GW - 190

MONITORING REPORTS

DATE:

2000 - 1995

4 OF 64

FINAL
SITE ASSESSMENT REPORT
TRUCK WASH DRAIN SYSTEM

ARTESIA, NEW MEXICO

BJ SERVICES COMPANY, U.S.A.

AUGUST 9, 1996

FINAL
SITE ASSESSMENT REPORT
TRUCK WASH DRAIN SYSTEM
ARTESIA, NEW MEXICO FACILITY

Prepared for

BJ Services Company, U.S.A.
8701 New Trials Drive
The Woodlands, Texas 77381

BC Project Number: 2988-27

Timothy Jenkins
Associate Engineer

August 9, 1996

Brown and Caldwell
1415 Louisiana, Suite 2500
Houston, Texas 77002 - (713) 759-0999

CONTENTS

1.0 INTRODUCTION

Brown and Caldwell, under contract to BJ Services Company, U.S.A., conducted a site assessment for the closure of the Truck Wash Drain System (TWDS) from February 2 through February 6, 1996. The site assessment was conducted in accordance with the "Closure Plan Summary: Truck Wash Drain Line and Tank" (Closure Plan), submitted to the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division (OCD) on January 10, 1996. The Closure Plan is found in Appendix A. Changes have been made to the figure in this appendix to reflect current facility operations. The Artesia facility is located in Eddy County, in the SE/4, Section 32, Township 16 South, Range 26 East. The facility address is 2401 Sivley, Artesia, New Mexico, 88210. A site location map and site plan are attached as Figures 1 and 2, respectively.

Between February 2 and February 6, 1996, Brown and Caldwell supervised the permanent removal of the TWDS, consisting of a single underground storage tank, approximately 25 feet of drain line, and two 95 foot leaching lines. The TWDS was located northeast of the Artesia District facility's Truck Wash Bay (see Figure 3). Brown and Caldwell also provided field oversight for the land spreading of excavated soils and confirmation sampling, which occurred on March 14, 1996. A letter report, "Land Spreading of Excavated Soils: Truck Wash Drain System", was submitted to the OCD on February 26, 1996, and is included as Appendix B. Changes have been made to the figures in this appendix to reflect current facility operations. Closure activities were conducted in accordance with Brown and Caldwell's Closure Plan. The objectives were: (1) to remove potential sources for hydrocarbon-affected soil, and (2) to achieve clean closure of the TWDS.

The following sections summarize the site activities, site assessment and scoring, closure verification methods utilized, and the results of both field and laboratory analyses. Section 3 requests approval for final closure based on the results of the site assessment.

2.0 SITE ASSESSMENT

BJ Services performed the site assessment to determine the potential for site soils/groundwater to have been impacted by the operation of the Truck Wash Drain System (TWDS). The results of the site assessment were used for evaluating the need for remediation and the type of closure best suited for the site.

2.1 General Site Characteristics

BJ Services determined the depth to groundwater to be approximately 20 to 25 feet below the ground surface based on previous groundwater investigations conducted at the site.

Depth to Groundwater	Ranking Score
< 50 feet	Yes - 20

Brown and Caldwell personnel conducted a water well search at the State Engineer's office in Roswell, New Mexico on February 21, 1993. This search determined that no water wells were identified within a one-half mile radius of the facility.

Wellhead Protection Area	Ranking Score
< 1000 feet from a water source, or	No - 0
< 200 feet from a private domestic water source:	No - 0

The distance from the site to the Pecos River (nearest downgradient surface water body), was determined to be more than 1,000 feet by reviewing a USGS topographic map for the area.

Distance to Surface Water Body	Ranking Score
> 1,000 feet	Yes - 0

2.2 Site Scoring

Groundwater is present at a depth of less than 50 feet below grade. Flow direction is east-southeast, as determined from wells previously installed at the facility. Therefore, the site scoring procedure outlined above calls for a depth to groundwater Ranking Score of 20. No water wells were identified within a 2,000 ft. radius of the site. Therefore, the wellhead protection Ranking Score is 0. A review of a USGS map indicates the nearest water body (Eagle Creek) is approximately 7,000 ft. south of the site. The Pecos River is several miles from the facility. Therefore, the distance to surface water body Ranking Score is 0.

The site ranking score of 20 is greater than 19. This determination was made based on physical site characteristics as described above. According to the OCD guidance document attached as Appendix C, "Unlined Surface Impoundment Closure Guidelines, 2/93", a total ranking score of greater than 19 yields action levels as outlined in Table 1.

2.3 Excavation Activities

The TWDS received effluent water from an in-ground oil/water separator connected to the Truck Wash Bay as shown in Figure 3. This separator, which is still in operation, handles water used for truck cleaning. The TWDS consisted of a drain line leading from the truck wash oil/water separator to a single underground tank. Two leaching lines which were connected to the tank spanned 95 feet in length.

The TWDS tank, drain line, and leach lines were removed based on the Closure Plan (Appendix A). Using field TPH screening, overexcavation and stockpiling of potentially affected soils were accomplished concurrent with the removal of the tank and lines. Field screening results are listed in Table 1. Approximately 350 cubic yards of soil were excavated and stockpiled for laboratory testing and eventual disposal. The excavation was then backfilled with imported fill material similar to existing site soil and compacted using rubber-tired machinery. The stockpiled soil was

later land spread on-site after receiving OCD approval of the land spreading plan (see Appendix B). The land spreading activities were accomplished on March 14, 1996.

2.3.1 Removal of Drain Line, Tank, and Leach Lines

Closure activities for the TWDS tank, drain line, and leach lines began on February 2, 1996. Rhino Environmental Services, Inc. (Rhino) removed the underground tank, the drain line leading from the oil/water separator, and two previously unknown leaching lines leading from the tank. The two leaching lines were approximately 95 feet in length, ran east from the tank at approximately 4 feet below grade, and were spaced about 10 feet apart. These lines and the surrounding soils were removed after receiving approval from the OCD.

Confirmation samples were collected from the center point of the drain line and from beneath the tank footprint. These samples were collected in plastic bags, and then transferred to a labeled, laboratory-supplied glass jar and immediately placed in an ice chest. Upon completion of sampling activities, the samples were delivered via overnight delivery service to ERMI Environmental Laboratories in Allen, Texas, using chain-of-custody procedures and analyzed as described in the Closure Plan. An additional sample was composited from the mid-point of the leach line excavations in a plastic bag. This sample was also transferred to a laboratory-supplied glass jar, placed on ice in an ice chest, and delivered via overnight delivery service to ERMI Environmental Laboratories in Allen, Texas, using chain-of-custody procedures.

Confirmation samples were analyzed for TPH, BTEX, total benzene, and Total RCRA metals, as required by the Closure Plan. Both field-analyzed and laboratory-analyzed TPH concentrations were below the OCD action levels as shown in Table 1. Total BTEX and total benzene concentrations were also below the OCD guidelines. Some metals were detected in the samples, but did not exceed RCRA Toxicity Characteristic Leaching Procedure (TCLP) standards, assuming that 5% of the total metal concentration is leachable using TCLP methods. Analytical results for metals analyses are listed in Table 2.

2.3.2 Stockpiling of Excavated Soils

A total of 350 cubic yards of soil was excavated and stockpiled on-site. The stockpile consisted of soil generated during the removal of the tank, drain line, and leaching lines that were part of the drain system, as described above. Soil excavated from around the leaching lines constituted the majority of the material that was stockpiled. Tank concrete and drain line piping were disposed separately from the stockpiled soil material.

A composite sample of the stockpiled material was collected by Brown and Caldwell personnel to determine which, if any, hazardous constituents were present. Laboratory results of the composite sample indicated that the material was non-hazardous based on a full TCLP and R.C.I. analysis, that TPH levels were non-detect, and that BTEX levels were also below OCD action levels. Tables 1 and 3 present the stockpile analytical results along with a comparison to OCD action levels for this facility.

2.3.3 Land Spreading of Stockpiled Soils

Based on the stockpile analytical results, Brown and Caldwell requested a one time land spread of stockpiled soil to BJ Services and to the OCD in a letter dated February 26, 1996 (Appendix B). This disposal option is described in the OCD guidance document for unlined surface impoundments, page 12 (see Appendix C). The area along the eastern property line, as shown in Figure 3, was selected as the location for the land spreading of stockpiled soils. Upon receiving OCD approval, Brown and Caldwell coordinated the land spreading of stockpiled material, with Rhino performing the work. The soil was moved using belly dumps, and was spread into an approximately six inch thick layer of loosely compacted soil using a grader. The final dimensions of the land spread area were roughly 50 feet by 330 feet.

Once the land spread area was established, a sampling grid was placed at 30 feet intervals both north and east. Twenty samples were collected, and a composite sample was created using approximately equal volumes of soil from each sample location. The composite sample was then placed in laboratory supplied jars and submitted to a laboratory for TPH, total BTEX, and total benzene analysis. The results are summarized in Table 1. The results were below OCD action levels, and no further action was required.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

The site assessment report has demonstrated that:

- Field and laboratory analyses of the soil samples obtained during the site investigation indicate that soils potentially impacted by TPH constituents and associated with the Truck Wash Drain System (TWDS) have been removed, based on confirmation sampling and analysis, as well as field TPH analysis.

- The TWDS has been sufficiently remediated to meet or exceed the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division requirements for TPH, benzene, and total BTEX concentrations. By this comparison, the TWDS now meets the requirements for a clean, final closure.

- The land spread facility, as indicated by laboratory analyses, has been sufficiently remediated to meet or exceed OCD requirements for TPH, benzene, and total BTEX concentrations. By this comparison, the land spread area now meets the requirements for a clean, final closure.

3.2 Recommendations

Based on the findings of the Site Assessment, no further remediation is necessary, and that no further remedial action is required to meet OCD action levels. This status applies to the TWDS and to the land spread area. BJ Services, under the advisement of Brown and Caldwell, requests the final closure of both facilities.

DISTRIBUTION

Final
Site Assessment Report
Truck Wash Drain System
Artesia, New Mexico Facility

August 9, 1996

1 copy to: New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Attention: Mr. Mark Ashley

1 copy to: BJ Services Company, U.S.A.
8701 New Trails Drive
The Woodlands, Texas 77381

Attention: Ms. Jo Ann Cobb

1 copy to: BJ Services Company, U.S.A.
2401 Sivley
Artesia, New Mexico 88210

Attention: Mr. Mike Wiggins

1 copy to: Brown and Caldwell
File

QUALITY CONTROL REVIEWER

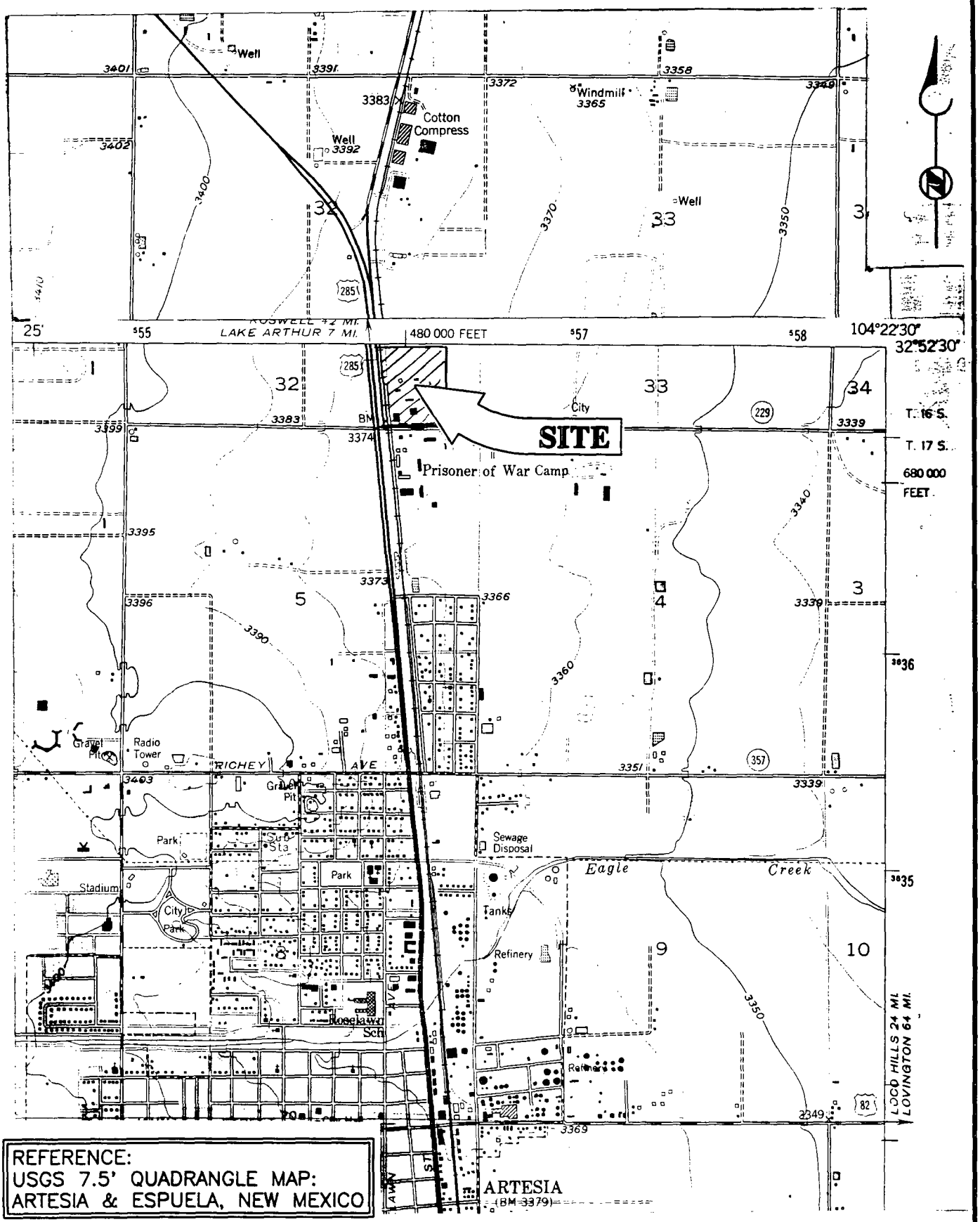
Robert N. Jennings, P.E.
Vice President

TJ:elg

FIGURES

FIGURE 1

Site Location Map



REFERENCE:
USGS 7.5' QUADRANGLE MAP:
ARTESIA & ESPUELA, NEW MEXICO

T:\2988\05VICIN (1=1) 08-09-96 DaveD

BROWN AND CALDWELL
HOUSTON, TEXAS

SUBMITTED: _____ DATE: _____
PROJECT MANAGER

APPROVED: _____ DATE: _____
BROWN AND CALDWELL

0 1000 2000
SCALE: 1" = 2000'

DRAWN BY: DHD DATE 8/9

CHK'D BY: _____ DATE _____

APPROVED: _____ DATE _____

TITLE: SITE LOCATION MAP

CLIENT: BJ SERVICES COMPANY, U.S.A.

SITE LOCATION: ARTESIA, NEW MEXICO

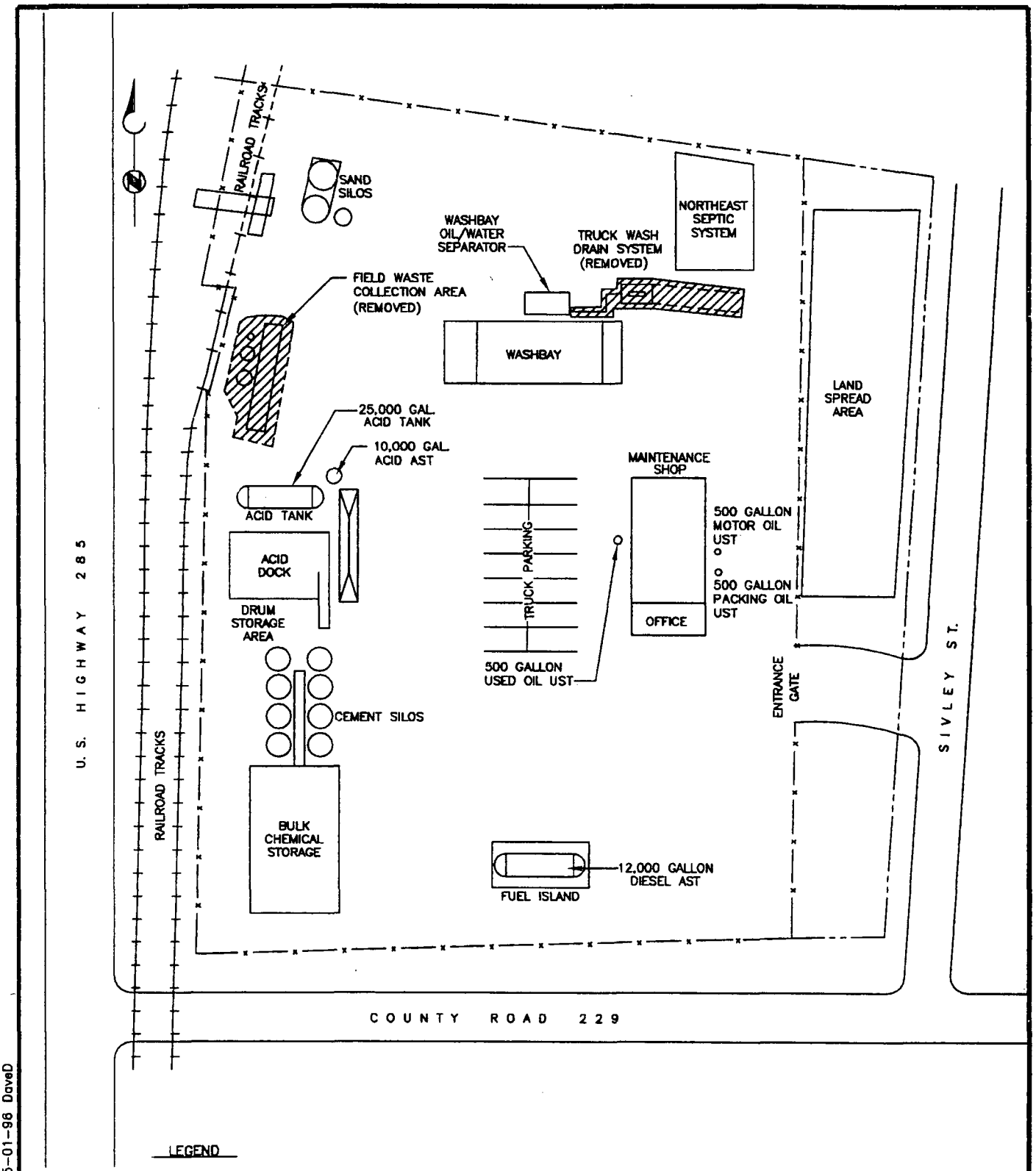
DATE: 8/9/96

PROJECT NUMBER: 2988.27

FIGURE NUMBER: 1

FIGURE 2

Site Plan



LEGEND

- BJ SERVICES FENCE LINE
- RAILROAD TRACKS
- BJ SERVICES PROPERTY LINE

T:\2988\EXCAVLOC (1=1) 05-01-96 DaveD

BROWN AND CALDWELL
HOUSTON, TEXAS

SUBMITTED: _____ DATE: _____
PROJECT MANAGER

APPROVED: _____ DATE: _____
BROWN AND CALDWELL

0 0 0
NOT TO SCALE

DRAWN BY: DMD DATE 10/25

CHK'D BY: ____ DATE ____

APPROVED: ____ DATE ____

TITLE: SITE PLAN

CLIENT: BJ SERVICES COMPANY, U.S.A.

SITE LOCATION: ARTESIA, NEW MEXICO

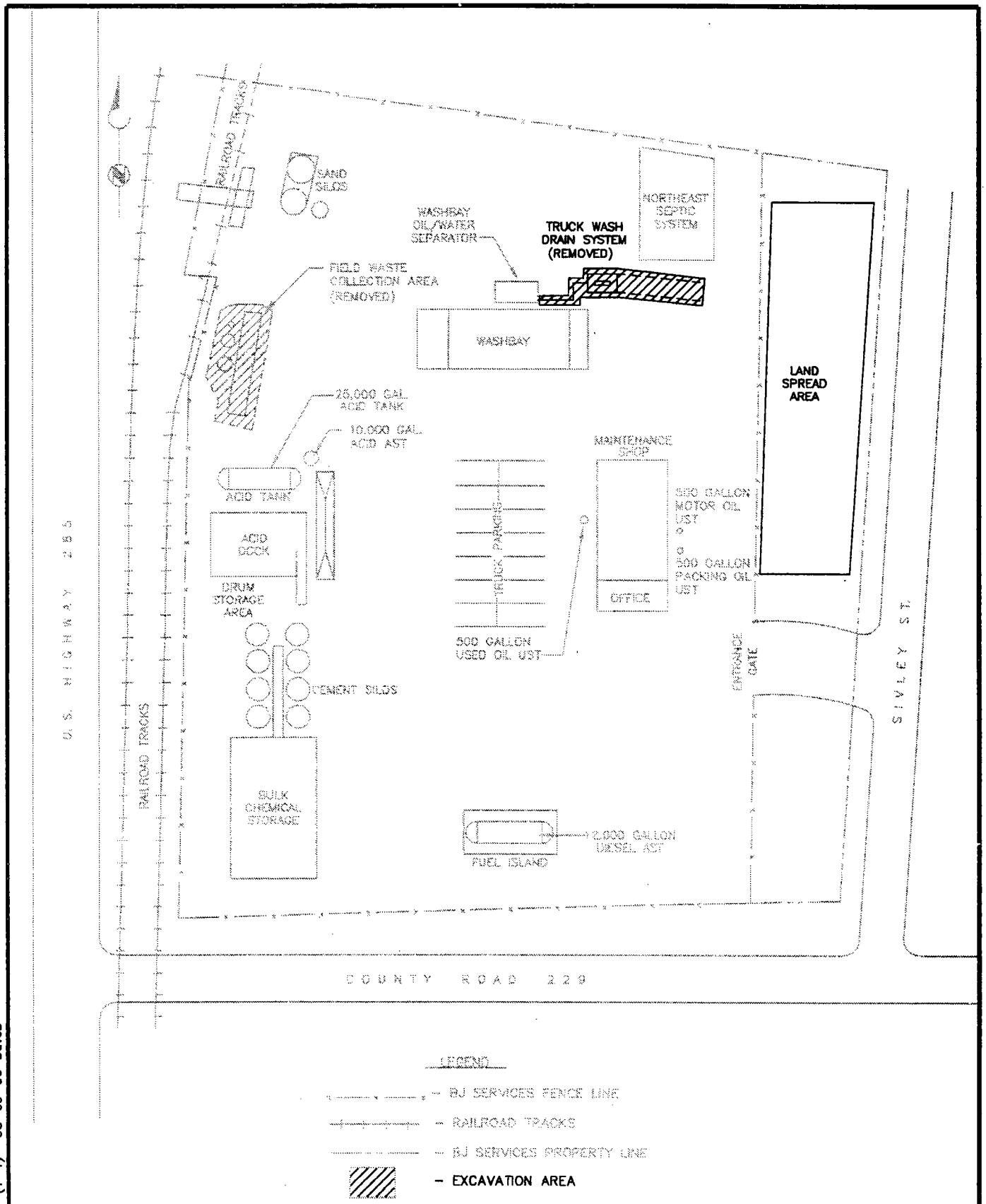
DATE: 5/7/96

PROJECT NUMBER: 2988-27

FIGURE NUMBER: 2

FIGURE 3

Excavation Location and Land Spread Area



BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: PROJECT MANAGER DATE: APPROVED: BROWN AND CALDWELL DATE:	0 0 0 NOT TO SCALE DRAWN BY: DMD DATE 10/29 CHK'D BY: DATE APPROVED: DATE	TITLE: EXCAVATION LOCATION AND LAND SPREAD AREA CLIENT: BJ SERVICES COMPANY, U.S.A. SITE LOCATION: ARTESIA, NEW MEXICO	DATE: 8/9/96 PROJECT NUMBER: 2988-27 FIGURE NUMBER: 3

T:\2988\EXCAVLOC (1=1) 08-09-96 DaveD

TABLES

TABLE 1

TWDS - Analytical Results and OCD Action Levels

Sample I.D.	TPH Diesel mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene mg/kg	Total BTEX (Calculated) mg/kg
LABORATORY ANALYSES:						
Tank Footprint	6.3	< 0.010	< 0.010	< 0.010	< 0.030	<0.060
Midpoint of Drain Line	6.2	< 0.010	< 0.010	< 0.010	< 0.030	<0.060
Midpoint of Leach Lines	45	< 0.010	< 0.010	< 0.010	0.069	0.069
Stockpile Composite	< 5.0	< 0.010	0.016	< 0.010	< 0.010	0.016
Land Spread Composite	< 5.0	0.010	0.016	0.010	0.041	0.077
FIELD ANALYSES:						
Tank Footprint	26	NA	NA	NA	NA	NA
Midpoint of Drain Line	5	NA	NA	NA	NA	NA
Midpoint of Leach Lines - North Sidewall	70	NA	NA	NA	NA	NA
Midpoint of Leach Lines - South Sidewall	81	NA	NA	NA	NA	NA
OCD ACTION LEVEL	**100**	**10**	**NS**	**NS**	**NS**	**50**

NA = Not Analyzed
NS = Not Specified

TABLE 2

TWDS - Metals Results

Sample I.D.	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Chromium mg/kg	Lead mg/kg	Mercury mg/kg	Selenium mg/kg	Silver mg/kg
Tank Footprint	< 1.0	13	0.54	6.7	2.8	< 0.02	< 0.75	< 0.35
Midpoint Drain Line	2.0	130	0.55	5.6	3.6	< 0.02	< 0.75	< 0.35
Midpoint Leach Lines	< 1.0	138	0.91	6.7	2.6	< 0.02	< 0.75	< 0.35

TABLE 3
RCRA Analytical Results - TWDS-Stockpile

Parameter	Observed Concentration	Units	Regulatory Limits
RCI			
Flashpoint	Not Ignitable	°C	< 60
pH	7.9	standard units	2.0≤pH≤12.5
Cyanides	< 1.0	mg/kg	≤ 250
Sulfides	< 4.0	mg/kg	≤ 500
TCLP Metals			
Arsenic	< 0.20	mg/L	< 5.0
Barium	0.43	mg/L	< 100.0
Cadmium	< 0.04	mg/L	< 1.0
Chromium	< 0.05	mg/L	< 5.0
Lead	< 0.10	mg/L	< 5.0
Mercury	< 0.004	mg/L	< 0.2
Selenium	< 0.15	mg/L	< 1.0
Silver	< 0.07	mg/L	< 5.0
TCLP Volatiles			
Benzene	< 0.003	mg/L	< 0.5
Carbon Tetrachloride	< 0.003	mg/L	< 0.5
Chlorobenzene	< 0.003	mg/L	< 100.0
Chloroform	< 0.003	mg/L	< 6.0
1,4-Dichlorobenzene	< 0.003	mg/L	< 7.5
1,2-Dichloroethane	< 0.003	mg/L	< 0.5
1,1-Dichloroethylene	< 0.003	mg/L	< 0.7
Methyl ethyl ketone	< 0.010	mg/L	< 200.0
Tetrachloroethylene	< 0.003	mg/L	< 0.7
Trichloroethylene	< 0.003	mg/L	< 0.5
Vinyl Chloride	< 0.005	mg/L	< 0.2
TCLP Semivolatiles			
2,4-Dinitrotoluene	< 0.003	mg/L	< 0.13
o-Cresol	< 0.003	mg/L	< 200.0
m-Cresol	< 0.003	mg/L	< 200.0
p-Cresol	< 0.003	mg/L	< 200.0
Cresol	< 0.003	mg/L	< 200.0
Hexachlorobenzene	< 0.003	mg/L	< 0.13
Hexachlorobutadiene	< 0.003	mg/L	< 0.5
Hexachloroethane	< 0.003	mg/L	< 3.0
Nitrobenzene	< 0.003	mg/L	< 2.0
Pentachlorophenol	< 0.003	mg/L	< 100.0
Pyridine	< 0.003	mg/L	< 5.0
2,4,5-Trichlorophenol	< 0.003	mg/L	< 400.0
2,4,6-Trichlorophenol	< 0.003	mg/L	< 2.0

APPENDICES

APPENDIX A

CLOSURE PLAN SUMMARY
TRUCK WASH DRAIN LINE AND TANK
(JANUARY 10, 1996)

BROWN AND CALDWELL

January 10, 1996

Mr. Mark Ashley
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Subject: Closure Plan Summary
Truck Wash Drain Line and Tank
BJ Services Facility in Artesia, New Mexico

Dear Mr. Ashley:

During field activities at the BJ Services Company U.S.A. (BJ Services) Artesia, NM facility, site personnel identified the location of a drainage system connected to the truck wash facility. This Truck Wash Drain System consists of a drain line leading from the truck wash oil/water separator to a single tank. Figure 1 shows the approximate location of the Truck Wash Drain System.

