

GW - 72

REPORTS

YEAR(S):

2005 - 1995



Site Remediation Report
For
Effluent Water Release from
Damaged Wash Bay Sewer Line

At

BJ Services Company, USA
2708 West County Road
Hobbs, New Mexico 88240

Prepared for:
BJ Services Company, USA
2708 West County Road
Hobbs, New Mexico 88240

Submitted to:
State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

Prepared by:

Etech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland, Texas 79708
(432) 563-2200

Etech Project No. 016-257-M
Issue Date: July 29, 2005



Site Remediation Report
For
Effluent Water Release from Damaged Wash Bay Sewer Line
At
BJ Services Company, USA
2708 West County Road
Hobbs, New Mexico 88240

Prepared by:
Etech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland, Texas 79708
(432) 563-2200



Shane Estep, P.G.

Table of Contents

1.0	Executive Summary	1
2.0	Introduction / Background	2
2.1.	Description of Release	2
2.2	Initial Response Actions	2
3.0	Site Assessment Activities	3
3.1.	Initial Observations	3
3.2.	Initial Response Actions	3
4.0	Delineation Investigations	5
4.1.	Leak Site & Area 1	5
4.2.	Area 2.....	5
4.3.	Background Sampling.....	6
4.4.	Analytical Laboratory Results Summary	6
5.0	Remediation Activities.....	7
5.1.	Excavation and Removal of Contaminated Soils.....	7
5.2.	Confirmation Sampling.....	7
5.3.	Additional Remediation Activities	8
5.4.	Backfilling Area 1 and Area 2 Excavation Trenches.....	9

Appendices

A	Location Map
B	Site Photographs
C	Area 1 and Area 2 Locations
D	Soil Sampling Locations
E	Analytical Laboratory Reports
F	Non-Hazardous Waste Manifests

1.0 Executive Summary

BJ Services Company, USA ("BJ Services"), located at 2708 West County Road, Hobbs, New Mexico 88240, discovered a second release of wash bay effluent waters on March 1, 2005 during line integrity testing activities. A 4-inch diameter buried PVC sewer line (the "sewer line") drains effluent waters from BJ Services' truck wash bay and sanitary sewer to the City of Hobbs Publicly Owned Treatment Works ("POTW"). Based on observations made by Etech and BJ Services, the effluent water release was the result of a cracked cleanout fitting (N32° 43' 59.00', W103° 09' 28.00') associated with the sewer line. Initial observations indicated a plug of sand in the sewer line caused over pressurization of the line and subsequently made the effluent waters backup into the cleanout. Visual observations of the release confirmed the effluent waters were confined to the lease roads in a westerly and northwesterly direction.

Initial response actions included immediate repair of the sewer line to stop the flow from the source, and contacting the New Mexico Oil Conservation Division ("NMOCD"). BJ Services then proceeded to define and remediate hydrocarbon and chloride impacts to soil.

Etech Environmental & Safety Solutions, Inc. ("Etech") was contracted by BJ Services to conduct site assessment and remediation activities. The assessment involved determination of the vertical and horizontal extent of contamination. Following the assessment, the contaminated soils were excavated, removed and properly disposed. Confirmation sampling of soils in the excavations was conducted to ascertain that all soils impacted by the release of effluent water from the damaged sewer line had been removed.

Based on the results of Etech's investigations and remedial activities performed, the following conclusions may be drawn:

- All soils potentially contaminated by the release of effluent waters from the damaged sewer pipe were excavated, removed and disposed of properly.
- No further remedial action is warranted to address impacts associated with the effluent water release, therefore BJ Services requests closure without further action.

2.0 Introduction / Background

This report summarizes investigation and remediation activities conducted March 1, 2005 through April 29, 2005 by Etech Environmental & Safety Solutions, Inc. ("Etech") on behalf of BJ Services Company, USA (BJ Services), at the facility located at 2708 West County Road, Hobbs, New Mexico. These field activities were performed to characterize and properly remediate impacted soils associated with a sewer line wastewater release.

In early 1997, BJ Services contracted the construction of a 4 inch PVC sewer line. The line runs west-to-east from the rear of BJ Services' facility, extending east approximately 5,000 feet across property currently owned by the College of the Southwest (formerly owned by Wallach Concrete). The sewer line discharges truck washbay wastewater and sanitary sewer into the City of Hobbs municipal sewer line.

On March 1, 2005, BJ Services was notified by Etech personnel that a break in the sewer line had occurred and was visible at ground surface. Etech personnel found the line leak during a sewer line integrity testing event. BJ Services verbally notified the New Mexico Oil Conservation Division ("NMOCD") on March 1, 2005, following-up with the requested "Release Notification and Corrective Action" report submitted on March 11, 2005. BJ Services also notified Ms. Dean Mooney, College of the Southwest, on March 1, 2005, advising that the break had occurred and steps were being taken to clean up the release. A letter was also sent to Ms. Dean on March 11, 2005.

2.1. Description of Release

A 4-inch diameter, buried PVC sewer line (the "sewer line") drains effluent waters from BJ Services' truck wash bay and sanitary sewer to the City of Hobbs municipal sewer line. Based on observations made by Etech and BJ Services, the wastewater release occurred from a damaged cleanout (N32° 43' 59.00', W103° 09' 28.00') associated with the sewer line. Initial observations indicated the cleanout was cracked at the point of connection to the main sewer line.

Effluent waters from the cleanout flowed approximately 300 feet in a westerly direction from the break, following the oilfield lease road and to the northwest along another oilfield lease road. The westerly flow was stopped by a shallow natural depression the lease road and the northwestern flow was contained in a depression on the lease road immediately prior to leaving the lease road onto a paved roadway.

2.2 Initial Response Actions

Initial response actions included immediate repair of the sewer line to stop the flow of effluent water at the source, and contacting NMOCD. BJ Services then proceeded to provide for assessment and remediation of impacts to environmental media.

3.0 Site Assessment Activities

Etech Environmental & Safety Solutions, Inc. ("Etech") was contracted by BJ Services to conduct site assessment and remediation activities.

3.1. Initial Observations

Etech arrived at the site (See Appendix A. Location Map) on March 1, 2005, to conduct an integrity test on the sewer line for compliance with their discharge plan. The inspection involved a count of the cleanouts along the sewer line and it was during this count that the leak was discovered. The following is a brief summary of the initial finding of the assessment on the release:

Area 1. West along oilfield service road.

Length of area:	Approximately 300 feet
Average width of area:	Approximately 10 feet
Average depth of water:	Approximately 12-18 inches

Area 2. Northwest along oilfield service road.

Length of area:	Approximately 200 feet
Width of area:	Approximately 10 feet
Maximum depth of water:	Approximately 1 foot in depression.

Surface impacts from the release of effluent waters from BJ Services' sewer line appeared to be confined to these two areas. No impacts beyond these two areas were observed.

Some hydrocarbon sheen was observed on the water along the western release pathway.

3.2. Initial Response Actions

As an initial response action, Etech contracted Controlled Recovery, Inc. (CRI) to remove any free liquid observed within the impacted area.

On March 2, 2005, Etech arrived on-site to excavate around the leaking section of sewer line. Within the trench line of the sewer pipe the excavation was completed to approximately 4 feet deep. During excavation activities, rock was encountered at approximately 2 feet in

depth. A visual inspection of the sewer line revealed a crack at the elbow of the cleanout.

The following morning the excavation was cleaned out and the broken cleanout was cut from the line. While the sewer line was cut in this area a pressure test was conducted on the section of line from the break to the main connection to the city sewer line. After the line was pressured, personnel were stationed at sump within the former BJ Service's yard to determine where the other plug would be placed. The line was pressured and it was observed that the pressure was building and not bleeding off. This lead to the conclusion the sewer line was plugged somewhere before entering the main sewer line.

A plumber was called in on March 4, 2005 to run a drain snake through the sewer line to clear any blockage. Snaking of the line was started at a cleanout inside the former BJ yard and continued east towards the main sewer connection. The blockage was encountered approximately 100 feet east of this cleanout. The drain snake could not pass through the blockage therefore the line was excavated and cut in this area to remove the blockage material. A 10 foot section of sewer line was found to be blocked with densely packed sand. This section was removed and replaced, along with a new set of cleanouts. Subsequent to repairing the line, Etech completed integrity testing by pressurizing the entire length of the line.

4.0 Delineation Investigations

Utilizing a hand-operated soil auger and a backhoe for trenching, Etech conducted investigations to ascertain the vertical and horizontal extent of the contamination, and to collect confirmation soil samples for analyses.

Based on a previous release from the same sewer line, a determination was made as to the chemicals of concern ("COC") for this release. Three (3) soil sampling locations were selected in Area 1, one (1) on the west end, one (1) on the east end and one (1) immediately west of the release site. (See Appendix D. Soil Sampling Locations) Surface soil samples were collected at each of the three (3) locations. These soil samples were submitted to an analytical laboratory for determination of the following analytical parameters (See Appendix E. Analytical Laboratory Reports):

Hydrocarbons (EPA Method 8015)

- Gasoline-range organics (GRO) (C6-C12)
- Diesel-range organics (DRO) (C12-C35)
- Total Hydrocarbon (TPH) (C6-C35)

Chlorides (EPA Method 300)

4.1. Leak Site & Area 1

Etech completed excavation activities around the leaking cleanout connection to effect repairs on the line. This excavation was also used for delineation purposes with the collection of five (5) soil samples from the bottom and sidewalls. Soil samples were also collected, by hand auger methods, along the release flow pathway outside the excavation (Area 1). Auger refusal was met at approximately 18 inches below ground surface (bgs) throughout Area 1. As observed earlier, it was confirmed that Area 1 measured approximately 10 feet wide by 300 feet long in lateral extent, with the long axis oriented in a general east-west direction along the oilfield service road. The vertical extent of contamination was observed to be approximately 12 inches bgs for most of the area. However, at the eastern section of Area 1, near the release point, contamination was observed to extend to an approximate depth of 48 inches bgs in the excavation trench.

4.2. Area 2

Etech collected two (2) soil samples along Area 2 to determine vertical and horizontal extent of contamination in this area. Auger refusal was met at approximately 12 to 18 inches within Area 2. One (1) sample was collected northwest of the release point in the flow pathway and the second sample was collected at the end point of this release path.

An area between the two (2) spill pathways was observed to contain water that was suspected to be rainwater. One (1) soil sample was collected in the area between the water and the release site and one (1) water sample was collected from the pool of water.

4.3. Background Sampling

No background sampling was conducted on the leak site since background values for the area had been established during the first line leak in this area.

4.4. Analytical Laboratory Results Summary

The twelve (12) samples of soils and one (1) sample of water collected in the initial delineation phase of this project were submitted to an analytical laboratory for analyses. (See Appendix E. Analytical Laboratory Reports): The following summarizes results of those analyses:

TABLE 1 - Analytical Summary for Contamination Delineation Soil Samples (mg/Kg)				
March 3, 2005				
Sample ID	Chlorides	GRO	DRO	TPH
Area 1: East Rd. from Exc.	86.3	<10.0	<10.0	<10.0
Area 1: West of Exc. Rd.	415	29.1	207	236
Area 1: West end of Rd.	205	J[5.15]	930	930
Excavation Bottom	298	<10.0	105	105
Excavation N. Wall	501	<10.0	<10.0	<10.0
Excavation S. Wall	364	71.9	1130	1200
East End Exc.	244	<10.0	42.0	42.0
West End Exc.	174	<10.0	<10.0	<10.0
Area 2: N/W of Exc. Rd.	613	115	741	856
Area 2: N/W end of Rd.	49.0	311	20100	20400
Marsh	120	<10.0	<10.0	<10.0
Pond (mg/L)	380	NR	NR	NR
NMOCD action levels		100	100	100

J – Detected but below the Reporting Limit; result is an estimated concentration.

Bolded values indicate levels above regulatory action levels.

NR – Indicates analysis not ran on sample.

The same scope of work approved for the first line leak was used for the remediation of this second line leak. The target concentration for hydrocarbons cleanup in soils was to be 100 mg/Kg; and NMOCD further required chloride concentrations in soils not exceed 250 mg/Kg.

5.0 Remediation Activities

Delineation and remediation activities at the site included the excavation of contaminated soils from the leak area, Area 1 and Area 2; disposal of those contaminated soils in a licensed disposal facility; and refilling the excavation trenches to grade with compacted, uncontaminated soils. Confirmation soil samples were to be collected from each area to be analyzed for hydrocarbon and chloride concentrations as determined during the assessment activities.

5.1 Excavation and Removal of Contaminated Soils

Etech arrived at the site on April 25, 2005, to conduct excavation and delineation of contaminated soils. Utilizing a tractor-mounted combination backhoe and front-end loader, Area 1 was excavated to an average depth of approximately 1 foot bgs throughout the release pathway. Area 2 was excavated to a depth of approximately 0.5 foot bgs near the terminus, increasing in depth to approximately 1 foot bgs at the end of the release pathway.

