Herbicides (ppm)	Semi-Volatiles (ppm)	Volatiles (ppm)	Corrosivity	Ignitability	Reactivity	Metals (ppm)
Wash Bay Soil Pile	08-01-97	<10.0	BDL	BDL	BDL	BDL	7.0	Non-Hazardous	Negative	0.174-Arsenic 0.976-Barium
Mechanics Pit Soil Pile	08-01-97	<10.0	BDL	BDL	BDL	BDL	6.5	Non-Hazardous	Negative	0.001-Mercury 1.12-Barium 0.062-Lead
Surface Stained Soil Pile	08-01-97	<10.0	BDL	BDL	BDL	BDL	6.0	Non-Hazardous	Negative	0.0007-Mercury 1.11-Barium 0.068-Selenium

Notes: ppm = Parts Per Million (equivalent to mg/l)
BDL=Below Detection Limits

8.2 Fluids Chemistry

E & E transferred fluids from each seepage pit to an on-site frac tank. Upon evacuating all liquids from each seepage pit, a composite sample was collected of the fluids and submitted for laboratory analysis and waste disposal characterization. Analytical parameters consisted of TCLP semivolatiles (EPA method 8270), TCLP volatiles (EPA method 8260), TCLP RCRA metals (EPA methods 6010 and 7470), herbicides (EPA method 8015A), pesticides (EPA method 8080A), and RCI (EPA method 9040 and ASTM method D92). All samples were submitted via overnight courier or hand delivered to Anachem, Inc. for laboratory analyses.

Results of the fluids characterization analysis indicate that all constituents were reported as BDL, with the exception of arsenic (1.111 ppm) and barium (0.410 ppm). A complete laboratory report and chain of custody documentation are provided in Appendix E.

9.0 WASTE MANAGEMENT/DISPOSITION

Soil and fluids removed from each seepage pit have been approved for off-site treatment. The soils and fluids are currently in the process of transportation and off-site treatment. Upon completion of site restoration activities and soil/fluids disposal, manifest documentation will be included in a final Site Closure Report.

Remaining waste streams will be properly disposed of in accordance with local, state and federal guidelines, or returned to principal parties. Manifest documentation, as applicable, will also be included in the Site Closure Report. Soil and fluid requests forms (C-138) were submitted to the OCD and subsequently, disposal approval was authorized (Appendix C, Fluids/Soil Management Documentation).

10.0 CONCLUSIONS

Pride formerly operated and maintained an oil field services facility located on a property owned by the City of Lovington. Site restoration and seepage pit assessment activities were performed as part of a property lease transfer between the City of Lovington and Pride. Assessment activities were performed to determine whether potential liabilities are associated with the seepage pits utilized as part of routine maintenance and oil field services, material handling units, and waste stream management. Seepage pits were assessed and site restoration was performed. The property is currently vacant and unoccupied pending completion of site restoration and closure activities.

A water well survey of the area within a one-half-mile radius was performed to determine the location of the nearest well and to identify the estimated depth to water.

As part of seepage pit assessment activities, a track- mounted excavator was utilized to remove the impacted soils. Upon establishing the limits of seepage pit excavation, Tetra Tech personnel collected appropriate soil samples from each seepage pit excavation area. As directed by the OCD, soil samples were collected to determine if hazardous constituents were present in the subsurface soils and to provide complete waste disposal characterization of the excavated soils.

E & E was contracted to remove petroleum fluids and water from the two ASTs and the associated containment structure surrounding the ASTs. The fluids were transported off-site to the E & E Midway, New

Mexico, facility for recycling. E & E also transferred fluids from each seepage pit to an on-site frac tank. Upon evacuating all liquids from the seepage pits, a composite sample was collected of the fluids and submitted for laboratory analysis and waste disposal characterization. The fluids will be transported to the CRI facility near Midway, New Mexico, for fuel blending and recycling. Soils will be transported to the Rhino Goo-Yea Landfarm facility located near Bronco, Texas.

Site restoration activities also involved the excavation of various oil stained parking areas. The impacted soil was excavated and staged separately pending waste disposal characterization. New and used products were identified during OCD site inspection activities and the remaining products were documented. The OCD requested proper disposal documentation for items such as used oil products, cleaners, paints, brake pads, antifreeze, grease and miscellaneous by-products associated with routine oil field servicing and maintenance.

Analyses of soil samples collected from the excavation floors and walls indicates that the regulated parameters are not a threat. All semivolatile and volatile parameters analyzed were reported as BDL for all samples collected from the mechanics pit floor and walls. The northeast wash bay/seepage pit floor and wall samples contained minor amounts of butyl benzene, ranging from 31 to 94 ppb; P-isopropyl toluene, ranging from 40 to 71 ppb; and trimethylbenzenes, ranging from 35 to 60 ppb. All other analytes tested were reported as BDL. Analyses of floor and wall confirmation samples also included TPH-DRO, and BTEX using EPA method 8020, methanol extraction. A review of the laboratory analyses indicates that TPH (DRO) ranged from BDL to 62 ppm. All BTEX constituents were also reported as BDL.

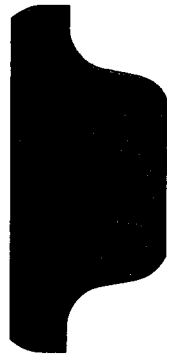
11.0 RECOMMENDATIONS

As a result of the analytical data collected during assessment and site restoration activities at the former Pride Petroleum Services Lovington Yard, Tetra Tech EM Inc. recommends that no further action be taken and requests a "Case Closure" designation from the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division.

Following completion of minor restoration activities, including backfill and compaction, Tetra Tech recommends the submission of a final Site Closure Report.

12.0 LIMITATIONS

This report summarizes the results of assessment and restoration activities performed to identify environmental liabilities at the subject property, or adjacent properties, based on readily available information. The conclusions and recommendations presented within this report are based on the results of a limited field investigation performed by Tetra Tech EM Inc. To the best of our knowledge, the information contained in this report is factual. The project was performed in accordance with a scope of work reflecting prudent standards of review. This report includes our investigative methods, the source of the scope of work, the identification of potentially hazardous materials or conditions found during our investigation, and our professional opinions concerning the potential impacts of identified areas of concern.



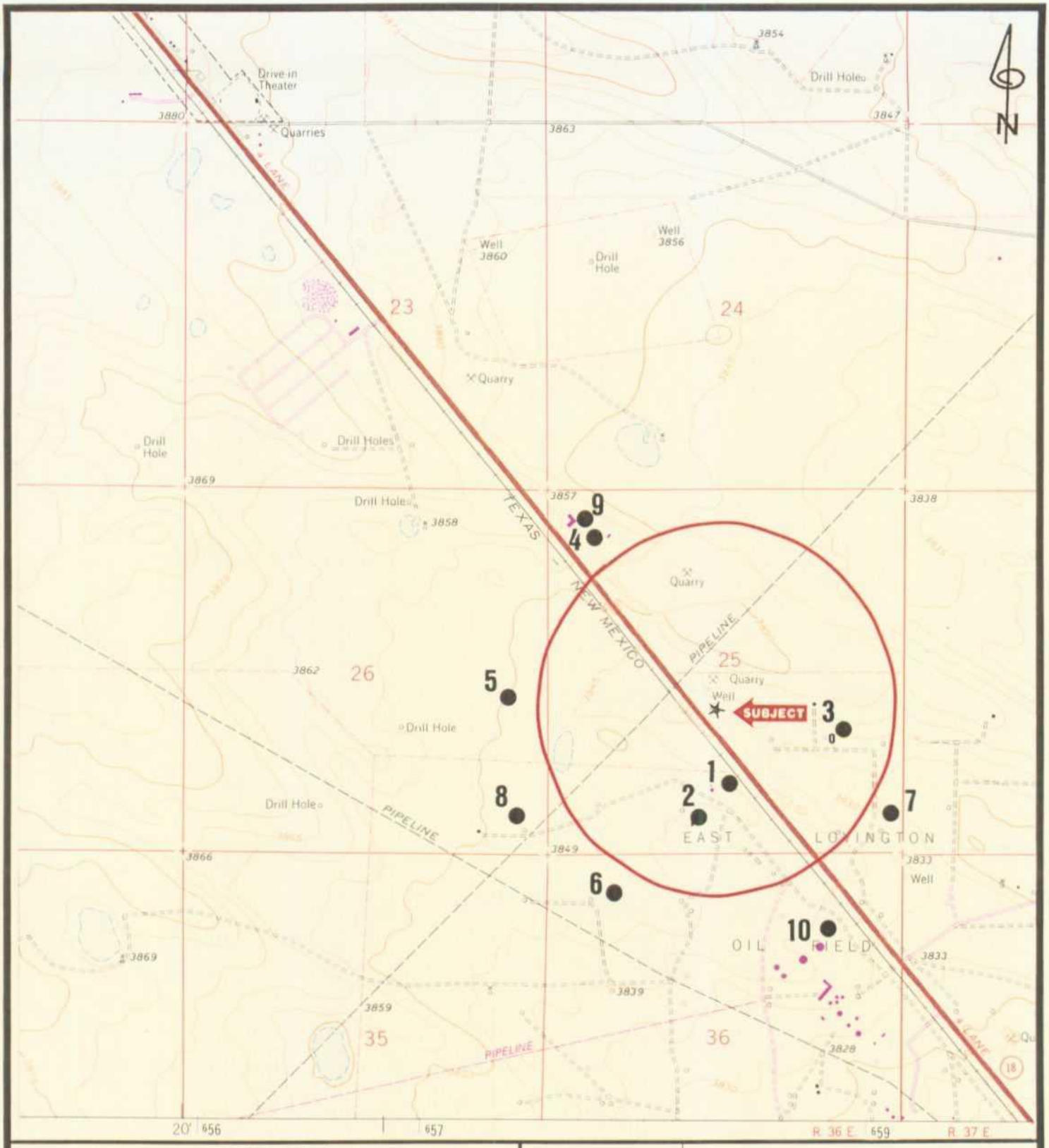


FIGURE 1
SITE LOCATION MAP
AND WATER WELL SURVEY
PRIDE PETROLEUM SERVICES, INC.
HIGHWAY 18
LOVINGTON, NEW MWEXICO

Original Scale
1 = 24,000

USGS TOPOGRAPHIC MAP
Lovington
(Lovington, New Mexico)
Photo-Revised 1979

Tetra Tech EM, Inc.