BJ Services intends to close the system by removing both the drain line and the tank. Excavated soils will be tested for ultimate disposal in an OCD approved facility. The excavated tank and piping will also be disposed of in an OCD approved facility. Field personnel will verify closure by collecting samples from the soils beneath the center point of the drain line and beneath the tank footprint. These samples will be split for field screening and for submission to a laboratory. Field screening for TPH will be conducted using a field test kit. Laboratory samples will be analyzed for TPH and total BTEX, total benzene, and total metals (8 RCRA metals). The TPH, BTEX and benzene results will be compared to previously determined OCD action levels for these parameters, as specified by site scoring criteria. Table 1 lists the OCD action levels for TPH, BTEX and benzene when site scoring is greater that 19. Total metal results will be multiplied by 5% for an estimated comparison to RCRA TCLP standard action levels.

Once the drain line and tank are removed, the discharge point from the oil/water separator will be plugged. BJ Services will then discharge truck wash water from the oil/water separator to an above-ground frac tank. The frac tank liquid will be periodically disposed of at an OCD approved disposal facility.

Closure activities will commence upon your approval of the closure approach discussed above. If you have any questions concerning the contents of this letter, please call either Tim Jenkins or Bob Jennings at 713-759-0999.

Very Truly Yours,

BROWN AND CALDWELL

Timothy L. Jenkins
Associate Engineer

Enclosures:

Table 1	OCD Action Levels
Figure 1	Site Plan and Drain System Location

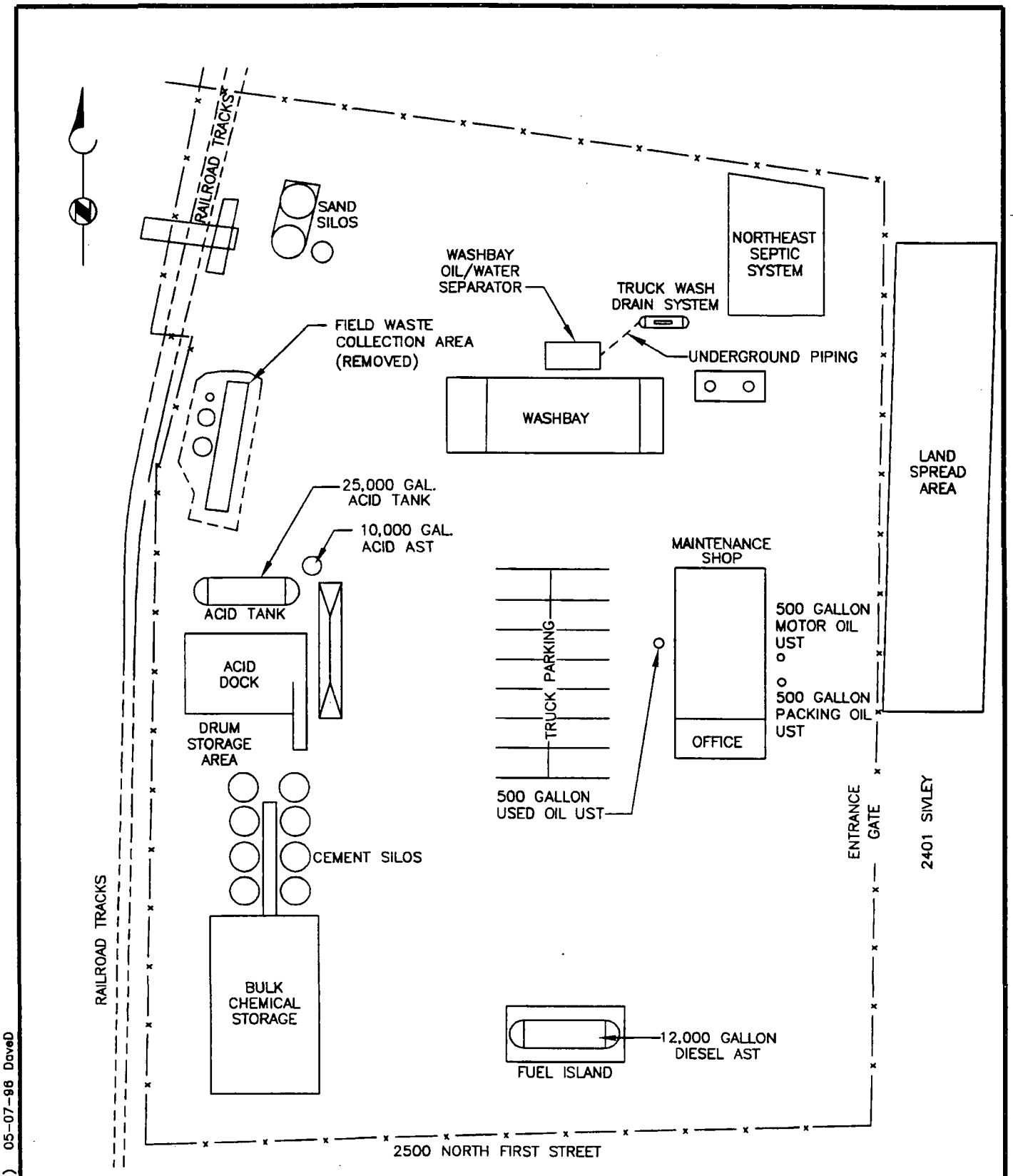
TLJ/RNJ/bjw

TABLE 1

OCD Action Levels

	TPH (mg/kg)	Total BTEX (mg/kg)	Benzene (mg/kg)
OCD Action Level	**100**	**50**	**10**

Note: OCD Action Levels assume a site scoring of -> 19. The Artesia Facility was previously scored at 20.



T:\2988\ARTESIA2 (1=1) 05-07-96 DaveD

BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: PROJECT MANAGER DATE: APPROVED: BROWN AND CALDWELL DATE:	0 0 0 NOT TO SCALE DRAWN BY: DMD DATE 10/25 CHK'D BY: DATE APPROVED: DATE	TITLE: SITE PLAN CLIENT: BJ SERVICES COMPANY, U.S.A. SITE LOCATION: ARTESIA, NEW MEXICO	DATE: 5/7/96 PROJECT NUMBER: 2988-07 FIGURE NUMBER: 1

APPENDIX B

LAND SPREADING OF EXCAVATED SOILS
TRUCK WASH DRAIN SYSTEM
(FEBRUARY 26, 1996)

BROWN AND CALDWELL

February 26, 1996

Mr. Mark Ashley
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

2988.27

Subject: Land Spreading of Excavated Soils
Truck Wash Drain System
BJ Services Facility in Artesia, New Mexico

Dear Mr. Ashley:

Beginning February 2, 1996, Brown and Caldwell removed the tank and drain line to fulfill the Truck Wash Drain System closure at the BJ Services Company U.S.A. (BJ Services) Artesia, NM facility, in accordance with Brown and Caldwell's letter of January 10, 1996. During removal activities, two previously unknown leaching lines were found to be connected to the tank. Upon approval from the NMOCD, these lines and the surrounding soil were subsequently removed as well. Approximately 300 cubic yards of soil were excavated and stockpiled on-site. Based on the laboratory results summarized in this letter, Brown and Caldwell proposes to dispose of these excavated soils in a one-time application of an on-site land spreading operation. A complete closure report will be submitted to the OCD at a future date describing the closure activities for the Truck Wash Drain System.

The stockpile consists of soil generated during the removal of the tank, drain line, and leaching lines that were part of the drain system. Soil excavated from around the leaching lines constitutes the majority of the material to be spread. The stockpiled material is located south of the leaching lines and east of Truck Wash Bay. See Figure 1 for the approximate locations of the stockpile and Truck Wash Drain System. Tank concrete and drain line piping were disposed of separately, and therefore have not been incorporated into the stockpile.

Laboratory results of the stockpile composite sample indicated that the material was non-hazardous based on a full TCLP and R.C.I. analysis, that TPH levels were non-detect, and that

Environmental Engineering And Consulting • Analytical Services

1415 Louisiana, Suite 2500, Houston, TX 77002
(713) 759-0999 Fax (713) 759-0952

BTEX levels were also below OCD action levels. Table 1 presents the stockpile analytical results along with a comparison to OCD action levels for this facility.

BJ Services intends to move the stockpiled soil from its present location to a land spreading area as shown in Figure 2. Once the land spread area is established, actual dimensions will be measured, and a sampling grid placed at 30 feet intervals both north and east as shown in Figure 3. Based on the anticipated dimensions, 12 samples locations will be created by the grid. A composite sample will be collected using approximately equal volumes of soil from each sample location. The composite sample will then be placed in laboratory supplied jars and submitted to a laboratory for TPH, total BTEX, and total benzene analysis. If the results are below the action levels for these parameters (refer to Table 1), then no further action will be required, and the land spread closure report will be prepared.

If levels of TPH, total BTEX, or total benzene exceed the OCD action levels, then bioenhancement activities such as periodic aeration, moisture control, and fertilization will commence. When the results are below the action levels in Table 1, no further action will be required, and the closure report will be prepared.

Land spreading activities will commence upon your approval of the approach discussed above. If you have any questions concerning the contents of this letter, please call either Tim Jenkins or Bob Jennings at 713-759-0999.

Very Truly Yours,

BROWN AND CALDWELL

Richard Raymond for

Timothy L. Jenkins
Associate Engineer

Robert N. Jennings, P.E.
Vice President

Enclosures: Table 1 OCD Action Levels
Figure 1 Site Plan and Stockpile Location
Figure 2 Proposed Landspread Location
Figure 3 Proposed Grid Sampling

TABLE 1

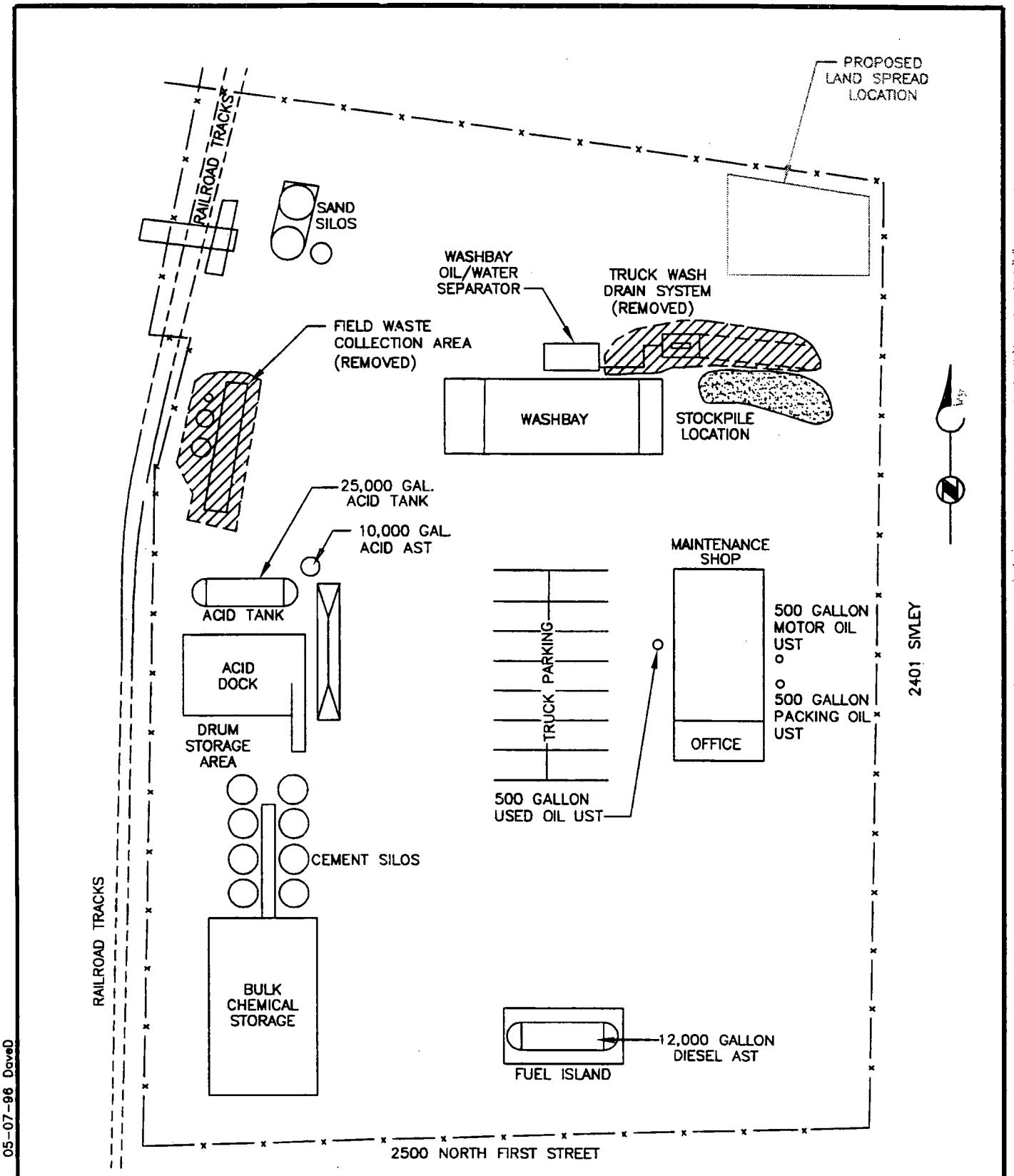
Analytical Results and Regulatory Action Levels

	TPH (mg/kg)	Total BTEX (mg/kg)	Benzene (mg/kg)	TCLP Barium [b] (mg/L)
TWDS - Piles	<5	0.016	< 0.01	0.43
OCD Action Level [a]	100	50	10	
RCRA Action Level				100

Notes:

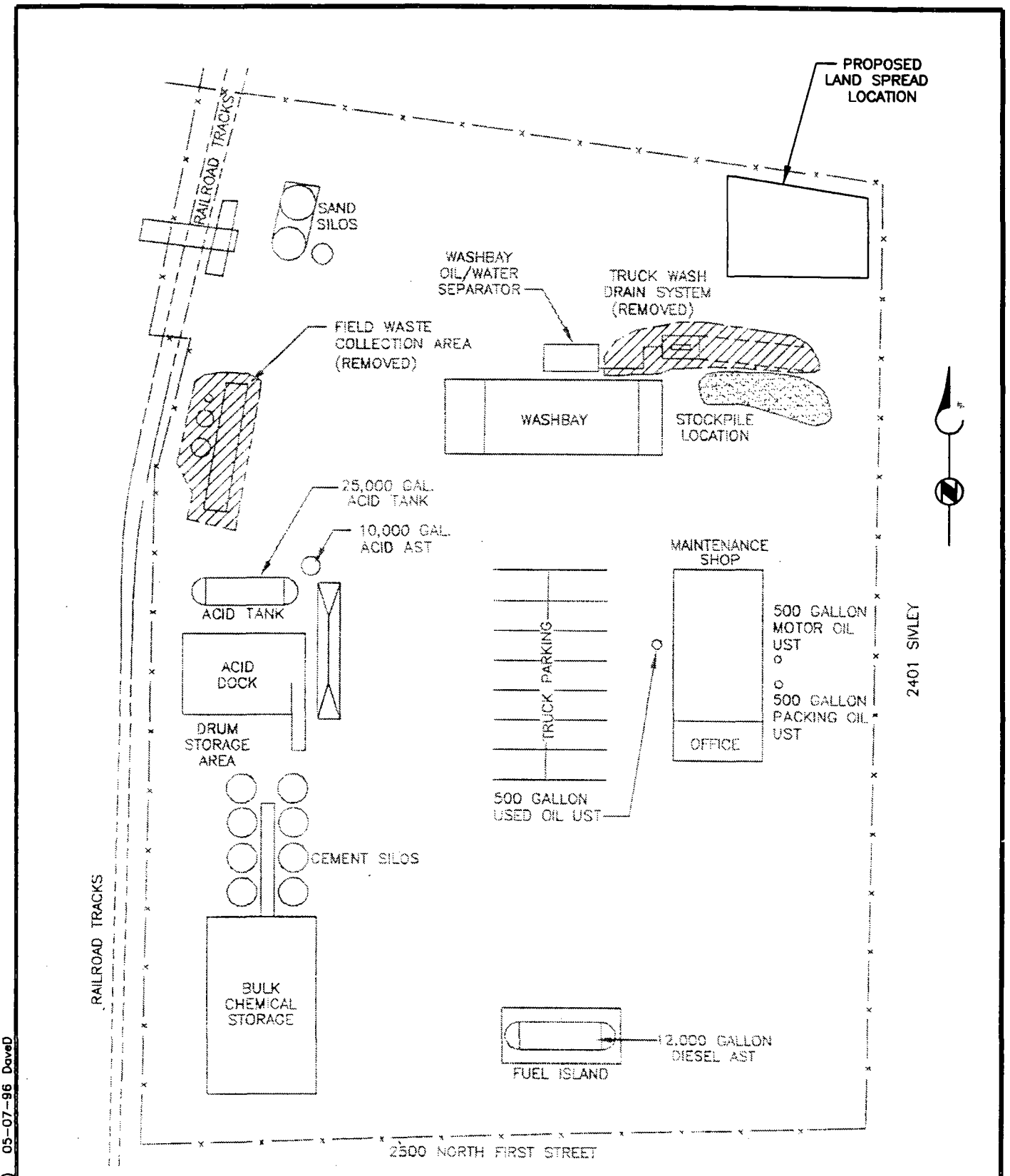
(a) OCD Action Levels assume a site scoring of > 19. The Artesia Facility was previously scored at 20.

(b) RCRA Regulatory limits for all other TCLP parameters are not summarized since the analytical results showed that these parameters were not detected in the composite sample collected from the stockpile.



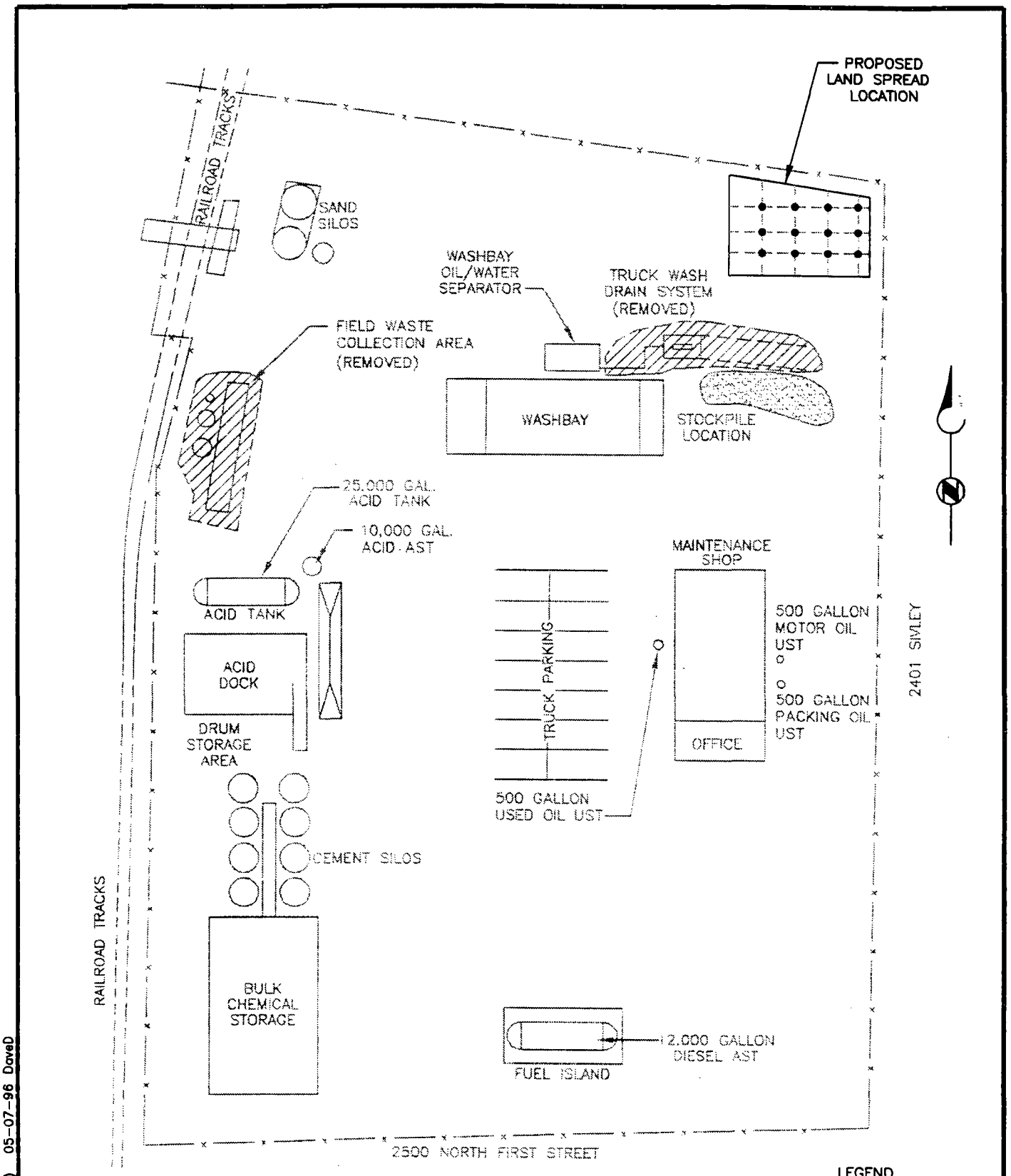
T:\2988\SITEPLAN (1=1) 05-07-96 DaveD

BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	0 0 0 NOT TO SCALE DRAWN BY: DMD DATE 10/25 CHK'D BY: ____ DATE ____ APPROVED: ____ DATE ____	TITLE SITE PLAN CLIENT BJ SERVICES COMPANY, U.S.A. SITE LOCATION ARTESIA, NEW MEXICO	DATE 5/7/96 PROJECT NUMBER 2988-27 FIGURE NUMBER 1



T:\2988\LANDSPRD (1=1) 05-07-96 DaveD

BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: PROJECT MANAGER DATE: APPROVED: BROWN AND CALDWELL DATE:	0 0 0 NOT TO SCALE DRAWN BY: DMD DATE 10/22 CHK'D BY: DATE APPROVED: DATE	TITLE: PROPOSED LAND SPREADING LOCATION CLIENT: BJ SERVICES COMPANY, U.S.A. SITE LOCATION: ARTESIA, NEW MEXICO	DATE: 5/7/96 PROJECT NUMBER: 2988-27 FIGURE NUMBER: 2



BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: PROJECT MANAGER DATE: APPROVED: BROWN AND CALDWELL DATE:	0 0 0 NOT TO SCALE DRAWN BY: DTD DATE 10/25 CHK'D BY: DATE APPROVED: DATE	TITLE: SAMPLE LOCATIONS AT PROPOSED LAND SPREADING AREA CLIENT: BJ SERVICES COMPANY, U.S.A. SITE LOCATION: ARTESIA, NEW MEXICO	DATE: 5/7/96 PROJECT NUMBER: 2988-27 FIGURE NUMBER: 3	

T:\2988\SMPLLOCN (1=1) 05-07-96 DaveD

APPENDIX C

UNLINED SURFACE IMPOUNDMENT CLOSURE GUIDELINES, 2/93

UNLINED

SURFACE IMPOUNDMENT

CLOSURE

GUIDELINES

(FEBRUARY 1993)

New Mexico Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

TABLE OF CONTENTS

PREFACE

The following document does not require that currently operating or permitted unlined surface impoundments be closed. This document is to be used only as a guide when closing unlined surface impoundments used for the containment of exploration, production, processing and storage wastes regulated by the New Mexico Oil Conservation Division (OCD).

OCD requires submission and approval of plans and procedures for closure prior to the actual closure of any unlined surface impoundment. Procedures may deviate from the following guidelines if it can be shown that the proposed procedure will remove or isolate contaminants in such a manner that fresh waters, public health and the environment will not be impacted by remaining contaminants. Specific constituents and/or requirements for soil and ground water analysis and/or remediation may vary depending on site specific conditions.

If a number of unlined impoundments are to be closed by a single company, the company may submit one area-wide plan stating the specific location of each unlined impoundment to be closed, along with the procedures to be used during closure. Deviations from approved plans will require OCD notification and approval.

INTRODUCTION

These guidelines are intended to provide guidance for closure of unlined surface impoundments in a manner that assures protection of fresh waters, public health and the environment.

The New Mexico State Engineer has designated fresh waters as all surface waters and ground waters of the state containing 10,000 milligrams per liter or less of total dissolved solids (TDS) for which there is a present or reasonably foreseeable beneficial use. As stated in New Mexico Oil Conservation Commission (OCC) Order No. R-3221-D, "reasonably foreseeable" generally has been taken to mean a time period of not less than 200 years into the future. An unlined surface impoundment is defined as any unlined below grade feature which receives anything other than fresh water. The term "unlined surface impoundment" includes but is not limited to the following types of unlined features: produced water pits, dehydrator pits, blowdown pits, tank drain pits, pipeline drip collector pits, compressor scrubber pits, flare pits, and all other unlined pits which receive exploration, production and processing wastes regulated by the OCD. Excluded from this definition are pits constructed exclusively for drill cuttings and drilling fluids which are regulated under OCD Rule 105.

Prior to commencing closure of an unlined surface impoundment, a closure plan must be submitted to and approved by OCD. A closure plan may apply to more than one unlined impoundment. At a minimum, a closure plan should include the following elements:

1. The locations of all pits to be closed by township, range, section, unit letter and footages or other OCD approved methods.

2. The procedures which will be used to conduct the soil and ground water assessments and the circumstances under which an assessment of ground water will be conducted.

3. The procedures which will be used to manage, remediate, or dispose of contaminated soil and ground water.

I. SITE ASSESSMENT

Prior to final closure (Section VI), the party responsible for an unlined surface impoundment should perform an assessment to determine the extent to which soils and/or ground water may have been impacted by the operation of the impoundment. Assessment results will form the basis of any required remediation. The sites will be assessed for the severity of contamination and potential environmental and public health threats using a risk based ranking system.

The following characteristics must be determined in order to evaluate a sites potential risks, the need for remedial action and, if necessary, the level of cleanup required at the site:

A. GENERAL SITE CHARACTERISTICS

1. Depth To Ground Water

The operator should determine the depth to ground water at each site. The depth to ground water is defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water. If the exact depth to ground water is unknown, the ground water depth can be estimated using either local water well information, published regional ground water information, data on file with the New Mexico State Engineer Office or the vertical distance from adjacent ground water or surface water.

2. Wellhead Protection Area

The operator should determine the horizontal distance from all water sources and private, domestic water sources. A water source shall mean wells, springs or other sources of fresh water extraction. Private, domestic water sources shall mean those water sources used by less than five households for domestic or stock purposes.

3. Distance To Nearest Surface Water Body

The operator should determine the horizontal distance to all downgradient surface water bodies. Surface water bodies are defined as perennial rivers, streams, creeks, irrigation canals and ditches, lakes and ponds.

B. SOIL/WASTE CHARACTERISTICS

Soils/wastes within and beneath the unlined surface impoundment should be evaluated to determine the type and extent of contamination at the site. In order to assess the level of contamination at the unlined impoundment, observations should be made of the soils at the surface and a

sample of the potentially impacted soils should be taken from the interval at least 3 feet into the undisturbed native soils beneath the bottom of the pit. Samples should be obtained according to the sampling procedures in Sections III.A. and III.B. This may be accomplished using a backhoe, drill rig, hand auger, shovel or other means.

Initial assessment of soil contaminant levels is not required if an operator proposes to determine the final soil contaminant concentrations after a soil removal or remediation pursuant to section IV.A.