Excavated contaminated soils were loaded into trucks to be transported under manifest to the Controlled Recovery landfill for disposal. A total of approximately 616 cubic yards of contaminated soils were transported and disposed in this manner. (See Appendix F. Non-Hazardous Waste Manifests)

5.2 Confirmation Sampling

Seven (7) confirmation soil samples were collected from each of the remediation areas approximately in the same location as earlier samples. (See Appendix D. Soil Sampling Locations)

TABLE 2 - Analytical Summary for Confirmation Soil Samples (mg/Kg)				
April 25, 2005				
<i>Sample ID</i>	<i>Chlorides</i>	<i>GRO</i>	<i>DRO</i>	<i>TPH</i>
Area 1: Sample #2 (West of Exc. Rd)	1430	<10.0	967	967
Area 1: Sample #4 (West end of Rd.)	NR	<10.0	279	279
Bottom Exc. - Post	267	<10.0	<10.0	<10.0
South Wall Exc. - Post	147	<10.0	<10.0	<10.0
North Wall Exc. - Post	192	NR	NR	NR
Area 2: Sample #1 (N/W of Exc. Rd.)	25.0	<10.0	<10.0	<10.0
Area 2: Sample #5 (N/W end of Rd.)	NR	<10.0	<10.0	<10.0
NMOCD action levels	250	100	100	100

Concentrations bolded indicate values in excess of NMOCD guidelines.

NR – Indicates analysis not ran on sample.

Analytical results from confirmation sampling indicated that two (2) sections of Area 1 and one (1) section of the leak area excavation were still elevated for either chlorides, TPH or both.

5.3. Additional Remediation Activities

In response to analytical results on soil samples collected on April 25, 2005, Etech excavated an additional 6 inches of contaminated soils from Area 1. Following this additional excavation and removal, on April 28, 2005, two (2) confirmation samples were collected from appropriate locations in the deepened excavation at Area 1 (See Appendix D. Soil Sampling Locations)

One (1) sample was collected from the bottom of the leak area excavation after additional excavation activities.

The three (3) samples of soils collected in this confirmation phase of sampling were submitted to an analytical laboratory for analyses. (See Appendix E. Analytical Laboratory Reports): The following summarizes results of those analyses:

TABLE 3 - Analytical Summary for Confirmation Soil Samples				
(mg/Kg)				
<i>Sample</i>	<i>Chlorides</i>	<i>GRO</i>	<i>DRO</i>	<i>TPH</i>
Area 1: Site #2 (West of Exc. Rd)	72.3	<10.0	67.0	67.0
Area 1: Site #4 (West end of Rd.)	NR	<10.0	<10.0	<10.0
Exc. Bottom	28.8	NR	NR	NR

NR – Indicates analysis not ran on sample.

Based on the results of the above analyses, all impacted soils associated with the leak site, Area 1 and Area 2 had been excavated, removed and properly disposed.

5.5 Backfilling Area 1 and Area 2 Excavation Trenches

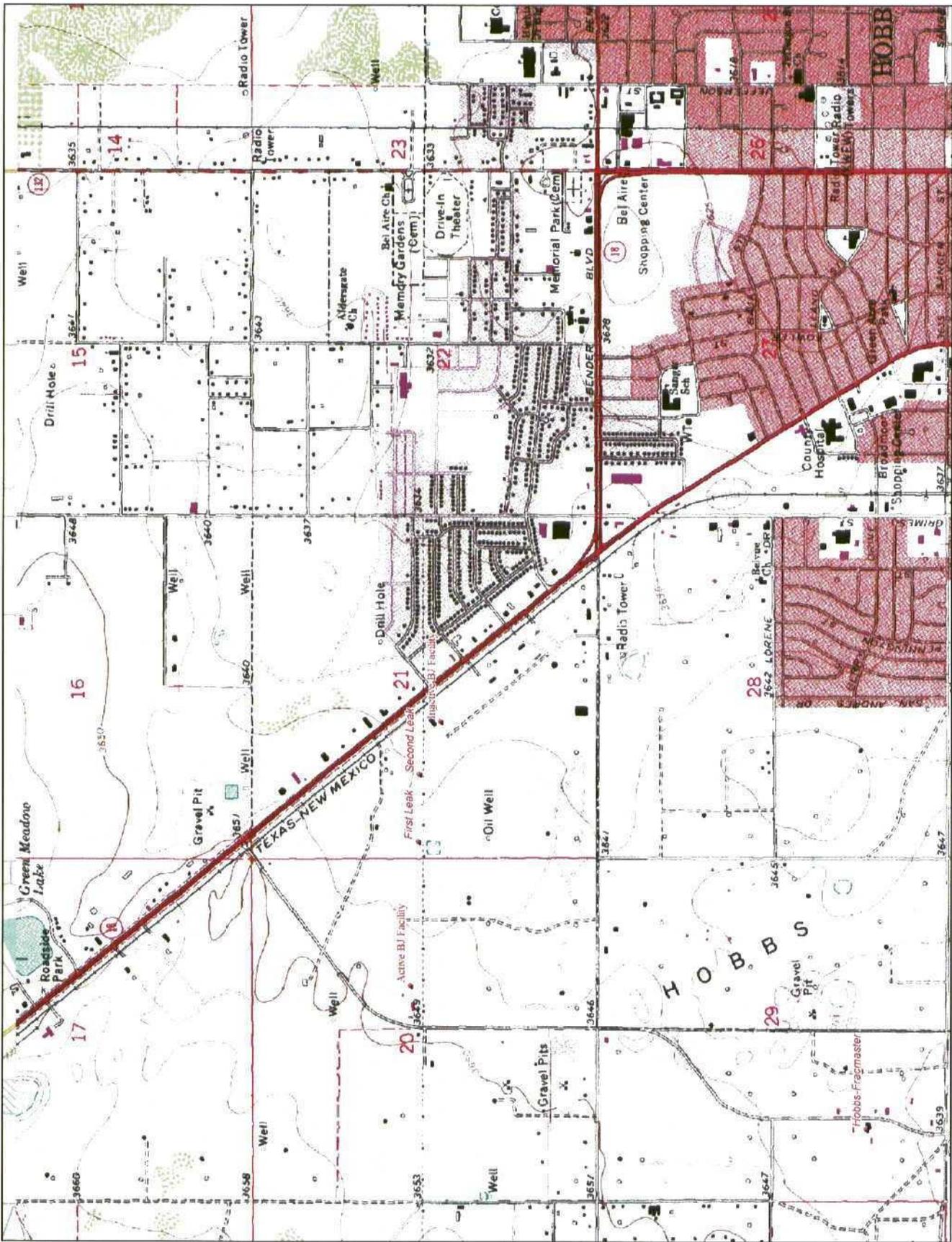
The excavations at the leak site, Area 1 and Area 2, were backfilled to grade with clean fill material.

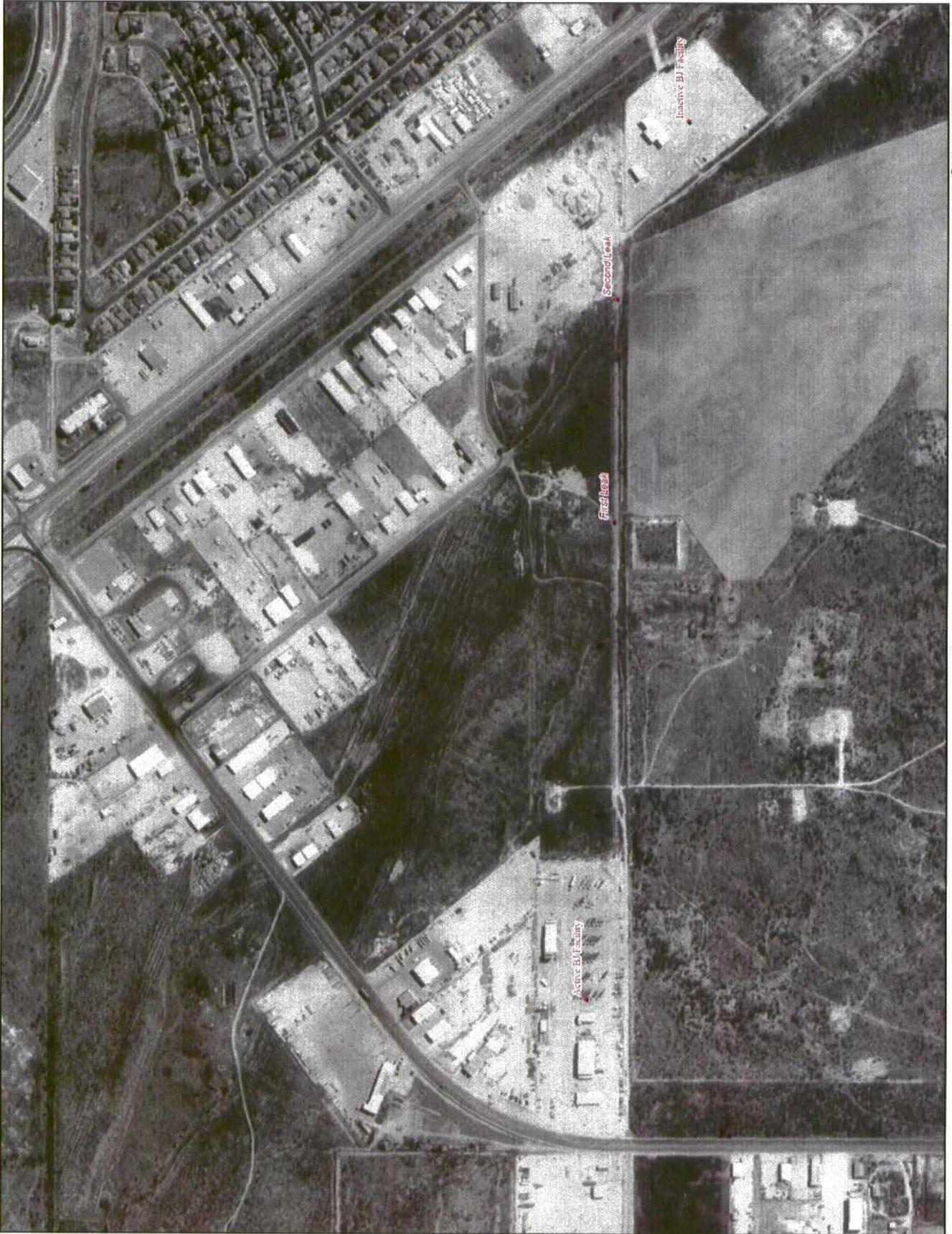
6.0 Conclusions

Based on the results of investigations and remedial activities conducted at the leak site, Area 1 and Area 2, the following conclusions may be drawn:

- Visual observations and analytical results confirmed that effluent waters were confined to the lease roads as marked as Area 1 and Area 2.
- All soils potentially contaminated by the release of effluent waters from the damaged sewer pipe were excavated, removed and properly disposed from the leak site, Area 1 and Area 2.
- No further remedial action is warranted to address impacts associated with the wastewater release, therefore BJ Services requests closure without further action.