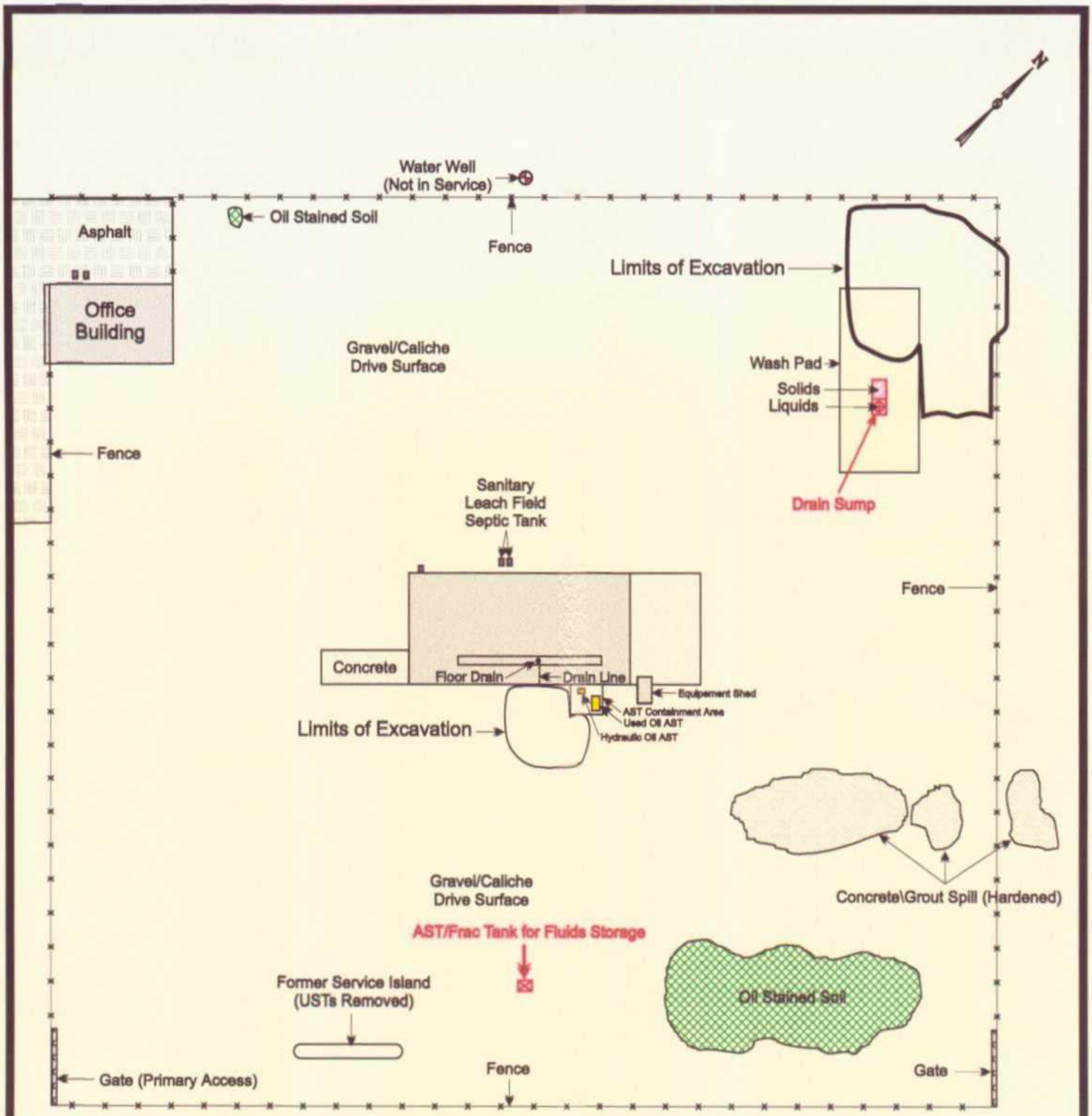


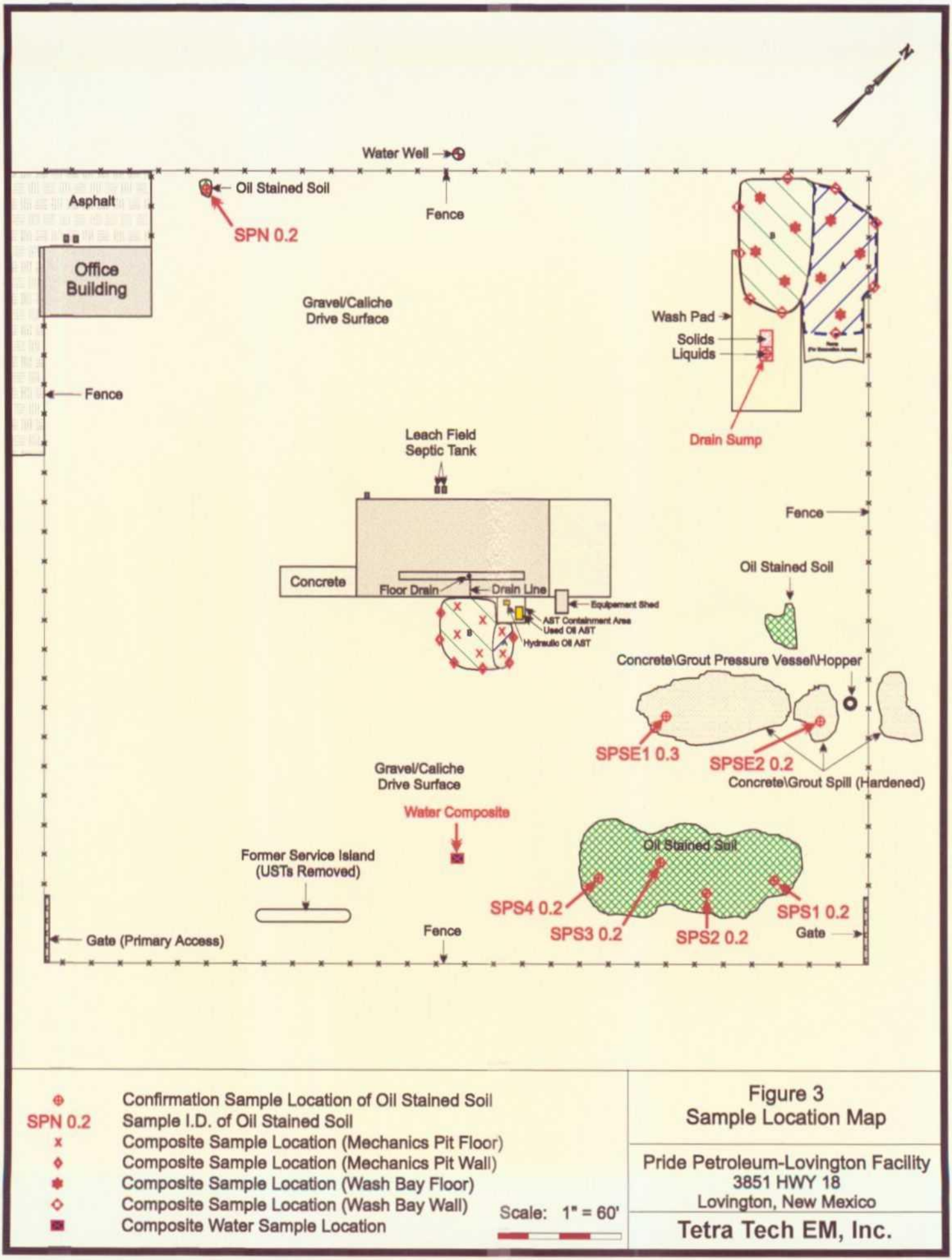
Figure 2
Site Map

Pride Petroleum-Lovington Facility
3851 HWY 18
Lovington, New Mexico

Scale: 1" = 60'

Tetra Tech EM, Inc.

Data: 7/8/97 KWA AL File: S:\Datashar\Pride\Graphics\001-0594f1



⊕ Confirmation Sample Location of Oil Stained Soil
SPN 0.2 Sample I.D. of Oil Stained Soil
× Composite Sample Location (Mechanics Pit Floor)
◆ Composite Sample Location (Mechanics Pit Wall)
✱ Composite Sample Location (Wash Bay Floor)
◇ Composite Sample Location (Wash Bay Wall)
▬ Composite Water Sample Location

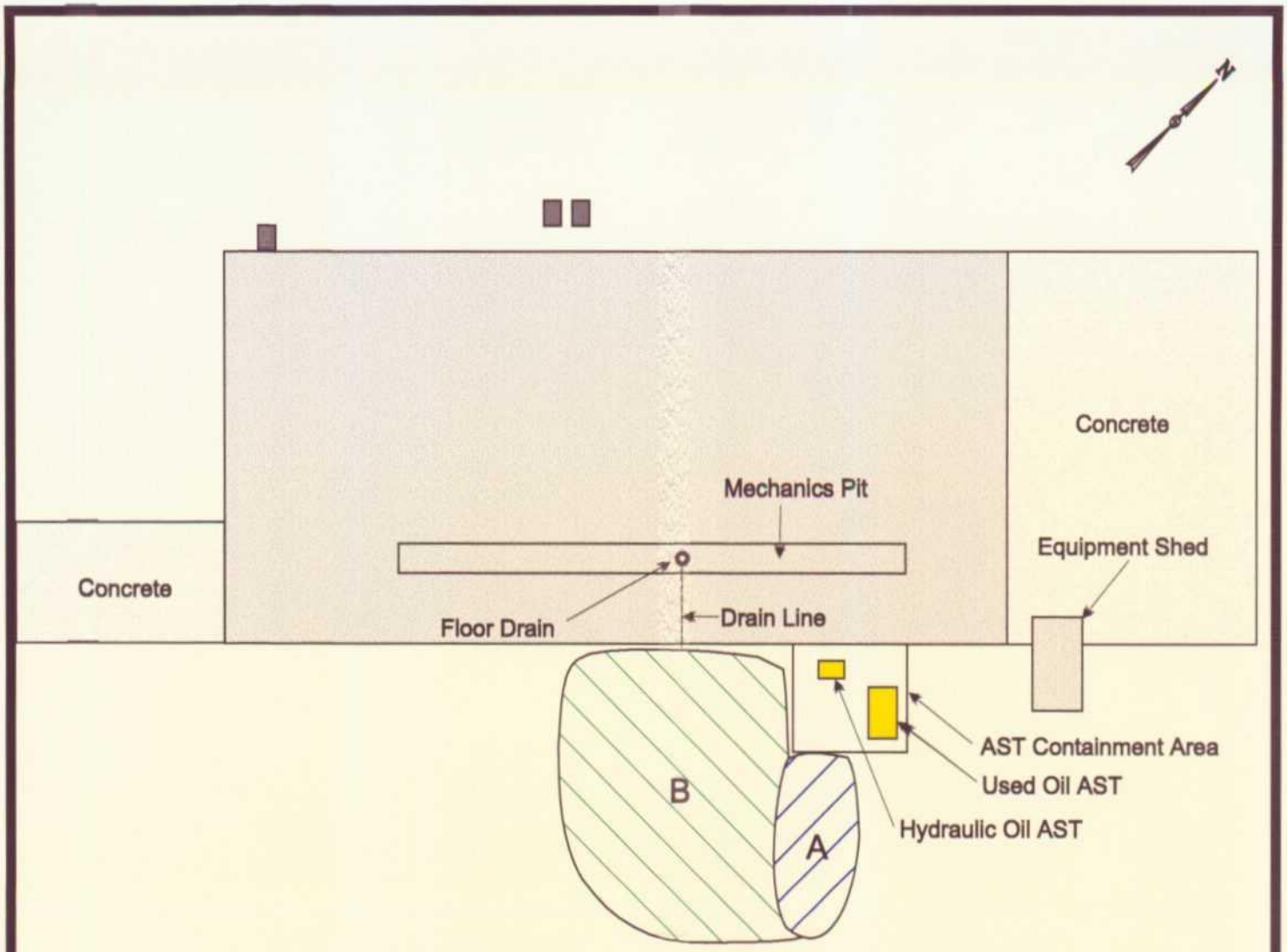
Scale: 1" = 60'

Figure 3
Sample Location Map

Pride Petroleum-Lovington Facility
3851 HWY 18
Lovington, New Mexico

Tetra Tech EM, Inc.

Date: 7/8/97 KWA AL File: S:\Datashar\Pride\Graphics\001-0594f3



NOTE: TOTAL VOLUME OF SOIL CAN BE DETERMINED IN UNIT TONS BASED ON DAILY WEIGHT TICKET AVERAGE. DOES NOT INCLUDE CLEAN SOIL ABOVE SEEPAGE PITS.

A — EXCAVATION AREA "A"
(Excavation Depth Approximately 20' deep)

B — EXCAVATION AREA "B"
(Excavation Depth Approximately 22' deep)

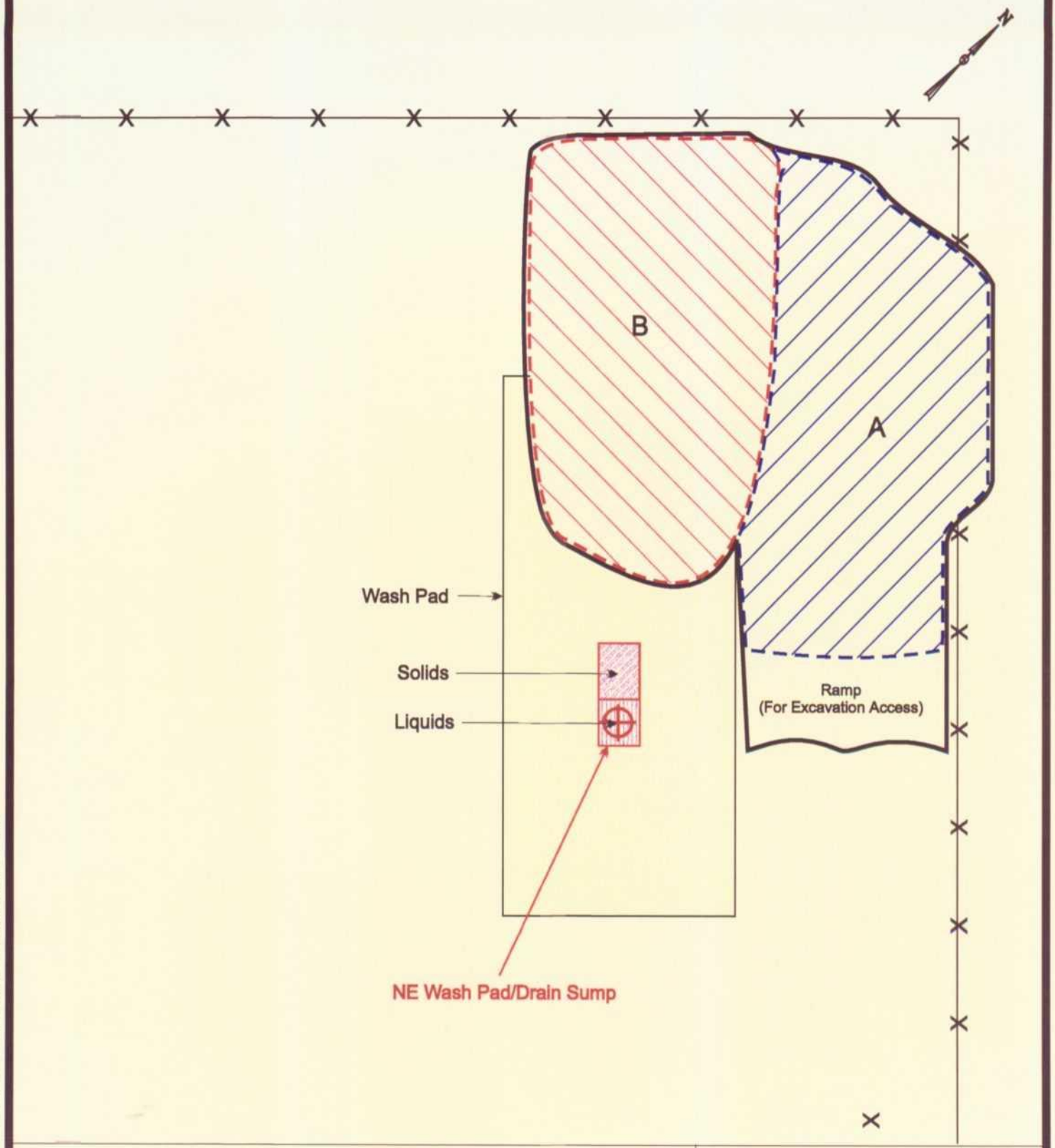
Scale: 1" = 20'

Figure 4
Mechanics Pit\
Leach Field Detail

Pride Petroleum-Lovington Facility
3851 HWY 18
Lovington, New Mexico

Tetra Tech EM, Inc.

Date: 9/4/97 KWA AL File: S:\Datashan\Pride\Graphics\001-059414



NOTE: TOTAL VOLUME OF SOIL CAN BE DETERMINED IN UNIT TONS BASED ON DAILY WEIGHT TICKET AVERAGE. DOES NOT INCLUDE CLEAN SOIL ABOVE SEEPAGE PITS.

A — EXCAVATION AREA "A"
(Excavation Depth Approximately 21.5' deep)

B — EXCAVATION AREA "B"
(Excavation Depth Approximately 12' deep)

Scale: 1" = 20'

Figure 5
Northeast Wash Bay\
Leach Field Detail

Pride Petroleum-Lovington Facility
3851 HWY 18
Lovington, New Mexico

Tetra Tech EM, Inc.

Date: 9/4/97 KWA AL File: S:\Datashar\Pride\Graphics\001-0594f5

APPENDIX A

WATER WELL SURVEY

USGS Topographic Map - Lovington - Key

Wells Within ½ Mile Radius:

*1 L-53-AA NE¼SW¼SE¼ Township 16 South Range 36 East Section 25 (Jack Cayton, City of Lovington)

*2 L-4058-S-17 SE¼SW¼SW¼ Township 16 South Range 36 East Section 25 (City of Lovington)

*3 L-4058-S-14 SW¼NE¼SE¼ Township 16 South Range 36 East Section 25 (City of Lovington)

Wells Outside ½ Mile Radius:

4 L-2507 NW¼NW¼ Township 16 South Range 36 East Section 25

5 L-3699 NW¼SE¼ Township 16 South Range 36 East Section 26

6 L-4058-S-21 SE¼NW¼NW¼ Township 16 South Range 36 East Section 36

7 L-2300 SE¼SE¼SE¼ Township 16 South Range 36 East Section 25

8 L-3031 SE¼SE¼SE¼ Township 16 South Range 36 East Section 26

9 L-6566 NW¼NW¼NW¼ Township 16 South Range 36 East Section 25

10 L-4058-S-15 SW¼NE¼NE¼ Township 16 South Range 36 East Section 36

Note: One plugged water well is located due North of the subject site; no information is available for this well.

* Indicates water well logs attached after Figure 1.

WATER WELL SURVEY DATA

Well No.	Well ID.	Owner	Year Completed	Total Depth (ft)	Depth To Water (ft)	Status
1	L-53-AA	Lovington	1959	126	60	Active
2	L-4058-S-17	Lovington	1965	266	50	Active
3	L-4058-S-14	Lovington	1965	260	50	Active
4	L-2507	Warren & Bradshaw	1954	110	41	Plugged (1955)
5	L-3699	B.L. McFarland, Inc.	1957	100	NA	Plugged (1957)
6	L-4058-S-21	Lovington	1981	251	67	Active
7	L-2300	Makin Drilling Company	NA	100	NA	Capped (1958)
8	L-3031	Velma Petroleum Corporation	1955	115	58	Active
9	L-6566a	NA	NA	NA	NA	NA
10	L-4058-S-15	Lovington	1965	260	50	Active

[a] Denotes missing well log from the New Mexico State Engineers Office in Santa Fe.
NA Denotes data which is not available.