Varying degrees of contamination described below may co-exist at an individual site. The following sections describe the degrees of contamination that should be documented during the assessment of the level of soil contamination:

1. **Highly Contaminated/Saturated Soils**

   Highly contaminated/saturated soils are defined as those soils which contain a free liquid hydrocarbon phase or exhibits gross hydrocarbon staining.

2. **Unsaturated Contaminated Soils**

   Unsaturated contaminated soils are those soils which are not highly contaminated or saturated, as described above, but contain measurable concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH). Sampling and analytical methods for determining contaminant concentrations are described in detail in Section III.A. and III.B.

   (NOTE: The above definitions apply only to oilfield contaminated soils which are exempt from federal RCRA Subtitle C hazardous waste provisions. Unlined impoundments receiving non-exempt wastes are subject to evaluation for RCRA hazardous waste characteristics.)

C. **GROUND WATER QUALITY**

If ground water is encountered during the soil/waste characterization of the impacted soils, a sample should be obtained to assess potential impacts on ground water quality. Ground water samples should be obtained using the sampling procedures in Section III.C. If there is a reasonable probability of ground water contamination based upon the level of contaminants in the soils directly beneath the pit or the extent of soil contamination defined during remedial activities, monitor wells may be required to assess potential impacts on ground water and the extent of ground water contamination.

II. SOIL AND WATER REMEDIATION LEVELS

A. SOILS

1. Highly Contaminated/Saturated Soils

Highly contaminated/saturated soils should be remediated insitu or excavated to the maximum extent practicable and remediated using techniques described in Section IV.A.

2. Unsaturated Contaminated Soils

The general site characteristics obtained during the site assessment (Section I.A.) will be used to determine the appropriate soil remediation levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria below to determine their relative threat to public health, fresh waters and the environment.

a. Ranking Criteria

Depth To Ground Water	Ranking Score
<50 feet	20
50 - 99	10
>100	0

Wellhead Protection Area

<1000 feet from a water source,or;
<200 feet from private domestic water source

Yes	20
No	0

Distance To Surface Water Body

<200 horizontal feet	20
200 - 1000 horizontal feet	10
>1000 horizontal feet	0

b. Recommended Remediation Level

The total ranking score determines the level of remediation that may be required at any given site. The total ranking score is the sum of all four individual ranking criteria listed in Section II.A.2.a. The table below lists the remediation level that may be required for the appropriate total ranking score.

(NOTE: The OCD retains the right to require remediation to more stringent levels than those proposed below if warranted by site specific conditions (ie. native soil type, location relative to population centers and future use of the site or other appropriate site specific conditions.)

	Total Ranking Score		
	>19	10 - 19	0 - 9
Benzene(ppm)*	10	10	10
BTEX(ppm)*	50	50	50
TPH(ppm)**	100	1000	5000

* A field soil vapor headspace measurement (Section III.B.1) of 100 ppm may be substituted for a laboratory analysis of the Benzene and BTEX concentration limits.

** The contaminant concentration for TPH is the concentration above background levels.

B. **GROUND WATER**

Contaminated ground water is fresh ground water which contains free phase products, measurable concentrations of dissolved phase volatile organic constituents or other dissolved constituents in excess of the natural background water quality. Ground water contaminated in excess of the New Mexico Water Quality Control Commission (WQCC) ground water standards or natural background water quality will require remediation.

III. SOIL AND WATER SAMPLING PROCEDURES

Below are the sampling procedures for soil and ground water contaminant investigations of unlined surface impoundments that have received RCRA Subtitle C exempt oil field exploration and

production wastes. Unlined surface impoundments that have received non-exempt RCRA wastes will be required to be tested to demonstrate that the wastes are not characteristically hazardous according to RCRA regulations.

A. HIGHLY CONTAMINATED OR SATURATED SOILS

The following method is used to determine if soils are highly contaminated or saturated:

1. Physical Observations

Study a representative sample of the soil for observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase. A soil exhibiting any of these characteristics is considered highly contaminated or saturated.

B. UNSATURATED CONTAMINATED SOILS

The following methods may be used for determining the magnitude of contamination in unsaturated soils:

1. Soil Sampling Procedures for Headspace Analysis

A headspace analysis may be used to determine the total volatile organic vapor concentrations in soils (ie. in lieu of a laboratory analysis for benzene and BTEX but not in lieu of a TPH analysis). Headspace analysis procedures should be conducted according to OCD approved industry standards or other OCD-approved procedures. Accepted OCD procedures are as follows:

a) Fill a 0.5 liter or larger jar half full of sample and seal the top tightly with aluminum foil or fill a one quart zip-lock bag one-half full of sample and seal the top of the bag leaving the remainder of the bag filled with air.

b) Ensure that the sample temperature is between 15 to 25 degrees Celsius (59-77 degrees Fahrenheit).

c) Allow aromatic hydrocarbon vapors to develop within the headspace of the sample jar or bag for 5 to 10 minutes. During this period, the sample jar should be shaken vigorously for 1 minute or the contents of the bag should be gently massaged to break up soil clods.

d) If using a jar, pierce the aluminum foil seal with the probe of either a PID or FID organic vapor meter (OVM), and then record the highest (peak) measurement. If using a bag, carefully open one end of the bag and insert the probe of the OVM into

the bag and re-seal the bag around the probe as much as possible to prevent vapors from escaping. Record the peak measurement. The OVM must be calibrated to assume a benzene response factor.

2. Soil Sampling Procedures For Laboratory Analysis

a. Sampling Procedures

Soil sampling for laboratory analysis should be conducted according to OCD approved industry standards or other OCD-approved procedures. Information on specific industry standards may be obtained from the OCD. Accepted OCD soil sampling procedures and laboratory analytical methods are as follows:

i) Collect samples in clean, air-tight glass jars supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier.

ii) Label the samples with a unique code for each sample.

iii) Cool and store samples with cold packs or on ice.

iv) Promptly ship sample to the lab for analysis following chain of custody procedures.

v) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

b. Analytical Methods

All soil samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are laboratory analytical methods commonly accepted by OCD for analysis of soil samples analyzed for petroleum related constituents. Additional analyses may be required if the impoundment has been used for anything other than petroleum based fluids or produced water.

i) Benzene, toluene, ethylbenzene and xylene

- EPA Method 602/8020

ii) Total Petroleum Hydrocarbons

- EPA Method 418.1, or;
- EPA Method Modified 8015

C. GROUND WATER SAMPLING

If an investigation of ground water quality is deemed necessary, it should be conducted according to OCD approved industry standards or other OCD-approved procedures. Information concerning specific industry standards may be obtained from the OCD. The following methods are standard accepted OCD methods which can be used to sample and analyze ground water at RCRA exempt sites (Note: The installation of monitor wells is not required if the OCD approves of an alternate ground water investigation or sampling technique):

1. Monitor Well Installation/Location

One monitor well should be installed adjacent to and hydrologically down-gradient from the unlined surface impoundment to determine if protectable fresh water has been impacted by the disposal activities. Additional monitor wells, located up-gradient and down-gradient of the impoundment, may be required to delineate the full extent of ground water contamination if ground water near the pit has been found to be contaminated.

2. Monitor Well Construction

a) Monitor well construction materials should be:

   i) selected according to industry standards;

   ii) chemically resistant to the contaminants to be monitored; and

   iii) able to be installed without the use of glues or adhesives.

b) Monitor wells should be constructed according to OCD approved industry standards to prevent migration of contaminants along the well casing, and with a minimum of five feet of well screen above the water table to accommodate seasonal fluctuations in the static water table.

3. Monitor Well Development

When ground water is collected for analysis from monitoring wells, the wells should be developed prior to sampling. The objective of monitor well development is to repair damage done to the formation by the drilling operation so that the natural hydraulic properties of the formation are restored and to remove any fluids introduced into the formation that could compromise the integrity of the sample. Monitoring well development is accomplished by purging fluid from the well until the pH and specific conductivity have stabilized and turbidity has been reduced to the greatest extent possible.

4. Sampling Procedures

Ground water should be sampled according to OCD accepted standards or other OCD approved methods. Samples should be collected in clean containers supplied by the laboratory which will conduct the analysis or from a reliable laboratory equipment supplier. Samples for different analyses require specific types of containers. The OCD or the laboratory can provide information on the types of containers required for sample collection. The following procedures are accepted by OCD as standard sampling procedures:

a) Monitor wells should be purged of a minimum of three well volumes of ground water using a clean bailer prior to sampling to ensure that the sample represents the quality of the ground water in the formation and not stagnant water in the well bore.

b) Collect samples in appropriate sample containers containing the appropriate preservative for the analysis required. No bubbles or headspace should remain in the sample container.

c) Label the sample containers with a unique code for each sample.

d) Cool and store samples with cold packs or on ice.

e) Promptly ship sample to the lab for analysis following chain of custody procedures.

f) All samples must be analyzed within the holding times for the laboratory analytical method specified by EPA.

5. Ground Water Laboratory Analysis

Samples should be analyzed for potential ground water contaminants contained in the waste stream, as defined by the New Mexico Water Quality Control Commission (WQCC). All ground water samples must be analyzed using EPA methods, or by other OCD approved methods and must be analyzed within the holding time specified by the method. Below are OCD accepted laboratory analytical methods for analysis of ground water samples analyzed for petroleum related constituents. Additional analyses may be required if the impoundment has been used for anything other than petroleum based fluids or produced water.

a. Analytical Methods

i.) Benzene, Toluene, Ethylbenzene and Xylene

- EPA Method 602/8020

ii.) Major Cations and Anions

- Various EPA or standard methods

iii.) Heavy Metals

- EPA Method 6010, or;
- Various EPA 7000 series methods

iv.) Polynuclear Aromatic Hydrocarbons

- EPA Method 8100

IV. REMEDIATION

The following discussion summarizes alternatives for remediation of contaminated soil and ground water as defined in Section II.A. and II.B. All procedures used are to be approved by OCD prior to commencement of remediation activities. Separate OCD-approval for remediation is not required if OCD has approved a closure plan which includes the site remediation technique for a particular site. All procedures which deviate from the closure plan, however, must be approved by OCD prior to commencement of remediation activities.

In lieu of remediation, OCD may accept an evaluation of risk which demonstrates that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh waters, public health and the environment.

A. SOIL REMEDIATION

When RCRA exempt or RCRA nonhazardous petroleum contaminated soil requires remediation, it should be remediated and managed according to the criteria described below or by other OCD approved procedures which will remove, treat, or isolate contaminants in order to protect fresh waters, public health and the environment.

1. Contaminated Soils

Highly contaminated/saturated soils and unsaturated contaminated soils exceeding the standards described in Section II.A.2.b. should be either:

a) Excavated from the ground until a representative sample from the walls and bottom of the excavation is below the contaminant specific remediation level listed in Section II.A.2.b or an alternate OCD approved remediation level, or;

b) Excavated to the maximum depth and horizontal extent practicable. Upon reaching this limit a sample should be taken from the walls and bottom of

the excavation to determine the remaining levels of soil contaminants, or;

c) Treated in place, as described in Section IV.A.2.b.ii. - Treatment of Soil in Place, until a representative sample is below the contaminant specific remediation level listed in Section II.A.2.b, or an alternate OCD approved remediation level, or;

d) Managed according to an OCD-approved alternate method.

2. Soil Management Options

All soil management options must be submitted to and approved by OCD prior to commencement of remediation activities. The following is a list of options for either on-site treatment and off-site treatment and/or disposal of contaminated soils:

a. Disposal

Excavated soils may be disposed of at an off-site OCD-approved facility.

b. Soil Treatment and Remediation Techniques

i. Landfarming

Onetime applications of contaminated soils may be landfarmed on location by spreading the soil in an approximately six inch lift within a bermed area. Only soils which do not contain free liquids can be landfarmed. The soils should be disced regularly to enhance biodegradation of the contaminants. If necessary, upon approval by OCD, moisture and nutrients may be added to the soil to enhance aerobic biodegradation.

In some high risk areas an impermeable liner may be required to prevent leaching of contaminants into the underlying soil.

Landfarming sites that will receive soils from more than one location are considered centralized sites and must be approved separately by OCD prior to operation.

ii. Insitu Soil Treatment

Insitu treatment may be accomplished using vapor venting, bioremediation or other OCD approved treatment systems.

iii. Alternate Methods

The OCD encourages alternate methods of soil remediation including, but not limited to, active soil aeration, composting, bioremediation, solidification, and thermal treatment. Use of alternate methods must be approved by OCD prior to implementation.

B. GROUND WATER REMEDIATION

1. Remediation Requirements

Ground water remediation activities will be reviewed and approved by OCD on a case by case basis prior to commencement of remedial activities. When contaminated ground water exceeds WQCC ground water standards, it should be remediated according to the criteria described below.

a. Free Phase Contamination

Free phase floating product should be removed from ground water through the use of skimming devices, total-fluid type pumps, or other OCD-approved methods.

b. Dissolved Phase Contamination

Ground water contaminated with dissolved phase constituents in excess of WQCC ground water standards can be remediated by either removing and treating the ground water, or treating the ground water in place. If treated waters are to be disposed of onto or below the ground surface, a discharge plan must be submitted and approved by OCD.

c. Alternate Methods

The OCD encourages other methods of ground water remediation including, but not limited to, air sparging and bioremediation. Use of alternate methods must be approved OCD prior to implementation.

V. TERMINATION OF REMEDIAL ACTION

Remedial action may be terminated when the criteria described below have been met:

A. SOIL

Contaminated soils requiring remediation should be remediated so that residual contaminant concentrations meet the recommended soil remediation level for a particular site as specified in Section II.A.2.b. Termination of remedial action will be approved by OCD upon a demonstration of completion of remediation as described above.

If soil action levels cannot practicably be attained, an evaluation of risk may be performed and provided to OCD for approval showing that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh water, public health and the environment.

B. GROUND WATER

A ground water remedial action may be terminated if all recoverable free phase product has been removed, and the concentration of the remaining dissolved phase contaminants in the ground water does not exceed New Mexico WQCC water quality standards or background levels. Termination of remedial action will be approved by OCD upon a demonstration of completion of remediation as described in above.

If the water quality standards cannot practicably be attained, an evaluation of risk may be performed and provided to OCD for approval showing that the remaining contaminants will not pose a threat to present or foreseeable beneficial use of fresh waters, human health and the environment.

VI. FINAL CLOSURE

Upon termination of any required soil remedial actions (Section V.) an unlined surface impoundment may be closed by backfilling, contouring to provide drainage away from the site and revegetating the site.

VII. CLOSURE REPORTS

Closure plans should provide a schedule for reporting the results of all closure activities.

District I
P.O. Box 1980, Hobbs, NM
District II
P.O. Drawer DD, Artesia, NM 88211
District III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: _____ **Telephone:** _____

Address: _____

Facility Or: Well Name _____

Location: Unit or Qtr/Qtr Sec_____ Sec___ T___ R____ County_____

Pit Type: Separator___ Dehydrator___ Other_____

Land Type: BLM___, State ___, Fee ___, Other_____

Pit Location: (Attach diagram)
Pit dimensions: length_____, width _____, depth _____
Reference: wellhead___, other _____
Footage from reference: _____
Direction from reference: _____ Degrees ___ East North ___ of ___ West South ___

Depth To Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 Points)	____
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes (20 points) No (0 points)	____
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet (20 points) 200 feet to 1000 feet (10 points) Greater than 1000 feet (0 points)	____
	RANKING SCORE (TOTAL POINTS):	____

Date Remediation Started: _____ **Date Completed:** _____

Remediation Method: (Check all appropriate sections)
Excavation ___ Approx. cubic yards _____
Landfarmed ___ Insitu Bioremediation ___
Other _____
_____

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility)
Onsite___ Offsite _____
_____

General Description Of Remedial Action: _____
_____
_____
_____
_____
_____

Ground Water Encountered: No ___ Yes ___ Depth _____

Final Pit: Closure Sampling: (If multiple samples, attach sample results and diagram of sample locations and depths)
Sample location _____
_____
Sample depth _____
Sample date _____ Sample time _____
Sample Results
Benzene(ppm) _____
Total BTEX(ppm) _____
Field headspace(ppm) _____
TPH _____

Ground Water Sample: Yes ___ No ___ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE

SIGNATURE PRINTED NAME AND TITLE

APPENDIX D

ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

February 8, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana St., Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ - Artesia: TWDS
2401 Sivley
Artesia, NM 88210

PROJECT NUMBER: 2988-27

SAMPLE I.D.: See Below

SAMPLE DATE: February 02, 1996
SAMPLE RECEIVED: February 06, 1996
TIME RECEIVED: 9:10AM
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: See Below

RESULTS:

Sample Number	Sample I.D.	TPH-Gas (mg/kg)	TPH-Diesel (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)	Total BTEX
56836	TWDS-TKFT	<5.0	6.3	<0.010	<0.010	<0.010	<0.030	*ND
56837	TWDS-DRLN	<5.0	6.2	<0.010	<0.010	<0.010	<0.030	*ND
56838	TWDS-LCHLN	14	45	<0.010	<0.010	<0.010	0.069	0.069
Detection Limits		**5.0**	**5.0**	**0.010**	**0.010**	**0.010**	**0.030**	

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
TPH	Cool to 4°C	8015				02/06/96	J. Karikari
Matrix Spikes:							
TPH - Gasoline			22.4	± 0.807	72		
Sample Number:	**56836**						
Surrogate:							
Trifluorotoluene			N/A	N/A	99		
Sample Number:	**56837**						
Surrogate:							
Trifluorotoluene			N/A	N/A	115		
Sample Number:	**56838**						
Surrogate:							
Trifluorotoluene			N/A	N/A	102		

SAMPLE NUMBERS: 56836-56838

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%		Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
Benzene	Cool to 4°C	8020	1.2	±	0.0004	102	02/06/96	J. Karikari
Toluene	Cool to 4°C	8020	2.0	±	0.0006	108	02/06/96	J. Karikari
Ethyl Benzene	Cool to 4°C	8020	1.4	±	0.0004	99	02/06/96	J. Karikari
Xylene	Cool to 4°C	8020	3.0	±	0.0010	109	02/06/96	J. Karikari
Sample Number:	**56836**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	101		
Sample Number:	**56837**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	97		
Sample Number:	**56838**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	99		

***ND** = None Detected.

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Weems
Reviewed By L'Cena Glover

NORMAL per Jim on 2/6/96 on TPH/BTEX - metals by NOON on 2/9/96

Chain-of-Custody 002603

ERMI
Bethany Tech Center
400 W. Bethany, Suite 190
Allen, Texas 75002
214-727-1123 (Local) * 800-228-ERMI (Long Distance)
214-727-1175 (Fax)

Company Name: BROWN & CALDWELL
Contact: JIM JENKINS
Address: 1415 LOUISIANA STE. 2500
City: HOUSTON State: TX Zip Code: 77002
Telephone: (713) 759-0999 Fax Number: (713) 759-0952

Comments: FAX; COPY ON WHITE PLUS ORIGINAL SENT TO TLJ

TAT: Normal ☒ Expedite ☐ (Call for Pricing) SEE BELOW

Billing Name: SAME AS ABOVE
Billing Address (if different):
City: State: Zip Code:
Telephone: Fax Number:
Purchase Order Number: 2988-27

Project Name: BJ-ARTESIA : TWDS Project Number: 2988-27
Address: 2401 SIVLEY
City: ARTESIA State: NM Zip Code: 88210
Sampler: TLJ Signature: [signature]

REQUESTED ANALYSES

ERMI Use Only	Field Sample I.D.	Sample Date	Sample Time	Matrix	# of Bottles	Preservative	Comp.	Grab	TPH (8015)	Total BETX (8020)	8 RCRA Metals (total)		TCLP VOLATILES	TCLP SEMIS	TCLP METALS	R.C.I
~~EXPEDITE~~	TWDS-TKFT	2/2/96	12:00	SOIL	1	56836		X	X	X	X					
~~EXPEDITE~~	TWDS-DRLN	2/2/96	13:30	SOIL	1	56837		X	X	X	X					
~~EXPEDITE~~	TWDS-LCHLN	2/2/96	14:00	SOIL	1	56838		X	X	X	X					
NORMAL →	TWDS-PILES	2/5/96	16:00	SOIL	1	56839	X	~~X~~	~~X~~				X	X	X	X

Relinquished By	Date	Time	Received By	Date	Time
[signature]	2/5/96	1615	FED EX	2/5/96	1615
Method of Shipment:		Received for ERMI By: [signature]		2/6	0910

See Reverse for Terms and Conditions

Revised 05/17/95

[redacted] Original [redacted] Return [redacted] Report [redacted] W: ER [redacted]: PINK [redacted] ner C [redacted]

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

February 9, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana Street, Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ-Artesia: TWDS
2401 Sivley
Artesia, NM 88210

PROJECT NUMBER: 2988-27

SAMPLE I.D.: TWDS-TKFT

SAMPLE DATE: February 02, 1996
SAMPLE TIME: 12:00PM
SAMPLE RECEIVED: February 06, 1996
TIME RECEIVED: 9:10AM
SAMPLE METHOD: Grab
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: 56836

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
Arsenic, Total	1.0	<1.0 (1)
Barium, Total	0.25	13
Cadmium, Total	0.20	0.54
Chromium, Total	0.25	6.7
Lead, Total	0.50	2.8
Mercury, Total	0.02	<0.02
Selenium, Total	0.75	<0.75
Silver, Total	0.35	<0.35

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Metals Digestion - ICP		3050				02/07/96	11:00AM	J. Marconi
Metals Digestion - Mercury		7471				02/08/96	11:30AM	J. Marconi
Arsenic	Cool to 4°C	6010	1.3	± 0.01	96	02/07/96	3:01PM	D. Bernhard
Barium	Cool to 4°C	6010	1.4	± 0.01	94	02/07/96	3:01PM	D. Bernhard
Cadmium	Cool to 4°C	6010	0.8	± 0.008	98	02/07/96	3:01PM	D. Bernhard
Chromium	Cool to 4°C	6010	1.0	± 0.01	101	02/07/96	3:01PM	D. Bernhard
Lead	Cool to 4°C	6010	0.8	± 0.008	97	02/07/96	3:01PM	D. Bernhard

SAMPLE NUMBERS: 56836

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Mercury	Cool to 4°C	7471	1.4	± 0.008	104	02/08/96	4:20PM	D. Bernhard
Selenium	Cool to 4°C	6010	4.1	± 0.04	94	02/07/96	3:01PM	D. Bernhard
Silver	Cool to 4°C	6010	1.6	± 0.006	95	02/07/96	3:01PM	D. Bernhard

(1) < = Less than Detection Limit.

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Pope
Reviewed By Shelly Weems

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

February 9, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana Street, Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ-Artesia: TWDS
2401 Sivley
Artesia, NM 88210

PROJECT NUMBER: 2988-27

SAMPLE I.D.: TWDS-DRLN

SAMPLE DATE: February 02, 1996
SAMPLE TIME: 1:30PM
SAMPLE RECEIVED: February 06, 1996
TIME RECEIVED: 9:10AM
SAMPLE METHOD: Grab
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: 56837

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
Arsenic, Total	1.0	2.0
Barium, Total	0.25	130
Cadmium, Total	0.20	0.55
Chromium, Total	0.25	5.6
Lead, Total	0.50	3.6
Mercury, Total	0.02	<0.02 (1)
Selenium, Total	0.75	<0.75
Silver, Total	0.35	<0.35

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Metals Digestion - ICP		3050				02/07/96	11:00AM	J. Marconi
Metals Digestion - Mercury		7471				02/08/96	11:30AM	J. Marconi
Arsenic	Cool to 4°C	6010	1.3	± 0.01	96	02/07/96	3:08PM	D. Bernhard
Barium	Cool to 4°C	6010	1.4	± 0.01	94	02/07/96	3:08PM	D. Bernhard
Cadmium	Cool to 4°C	6010	0.8	± 0.008	98	02/07/96	3:08PM	D. Bernhard
Chromium	Cool to 4°C	6010	1.0	± 0.01	101	02/07/96	3:08PM	D. Bernhard
Lead	Cool to 4°C	6010	0.8	± 0.008	97	02/07/96	3:08PM	D. Bernhard

SAMPLE NUMBERS: 56837

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Mercury	Cool to 4°C	7471	1.4	± 0.008	104	02/08/96	4:21PM	D. Bernhard
Selenium	Cool to 4°C	6010	4.1	± 0.04	94	02/07/96	3:08PM	D. Bernhard
Silver	Cool to 4°C	6010	1.6	± 0.006	95	02/07/96	3:08PM	D. Bernhard

(1) < = Less than Detection Limit.

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Pope
Reviewed By Shelly Weems

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

February 9, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana Street, Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ-Artesia: TWDS
2401 Sivley
Artesia, NM 88210

PROJECT NUMBER: 2988-27

SAMPLE I.D.: TWDS-LCHLN

SAMPLE DATE: February 02, 1996
SAMPLE TIME: 2:00PM
SAMPLE RECEIVED: February 06, 1996
TIME RECEIVED: 9:10AM
SAMPLE METHOD: Grab
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: 56838

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
Arsenic, Total	1.0	<1.0 (1)
Barium, Total	0.25	138
Cadmium, Total	0.20	0.91
Chromium, Total	0.25	6.7
Lead, Total	0.50	2.6
Mercury, Total	0.02	<0.02
Selenium, Total	0.75	<0.75
Silver, Total	0.35	<0.35

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Metals Digestion - ICP		3050				02/07/96	11:00AM	J. Marconi
Metals Digestion - Mercury		7471				02/08/96	11:30AM	J. Marconi
Arsenic	Cool to 4°C	6010	1.3	± 0.01	96	02/07/96	3:15PM	D. Bernhard
Barium	Cool to 4°C	6010	1.4	± 0.01	94	02/07/96	3:15PM	D. Bernhard
Cadmium	Cool to 4°C	6010	0.8	± 0.008	98	02/07/96	3:15PM	D. Bernhard
Chromium	Cool to 4°C	6010	1.0	± 0.01	101	02/07/96	3:15PM	D. Bernhard
Lead	Cool to 4°C	6010	0.8	± 0.008	97	02/07/96	3:15PM	D. Bernhard

SAMPLE NUMBERS: 56838

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Mercury	Cool to 4°C	7471	1.4	± 0.008	104	02/08/96	4:23PM	D. Bernhard
Selenium	Cool to 4°C	6010	4.1	± 0.04	94	02/07/96	3:15PM	D. Bernhard
Silver	Cool to 4°C	6010	1.6	± 0.006	95	02/07/96	3:15PM	D. Bernhard

(1) < = Less than Detection Limit.