Appendix A
Location Map





Scale 1 : 7,200

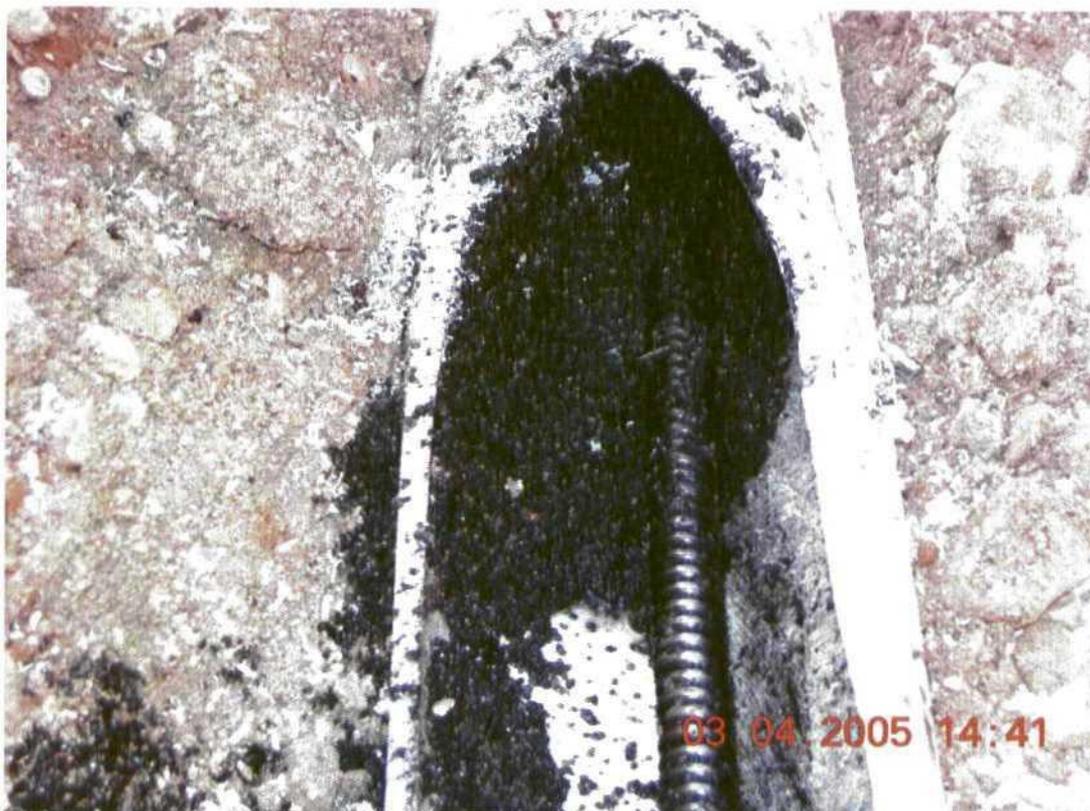


1" = 600.0 ft Data Zoom 14-7

Appendix B
Site Photographs









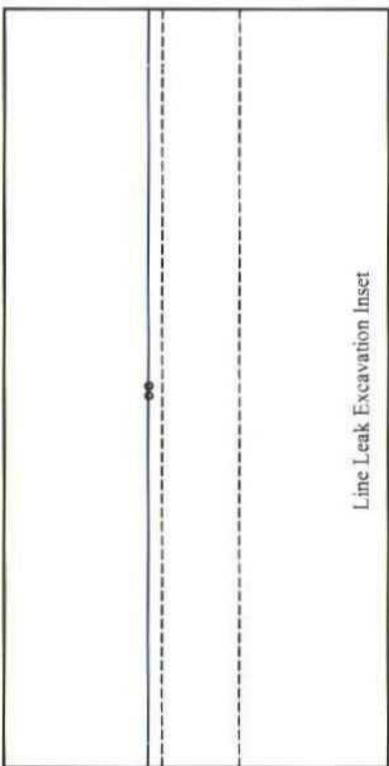
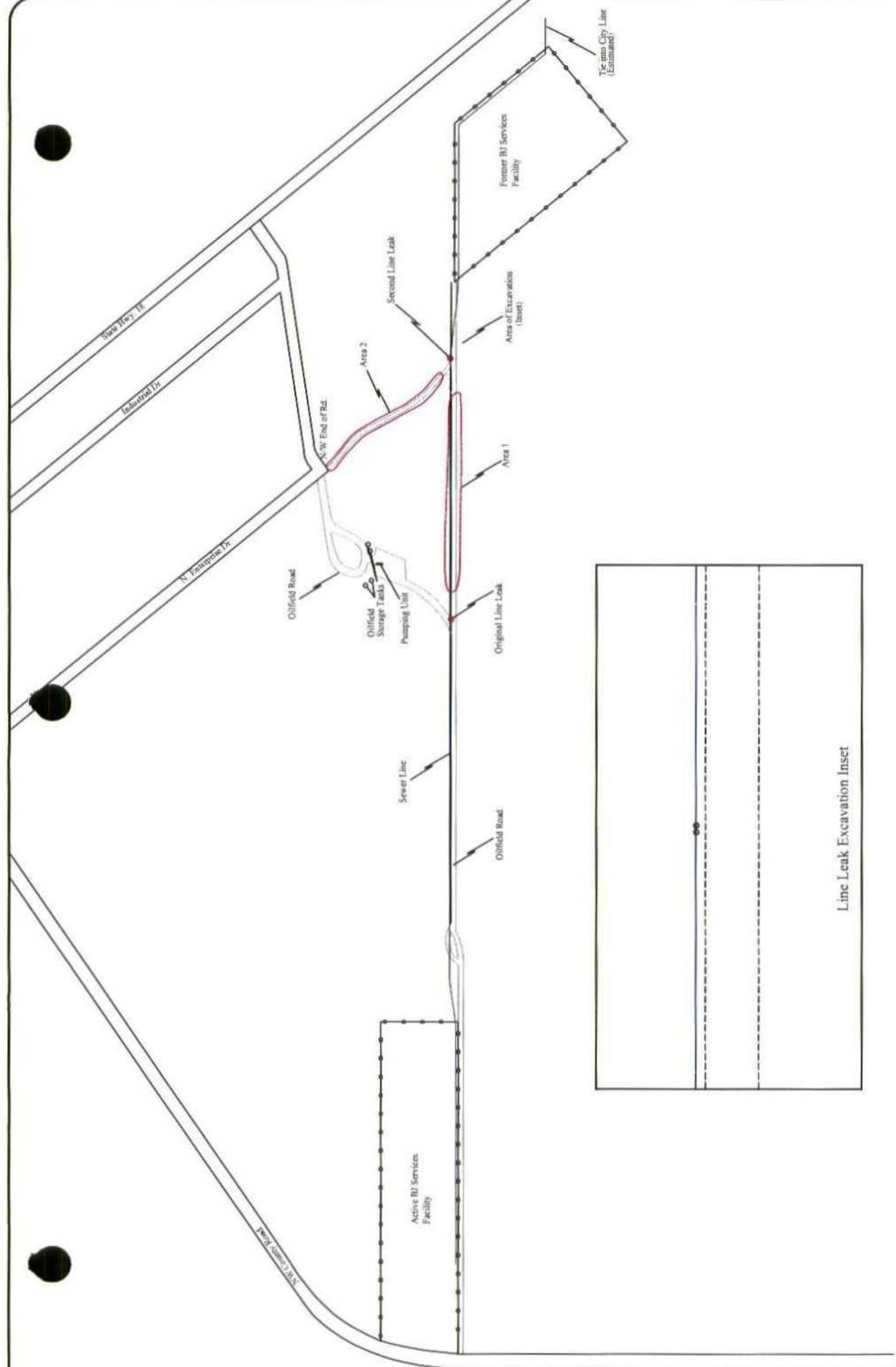
03.04.2005 17:44



03.04.2005 17:44



Appendix C
Area 1 and Area 2 Locations



Site Map - BJ Services Sewer Line Initial Sampling
 BJ Services Company, USA
 NW County Road
 Hobbs, New Mexico
 July 25, 2005

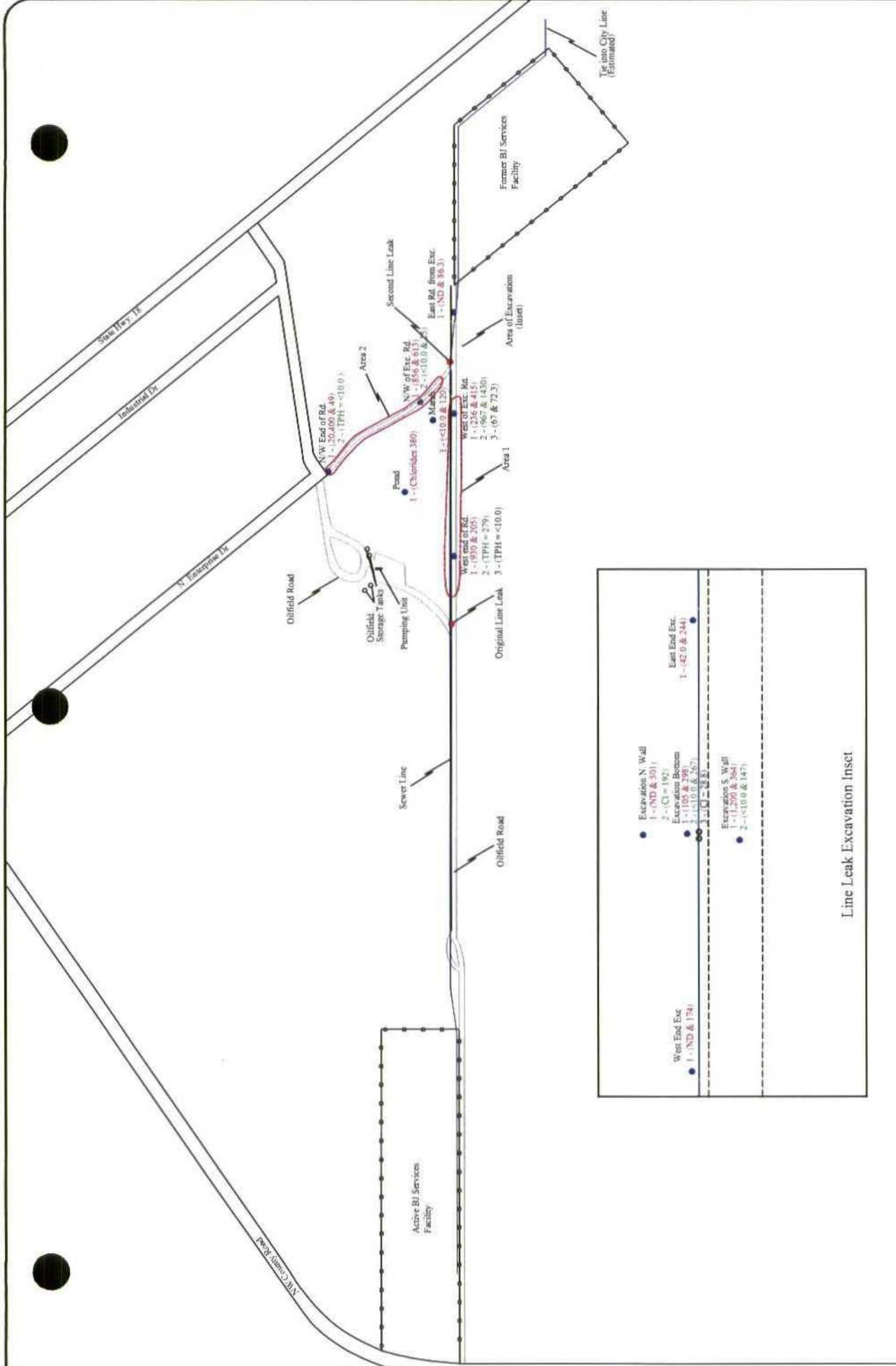
• Indicates Sewer Line Leak Location

Legend

Prepared By:



Appendix D
Soil Sampling Locations



Site Map - BJ Services Sewer Line Initial Sampling
 BJ Services Company, USA
 NW County Road
 Hobbs, New Mexico
 July 25, 2005

- Legend**
- Indicates Sample Point Location
 - Indicates Sewer Line Leak Location (TPH & Chlorides)
 - 1 - Red Indicates First Sampling Event
 - 2 - Green Indicates Second Sampling Event
 - 3 - Black Indicates Third Sampling Event

Prepared By:
ETECH
 Environmental & Safety Solutions, Inc.

Appendix E
Analytical Laboratory Reports



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Shane Estep

E Tech Environmental & Safety Solutions, Inc.

P.O. Box 8469

Midland, TX 79708-8469

Project: BJ Hobbs Washbay Line Leak

Project Number: 016-257

Location: None Given

Lab Order Number: 5C08004

Report Date: 03/14/05

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
03/14/05 15:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
East Rd. from Exc.	5C08004-01	Soil	03/02/05 17:10	03/08/05 10:18
West of Exc. Rd.	5C08004-02	Soil	03/02/05 17:15	03/08/05 10:18
N/W of Exc. Rd.	5C08004-03	Soil	03/02/05 17:25	03/08/05 10:18
Marsh	5C08004-04	Soil	03/03/05 14:55	03/08/05 10:18
West end of Rd.	5C08004-05	Soil	03/03/05 14:35	03/08/05 10:18
N/W end of Rd.	5C08004-06	Soil	03/03/05 14:45	03/08/05 10:18
Excavation Bottom	5C08004-07	Soil	03/03/05 15:15	03/08/05 10:18
Excavation N. Wall	5C08004-08	Soil	03/03/05 15:20	03/08/05 10:18
Excavation S. Wall	5C08004-09	Soil	03/03/05 15:25	03/08/05 10:18
East End Exc.	5C08004-10	Soil	03/07/05 12:50	03/08/05 10:18
West End Exc.	5C08004-11	Soil	03/07/05 12:55	03/08/05 10:18
Pond	5C08004-12	Water	03/07/05 13:00	03/08/05 10:18

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
03/14/05 15:53

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Rd. from Exc. (5C08004-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC50812	03/08/05	03/09/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		89.6 %	67.6-140		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		73.6 %	70-130		"	"	"	"	
West of Exc. Rd. (5C08004-02) Soil									
Gasoline Range Organics C6-C12	29.1	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	207	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	236	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		96.6 %	67.6-140		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		93.8 %	70-130		"	"	"	"	
N/W of Exc. Rd. (5C08004-03) Soil									
Gasoline Range Organics C6-C12	115	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	741	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	856	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		90.0 %	67.6-140		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		99.0 %	70-130		"	"	"	"	
Marsh (5C08004-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		95.0 %	67.6-140		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		86.4 %	70-130		"	"	"	"	
West end of Rd. (5C08004-05) Soil									
Gasoline Range Organics C6-C12	J [5.15]	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	J
Diesel Range Organics >C12-C35	930	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	930	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		96.8 %	67.6-140		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		101 %	70-130		"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
03/14/05 15:53

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
N/W end of Rd. (5C08004-06) Soil									
Gasoline Range Organics C6-C12	311	50.0	mg/kg dry	5	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	20100	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	20400	50.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		14.9 %		67.6-140	"	"	"	"	S-06
<i>Surrogate: 1-Chlorooctadecane</i>		22.6 %		70-130	"	"	"	"	S-06
Excavation Bottom (5C08004-07) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	105	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	105	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		83.2 %		67.6-140	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		80.6 %		70-130	"	"	"	"	
Excavation N. Wall (5C08004-08) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		85.8 %		67.6-140	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		83.4 %		70-130	"	"	"	"	
Excavation S. Wall (5C08004-09) Soil									
Gasoline Range Organics C6-C12	71.9	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	1130	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	1200	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		90.8 %		67.6-140	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		104 %		70-130	"	"	"	"	
East End Exc. (5C08004-10) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	42.0	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	42.0	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		94.4 %		67.6-140	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		84.2 %		70-130	"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
03/14/05 15:53