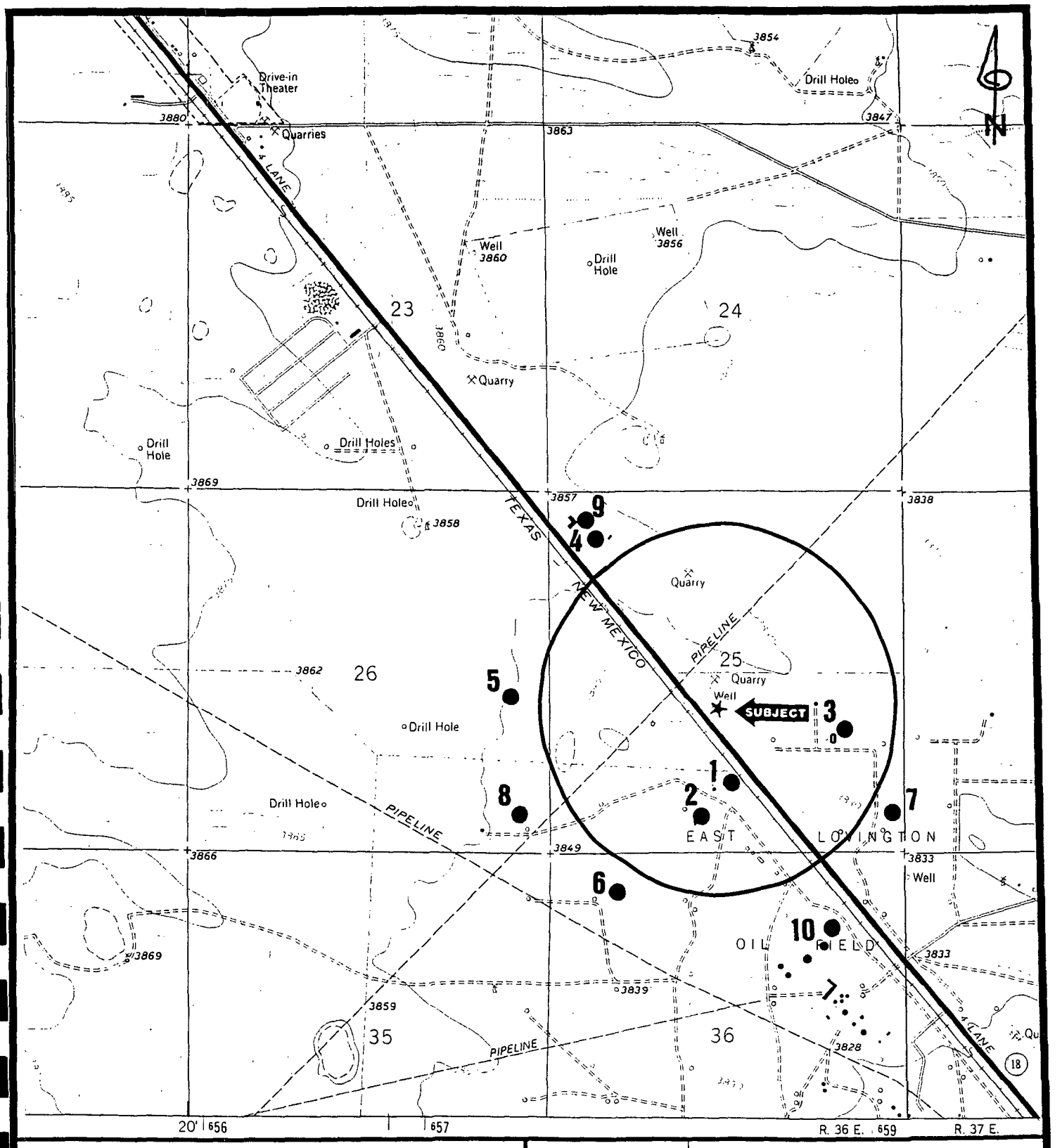


FIGURE 1
SITE LOCATION MAP AND WATER WELL SURVEY

PRIDE PETROLEUM SERVICES, INC.
HIGHWAY 18
LOVINGTON, NEW MWEXICO

Original Scale
1 = 24,000

USGS TOPOGRAPHIC MAP
Lovington
(Lovington, New Mexico)
Photo-Revised 1979

Tetra Tech EM, Inc.

Form WR-23 FIELD ENGR. LOG STATE ENGINEER OFFICE

WELL RECORD

1

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(A) Owner of well Jack Clayton City of Lovington

Street and Number Box 1021 Well No. "

City Lovington State New Mexico

Well was drilled under Permit No. [illegible] and is located in the

¼ ¼ ¼ of Section [illegible] Twp. [illegible] Rge. [illegible] NM-261

(B) Drilling Contractor [illegible] License No.

Street and Number 1121 S. Love

City Lovington State New Mexico

Drilling was commenced Oct. 5 19 59

Drilling was completed Oct. 9 19

(Plat of 640 acres)

Elevation at top of casing in feet above sea level [illegible] Total depth of well 126 ft. 107 ft.

State whether well is shallow or artesian " Depth to water upon completion

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1				
2	107	[illegible]		
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds per ft.	Threads per in.	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
		None						

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
		15	2 sacks		

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

Basin Supervisor

FOR USE OF STATE ENGINEER ONLY

Date Received [illegible] STATE ENGINEER OFFICE 1959 DEC 17 PM 2 34

File No. L-53-RR Use Out Location No. 16.36.25.[illegible]

Section 8

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1			Soil
1	6			Rock
6	13			Caliche
13	24			Pollar
24	51			Sandy Clay
51	60			Water Sand
60	72			Sandy Clay
72	85			Sand
85	95			Quick Sand
95	107			Sandy Clay
107	113			Sand
113	126			Sandy Clay

L.S. Elev. ______ ______

Depth to W______ Ft. ______

Elev of W______ Ft. ______

W.R. No. 16.36.25. 32223

Hydro. Survey ______ Fed Check ✓

SOURCE OF ALTITUDE GIVEN

Interpolated from Topo. Sheet ______

Determined by Inst. Leveling ______

Other ______

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Otis H. Pruett

Well Driller

1-53-AA

Form WR-23

FIELD ENGR. LOG

STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well CITY OF LOVINGTON N.M. "City Well No. 11"

Street and Number LOVINGTON CITY HALL

City LOVINGTON State N.M.

Well was drilled under Permit No. L-4058-S-17 and is located in the [illegible] ¼ [illegible] ¼ [illegible] ¼ of Section 25 Twp. 16S Rge. 36E

(B) Drilling Contractor [illegible] License No. WD 308

Street and Number PO BOX 3097

City ALBUQUERQUE State N.M.

Drilling was commenced APRIL 8 19 65

Drilling was completed APRIL 29 19 65

Elevation at top of casing in feet above sea level ______ Total depth of well 266 FT.

State whether well is shallow or artesian SHALLOW Depth to water upon completion ______

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	50	255	205	SAND
2				
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
12	40	WELDED			266	STANDARD	50	246

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5

PLUGGING RECORD

Name of Plugging Contractor NONE License No. ______

Street and Number ______ City ______ State ______

Tons of Clay used ______ Tons of Roughage used ______ Type of roughage ______

Plugging method used ______ Date Plugged ______ 19 ______

Plugging approved by: ______

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received 1965 JUL 13 AM 8 22

STATE ENGINEER OFFICE

File No. L-4058-S-17 Use Muni Location No. 16.36.25.33424

Section 5

LOG OF WELL # 11

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	11	11	WHITE	CALICHIE
11	32	21	[redacted] BROWN	SAND
32	44	12	WHITE	CALICHIE
44	60	16	BROWN	SAND WITH STREEKS OF CALICHIE
60	80	20	BROWN	SAND AND SANDY CLAY
80	89	9	WHITE	SAND
89	90	1	BROWN	HARD SAND STONE
90	115	25	WHITE	SAND
115	120	5	brown	SAND
120	122	2	WHITE	SANDSTONE
122	140	18	WHITE	SANDSTONE
140	160	20	brown	SAND WITH STREEKS OF SANDSTONE
160	185	25	"	" " " " " "
185	205	20	SAND AND SANDY CLAY	
205	220	15	BROWN	SANDY CLAY AND GRAVEL
220	255	35	BROWN	GRAVEL
255	265	10	RED	GRAVEL AND CLAY

[illegible]
Elev of ________ Tr________

Loc. No. 16.36.25.33424

Hydro. Survey________ Field Check ✓

SOURCE OF ALTITUDE GIVEN

Interpolated from Topo. Sheet________

Determined by Inst. Leveling________

Other________

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Jewell F. Atkinson
Well Driller

L-4058-S-17

16.36.25.334

FIELD ENGR. LOG

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well CITY OF LOVINGTON "City Well No. 2"

Street and Number LOVINGTON CITY HALL

City LOVINGTON State N.M.

Well was drilled under Permit No. L-4058-S-1A and is located in the SW ¼ NE ¼ SE ¼ of Section 25 Twp. 16 S Rge. 36 E

(B) Drilling Contractor JERALL F. ADKISON License No. WD 308

Street and Number BOX 3097 STATION D

City ALBUQUERQUE State N.M.

Drilling was commenced MAY 4 19 65

Drilling was completed MAY 5 19 65

Elevation at top of casing in feet above sea level _____ Total depth of well 260

State whether well is shallow or artesian SHALLOW Depth to water upon completion 50

Section 2 — PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	50	255	205	SAND
2				
3				
4				
5				

Section 3 — RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
12	49	WELDED		260	260	STANDARD	50	240

Section 4 — RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 — PLUGGING RECORD

Name of Plugging Contractor NONE License No.

Street and Number City State

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Date Plugged 19

Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received

STATE ENGINEER OFFICE DISTRICT 2

1965 JUL 13 AM 8 22

L-4058-S-1A

Section 3

LOG OF WELL # 2

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	60	60	WHITE	CALICHE
60	104	44	BROWN	SAND
104	132	28	BROWN	SAND AND SANDY CLAY
132	204	72	BROWN	SAND WITH STREAKS OF SANDSTONE
204	255	51	YELLOW	SAND AND GRAVEL
255	260	5	RED	RED CLAY AND GRAVEL

L.S. Elev. ______

Cem. to ______ ft. ______

Clay at ______ ft. ______

Loc. No. 16.36.25.42314

Hydro. Survey ______ Field Check ______

SOURCE OF ALTITUDE GIVEN

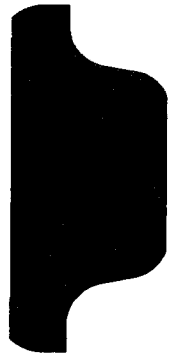
Interpolated from Topo. Chart ______

Determined by Inst. Leveling ______

Other ______

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Well Driller



APPENDIX B

FIELD ANALYTICAL TESTING RESULTS

P.O. Box 1816
Hobbs, New Mexico 88241

WESTERN ENVIRONMENTAL CONSULTANTS

Phone (505) 392-5021
Fax (505) 397-2597

SOIL ANALYSIS REPORT

DATE: 7/21/97
CLIENT: Tetra Tech EM, Inc.
SUPERVISOR: A. Hodge
Sample Matrix: Soil

FACILITY: Pride Yard Lovington Hwy
Test Method: EPA 418.1
Order No. Anthony Herald, RPG
SAMPLE RECEIVED: Intact on site

	TPH		DEPTH	LOCATION
SAMPLE NO. 1:	66	PPM	23'	Bottom of South pit
SAMPLE NO. 2:	6,820	PPM	12'	West wall
SAMPLE NO. 3:	716	PPM	12'	South wall
SAMPLE NO. 4:	814	PPM	14'	East wall
SAMPLE NO. 5:	3030	PPM	10'	North wall
SAMPLE NO. 6:		PPM		
SAMPLE NO. 7:		PPM		
SAMPLE NO. 8:		PPM		
SAMPLE NO. 9:		PPM		
SAMPLE NO. 10:		PPM		

COMMENTS: These samples were taken and run on site by Western Environmental Consultants. These samples were taken from the pit located on the south side of the shop.

WESTERN ENVIRONMENTAL CONSULTANTS

P.O. Box 1816
Hobbs, New Mexico 88241

Phone (505) 392-5021
Fax (505) 397-2597

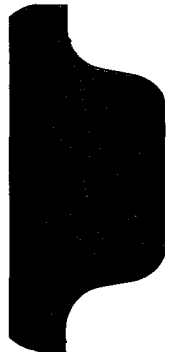
SOIL ANALYSIS REPORT

DATE: 8/1/97
CLIENT: Tetra Tech EM, Inc.
SUPERVISOR: A. Hodge
Sample Matrix: Soil

FACILITY: Pride Yard Lovington Hwy
Test Method: EPA 418.1
Order No. Anthony Herald, RPG
SAMPLE RECEIVED: Intact on site

	TPH		DEPTH	LOCATION
SAMPLE NO. 1:	5760	PPM	19'	Bottom of wash bay pit
SAMPLE NO. 2:	147	PPM	12'	Bottom west side
SAMPLE NO. 3:	68	PPM	18'	North wall
SAMPLE NO. 4:	42	PPM	18'	East wall
SAMPLE NO. 5:	114	PPM	16'	South wall
SAMPLE NO. 6:	81	PPM	10'	West wall
SAMPLE NO. 7:		PPM		
SAMPLE NO. 8:		PPM		
SAMPLE NO. 9:		PPM		
SAMPLE NO. 10:		PPM		

COMMENTS: These samples were taken and run on site by Western Environmental Consultants. These samples were taken from the wash bay pit located in the north east corner of the yard .



APPENDIX C

FLUIDS/SOIL MANIFEST DOCUMENTATION

Hobbs, NM 88241-1980
District II - (505) 748-1283
1 S. First
Artesia, NM 88210
District III - (505) 334-6178
00 Rio Brazos Road
tec, NM 87410
District IV - (505) 827-7131

Energy :nerals and Natural Resources I partment
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Originated 8/8/95

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ Verbal Approval Received: Yes ☐ No ☐	4. Generator Pride Petroleum
	5. Originating Site Lovington facility
2. Management Facility Destination Controlled Recovery, Inc.	6. Transporter Pate Trucking
3. Address of Facility Operator P.O. Box 369 Hobbs	8. State NM
7. Location of Material (Street Address or ULSTR) 3851 Hyw 18	LOvington, NM

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B.) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

The following analytical is from the Pride Refining Lovington facility. The waste was generated from oil water seperation and seepage pit. I have included a certificate of waste and a chain of custody.

Estimated Volume 750 gallons cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Billie Charo Waste Management Facility Authorized Agent TITLE: Office Manager DATE: 08/19/97

TYPE OR PRINT NAME: Billie Charo TELEPHONE NO. (505)393-1079

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____

O. Box 1980
obbs, NM 88241-1980
istrict II - (505) 748-1283
1 S. First
tesia, NM 88210
istrict III - (505) 334-6178
00 Rio Brazos Road
tec, NM 87410
strict IV - (505) 827-7131

New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-13
Originated 8/8/9

Submit Origina
Plus 1 Cop
to appropria
District Offic

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ fry to Price Verbal Approval Received: Yes ☒ No ☐	4. Generator Pride Petroleum
	5. Originating Site Lovington facility
2. Management Facility Destination Controlled Recovery, Inc.	6. Transporter Pate Trucking
3. Address of Facility Operator P.O. Box 369 Hobbs	8. State NM
7. Location of Material (Street Address or ULSTR) 3851 Hyw 18	LOvington, NM

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator: one certificate per job.

(B.) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

The following analytical is from the Pride Refining Lovington facility. The waste was generated from oil water seperation and seepage pit. I have included a certificate of waste and a chain of custody.