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Pope SP
Reviewed By Shelly Weems SW

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

February 12, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana Street, Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ-Artesia: TWDS
2401 Sivley
Artesia, NM 88210

PROJECT NUMBER: 2988-27

SAMPLE I.D.: TWDS-Piles*

SAMPLE DATE: February 05, 1996
SAMPLE TIME: 4:00PM
SAMPLE RECEIVED: February 06, 1996
TIME RECEIVED: 9:10AM
SAMPLE METHOD: Composite
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: 56839

RESULTS:

Parameter	Regulatory Limits	Detection Limits	Observed Concentration
IGNITABILITY			
Flashpoint	>60°C (140°F)	0.5°C	**
CORROSIVITY			
pH	pH ≥ 2.0 pH units pH ≤12.5 pH units	0.1 units	7.9 units
REACTIVITY			
Cyanides, mg/kg	≤250	1.0	<1.0 (1)
Sulfides, mg/kg	≤500	4.0	<4.0
TCLP METALS			
Arsenic, mg/l	<5.0	0.20	<0.20
Barium, mg/l	<100.0	0.05	0.43
Cadmium, mg/l	<1.0	0.04	<0.04
Chromium, mg/l	<5.0	0.05	<0.05
Lead, mg/l	<5.0	0.10	<0.10
Mercury, mg/l	<0.2	0.004	<0.004
Selenium, mg/l	<1.0	0.15	<0.15
Silver, mg/l	<5.0	0.07	<0.07

SAMPLE NUMBER: 56839

Parameter	Regulatory Limits	Detection Limits	Observed Concentration
TCLP VOLATILE ORGANICS			
Benzene, mg/l	<0.5	0.003	<0.003
Carbon tetrachloride, mg/l	<0.5	0.003	<0.003
Chlorobenzene, mg/l	<100.0	0.003	<0.003
Chloroform, mg/l	<6.0	0.003	<0.003
1,4-Dichlorobenzene, mg/l	<7.5	0.003	<0.003
1,2-Dichloroethane, mg/l	<0.5	0.003	<0.003
1,1-Dichloroethylene, mg/l	<0.7	0.003	<0.003
Methyl ethyl ketone, mg/l	<200.0	0.010	<0.010
Tetrachloroethylene, mg/l	<0.7	0.003	<0.003
Trichloroethylene, mg/l	<0.5	0.003	<0.003
Vinyl chloride, mg/l	<0.2	0.005	<0.005
TCLP SEMIVOLATILES			
2,4-Dinitrotoluene, mg/l	<0.13	0.003	<0.003
o-Cresol, mg/l	<200.0	0.003	<0.003
m-Cresol, mg/l	<200.0	0.003	<0.003
p-Cresol, mg/l	<200.0	0.003	<0.003
Cresol, mg/l	<200.0	0.003	<0.003
Hexachlorobenzene, mg/l	<0.13	0.003	<0.003
Hexachlorobutadiene, mg/l	<0.5	0.003	<0.003
Hexachloroethane, mg/l	<3.0	0.003	<0.003
Nitrobenzene, mg/l	<2.0	0.003	<0.003
Pentachlorophenol, mg/l	<100.0	0.003	<0.003
Pyridine, mg/l	<5.0	0.003	<0.003
2,4,5-Trichlorophenol, mg/l	<400.0	0.003	<0.003
2,4,6-Trichlorophenol, mg/l	<2.0	0.003	<0.003
TCLP HERBICIDES			
2,4-D, mg/l	<10.0	0.003	<0.003
2,4,5-TP (Silvex), mg/l	<1.0	0.003	<0.003
TCLP PESTICIDES			
Chlordane, mg/l	<0.03	0.030	<0.030
Endrin, mg/l	<0.02	0.003	<0.003
Heptachlor, mg/l	<0.008	0.003	<0.003
Heptachlor epoxide, mg/l	<0.008	0.003	<0.003

SAMPLE NUMBER: 56839

Parameter	Regulatory Limits	Detection Limits	Observed Concentration
TCLP PESTICIDES (Continued)			
Lindane, mg/l	<0.4	0.003	<0.003
Methoxychlor, mg/l	<10.0	0.003	<0.003
Toxaphene, mg/l	<0.5	0.030	<0.030

Quality Control Information

Parameter	Sample Preservation	EPA (2) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Ignitability	None Required	7.1.2.2	0.0	0.00	NA	02/09/96	12:00PM	S. Isaac
Corrosivity	None Required	9045	0.0	± 0.00	100	02/09/96	3:30PM	S. Isaac
Reactivity								
Cyanides	None Required	7.3.3.2	0.0	± 0.00	22	02/09/96	1:30PM	S. Freeman
Sulfides	None Required	7.3.4.2	0.0	± 0.00	103	02/09/96	1:30PM	S. Freeman
TCLP Metals								
Extraction		1311				02/07/96	2:15PM	D. Bernhard
Metals Digestion - ICP		3010				02/09/96	10:00AM	D. Bernhard
Metals Digestion - Mercury		7470				02/08/96	11:30AM	J. Marconi
Arsenic	Cool to 4°C	6010	2.1	± 0.02	98	02/09/96	1:04PM	D. Bernhard
Barium	Cool to 4°C	6010	1.5	± 0.01	94	02/09/96	1:04PM	D. Bernhard
Cadmium	Cool to 4°C	6010	1.7	± 0.02	95	02/09/96	1:04PM	D. Bernhard
Chromium	Cool to 4°C	6010	1.2	± 0.01	99	02/09/96	1:04PM	D. Bernhard
Lead	Cool to 4°C	6010	0.7	± 0.007	98	02/09/96	1:04PM	D. Bernhard
Mercury	Cool to 4°C	7470	3.4	± 0.004	99	02/08/96	3:21PM	D. Bernhard
Selenium	Cool to 4°C	6010	3.5	± 0.03	94	02/09/96	1:04PM	D. Bernhard
Silver	Cool to 4°C	6010	1.3	± 0.005	97	02/09/96	1:04PM	D. Bernhard

SAMPLE NUMBER: 56839

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA (2) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
TCLP Volatiles	Cool to 4°C	8260				02/09/96	12:33PM	K. Richmond
ZHE Extraction		1311				02/08/96	1:25PM	K. Richmond
Matrix Spikes:								
Benzene			3.18	± 0.679	107			
Carbon Tetrachloride			4.06	± 0.841	104			
Chlorobenzene			3.72	± 0.792	107			
Chloroform			2.58	± 0.559	108			
1,4-Dichlorobenzene			0.71	± 0.148	105			
1,2-Dichloroethane			4.07	± 0.877	108			
1,1-Dichloroethylene			2.17	± 0.467	108			
Methyl ethyl ketone			2.47	± 0.502	102			
Tetrachloroethylene			0.03	± 0.007	102			
Trichloroethylene			4.86	± 1.011	104			
Vinyl chloride			5.18	± 0.933	90			
Surrogates:								
Fluorobenzene			N/A	N/A	105			
Toluene-d_8			N/A	N/A	98			
Bromofluorobenzene			N/A	N/A	109			
TCLP SemiVolatiles	Cool to 4°C	8270				02/08/96	4:40PM	F. Coskey
Extraction		1311				02/07/96	2:15PM	D. Bernhard
Liquid-Liquid Extraction		3510				02/08/96	10:00AM	E. Boateng
Matrix Spikes:								
o-Cresol			4.0	± 6.28	71			
m-Cresol & p-Cresol			6.0	± 11.44	98			
2,4,5-Trichlorophenol			5.0	± 4.07	45			
2,4,6-Trichlorophenol			0.0	± 0.12	41			
Pentachlorophenol			4.0	± 4.02	46			
1,4-Dichlorobenzene			4.0	± 5.62	63			
2,4,-Dinitrotoluene			6.0	± 11.63	91			
Hexachlorobenzene			7.0	± 13.33	97			
Hexachlorobutadiene			5.0	± 6.42	62			
Hexachloroethane			4.0	± 4.08	58			
Nitrobenzene			4.0	± 6.44	78			
Pyridine			5.0	± 7.79	86			

SAMPLE NUMBER: 56839

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA (2) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
TCLP SemiVolatiles	Cool to 4°C	8270				02/08/96	4:40PM	F. Coskey
Surrogates:								
2-Fluorophenol			N/A	N/A	35			
Phenol-d_6			N/A	N/A	39			
Nitrobenzene-d_5			N/A	N/A	64			
2-Fluorobiphenyl			N/A	N/A	67			
2,4,6-Tribromophenol			N/A	N/A	96			
Terphenyl-d_{14}			N/A	N/A	99			
TCLP Herbicides	Cool to 4°C	8270				02/09/96	11:42AM	F. Coskey
Matrix Spikes:								
2,4-D			8.0	± 5.35	32			
2,4,5-TP (Silvex)			8.0	± 3.65	23			
Surrogate:								
Methyl 2,4-dichlorophenylacetate			N/A	N/A	68			
TCLP Pesticides	Cool to 4°C	8270				02/08/96	4:40PM	F. Coskey
Matrix Spikes:								
Endrin			7.0	± 16.42	110			
Heptachlor			5.0	± 11.17	104			
Heptachlor epoxide			5.0	± 10.97	107			
Lindane			6.0	± 12.80	103			
Methoxychlor			4.0	± 7.73	109			
Chlordane			3.0	± 5.54	101			
Toxaphene			2.0	± 3.19	103			

* Using the criteria of Ignitability, Reactivity, Corrosivity and Toxicity characteristics, this sample of waste is not hazardous.

** Not ignitable using the criteria applied for not a liquid sample. (Section 7.1.2.2)

SAMPLE NUMBER: 56839

(1) < = Less than Detection Limit.

(2) EPA. 1986. Test Methods for Evaluating Solid Waste. SW-846, 3rd Edition.

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Pope SP
Reviewed By Shelly Weems SW

Chain-of-Custody

002603

Page 1 of 1

ERMI
Bethany Tech Center
400 W. Bethany, Suite 190
Allen, Texas 75002
214-727-1123 (Local) * 800-228-ERMI (Long Distance)
214-727-1175 (Fax)

NORMAL per Jim on 2/6/96
on TPH/BTEX - metals by NOON on 2/9/96

Company Name: BROWN & CALDWELL ❶
Contact: TIM JENKINS
Address: 1415 LOUISIANA STE. 2500
City: HOUSTON State: TX Zip Code: 77002
Telephone: (713) 759-0999 Fax Number: (713) 759-0952

Billing Name: SAME AS ABOVE ❷
Billing Address (if different):
City: State: Zip Code:
Telephone: Fax Number:
Purchase Order Number: 2988-27 ❸

Project Name: BJ-ARTESIA : TINDS ❹ Project Number: 2988-27 ❺
Address: 2401 SEVLEY
City: ARTESIA State: NM Zip Code: 88210
Sampler: TLJ Signature: [signature] ❻

Comments: FAX ; COPY ON WHITE PLUS ORIGINAL SENT TO TLJ

TAT: Normal ☒ SEE BELOW Expedite ☐ (Call for Pricing)

REQUESTED ANALYSES ❼

ERMI Use Only	Field Sample I.D.	Sample Date ❽	Sample Time ❾	Matrix	# of Bottles	Preservative	Comp.	Grab	TPH (8015)	Total BETX (8020)	8 RCRA Metals (total)		TCLP VOLATILS	TCLP SEMIS	TCLP METALS	R.C.I
~~EXPEDITE~~	TINDS-TKFT	2/2/96	12:00	SOIL	1	50836		X	X	X	X					
~~EXPEDITE~~	TINDS-DRLN	2/2/96	13:30	SOIL	1	50837		X	X	X	X					
~~EXPEDITE~~	TINDS-LCHLN	2/2/96	14:00	SOIL	1	50838		X	X	X	X					
NORMAL →	TWDS-PILES	2/5/96	16:00	SOIL	1	50839	X	~~X~~					X	X	X	X

Relinquished By: [signature] ❿	Date: 2/5/96	Time: 16:15	Received By: FED EX	Date: 2/5/96	Time: 16:15
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Method of Shipment:	Date:		Received for ERMI By: [signature]	Date: 2/6	Time: 1:29

See Reverse for Terms and Conditions

Revised

WHI[redacted]inal to[redacted]ned w[redacted]ort; YE[redacted] ERMI [redacted]NK, C[redacted] Copy [redacted]

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

February 16, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana St., Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ - Artesia: TWDS
2401 Sivley
Artesia, NM 88210

PROJECT NUMBER: 2988-27

SAMPLE I.D.: TWDS-PILES

SAMPLE DATE: February 05, 1996
SAMPLE TIME: 4:00PM
SAMPLE RECEIVED: February 06, 1996
TIME RECEIVED: 9:10AM
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: 56839

RESULTS:

Sample Number	Sample I.D.	TPH-Diesel (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)	Total BTEX
56839	TWDS-PILES	<5.0	<0.010	0.016	<0.010	<0.030	0.016
Detection Limits		**5.0**	**0.010**	**0.010**	**0.010**	**0.030**	

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%		Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
TPH - Gasoline	Cool to 4°C	8015	2.0	±	0.101	102	02/15/96	K. Richmond
Surrogate: Trifluorotoluene			N/A		N/A	76		
Benzene	Cool to 4°C	8020	13.7	±	0.0045	109	02/15/96	K. Richmond
Toluene	Cool to 4°C	8020	13.8	±	0.0045	108	02/15/96	K. Richmond
Ethyl Benzene	Cool to 4°C	8020	15.1	±	0.0048	106	02/15/96	K. Richmond
Xylene	Cool to 4°C	8020	13.0	±	0.0042	107	02/15/96	K. Richmond

SAMPLE NUMBER: 56839

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
Surrogate:							
Bromofluorobenzene			N/A	N/A	74		

Respectfully submitted,

Kendall K. Brown
President

Prepared By S. Doster
Reviewed By L'Cena Glover

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

March 19, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana St., Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ - Artesia, TWDS-LS
2401 Sivley
Artesia, NM 88210

PROJECT NUMBER: 2988-27

SAMPLE I.D.: TWDS, LS-1

SAMPLE DATE: March 14, 1996
SAMPLE RECEIVED: March 15, 1996
TIME RECEIVED: 9:00AM
SAMPLE COLLECTED BY: Tim Jenkins - Customer

SAMPLE NUMBER: 58266

RESULTS:

Sample Number	Sample I.D.	TPH-Diesel (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)	Total BTEX
58266	TWDS, LS-1	<5.0	0.010	0.016	0.010	0.041	0.077
Detection Limits		**5.0**	**0.010**	**0.010**	**0.010**	**0.030**	

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%		Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
TPH - Diesel	Cool to 4°C	8015	4.1	±	0.1846	90	03/17/96	J. Karikari
Surrogate: Trifluorotoluene			N/A		N/A	85		
Benzene	Cool to 4°C	8020	11.4	±	0.0038	113	03/17/96	J. Karikari
Toluene	Cool to 4°C	8020	11.8	±	0.0039	110	03/17/96	J. Karikari
Ethyl Benzene	Cool to 4°C	8020	11.2	±	0.0034	100	03/17/96	J. Karikari
Xylene	Cool to 4°C	8020	12.0	±	0.0044	121	03/17/96	J. Karikari

SAMPLE NUMBER: 58266

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
Surrogate:							
Bromofluorobenzene			N/A	N/A	85		

Respectfully submitted,

Kendall K. Brown
President

Prepared By S. Doster
Reviewed By Shelly Weems

Chain-of-Custody

Page 1 of 1

ERMI

Bethany Tech Center
400 W. Bethany, Suite 190
Allen, Texas 75002
214- 727-1123 (Local) * 800- 228- ERMI (Long Distance)
214- 727-1175 (Fax)

Company Name: BROWN AND CALDWELL ❶
Contact: TIM JENKINS
Address: 1415 LOUISIANA, STE 2500
City: HOUSTON State: TX Zip Code: 77002
Telephone: (713) 646-1138 Fax Number: (713) 759-0752

Comments:

TAT: Normal ☒ Expedite ☐ (Call for Pricing)

Billing Name: SAME AS ABOVE ❷
Billing Address (if different):
City: State: Zip Code:
Telephone: Fax Number:
Purchase Order Number: 2988-27 ❸

Project Name: BJ SERVICES - ARTESIA, TWDS-LS ❹ Project Number: 2988-27 ❺
Address: 2401 SIVLEY
City: ARTESEA State: NM Zip Code: 88210
Sampler: TIM JENKINS Signature: ❻

REQUESTED ANALYSES ❼

ERMI Use Only	Field Sample I.D.	Sample Date ❽	Sample Time ❾	Matrix	# of Bottles	Preservative	Sample Type Comp.	Sample Type Grab	BTEX (8020)	TPH (8015 Mod Diesel fraction						
582606	TWDS, LS-1 ~~TWDS,~~	3/14/96		SOIL	2	4°C	✓		X	X						
				3/14/96												

Relinquished By: ❿	Date: ~~3/14/96~~	Time: ~~1545~~	Received By: FED EX	Date: 3/14/96	Time: 1515
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Method of Shipment:	Date:	Received for ERMI By:		Date: 3/14/96	Time: 0900

3/15/96 SD

See Reverse for Terms and Conditions

Revised 05/17/95

WHITE: Original to be returned with Report; YELLOW: ERMI copy; PINK, Customer Copy

FINAL
SITE ASSESSMENT REPORT
FIELD WASTE COLLECTION SYSTEM AND
BRINE STORAGE TANKS

ARTESIA, NEW MEXICO

BJ SERVICES COMPANY, U.S.A.

APRIL 2, 1996

A Report Prepared for:

BJ Services Company, U.S.A.
8701 New Trials Drive
The Woodlands, Texas 77381

FINAL
SITE ASSESSMENT REPORT
FIELD WASTE COLLECTION SYSTEM
AND BRINE STORAGE TANKS
ARTESIA, NEW MEXICO FACILITY

Project Number: 2988-26

Timothy Jenkins
Associate Engineer

Brown and Caldwell
1415 Louisiana, Suite 2500
Houston, Texas 77002

April 2, 1996

LIST OF TABLES

LIST OF FIGURES

1.0 INTRODUCTION

Brown and Caldwell, under the authority of BJ Services Company, U.S.A., conducted a site assessment for the closure of the existing field waste collection system (field waste tank [FWT] area), the associated spinout bay, and the adjacent brine storage tanks from November 14 to November 16, 1995. A second investigation to delineate the extent of total petroleum hydrocarbons (TPH) impacted soils was performed on December 27, 1995, with final overexcavation and confirmation sampling occurring from January 31 through February 2, 1996.

Site assessment activities were conducted in accordance with the site-specific "Closure Plan: Field Waste Tanks and Old Steel Brine Tanks" (Closure Plan), and the conditions for approval of same set forth by the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division (OCD) on November 2, 1995. The Closure Plan and OCD approval notice are found as Appendices A and B, respectively. BJ Services Artesia District facility is located in Eddy County, in the SE/4, Section 32, Township 16 South, Range 26 East. The facility address is 2401 Sivley, Artesia, New Mexico, 88210. A site location map and site plan are included as Figures 1 and 2, respectively.

Between November 14 and November 16, 1995, Brown and Caldwell observed the removal of three underground storage tanks, a concrete spinout bay, and two brine storage tanks located at the Artesia District facility's FWT area. These activities were conducted in accordance with Brown and Caldwell's Closure Plan.

The following sections summarize the site activities, site assessment and scoring, closure verification methods utilized, and the results of both field and laboratory analyses. Section 3 will request approval for final closure based on the results of the Site Assessment Report.

2.0 SITE ASSESSMENT

BJ Services performed the site assessment to determine the potential that site soils/groundwater may have been impacted by the operation of the field waste collection system. The results of the site assessment were used for evaluating the need for remediation and the type of closure best suited for the site.

2.1 General Site Characteristics

BJ Services determined the depth to groundwater to be approximately 20 to 25 feet below the ground surface based on previous groundwater investigations conducted at the site.

Depth to Groundwater	Ranking Score
< 50 feet	Yes - 20

Brown and Caldwell personnel conducted a water well search at the State Engineer's office in Roswell, New Mexico on February 21, 1993. This search determined that no water wells were identified within a one-half mile radius of the facility.

Wellhead Protection Area	Ranking Score
< 1000 feet from a water source, or	No - 0
< 200 feet from a private domestic water source:	No - 0

The distance from the site to the Pecos River (nearest downgradient surface water body) was determined to be more than 1,000 feet by reviewing a USGS topographic map for the area. A tributary of the Pecos River (Eagle Creek) is the nearest surface water body, and is located approximately 7,000 ft. south of site.

Distance to Surface Water Body	Ranking Score
> 1,000 feet	Yes - 0

2.2 Site Scoring

Groundwater is present at a depth of less than 50 feet below grade. Flow direction is east-southeast, as determined from wells previously installed at the facility. Therefore, the site scoring procedure outlined above calls for a depth to groundwater Ranking Score of 20. No water wells were identified within a 2,000 ft. radius of the site. Therefore, the wellhead protection Ranking Score is 0. A review of a USGS map indicates the nearest water body (Eagle Creek) is approximately 7,000 ft. south of the site. The Pecos River is several miles from the facility. Therefore, the distance to surface water body Ranking Score is 0.

The site ranking score of 20 is greater than 19. This determination was made based on physical site characteristics as described above. According to the OCD guidance documents, a total ranking score of greater than 19 yields action levels as outlined in Table 1.

2.3 Field Investigation Activities

The Field Waste Tank (FWT) area (see Figure 3) received waste from activities associated with oil and gas well servicing. The system, closed to operation for several years, consisted of a concrete, drive-through dump station (spinout bay) with an enclosed sump (see CS-1 on Figure 4), three in-ground field waste tanks (FWT-1, FWT-2, and FWT-3), and two brine storage tanks (BST-1, and BST-2). During its operation, waste entered the spinout bay sump, and was transferred via underground PVC pipe to FWT-1, the first of three tanks connected in series. FWT-1, acting as a sand trap, was a fiberglass-lined steel tank with an estimated capacity of 1,000 gallons. Tanks FWT-2 and FWT-3 were large, vertical underground tanks piped together with HDPE piping. The estimated capacity of the second and third field waste tanks was 10,000 gallons each. The two brine tanks (BST-1 and BST-2) were above-ground steel tanks, and received brine water associated with oil and gas well servicing. The estimated volume of each brine storage tanks was 5,000 gallons each.

The removal of the FWT was accomplished in three phases. Phase 1 involved the removal of the two brine storage tanks and residual crystalline material, and the removal of the residual material from within the three field waste tanks. Phase 2 consisted of the destruction and removal of the concrete spinout bay, and the removal of the in-ground field waste tanks. Once the tanks were removed, approximately 350 cubic yards of potentially impacted soil was excavated and stockpiled for testing and eventual disposal. Phase 3 involved the delineation and overexcavation of TPH-impacted soils from the excavation sidewalls and bottom. The stockpile, totaling approximately 700 cubic yards of excavated TPH-affected soils was disposed at an OCD approved facility.

Phase 1

Closure activities at the FWT area began on November 14, 1995. Rhino Environmental Services, Inc. (Rhino) removed the brine storage tanks and their contents (BST-1 and BST-2). The sand from within the three in-ground field waste tanks (FWT-1, FWT-2, and FWT-3) was tested for TPH and benzene, toluene, ethylbenzene, and xylene (BTEX) prior to commencing excavation of the FWT system. The results are shown in Table 1. FWT-1 contents were also analyzed for metals, and appeared to have an elevated concentration for total barium. An additional analysis of FWT-1 solids showed a barium concentration in the Toxicity Characteristic Leaching Procedure (TCLP) extract to be below Resource Conservation and Recovery Act (RCRA) guidelines. Metals results are shown on Table 2. The waste sand from within all of the tanks was disposed of during Phase 3 activities as Class I non-hazardous waste.

Phase 2

The fiberglass field waste tanks FWT-1, FWT-2 and FWT-3 were excavated and removed. The tanks were stockpiled separately from the excavated soil and tank contents, and were disposed at an OCD approved facility.

The concrete pad for the old spinout bay was broken into large pieces and removed for eventual disposal from November 14 to November 17, 1995. Approximately 200 cubic yards of concrete were disposed in a nearby construction debris landfill.

Excavation of potentially impacted soils was performed following tank removal. Soils approximately 2 to 3 ft. beyond the tank dimensions were excavated. Hydrocarbon staining was observed around tank FWT-1 on the north end of the excavation. An exploratory hole was advanced in the area of FWT-1. Water was apparently encountered at a nominal depth of 20 feet. The general grade of the main excavation varied from approximately 12 to 14 feet below grade.

Phase 3

A test trench was excavated on the north side of the FWT area to determine the extent of overexcavation which may be required. The trench was excavated to a depth of approximately ten feet and extended north approximately ten feet from the original north excavation sidewall. Soil samples were collected from the bottom of the trench, split with a laboratory, and analyzed using a field TPH analyzer. The field TPH results were then used to determine extent of the TPH impacted soil. These results, as listed in Table 3, were below the agreed OCD action level for field analyzed TPH of 200 parts per million (ppm).

Overexcavation proceeded approximately 10 feet to the north, as delineated in the field investigation. The south wall was also overexcavated at the request of the OCD an additional 5 feet to the south end to a depth of approximately 14 feet below the ground surface. A soil sample was collected on each new face of the excavation, both north and south, and field analyzed for TPH. As requested by the OCD, a sample collected from the FWT-1 tank footprint was also analyzed for field TPH. These results are summarized in Table 3. The nominal dimensions of the excavation and soil sampling locations for the FWT area removal are shown on Figure 4.

Upon completion of tank removal, overexcavation, and soil sampling and confirmation activities, the excavation was backfilled with native material from an off-site source beginning February 2, 1996. Starting at approximately 10 feet below grade the backfill was compacted in nominal eight to twelve inch lifts using a vibratory sheepsfoot roller. As requested by the OCD, the backfill was mounded slightly above grade.

Approximately 900 tons of excavated soil was trucked to the Goo-Yea Landfarm in Lea County, a facility owned and operated by Rhino Environmental Services, Inc. The permit

for the disposal of this soil was obtained February 5, 1996, and is included as Appendix C. Waste disposal manifests are included as Appendix D.

2.4 Soil/Waste Characterization

ERMI Environmental Laboratories tested the soil/waste samples collected by Brown and Caldwell from the former location of the field waste tanks to evaluate the nature and extent of contamination. Brown and Caldwell personnel coordinated excavation activities using the field screening procedures as outlined in the closure plan.

2.4.1 Sampling Locations and Methodology

On November 15, 1995, composite samples were collected from locations within the excavation, as required by the Closure Plan. Brown and Caldwell personnel collected soil samples from each of the four walls and from the excavation floor within each of the tank footprints. Each soil sample collected from the side walls was composited from the depth that appeared to be most impacted by hydrocarbons (as indicated by visual and field photoionization detector [PID] readings). Soil samples collected from the bottom of the excavation were composited from five grab samples retrieved using the back-hoe from each of the tank footprints (total of three). Brown and Caldwell personnel field measured volatile organic compound (VOC) levels using a PID. Based on PID readings and visual staining the FWT-1 floor composite and the north sidewall composite samples were selected for TCLP metals analysis, as required in the Closure Plan.

Soil samples from the three phases of the FWT removal were collected with the assistance of a back-hoe, and deposited in plastic bags. Once composited, a sufficient quantity of sample was transferred to a labeled, laboratory-supplied glass jar and immediately placed in an ice chest. Upon completion of sampling activities, the samples were delivered via overnight delivery service to ERMI Environmental Laboratories in Allen, Texas, using chain-of-custody procedures.

2.4.2 Laboratory Analytical Results

The seven composite samples collected were analyzed for BTEX using EPA Method 8020 and TPH using EPA Method 8015 modified for diesel range organics, as indicated in the Closure Plan. These results are summarized in Table 1. Analytical results for both total metals and TCLP metals are summarized in Table 2. Please note that all TCLP analyses other than metals were non-detect, and, therefore, are not listed. Complete analytical reports and chain-of-custody forms are included in Appendix E.