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
West End Exc. (5C08004-11) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC50815	03/08/05	03/11/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		75.8 %		67.6-140	"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		76.4 %		70-130	"	"	"	"	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
03/14/05 15:53

**General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Rd. from Exc. (5C08004-01) Soil									
Chloride	86.3	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	13.0	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
West of Exc. Rd. (5C08004-02) Soil									
Chloride	415	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	28.5	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
N/W of Exc. Rd. (5C08004-03) Soil									
Chloride	613	20.0	mg/kg	40	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	27.7	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
Marsh (5C08004-04) Soil									
Chloride	120	5.00	mg/kg	10	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	25.1	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
West end of Rd. (5C08004-05) Soil									
Chloride	205	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	22.3	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
N/W end of Rd. (5C08004-06) Soil									
Chloride	49.0	5.00	mg/kg	10	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	11.3	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
Excavation Bottom (5C08004-07) Soil									
Chloride	298	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	21.4	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
Excavation N. Wall (5C08004-08) Soil									
Chloride	501	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	19.2	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
03/14/05 15:53

**General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Excavation S. Wall (5C08004-09) Soil									
Chloride	364	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	14.9	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
East End Exc. (5C08004-10) Soil									
Chloride	244	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	16.3	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
West End Exc. (5C08004-11) Soil									
Chloride	174	10.0	mg/kg	20	EC51108	03/10/05	03/10/05	EPA 300.0	
% Moisture	14.5	0.1	%	1	EC50904	03/08/05	03/09/05	% calculation	
Pond (5C08004-12) Water									
Chloride	380	5.00	mg/L	10	EC51110	03/10/05	03/10/05	EPA 300.0	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
03/14/05 15:53

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EC50812 - Solvent Extraction (GC)

Blank (EC50812-BLK1)

Prepared: 03/08/05 Analyzed: 03/09/05

Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	38.9		mg/kg	50.0		77.8	67.6-140			
Surrogate: 1-Chlorooctadecane	36.3		"	50.0		72.6	70-130			

LCS (EC50812-BS1)

Prepared: 03/08/05 Analyzed: 03/09/05

Gasoline Range Organics C6-C12	432	10.0	mg/kg wet	500		86.4	76.3-104			
Diesel Range Organics >C12-C35	447	10.0	"	500		89.4	76.1-118			
Total Hydrocarbon C6-C35	879	10.0	"	1000		87.9	81.8-105			
Surrogate: 1-Chlorooctane	38.9		mg/kg	50.0		77.8	67.6-140			
Surrogate: 1-Chlorooctadecane	35.3		"	50.0		70.6	70-130			

Calibration Check (EC50812-CCV1)

Prepared & Analyzed: 03/08/05

Gasoline Range Organics C6-C12	440		mg/kg	500		88.0	80-120			
Diesel Range Organics >C12-C35	526		"	500		105	80-120			
Total Hydrocarbon C6-C35	966		"	1000		96.6	80-120			
Surrogate: 1-Chlorooctane	49.6		"	50.0		99.2	67.6-140			
Surrogate: 1-Chlorooctadecane	44.0		"	50.0		88.0	70-130			

Matrix Spike (EC50812-MS1)

Source: 5C07010-01

Prepared: 03/08/05 Analyzed: 03/09/05

Gasoline Range Organics C6-C12	527	10.0	mg/kg dry	568	ND	92.8	75.9-114			
Diesel Range Organics >C12-C35	561	10.0	"	568	ND	98.8	85.3-122			
Total Hydrocarbon C6-C35	1090	10.0	"	1140	ND	95.6	84.4-115			
Surrogate: 1-Chlorooctane	52.0		mg/kg	50.0		104	67.6-140			
Surrogate: 1-Chlorooctadecane	41.9		"	50.0		83.8	70-130			

Matrix Spike Dup (EC50812-MSD1)

Source: 5C07010-01

Prepared: 03/08/05 Analyzed: 03/09/05

Gasoline Range Organics C6-C12	520	10.0	mg/kg dry	568	ND	91.5	75.9-114	1.34	10.4	
Diesel Range Organics >C12-C35	574	10.0	"	568	ND	101	85.3-122	2.29	10.4	
Total Hydrocarbon C6-C35	1090	10.0	"	1140	ND	95.6	84.4-115	0.00	7.6	
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		100	67.6-140			
Surrogate: 1-Chlorooctadecane	40.3		"	50.0		80.6	70-130			

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
03/14/05 15:53

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EC50815 - Solvent Extraction (GC)

Blank (EC50815-BLK1)

Prepared: 03/08/05 Analyzed: 03/11/05

Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	40.9		mg/kg	50.0		81.8	67.6-140			
Surrogate: 1-Chlorooctadecane	35.0		"	50.0		70.0	70-130			

LCS (EC50815-BS1)

Prepared: 03/08/05 Analyzed: 03/11/05

Gasoline Range Organics C6-C12	428	10.0	mg/kg wet	500		85.6	76.3-104			
Diesel Range Organics >C12-C35	464	10.0	"	500		92.8	76.1-118			
Total Hydrocarbon C6-C35	892	10.0	"	1000		89.2	81.8-105			
Surrogate: 1-Chlorooctane	38.5		mg/kg	50.0		77.0	67.6-140			
Surrogate: 1-Chlorooctadecane	38.1		"	50.0		76.2	70-130			

Calibration Check (EC50815-CCV1)

Prepared: 03/08/05 Analyzed: 03/11/05

Gasoline Range Organics C6-C12	453		mg/kg	500		90.6	80-120			
Diesel Range Organics >C12-C35	537		"	500		107	80-120			
Total Hydrocarbon C6-C35	990		"	1000		99.0	80-120			
Surrogate: 1-Chlorooctane	50.8		"	50.0		102	67.6-140			
Surrogate: 1-Chlorooctadecane	45.6		"	50.0		91.2	70-130			

Matrix Spike (EC50815-MS1)

Source: 5C08004-07

Prepared: 03/08/05 Analyzed: 03/11/05

Gasoline Range Organics C6-C12	599	10.0	mg/kg dry	636	ND	94.2	75.9-114			
Diesel Range Organics >C12-C35	777	10.0	"	636	105	106	85.3-122			
Total Hydrocarbon C6-C35	1380	10.0	"	1270	105	100	84.4-115			
Surrogate: 1-Chlorooctane	45.7		mg/kg	50.0		91.4	67.6-140			
Surrogate: 1-Chlorooctadecane	41.1		"	50.0		82.2	70-130			

Matrix Spike Dup (EC50815-MSD1)

Source: 5C08004-07

Prepared: 03/08/05 Analyzed: 03/11/05

Gasoline Range Organics C6-C12	617	10.0	mg/kg dry	636	ND	97.0	75.9-114	2.96	10.4	
Diesel Range Organics >C12-C35	799	10.0	"	636	105	109	85.3-122	2.79	10.4	
Total Hydrocarbon C6-C35	1420	10.0	"	1270	105	104	84.4-115	2.86	7.6	
Surrogate: 1-Chlorooctane	46.1		mg/kg	50.0		92.2	67.6-140			
Surrogate: 1-Chlorooctadecane	41.0		"	50.0		82.0	70-130			

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
03/14/05 15:53

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EC50904 - General Preparation (Prep)

Blank (EC50904-BLK1) Prepared: 03/08/05 Analyzed: 03/09/05										
% Moisture	ND	0.1	%							
Duplicate (EC50904-DUP1) Source: 5C07010-01 Prepared: 03/08/05 Analyzed: 03/09/05										
% Moisture	10.7	0.1	%		12.0			11.5	20	

Batch EC51108 - Water Extraction

Blank (EC51108-BLK1) Prepared & Analyzed: 03/10/05										
Chloride	ND	0.500	mg/kg							
LCS (EC51108-BS1) Prepared & Analyzed: 03/10/05										
Chloride	10.3		mg/L	10.0		103	80-120			
LCS Dup (EC51108-BSD1) Prepared & Analyzed: 03/10/05										
Chloride	10.4		mg/L	10.0		104	80-120	0.966	20	
Calibration Check (EC51108-CCV1) Prepared & Analyzed: 03/10/05										
Chloride	10.7		mg/L	10.0		107	80-120			
Duplicate (EC51108-DUP1) Source: 5C08004-01 Prepared & Analyzed: 03/10/05										
Chloride	107	10.0	mg/kg		86.3			21.4	20	S-08

Batch EC51110 - General Preparation (WetChem)

Blank (EC51110-BLK1) Prepared & Analyzed: 03/10/05										
Chloride	ND	0.500	mg/L							

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
03/14/05 15:53

**General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EC51110 - General Preparation (WetChem)

LCS (EC51110-BS1)

Prepared & Analyzed: 03/10/05

Chloride	10.3		mg/L	10.0		103	80-120			
----------	------	--	------	------	--	-----	--------	--	--	--

Calibration Check (EC51110-CCV1)

Prepared & Analyzed: 03/10/05

Chloride	10.4		mg/L	10.0		104	80-120			
----------	------	--	------	------	--	-----	--------	--	--	--

Duplicate (EC51110-DUPI)

Source: 5C08004-12

Prepared & Analyzed: 03/10/05

Chloride	381	5.00	mg/L		380			0.263	20	
----------	-----	------	------	--	-----	--	--	-------	----	--

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
03/14/05 15:53

Notes and Definitions

S-08 Value outside Laboratory historical or method prescribed QC limits.

S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Raland K Tuttle

Date:

3/14/2005

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 11 of 11
36

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: E-Teck

Date/Time: 3/21/05

Order #: SC08004

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	OK	C
Shipping container/cooler in good condition?	Yes	No		
Custody Seals intact on shipping container/cooler?	Yes	No	Not present	
Custody Seals intact on sample bottles?	Yes	No	Not present	
Chain of custody present?	Yes	No		
Sample Instructions complete on Chain of Custody?	Yes	No		
Chain of Custody signed when relinquished and received?	Yes	No		
Chain of custody agrees with sample label(s) <u>no label</u>	Yes	No	wrote on jar	*
Container labels legible and intact?	Yes	No	N/A	
Sample Matrix and properties same as on chain of custody?	Yes	No		
Samples in proper container/bottle?	Yes	No		
Samples properly preserved?	Yes	No		
Sample bottles intact?	Yes	No		
Preservations documented on Chain of Custody?	Yes	No		
Containers documented on Chain of Custody?	Yes	No		
Sufficient sample amount for indicated test?	Yes	No		
All samples received within sufficient hold time?	Yes	No		
VOC samples have zero headspace?	Yes	No	Not Applicable	

Other observations:

* Labels are present on last 3 samples

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____
 Regarding: _____

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Eric Weaver

E Tech Environmental & Safety Solutions, Inc.

P.O. Box 8469

Midland, TX 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2

Project Number: 016-257

Location: None Given

Lab Order Number: 5D26008

Report Date: 04/27/05

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213
Reported:
04/27/05 14:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
South Wall Exc.- Post	5D26008-01	Soil	04/25/05 12:12	04/26/05 15:50
North Wall Exc.- Post	5D26008-02	Soil	04/25/05 12:37	04/26/05 15:50
Bottom Exc.- Post	5D26008-03	Soil	04/25/05 13:16	04/26/05 15:50
Sample #1- Post	5D26008-04	Soil	04/25/05 13:48	04/26/05 15:50
Sample #2- Post	5D26008-05	Soil	04/25/05 13:33	04/26/05 15:50
Sample #4- Post	5D26008-06	Soil	04/25/05 14:37	04/26/05 15:50
Sample #5- Post	5D26008-07	Soil	04/25/05 13:59	04/26/05 15:50

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213
Reported:
04/27/05 14:03

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
South Wall Exc.- Post (5D26008-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52609	04/26/05	04/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		77.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		71.6 %	70-130		"	"	"	"	
Bottom Exc.- Post (5D26008-03) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52609	04/26/05	04/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		75.0 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		74.2 %	70-130		"	"	"	"	
Sample #1- Post (5D26008-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52609	04/26/05	04/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		75.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		73.4 %	70-130		"	"	"	"	
Sample #2- Post (5D26008-05) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52609	04/26/05	04/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	967	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	967	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		71.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		77.8 %	70-130		"	"	"	"	
Sample #4- Post (5D26008-06) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52609	04/26/05	04/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	279	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	279	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		82.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		73.0 %	70-130		"	"	"	"	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213

Reported:
04/27/05 14:03

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sample #5- Post (5D26008-07) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52609	04/26/05	04/26/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		84.6 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.2 %	70-130	"	"	"	"	"	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213