RECEIVED
AUG
OCD HOBBS

.stimated Volume 750 gallons cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

IGNATURE: Billie Charo TITLE: Office Manager DATE: 08/19/97
Waste Management Facility Authorized Agent

YPE OR PRINT NAME: Billie Charo TELEPHONE NO. (505)393-1079

(This space for State Use)

APPROVED BY: _____ TITLE: ENVR ENGR DATE: 8/23/97

APPROVED BY: _____ TITLE: _____ DATE: _____

s, NM 88241-1980
ct II - (505) 748-1283
First
a, NM 88210
ct III - (505) 334-6178
Rio Brazos Road
NM 87410
ct IV - (505) 827-7131

Energy [illegible]erals and Natural Resources [illegible]artment

Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Submit Original
Plus 1 Copy
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

RCRA Exempt: ☐ Non-Exempt: ☑ Pl Verbal 8/27/97	4. Generator Pride Petroleum Services, Inc
Verbal Approval Received: Yes ☑ No ☐	5. Originating Site Lovington, NM
Management Facility Destination GooVea Commercial Landfarm	6. Transporter Constructive Solutions, Inc
Address of Facility Operator Lea County, New Mexico	8. State New Mexico
Location of Material (Street Address or ULSTR) 3851 Hwy 18 Lovington, NM	

Circle One:

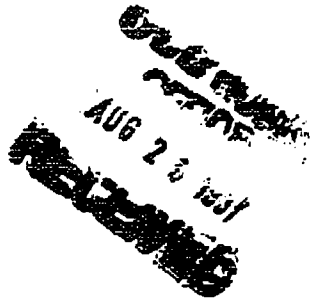
DB 8/28/97 (A) All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Hydrocarbon contaminated soil from seepage pits.



Estimated Volume 2700 - 3000 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: _____ TITLE: Manager DATE: 8-25-97
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Daniele Berardelli TELEPHONE NO. (505) 598-9626
Fax (505) 598-9627, Address: 5 CR 6065
Farmington, NM 87401

(This space for State Use)

APPROVED BY: _____ TITLE: Env Spec DATE: 8/29/97

APPROVED BY: _____ TITLE: _____ DATE: _____

001-0594
PRIDE

E & E ENTERPRISES

P.O. BOX 683
Brownfield, Tx 79316

CUSTOMER INVOICE
45718

E P A MANIFEST RECORD
NON-HAZARDOUS
WASTE MANIFEST

PAY FROM THIS INVOICE

Please print or type

GENERATOR'S MAILING ADDRESS PRC John Hartsie 6121 Indian RD NE Ste 205 Albq. NM 87110-4166

PICK-UP LOCATION Louisiana Pride Refinery Hobbs Hwy 18 3851

ACCOUNT NO: 99

P.O. NO:

EPA ID NO:

GENERATOR'S PHONE NO. (505) 1-800-762 0241

APPROVED FOR PAYMENT
Delora W. Lopez
AUTHORIZED SIGNATURE
8/26/97
DATE
001-0594
CHARGE NUMBERS

DESCRIPTION OF NON-HAZARDOUS WASTE:

Type of Waste (Include US DOT Shipping Name, Hazard Class, and ID Number, if applicable)	QUANTITY	Type QTY*	Unit Cost	Total Cost
NON-HAZARDOUS USED OIL (water mixed)	1200	G	50¢ per Gal	600.00
NON-HAZARDOUS USED OIL FILTERS				
USED ANTI-FREEZE				
Haul Trk Surchg 50.00 per load				150.00
*G=Gallons, P=Pounds; T=Tons; D=Drums			TOTAL CHARGE	$ 750.00
Additional Descriptions of Materials, if necessary			Tax	37.50
Special Handling Instructions and Additional Information			Bill Customer	787.50

APPROVED FOR PAYMENT
Project / Program Mgr. 8/26/97
Delora W. Lopez
Procurement Mgr.
Financial Mgr.
001-0594
Charge Number

GENERATOR CERTIFICATION: I hereby declare that the contents of this consignment are full and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.

Print Name of Generator	Signature of Generator	MO.	DAY	YR.
MARK DYER		6	5	97

P.O. No EXP CON FSU XXX

DESIGNATED FACILITY: TRANSPORTER, STORER AND TREATOR OF MATERIALS

E & E ENTERPRISES
P.O. Box 683
Brownfield, TX 79316

Phone: (806) 637 9336
1-800-658-2137
(TWC: (512) 463 7727)

TNRCC ACTIVITY REG NO 85129
US EPA ID NO TXD 982 75 6868
TNRCC FACILITY REG NO 41398
TX RR NO 000013747C

Transporter Acknowledgement of Receipt of Materials

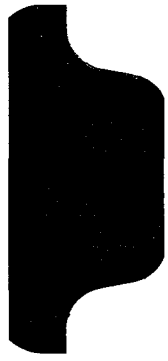
Print Name of Hauler	Signature of Hauler	MO.	DAY	YR.
Robert Gonzalez	Robert Gonzalez	6	5	97

Discrepancy Space

Facility Certification of Receipt of Materials Covered by this Manifest (except as noted above)

Print Name of Facility Operator	Signature of Facility Operator	MO.	DAY	YR.
JE		6	6	97

LPC-3356 WHITE COPY - Accounting YELLOW COPY - Plant PINK COPY - Generator copy



APPENDIX D

PHOTOGRAPHIC DOCUMENTATION

Photographic Documentation Index

Photograph Number	Caption
1	View North of maintenance building.
2	View Northwest of office building located near Northeast corner of subject property.
3	Miscellaneous fluids staged for disposal.
4	Miscellaneous ancillary servicing equipment.
5	Hydraulic and used oil AST area with containment.
6	Former underground storage tank system (removed, not in service).
7	View of mechanics pit.
8	Fluid recovery activities.
9	Typical oil stained surface areas.
10	Typical surface stained soil excavation.
11	Excavated soil staged from surface stained soils.
12	Temporary storage tank (frac tank) for fluids removed from seepage pits.
13	City of Lovington water well (not in service).
14	Northeast wash pad/seepage pit prior to restoration/assessment activities.
15	Wash pad drain location. Note Northern sump is near total capacity with solids.
16	Northeast wash bay seepage pit exposed.
17	Wash bay drain/sump with fluids and solids.
18	Fluids removal from wash bay seepage pit.
19	View Southwest of excavation (arrow indicates drain area at wash pad).
20	View South of Northeast wash bay/leach field excavation.
21	Typical impacted soil excavated from Northeast wash bay/seepage pit.
22	View Northeast of final excavation limits of wash bay/leach field.
23	View South of Northeast wash bay excavation. Note Floor area excavated to 21 feet below ground level.
24	Location of mechanics pit/leach field. Soil staged was removed from above seepage pit.
25	Location of wash bay/seepage pit. Note PVC clean out.
26	Excavation of surface cover above leach field.
27	Drain line entering mechanics pit/leach field.
28	Mechanics pit uncovered. Note access piping port.
29	Typical concrete block constructed seepage pit.
30	Impacted soil contact at mechanics pit/leach field.
31	Typical hydrocarbon impacted soil at mechanics pit/leach field.
32	Final excavation limits of mechanics pit/leach field.

Photo 1: View North of maintenance building.

Photo 2: View Northwest of office building located near Northeast corner of subject property.

Photo 3: Miscellaneous fluids staged for disposal.

Photo 4: Miscellaneous ancillary servicing equipment.

Photo 5: Hydraulic and used oil AST area with containment.

Photo 6: Former underground storage tank system (removed, not in service).

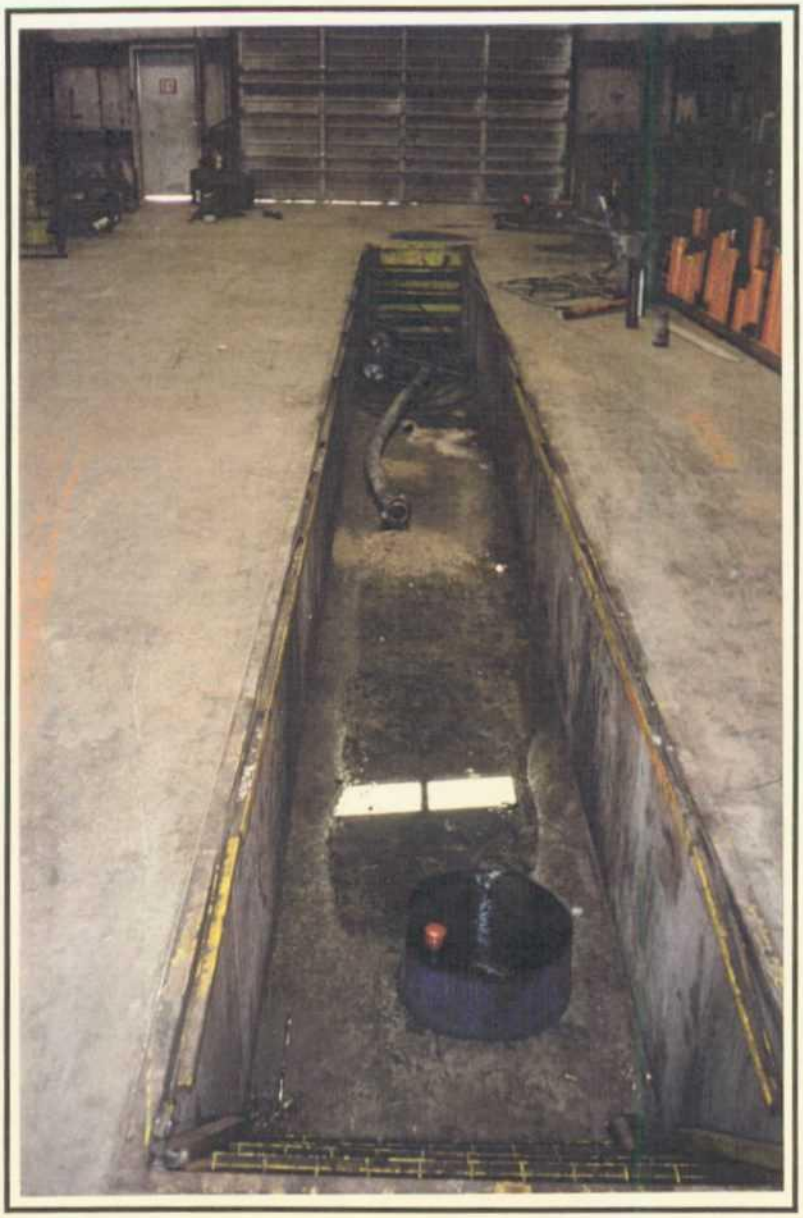


Photo 7: View of mechanics pit.

Photo 9: Typical oil stained surface areas.

Photo 10: Typical surface stained soil excavation.

Photo 8: Fluid recovery activities.

Photo 11: Excavated soil staged from surface stained soils.

Photo 12: Temporary storage tank (frac tank) for fluids removed from seepage pits.

Photo 13: City of Lovington water well (not in service).

Photo 14: Northeast wash pad/seepage pit prior to restoration/assessment activities.

Photo 15: Wash pad drain location. Note Northern sump is near total capacity with solids.

Photo 16: Northeast wash bay seepage pit exposed.

Photo 17: Wash bay drain/sump with fluids and solids.

Photo 18: Fluids removal from wash bay seepage pit.

Photo 19: View Southwest of excavation (arrow indicates drain area at wash pad).

Photo 20: View South of Northeast wash bay/leach field excavation.

Photo 21: Typical impacted soil excavated from Northeast wash bay/seepage pit.

Photo 22: View Northeast of final excavation limits of wash bay/leach field.

Photo 23: View South of Northeast wash bay excavation. Note Floor area excavated to 21 feet below ground level.

Photo 24: Location of mechanics pit/leach field. Soil staged was removed from above seepage pit.

Photo 25: Location of wash bay/seepage pit. Note PVC clean out.

Photo 26: Excavation of surface cover above leach field.

Photo 27: Drain line entering mechanics pit/leach field.

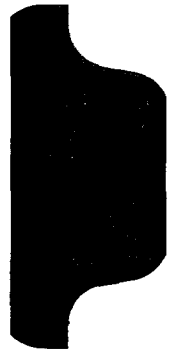
Photo 28: Mechanics pit uncovered. Note access piping port.

Photo 29: Typical concrete block constructed seepage pit.

Photo 30: Impacted soil contact at mechanics pit/leach field.

Photo 31: Typical hydrocarbon impacted soil at mechanics pit/leach field.

Photo 32: Final excavation limits of mechanics pit/leach field.



APPENDIX E

LABORATORY REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Key For Laboratory Reports

Date Received	Date Reported	Subject
June 2, 1997	June 6, 1997	Stained Surface Soil Analysis
August 13, 1997	August 15, 1997	Water Composite Analysis
August 4, 1997	August 20, 1997	Seepage Pit/Spoil Pile Characterization Analysis

ANACHEM INC.

8 Prestige Circle, Suite 104 Allen, Texas 75002
972/727-9003 • FAX # 972/727-9686 • 1-800-966-1186

Customer Name: PRC Environmental Mgmt., Inc.
Date Received: June 2, 1997 at 09:30:00
Date Reported: June 6, 1997
Submission #: 9706000001
Project: PRIDE LOVINGTON

SAMPLES The submission consisted of 10 samples with sample I.D.'s shown in the attached data tables.

TESTS The samples listed in the attached result pages were analyzed for:

* CORROSIVITY (EPA 9040)
* IGNITABILITY (ASTM D92)
* MERCURY DIGESTION, TCLP (EPA 7470)
* MICROWAVE DIGESTION, TCLP (EPA 3015)
* REACTIVITY (FULL)
* TCLP NON-VOLATILE EXTRACTION (EPA 1311)
* TCLP RCRA MERCURY (EPA 7470)
* TCLP RCRA METALS (EPA 6010)
* TCLP SEMI-VOLATILES (EPA 8270)
* TCLP VOLATILES (EPA 8260)
* TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)
* TPH (EPA 418.1)
* TPH GAS-RANGE (MOD EPA 8015)
* VOLATILES (EXPANDED EPA 8260)

Distribution Of Reports
1-Mr. John Harrie of PRC Environmental Mgmt., Inc.
Ph. 505-881-3188 Fax 505-881-3283

Respectfully Submitted,
Anachem,Inc.