DISTRIBUTION

1 copy to: New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Attention: Mr. Mark Ashley

1 copy to: BJ Services Company, U.S.A.
8701 New Trails Drive
The Woodlands, Texas 77381

Attention: Ms. Jo Ann Cobb

1 copy to: BJ Services Company, U.S.A.
2401 Sivley
Artesia, New Mexico 88210

Attention: Mr. Mike Wiggins

1 copy to: Brown and Caldwell
File

QUALITY CONTROL REVIEWER

Robert N. Jennings, P.E.
Vice President

TJ:elg

TABLE 1

FWT - Analytical Results and OCD Action Levels

Sample I.D.	TPH Diesel mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene mg/kg	Total BTEX (Calculated) mg/kg
North Tank, Contents	1,902	0.120	0.920	1.1	5.5	7.6
Middle Tank, Contents	8.0	< 0.010	< 0.010	< 0.010	< 0.030	< 0.060
South Tank, Contents	128	< 0.010	< 0.010	< 0.010	0.044	0.059
North Tank, Floor	1,059	< 0.050	< 0.050	0.145	1.3	1.5
Middle Tank, Floor	276	< 0.050	< 0.050	< 0.050	0.28	0.36
South Tank, Floor	213	< 0.050	< 0.050	< 0.050	0.465	0.54
North Sidewall	5,045	< 0.500	< 0.500	< 0.500	9.2	9.95
South Sidewall	652	< 0.250	< 0.250	< 0.250	0.825	1.2
East Sidewall	52	< 0.050	< 0.050	<0.050	< 0.150	< 0.30
West Sidewall	81	< 0.050	< 0.050	< 0.050	< 0.150	< 0.30
North Delineation- 10'	16	NA	NA	NA	NA	NA
Stockpile Sample	54	NA	NA	NA	NA	NA
OCD Action Levels	**100**	**10**	**NS**	**NS**	**NS**	**50**

NA = Not Analyzed
NS = Not Specified

TABLE 2

FWT - Metals Results

Sample I.D.	Arsenic mg/kg	Barium mg/kg	Cadmium mg/kg	Chromium mg/kg	Lead mg/kg	Mercury mg/kg	Selenium mg/kg	Silver mg/kg
North Tank, Contents	< 1.0	2300	< 0.20	0.71	1.2	< 0.020	< 0.75	< 0.35
North Tank, Floor	1.5	210	0.87	7.2	4.3	< 0.020	< 0.75	< 0.35
North Sidewall	1.7	210	0.57	7.8	9.5	< 0.020	< 0.75	< 0.35
	TCLP Arsenic mg/L	**TCLP Barium mg/L**	**TCLP Cadmium mg/L**	**TCLP Chromium mg/L**	**TCLP Lead mg/L**	**TCLP Mercury mg/L**	**TCLP Selenium mg/L**	**TCLP Silver mg/L**
North Sidewall	< 0.20	0.40	< 0.04	< 0.05	< 0.10	< 0.004	< 0.15	< 0.07
Stockpile Sample	< 0.20	1.0	< 0.04	< 0.05	< 0.10	< 0.004	< 0.15	< 0.07

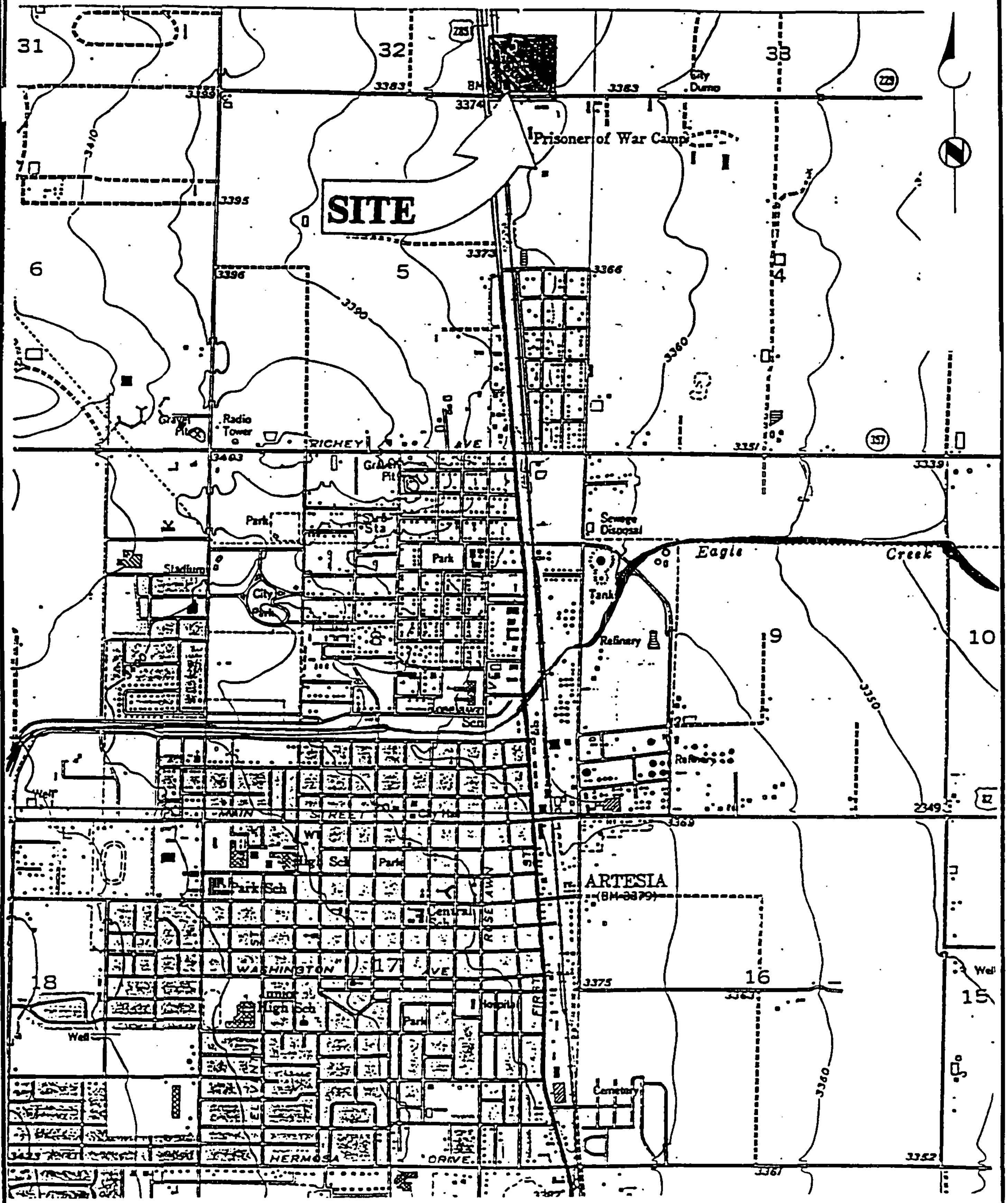
TABLE 3

FWT - Field Analytical Results and Approved OCD Field Closure Levels

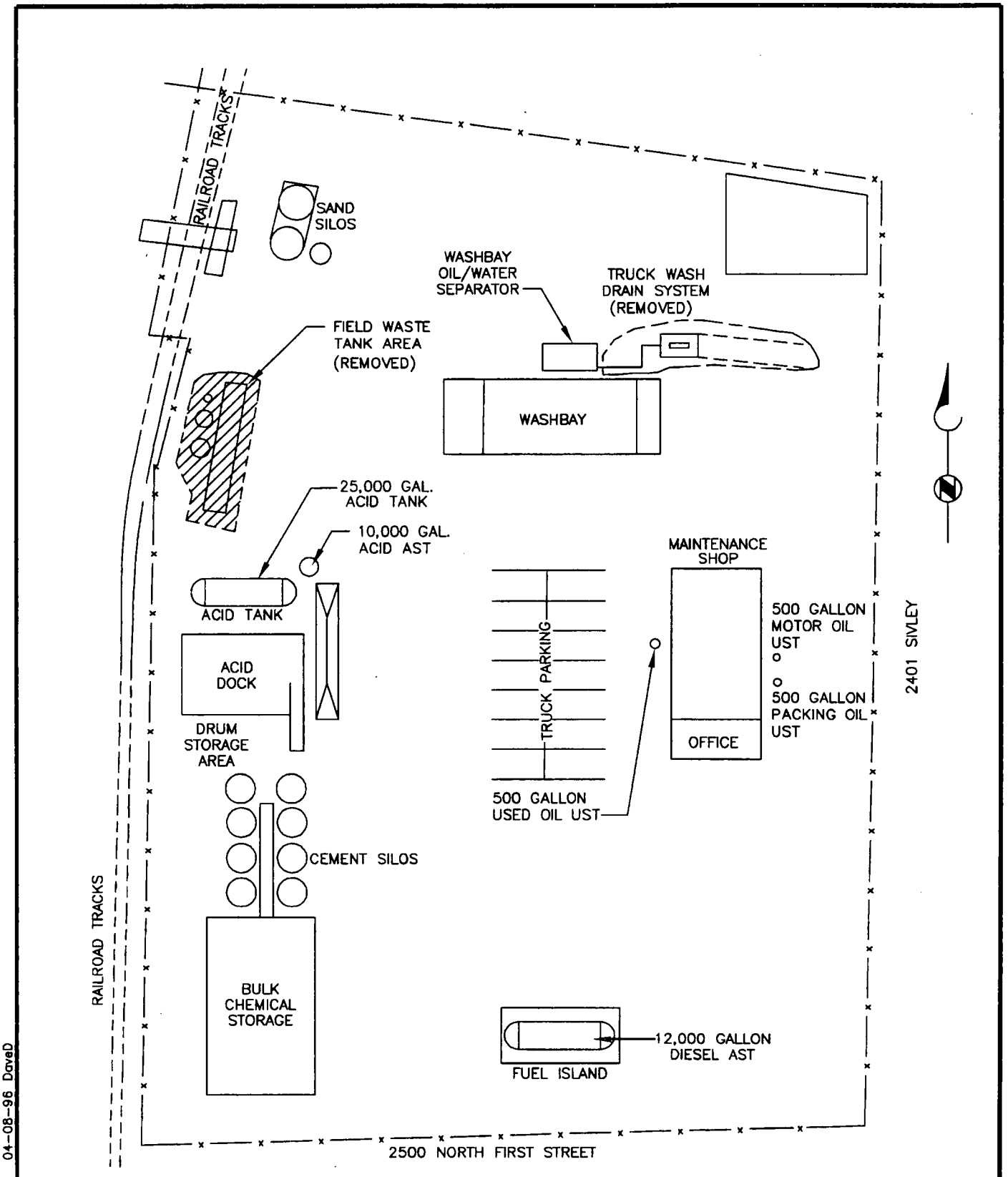
Sample I.D.	Field TPH Analysis mg/kg	Laboratory TPH mg/kg
North Delineation- 10'	27	16
Stockpile Sample	89	54
North Sidewall	54	NA
South Sidewall	176	NA
North Footing	187	NA
OCD Approved Action Levels	**200**	**100**

NA = Not Analyzed

FIGURES

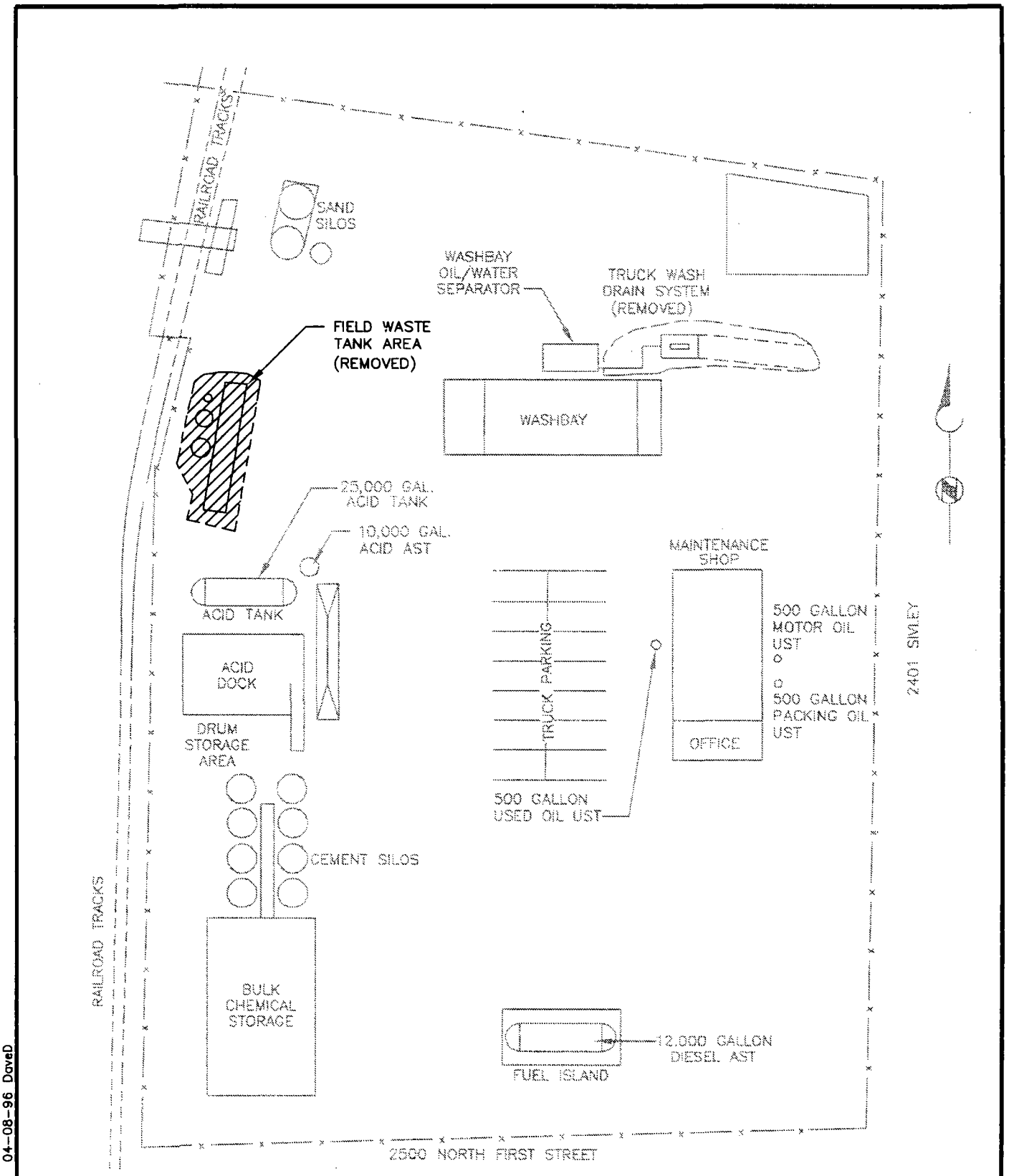


BROWN AND CALDWELL HOUSTON, TEXAS	0 1000 2000 SCALE: 1" = 2000'	TITLE SITE LOCATION MAP	DATE 10/25/95
SUBMITTED: ______ DATE: ____ PROJECT MANAGER	DRAWN BY: DMD DATE 10/25	CLIENT BJ SERVICES COMPANY, U.S.A.	PROJECT NUMBER 2988–06
APPROVED: ______ DATE: ____ BROWN AND CALDWELL	CHK'D BY: ____ DATE ____ APPROVED: ____ DATE ____	SITE LOCATION ARTESIA, NEW MEXICO	FIGURE NUMBER 1



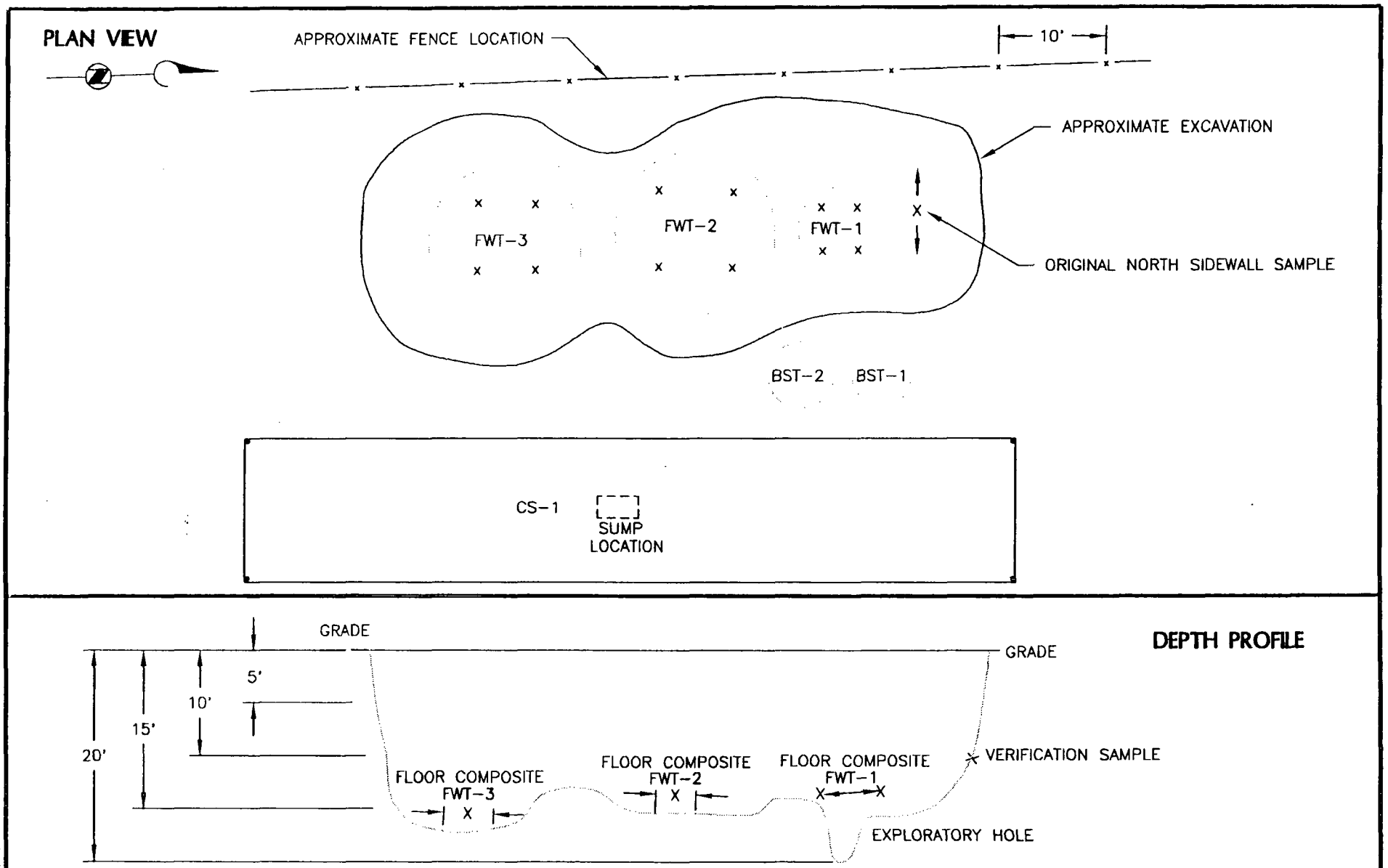
T:\2988\EXCAVLOC (1=1) 04-08-96 DaveD

BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	0 0 0 NOT TO SCALE DRAWN BY: DMD DATE 10/25 CHK'D BY: _____ DATE _____ APPROVED: _____ DATE _____	TITLE: SITE PLAN CLIENT: BJ SERVICES COMPANY, U.S.A. SITE LOCATION: ARTESIA, NEW MEXICO	DATE: 3/5/96 PROJECT NUMBER: 2988-26 FIGURE NUMBER: 2



T:\2988\EXCAVLOC (1=1) 04-08-96 DaveD

BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: PROJECT MANAGER DATE: APPROVED: BROWN AND CALDWELL DATE:	0 0 0 NOT TO SCALE DRAWN BY: DMD DATE 10/23 CHK'D BY: DATE APPROVED: DATE	TITLE: SITE PLAN WITH EXCAVATION LOCATION CLIENT: BJ SERVICES COMPANY, U.S.A. SITE LOCATION: ARTESIA, NEW MEXICO	DATE: 3/5/96 PROJECT NUMBER: 2988-26 FIGURE NUMBER: 3



T:\2988\FWTEXCAV 3/5/96 DHD

BROWN AND CALDWELL
HOUSTON, TEXAS

SUBMITTED: _____ DATE: _____
PROJECT MANAGER

APPROVED: _____ DATE: _____
BROWN AND CALDWELL

REV.	DESCRIPTION	BY	DATE

0 5 10
SCALE: ~0.8" = 10'
DRAWN BY: DHD DATE 3/5
CHK'D BY: ____ DATE ____
APPROVED: ____ DATE ____

TITLE: FWT-EXCAVATION
CLIENT: BJ SERVICES COMPANY, U.S.A.
SITE LOCATION: ARTESIA, NEW MEXICO

DATE: 3/5/96
PROJECT NUMBER: 2988-26
FIGURE NUMBER: 4

APPENDICES

APPENDIX A

CLOSURE PLAN - FIELD WASTE TANKS AND OLD STEEL BRINE TANKS

CLOSURE PLAN
FIELD WASTE TANKS AND
OLD STEEL BRINE TANKS

BJ SERVICES COMPANY, U.S.A.

ARTESIA, NEW MEXICO FACILITY

Prepared by

BROWN AND CALDWELL

October 26, 1995

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

SECTION 1

INTRODUCTION

BJ Services has developed this closure plan for three (3) fiberglass field waste tanks and two (2) steel brine tanks for the facility in Artesia, New Mexico, for OCD approval. The Artesia facility is located in Eddy County, in the SE/4, Section 32, Township 16 South, Range 26 East. The facility address is 2401 Sivley, Artesia, New Mexico, 88210. A site location map and site plan map are attached as Figures 1 and 2, respectively.

The field waste collection system received wastewater from activities associated with oil and gas well servicing. The closure of the field waste collection system will include the removal of three field waste tanks. The field waste collection system is no longer in service.

The brine tanks are no longer is service. Closure of the brine tanks will include cleaning to remove crystalline salt, and disposal of metal tank parts.

This closure plan is prepared in general accordance with a guidance document prepared by the OCD entitled Unlined Surface Impoundment Closure Guidelines (February 1993), and the Guidelines for Remediation of Leaks, Spills, and Releases (August 13, 1993). In accordance with these guidance documents, this closure plan contains the following elements:

- The procedures that will be used to collect soil verification samples for closure of the field waste tanks.

- The procedures that will be used to manage, remediate, or dispose of contaminated soil and groundwater.

- Reporting procedures that will be used to document the closure activities and obtain approval for final closure from the OCD.

SECTION 2

SITE ASSESSMENT

BJ Services will perform a site assessment to determine general site characteristics, soil/waste characteristics, and groundwater quality, if groundwater is encountered.

General Site Characteristics

Based on OCD guidance documents, BJ Services will determine the depth to groundwater, defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the groundwater. Depth to groundwater will be determined by reviewing reports of previous groundwater investigations at the site and regional and local groundwater reports published by state and federal agencies such as the USGS and the New Mexico Bureau of Mines and Mineral Resources. Information on groundwater quality may also be researched through local and state agencies.

Depth to Groundwater:	**Ranking Score:**
< 50 feet	**20**
50 - 99 feet	**10**
> 100 feet	**0**

If necessary, BJ Services will determine the proximity of drinking water sources by performing a search of water wells within a one mile radius of the facility. The search would provide information (as available) such as the distance from the site to each well, well depth, water quality data and the purpose of the well.

Wellhead Protection Area:	**Ranking Score:**
< 1000 feet from a water source, or;	
< 200 feet from a private domestic water source:	
Yes	**20**
No	**0**

The distance to nearby downgradient surface water bodies will be determined by review of a USGS topographic map for the area. Surface water bodies include rivers, creeks, ponds, lakes, irrigation canals and ditches. Site drainage patterns and off-site receptors of surface drainage will be determined from field observations and discussions with site personnel.

Distance to Surface Water Body:	**Ranking Score:**
< 200 horizontal feet	**20**
200 - 1000 feet	**10**
> 1000 feet	**0**

Preliminary Site Scoring

Groundwater is present at a depth of less than 50 feet below grade, and flow direction is east-southeast, determined from wells previously installed at the facility. Therefore, the site scoring procedure outlined above calls for a groundwater Ranking Score of 20, since the groundwater is less than 50 feet below the ground surface, and hence less than 50 ft. below the bottom of the tanks. BJ Services may confirm groundwater elevation and flow direction prior to tank removal and verification sampling by measuring water levels in the existing wells, if available.

The site ranking is greater than 19. This determination was made based on physical site characteristics as described above. According to the OCD guidance documents, a total ranking score of >19 yields action levels as outlined in the Site Assessment Report section, Table 1.

Soil/Waste Characteristics

Following tank removal, BJ Services will sample the soils beneath the field waste collection system. Soil samples will be collected from each of the excavation sidewalls, and from the base of the excavation at each tank footprint. The sidewall samples should be collected from the lower 1/3 of the excavation.

Based on visual observation, highly contaminated/saturated soils will be excavated for treatment or disposal, in accordance with the OCD guidance documents. Highly contaminated/saturated soils are those soils which contain observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase.

Unsaturated contaminated soils encountered during field waste tank removal will be evaluated and remediated in accordance with OCD guidance documents. Unsaturated contaminated soils are those that are not highly contaminated as described above, but contain measurable concentrations of contaminants.

Verification samples will be collected following the removal of the tanks. One sample from each tank footprint will be composited from five grabs taken from the 0 - 6 inch interval of soil from the excavation floor. Samples will be field composited and placed in jars. One sample from each sidewall of the field waste collection system excavation will also be composited from five grab samples collected from the lower 1/3 of the sidewall.

Samples will be collected with decontaminated sampling equipment, field composited, placed in labeled jars, and shipped on ice overnight using chain of custody procedures to the off-site laboratory. Decontamination fluids (non-toxic degreasers and water) will be collected for subsequent disposal by BJ Services. Decontamination solids will be placed on plastic and covered near the field waste collection system, pending the results of

sample analysis. Final disposition of the solids will be determined as part of the remedial evaluation included in the site assessment report.

The samples will be analyzed for TPH by EPA Method 8015 modified for diesel range organics, BTEX by EPA Method 8020, and pH. Two excavation samples, one bottom and one sidewall, will be selected for RCRA metals analysis. These RCRA samples will be chosen based on visual staining and the field-determined highest organic vapor measurements and/or corrosivity (pH) measurements.

In accordance with the OCD guidance documents, all highly contaminated/saturated soils encountered during tank removal will be remediated in-situ or excavated to the maximum extent practicable. Unsaturated contaminated soils may require remediation based on the general site characteristics obtained during the site assessment. These site characteristics will be used to determine the appropriate soil remediation levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria presented in the OCD guidance document (depth to groundwater, distance to water sources, and distance to nearest surface water body). Soils contaminated with substances other than petroleum hydrocarbons may be required to be remediated based upon the nature of the contamination and its potential to impact fresh waters, public health and the environment (see Table 1).

Closure activities are planned to commence within 10 days of approval of this Closure Plan by the New Mexico Oil Conservation Division (NMOCD). The closure of tanks are planned to be completed within 14 days of start-up.

SECTION 3

SITE ASSESSMENT REPORT

The field procedures and analytical results documenting closure of the field waste and brine tanks will be presented in a site assessment report to the OCD within 20 days after field activities are completed. The sample results will be used in conjunction with the ranking score, to verify final closure determined according to the OCD closure guidance documents. BJ Services will present the ranking score in the site assessment report and propose further activities, such as additional investigation of groundwater or soil remediation, if needed.

The ranking score will establish the OCD recommended cleanup level for benzene, total BTEX, and TPH for those soils contaminated with petroleum constituents. If the site assessment indicates additional investigation or remediation is not necessary, the report will propose no further action and BJ Services will request approval for final closure of the site.

Cleanup Goals

Soil cleanup goals for the field waste collection system removal and excavation are listed below in Table 1.

Upon removal of the tanks as described above, BJ Services will determine the extent of the contaminated soils, if any, using results from the samples collected from the excavation. Once the sample analytical results are obtained, they will be compared to the cleanup goals for particular constituents. These cleanup goals are listed below in Table 1.

If soil analytical results exceed clean-up goals, BJ Services may propose alternate cleanup levels for OCD approval or propose no further action by conducting a risk-based evaluation of the site assessment data.

Cleanup Alternatives

If remediation is necessary, feasible cleanup alternatives will be presented in the site assessment report. Alternatives include further excavation and off-site disposal, landfarming or other in-situ treatment such as vapor sparging, bioremediation, and bioattenuation. BJ Services will not commence further remediation until the OCD has reviewed and approved the recommended cleanup alternatives.