Reported:
04/27/05 14:03

**General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
South Wall Exc.- Post (5D26008-01) Soil									
Chloride	147	10.0	mg/kg	20	ED52709	04/26/05	04/26/05	EPA 300.0	
% Moisture	11.4	0.1	%	1	ED52604	04/26/05	04/27/05	% calculation	
North Wall Exc.- Post (5D26008-02) Soil									
Chloride	192	10.0	mg/kg	20	ED52709	04/26/05	04/26/05	EPA 300.0	
Bottom Exc.- Post (5D26008-03) Soil									
Chloride	267	10.0	mg/kg	20	ED52709	04/26/05	04/26/05	EPA 300.0	
% Moisture	14.8	0.1	%	1	ED52604	04/26/05	04/27/05	% calculation	
Sample #1- Post (5D26008-04) Soil									
Chloride	25.0	5.00	mg/kg	10	ED52709	04/26/05	04/26/05	EPA 300.0	
% Moisture	1.2	0.1	%	1	ED52604	04/26/05	04/27/05	% calculation	
Sample #2- Post (5D26008-05) Soil									
Chloride	1430	50.0	mg/kg	100	ED52709	04/26/05	04/26/05	EPA 300.0	
% Moisture	2.4	0.1	%	1	ED52604	04/26/05	04/27/05	% calculation	
Sample #4- Post (5D26008-06) Soil									
% Moisture	2.4	0.1	%	1	ED52604	04/26/05	04/27/05	% calculation	
Sample #5- Post (5D26008-07) Soil									
% Moisture	5.8	0.1	%	1	ED52604	04/26/05	04/27/05	% calculation	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213

Reported:
04/27/05 14:03

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch ED52609 - Solvent Extraction (GC)

Blank (ED52609-BLK1)

Prepared: 04/26/05 Analyzed: 04/27/05

Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	44.0		mg/kg	50.0		88.0	70-130			
Surrogate: 1-Chlorooctadecane	41.8		"	50.0		83.6	70-130			

LCS (ED52609-BS1)

Prepared: 04/26/05 Analyzed: 04/27/05

Gasoline Range Organics C6-C12	411	10.0	mg/kg wet	500		82.2	75-125			
Diesel Range Organics >C12-C35	434	10.0	"	500		86.8	75-125			
Total Hydrocarbon C6-C35	845	10.0	"	1000		84.5	75-125			
Surrogate: 1-Chlorooctane	40.9		mg/kg	50.0		81.8	70-130			
Surrogate: 1-Chlorooctadecane	36.2		"	50.0		72.4	70-130			

Calibration Check (ED52609-CCV1)

Prepared & Analyzed: 04/26/05

Gasoline Range Organics C6-C12	473		mg/kg	500		94.6	80-120			
Diesel Range Organics >C12-C35	493		"	500		98.6	80-120			
Total Hydrocarbon C6-C35	966		"	1000		96.6	80-120			
Surrogate: 1-Chlorooctane	49.9		"	50.0		99.8	70-130			
Surrogate: 1-Chlorooctadecane	49.5		"	50.0		99.0	70-130			

Matrix Spike (ED52609-MS1)

Source: 5D26008-01

Prepared & Analyzed: 04/26/05

Gasoline Range Organics C6-C12	504	10.0	mg/kg dry	564	ND	89.4	75-125			
Diesel Range Organics >C12-C35	570	10.0	"	564	ND	101	75-125			
Total Hydrocarbon C6-C35	1070	10.0	"	1130	ND	94.7	75-125			
Surrogate: 1-Chlorooctane	41.8		mg/kg	50.0		83.6	70-130			
Surrogate: 1-Chlorooctadecane	36.4		"	50.0		72.8	70-130			

Matrix Spike Dup (ED52609-MSD1)

Source: 5D26008-01

Prepared & Analyzed: 04/26/05

Gasoline Range Organics C6-C12	545	10.0	mg/kg dry	564	ND	96.6	75-125	7.82	20	
Diesel Range Organics >C12-C35	559	10.0	"	564	ND	99.1	75-125	1.95	20	
Total Hydrocarbon C6-C35	1100	10.0	"	1130	ND	97.3	75-125	2.76	20	
Surrogate: 1-Chlorooctane	42.1		mg/kg	50.0		84.2	70-130			
Surrogate: 1-Chlorooctadecane	35.4		"	50.0		70.8	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213
Reported:
04/27/05 14:03

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch ED52604 - General Preparation (Prep)

Blank (ED52604-BLK1)

Prepared: 04/26/05 Analyzed: 04/27/05

% Moisture	ND	0.1	%							
------------	----	-----	---	--	--	--	--	--	--	--

Duplicate (ED52604-DUP1)

Source: 5D25014-01

Prepared: 04/26/05 Analyzed: 04/27/05

% Moisture	5.8	0.1	%		5.9			1.71	20	
------------	-----	-----	---	--	-----	--	--	------	----	--

Batch ED52709 - Water Extraction

Blank (ED52709-BLK1)

Prepared & Analyzed: 04/26/05

Chloride	ND	0.500	mg/kg							
----------	----	-------	-------	--	--	--	--	--	--	--

Blank (ED52709-BLK2)

Prepared & Analyzed: 04/26/05

Chloride	ND	0.500	mg/kg							
----------	----	-------	-------	--	--	--	--	--	--	--

LCS (ED52709-BS1)

Prepared & Analyzed: 04/26/05

Chloride	11.0		mg/L	10.0		110	80-120			
----------	------	--	------	------	--	-----	--------	--	--	--

LCS (ED52709-BS2)

Prepared & Analyzed: 04/26/05

Chloride	10.2		mg/L	10.0		102	80-120			
----------	------	--	------	------	--	-----	--------	--	--	--

Calibration Check (ED52709-CCV1)

Prepared & Analyzed: 04/26/05

Chloride	10.3		mg/L	10.0		103	80-120			
----------	------	--	------	------	--	-----	--------	--	--	--

Calibration Check (ED52709-CCV2)

Prepared & Analyzed: 04/26/05

Chloride	10.0		mg/L	10.0		100	80-120			
----------	------	--	------	------	--	-----	--------	--	--	--

Duplicate (ED52709-DUP1)

Source: 5D26008-01

Prepared & Analyzed: 04/26/05

Chloride	160	10.0	mg/kg		147			8.47	20	
----------	-----	------	-------	--	-----	--	--	------	----	--

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213
Reported:
04/27/05 14:03

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch ED52709 - Water Extraction

Duplicate (ED52709-DUP2)

Source: 5D25001-15

Prepared & Analyzed: 04/26/05

Chloride	46.9	10.0	mg/kg		48.5			3.35	20	
----------	------	------	-------	--	------	--	--	------	----	--

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ- Hobbs Washbay Line Leak #2
Project Number: 016-257
Project Manager: Eric Weaver

Fax: 563-2213
Reported:
04/27/05 14:03

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Raland K Tuttle

Date:

4/27/2005

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

48 Page 8 of 8

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: E-TECH ENV.
 Date/Time: 4/26/05 4:00
 Order #: 5D26008
 Initials: CR

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	4.0 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	No	
Custody Seals intact on shipping container/cooler?	Yes	No	NOT PRESENT
Custody Seals intact on sample bottles?	Yes	No	NOT PRESENT
Chain of custody present?	<input checked="" type="checkbox"/>	No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/>	No	
Chain of custody agrees with sample label(s)	none	Yes	No wrote on lid
Container labels legible and intact?	Yes	No	n/a
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/>	No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/>	No	
Samples properly preserved?	<input checked="" type="checkbox"/>	No	
Sample bottles intact?	<input checked="" type="checkbox"/>	No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/>	No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	No	
VOC samples have zero headspace?	<input checked="" type="checkbox"/>	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: _____ Date/Time: _____ Contacted by: _____

Regarding:

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Shane Estep

E Tech Environmental & Safety Solutions, Inc.

P.O. Box 8469

Midland, TX 79708-8469

Project: BJ Hobbs Washbay Line Leak

Project Number: 016-257

Location: None Given

Lab Order Number: 5D28007

Report Date: 05/03/05

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
05/03/05 14:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Exc. Bottom	5D28007-01	Soil	04/28/05 09:00	04/28/05 16:05
Site #1	5D28007-02	Soil	04/28/05 09:15	04/28/05 16:05
Site #4	5D28007-03	Soil	04/28/05 09:20	04/28/05 16:05
Site #7	5D28007-04	Soil	04/28/05 09:45	04/28/05 16:05

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213

Reported:
05/03/05 14:06

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Site #1 (5D28007-02) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52817	04/28/05	04/29/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		79.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		72.8 %	70-130		"	"	"	"	
Site #4 (5D28007-03) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52817	04/28/05	04/29/05	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		75.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		71.6 %	70-130		"	"	"	"	
Site #7 (5D28007-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	ED52817	04/28/05	04/29/05	EPA 8015M	
Diesel Range Organics >C12-C35	67.0	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	67.0	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		74.4 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		72.6 %	70-130		"	"	"	"	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
05/03/05 14:06

**General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Exc. Bottom (5D28007-01) Soil									
Chloride	28.8	5.00	mg/kg	10	EE50303	05/02/05	05/02/05	EPA 300.0	
Site #1 (5D28007-02) Soil									
Chloride	204	10.0	mg/kg	20	EE50303	05/02/05	05/02/05	EPA 300.0	
% Moisture	17.1	0.1	%	1	ED52901	04/28/05	04/29/05	% calculation	
Site #4 (5D28007-03) Soil									
% Moisture	10.8	0.1	%	1	ED52901	04/28/05	04/29/05	% calculation	
Site #7 (5D28007-04) Soil									
Chloride	72.3	5.00	mg/kg	10	EE50303	05/02/05	05/02/05	EPA 300.0	
% Moisture	4.5	0.1	%	1	ED52901	04/28/05	04/29/05	% calculation	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
05/03/05 14:06

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch ED52817 - Solvent Extraction (GC)

Blank (ED52817-BLK1)		Prepared: 04/28/05 Analyzed: 04/29/05								
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	35.6		mg/kg	50.0		71.2	70-130			
Surrogate: 1-Chlorooctadecane	37.4		"	50.0		74.8	70-130			

LCS (ED52817-BS1)		Prepared: 04/28/05 Analyzed: 04/29/05								
Gasoline Range Organics C6-C12	425	10.0	mg/kg wet	500		85.0	75-125			
Diesel Range Organics >C12-C35	490	10.0	"	500		98.0	75-125			
Total Hydrocarbon C6-C35	915	10.0	"	1000		91.5	75-125			
Surrogate: 1-Chlorooctane	35.6		mg/kg	50.0		71.2	70-130			
Surrogate: 1-Chlorooctadecane	36.7		"	50.0		73.4	70-130			

Calibration Check (ED52817-CCV1)		Prepared: 04/28/05 Analyzed: 04/29/05								
Gasoline Range Organics C6-C12	425		mg/kg	500		85.0	80-120			
Diesel Range Organics >C12-C35	513		"	500		103	80-120			
Total Hydrocarbon C6-C35	938		"	1000		93.8	80-120			
Surrogate: 1-Chlorooctane	44.0		"	50.0		88.0	70-130			
Surrogate: 1-Chlorooctadecane	37.9		"	50.0		75.8	70-130			

Matrix Spike (ED52817-MS1)		Source: 5D28005-02		Prepared: 04/28/05 Analyzed: 04/29/05						
Gasoline Range Organics C6-C12	566	10.0	mg/kg dry	566	ND	100	75-125			
Diesel Range Organics >C12-C35	622	10.0	"	566	ND	110	75-125			
Total Hydrocarbon C6-C35	1190	10.0	"	1130	ND	105	75-125			
Surrogate: 1-Chlorooctane	47.4		mg/kg	50.0		94.8	70-130			
Surrogate: 1-Chlorooctadecane	38.6		"	50.0		77.2	70-130			

Matrix Spike Dup (ED52817-MSD1)		Source: 5D28005-02		Prepared: 04/28/05 Analyzed: 04/29/05						
Gasoline Range Organics C6-C12	546	10.0	mg/kg dry	566	ND	96.5	75-125	3.60	20	
Diesel Range Organics >C12-C35	618	10.0	"	566	ND	109	75-125	0.645	20	
Total Hydrocarbon C6-C35	1160	10.0	"	1130	ND	103	75-125	2.55	20	
Surrogate: 1-Chlorooctane	47.1		mg/kg	50.0		94.2	70-130			
Surrogate: 1-Chlorooctadecane	37.4		"	50.0		74.8	70-130			

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
05/03/05 14:06

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ED52901 - General Preparation (Prep)										
Blank (ED52901-BLK1) Prepared: 04/28/05 Analyzed: 04/29/05										
% Moisture	ND	0.1	%							
Duplicate (ED52901-DUPI) Source: 5D28002-01 Prepared: 04/28/05 Analyzed: 04/29/05										
% Moisture	1.9	0.1	%		1.9			0.00	20	
Batch EE50303 - Water Extraction										
Blank (EE50303-BLK1) Prepared & Analyzed: 05/02/05										
Chloride	ND	0.500	mg/kg							
LCS (EE50303-BS1) Prepared & Analyzed: 05/02/05										
Chloride	9.94		mg/L	10.0		99.4	80-120			
Calibration Check (EE50303-CCV1) Prepared & Analyzed: 05/02/05										
Chloride	10.9		mg/L	10.0		109	80-120			
Duplicate (EE50303-DUPI) Source: 5D28007-04 Prepared & Analyzed: 05/02/05										
Chloride	71.7	5.00	mg/kg		72.3			0.833	20	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