C E Newton for
Howard H. Hayden, B.S.
Chemist

C E Newton
C.E. Newton, Ph.D.
Chemist

Submission #: 9706000001 lims

85295 to 85304

Client Name: PRC En..onmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

Client Sample #: So. SEEP PIT
Laboratory ID #: 85295 *Order Type: Normal Matrix: Liquid*
Sample Container: *2xVOA Vial*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH GAS-RANGE (MOD EPA 8015)

Analyte	Results(mg/l)	Detection Limit
Gasoline-Range Petroleum Hydrocarbons	**140**	1.0

VOLATILES (EXPANDED EPA 8260)
Date Analyzed: 06/03/97

Analyte	Results(ug/l)	Detection Limit
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	**45**	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	**29**	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	**55**	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	**8.6**	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10

Client Name: PRC En..ronmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

VOLATILES (EXPANDED EPA 8260)

Analyte	Results(ug/l)	Detection Limit
Tetrachloroethene	<3.0	3.0
Toluene	**6.3**	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	**36**	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	**210**	10

Client Sample #: NW SEEP PIT

Laboratory ID #: 85296 *Order Type: Normal Matrix: Liquid*
Sample Container: *2xVOA Vial,Liter Amber Bottle*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH GAS-RANGE (MOD EPA 8015)

Analyte	Results(mg/l)	Detection Limit
Gasoline-Range Petroleum Hydrocarbons	**57**	1.0

VOLATILES (EXPANDED EPA 8260)
Date Analyzed: 06/03/97

Analyte	Results(ug/l)	Detection Limit
Acetone	<10	10
Benzene	**25**	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	**20**	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0

Client Name: PRC Environmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

VOLATILES (EXPANDED EPA 8260)

Analyte	Results(ug/l)	Detection Limit
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	**10**	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	**30**	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	<10	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	**29**	10

Client Sample #: SP SE 1 03

Laboratory ID #: 85297 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH (EPA 418.1)
TPH Prep Date: 06/02/97

Analyte	Results(mg/kg)	Detection Limit
Total Petroleum Hydrocarbons	**32**	10

Client Sample #: SP SE 2 02

Laboratory ID #: 85298 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH (EPA 418.1)
TPH Prep Date: 06/02/97

Analyte	Results(mg/kg)	Detection Limit
Total Petroleum Hydrocarbons	**4800**	10

Client Name: PRC Environmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

Client Sample #: SP N 02
Laboratory ID #: 85299 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH (EPA 418.1)
TPH Prep Date: 06/02/97

Analyte	Results(mg/kg)	Detection Limit
Total Petroleum Hydrocarbons	**2500**	10

Client Sample #: SP S1 02
Laboratory ID #: 85300 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH (EPA 418.1)
TPH Prep Date: 06/02/97

Analyte	Results(mg/kg)	Detection Limit
Total Petroleum Hydrocarbons	**480**	10

Client Sample #: SP S2 02
Laboratory ID #: 85301 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH (EPA 418.1)
TPH Prep Date: 06/02/97

Analyte	Results(mg/kg)	Detection Limit
Total Petroleum Hydrocarbons	**12000**	10

Client Sample #: SP S3 02
Laboratory ID #: 85302 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH (EPA 418.1)
TPH Prep Date: 06/02/97

Analyte	Results(mg/kg)	Detection Limit
Total Petroleum Hydrocarbons	**72**	10

Client Sample #: SP S4 02
Laboratory ID #: 85303 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

TPH (EPA 418.1)
TPH Prep Date: 06/02/97

Analyte	Results(mg/kg)	Detection Limit
Total Petroleum Hydrocarbons	**13000**	10

Client Name: PRC Environmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

Client Sample #: COMPOSITE
Laboratory ID #: 85304 *Order Type: Normal Matrix: Soil*
Sample Container: *32oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *Not listed on the chain of custody.*
Sampling Date : *05/30/97*

CORROSIVITY (EPA 9040)

Analyte	Results	Detection Limit
Corrosivity	**6.5**	

IGNITABILITY (ASTM D92)
Ignitability: DOES NOT IGNITE AT ROOM TEMPERATURE; NOT HAZARDOUS

MERCURY DIGESTION, TCLP (EPA 7470)
Mercury Digestion Date: 06/03/97

MICROWAVE DIGESTION, TCLP (EPA 3015)
Microwave Digestion Date: 06/03/97

REACTIVITY (FULL)
Reactive Cyanide (EPA 9010): <0.2 mg/kg
Reactive Sulfide (EPA 9030): <0.3 mg/kg
Reactivity To Air: Negative
Reactivity To Diluted HCl: Negative
Reactivity To Diluted NaOH: Negative
Reactivity To Water: Negative

TCLP NON-VOLATILE EXTRACTION (EPA 1311)
TCLP Extraction Date: 06/02/97

TCLP RCRA MERCURY (EPA 7470)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7439-97-6	TCLP Mercury	<0.0004	0.0004	0.2

TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-38-2	Arsenic	<0.061	0.061	5
7440-39-3	Barium	**1.30**	0.001	100
7440-43-9	Cadmium	<0.008	0.008	1
7440-47-3	Chromium	<0.0075	0.0075	5
7439-92-1	Lead	<0.040	0.040	5
7482-49-2	Selenium	<0.050	0.050	1
7440-39-2	Silver	<0.030	0.030	5

TCLP SEMI-VOLATILES (EPA 8270)
Prep Date:: 06/03/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
no C.A.S.	Cresol (Total)	<1.0	1.0	200.0
121-14-2	2,4-Dinitrotoluene	<0.10	0.10	0.13
118-74-1	Hexachlorobenzene	<0.10	0.10	0.13
87-68-3	Hexachlorobutadiene	<0.20	0.20	0.5
67-72-1	Hexachloroethane	<0.10	0.10	3.0
98-95-3	Nitrobenzene	<0.50	0.50	2.0
87-86-5	Pentachlorophenol	<0.20	0.20	100.0
110-86-1	Pyridine	<0.50	0.50	5.0

Report To: PRC Environmental Mgmt. Inc.
Project: Pride Lovington
Lab Number: 9706000001

QUALITY CONTROL DATA

TPH results are reported in parts per million (ppm) in solid.

	Value 1	Value 2	% Var.
TPH:	22	20	9.1
CONCENTRATION UNITS:	TPH - ppm		
DETECTION LIMITS:	TPH - 10		

ANALYST	ANALYTE	DATE EXTRACTED	DATE ANALYZED
Anthony Taylor	TPH	6/2/97	6/2/97

VOLATILE ORGANICS QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8260	Howard Hayden	Liquid	-----	6/3/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
1,1-Dichloroethene	20 ppb	107	97.1	20-234	9.3	25.0
Trichloroethene	20 ppb	115	102	71-157	11	25.0
Benzene	20 ppb	112	105	37-151	6.3	25.0
Toluene	20 ppb	110	103	47-150	6.4	25.0
Chlorobenzene	20 ppb	108	108	37-160	0.0	25.0

TCLP SEMI-VOLATILES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8270	Dennis Shaw	Liquid	6/3/97	6/4/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
Phenol	200 ppb	99.1	97.7	10-120	1.4	42.0
2-Chlorophenol	200 ppb	92.4	92.4	23-134	0.0	40.0
Acenaphthene	100 ppb	66.3	75.4	47-145	12	31.0
Pyrene	100 ppb	79.4	86.5	52-125	8.2	31.0

Report To: PRC Environmental Mgmt. Inc.
Project: Pride Lovington
Lab Number: 9706000001

QUALITY CONTROL DATA

ANALYTE	DATE ANALYZED	SPIKE (ppm)	STAND. DEV.	COEFF. OF VAR %	REC1/%	REC2/%
Reactive Cyanide	6/4/97	----	9.5	10	79	70.5
Reactive Sulfide	6/4/97	----	74	16	110	90
Mercury	6/5/97	----	0.233	2.8	103	99
Arsenic	6/3/97	----	0.041	0.8	110	109
Barium	6/3/97	----	0.243	4.0	99	106
Cadmium	6/3/97	----	0.099	2.0	100	97
Chromium	6/3/97	----	0.134	2.3	109	112
Lead	6/3/97	----	0.024	0.5	89	88
Selenium	6/3/97	----	0.378	6.9	112	101
Silver	6/3/97	----	0.022	0.8	97	99

Standard Deviation = (x1-x2)/1.414
Coefficient of Variability % = (S.D./Avg.) X 100
Recovery % = [(spiked-unspiked)/expected] X 100

Client Name: PRC Environmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

TCLP SEMI-VOLATILES (EPA 8270)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
95-95-4	2,4,5-Trichlorophenol	<0.50	0.50	400.0
88-06-2	2,4,6-Trichlorophenol	<0.50	0.50	2.0

TCLP VOLATILES (EPA 8260)
Date analyzed: 06/03/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
71-43-2	Benzene	<0.10	0.10	0.5
56-23-5	Carbon Tetrachloride	<0.10	0.10	0.5
108-90-7	Chlorobenzene	<0.10	0.10	100
67-66-3	Chloroform	<0.10	0.10	6.0
106-46-7	1,4-Dichlorobenzene	<0.10	0.10	7.5
107-06-2	1,2-Dichloroethane	<0.10	0.10	0.5
75-35-4	1,1-Dichloroethylene	<0.10	0.10	0.7
78-93-3	Methyl Ethyl Ketone	<0.10	0.10	200.0
127-18-4	Tetrachloroethylene	<0.10	0.10	0.7
79-01-6	Trichloroethylene	<0.10	0.10	0.5
75-01-4	Vinyl Chloride	<0.10	0.10	0.2

TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)
TCLP ZHE Extraction Date: 06/02/97

Purchase Order/Chain Of Custody

Anachem, Inc. 8 Prestige Circle, Suite 104, Allen, TX 75002 Phone: 214-727-9003 Fax: 214-727-9686

Report To: JOHN HARRIE	Bill To: (Buyer) PRC
Company: PRC TETRA TECH	Purchase Order #:
Address: 6121 INDIAN SCHOOL Rd NE SUITE 205	Address:
City, State, Zip: ABQ NM 87110	City, State, Zip:
Phone: (505) 8813188 Fax: 881 3283	Phone: Fax:

Project Name: PRIDE LOVINGTON Quote #:

Project Location: City, State:

Date Due: Rush: 0% 25% 50% 100% Sampled By:

Lab#	Client Sample ID	Matrix	Date/Time	Sample Notes	TPH 418.1	TCLP/RCI	BTEX 8	Solvent Scrn	GRO Range	Diesel Range	PLEASE HOLD	6/2/97
85295	1. So. Seep Pit	Liq	5/30/97 0945	12B 2-VOA			X	X	X	(X)		
96	2. NW Seep Pit	Liq	" 0930	" "			X	X	X	X		
97	3. SPSE1 0.3	S	" 0835	1 402	X		~~X~~	~~X~~	~~X~~	~~X~~		
98	4. SPSE2 0.2		0838		X							
99	5. SPN 0.2		0824		X							
85300	6. SPS1 0.2		0842		X							
01	7. SPS2 0.2		0844		X							
02	8. SPS3 0.2		0846		X							
03	9. SPS4 0.2		0848		X							
04	10. Composite		0945			X						

Relinquished By	Date	Time	Received By	Date	Time
[signature]	5/30/97		Shad Thornhill	6/2/97	9:30

Sample Receipt Notes

Temperature	4°C
Preserved Properly	yes
COC Seals Intact	yes
Method of Shipment	Fed-X

In the event that Anachem determines that a sample is hazardous, the client agrees to:

Pay For Sample Disposal ✓
Accept Returned Sample ___

Submission # 9706-01

009 REV 6/96

Sa[redacted]info[redacted]on i[redacted]l for[redacted]per l[redacted]and [redacted]rting. This is a contract subject to the terms and conditions on the reverse side.

ANACHEM INC.

8 Prestige Circle, Suite 104 Allen, Texas 75002
972/727-9003 • FAX # 972/727-9686 • 1-800-966-1186

Customer Name: Tetra Tech EM, Inc. -Alb, N.M.
Date Received: August 13, 1997 at 09:30:00
Date Reported: August 15, 1997
Submission #: 9708000140
Project: PRIDE PETROLEUM SERVICES

SAMPLES The submission consisted of 1 sample with sample I.D. shown in the attached data table.

TESTS The sample listed in the attached result pages was analyzed for:

* CORROSIVITY (EPA 9040)
* IGNITABILITY (ASTM D92)
* MERCURY DIGESTION, TCLP (EPA 7470)
* MICROWAVE DIGESTION, TCLP (EPA 3015)
* REACTIVITY (FULL)
* TCLP HERBICIDES (EPA 8150A)
* TCLP PESTICIDES (EPA 8080A)
* TCLP RCRA MERCURY (EPA 7470)
* TCLP RCRA METALS (EPA 6010)
* TCLP SEMI-VOLATILES (EPA 8270)
* TCLP VOLATILES (EPA 8260)

Distribution Of Reports
1-Mr. Tony Herald of Tetra Tech EM, Inc. -Alb, N.M.
Ph. 505-881-3188 Fax 505-881-3283

Respectfully Submitted,
Anachem,Inc.

Howard H. Hayden, B.S.
Chemist

C.E. Newton, Ph.D.
Chemist

Submission #: 9708000140 lims

NOTE: Submitted material will be retained for 60 days unless notified or consumed in analysis. Material determined to be hazardous will be returned or a $20 disposal fee will be assessed. Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply to the sample tested and/or inspected, and are not necessarily indicative of the qualitites of apparently identical or similar materials.

89107 to 89107

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000140
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/15/97

Client Sample #: WATER COMPOSITE
Laboratory ID #: 89107 *Order Type: Normal Matrix: Liquid*
Sample Container: *2xVOA Vial,3xLiter Amber,Plastic Bottle*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/11/97*
Temperature (Celcius):4

CORROSIVITY (EPA 9040)

Analyte	Results(---)	Detection Limit
Corrosivity	**7.0**	0.0

IGNITABILITY (ASTM D92)
Ignitability: DOES NOT IGNITE AT ROOM TEMPERATURE; NOT HAZARDOUS

FLASH POINT = >150F

MERCURY DIGESTION, TCLP (EPA 7470)
Mercury Digestion Date: 08/13/97

MICROWAVE DIGESTION, TCLP (EPA 3015)
Microwave Digestion Date: 08/13/97

REACTIVITY (FULL)
Reactive Cyanide (EPA 9010): <0.2 mg/kg
Reactive Sulfide (EPA 9030): <0.3 mg/kg
Reactivity To Air: Negative
Reactivity To Diluted HCl: Negative
Reactivity To Diluted NaOH: Negative
Reactivity To Water: Negative

TCLP HERBICIDES (EPA 8150A)
Prep Date: 08/14/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
94-75-7	2,4-D	<0.010	0.010	10
93-72-1	2,4,5-TP (Silvex)	<0.003	0.003	1

TCLP PESTICIDES (EPA 8080A)
Prep Date: 08/14/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
58-89-9	gamma-BHC (Lindane)	<0.010	0.010	0.04
57-74-9	Chlordane	<0.010	0.010	0.03
72-20-8	Endrin	<0.010	0.010	0.02
76-44-8	Heptachlor	<0.005	0.005	0.008
1024-57-3	Heptachlor Epoxide	<0.005	0.005	0.008
72-43-5	Methoxychlor	<0.010	0.010	10.0
8001-35-2	Toxaphene	<0.010	0.010	0.5

TCLP RCRA MERCURY (EPA 7470)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7439-97-6	TCLP Mercury	<0.0004	0.0004	0.2

TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-38-2	Arsenic	**0.111**	0.061	5
7440-39-3	Barium	**0.410**	0.001	100.