TABLES

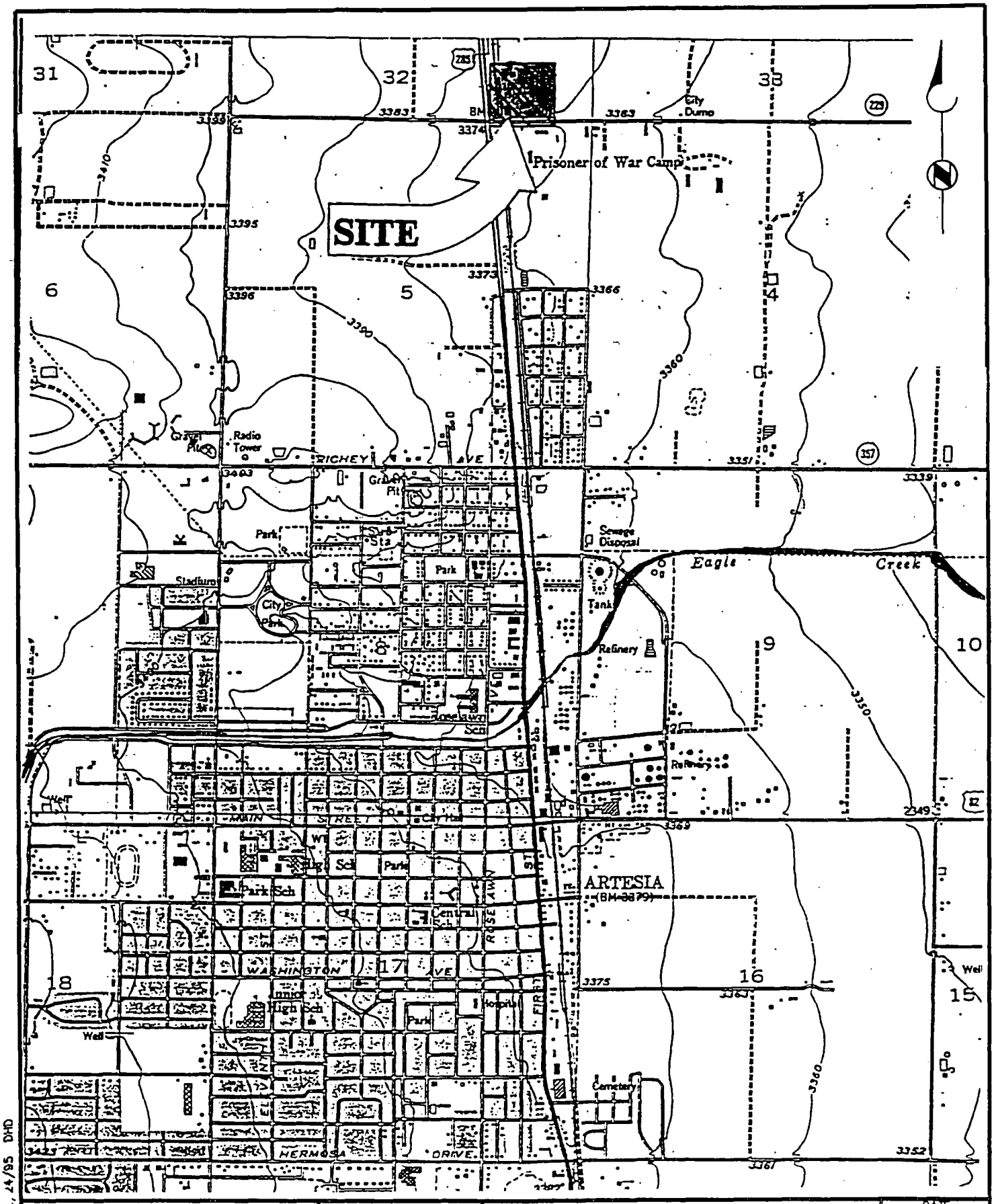
Table 1

Soil Cleanup Goals

Contaminant (mg/kg)	Regulatory Remediation Action Levels
Benzene	*10 ppm
BTEX, Total	*50 ppm
TPH	*100 ppm
pH (Std. Units) for Corrosivity	2.0<pH Measured<12.5
RCRA Metals (if necessary):	
Arsenic	<5.0 (mg/L TCLP)
Barium	<100.0 (mg/L TCLP)
Cadmium	<1.0 (mg/L TCLP)
Chromium	<5.0 (mg/L TCLP)
Lead	<5.0 (mg/L TCLP)
Mercury	<0.2 (mg/L TCLP)
Selenium	<1.0 (mg/L TCLP)
Silver	<5.0 (mg/L TCLP)

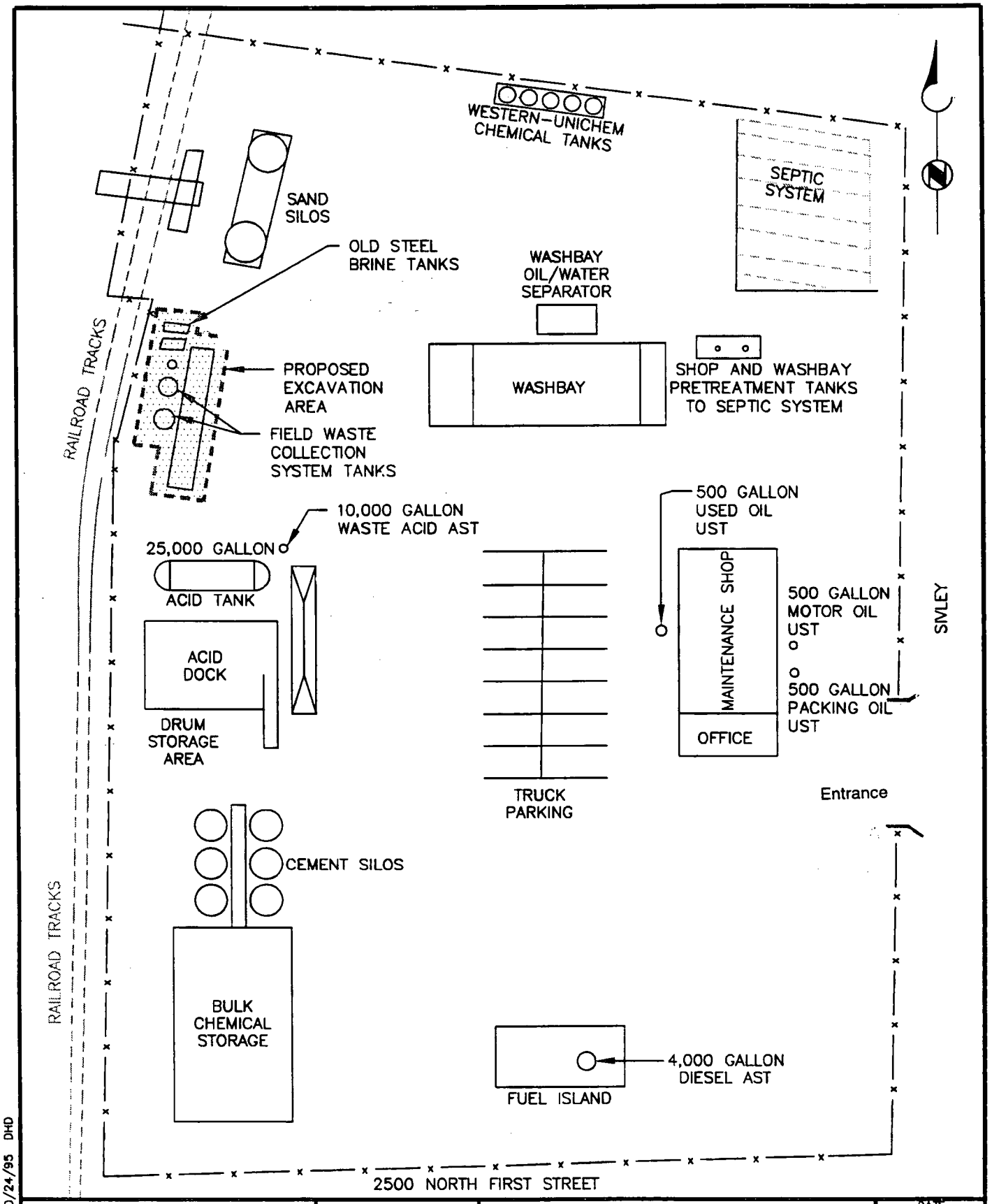
* These limits based on a ranking score >19, and are outlined in the NMOCD guidance documents.

FIGURES



BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	0 1000 2000 SCALE: 1" = 2000' DRAWN BY: DHD DATE 10/25 CHK'D BY: _____ DATE _____ APPROVED: _____ DATE _____	TITLE SITE LOCATION MAP CLIENT BJ SERVICES COMPANY, U.S.A. SITE LOCATION ARTESIA, NEW MEXICO	DATE 10/25/95 PROJECT NUMBER 2988-06 FIGURE NUMBER 1

T:\2988\VICNITY 10/24/95 DHD



T:\2988\VICINITY 10/24/95 DHD

BROWN AND CALDWELL
HOUSTON, TEXAS

SUBMITTED: _____ DATE: _____
PROJECT MANAGER

APPROVED: _____ DATE: _____
BROWN AND CALDWELL

0 0 0
NOT TO SCALE

DRAWN BY: DHD DATE 10/25
CHK'D BY: ____ DATE ____
APPROVED: ____ DATE ____

TITLE: SITE PLAN

CLIENT: BJ SERVICES COMPANY, U.S.A.

SITE LOCATION: ARTESIA, NEW MEXICO

DATE: 10/25/95

PROJECT NUMBER: 2988-06

FIGURE NUMBER: 2

APPENDIX B

CLOSURE PLAN APPROVAL NOTICE

NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

November 2, 1995

CERTIFIED MAIL
RETURN RECEIPT NO. Z-765-962-892

Mr. C.L. Smith
BJ Services Company, U.S.A.
8701 New Trails Drive
The Woodlands, Texas 77381

RE: Field Waste and Steel Brine Tank Closure Plan
Artesia Facility
Eddy County, New Mexico

Dear Mr. Smith:

The New Mexico Oil Conservation Division (OCD) has completed a review of BJ Services' (BJ) October 26, 1995 "Closure Plan Field Waste Tanks and Old Steel Brine Tanks BJ Services Company, U.S.A. Artesia, New Mexico Facility." This document contains BJ's work plan to remediate and determine the extent of potential soil contamination related to the operation of the tank system.

The above referenced work plan is approved with the following conditions:

1. Crystalline salt and any salt contaminated soils will be disposed of at an OCD approved site.

2. BJ will submit a report on the investigation to the OCD by January 12, 1996. The report will contain:

   a. A description of all activities which occurred during the investigation, conclusions and recommendations.

   b. A summary of the laboratory analytic results of soil samples.

3. All documents submitted for approval will be submitted to the OCD Santa Fe Office with copies provided to the OCD Artesia District Office.

Please be advised that OCD approval does not relieve BJ of liability if contamination exists which is beyond the scope of the work plan or if the activities fail to adequately determine the extent of contamination related to BJ's activities. In addition, OCD approval does not relieve BJ of responsibility for compliance with any other federal, state or local laws and/or regulations.

If you have any questions, please call me at (505) 827-7155.

Sincerely,

Mark Ashley
Geologist

xc: OCD Artesia Office

APPENDIX C

PERMIT FOR SOIL DISPOSAL

1/29/96

District I - (505) 393-6161
P. O. Box 1980
Hobbs, NM 88241-1980
District II - (505) 748-1283
811 S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District 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-138
Originated 4/18/95

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 B.J Services 5. Originating Site Artesia
2. Management Facility Destination Goo-Yea Landfarm	6. Transporter Rhino Environmental Services
3. Address of Facility Operator 4007 Lovington Hwy Hobbs NM	8. State New Mexico
7. Location of Material (Street Address or ULSTR) 2401 Sivley	

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:

Soils generated from Removal of Underground Storage Tanks. The tanks were used as collection basins from cleaning out trucks used in oilfield servicing.

Sending to Artesia for approval

RECEIVED
JAN 2 9 1996
OCD HOBBS OFFICE

Estimated Volume 150 tons cy Known Volume (to be entered by the operator at the end of the haul) ______ cy

SIGNATURE: [signature] TITLE: Vice President DATE: 1-26-96
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Royce Crowell TELEPHONE NO. 505 392-4498

(This space for State Use)

APPROVED BY: [signature] TITLE: District Supervisor DATE: 2/2/96

APPROVED BY: [signature] TITLE: GEOLOGIST DATE: 2/5/96

CC: Wayne Price

CERTIFICATE OF WASTE STATUS:
OILFIELD NON-EXEMPT WASTE MATERIAL

Originating Location: BJ Services Company, U.S.A. - Artesia District, Artesia, NM
Source: Field Waste Tank Area Excavation
Disposal Location: Rhino E.S.I. Goo-Yea Facility, Lea County, NM

"As a condition of acceptance for disposal, I hereby certify that this waste as defined by the Environmental Protection Agency's (EPA) July 1988 Regulatory Determination. To my knowledge, this waste will be analyzed pursuant to the provisions of 40 CFR, Part 261, Subparts C and D, to verify the nature as non-hazardous. I further certify that, to my knowledge, no "hazardous or listed waste" pursuant to the provisions of 40 CFR, Part 261, Subparts C and D has been added or mixed with the waste so as to make the resultant mixture a "hazardous waste" pursuant to the provisions of 40 CFR, Section 261.3(b)."

I, the undersigned, as the agent for BJ Services Company, U.S.A. concur with the status of the waste from the subject site.

Name: Mike Wiggins
Title: District Manager
Address: 2401 Sivley
Artesia NM 88210
Signature: Mike Wiggins
Date: 2-1-96

CERTIFICATE OF WASTE STATUS

NON-EXEMPT WASTE MATERIAL

ORIGINATION LOCATION: BJ Services
2401 Sivley
Artesia, NM

SOURCE: Soils from around removed underground storage tanks used as collection basins from cleaning out trucks used in oilfield servicing.

DISPOSAL LOCATION: Goo Yea Landfarm
Permit #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH, RANGE 38 EAST, NMPM, LEA COUNTY, NM 1-800-762-0241

As a condition of acceptance for disposal, I hereby certify that this waste is a non-exempt waste as defined by the Environmental Protection Agency's (EPA) July 1988 Regulatory Determination. To my knowledge, this waste will be analyzed pursuant to the provisions of 40 CFR Part 261 to verify the nature as non-hazardous. I further certify that to my knowledge no "hazardous or listed waste" pursuant to the provisions of 40 CFR, Part 261, Subparts C and D, has been added or mixed with the waste so as to make the resultant mixture a "hazardous waste" pursuant to the provisions of 40 CFR, section 261.3."

I, the undersigned as the agent for _____ _____ concur with the status of the waste from the subject site.

Name: _____

Title: _____

Address: _____

_____

Signature: _____

Date: _____

APPENDIX D

WASTE DISPOSAL MANIFESTS

GOO YEA LANDFARM #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM
CONTAMINATED SOIL DOCUMENTATION SUMMARY

GENERATOR'S NAME/ADDRESS ADDRESS OF FACILITY (IF DIFFERENT)

BJ Services, Inc.
2401 Sivley
Artesia, NM

TRANSPORTER'S NAME/ADDRESS

Valley Construction
505-746-2761

DATE DELIVERED: 002/06/96 thru 02/13/96

TOTAL VOLUME OF SOIL FROM SITE: 919.60 tons

Please print or type
(Form designed for use on elite (12 pitch) typewriter.)

33960 Empty

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0001

2. Page 1 of 1

#20 - LOAD #1

GENERATOR

3. Generator's Name and Mailing Address

BJ ~~Serives~~ Services
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.3	Ton
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Joe Greenwood — Signature: Joe Greenwood — Month 2 Day 6 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Bill Dyer — Signature: Bill Dyer — Month 2 Day 6 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: Bill Dyer — Signature: — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

RHINO ENVIRONMENTAL (GOO-YEA)

Printed/Typed Name: Max W. Nelson — Signature: Max W Nelson — Month 02 Day 06 Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

32,880 Empty 8-45

Please print or type
(Form designed for use on elite (12-pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0003

2. Page 1 of 1 #18 - LOAD #2

3. Generator's Name and Mailing Address

BJ ~~Services~~ Services
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	19.8	T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joe Greenwood	Joe Greenwood	2	6	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Bill Dyer	Bill Dyer	2	6	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO YEA LAND FARM (KNIGHT ENVIRONMENTAL SERVICES)

Printed/Typed Name	Signature	Month	Day	Year
MAX W. HUDSON	Max W. Hudson	02	06	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

30,280 Empty 8:50

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
	G-0002	#17 - LOAD #3

GENERATOR

3. Generator's Name and Mailing Address
BJ ~~Serives~~ Services
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A

7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address	10. US EPA ID Number
Goo Yea Landfarm #NM-01-0015 SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH RANGE 38 EAST, NMPM, LEA COUNTY, NM	

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.2	Ton
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joe Greenwood	Joe Greenwood	2	6	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Bill Dyer	Bill Dyer	2	6	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
GOO-YEA LANDFARM

Printed/Typed Name	Signature	Month	Day	Year
MAX W. NUDSON	Max W. Nudson	02	06	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

1:50 pm

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0010

2. Page 1 of 1

#20 - LOAD #4

3. Generator's Name and Mailing Address
BJ ~~Serives~~
2401 Sivley
4. Generator's Phone Artesia, NM

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	20.9	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joe Greenwood	Joe Greenwood	2	6	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Bill Dyer / Valley Const.	Bill Dyer	2	6	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Goo Yea Landfarm

Printed/Typed Name	Signature	Month	Day	Year
Mary W. Hudson	Mary W. Hudson	2	06	96

GENERATOR — TRANSPORTER — FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

20.5 Pm

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0009

2. Page 1 of 1 #17 Load #5

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone/

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	20.2	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joe Greenwood	Joe Greenwood	2	6	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Guillermo Armendariz (Valley Const.)		2	6	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo-Yea Landfarm

Printed/Typed Name	Signature	Month	Day	Year
MAX W. NIDSON	Max W Nidson	2	6	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

2-12-96

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc No. C-0008

2. Page 1 of 1 — #18 #6

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone 505-746-2761
B. Transporter's Phone
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21-3	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joe Greenwood	Joe Greenwood	2	6	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Bernie Griffith (VALLEY CONST.)	Bernie Griffith	2	6	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
GOO YEA LANDFARM

Printed/Typed Name	Signature	Month	Day	Year
MAX D. WILSON	Max D. Wilson	2	6	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. G-0087 | 2. Page 1 of 1

3. Generator's Name and Mailing Address
BJ Services
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name: Valley Construction | 6. US EPA ID Number: N/A

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address: Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone 505-746-2761
B. Transporter's Phone
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.1	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Joe Greenwood | Signature: Joe Greenwood | Month: 2 | Day: 6 | Year: 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: VALLEY CONSTRUCTION | Signature: Bill Dyer | Month: 2 | Day: 7 | Year: 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO YEA LANDFARM

Printed/Typed Name: MARK WOOD | Signature | Month: 2 | Day: 7 | Year: 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

8:00 AM

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0021

2. Page 1 of 1

#17 Load #8

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

	11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a.	Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23.6	TN
b.					
c.					
d.					

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane GRIFFIN — Signature: Diane Griffin — Month: 2 Day: 7 Year: 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: VALLEY CONSTRUCTION — Signature: [signature] — Month: 2 Day: 7 Year: 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month: Day: Year:

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO-YEA LAND FARM

Printed/Typed Name: MAX W HUDSON — Signature: [signature] — Month: 2 Day: 7 Year: 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

8:30 AM

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0020

2. Page 1 of 1

#18 load 9.

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.2 TN	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane GRIFFIN — Signature: Diane Griffin — Month: 2 Day: 7 Year: 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const — Signature: Bessie Daffin — Month: 2 Day: 7 Year: 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month — Day — Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO-YEA LAND FARM

Printed/Typed Name: MAXIE HUDSON — Signature — Month: 02 Day: 7 Year: 96

GENERATOR — TRANSPORTER — FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

1:00pm

#17 Load #C

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0005

2. Page 1 of 1

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joe Greenwood	Joe Greenwood	2	6	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const —	Gilbert Hernandez	2	7	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO-YEA LANDFARM

Printed/Typed Name	Signature	Month	Day	Year
Max W. Hudson	Max W. Hudson	2	7	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

1:00

#18 Load #1

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	
	G-0006		221

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A

7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.1	TON
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Joe Greenwood	Joe Greenwood	2	6	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Bernie Duffitt	2	7	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Goo Yea

Printed/Typed Name	Signature	Month	Day	Year
Maxine Nelson	Maxine Nelson	2	7	96

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

1:25pm

#20 Load 12

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0022

2. Page 1 of 1

23.8

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23.8	ton
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	7	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Dusty Sweet	2	7	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo Yea Landfarm

Printed/Typed Name	Signature	Month	Day	Year
Maxine Dodson	Maxine Dodson	2	7	96

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8.00

#17 #13

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0025

2. Page 1 of 1

207

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	207 ton	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	8	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const		2	8	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Goo Yea Landfarm

Printed/Typed Name	Signature	Month	Day	Year
MAX W HUDSON		2	8	96

GENERATOR — TRANSPORTER — FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00

#20 Load 14

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0027

2. Page 1 of 1

226

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.6 tn	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin | Signature: D. Griffin | Month: 2 | Day: 8 | Year: 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const. | Signature: Dusty Smart | Month: 2 | Day: 8 | Year: 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo Yea Landfarm

Printed/Typed Name: MAX W HUDSON | Signature: Max W Hudson | Month: 2 | Day: 8 | Year: 96

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

#20 Load 15

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Document No. G-0026	2. Page 1 of 1	21.6

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A
7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.6	tn
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griff	2	8	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const	Bernie Duffett	2	8	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO-YEA LAND FARM

Printed/Typed Name	Signature	Month	Day	Year
MAX W. NUDSON	Max W. Nudson	2	8	96

12-BLS-C5 Rev. 4/94

ORIGINAL – RETURN TO GENERATOR

1:00 pm

#17 Land Ap

Please print or type
(Form designed for use on elite (12-pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0028

2. Page 1 of 1

21.6

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

	11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a.	Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.6 TM	
b.					
c.					
d.					

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane GRIFFIN	Diane Griffin	12	18	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Con —		12	18	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
GOO YEA LANDFARM

Printed/Typed Name	Signature	Month	Day	Year
MAX A. HUDSON	Max A Hudson	2	5	96

12-BLS-C5 Rev. 4/94

ORIGINAL – RETURN TO GENERATOR

1-05

#20 Load #17

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0029

2. Page 1 of 1

233

GENERATOR

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23.3	TON
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: *I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.*

Printed/Typed Name: Diane GRIFFIN — Signature: Diane Griffin — Month 2 Day 8 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: VALLEY CONST. — Signature: Dusty Stuart — Month 2 Day 8 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO LAND FARM

Printed/Typed Name: MAX W. NELSON — Signature: Max W. Nelson — Month 2 Day 8 Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00 AM

#18 Load #18

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
	G-0030	21.5 TN

GENERATOR

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A
7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address	10. US EPA ID Number
Goo Yea Landfarm #NM-01-0015 SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH RANGE 38 EAST, NMPM, LEA COUNTY, NM	

A. Transporter's Phone
B. Transporter's Phone
C. Facility's Phone 505-746-2761 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.5	T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	9	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const	Bernie Duffy	2	9	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO-YEA LAND FARM

Printed/Typed Name	Signature	Month	Day	Year
MAX W. HUDSON	Max W Hudson	2	9	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00

#20 Loo #19

Please print or type.
(Form designed for use on elite (12 pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0031

2. Page 1 of 1

245

GENERATOR

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	25.0 +	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin — Signature: Diane Griffin — Month 2 Day 9 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const. — Signature: Dusty Smart — Month 2 Day 9 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
GOO YEA LANDFARM

Printed/Typed Name: MAX W. JUDSON — Signature — Month 2 Day 9 Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00 AM

#17 #30

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0032

2. Page 1 of 1

227

GENERATOR

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.7	T
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin — Signature: Diane Griffin — Month: 2 Day: 9 Year: 94

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const — Signature: [signature] — Month: 2 Day: 9 Year: 94

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month — Day — Year

FACILITY

19. Discrepancy Indication Space
Goo Yea Land Fill

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Royce Cooper — Signature: [signature] — Month: 2 Day: 10 Year: 94

ORIGINAL - RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type
(Form designed for use on site (12-pitch) typewriter.)

12:30 pm

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0034

2. Page 1 of 1 — #18 Load 2

22.7

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.7	tr
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin — Signature: Diane Griffin — Month 2 Day 9 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const. — Signature: Dennis Duffy — Month 2 Day 9 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month — Day — Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo Yea Land Farm

Printed/Typed Name: MAX W. WILSON — Signature: Max W Wilson — Month 2 Day 9 Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

1345R

#20 Load 20

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. C0053

2. Page 1 of 1

24.8

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone 505-746-2761
B. Transporter's Phone
C. Facility's Phone 505-392-4898

	11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a.	Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	24.8	T
b.					
c.					
d.					

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane GRIFFIN	Diane Griffin	2	9	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Dusty Smart	2	9	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Goo Yea Land Farm

Printed/Typed Name	Signature	Month	Day	Year
MAX W HUDSON	Max W. Hudson	2	9	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00 AM

#18 Load 423

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0050

2. Page 1 of 1

23.0

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23.0	tons
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin | Signature: Diane Griffin | Month: 12 | Day: 12 | Year: 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const | Signature: Bernie Duffitt | Month: 12 | Day: 12 | Year: 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

Goo Yea Land Fill

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Royce Cooper | Signature: Royce Cooper | Month: 12 | Day: 12 | Year: 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8.08

420 Loadout

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	
	G-0035		23.7

GENERATOR

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name — 6. US EPA ID Number
Valley Construction — N/A

7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address — 10. US EPA ID Number
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23.7	tons
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin — Signature: Diane Griffin — Month 2 Day 12 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Valley Const. — Signature: Rusty Smart — Month 2 Day 12 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space
Goo Yea Land Fill

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Royce Cooper — Signature: Royce Cooper — Month 2 Day 12 Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

12:25pm

#18 Load 25

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 0036

2. Page 1 of 1

23.9 tn

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name
Valley Construction

6. US EPA ID Number
N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23.9 tn	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane GRIFFIN | Signature: Diane Griffin | Month 12 | Day 12 | Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const. | Signature: Bessie Griffin | Month 12 | Day 12 | Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space
Goo Yea Landfill

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: ROYCE COOPER | Signature: Royce Cooper | Month 12 | Day 12 | Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

12:37 pm

#20 Load #20

Please print or type
(Form designed for use on elite (12-pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. G-0687 | 2. Page 1 of 1 | 20.0

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name: Valley Construction | 6. US EPA ID Number: N/A

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address: Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone: 505-746-2761
B. Transporter's Phone:
C. Facility's Phone: 505-392-4898

	11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a.	Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.9	T
b.					
c.					
d.					