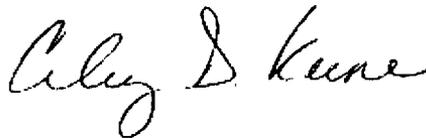
Fax: 563-2213

Reported:
05/03/05 14:06

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By: _____



Date: 5/3/2005

Raland K. Tuttle, Lab Manager
Caley D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

57 Page 6 of 6

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: E Tech Env.
 Date/Time: 4/28/05 9:30
 Order #: 5D28007
 Initials: CR

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	O.D	C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/>	No		
Custody Seals Intact on shipping container/cooler?	Yes	No	<u>Not present</u>	
Custody Seals Intact on sample bottles?	Yes	No	<u>Not present</u>	
Chain of custody present?	<input checked="" type="checkbox"/>	No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/>	No		
Chain of custody agrees with sample labels:	<u>none</u>	Yes	No	<u>write on lid</u>
Container labels legible and intact?	Yes	No	<u>n/a</u>	
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/>	No		
Samples in proper container/bottle?	<input checked="" type="checkbox"/>	No		
Samples properly preserved?	<input checked="" type="checkbox"/>	No		
Sample bottles intact?	<input checked="" type="checkbox"/>	No		
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/>	No		
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/>	No		
All samples received within sufficient hold time?	<input checked="" type="checkbox"/>	No		
VOC samples have zero headspace?	<input checked="" type="checkbox"/>	No		<u>Not Applicable</u>

Other observations:

Variance Documentation:

Contact Person: _____ Date/Time: _____ Contacted by: _____
 Regarding: _____

Corrective Action Taken:

Appendix F
Non-Hazardous Waste Manifests

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to E-T

Address _____

Company/Generator BJ's

Lease Name Hobbs Yard - Sewer Leak

Trucking Company M'Nabb Vehicle Number M77 Driver (Print) Woody

Date 4/27/05 Time 12:55 a.m. / (p.m.)

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

<22 yd Caliche>

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent [Signature]
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transfer

94070

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ's

Lease Name Hobbs Yard - Sewer leak

Trucking Company McNabb Vehicle Number M10 Driver (Print) M. L. ...

Date 4/27/05 Time 12:45 a.m. / (p.m.)

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

(22 yd Caliche)

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative _____
(Signature)

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transfer

64069

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Hobbs Yard - Sewer Leak

Trucking Company McNabb Vehicle Number M70 Driver (Print) Boody

Date 4/27/05 Time 10:55 a.m./p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

(22 yd Caliche)

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transfer

64066

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Hobbs Yard - Sewer Leak

Trucking Company 4/27/05 Vehicle Number M10 Driver (Print) Melvin

Date 4/27/05 Time 10:45 () a.m. / p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

22 yd Caliche

Volume of Material Bbls. _____ Yard 82 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative _____
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transfer

SUPERIOR PRINTING SERVICE, INC.

012 64065

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Hobbs Yard - Sewer Leak

Trucking Company M Nabb Vehicle Number 177 Driver (Print) Woods

Date 4/27/05 Time 8:00 a.m. / p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

<22 yd Caliche> Cont. Soil

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

64040

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Hobbs Yard Sewer 149K

Trucking Company M. Webb Vehicle Number M10 Driver (Print) Malvin

Date 4/27/05 Time 7:50 a.m./p.m.

Type of Material

- Exempt
- Tank Bottoms
- Fluids
- Non-Exempt
- C117 _____
- Other Material
- C138 _____
- Soils
- List Description Below

DESCRIPTION

Cont. Soil
< 22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent Malvin
 (Signature)

CRI Representative [Signature]
 (Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transfer

84037

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Hobbs Yard - Sewer Leak

Trucking Company M Nabb Vehicle Number M10 Driver (Print) Malvin

Date 4/27/05 Time 3:45 a.m. / p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont Soil

< yard Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature) Malvin

CRI Representative _____
(Signature) [Signature]

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transizer

SUPERIOR PRINTING SERVICE, INC.

112 84074

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Hobbs Yard - Sewer Leak

Trucking Company McNabb Vehicle Number M77 Driver (Print) Woody

Date 4/27/05 Time 3:40 a.m. (p.m.)

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

< 22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent [Signature] [Signature]
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

112 64075

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ Services

Lease Name Sewer Line Leak

Trucking Company McNabb Vehicle Number M10 Driver (Print) Molvin

Date 1-28-05 Time 2:20 a.m. (p.m.)

Type of Material

Exempt

Tank Bottoms

Fluids

Non-Exempt

C117 _____

Other Material

C138 _____

Soils

List Description Below

DESCRIPTION

22 yds backfill
caliche

cont soil

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recovery Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent [Signature]
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

SUPERIOR PRINTING SERVICE, INC.

012 64098

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BT'S

Lease Name Sewer Line Leak

Trucking Company m-Noble Vehicle Number m10 Driver (Print) Malvin

Date 4/28/05 Time 12:15 a.m. / p.m. (p.m.)

Type of Material

- Exempt
- Tank Bottoms
- Fluids
- Non-Exempt
- C117 _____
- Other Material
- C138 _____
- Soils
- List Description Below

DESCRIPTION

Cont. Soil

< 22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations: exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature) Malvin

CRI Representative _____
(Signature) [Signature]

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

112 64092

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

SUPERIOR PRINTING SERVICE, INC.

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company McNabb's Vehicle Number MD1 Driver (Print) Howard

Date 4/28/05 Time 12:30 a.m. (p.m.)

Type of Material

- Exempt Tank Bottoms Fluids
 Non-Exempt C117 _____ Other Material
 C138 _____ Soils List Description Below

DESCRIPTION

Cont. Soil

<22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent Howard McNabb Sr.
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

NC 64093

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company W. Webb Vehicle Number M 21 Driver (Print) Howard

Date 4/28/05 Time 10:40 a.m. / p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

< 22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.
 I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent [Signature]
 (Signature)

CRI Representative [Signature]
 (Signature)

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company M. Webb's Vehicle Number M10 Driver (Print) Malvia

Date 4-28-05 Time 10:15 (a.m.) p.m.

Type of Material

- Exempt Tank Bottoms Fluids
 Non-Exempt C117 _____ Other Material
 C138 _____ Soils List Description Below

DESCRIPTION

Coal Soil
<22yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
 (Signature) Malvia

CRI Representative _____
 (Signature) Malvia

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

64089

SUPERIOR PRINTING SERVICE, INC.

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Hobbs Yard

Trucking Company McNabb Vehicle Number M21 Driver (Print) Howard

Date 4/28/05 Time 8:30 a.m. / p.m.

Type of Material

- Exempt
- Tank Bottoms
- Fluids
- Non-Exempt
- C117 _____
- Other Material
- C138 _____
- Soils
- List Description Below

DESCRIPTION

Cont. Soil
22 yd Caliche

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.
I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent [Signature]
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ's

Lease Name Hobbs Yard

Trucking Company M. Nabb Vehicle Number M10 Driver (Print) Malvin

Date 4/28/05 Time 8:30 a.m. / p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

<22 yd Celiche>

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature) *[Signature]*

CRI Representative _____
(Signature) *[Signature]*

TANK BOTTOMS

	Feet	Inches			
1st Gauge			BBLS Received		BS&W %
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

64087
75
Gold - Transporter

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to CRI

Address _____

Company/Generator B.T. Hobbs Yard

Lease Name _____

Trucking Company MCA/ABR Vehicle Number 21 Driver (Print) HOWARD

Date 4/28/05 Time 2:45 a.m. / p.m.

Type of Material

Exempt

Tank Bottoms

Fluids

Non-Exempt

C117 _____

Other Material

C138 _____

Soils

List Description Below

DESCRIPTION

22 yds BACK FILL
CRUSHED

Volume of Material Bbls. _____ Yard 22 yds Gallons _____

Wash Out

Call Out

After Hours

Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle-C Regulations; and not mixed with non-exempt wastes.

Agent [Signature]
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

NO 64101

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to CR

Address _____

Company/Generator _____

Lease Name BJ Hobbs Yard

Trucking Company M. C. NABB Vehicle Number 21 Driver (Print) HOWARD

Date 4/28/05 Time _____ a.m./p.m. (p.m.)

Type of Material

- Exempt
- Tank Bottoms
- Fluids
- Non-Exempt
- C117 _____
- Other Material
- C138 _____
- Soils
- List Description Below

DESCRIPTION

22 yds BACK FILL
1 CACOXITE

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.
I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent David M. ...
(Signature)

CRI Representative David Joe
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Jawor Line Leak

Trucking Company M Nabb Vehicle Number M10 Driver (Print) Malvin

Date 4/29/05 Time 4:50 a.m. / (p.m.)

Type of Material

- Exempt Tank Bottoms Fluids
 Non-Exempt C117 _____ Other Material
C138 _____ Soils List Description Below

DESCRIPTION

cont soil

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations: exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative _____
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

NO 64154

SUPERIOR PRINTING SERVICE, INC.

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company McNabb Vehicle Number M21 Driver (Print) Howard

Date 4/28/05 Time _____ a.m. / p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

< 20 yd Caliche >

Volume of Material Bbls. _____ Yard 20 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent Howard McNabb
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

64146

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company McNabb Vehicle Number M10 Driver (Print) Malvin

Date 4/29/05 Time 3:05 a.m. / p.m. (p.m.)

Type of Material

- Exempt
- Tank Bottoms
- Fluids
- Non-Exempt
- C117 _____
- Other Material
- C138 _____
- Soils
- List Description Below

DESCRIPTION

Cont. Soil

< 22 yd Colichep >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature) Malvin

CRI Representative _____
(Signature) [Signature]

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

NO 64150

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name SPWAR Line Park

Trucking Company McNabb's Vehicle Number 1110 Driver (Print) Malvin

Date 4/2 Time 1:00 a.m. / p.m.

Type of Material

- Exempt Tank Bottoms Fluids
 Non-Exempt C117 _____ Other Material
 C138 _____ Soils List Description Below

DESCRIPTION

Cont Soil

22 yd Caliche

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature) Malvin

CRI Representative _____
(Signature) [Signature]

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

SUPERIOR PRINTING SERVICE, INC.

64144

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388
 (505) 393-1079
 www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company McNabb Vehicle Number 1721 Driver (Print) Howard

Date 4/29/05 Time 2:15 a.m. / p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Coat Soil

22 yd Caliche

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative _____
(Signature)

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer line leak

Trucking Company McNabb Vehicle Number M21 Driver (Print) Howard

Date 4/29/05 Time 12:00 a.m./p.m. (p.m.)

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Leak Seal

122 yd Caliche

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent [Signature]
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches			
1st Gauge			BBLS Received		BS&W %
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transfer

SUPERIOR PRINTING SERVICE, INC.

NO 64141
83

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BT

Lease Name Sewer Line Leak

Trucking Company M. Nally Vehicle Number M10 Driver (Print) Malvin

Date 4 29 05 Time 1110 a.m./p.m.

Type of Material

- | | | |
|-------------------------------------|--|--|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input checked="" type="checkbox"/> Other Material |
| C138 _____ | <input checked="" type="checkbox"/> Soils <u>DCD</u> | List Description Below |

DESCRIPTION

Caticle Badell cont Sol

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative _____
(Signature)

TANK BOTTOMS

	Feet	Inches			
1st Gauge			BBLS Received		BS&W %
2nd Gauge			Free Water		
Received			Total Received		

641.38

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transfer

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator AJ'S

Lease Name SPUR Line Leak

Trucking Company McNabb's Vehicle Number M10 Driver (Print) Malvin

Date 4/29/05 Time 9:15 a.m./p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

(20 yd Caliche)

Volume of Material Bbls. _____ Yard 20 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transport

REC 64132

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company M^c Nabb Vehicle Number M 21 Driver (Print) Howard

Date 4/29/05 Time 10:30 (a.m./p.m.)

Type of Material

Exempt

Tank Bottoms

Fluids

Non-Exempt

C117 _____

Other Material

C138 _____

Soils

List Description Below

DESCRIPTION

Cont. So. 1

< 22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out

Call Out

After Hours

Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent [Signature] [Signature]
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches	BBLS Received	BS&W	%
1st Gauge					
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

64128
Gold - Transfer

SUPERIOR PRINTING SERVICE, INC.

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company McNabb Vehicle Number M21 Driver (Print) Howard

Date 4/29/05 Time 8:00 (a.m.) / p.m.

Type of Material

- Exempt
- Tank Bottoms
- Fluids
- Non-Exempt
- C117 _____
- Other Material
- C138 _____
- Soils
- List Description Below

DESCRIPTION

Cont Soil

<22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent Howard McNabb Sr.
(Signature)

CRI Representative [Signature]
(Signature)

TANK BOTTOMS

	Feet	Inches		
1st Gauge			BBLS Received	BS&W %
2nd Gauge			Free Water	
Received			Total Received	

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

NR 64127
87
Gold - Transporter

CONTROLLED RECOVERY, INC.