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000140
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/15/97

TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-43-9	Cadmium	<0.008	0.008	1
7440-47-3	Chromium	<0.0075	0.0075	5
7439-92-1	Lead	<0.040	0.040	5
7482-49-2	Selenium	<0.050	0.050	1
7440-39-2	Silver	<0.030	0.030	5

TCLP SEMI-VOLATILES (EPA 8270)
Prep Date:: 08/13/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
no C.A.S.	Cresol (Total)	<1.0	1.0	200.0
121-14-2	2,4-Dinitrotoluene	<0.10	0.10	0.13
118-74-1	Hexachlorobenzene	<0.10	0.10	0.13
87-68-3	Hexachlorobutadiene	<0.20	0.20	0.5
67-72-1	Hexachloroethane	<0.10	0.10	3.0
98-95-3	Nitrobenzene	<0.50	0.50	2.0
87-86-5	Pentachlorophenol	<0.20	0.20	100.0
110-86-1	Pyridine	<0.50	0.50	5.0
95-95-4	2,4,5-Trichlorophenol	<0.50	0.50	400.0
88-06-2	2,4,6-Trichlorophenol	<0.50	0.50	2.0

TCLP VOLATILES (EPA 8260)
Date analyzed: 08/13/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
71-43-2	Benzene	<0.10	0.10	0.5
56-23-5	Carbon Tetrachloride	<0.10	0.10	0.5
108-90-7	Chlorobenzene	<0.10	0.10	100
67-66-3	Chloroform	<0.10	0.10	6.0
106-46-7	1,4-Dichlorobenzene	<0.10	0.10	7.5
107-06-2	1,2-Dichloroethane	<0.10	0.10	0.5
75-35-4	1,1-Dichloroethylene	<0.10	0.10	0.7
78-93-3	Methyl Ethyl Ketone	<0.10	0.10	200.0
127-18-4	Tetrachloroethylene	<0.10	0.10	0.7
79-01-6	Trichloroethylene	<0.10	0.10	0.5
75-01-4	Vinyl Chloride	<0.10	0.10	0.2

Project: Pride Petroleum Services

TCLP VOLATILE ORGANICS QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8260	Howard Hayden	Liquid	-----	8/13/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
1,1-Dichloroethene	20 ppb	83.3	80.6	20-234	3.2	25.0
Trichloroethene	20 ppb	86.2	84.5	71-157	2.0	25.0
Benzene	20 ppb	91.9	91.8	37-151	0.11	25.0
Toluene	20 ppb	91.1	92.3	47-150	1.3	25.0
Chlorobenzene	20 ppb	103	99.1	37-160	3.8	25.0

TCLP SEMI-VOLATILES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8270	Dennis Shaw	Liquid	8/13/97	8/13/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
Phenol	200 ppb	68.2	74.4	10-120	8.31	42.0
2-Chlorophenol	200 ppb	65.1	68.7	23-134	5.16	40.0
Acenaphthene	100 ppb	86.8	92.9	47-145	6.48	31.0
Pyrene	100 ppb	99.8	101	52-125	1.30	31.0

TCLP PESTICIDES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8080	Dennis Shaw	Liquid	8/14/97	8/14/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
4,4'-DDD	1.0 ppb	115	106	31-141	7.83	35
4,4'-DDT	1.0 ppb	116	109	25-160	6.03	35
Heptachlor	0.20 ppb	95.1	87.0	33-135	8.52	35
Endosulfan Sulfate	1.0 ppb	122	117	26-144	4.10	35
Endrin	0.20 ppb	109	101	30-147	7.34	35

Report To: Tetra Tech EM, Inc.
Lab Number: 9708000140
Page 5 of 5

Project: Pride Petroleum Services

TCLP HERBICIDES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8150	Dennis Shaw	Liquid	8/14/97	8/14/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
2,4-D	0.5 ppm	67.2	54.9	8.0-170	18.3	35
2,4,5-T	0.5 ppm	68.1	56.3	8.0-170	17.3	35
2,4,5-TP (Silvex)	0.5 ppm	73.4	62.0	8.0-170	15.5	35

QUALITY CONTROL DATA

ANALYTE	DATE ANALYZED	SPIKE (ppm)	STAND. DEV.	COEFF. OF VAR %	REC1/%	REC2/%
Reactive Cyanide	8/14/97	----	0	0	105	93
Reactive Sulfide	8/14/97	----	284	0.8	70.3	105
Mercury	8/14/97	----	0.106	1.4	102	100
Arsenic	8/14/97	----	0.181	5.0	90	97
Barium	8/14/97	----	0.185	5.2	98	91
Cadmium	8/14/97	----	0.203	7.7	78	87
Chromium	8/14/97	----	0.139	4.2	91	86
Lead	8/14/97	----	0.135	4.3	86	91
Selenium	8/14/97	----	0.339	10	85	98
Silver	8/14/97	----	0.053	1.5	89	87

Standard Deviation = (x1-x2)/1.414
Coefficient of Variability % = (S.D./Avg.) X 100
Recovery % = [(spiked-unspiked)/expected] X 100

Purchase Order/Chain Of Custody

Page___of ___.

Anachem, Inc. 8 Prestige Circle, Suite 104, Allen, TX 75002 Phone: 972-727-9003 Fax: 972-727-9686

Report To: ANTHONY R. HERALD	Bill To: (Buyer)
Company: TETRA TECH EM, INC.	Purchase Order #:
Address: 6121 INDIAN SCHOOL ROAD, NE # 205	Address:
City, State, Zip: ALBUQUERQUE, NM 87110	City, State, Zip:
Phone: 505-881-3188 Fax: 505-881-3283	Phone: Fax:
Project Name: PRIDE PETROLEUM SERVICES	Quote #:
Project Location: LOVINGTON, NM	City, State:
Date Due: Rush: 0% 25% 50% 100%	Sampled By: ALLAN HODGE

Lab#	Client Sample ID	Matrix	Date/Time	Sample Notes
89107	1. WATER COMPOSITE	WATER	8-11-97 4:39 pm	
	2.			
	3.			
	4.			
	5.			
	6.			
	7.			
	8.			
	9.			
	10.			

Analysis

TCLP VOLATILES	TCLP SEMI-VOLATILES	TCLP PESTICIDES	TCLP HERBICIDES	RCI	TCLP METALS		
X	X	X	X	X	X		

Relinquished By	Date	Time	Received By	Date	Time
	8/11/97	4:30 pm	Thad Thornhill	8/13/97	9:30

Sample Receipt Notes

Temperature	4°C
Preserved Properly	yes
COC Seals Intact	yes
Method of Shipment	Fed-X

In the event that Anachem determines that a sample is hazardous, the client agrees to:
Pay For Sample Disposal____
Accept Returned Sample ____

Submission # 9708-140

010 REV 5/97

Sample information is vital for proper login and reporting. This is a contract subject to the terms and conditions on the reverse side.

ANACHEM INC.

8 Prestige Circle, Suite 104 Allen, Texas 75002
972/727-9003 • FAX # 972/727-9686 • 1-800-966-1186

Customer Name: Tetra Tech EM, Inc. -Alb, N.M.
Date Received: August 4, 1997 at 15:00:00
Date Reported: August 20, 1997
Submission #: 9708000031
Project: PRIDE PETROLEUM SERVICES

SAMPLES The submission consisted of 7 samples with sample I.D.'s shown in the attached data tables.

TESTS The samples listed in the attached result pages were analyzed for:

* BTEX/TPH (EPA 8020/MOD 8015 GAS-RANGE)
* CORROSIVITY (EPA 9040)
* IGNITABILITY (ASTM D92)
* MERCURY DIGESTION, TCLP (EPA 7470)
* MICROWAVE DIGESTION, TCLP (EPA 3015)
* REACTIVITY (FULL)
* SEMI-VOLATILES (EPA 8270)
* TCLP HERBICIDES (EPA 8150A)
* TCLP NON-VOLATILE EXTRACTION (EPA 1311)
* TCLP PESTICIDES (EPA 8080A)
* TCLP RCRA MERCURY (EPA 7470)
* TCLP RCRA METALS (EPA 6010)
* TCLP SEMI-VOLATILES (EPA 8270)
* TCLP VOLATILES (EPA 8260)
* TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)
* TPH DIESEL-RANGE (MOD 8015)
* VOLATILES (EXPANDED EPA 8260)

Distribution Of Reports
1-Mr. Tony Herald of Tetra Tech EM, Inc. -Alb, N.M.
Ph. 505-881-3188 Fax 505-881-3283

Respectfully Submitted,
Anachem, Inc.

Howard H. Hayden, B.S.
Chemist

C.E. Newton, Ph.D.
Chemist

Submission #: 9708000031 lims

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

Client Sample #: WASH BAY FLOOR COMPOSITE
Laboratory ID #: 88594 *Order Type: Normal Matrix: Soil*
Sample Container: *3x4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

SEMI-VOLATILES (EPA 8270)
Semi-Volatile prep date: 08/05/97

Analyte	Results(ug/kg)	Detection Limit
Acenaphthene	<330	330
Acenaphthylene	<330	330
Aniline	<1650	1650
Anthracene	<330	330
Benzidine	<2500	2500
Benzo (a) anthracene	<330	330
Benzo (a) pyrene	<660	660
Benzo (b) fluoranthene	<660	660
Benzo (g,h,i) perylene	<330	330
Benzoic Acid	<1650	1650
Benzo (k) fluoranthene	<660	660
Benzyl Alcohol	<660	660
4-Bromophenyl-phenylether	<660	660
Butylbenzylphthalate	<660	660
Carbazole	<660	660
4-Chloro-3-methylphenol	<660	660
4-Chloroaniline	<660	660
bis (2-Chloroethoxy) methane	<330	330
bis(2-Chloroethyl) ether	<330	330
bis(2-Chloroisopropyl) ether	<660	660
2-Chloronaphthalene	<330	330
2-Chlorophenol	<330	330
4-Chlorophenyl-phenylether	<660	660
Chrysene	<330	330
Dibenz (a,h) anthracene	<1650	1650
Dibenzofuran	<1650	1650
1,3-Dichlorobenzene	<330	330
1,4-Dichlorobenzene	<330	330
1,2-Dichlorobenzene	<330	330
3,3'-Dichlorobenzidine	<670	670
2,4-Dichlorophenol	<660	660
Diethylphthalate	<660	660
2,4-Dimethylphenol	<660	660
Dimethylphthalate	<660	660
Di-n-butylphthalate	<660	660
4,6-Dinitro-2-methylphenol	<660	660
2,4-Dinitrophenol	<1650	1650
2,6-Dinitrotoluene	<660	660
2,4-Dinitrotoluene	<660	660
Di-n-octylphthalate	<660	660
1,2-Diphenylhydrazine (as Azobenzene)	<660	660
bis (2-Ethylhexyl) phthalate	<660	660
Fluoranthene	<330	330
Fluorene	<330	330
Hexachlorobenzene	<330	330
Hexachlorobutadiene	<330	330
Hexachlorocyclopentadiene	<330	330
Hexachloroethane	<330	330
Indeno (1,2,3-cd) pyrene	<330	330
Isophorone	<660	660

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

SEMI-VOLATILES (EPA 8270)

Analyte	Results(ug/kg)	Detection Limit
2-Methylnaphthalene	<330	330
2-Methylphenol	<660	660
4-Methylphenol	<660	660
Naphthalene	<330	330
2-Nitroaniline	<660	660
4-Nitroaniline	<1650	1650
3-Nitroaniline	<1650	1650
Nitrobenzene	<660	660
2-Nitrophenol	<660	660
4-Nitrophenol	<1650	1650
N-Nitrosodimethylamine	<330	330
N-Nitrosodi-n-propylamine	<330	330
N-Nitrosodiphenylamine (1)	<660	660
Pentachlorophenol	<1650	1650
Phenanthrene	<330	330
Phenol	<330	330
Pyrene	<330	330
1,2,4-Trichlorobenzene	<330	330
2,4,6-Trichlorophenol	<660	660
2,4,5-Trichlorophenol	<660	660

VOLATILES (EXPANDED EPA 8260)
Date Analyzed: 08/04/97

Analyte	Results(ug/kg)	Detection Limit
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	**94**	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

VOLATILES (EXPANDED EPA 8260)

Analyte	Results(ug/kg)	Detection Limit
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	**71**	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	<3.0	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	**60**	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	<10	10

ACROLEIN *<20 ug/kg*
ACRYLONITRILE *<20 ug/kg*
BIS (CHLOROMETHYL) ETHER *<660 ug/kg*
ALPHA,BETA,GAMMA,TECH-HCH *<660 ug/kg*
ISOPHORONE *<20 ug/kg*
N-NITROSOPYRROLIDINE *<660 ug/kg*
1-METHYLNAPHTHALENE *<330 ug/kg*

Client Sample #: WASH BAY WALL COMPOSITE
Laboratory ID #: 88595 *Order Type: Normal Matrix: Soil*
Sample Container: *3x4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

SEMI-VOLATILES (EPA 8270)
Semi-Volatile prep date: 08/05/97

Analyte	Results(ug/kg)	Detection Limit
Acenaphthene	<330	330
Acenaphthylene	<330	330
Aniline	<1650	1650
Anthracene	<330	330
Benzidine	<2500	2500
Benzo (a) anthracene	<330	330
Benzo (a) pyrene	<660	660
Benzo (b) fluoranthene	<660	660
Benzo (g,h,i) perylene	<330	330
Benzoic Acid	<1650	1650
Benzo (k) fluoranthene	<660	660
Benzyl Alcohol	<660	660
4-Bromophenyl-phenylether	<660	660
Butylbenzylphthalate	<660	660
Carbazole	<660	660
4-Chloro-3-methylphenol	<660	660

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

SEMI-VOLATILES (EPA 8270)

Analyte	Results(ug/kg)	Detection Limit
4-Chloroaniline	<660	660
bis (2-Chloroethoxy) methane	<330	330
bis(2-Chloroethyl) ether	<330	330
bis(2-Chloroisopropyl) ether	<660	660
2-Chloronaphthalene	<330	330
2-Chlorophenol	<330	330
4-Chlorophenyl-phenylether	<660	660
Chrysene	<330	330
Dibenz (a,h) anthracene	<1650	1650
Dibenzofuran	<1650	1650
1,3-Dichlorobenzene	<330	330
1,4-Dichlorobenzene	<330	330
1,2-Dichlorobenzene	<330	330
3,3'-Dichlorobenzidine	<670	670
2,4-Dichlorophenol	<660	660
Diethylphthalate	<660	660
2,4-Dimethylphenol	<660	660
Dimethylphthalate	<660	660
Di-n-butylphthalate	<660	660
4,6-Dinitro-2-methylphenol	<660	660
2,4-Dinitrophenol	<1650	1650
2,6-Dinitrotoluene	<660	660
2,4-Dinitrotoluene	<660	660
Di-n-octylphthalate	<660	660
1,2-Diphenylhydrazine (as Azobenzene)	<660	660
bis (2-Ethylhexyl) phthalate	<660	660
Fluoranthene	<330	330
Fluorene	<330	330
Hexachlorobenzene	<330	330
Hexachlorobutadiene	<330	330
Hexachlorocyclopentadiene	<330	330
Hexachloroethane	<330	330
Indeno (1,2,3-cd) pyrene	<330	330
Isophorone	<660	660
2-Methylnaphthalene	<330	330
2-Methylphenol	<660	660
4-Methylphenol	<660	660
Naphthalene	<330	330
2-Nitroaniline	<660	660
4-Nitroaniline	<1650	1650
3-Nitroaniline	<1650	1650
Nitrobenzene	<660	660
2-Nitrophenol	<660	660
4-Nitrophenol	<1650	1650
N-Nitrosodimethylamine	<330	330
N-Nitrosodi-n-propylamine	<330	330
N-Nitrosodiphenylamine (1)	<660	660
Pentachlorophenol	<1650	1650
Phenanthrene	<330	330
Phenol	<330	330
Pyrene	<330	330
1,2,4-Trichlorobenzene	<330	330
2,4,6-Trichlorophenol	<660	660
2,4,5-Trichlorophenol	<660	660