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Diane Griffin | Signature: Diane Griffin | Month: 12 | Day: 12 | Year: 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const | Signature: Dusty Sweet | Month: 12 | Day: 12 | Year: 96

TRANSPORTER

19. Discrepancy Indication Space
Goo Yea Landfills

FACILITY

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Roy Cooper | Signature: Roy Cooper | Month: 12 | Day: 12 | Year: 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:30 AM

#13 Load 2

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	21.7
	G-0023		

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A
7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address	10. US EPA ID Number
Goo Yea Landfarm #NM-01-0015 SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH RANGE 38 EAST, NMPM, LEA COUNTY, NM	

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.7	tn
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
DIANE GRIFFIN	Diane Griffin	2	8	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const	Bernie Duffett	2	8	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Goo-Yea Land Farm

Printed/Typed Name	Signature	Month	Day	Year
MAX W. WIDSON	Max W. Widson	2	13	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

913 Dn

#20 Load #28

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0039

2. Page 1 of 1

225

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.5	tn
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin — Signature: Diane Griffin — Month 12 Day 13 Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const. — Signature: Dusty Smart — Month 12 Day 13 Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo Yea Landfarm

Printed/Typed Name: Max W. Hudson — Signature: Max W. Hudson — Month 12 Day 12 Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

1:20 pm

#20 - Load #29

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0048

2. Page 1 of 1

21.7

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.7	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
BARBARA LEWIS	Barbara Lewis	2	13	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Dusty Smart	2	13	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO YEA LAND FARM

Printed/Typed Name	Signature	Month	Day	Year
MAX W. NUDSON	Max W. Nudson	2	13	96

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

1:35 pm

#13 4-30

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	
	G-0049		20-8

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A
7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address	10. US EPA ID Number
Goo Yea Landfarm #NM-01-0015 SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH RANGE 38 EAST, NMPM, LEA COUNTY, NM	

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	20.8 tons	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
DIANE GRIFFIN	Diane Griff	2	13	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const		2	13	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
MAX W HUDSON	Max W Hudson	2	13	96

GENERATOR — TRANSPORTER — FACILITY

12-BLS-C5 Rev. 4/94

ORIGINAL – RETURN TO GENERATOR

815 AM

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

1 L00443

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Document No. G-0019	2. Page 1 of 1	22.3

3. Generator's Name and Mailing Address
BJ Services
2401 Sivley
4. Generator Artesia, NM

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A
7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.3	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	14	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Benjamin Lara	2	14	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Goo Yea Landfarm

Printed/Typed Name	Signature	Month	Day	Year
Max W. Hudson	Max W. Hudson	2	14	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8/5

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

#20 Land #32

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Document No. G-0047	2. Page 1 of 1	22.1

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone (

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A
7. Transporter 2 Company Name	8. US EPA ID Number
9. Designated Facility Name and Site Address	10. US EPA ID Number
Goo Yea Landfarm #NM-01-0015 SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH RANGE 38 EAST, NMPM, LEA COUNTY, NM	

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.1	[illegible]
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** *I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.*

Printed/Typed Name	Signature	Month	Day	Year
Diane GRIFFIN	Diane Griffin	2	14	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
VALLEY CONST.	Dusty [illegible]	2	14	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
GOOYEA LAND FARM	[illegible]	2	14	96

12-BLS-C5 Rev. 4/94

ORIGINAL – RETURN TO GENERATOR

300 pm

#1 Load #33

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1
	G-0045	23 TN

GENERATOR

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name: Valley Construction
6. US EPA ID Number: N/A

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM
10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23.0 T	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane GRIFFIN	Diane Griffin	12	14	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Benjamin Force	12	14	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Goo-Yea Land Farm

Printed/Typed Name	Signature	Month	Day	Year
MAX W. NUDSON	Max W. Nudson	12	15	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

3:10pm

#20 Load #34

Please print or type.
(Form designed for use on elite (12-pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0017

2. Page 1 of 1

21.6

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.6	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** *I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.*

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	15	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Dusty Smart	2	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO YEA LANDFARM

Printed/Typed Name	Signature	Month	Day	Year
MAX W NELSON	Max W Nelson	2	15	96

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00 Am

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

#16 Load #35

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No. G-0044	2. Page 1 of 1	20.3

GENERATOR

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone (

5. Transporter 1 Company Name: Valley Construction
6. US EPA ID Number: N/A

7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number:

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	20.3	tn
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Gri[illegible]	2	15	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	[signature]	2	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo-Yea Land Farm

Printed/Typed Name	Signature	Month	Day	Year
Max W Hudson	Max W. Hudson	2	15	96

12-BLS-C5 Rev. 4/94

ORIGINAL – RETURN TO GENERATOR

8:00 AM

#135 Load #3

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	21.3
	G-0043		

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name	6. US EPA ID Number
Valley Construction	N/A
7. Transporter 2 Company Name	8. US EPA ID Number

9. Designated Facility Name and Site Address	10. US EPA ID Number
Goo Yea Landfarm #NM-01-0015 SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH RANGE 38 EAST, NMPM, LEA COUNTY, NM	

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.3	tn
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above	E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	15	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Kenny Jimenez	2	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo Yea Land Farm

Printed/Typed Name	Signature	Month	Day	Year
MAX W. NELSON	Max W Nelson	2	15	96

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:00 AM

#3 Load #37

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0041

2. Page 1 of 1

22.3

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	223 tons	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	15	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const	Gilbert Armstrong	2	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo-Yea Land Farm

Printed/Typed Name	Signature	Month	Day	Year
MAX W. ALDSON	Max W. Aldson	2	15	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

10 of 10 pages

#20 Load #38

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0018

2. Page 1 of 1

22.7

GENERATOR

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	22.7	tons
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane GRIFFIN	Diane Griffin	12	15	96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const	Dusty Sweet	12	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo Yea Land Farm

Printed/Typed Name	Signature	Month	Day	Year
MAX W. HUDSON	Max W. Hudson	12	15	96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

12:50

#16 Load 39

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0046

2. Page 1 of 1

21.7

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	21.7 tn	
b.				
c.				
d.				

GENERATOR

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** *I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.*

Printed/Typed Name: Diane GRIFFIN | Signature: Diane Griffin | Month 12 | Day 15 | Year 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Const. | Signature: Dennis Duff | Month 12 | Day 15 | Year 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO YEA LANDFARM

Printed/Typed Name: MAX W. HUDSON | Signature: Max W. Hudson | Month 12 | Day 15 | Year 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Load 40

HBS 1:30 pm

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0040

2. Page 1 of 1

19.8

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	19.8	to
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane GRIFFIN	Diane Griffin	2	15	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const	Kenny Jinnings	2	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

GOO-YEA LAND Farm

Printed/Typed Name	Signature	Month	Day	Year
MAX W. HUDSON	Max W. Hudson	2	15	96

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

Please print or type.
(Form designed for use on elite (12-pitch) typewriter.)

#13 Load #41

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. G-0042

2. Page 1 of 1

12.3

3. Generator's Name and Mailing Address

BJ Serives
2401 Sivley
Artesia, NM

4. Generator's Phone ( )

5. Transporter 1 Company Name

Valley Construction

6. US EPA ID Number

N/A

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Goo Yea Landfarm #NM-01-C015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM

10. US EPA ID Number

A. Transporter's Phone

B. Transporter's Phone 505-746-2761

C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	12.3	TN
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Diane Griffin | Signature: Diane Griffin | Month: 2 | Day: 15 | Year: 96

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Valley Construction | Signature: [signature] | Month: 2 | Day: 15 | Year: 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Goo Yea Landfarm

Printed/Typed Name: MAX W. NELSON | Signature: [signature] | Month: 2 | Day: 15 | Year: 96

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

8:80 Ahm

#1 Load 42

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Document No. G-0024	2. Page 1 of 1	22.9

3. Generator's Name and Mailing Address
BJ Serives
2401 Sivley
4. Generator's Site Address Artesia, NM

5. Transporter 1 Company Name: Valley Construction
6. US EPA ID Number: N/A

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
Goo Yea Landfarm #NM-01-0015
SE/4 OF SECTION 14, TOWNSHIP 11 SOUTH
RANGE 38 EAST, NMPM, LEA COUNTY, NM
10. US EPA ID Number

A. Transporter's Phone
B. Transporter's Phone 505-746-2761
C. Facility's Phone 505-392-4898

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-exempt soils from around underground storage tanks used as collection basins from cleaning out truck used in oilfield servicing	1	Bulk	23 tn	
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name	Signature	Month	Day	Year
Diane Griffin	Diane Griffin	2	15	96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Valley Const.	Bill Marley	2	15	96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Royce Cooper		2	16	96

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 4/94

APPENDIX E

ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY FORMS

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

November 10, 1995

REPORT OF: Soil Analysis

REPORT TO:
Mr. Scott Lesikar
Brown & Caldwell
2710 Stemmons Freeway
1100 Tower North
Dallas, Texas 75207

PROJECT NAME:
BJ Services
2401 Sivley
Artesia, NM 88210

SAMPLE I.D.: Tank #1

SAMPLE DATE: November 07, 1995
SAMPLE TIME: 3:10PM
SAMPLE RECEIVED: November 08, 1995
TIME RECEIVED: 9:10AM
SAMPLE COLLECTED BY: Customer

SAMPLE NUMBER: 53641

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
METALS		
Arsenic, Total	1.0	<1.0
Barium, Total	0.25	2300
Cadmium, Total	0.20	<0.20
Chromium, Total	0.25	0.71
Lead, Total	0.50	1.2
Mercury, Total	0.020	<0.020
Selenium, Total	0.75	<0.75
Silver, Total	0.35	<0.35
TPH & BTXE		
Total Petroleum Hydrocarbons (Diesel)	50	1902
Benzene	0.100	0.120
Toluene	0.100	0.920
Ethyl Benzene	0.100	1.1
Xylene (Total)	0.300	5.5

Local: (214) 727-1123 Long Distance: (800) 228-ERMI FAX: (214) 727-1175

SAMPLE NUMBER: 53641

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Metals Digestion - ICP		3050				11/08/95	12:00PM	J. Marconi
Metals Digestion - Mercury		7471				11/08/95	10:00AM	J. Marconi
Arsenic	Cool to 4°C	6010	2.7	± 0.03	102	11/08/95	4:13PM	D. Bernhard
Barium	Cool to 4°C	6010	9.7	± 0.11	98	11/08/95	4:13PM	D. Bernhard
Cadmium	Cool to 4°C	6010	0.5	± 0.004	96	11/08/95	4:13PM	D. Bernhard
Chromium	Cool to 4°C	6010	1.0	± 0.01	99	11/08/95	4:13PM	D. Bernhard
Lead	Cool to 4°C	6010	1.4	± 0.01	98	11/08/95	4:13PM	D. Bernhard
Mercury	Cool to 4°C	7471	0.3	± 0.001	96	11/08/95	11:05AM	J. Marconi
Selenium	Cool to 4°C	6010	2.2	± 0.02	92	11/08/95	5:25PM	D. Bernhard
Silver	Cool to 4°C	6010	0.7	± 0.003	97	11/08/95	4:13PM	D. Bernhard
Matrix Spikes:								
TPH - Gas	Cool to 4°C	8015	0.4	± 0.018	91	11/09/95	12:37PM	K. Richmond
Benzene	Cool to 4°C	8020	3.4	± 0.0012	113	11/09/95	12:37PM	K. Richmond
Toluene	Cool to 4°C	8020	3.2	± 0.0009	94	11/09/95	12:37PM	K. Richmond
Ethyl Benzene	Cool to 4°C	8020	1.7	± 0.0005	101	11/09/95	12:37PM	K. Richmond
Xylene	Cool to 4°C	8020	2.3	± 0.0008	107	11/09/95	12:37PM	K. Richmond
Surrogate:								
Bromofluorobenzene			N/A	N/A	101			

Respectfully submitted,

Kendall K. Brown
President

Prepared By S. Doster SD
Reviewed By Shelly Weems

Environmental Laboratories

Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

November 10, 1995

REPORT OF: Soil Analysis

REPORT TO:
Mr. Scott Lesikar
Brown & Caldwell
2710 Stemmons Freeway
1100 Tower North
Dallas, Texas 75207

PROJECT NAME:
BJ Services
2401 Sivley
Artesia, NM 88210

SAMPLE I.D.: Tank #2

SAMPLE DATE: November 07, 1995
SAMPLE TIME: 3:20PM
SAMPLE RECEIVED: November 08, 1995
TIME RECEIVED: 9:10AM
SAMPLE COLLECTED BY: Customer

SAMPLE NUMBER: 53642

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
TPH & BTXE		
Total Petroleum Hydrocarbons (Diesel)	5.0	8.0
Benzene	0.010	<0.010
Toluene	0.010	<0.010
Ethyl Benzene	0.010	<0.010
Xylene (Total)	0.030	<0.030

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Matrix Spikes:								
TPH - Gas	Cool to 4°C	8015	0.4	± 0.018	91	11/09/95	1:14PM	K. Richmond
Benzene	Cool to 4°C	8020	3.4	± 0.0012	113	11/09/95	1:14PM	K. Richmond
Toluene	Cool to 4°C	8020	3.2	± 0.0009	94	11/09/95	1:14PM	K. Richmond
Ethyl Benzene	Cool to 4°C	8020	1.7	± 0.0005	101	11/09/95	1:14PM	K. Richmond
Xylene	Cool to 4°C	8020	2.3	± 0.0008	107	11/09/95	1:14PM	K. Richmond

SAMPLE NUMBER: 53642

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Surrogate:								
Bromofluorobenzene			N/A	N/A	88			

Respectfully submitted,

Kendall K. Brown
President

Prepared By S. Doster SD
Reviewed By Shelly Weems

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

November 10, 1995

REPORT OF: Soil Analysis

REPORT TO: Mr. Scott Lesikar
Brown & Caldwell
2710 Stemmons Freeway
1100 Tower North
Dallas, Texas 75207

PROJECT NAME: BJ Services
2401 Sivley
Artesia, NM 88210

SAMPLE I.D.: Tank #3

SAMPLE DATE: November 07, 1995
SAMPLE TIME: 3:30PM
SAMPLE RECEIVED: November 08, 1995
TIME RECEIVED: 9:10AM
SAMPLE COLLECTED BY: Customer

SAMPLE NUMBER: 53643

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
TPH & BTXE		
Total Petroleum Hydrocarbons (Diesel)	5.0	128
Benzene	0.010	<0.010
Toluene	0.010	<0.010
Ethyl Benzene	0.010	<0.010
Xylene (Total)	0.030	0.044

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Matrix Spikes:								
TPH - Gas	Cool to 4°C	8015	0.4	± 0.018	91	11/09/95	3:58PM	K. Richmond
Benzene	Cool to 4°C	8020	3.4	± 0.0012	113	11/09/95	1:51PM	K. Richmond
Toluene	Cool to 4°C	8020	3.2	± 0.0009	94	11/09/95	1:51PM	K. Richmond
Ethyl Benzene	Cool to 4°C	8020	1.7	± 0.0005	101	11/09/95	1:51PM	K. Richmond
Xylene	Cool to 4°C	8020	2.3	± 0.0008	107	11/09/95	1:51PM	K. Richmond

SAMPLE NUMBER: 53643

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Surrogate:								
Bromofluorobenzene			N/A	N/A	72			

Respectfully submitted,

Kendall K. Brown
President

Prepared By S. Doster SD
Reviewed By Shelly Weems

Environmental Laboratories

Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

November 21, 1995

COPY

REPORT OF: Soil Analysis

REPORT TO: Mr. Scott E. Lesikar
Brown & Caldwell
2710 Stemmons Freeway
1100 Tower North
Dallas, TX 75207

PROJECT NAME: BJ Services, FWT Closure
Artesia, NM

PROJECT NUMBER: 2988-25

SAMPLE I.D.: See Below

SAMPLE DATE: November 15-16, 1995
SAMPLE RECEIVED: November 17, 1995
TIME RECEIVED: 9:30AM
SAMPLE COLLECTED BY: Scott Lesikar - Customer

SAMPLE NUMBER: See Below

RESULTS:

Sample Number	Sample I.D.	TPH-Diesel (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylene (mg/kg)
54039	T -1, FC	1059	<0.050	<0.050	0.145	1.3
54040	T -3, FC	276	<0.050	<0.050	<0.050	0.280
54041	T -2, FC	213	<0.050	<0.050	<0.050	0.465
Detection Limits		**25**	**0.050**	**0.050**	**0.050**	**0.150**
54042	T -1-3, NC	5045	<0.500	<0.500	<0.500	9.2
Detection Limits		**250**	**0.500**	**0.500**	**0.500**	**1.5**
54043	T -1-3, SC	652	<0.250	<0.250	<0.250	0.825
Detection Limits		**125**	**0.250**	**0.250**	**0.250**	**0.750**
54044	T -1-3, EC	52	<0.050	<0.050	<0.050	<0.150
54045	T -1-3, WC	81	<0.050	<0.050	<0.050	<0.150
Detection Limits		**25**	**0.050**	**0.050**	**0.050**	**0.150**

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%		Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
TPH	Cool to 4°C	8015					11/20/95	K. Richmond
Matrix Spikes:								
TPH - Diesel			0.7	±	0.0365	106		

Local: (214) 727-1123 Long Distance: (800) 228-ERMI FAX: (214) 727-1175

SAMPLE NUMBERS: 54039-54045

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%		Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
Sample Numbers:	**54039-54044**							
Benzene	Cool to 4°C	8020	0.3	±	0.0001	119	11/20/95	K. Richmond
Toluene	Cool to 4°C	8020	1.5	±	0.0005	111	11/20/95	K. Richmond
Ethyl Benzene	Cool to 4°C	8020	1.0	±	0.0004	114	11/20/95	K. Richmond
Xylene	Cool to 4°C	8020	2.1	±	0.0008	119	11/20/95	K. Richmond
Sample Number:	**54045**							
Benzene	Cool to 4°C	8020	0.6	±	0.0002	112	11/20/95	K. Richmond
Toluene	Cool to 4°C	8020	0.8	±	0.0002	111	11/20/95	K. Richmond
Ethyl Benzene	Cool to 4°C	8020	3.0	±	0.0010	113	11/20/95	K. Richmond
Xylene	Cool to 4°C	8020	0.8	±	0.0028	116	11/20/95	K. Richmond
Sample Number:	**54039**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	106		
Sample Number:	**54040**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	84		
Sample Number:	**54041**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	95		
Sample Number:	**54042**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	105		
Sample Number:	**54043**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	111		
Sample Number:	**54044**							
Surrogate:								
Bromofluorobenzene			N/A		N/A	100		

SAMPLE NUMBERS: 54039-54045

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery %	Date of Analyses	Analyst
Sample Number:	**54044**						
Surrogate:							
Bromofluorobenzene			N/A	N/A	74		
Sample Number:	**54045**						
Surrogate:							
Bromofluorobenzene			N/A	N/A	122		
Sample Number:	**54045**						
Surrogate:							
Bromofluorobenzene			N/A	N/A	96		

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Pope
Reviewed By Shelly Weems

cc: Tim Jenkins - Brown & Caldwell

Chain-of-Custody

001284

Page 1 of 1

ERMI
Bethany Tech Center
400 W. Bethany, Suite 190
Allen, Texas 75002
214- 727-1123 (Local) * 800- 228- ERMI (Long Distance)
214- 727-1175 (Fax)

Company Name: Brown and Caldwell ❶	Comments: Print on white paper fax results to S. Lesikar (214) 630-9866 also fax to T. Jenkins (713) 759-0952
Contact: Scott E. Lesikar	
Address: 2710 Stemmons Fwy., 1100 North	
City: Dallas State: TX Zip Code: 75207	TAT: Normal (X) Expedite ☐ (Call for Pricing)
Telephone: (214) 630-0001 Fax Number: (214) 630-9866	
Billing Name: Brown and Caldwell ❷	REQUESTED ANALYSES ❼
Billing Address (if different): SAME	
City: State: Zip Code:	
Telephone: Fax Number:	
Purchase Order Number: 2988-25 ❸	
Project Name: BJ Services, FWT Closure ❹ Project Number: 2988-25 ❺	
Address: 2401 Sivley	
City: Artesia State: NM Zip Code:	
Sampler: Scott Lesikar Signature: Scott E Lesikar ❻	

ERMI Use Only	Field Sample I.D.	Sample Date ❽	Sample Time ❾ 11:30	Matrix	# of Bottles	Preservative	Sample Type Comp.	Sample Type Grab	TPH 8015 M Diesel	BTEX 8020	pH	Total metals (RCRA list)
54039	T-1, FC	11-15-95	~~09:00~~	Soil	1	<4°C	✓		✓	✓	✓	✓
54040	T-3, FC	11-15-95	16:30	Soil	1	<4°C	✓		✓	✓	✓	
54041	T-2, FC	11-15-95	17:00	Soil	1	<4°C	✓		✓	✓	✓	
54042	T-1-3, NC	11-16-95	10:00	Soil	1	<4°C	✓		✓	✓	✓	✓
54043	T-1-3, SC	11/16/95	10:15	Soil	1	<4°C	✓		✓	✓	✓	
54044	T-1-3, EC	11/16/95	10:30	Soil	1	<4°C	✓		✓	✓	✓	
54045	T-1-3, WC	11/16/95	10:45	Soil	1	<4°C	✓		✓	✓	✓	

Relinquished By: Scott E Lesikar ❿	Date: 11-16-95	Time: 15:00	Received By: Fedex	Date: 11/16/95	Time: 15:00
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Method of Shipment:	Date:		Received for ERMI By: [signature]	Date: 11/17	Time: 0930

See Reverse for Terms and Conditions

Revised 05/17/95

WHITE: Or[illegible] to be returned with Report; YELLOW: ERMI copy; PINK, Customer Copy

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

November 27, 1995

REPORT OF: Soil Analysis

REPORT TO: Mr. Scott E. Lesikar
Brown & Caldwell
2710 Stemmons Freeway
1100 Tower North
Dallas, TX 75207

PROJECT NAME: BJ Services, FWT Closure
Artesia, NM

PROJECT NUMBER: 2988-25

SAMPLE I.D.: See Below

SAMPLE DATE: See Below
SAMPLE TIME: See Below
SAMPLE RECEIVED: November 17, 1995
TIME RECEIVED: 9:30AM
SAMPLE COLLECTED BY: Scott Lesikar - Customer

SAMPLE NUMBER: See Below

RESULTS:

Sample Number	Sample I.D.	Sample Date	Sample Time	Corrosivity (units)
54039	T -1, FC	11/15/95	11:30AM	8.0
54040	T -3, FC	11/15/95	4:30PM	7.9
54041	T -2, FC	11/15/95	5:00PM	7.6
54042	T -1-3, NC	11/16/95	10:00AM	7.5
54043	T -1-3, SC	11/16/95	10:15AM	7.7
54044	T -1-3, EC	11/16/95	10:30AM	7.4
54045	T -1-3, WC	11/16/95	10:45AM	7.5
Detection Limit				**0.1**

Quality Control Information

Parameter	Sample Preservation	EPA (1) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Corrosivity	None Required	9045	0.0	± 0.00	N/A	11/20/95	11:00AM	M. McGaugh

Local: (214) 727-1123 Long Distance: (800) 228-ERMI FAX: (214) 727-1175

SAMPLE NUMBERS: 54039-54045

* Using the criteria of Corrosivity characteristics, these samples of waste are not hazardous.

(1) EPA. 1986. Test Methods for Evaluating Solid Waste. SW-846, 3rd Edition.

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Weems
Reviewed By S. Doster

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

November 27, 1995

REPORT OF: Soil Analysis

REPORT TO: Mr. Scott E. Lesikar
Brown & Caldwell
2710 Stemmons Freeway
1100 Tower North
Dallas, TX 75207

PROJECT NAME: BJ Services, FWT Closure
Artesia, NM

PROJECT NUMBER: 2988-25

SAMPLE I.D.: T-1, FC

SAMPLE DATE: November 15, 1995
SAMPLE TIME: 11:30AM
SAMPLE RECEIVED: November 17, 1995
TIME RECEIVED: 9:30AM
SAMPLE COLLECTED BY: Scott Lesikar - Customer

SAMPLE NUMBER: 54039

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
METALS		
Arsenic, Total	1.0	1.5
Barium, Total	0.25	210
Cadmium, Total	0.20	0.87
Chromium, Total	0.25	7.2
Lead, Total	0.50	4.3
Mercury, Total	0.020	<0.020
Selenium, Total	0.75	<0.75
Silver, Total	0.35	<0.35

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Metals Digestion - ICP		3050				11/21/95	10:00AM	J. Marconi
Metals Digestion - Mercury		7471				11/20/95	12:30PM	D. Bernhard
Arsenic	Cool to 4°C	6010	1.5	± 0.01	93	11/21/95	3:04PM	J. Marconi
Barium	Cool to 4°C	6010	2.6	± 0.03	94	11/21/95	3:04PM	J. Marconi
Cadmium	Cool to 4°C	6010	1.5	± 0.01	92	11/21/95	3:04PM	J. Marconi
Chromium	Cool to 4°C	6010	1.8	± 0.02	94	11/21/95	3:04PM	J. Marconi
Lead	Cool to 4°C	6010	0.2	± 0.002	97	11/21/95	3:04PM	J. Marconi

SAMPLE NUMBER: 54039

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Mercury	Cool to 4°C	7471	0.2	± 0.001	106	11/20/95	1:46PM	J. Marconi
Selenium	Cool to 4°C	6010	2.2	± 0.02	97	11/21/95	3:04PM	J. Marconi
Silver	Cool to 4°C	6010	0.1	± 0.0006	95	11/21/95	3:04PM	J. Marconi

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Weems
Reviewed By S. Doster

Environmental Laboratories

Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

November 27, 1995

REPORT OF: Soil Analysis

REPORT TO: Mr. Scott E. Lesikar
Brown & Caldwell
2710 Stemmons Freeway
1100 Tower North
Dallas, TX 75207

PROJECT NAME: BJ Services, FWT Closure
Artesia, NM

PROJECT NUMBER: 2988-25

SAMPLE I.D.: T-1-3, NC

SAMPLE DATE: November 16, 1995
SAMPLE TIME: 10:00AM
SAMPLE RECEIVED: November 17, 1995
TIME RECEIVED: 9:30AM
SAMPLE COLLECTED BY: Scott Lesikar - Customer

SAMPLE NUMBER: 54042

RESULTS:

Parameter	Detection Limits (mg/kg)	Observed Concentration (mg/kg)
METALS		
Arsenic, Total	1.0	1.7
Barium, Total	0.25	210
Cadmium, Total	0.20	0.57
Chromium, Total	0.25	7.8
Lead, Total	0.50	9.5
Mercury, Total	0.020	<0.020
Selenium, Total	0.75	<0.75
Silver, Total	0.35	<0.35

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Metals Digestion - ICP		3050				11/21/95	10:00AM	J. Marconi
Metals Digestion - Mercury		7471				11/20/95	12:30PM	D. Bernhard
Arsenic	Cool to 4°C	6010	1.5	± 0.01	93	11/21/95	3:36PM	J. Marconi
Barium	Cool to 4°C	6010	2.6	± 0.03	94	11/21/95	3:36PM	J. Marconi
Cadmium	Cool to 4°C	6010	1.5	± 0.01	92	11/21/95	3:36PM	J. Marconi
Chromium	Cool to 4°C	6010	1.8	± 0.02	94	11/21/95	3:36PM	J. Marconi
Lead	Cool to 4°C	6010	0.2	± 0.002	97	11/21/95	3:36PM	J. Marconi

SAMPLE NUMBER: 54042

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Mercury	Cool to 4°C	7471	0.2	± 0.001	106	11/20/95	1:47PM	J. Marconi
Selenium	Cool to 4°C	6010	2.2	± 0.02	97	11/21/95	3:36PM	J. Marconi
Silver	Cool to 4°C	6010	0.1	± 0.0006	95	11/21/95	3:36PM	J. Marconi

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Weems SW
Reviewed By S. Doster SD

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

December 27, 1995

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana St., Suite 2500
Houston, Texas 77002

PROJECT NAME: BJ Services, FWT Closure
Artesia, NM

PROJECT NUMBER: 2988-25

SAMPLE I.D.: T-1-3, NC

SAMPLE DATE: November 16, 1995
SAMPLE TIME: 10:00AM
SAMPLE RECEIVED: November 17, 1995
TIME RECEIVED: 9:30AM
SAMPLE COLLECTED BY: Scott Lesikar - Customer

SAMPLE NUMBER: 54042

RESULTS:

Parameter	Regulatory Limits	Detection Limits	Observed Concentration
		TCLP METALS	
Arsenic, mg/l	<5.0	0.20	<0.20
Barium, mg/l	<100.0	0.05	0.40
Cadmium, mg/l	<1.0	0.04	<0.04
Chromium, mg/l	<5.0	0.05	<0.05
Lead, mg/l	<5.0	0.10	<0.10
Mercury, mg/l	<0.2	0.004	<0.004
Selenium, mg/l	<1.0	0.15	<0.15
Silver, mg/l	<5.0	0.07	<0.07

Quality Control Information

Parameter	Sample Preservation	EPA (1) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
TCLP Metals Extraction		1311				12/22/95	5:30PM	D. Bernhard
Metals Digestion - ICP		3010				12/22/95	10:00AM	D. Bernhard
Metals Digestion - Mercury		7470				12/27/95	12:00PM	D. Bernhard
Arsenic	Cool to 4°C	6010	1.3	± 0.01	101	12/22/95	4:47PM	D. Bernhard
Barium	Cool to 4°C	6010	0.3	± 0.003	97	12/22/95	4:47PM	D. Bernhard
Cadmium	Cool to 4°C	6010	0.04	± 0.0004	93	12/22/95	4:47PM	D. Bernhard
Chromium	Cool to 4°C	6010	0.3	± 0.002	99	12/22/95	4:47PM	D. Bernhard
Lead	Cool to 4°C	6010	2.4	± 0.02	95	12/22/95	4:47PM	D. Bernhard

SAMPLE NUMBER: 54042

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA (1) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Mercury	Cool to 4°C	7470	0.8	± 0.0008	97	12/27/95	3:15PM	D. Bernhard
Selenium	Cool to 4°C	6010	0.3	± 0.003	96	12/22/95	4:47PM	D. Bernhard
Silver	Cool to 4°C	6010	0.7	± 0.003	102	12/22/95	4:47PM	D. Bernhard

* Using the criteria of Metals Toxicity characteristics, this sample of waste is not hazardous.

(1) EPA. 1986. Test Methods for Evaluating Solid Waste. SW-846, 3rd Edition.