P.O. Box 388 • Hobbs, New Mexico 88241-0388

(505) 393-1079

www.crihobbs.com

Bill to _____

Address _____

Company/Generator BJ'S

Lease Name Sewer Line Leak

Trucking Company McNabb Vehicle Number 1110 Driver (Print) Mark

Date 4/29/05 Time 7:20 () a.m./p.m.

Type of Material

- | | | |
|-------------------------------------|---------------------------------------|---|
| <input type="checkbox"/> Exempt | <input type="checkbox"/> Tank Bottoms | <input type="checkbox"/> Fluids |
| <input type="checkbox"/> Non-Exempt | C117 _____ | <input type="checkbox"/> Other Material |
| C138 _____ | <input type="checkbox"/> Soils | List Description Below |

DESCRIPTION

Cont. Soil

< 22 yd Caliche >

Volume of Material Bbls. _____ Yard 22 Gallons _____

Wash Out Call Out After Hours Debris Charge

This statement applicable to exempt waste only.

I represent and warrant that the wastes are: generated from oil and gas exploration and production operations; exempt from Resource Conservation and Recover Act (RCRA) Subtitle C Regulations; and not mixed with non-exempt wastes.

Agent _____
(Signature)

CRI Representative _____
(Signature)

TANK BOTTOMS

	Feet	Inches			
1st Gauge			BBLS Received		BS&W %
2nd Gauge			Free Water		
Received			Total Received		

White - CRI

Canary - CRI Accounting

Pink - CRI Plant

Gold - Transporter

64126



Site Remediation Report
for
Effluent Water Release from Damaged Wash Bay Sewer Line
at
BJ Service Truck Yard
2708 West County Road
Hobbs, New Mexico 88240

Prepared for:

BJ Services Company, USA
2708 West County Road
Hobbs, New Mexico 88240

Submitted to:

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

Prepared by:

TECH Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland, Texas 70708
(432) 563-2200

TECH Project No. 016-257-M
Issue Date: February 15, 2005



February 16, 2005

Jason S. Goodwin
HSE Specialist
BJ Services Company, U.S.A.
11211 FM 2920
Tomball, TX 77375

Wayne Price
Environmental Engineer
Oil Conservation Division – District 4
1220 S. St. Francis Dr.
Santa Fe, NM 87505

Larry Johnson
Environmental Engineer
Oil Conservation Division – District 1
1625 N. French Dr.
Hobbs, NM 88240

**RE: Site Remediation Report
Effluent Water Release from Damaged Wash Bay Sewer Line
BJ Services Truck Yard
2708 West County Road
Hobbs, NM 88240**

Gentlemen:

For each addressee, enclosed please find one (1) copy of the referenced report.

Choice regards,



Dr. Hoy Bryson, PG, CEP
Senior Environmental Scientist

ENCLOSURE



Site Remediation Report
for
Effluent Water Release from Damaged Wash Bay Sewer Line
at
BJ Service Truck Yard
2708 West County Road
Hobbs, New Mexico 88240

Prepared for:

BJ Services Company, USA
2708 West County Road
Hobbs, New Mexico 88240

Submitted to:

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

Prepared by:

TECH Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland, Texas 70708
(432) 563-2200

TECH Project No. 016-257-M
Issue Date: February 15, 2005

Table of Contents

1.0	Executive Summary	3
2.0	Introduction.....	4
2.1.	Description of Release	4
2.2.	Initial Response Actions	4
3.0	Site Assessment Activities.....	5
3.1.	Initial Observations.....	5
3.2.	Impact Characterization Sampling.....	6
4.0	Delineation Investigations	8
4.1.	Area 1	8
4.2.	Area 2.....	8
4.3.	Background Sampling.....	9
4.4.	Analytical Laboratory Results Summary.....	9
5.0	Remediation Activities.....	10
5.1.	Excavation and Removal of Contaminated Soils.....	10
5.2.	Confirmation Sampling.....	10
5.3.	Discussion of Confirmation Sampling Results	11
5.4.	Additional Remediation Activities at Area 1	12
5.5.	Backfilling Area 1 and Area 2 Excavation trenches	124
6.0	Conclusions.....	15

Appendices

A	Location Map
B	Site Photographs
C	Area 1 and Area 2 Locations
D	Soil Sampling Locations
E	Analytical Laboratory Reports
F	Non-Hazardous Waste Manifests

1.0 Executive Summary

BJ Services Company, USA (“BJ Services”), located at 2708 West County Road, Hobbs, New Mexico 88240, discovered a release of wash bay effluent waters on July 9, 2004. A 4-inch diameter buried PVC sewer line (the “sewer line”) drains effluent waters from BJ Services’ truck wash bay and sanitary sewer to the City of Hobbs Publicly Owned Treatment Works (“POTW”). Based on observations made by Etech and BJ Services, the wastewater release emanated from a damaged cleanout (N32° 43.985’, W103° 9.666’) associated with the sewer line. Initial observations indicated that truck traffic along the oilfield service road was the most probable cause of the break.

Effluent waters from the cleanout flowed approximately 155 feet in a northerly direction from the break, following the east side of the adjacent oilfield road. From there the effluent waters drained away from the road in a northeasterly direction where they accumulated in a large shallow depression, measuring approximately 52 by 85 feet.

Initial response actions included immediate repair of the sewer line to stop the flow from the source, and contacting the New Mexico Oil Conservation Division (“NMOCD”). BJ Services then proceeded to provide for assessment and remediation of impacts to environmental media.

Etech Environmental & Safety Solutions, Inc. (“Etech”) was contracted by BJ Services to conduct site assessment and remediation activities. Etech determined the vertical and horizontal extent of contamination. Contaminated soils were excavated, removed and properly disposed. Confirmation sampling of soils in the excavations was conducted to ascertain that all soils impacted by the release of effluent water from the damaged sewer line had been removed.

Based on the results of investigations and remedial activities conducted the following conclusions may be drawn:

- All soils potentially contaminated by the release of effluent waters from the damaged sewer pipe were excavated, removed and properly disposed from Area 1 and Area 2.
- Area 2 and, in part, Area 1 were determined to have experienced historical soils contamination by petroleum hydrocarbons and produced water (brine), probably from nearby petroleum E&P operations.
- No further remedial action is warranted to address impacts associated with the wastewater release, therefore BJ Services requests closure without further action.

2.0 Introduction / Background

This report summarizes investigation and remediation activities conducted July 09, 2004 through December 10, 2004 by Etech Environmental & Safety Solutions, Inc. ("Etech") on behalf of BJ Services Company, USA (BJ Services), at the facility located at 2708 West County Road, Hobbs, New Mexico. These field activities were performed to characterize and properly remediate impacted soils associated with a wastewater release.

In early 1997, BJ Services contracted the construction of a 4 inch PVC sewer line that runs west-to-east from the rear of BJ Services' facility, extending east approximately 5,000 feet across property currently owned by the College of the Southwest (formerly owned by Wallach Concrete). The sewer line discharges truck washbay water and sanitary sewer into the City of Hobbs municipal sewer line.

On July 09, 2004, BJ Services was notified by Mr. Robert Wallach of Wallach Concrete that a break in the sewer line had occurred and was visible at ground surface. BJ Services immediately met with the City of Hobbs, and subsequently verbally notified the New Mexico Oil Conservation Division ("NMOCD"), following-up with the requested "Release Notification and Corrective Action" report. BJ Services also notified Ms. Dean Mooney, College of the Southwest, on July 9, 2004, advising that the break had occurred and steps were being taken to clean up the release.

2.1 Description of Release

A 4-inch diameter, buried PVC sewer line (the "sewer line") drains effluent waters from BJ Services' truck wash bay and sanitary sewer to the City of Hobbs municipal sewer line. Based on observations made by Etech and BJ Services, the wastewater release emanated from a damaged cleanout (N32° 43.985', W103° 9.666') associated with the sewer line. Initial observations indicated that truck traffic along the oilfield service road was the most probable cause of the break.

Effluent waters from the cleanout flowed approximately 155 feet in a northerly direction from the break, following the east side of the adjacent oilfield road. From there the effluent waters drained away from the road in a northeasterly direction where the waters accumulated in a large shallow depression, measuring approximately 52 by 85 feet. This depression was located in the vicinity of an active oil & gas production site, and the depression exhibited indications of having been the former site of a reserve pit.

2.2 Initial Response Actions

Initial response actions included immediate repair of the sewer line to stop the flow from the source, and contacting NMOCD. BJ Services then proceeded to provide for assessment and remediation of impacts to environmental media.

3.0 Site Assessment Activities

Etech Environmental & Safety Solutions, Inc. ("Etech") was contracted by BJ Services to conduct site assessment and remediation activities.

3.1. Initial Observations

Etech arrived at the site (See Appendix A, Location Map) on July 9, 2004, finding that the break in the sewer pipe had been repaired. No effluent waters were escaping from the repaired sewer pipe (See Appendix B, Site Photographs). Accumulated effluent waters were observed in two areas, described as follows (See Appendix C. Area 1 and Area 2 Locations.):

Area 1. Adjacent to oilfield service road.

Length of area:	Approximately 115 feet
Average width of area:	Approximately 9 feet
Average depth of water:	Approximately 6 inches

Area 2. Depression located northeast of Area 1.

Length of area:	Approximately 85 feet
Width of area:	Approximately 52 feet
Maximum depth of water:	Approximately 1 – 2 feet.

Surface impacts from the release of effluent waters from BJ Services' sewer line appeared to be confined to these two areas. No impacts beyond these two areas were observed. There were no indications of hydrocarbons associated with the effluent waters, and no surface sheen was observed at either area.

Other observations at the site suggested that previous environmental impacts, not associated with BJ Services, may have occurred prior to release of effluent waters from BJ Services' sewer line. These putative impacts are described, as follows:

- A salt-like crust was observed around the pool of effluent waters in the depression area (Area 2). This crusting was above the elevation of the highest water line achieved by the effluent waters. This suggests that the area may have received significant quantities of produced water from the nearby oil well and associated facilities – in the past, prior to the present spill of effluent waters.

- Significant spills and releases of petroleum hydrocarbons were observed on surface soils around oilfield installations at the site -- including tanks, pipes and valves.
- Positioned immediately south of the effluent waters release point is a large, inactive, apparently unlined, square-shaped impoundment feature. (See Appendix C. Area 1 and Area 2 Locations.) This impoundment feature appears to have been utilized historically to support petroleum exploration and production activities. It is possible this impoundment feature may have contained produced brines and/or petroleum hydrocarbons at various times.

3.2. Impact Characterization Sampling

In consultation with Mr. Johnson of the NMOCD, it was determined that a single composite sample of impacted soils would be collected for analyses to initially characterize soil impact. The intent was to ascertain whether any chemicals of concern ("COC") were present at regulated concentrations in the soils. Four (4) soil sampling locations were selected in Area 1, in moist soils immediately above the accumulated water line (See Appendix D. Soil Sampling Locations.) Surface soil samples were collected at each of the four locations. These samples were carefully blended together to form a single composite sample. This soil sample was submitted to an analytical laboratory for determination of the following analytical parameters (See Appendix E. Analytical Laboratory Reports.):

Hydrocarbons (EPA Method 8015)

- Gasoline-range organics (GRO) (C6-C12)
- Diesel-range organics (DRO) (C12-C35)
- Total Hydrocarbon (TPH) (C6-C35)

Total RCRA Metals (EPA Methods 6010B/7471)

- Silver (Ag)
- Mercury (Hg)
- Arsenic (As)
- Barium (Ba)
- Cadmium (Cd)
- Chromium (Cr)
- Lead (Pb)
- Selenium (Se)

The following summarizes results for those analyses:

**TABLE 1. Analytical Summary from Initial Characterization Soil Sample
Hydrocarbons
(mg/Kg)**

<i>Sample ID</i>	<i>Date</i>	<i>GRO</i>	<i>DRO</i>	<i>TPH</i>
Composite soil	07/15/04	408	7,060	7,470
NMOCD action levels ¹		100	100	100
<i>Total RCRA Metals (mg/Kg)</i>				
<i>Sample</i>	<i>Date</i>	<i>Metal</i>	<i>Concentration</i>	<i>RCRA Metals Maxima³</i>
Composite soil	07/15/04	Silver	<0.250	<0.5
		Mercury	<0.500	0.06
		Arsenic	3.24	5.8
		Barium	139	727
		Cadmium	1.77	<11
		Chromium	10.8	55
		Lead	3.12	17
		Selenium	<0.200	0.28

Concentrations highlighted in yellow indicate values in excess of NMOCD guidelines.

(NOTE: No RCRA metals concentrations exceed published values for typical concentrations in New Mexico soils².)

Based on the results reported above, BJ Services determined that remediation activities would be required at the site to address soil impacts associated with the wastewater release. The first encountered groundwater at the site is reported to range from 52 to 54 feet below ground surface (bgs). Based on this information and in conversations with NMOCD, BJ Services established that 100 mg/Kg would be the target concentration for hydrocarbons cleanup at the site.

² Guidelines for Remediation of Leaks, Spills and Releases. August 13, 1993. NMOCD.