VOLATILES (EXPANDED EPA 8260)
Date Analyzed: 08/04/97

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

VOLATILES (EXPANDED EPA 8260)

Analyte	Results(ug/kg)	Detection Limit
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	**31**	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	**40**	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	<3.0	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	**35**	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

VOLATILES (EXPANDED EPA 8260)

Analyte	Results(ug/kg)	Detection Limit
Xylene (Total)	<10	10
ACROLEIN	*<20 ug/kg*	
ACRYLONITRILE	*<20 ug/kg*	
BIS (CHLOROMETHYL) ETHER	*<660 ug/kg*	
ALPHA,BETA,GAMMA,TECH-HCH	*<660 ug/kg*	
ISOPHORONE	*<20 ug/kg*	
N-NITROSOPYRROLIDINE	*<660 ug/kg*	
1-METHYLNAPHTHALENE	*<330 ug/kg*	

Client Sample #: MECHANICS PIT FLOOR COMPOSITE
Laboratory ID #: 88596 *Order Type: Normal Matrix: Soil*
Sample Container: *3x4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date: *08/01/97*
Temperature (Celcius):4

SEMI-VOLATILES (EPA 8270)
Semi-Volatile prep date: 08/05/97

Analyte	Results(ug/kg)	Detection Limit
Acenaphthene	<330	330
Acenaphthylene	<330	330
Aniline	<1650	1650
Anthracene	<330	330
Benzidine	<2500	2500
Benzo (a) anthracene	<330	330
Benzo (a) pyrene	<660	660
Benzo (b) fluoranthene	<660	660
Benzo (g,h,i) perylene	<330	330
Benzoic Acid	<1650	1650
Benzo (k) fluoranthene	<660	660
Benzyl Alcohol	<660	660
4-Bromophenyl-phenylether	<660	660
Butylbenzylphthalate	<660	660
Carbazole	<660	660
4-Chloro-3-methylphenol	<660	660
4-Chloroaniline	<660	660
bis (2-Chloroethoxy) methane	<330	330
bis(2-Chloroethyl) ether	<330	330
bis(2-Chloroisopropyl) ether	<660	660
2-Chloronaphthalene	<330	330
2-Chlorophenol	<330	330
4-Chlorophenyl-phenylether	<660	660
Chrysene	<330	330
Dibenz (a,h) anthracene	<1650	1650
Dibenzofuran	<1650	1650
1,3-Dichlorobenzene	<330	330
1,4-Dichlorobenzene	<330	330
1,2-Dichlorobenzene	<330	330
3,3'-Dichlorobenzidine	<670	670
2,4-Dichlorophenol	<660	660
Diethylphthalate	<660	660
2,4-Dimethylphenol	<660	660
Dimethylphthalate	<660	660
Di-n-butylphthalate	<660	660
4,6-Dinitro-2-methylphenol	<660	660
2,4-Dinitrophenol	<1650	1650
2,6-Dinitrotoluene	<660	660
2,4-Dinitrotoluene	<660	660

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

SEMI-VOLATILES (EPA 8270)

Analyte	Results(ug/kg)	Detection Limit
Di-n-octylphthalate	<660	660
1,2-Diphenylhydrazine (as Azobenzene)	<660	660
bis (2-Ethylhexyl) phthalate	<660	660
Fluoranthene	<330	330
Fluorene	<330	330
Hexachlorobenzene	<330	330
Hexachlorobutadiene	<330	330
Hexachlorocyclopentadiene	<330	330
Hexachloroethane	<330	330
Indeno (1,2,3-cd) pyrene	<330	330
Isophorone	<660	660
2-Methylnaphthalene	<330	330
2-Methylphenol	<660	660
4-Methylphenol	<660	660
Naphthalene	<330	330
2-Nitroaniline	<660	660
4-Nitroaniline	<1650	1650
3-Nitroaniline	<1650	1650
Nitrobenzene	<660	660
2-Nitrophenol	<660	660
4-Nitrophenol	<1650	1650
N-Nitrosodimethylamine	<330	330
N-Nitrosodi-n-propylamine	<330	330
N-Nitrosodiphenylamine (1)	<660	660
Pentachlorophenol	<1650	1650
Phenanthrene	<330	330
Phenol	<330	330
Pyrene	<330	330
1,2,4-Trichlorobenzene	<330	330
2,4,6-Trichlorophenol	<660	660
2,4,5-Trichlorophenol	<660	660

VOLATILES (EXPANDED EPA 8260)

Date Analyzed: 08/04/97

Analyte	Results(ug/kg)	Detection Limit
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	<10	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

VOLATILES (EXPANDED EPA 8260)

Analyte	Results(ug/kg)	Detection Limit
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	<5.0	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	<3.0	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	<10	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	<10	10

ACROLEIN <20 ug/kg
ACRYLONITRILE <20 ug/kg
BIS (CHLOROMETHYL) ETHER <660 ug/kg
ALPHA,BETA,GAMMA,TECH-HCH <660 ug/kg
ISOPHORONE <20 ug/kg
N-NITROSOPYRROLIDINE <660 ug/kg
1-METHYLNAPHTHALENE <330 ug/kg

Client Sample #: MECHANICS PIT WALL COMPOSITE
Laboratory ID #: 88597 *Order Type: Normal Matrix: Soil*
Sample Container: *3x4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

SEMI-VOLATILES (EPA 8270)
Semi-Volatile prep date: 08/05/97

Analyte	Results(ug/kg)	Detection Limit
Acenaphthene	<330	330
Acenaphthylene	<330	330
Aniline	<1650	1650
Anthracene	<330	330
Benzidine	<2500	2500

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

SEMI-VOLATILES (EPA 8270)

Analyte	Results(ug/kg)	Detection Limit
Benzo (a) anthracene	<330	330
Benzo (a) pyrene	<660	660
Benzo (b) fluoranthene	<660	660
Benzo (g,h,i) perylene	<330	330
Benzoic Acid	<1650	1650
Benzo (k) fluoranthene	<660	660
Benzyl Alcohol	<660	660
4-Bromophenyl-phenylether	<660	660
Butylbenzylphthalate	<660	660
Carbazole	<660	660
4-Chloro-3-methylphenol	<660	660
4-Chloroaniline	<660	660
bis (2-Chloroethoxy) methane	<330	330
bis(2-Chloroethyl) ether	<330	330
bis(2-Chloroisopropyl) ether	<660	660
2-Chloronaphthalene	<330	330
2-Chlorophenol	<330	330
4-Chlorophenyl-phenylether	<660	660
Chrysene	<330	330
Dibenz (a,h) anthracene	<1650	1650
Dibenzofuran	<1650	1650
1,3-Dichlorobenzene	<330	330
1,4-Dichlorobenzene	<330	330
1,2-Dichlorobenzene	<330	330
3,3'-Dichlorobenzidine	<670	670
2,4-Dichlorophenol	<660	660
Diethylphthalate	<660	660
2,4-Dimethylphenol	<660	660
Dimethylphthalate	<660	660
Di-n-butylphthalate	<660	660
4,6-Dinitro-2-methylphenol	<660	660
2,4-Dinitrophenol	<1650	1650
2,6-Dinitrotoluene	<660	660
2,4-Dinitrotoluene	<660	660
Di-n-octylphthalate	<660	660
1,2-Diphenylhydrazine (as Azobenzene)	<660	660
bis (2-Ethylhexyl) phthalate	<660	660
Fluoranthene	<330	330
Fluorene	<330	330
Hexachlorobenzene	<330	330
Hexachlorobutadiene	<330	330
Hexachlorocyclopentadiene	<330	330
Hexachloroethane	<330	330
Indeno (1,2,3-cd) pyrene	<330	330
Isophorone	<660	660
2-Methylnaphthalene	<330	330
2-Methylphenol	<660	660
4-Methylphenol	<660	660
Naphthalene	<330	330
2-Nitroaniline	<660	660
4-Nitroaniline	<1650	1650
3-Nitroaniline	<1650	1650
Nitrobenzene	<660	660
2-Nitrophenol	<660	660
4-Nitrophenol	<1650	1650
N-Nitrosodimethylamine	<330	330
N-Nitrosodi-n-propylamine	<330	330
N-Nitrosodiphenylamine (1)	<660	660

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

SEMI-VOLATILES (EPA 8270)

Analyte	Results(ug/kg)	Detection Limit
Pentachlorophenol	<1650	1650
Phenanthrene	<330	330
Phenol	<330	330
Pyrene	<330	330
1,2,4-Trichlorobenzene	<330	330
2,4,6-Trichlorophenol	<660	660
2,4,5-Trichlorophenol	<660	660

VOLATILES (EXPANDED EPA 8260)

Date Analyzed: 08/04/97

Analyte	Results(ug/kg)	Detection Limit
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	<10	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	<5.0	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

VOLATILES (EXPANDED EPA 8260)

Analyte	Results(ug/kg)	Detection Limit
Toluene	<3.0	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	<10	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	<10	10

ACROLEIN <20 ug/kg
ACRYLONITRILE <20 ug/kg
BIS (CHLOROMETHYL) ETHER <660 ug/kg
ALPHA,BETA,GAMMA,TECH-HCH <660 ug/kg
ISOPHORONE <20 ug/kg
N-NITROSOPYRROLIDINE <660 ug/kg
1-METHYLNAPHTHALENE <330 ug/kg

Client Sample #: WASH BAY SOIL PILE
Laboratory ID #: 88598 *Order Type: Normal Matrix: Soil*
Sample Container: *3x4oz EPA Glass Jar\Aqua Lid,Methanol Jar*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

BTEX/TPH (EPA 8020/MOD 8015 GAS-RANGE)

Analyte	Results	Detection Limit
Benzene	<0.40	0.40
Toluene	<0.50	0.50
Ethyl Benzene	<0.50	0.50
Xylenes	<0.50	0.50
TPH	<10	10

BTEX results are reported in parts per million (ppm) in soil and parts per billion (ppb) in water and air. TPH results are reported in parts per million (ppm) in soil, air, and water.

MERCURY DIGESTION, TCLP (EPA 7470)
Mercury Digestion Date: 08/06/97

MICROWAVE DIGESTION, TCLP (EPA 3015)
Microwave Digestion Date: 08/05/97

TCLP HERBICIDES (EPA 8150A)
Prep Date: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
94-75-7	2,4-D	<0.010	0.010	10
93-72-1	2,4,5-TP (Silvex)	<0.003	0.003	1

TCLP NON-VOLATILE EXTRACTION (EPA 1311)
TCLP Extraction Date: 08/05/97

TCLP PESTICIDES (EPA 8080A)
Prep Date: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
58-89-9	gamma-BHC (Lindane)	<0.010	0.010	0.04
57-74-9	Chlordane	<0.010	0.010	0.03

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

TCLP PESTICIDES (EPA 8080A)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
72-20-8	Endrin	<0.010	0.010	0.02
76-44-8	Heptachlor	<0.005	0.005	0.008
1024-57-3	Heptachlor Epoxide	<0.005	0.005	0.008
72-43-5	Methoxychlor	<0.010	0.010	10.0
8001-35-2	Toxaphene	<0.010	0.010	0.5

TCLP RCRA MERCURY (EPA 7470)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7439-97-6	TCLP Mercury	<0.0004	0.0004	0.2

TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-38-2	Arsenic	**0.174**	0.061	5
7440-39-3	Barium	**0.976**	0.001	100
7440-43-9	Cadmium	<0.008	0.008	1
7440-47-3	Chromium	<0.0075	0.0075	5
7439-92-1	Lead	<0.040	0.040	5
7482-49-2	Selenium	<0.050	0.050	1
7440-39-2	Silver	<0.030	0.030	5

TCLP SEMI-VOLATILES (EPA 8270)
Prep Date:: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
no C.A.S.	Cresol (Total)	<1.0	1.0	200.0
121-14-2	2,4-Dinitrotoluene	<0.10	0.10	0.13
118-74-1	Hexachlorobenzene	<0.10	0.10	0.13
87-68-3	Hexachlorobutadiene	<0.20	0.20	0.5
67-72-1	Hexachloroethane	<0.10	0.10	3.0
98-95-3	Nitrobenzene	<0.50	0.50	2.0
87-86-5	Pentachlorophenol	<0.20	0.20	100.0
110-86-1	Pyridine	<0.50	0.50	5.0
95-95-4	2,4,5-Trichlorophenol	<0.50	0.50	400.0
88-06-2	2,4,6-Trichlorophenol	<0.50	0.50	2.0

TCLP VOLATILES (EPA 8260)
Date analyzed: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
71-43-2	Benzene	<0.10	0.10	0.5
56-23-5	Carbon Tetrachloride	<0.10	0.10	0.5
108-90-7	Chlorobenzene	<0.10	0.10	100
67-66-3	Chloroform	<0.10	0.10	6.0
106-46-7	1,4-Dichlorobenzene	<0.10	0.10	7.5
107-06-2	1,2-Dichloroethane	<0.10	0.10	0.5
75-35-4	1,1-Dichloroethylene	<0.10	0.10	0.7
78-93-3	Methyl Ethyl Ketone	<0.10	0.10	200.0
127-18-4	Tetrachloroethylene	<0.10	0.10	0.7
79-01-6	Trichloroethylene	<0.10	0.10	0.5
75-01-4	Vinyl Chloride	<0.10	0.10	0.2

TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)
TCLP ZHE Extraction Date: 08/05/97

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

Client Sample #: MECHANICS PIT SOIL PILE
Laboratory ID #: 88599 *Order Type: Normal Matrix: Soil*
Sample Container: *3x4oz EPA Glass Jar\Aqua Lid,Methanol Jar*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

BTEX/TPH (EPA 8020/MOD 8015 GAS-RANGE)

Analyte	Results	Detection Limit
Benzene	<0.40	0.40
Toluene	<0.50	0.50
Ethyl Benzene	<0.50	0.50
Xylenes	<0.50	0.50
TPH	<10	10

BTEX results are reported in parts per million (ppm) in soil and parts per billion (ppb) in water and air. TPH results are reported in parts per million (ppm) in soil, air, and water.