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Weems
Reviewed By L'Cena Glover

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

January 3, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown & Caldwell
1415 Louisiana
Houston, TX 77002

PROJECT NAME: BJ Services
Artesia, NM

PROJECT NUMBER: 2988-26

SAMPLE I.D.: See Below

SAMPLE DATE: See Below
SAMPLE TIME: See Below
SAMPLE RECEIVED: December 29, 1995
TIME RECEIVED: 9:00AM
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: See Below

RESULTS:

Sample Number	Sample I.D.#	Sample Date	Sample Time	TPH -Diesel (mg/kg)
55520	10' X 10' North	12/27/95	2:00PM	16
55521	15' @ N. Face	12/27/95	12:00PM	54
Detection Limits				**5.0**

Quality Control Information

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
TPH - Diesel	Cool to 4°C	8015	14.4	± 0.613	85	01/02/96	6:17PM	K. Richmond
Sample Number:	**55520**							
Surrogates:								
Trifluorotoluene			N/A	N/A	80			

Local: (214) 727-1123 Long Distance: (800) 228-ERMI FAX: (214) 727-1175

SAMPLE NUMBERS: 55520-55521

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Sample Number:	**55521**							
Surrogates:								
Trifluorotoluene			N/A	N/A	85			

Respectfully submitted,

Kendall K. Brown
President

Prepared By Shelly Pope
Reviewed By Shelly Weems

Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

January 3, 1996

REPORT OF: Soil Analysis

REPORT TO: Mr. Tim Jenkins
Brown and Caldwell
1415 Louisiana Street, Suite 2500
Houston, Texas 77002

SAMPLE I.D.: 15' @ N. Face*

SAMPLE DATE: December 27, 1995
SAMPLE TIME: 12:00PM
SAMPLE RECEIVED: December 29, 1995
TIME RECEIVED: 9:00AM
SAMPLE METHOD: Grab
SAMPLE COLLECTED BY: TLJ - Customer

SAMPLE NUMBER: 55521

RESULTS:

Parameter	Regulatory Limits	Detection Limits	Observed Concentration
IGNITABILITY			
Flashpoint	>60°C (140°F)	0.5°C	**
CORROSIVITY			
pH	pH ≥ 2.0 pH units pH ≤12.5 pH units	0.1 units	8.1 units
REACTIVITY			
Cyanides, mg/kg	≤250	1.0	<1.0 (1)
Sulfides, mg/kg	≤500	4.0	7.8
TCLP METALS			
Arsenic, mg/l	<5.0	0.20	<0.20
Barium, mg/l	<100.0	0.05	1.0
Cadmium, mg/l	<1.0	0.04	<0.04
Chromium, mg/l	<5.0	0.05	<0.05
Lead, mg/l	<5.0	0.10	<0.10
Mercury, mg/l	<0.2	0.004	<0.004
Selenium, mg/l	<1.0	0.15	<0.15
Silver, mg/l	<5.0	0.07	<0.07
TCLP VOLATILE ORGANICS			
Benzene, mg/l	<0.5	0.003	<0.003
Carbon tetrachloride, mg/l	<0.5	0.003	<0.003
Chlorobenzene, mg/l	<100.0	0.003	<0.003
Chloroform, mg/l	<6.0	0.003	<0.003
1,4-Dichlorobenzene, mg/l	<7.5	0.003	<0.003

SAMPLE NUMBER: 55521

Parameter	Regulatory Limits	Detection Limits	Observed Concentration
TCLP VOLATILES (Continued)			
1,2-Dichloroethane, mg/l	<0.5	0.003	<0.003
1,1-Dichloroethylene, mg/l	<0.7	0.003	<0.003
Methyl ethyl ketone, mg/l	<200.0	0.010	<0.010
Tetrachloroethylene, mg/l	<0.7	0.003	<0.003
Trichloroethylene, mg/l	<0.5	0.003	<0.003
Vinyl chloride, mg/l	<0.2	0.005	<0.005
TCLP SEMIVOLATILES			
2,4-Dinitrotoluene, mg/l	<0.13	0.003	<0.003
o-Cresol, mg/l	<200.0	0.003	<0.003
m-Cresol, mg/l	<200.0	0.003	<0.003
p-Cresol, mg/l	<200.0	0.003	<0.003
Cresol, mg/l	<200.0	0.003	<0.003
Hexachlorobenzene, mg/l	<0.13	0.003	<0.003
Hexachlorobutadiene, mg/l	<0.5	0.003	<0.003
Hexachloroethane, mg/l	<3.0	0.003	<0.003
Nitrobenzene, mg/l	<2.0	0.003	<0.003
Pentachlorophenol, mg/l	<100.0	0.003	<0.003
Pyridine, mg/l	<5.0	0.003	<0.003
2,4,5-Trichlorophenol, mg/l	<400.0	0.003	<0.003
2,4,6-Trichlorophenol, mg/l	<2.0	0.003	<0.003

Quality Control Information

Parameter	Sample Preservation	EPA (2) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
Ignitability	None Required	7.1.2.2	N/A	N/A	N/A	01/03/96	10:00AM	M. McGaugh
Corrosivity	None Required	9045	0.0	± 0.00	N/A	01/03/96	12:30PM	M. McGaugh
Reactivity								
Cyanides	None Required	7.3.3.2	0.0	± 0.00	22	01/03/96	10:00AM	S. Freeman
Sulfides	None Required	7.3.4.2	7.3	± 0.57	99	01/03/96	10:00AM	S. Freeman
TCLP Metals								
Extraction		1311				12/29/95	5:00PM	D. Bernhard
Metals Digestion - ICP		3010				01/02/96	10:00AM	D. Bernhard
Metals Digestion - Mercury		7470				01/02/96	11:00AM	J. Marconi

SAMPLE NUMBER: 55521

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA (2) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
TCLP Metals								
Arsenic	Cool to 4°C	6010	0.2	± 0.002	101	01/02/96	2:40PM	D. Bernhard
Barium	Cool to 4°C	6010	0.4	± 0.004	93	01/02/96	2:40PM	D. Bernhard
Cadmium	Cool to 4°C	6010	0.8	± 0.007	97	01/02/96	2:40PM	D. Bernhard
Chromium	Cool to 4°C	6010	0.3	± 0.003	99	01/02/96	2:40PM	D. Bernhard
Lead	Cool to 4°C	6010	1.1	± 0.01	101	01/02/96	2:40PM	D. Bernhard
Mercury	Cool to 4°C	7470	1.9	± 0.002	99	01/02/96	3:11PM	J. Marconi
Selenium	Cool to 4°C	6010	0.5	± 0.005	97	01/02/96	2:40PM	D. Bernhard
Silver	Cool to 4°C	6010	0.3	± 0.001	98	01/02/96	2:40PM	D. Bernhard
TCLP Volatiles	Cool to 4°C	8260				01/03/96	11:43AM	K. Richmond
ZHE Extraction		1311				01/02/96	5:15PM	K. Richmond
Matrix Spikes:								
Benzene			1.44	± 0.290	101			
Carbon Tetrachloride			1.16	± 0.262	113			
Chlorobenzene			5.74	± 1.061	92			
Chloroform			4.31	± 0.856	99			
1,4-Dichlorobenzene			2.37	± 0.516	109			
1,2-Dichloroethane			7.71	± 1.541	100			
1,1-Dichloroethylene			2.56	± 0.495	97			
Methyl ethyl ketone			4.84	± 0.969	100			
Tetrachloroethylene			3.41	± 0.750	110			
Trichloroethylene			2.21	± 0.495	112			
Vinyl chloride			11.71	± 2.256	96			
Surrogates:								
Fluorobenzene			N/A	N/A	103			
Toluene-d_8			N/A	N/A	102			
Bromofluorobenzene			N/A	N/A	99			
TCLP								
SemiVolatiles	Cool to 4°C	8270				01/02/96	8:26PM	F. Coskey
Extraction		1311				12/29/95	5:00PM	D. Bernhard
Liquid-Liquid Extraction		3520				12/31/95	10:15AM	E. Boateng
Matrix Spikes:								
o-Cresol			7.0	± 8.80	60			
m-Cresol & p-Cresol			4.0	± 7.76	93			
2,4,5-Trichlorophenol			12.0	± 18.04	73			
2,4,6-Trichlorophenol			12.0	± 17.56	71			
Pentachlorophenol			2.0	± 9.23	103			
1,4-Dichlorobenzene			5.0	± 5.45	53			

SAMPLE NUMBER: 55521

Quality Control Information (Continued)

Parameter	Sample Preservation	EPA (2) Method	C.V.%	Standard Deviation	Spike Recovery%	Date of Analyses	Time of Analyses	Analyst
TCLP								
SemiVolatiles	Cool to 4°C	8270				01/02/96	8:26PM	F. Coskey
Matrix Spikes:								
2,4,-Dinitrotoluene			7.0	± 12.25	91			
Hexachlorobenzene			3.0	± 4.62	83			
Hexachlorobutadiene			4.0	± 3.88	53			
Hexachloroethane			6.0	± 6.71	54			
Nitrobenzene			3.0	± 3.95	62			
Pyridine			2.0	± 2.08	46			
Surrogates:								
2-Fluorophenol			N/A	N/A	40			
Phenol-d_5			N/A	N/A	90			
Nitrobenzene-d_5			N/A	N/A	59			
2-Fluorobiphenyl			N/A	N/A	67			
2,4,6-Tribromophenol			N/A	N/A	110			
Terphenyl-d_{14}			N/A	N/A	93			

* Using the criteria of Ignitability, Reactivity, Corrosivity and Toxicity characteristics, this sample of waste is not hazardous.

** Not ignitable using the criteria applied for not a liquid sample. (Section 7.1.2.2)

(1) < = Less than Detection Limit.

(2) EPA. 1986. Test Methods for Evaluating Solid Waste. SW-846, 3rd Edition.

Respectfully submitted,

Kendall K. Brown
President

Prepared By S. Doster
Reviewed By Shelly Weems

Chain-of-Custody

002426

ERMI
Bethany Tech Center
400 W. Bethany, Suite 190
Allen, Texas 75002
214-727-1123 (Local) * 800-228-ERMI (Long Distance)
214-727-1175 (Fax)

Company Name: BROWN & CALDWELL ❶
Contact: TIM JENKINS
Address: 1415 LOUISIANA
City: HOUSTON State: TX Zip Code: 77002
Telephone: (713) 646-1138 Fax Number: (713) 759-0952

Billing Name: SAME ❷
Billing Address (if different):
City: State: Zip Code:
Telephone: Fax Number:
Purchase Order Number: 2988-26 ❸

Project Name: BJ SERVICES ❹ Project Number: 2988-26 ❺
Address: 2401 SIVLEY
City: ARTESIA State: NM Zip Code:
Sampler: TLJ Signature: ❻

Comments: End of day Wed.

TAT: Normal ☐ Expedite ☒ (Call for Pricing)

REQUESTED ANALYSES ❼

ERMI Use Only	Field Sample I.D.	Sample Date ❽	Sample Time ❾	Matrix	# of Bottles	Preservative	Sample Type Comp.	Sample Type Grab	TPH (8015) per Tim	TCLP (no pest or herb) per Tim	R.C.I.					
55520	10'X10' NORTH	12/27	1400	SOIL	1	4°C		X	X							
55521	15'@N. FACE	12/27	1200	SOIL	2	4°C		X	X	X	X					

Relinquished By: [signature] ❿	Date: 12/28/95	Time: 5:00	Received By: FED EX	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Method of Shipment:	Date:		Received for ERMI By: Shelly Weems	Date: 12/29	Time: 9:00

See Reverse for Terms and Conditions

Revised 05/17/95

WHITE: Original to be returned with Report; YELLOW: ERMI copy; PINK, Customer Copy

CLOSURE PLAN
FIELD WASTE TANKS AND
OLD STEEL BRINE TANKS

BJ SERVICES COMPANY, U.S.A.

ARTESIA, NEW MEXICO FACILITY

Prepared by

BROWN AND CALDWELL

October 26, 1995

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

SECTION 1

INTRODUCTION

BJ Services has developed this closure plan for three (3) fiberglass field waste tanks and two (2) steel brine tanks for the facility in Artesia, New Mexico, for OCD approval. The Artesia facility is located in Eddy County, in the SE/4, Section 32, Township 16 South, Range 26 East. The facility address is 2401 Sivley, Artesia, New Mexico, 88210. A site location map and site plan map are attached as Figures 1 and 2, respectively.

The field waste collection system received wastewater from activities associated with oil and gas well servicing. The closure of the field waste collection system will include the removal of three field waste tanks. The field waste collection system is no longer in service.

The brine tanks are no longer is service. Closure of the brine tanks will include cleaning to remove crystalline salt, and disposal of metal tank parts.

This closure plan is prepared in general accordance with a guidance document prepared by the OCD entitled Unlined Surface Impoundment Closure Guidelines (February 1993), and the Guidelines for Remediation of Leaks, Spills, and Releases (August 13, 1993). In accordance with these guidance documents, this closure plan contains the following elements:

- The procedures that will be used to collect soil verification samples for closure of the field waste tanks.
- The procedures that will be used to manage, remediate, or dispose of contaminated soil and groundwater.
- Reporting procedures that will be used to document the closure activities and obtain approval for final closure from the OCD.

SECTION 2

SITE ASSESSMENT

BJ Services will perform a site assessment to determine general site characteristics, soil/waste characteristics, and groundwater quality, if groundwater is encountered.

General Site Characteristics

Based on OCD guidance documents, BJ Services will determine the depth to groundwater, defined as the vertical distance from the lowermost contaminants to the seasonal high water elevation of the groundwater. Depth to groundwater will be determined by reviewing reports of previous groundwater investigations at the site and regional and local groundwater reports published by state and federal agencies such as the USGS and the New Mexico Bureau of Mines and Mineral Resources. Information on groundwater quality may also be researched through local and state agencies.

Depth to Groundwater:	**Ranking Score:**
< 50 feet	**20**
50 - 99 feet	**10**
> 100 feet	**0**

If necessary, BJ Services will determine the proximity of drinking water sources by performing a search of water wells within a one mile radius of the facility. The search would provide information (as available) such as the distance from the site to each well, well depth, water quality data and the purpose of the well.

Wellhead Protection Area:	**Ranking Score:**
< 1000 feet from a water source, or;	
< 200 feet from a private domestic water source:	
Yes	**20**
No	**0**

The distance to nearby downgradient surface water bodies will be determined by review of a USGS topographic map for the area. Surface water bodies include rivers, creeks, ponds, lakes, irrigation canals and ditches. Site drainage patterns and off-site receptors of surface drainage will be determined from field observations and discussions with site personnel.

Distance to Surface Water Body:	**Ranking Score:**
< 200 horizontal feet	**20**
200 - 1000 feet	**10**
> 1000 feet	**0**

Preliminary Site Scoring

Groundwater is present at a depth of less than 50 feet below grade, and flow direction is east-southeast, determined from wells previously installed at the facility. Therefore, the site scoring procedure outlined above calls for a groundwater Ranking Score of 20, since the groundwater is less than 50 feet below the ground surface, and hence less than 50 ft. below the bottom of the tanks. BJ Services may confirm groundwater elevation and flow direction prior to tank removal and verification sampling by measuring water levels in the existing wells, if available.

The site ranking is greater than 19. This determination was made based on physical site characteristics as described above. According to the OCD guidance documents, a total ranking score of >19 yields action levels as outlined in the Site Assessment Report section, Table 1.

Soil/Waste Characteristics

Following tank removal, BJ Services will sample the soils beneath the field waste collection system. Soil samples will be collected from each of the excavation sidewalls, and from the base of the excavation at each tank footprint. The sidewall samples should be collected from the lower 1/3 of the excavation.

Based on visual observation, highly contaminated/saturated soils will be excavated for treatment or disposal, in accordance with the OCD guidance documents. Highly contaminated/saturated soils are those soils which contain observable free petroleum hydrocarbons or immiscible phases and gross staining. The immiscible phase may range from a free hydrocarbon to a sheen on any associated aqueous phase.

Unsaturated contaminated soils encountered during field waste tank removal will be evaluated and remediated in accordance with OCD guidance documents. Unsaturated contaminated soils are those that are not highly contaminated as described above, but contain measurable concentrations of contaminants.

Verification samples will be collected following the removal of the tanks. One sample from each tank footprint will be composited from five grabs taken from the 0 - 6 inch interval of soil from the excavation floor. Samples will be field composited and placed in jars. One sample from each sidewall of the field waste collection system excavation will also be composited from five grab samples collected from the lower 1/3 of the sidewall.

Samples will be collected with decontaminated sampling equipment, field composited, placed in labeled jars, and shipped on ice overnight using chain of custody procedures to the off-site laboratory. Decontamination fluids (non-toxic degreasers and water) will be collected for subsequent disposal by BJ Services. Decontamination solids will be placed on plastic and covered near the field waste collection system, pending the results of

sample analysis. Final disposition of the solids will be determined as part of the remedial evaluation included in the site assessment report.

The samples will be analyzed for TPH by EPA Method 8015 modified for diesel range organics, BTEX by EPA Method 8020, and pH. Two excavation samples, one bottom and one sidewall, will be selected for RCRA metals analysis. These RCRA samples will be chosen based on visual staining and the field-determined highest organic vapor measurements and/or corrosivity (pH) measurements.

In accordance with the OCD guidance documents, all highly contaminated/saturated soils encountered during tank removal will be remediated in-situ or excavated to the maximum extent practicable. Unsaturated contaminated soils may require remediation based on the general site characteristics obtained during the site assessment. These site characteristics will be used to determine the appropriate soil remediation levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria presented in the OCD guidance document (depth to groundwater, distance to water sources, and distance to nearest surface water body). Soils contaminated with substances other than petroleum hydrocarbons may be required to be remediated based upon the nature of the contamination and its potential to impact fresh waters, public health and the environment (see Table 1).

Closure activities are planned to commence within 10 days of approval of this Closure Plan by the New Mexico Oil Conservation Division (NMOCD). The closure of tanks are planned to be completed within 14 days of start-up.

SECTION 3

SITE ASSESSMENT REPORT

The field procedures and analytical results documenting closure of the field waste and brine tanks will be presented in a site assessment report to the OCD within 20 days after field activities are completed. The sample results will be used in conjunction with the ranking score, to verify final closure determined according to the OCD closure guidance documents. BJ Services will present the ranking score in the site assessment report and propose further activities, such as additional investigation of groundwater or soil remediation, if needed.

The ranking score will establish the OCD recommended cleanup level for benzene, total BTEX, and TPH for those soils contaminated with petroleum constituents. If the site assessment indicates additional investigation or remediation is not necessary, the report will propose no further action and BJ Services will request approval for final closure of the site.

Cleanup Goals

Soil cleanup goals for the field waste collection system removal and excavation are listed below in Table 1.

Upon removal of the tanks as described above, BJ Services will determine the extent of the contaminated soils, if any, using results from the samples collected from the excavation. Once the sample analytical results are obtained, they will be compared to the cleanup goals for particular constituents. These cleanup goals are listed below in Table 1.

If soil analytical results exceed clean-up goals, BJ Services may propose alternate cleanup levels for OCD approval or propose no further action by conducting a risk-based evaluation of the site assessment data.

Cleanup Alternatives

If remediation is necessary, feasible cleanup alternatives will be presented in the site assessment report. Alternatives include further excavation and off-site disposal, landfarming or other in-situ treatment such as vapor sparging, bioremediation, and bioattenuation. BJ Services will not commence further remediation until the OCD has reviewed and approved the recommended cleanup alternatives.

TABLES

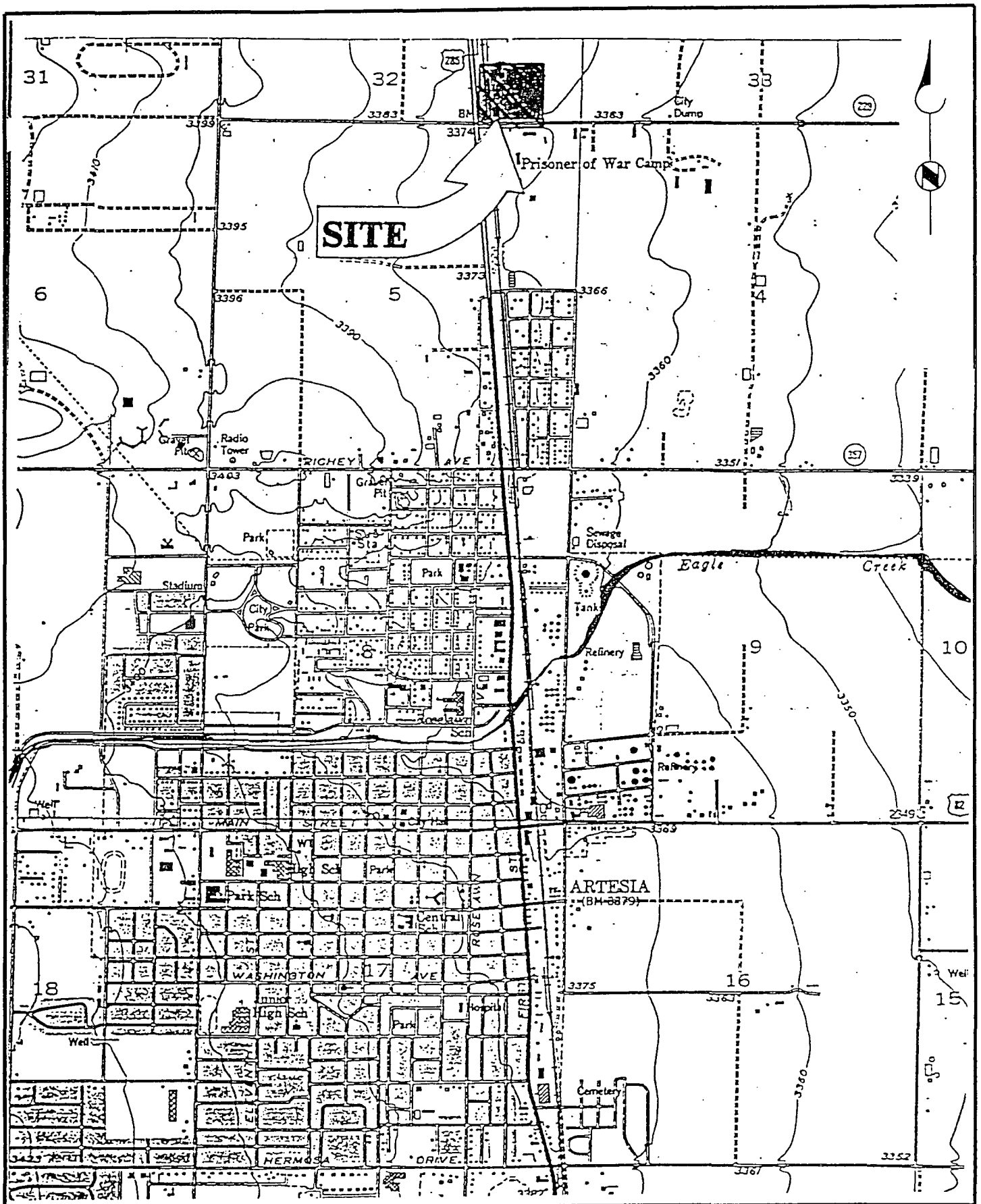
Table 1

Soil Cleanup Goals

Contaminant (mg/kg)	Regulatory Remediation Action Levels
Benzene	*10 ppm
BTEX, Total	*50 ppm
TPH	*100 ppm
pH (Std. Units) for Corrosivity	2.0<pH Measured<12.5
RCRA Metals (if necessary):	
Arsenic	<5.0 (mg/L TCLP)
Barium	<100.0 (mg/L TCLP)
Cadmium	<1.0 (mg/L TCLP)
Chromium	<5.0 (mg/L TCLP)
Lead	<5.0 (mg/L TCLP)
Mercury	<0.2 (mg/L TCLP)
Selenium	<1.0 (mg/L TCLP)
Silver	<5.0 (mg/L TCLP)

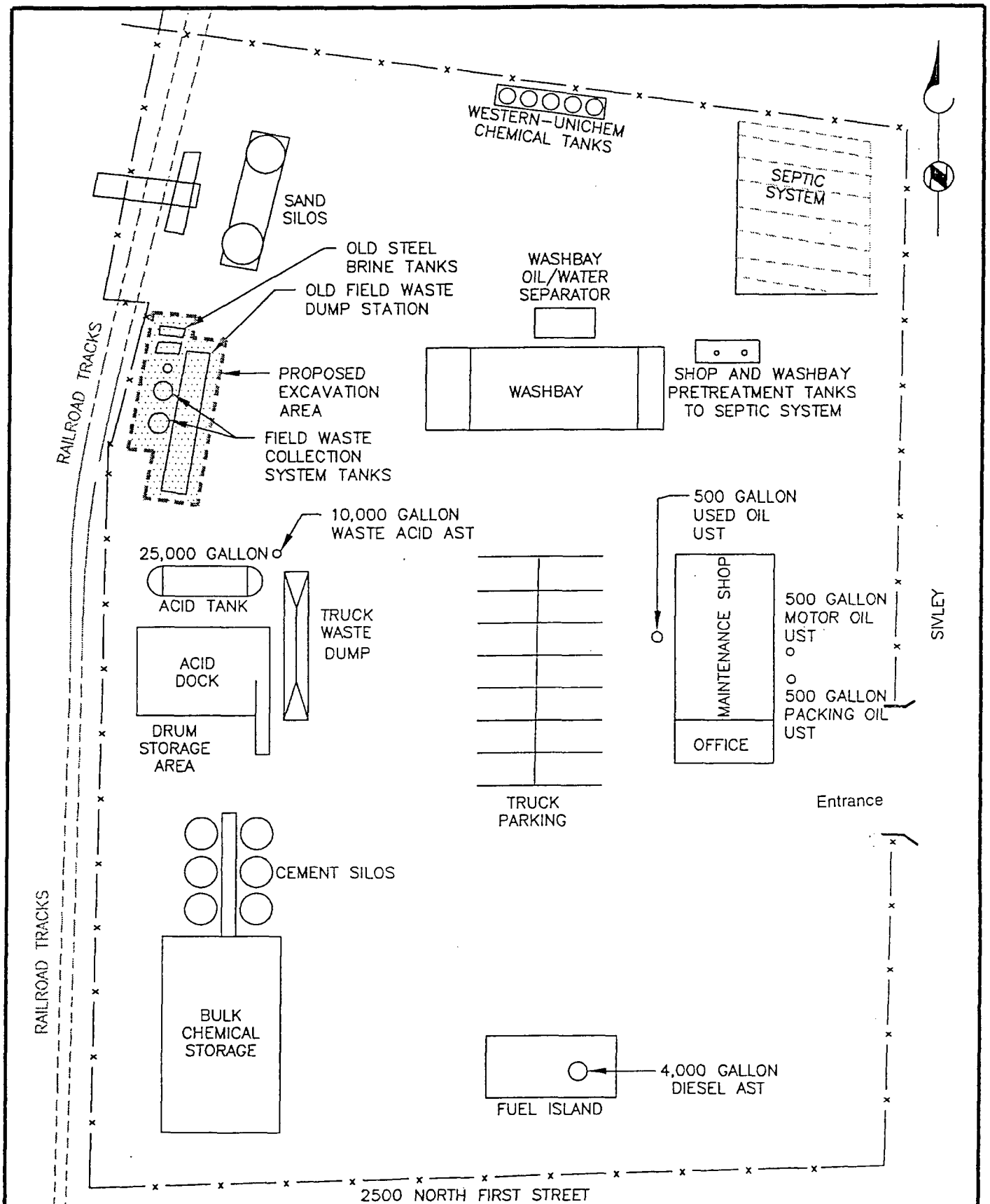
* These limits based on a ranking score >19, and are outlined in the NMOCD guidance documents.

FIGURES



BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	0 1000 2000 SCALE: 1" = 2000' DRAWN BY: DHD DATE 10/25 CHK'D BY: _____ DATE _____ APPROVED: _____ DATE _____	TITLE SITE LOCATION MAP CLIENT BJ SERVICES COMPANY, U.S.A. SITE LOCATION ARTESIA, NEW MEXICO	DATE 10/25/95 PROJECT NUMBER 2988-06 FIGURE NUMBER 1

T:\2988\VICINITY 10/24/95 DHD



T:\2988\VICINITY 10/24/95 DHD

BROWN AND CALDWELL
HOUSTON, TEXAS

SUBMITTED: _____ DATE: _____
PROJECT MANAGER

APPROVED: _____ DATE: _____
BROWN AND CALDWELL

0 0 0
NOT TO SCALE

DRAWN BY: DHD DATE 10/25
CHK'D BY: ____ DATE ____
APPROVED: ____ DATE ____

TITLE: SITE PLAN

CLIENT: BJ SERVICES COMPANY, U.S.A.

SITE LOCATION: ARTESIA, NEW MEXICO

DATE: 10/25/95

PROJECT NUMBER: 2988-06

FIGURE NUMBER: 2