MERCURY DIGESTION, TCLP (EPA 7470)
Mercury Digestion Date: 08/06/97

MICROWAVE DIGESTION, TCLP (EPA 3015)
Microwave Digestion Date: 08/05/97

TCLP HERBICIDES (EPA 8150A)
Prep Date: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
94-75-7	2,4-D	<0.010	0.010	10
93-72-1	2,4,5-TP (Silvex)	<0.003	0.003	1

TCLP NON-VOLATILE EXTRACTION (EPA 1311)
TCLP Extraction Date: 08/05/97

TCLP PESTICIDES (EPA 8080A)
Prep Date: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
58-89-9	gamma-BHC (Lindane)	<0.010	0.010	0.04
57-74-9	Chlordane	<0.010	0.010	0.03
72-20-8	Endrin	<0.010	0.010	0.02
76-44-8	Heptachlor	<0.005	0.005	0.008
1024-57-3	Heptachlor Epoxide	<0.005	0.005	0.008
72-43-5	Methoxychlor	<0.010	0.010	10.0
8001-35-2	Toxaphene	<0.010	0.010	0.5

TCLP RCRA MERCURY (EPA 7470)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7439-97-6	TCLP Mercury	**0.001**	0.0004	0.2

TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-38-2	Arsenic	<0.061	0.061	5
7440-39-3	Barium	**1.12**	0.001	100
7440-43-9	Cadmium	<0.008	0.008	1
7440-47-3	Chromium	<0.0075	0.0075	5
7439-92-1	Lead	**0.062**	0.040	5
7482-49-2	Selenium	<0.050	0.050	1

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-39-2	Silver	<0.030	0.030	5

TCLP SEMI-VOLATILES (EPA 8270)
Prep Date:: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
no C.A.S.	Cresol (Total)	<1.0	1.0	200.0
121-14-2	2,4-Dinitrotoluene	<0.10	0.10	0.13
118-74-1	Hexachlorobenzene	<0.10	0.10	0.13
87-68-3	Hexachlorobutadiene	<0.20	0.20	0.5
67-72-1	Hexachloroethane	<0.10	0.10	3.0
98-95-3	Nitrobenzene	<0.50	0.50	2.0
87-86-5	Pentachlorophenol	<0.20	0.20	100.0
110-86-1	Pyridine	<0.50	0.50	5.0
95-95-4	2,4,5-Trichlorophenol	<0.50	0.50	400.0
88-06-2	2,4,6-Trichlorophenol	<0.50	0.50	2.0

TCLP VOLATILES (EPA 8260)
Date analyzed: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
71-43-2	Benzene	<0.10	0.10	0.5
56-23-5	Carbon Tetrachloride	<0.10	0.10	0.5
108-90-7	Chlorobenzene	<0.10	0.10	100
67-66-3	Chloroform	<0.10	0.10	6.0
106-46-7	1,4-Dichlorobenzene	<0.10	0.10	7.5
107-06-2	1,2-Dichloroethane	<0.10	0.10	0.5
75-35-4	1,1-Dichloroethylene	<0.10	0.10	0.7
78-93-3	Methyl Ethyl Ketone	<0.10	0.10	200.0
127-18-4	Tetrachloroethylene	<0.10	0.10	0.7
79-01-6	Trichloroethylene	<0.10	0.10	0.5
75-01-4	Vinyl Chloride	<0.10	0.10	0.2

TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)
TCLP ZHE Extraction Date: 08/05/97

Client Sample #: SURFACE STAINED SOIL PILE
Laboratory ID #: 88600 *Order Type: Normal Matrix: Soil*
Sample Container: *3x4oz EPA Glass Jar\Aqua Lid,Methanol Jar*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

BTEX/TPH (EPA 8020/MOD 8015 GAS-RANGE)

Analyte	Results	Detection Limit
Benzene	<0.40	0.40
Toluene	<0.50	0.50
Ethyl Benzene	<0.50	0.50
Xylenes	<0.50	0.50
TPH	<10	10

BTEX results are reported in parts per million (ppm) in soil and parts per billion (ppb) in water and air. TPH results are reported in parts per million (ppm) in soil, air, and water.

MERCURY DIGESTION, TCLP (EPA 7470)
Mercury Digestion Date: 08/06/97

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

MICROWAVE DIGESTION, TCLP (EPA 3015)
Microwave Digestion Date: 08/05/97

TCLP HERBICIDES (EPA 8150A)
Prep Date: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
94-75-7	2,4-D	<0.010	0.010	10
93-72-1	2,4,5-TP (Silvex)	<0.003	0.003	1

TCLP NON-VOLATILE EXTRACTION (EPA 1311)
TCLP Extraction Date: 08/05/97

TCLP PESTICIDES (EPA 8080A)
Prep Date: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
58-89-9	gamma-BHC (Lindane)	<0.010	0.010	0.04
57-74-9	Chlordane	<0.010	0.010	0.03
72-20-8	Endrin	<0.010	0.010	0.02
76-44-8	Heptachlor	<0.005	0.005	0.008
1024-57-3	Heptachlor Epoxide	<0.005	0.005	0.008
72-43-5	Methoxychlor	<0.010	0.010	10.0
8001-35-2	Toxaphene	<0.010	0.010	0.5

TCLP RCRA MERCURY (EPA 7470)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7439-97-6	TCLP Mercury	**0.0007**	0.0004	0.2

TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-38-2	Arsenic	<0.061	0.061	5
7440-39-3	Barium	**1.11**	0.001	100
7440-43-9	Cadmium	<0.008	0.008	1
7440-47-3	Chromium	<0.0075	0.0075	5
7439-92-1	Lead	<0.040	0.040	5
7482-49-2	Selenium	**0.068**	0.050	1
7440-39-2	Silver	<0.030	0.030	5

TCLP SEMI-VOLATILES (EPA 8270)
Prep Date:: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
no C.A.S.	Cresol (Total)	<1.0	1.0	200.0
121-14-2	2,4-Dinitrotoluene	<0.10	0.10	0.13
118-74-1	Hexachlorobenzene	<0.10	0.10	0.13
87-68-3	Hexachlorobutadiene	<0.20	0.20	0.5
67-72-1	Hexachloroethane	<0.10	0.10	3.0
98-95-3	Nitrobenzene	<0.50	0.50	2.0
87-86-5	Pentachlorophenol	<0.20	0.20	100.0
110-86-1	Pyridine	<0.50	0.50	5.0
95-95-4	2,4,5-Trichlorophenol	<0.50	0.50	400.0
88-06-2	2,4,6-Trichlorophenol	<0.50	0.50	2.0

TCLP VOLATILES (EPA 8260)
Date analyzed: 08/06/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
71-43-2	Benzene	<0.10	0.10	0.5

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

TCLP VOLATILES (EPA 8260)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
56-23-5	Carbon Tetrachloride	<0.10	0.10	0.5
108-90-7	Chlorobenzene	<0.10	0.10	100
67-66-3	Chloroform	<0.10	0.10	6.0
106-46-7	1,4-Dichlorobenzene	<0.10	0.10	7.5
107-06-2	1,2-Dichloroethane	<0.10	0.10	0.5
75-35-4	1,1-Dichloroethylene	<0.10	0.10	0.7
78-93-3	Methyl Ethyl Ketone	<0.10	0.10	200.0
127-18-4	Tetrachloroethylene	<0.10	0.10	0.7
79-01-6	Trichloroethylene	<0.10	0.10	0.5
75-01-4	Vinyl Chloride	<0.10	0.10	0.2

TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)
TCLP ZHE Extraction Date: 08/05/97

Client Sample #: WASH BAY FLOOR COMPOSITE
Laboratory ID #: 89074 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

TPH DIESEL-RANGE (MOD 8015)

Analyte	Results(mg/kg)	Detection Limit
Diesel-Range Petroleum Hydrocarbons	**62**	5.0

Sample contains 37 mG/kG oil.

Client Sample #: WASH BAY WALL COMPOSITE
Laboratory ID #: 89075 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

TPH DIESEL-RANGE (MOD 8015)

Analyte	Results(mg/kg)	Detection Limit
Diesel-Range Petroleum Hydrocarbons	**21**	5.0

Sample contains 29 mG/kG oil.

Client Sample #: MECHANICS PIT FLOOR COMPOSITE
Laboratory ID #: 89076 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

TPH DIESEL-RANGE (MOD 8015)

Analyte	Results(mg/kg)	Detection Limit
Diesel-Range Petroleum Hydrocarbons	<5.0	5.0

Sample contains 64 mG/kG oil.

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

Client Sample #: MECHANICS PIT WALL COMPOSITE
Laboratory ID #: 89077 *Order Type: Normal Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

TPH DIESEL-RANGE (MOD 8015)

Analyte	Results(mg/kg)	Detection Limit
Diesel-Range Petroleum Hydrocarbons	<5.0	5.0

Sample contains 16 mG/kG oil.

Client Sample #: WASH BAY SOIL PILE
Laboratory ID #: 89190 *Order Type: Additional Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

CORROSIVITY (EPA 9040)

Analyte	Results	Detection Limit
Corrosivity	**7.0**	

IGNITABILITY (ASTM D92)
Ignitability: DOES NOT IGNITE AT ROOM TEMPERATURE; NOT HAZARDOUS

REACTIVITY (FULL)
Reactive Cyanide (EPA 9010): <0.2 mg/kg
Reactive Sulfide (EPA 9030): 893 mg/kg
Reactivity To Air: Negative
Reactivity To Diluted HCl: Negative
Reactivity To Diluted NaOH: Negative
Reactivity To Water: Negative

Client Sample #: MECHANICS PIT SOIL PILE
Laboratory ID #: 89191 *Order Type: Additional Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

CORROSIVITY (EPA 9040)

Analyte	Results	Detection Limit
Corrosivity	**6.5**	

IGNITABILITY (ASTM D92)
Ignitability: DOES NOT IGNITE AT ROOM TEMPERATURE; NOT HAZARDOUS

REACTIVITY (FULL)
Reactive Cyanide (EPA 9010): <0.2 mg/kg
Reactive Sulfide (EPA 9030): 120 mg/kg
Reactivity To Air: Negative
Reactivity To Diluted HCl: Negative
Reactivity To Diluted NaOH: Negative

Client Name: Tetra Tech EM, Inc. -Alb, N.M.
Submission #: 9708000031
Project Name: PRIDE PETROLEUM SERVICES
Report Date: 08/20/97

REACTIVITY (FULL)
Reactivity To Water: Negative

Client Sample #: SURFACE STAINED SOIL PILE
Laboratory ID #: 89192 *Order Type: Additional Matrix: Soil*
Sample Container: *4oz EPA Approved Glass Jar\Aqua Lid*
Sampling Location: *LOVINGTON, NM*
Sampling Date : *08/01/97*
Temperature (Celcius):4

CORROSIVITY (EPA 9040)

Analyte	Results	Detection Limit
Corrosivity	**6.0**	

IGNITABILITY (ASTM D92)
Ignitability: DOES NOT IGNITE AT ROOM TEMPERATURE; NOT HAZARDOUS

REACTIVITY (FULL)
Reactive Cyanide (EPA 9010): <0.2 mg/kg
Reactive Sulfide (EPA 9030): 195 mg/kg
Reactivity To Air: Negative
Reactivity To Diluted HCl: Negative
Reactivity To Diluted NaOH: Negative
Reactivity To Water: Negative

Report To: Tetra Tech EM, Inc.
Lab Number: 9708000031
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Project: Pride Petroleum Services

QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
BTEX 8020	Howard Hayden	Solid	8/4/97	8/4/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
Benzene	100 ppb	96.2	111	80-120	13	20.0
Toluene	100 ppb	96.5	111	80-120	13	20.0
Ethyl Benzene	100 ppb	96.9	112	80-120	13	20.0
Xylenes	300 ppb	106	115	80-120	7.8	20.0

TCLP VOLATILE ORGANICS QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8260	Howard Hayden	Liquid	-----	8/6/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
1,1-Dichloroethene	20 ppb	94.3	99.8	20-234	5.5	25.0
Trichloroethene	20 ppb	102	98.6	71-157	3.3	25.0
Benzene	20 ppb	108	106	37-151	1.9	25.0
Toluene	20 ppb	104	100	47-150	3.8	25.0
Chlorobenzene	20 ppb	109	103	37-160	5.5	25.0

TCLP SEMI-VOLATILES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8270	Dennis Shaw	Liquid	8/6/97	8/6/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
Phenol	200 ppb	73.3	74.2	10-120	1.23	42.0
2-Chlorophenol	200 ppb	80.4	81.6	23-134	1.46	40.0
Acenaphthene	100 ppb	91.9	99.4	47-145	7.62	31.0
Pyrene	100 ppb	103	111	52-125	6.61	31.0

Report To: Tetra Tech EM, Inc.
Lab Number: 9708000031
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Project: Pride Petroleum Services

TCLP PESTICIDES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8080	Dennis Shaw	Liquid	8/6/97	8/6/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
4,4'-DDD	1.0 ppb	75.2	71.5	31-141	4.92	35
4,4'-DDT	1.0 ppb	68.4	60.9	25-160	11.0	35
Heptachlor	0.20 ppb	101.4	110	33-135	7.82	35
Endosulfan Sulfate	1.0 ppb	116	116	26-144	0.0215	35
Endrin	0.20 ppb	49.0	56.0	30-147	12.5	35

TCLP HERBICIDES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8150	Dennis Shaw	Liquid	8/6/97	8/7/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
2,4-D	0.5 ppm	81.1	70.7	8.0-170	12.8	35
2,4,5-T	0.5 ppm	73.6	60.9	8.0-170	17.2	35
2,4,5-TP (Silvex)	0.5 ppm	76.7	63.0	8.0-170	17.9	35

VOLATILE ORGANICS QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8260	Howard Hayden	Solid	-----	8/4/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
1,1-Dichloroethene	20 ppb	109	95.6	20-234	12	25.0
Trichloroethene	20 ppb	108	107	71-157	0.93	25.0
Benzene	20 ppb	110	109	37-151	0.91	25.0
Toluene	20 ppb	111	109	47-150	1.8	25.0
Chlorobenzene	20 ppb	113	109	37-160	3.5	25.0

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SEMI-VOLATILES QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8270	Dennis Shaw	Solid	8/5/97	8/5/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
Phenol	200 ppb	64.1	73.6	10-120	13.0	42.0
2-Chlorophenol	200 ppb	75.0	79.6	23-134	6.05	40.0
Acenaphthene	100 ppb	86.3	96.2	47-145	10.3	31.0
Pyrene	100 ppb	99.3	111	52-125	10.2	31.0

QUALITY CONTROL DATA

ANALYTE	DATE ANALYZED	SPIKE (ppm)	STAND. DEV.	COEFF. OF VAR %	REC1/%	REC2/%
Mercury	8/8/97	----	---	---	106	106
Arsenic	8/8/97	----	0.153	3.4	105	110
Barium	8/8/97	----	0.044	1.4	95	97
Cadmium	8/8/97	----	0.064	2.2	103	107
Chromium	8/8/97	----	0.070	2.1	102	99
Lead	8/8/97	----	0.053	1.5	105	107
Selenium	8/8/97	----	0.318	8.4	97	109
Silver	8/8/97	----	0.094	2.7	96	100

Standard Deviation = (x1-x2)/1.414
Coefficient of Variability % = (S.D./Avg.) X 100
Recovery % = [(spiked-unspiked)/expected] X 100

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QUALITY CONTROL DATA

METHOD	ANALYST	MATRIX	DATE EXTRACTED	DATE ANALYZED
8015 Mod.	Dennis Shaw	Solid	8/14/97	8/14/97

SPIKE COMPOUND	SPIKE AMOUNT	% REC 1	% REC 2	% REC QC LIMIT	% VAR.	% VAR QC LIMIT
Diesel Fuel	6085 ppm	97.0	102	20-150	4.90	30

QUALITY CONTROL DATA

ANALYTE	DATE ANALYZED	SPIKE (ppm)	STAND. DEV.	COEFF. OF VAR %	REC1/%	REC2/%
Reactive Cyanide	8/19/97	----	0.06	2.3	102.4	105.6
Reactive Sulfide	8/19/97	----	15.6	3.8	71.1	75

Standard Deviation = (x1-x2)/1.414
Coefficient of Variability % = (S.D./Avg.) X 100
Recovery % = [(spiked-unspiked)/expected] X 100

ANACHEM, INC.

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