³ Specific soils concentration maxima for RCRA metals have not been published for NMOCD-regulated sites. The following publication is a recognized authority concerning concentrations of metals in native soils:

Dragun, James and A. Chiasson. 1991. Elements in North American Soils. Hazardous Materials Control Resources Institute. Greenbelt, Maryland. 230 pp.

4.0 Delineation Investigations

Utilizing a hand-operated soil auger, Etech conducted investigations to ascertain the vertical and horizontal extent of contamination, and to collect confirmation soil samples for analyses.

4.1. Area 1

Etech advanced a soil auger at numerous locations around Area 1 to determine, by visual and olfactory means, the apparent vertical and horizontal extent of contamination in this area. Auger refusal was met at approximately 18 inches bgs throughout Area 1. As observed earlier, it was confirmed that Area 1 measured approximately 9 feet wide by 115 feet long in lateral extent, with the long axis oriented in a general north-south direction along the east side of the oilfield service road. The vertical extent of contamination was observed to be approximately 6 inches bgs for most of the area. However, at the southern extreme of Area 1, near the release point (at the damaged riser pipes), contamination was observed to extend to the auger refusal depth of approximately 18 inches bgs.

Etech collected three (3) soil samples at appropriate depths within Area 1 to confirm contamination concentrations in the impacted soils (See Appendix D. Soil Sampling Locations.) In general these samples were intended to reflect contaminant concentrations at the deepest extent of impacts in the soil profile. Sample results would be used to develop initial remediation protocols for the area.

4.2. Area 2

Etech advanced a soil auger at numerous locations around Area 2 to determine, by visual and olfactory means, the apparent vertical and horizontal extent of contamination in this area. Auger refusal was not met at any location within Area 2 suggesting that the area previously had been excavated. It was determined by these subsurface investigations that Area 2 was roughly an oval-shaped area measuring approximately 50 feet wide by 100 feet long in lateral extent, with the long axis oriented in a general north-south direction – connecting to and positioned generally northeast of Area 1. The vertical extent of contamination was observed to be approximately 6 inches bgs for most of the outer area of the oval, deepening to a maximum of approximately 3 feet bgs near the center of the depression.

Etech collected five (5) soil samples at appropriate depths within Area 2 to confirm contamination concentrations in the impacted soils (See Appendix D. Soil Sampling Locations.) In general these samples were intended to reflect contaminant concentrations at the deepest extent of

impacts in the soil profile. Sample results would be used to develop initial remediation protocols for the area.

4.3. Background Sampling

Etech visited a site located south of and topographically up-gradient from the effluent water release point, that had the appearance of being "undisturbed". At this location a near-surface soil sample was collected, to be analyzed for the metals chromium, lead and arsenic -- in an effort to establish background concentrations for remedial purposes (See Appendix D. Soil Sampling Locations.)

4.4. Analytical Laboratory Results Summary

The nine (9) samples of soils collected in the initial delineation phase of this project were submitted to an analytical laboratory for analyses. (See Appendix E. Analytical Laboratory Reports.): The following summarizes results of those analyses:

<i>Sample ID</i>	<i>Date</i>	<i>GRO</i>	<i>DRO</i>	<i>TPH</i>
Area 1: North 9" bgs	07/30/04	<10.0	47.5	47.5
Area 1: Central 6" bgs		<10.0	65.3	65.3
Area 1: South 1' bgs		J[8.74]	96.3	96.3
Area 2: Central 3' bgs		24.3	70.1	94.4
Area 2: North Central 1' bgs		<10.0	<10.0	<10.0
Area 2: South Central 1' bgs		<10.0	<10.0	<10.0
Area 2: East Central 1' bgs		<10.0	<10.0	<10.0
Area 2: West Central 2' bgs		<10.0	<10.0	<10.0
NMOCD action levels			100	100

J - Detected but below the Reporting Limit; result is an estimated concentration.

(NOTE: Results for all hydrocarbon concentration data fall below NMOCD guidelines.)

<i>Sample ID</i>	<i>Date</i>	<i>Arsenic</i>	<i>Chromium</i>	<i>Lead</i>
Background	07/30/04	2.22	7.78	<0.555

Based on the results of the foregoing analyses, a remediation scope of work (SOW) was formulated and presented to NMOCD, and verbal approval for that SOW was obtained from NMOCD. As stated previously, the target concentration for hydrocarbons cleanup in soils was to be 100 mg/Kg; and NMOCD further required that chloride concentrations in soils not exceed 250 mg/Kg.

5.0 Remediation Activities

NMOCD gave verbal approval for remediation activities at the site that entailed excavation of contaminated soils from Area 1 and Area 2; disposal of those contaminated soils in a licensed disposal facility; and refilling the excavation trenches back to grade with compacted, uncontaminated soils. Area 1 would be excavated to an approximate depth of 1 foot bgs, and Area 2 would be excavated to an approximate depth of 2 feet bgs. As stated in the Scope of Work, five (5) confirmation soil samples would be collected from each area to be analyzed for hydrocarbon and chloride concentrations.

5.1. Excavation and Removal of Contaminated Soils

Etech arrived at the site on September 20, 2004, to conduct excavation and removal of contaminated soils. Utilizing a tractor-mounted combination backhoe and front-end loader, Area 1 was excavated to an average depth of approximately 1 foot bgs throughout the area. Area 2 was excavated to a depth of approximately 0.5 foot bgs near the terminus, increasing in depth to approximately 3.5 feet bgs at the center of the area.

Excavated contaminated soils were loaded into transports to be transported under manifest to the Lea Land landfill, located approximately 30 miles east of Carlsbad, New Mexico, on US Hwy 62/180, where they were disposed. A total of approximately 600 tons of contaminated soils ultimately were transported and disposed in this manner. (See Appendix F. Non-Hazardous Waste Manifests.)

5.2. Confirmation Sampling

Five (5) confirmation soil samples were collected from each of the two areas (See Appendix D. Soil Sampling Locations.) Samples were collected from appropriate locations in each area. Each sample represented the contamination concentration at the vertical extent of the excavation, at that location.

The ten (10) soil samples collected in this confirmation phase of sampling were submitted to an analytical laboratory for analyses. (See Appendix E. Analytical Laboratory Reports.): The following summarizes results of those analyses:

**TABLE 4. Analytical Summary for Confirmation Soil Samples
(mg/Kg)**

<i>Sample ID</i>	<i>Date</i>	<i>Chlorides</i>	<i>GRO</i>	<i>DRO</i>	<i>TPH</i>	
Area 1: North 8" depth	09/23/04	<u>744</u>	26.1	<u>936</u>	<u>962</u>	
Area 1: Central 8" depth		<u>851</u>	<10.0	<u>516</u>	<u>516</u>	
Area 1: South Central 2' depth		<u>1,060</u>	<10.0	<10.0	<10.0	
Area 1: South SE 2' depth		<u>2,130</u>	<10.0	J[7.50}	<10.0	
Area 1: South NW 2' depth		<u>709</u>	16.9	66.3	83.2	
Area 2: Central 3.5' depth		<u>2,640</u>	28.5	<u>504</u>	<u>533</u>	
Area 2: South Central 6" depth		<u>3,190</u>	35.0	<u>894</u>	<u>929</u>	
Area 2: East Central 6" depth		<u>993</u>	<10.0	J[7.58}	<10.0	
Area 2: West Central 6" depth		<u>5,320</u>	12.5	<u>394</u>	<u>407</u>	
Area 2: North Central 6" depth		<u>6,700</u>	J[8.92}	<u>674</u>	<u>674</u>	
NMOCD action levels			250	100	100	100

Concentrations highlighted in yellow indicate values in excess of NMOCD guidelines.

5.3. Discussion of Confirmation Sampling Results

Area 1

In the delineation phase of this project, samples of soils were collected from the surface soils in immediate contact with the effluent waters. Hydrocarbon concentration results for the delineation phase samples all fell below 100 mg/Kg (See Table 2.) After excavating up to 2 feet bgs in Area 1, samples of soils were collected. It is important to observe that hydrocarbon concentrations in these samples increased significantly as the sampling point approached the suspected former reserve pit (Area 2), rather than decreasing with depth of sampling. This fact strongly supports the notion that hydrocarbon contamination existed in soils in this area prior to the spill of effluent waters from the damaged sewer line.

Despite the clear indications of previous contamination in Area 1, particularly where it approaches Area 2, BJ Services committed to excavating Area 1 to an additional 0.5 foot in depth across the area to remove more contaminated soils.

Area 2

In the delineation phase of this project, five (5) soil samples were collected from the near surface in this area. Four (4) of these samples registered hydrocarbon concentration results that were "non-detect". Only the sample collected at the deepest central location in the depression contained hydrocarbons, and that was below 100 mg/Kg (See Table 2.) After excavating up to 3½ feet bgs and removing contaminated soils in

Area 2, another five (5) samples of soils were collected. It is important to observe that hydrocarbon concentrations in these samples increased significantly, with four (4) of these samples having TPH values ranging from 407 to 929 mg/Kg. Again, this fact strongly supports the contention that hydrocarbon contamination existed in soils in this area prior to the spill of effluent waters from the damaged sewer line.

Furthermore, the highly elevated concentrations of chlorides exhibited in soil samples collected in Area 2 during the confirmation phase of the project also argue strongly for the conclusion that the area was the site of a former reserve pit that had received produced water from petroleum E&P operations.

Etech has advised BJ Services that the evidence is strong that Area 2 is the site of an abandoned reserve pit that had received produced fluids including petroleum hydrocarbons and produced water (brine). Etech also believes these contaminants, that are increasingly present with depth, were not a result of the spill of effluent waters from the damaged sewer line.

5.4. Additional Remediation Activities at Area 1

In response to soil sample results collected on September 23, 2004, Etech excavated an additional 6 inches of contaminated soils from Area 1. Following this additional excavation and removal, on October 11, 2004, three (3) confirmation samples of soils were collected from appropriate locations in the deepened excavation at Area 1 (See Appendix D. Soil Sampling Locations.) Each sample represented the contamination concentration at the vertical extent of the excavation, at that location.

The three samples of soils collected in this confirmation phase of sampling were submitted to an analytical laboratory for analyses. (See Appendix E. Analytical Laboratory Reports.): The following summarizes results of those analyses:

TABLE 5. Analytical Summary for Confirmation Soil Samples					
Area 1					
(mg/Kg)					
Sample	Date	Chlorides	GRO	DRO	TPH
Area 1: South	10/13/04	1,020 ³	<10.0	<10.0	<10.0
Area 1: Central		160	<10.0	<10.0	<10.0
Area 1: North		<20.0	<10.0	<10.0	<10.0

Concentrations highlighted in yellow indicate values in excess of NMOCD guidelines.

³ The result listed for the sample collected in the "south" location in Area 1 – i.e., 1,020 mg/Kg – is thought to have resulted from additional migration of chlorides since the "confirmation" sampling event occurred, almost a month earlier on September 23, 2004. In the intervening period an unusually large quantity of precipitation fell as rainfall.

In response to the results listed above, Etech revisited Area 1 on December 6, 2004, to collect excavation wall samples, a floor sample in the central portion of the excavation, and a background surface soil sample. A total of six (6) samples were collected and submitted to an analytical laboratory for analyses. (See Appendix E. Analytical Laboratory Reports.): The following summarizes results of those analyses:

TABLE 6. Analytical Summary for Delineation Soil Samples Area 1 (mg/Kg Wet)		
Sample	Date	Chlorides
North Wall	12/08/04	189
South Wall		248
East Wall		681
West Wall		236
Floor - Central		<20.0
Background		<20.0

Concentrations highlighted in yellow indicate values in excess of OCD guidelines.

Based on the results of the two sets of analyses presented above, Etech excavated an additional 12 inches of contaminated soils from the south and east walls of the Area 1 trench. Excavated contaminated soils were loaded into transports to be transported under manifest to the Lea Land landfill. Following this additional excavation and removal, on December 10, 2004, a confirmation sample of soils was collected from the east wall of the expanded excavation at Area 1. The sample of soils collected in this confirmation phase of sampling was submitted to an analytical laboratory for analyses. (See Appendix E. Analytical Laboratory Reports.): The following summarizes results of that analysis:

TABLE 7. Analytical Summary for Delineation Soil Sample Area 1 (mg/Kg Wet)		
Sample	Date	Chlorides
East Side	12/16/04	53.2

Based on the results of the above analyses, it was determined that all impacted soils associated with Area 1 and Area 2, resulting from the wastewater release, had been excavated, removed and properly disposed.

5.5 Backfilling Area 1 and Area 2 Excavation Trenches

The excavation trenches at Area 1 and Area 2 were backfilled to grade with clean soil material.

6.0 Conclusions

Based on the results of investigations and remedial activities conducted at Area 1 and Area 2, the following conclusions may be drawn:

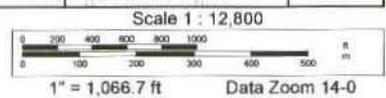
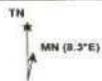
- All soils potentially contaminated by the release of effluent waters from the damaged sewer pipe were excavated, removed and properly disposed from Area 1 and Area 2.
- Area 2 and, in part, Area 1 were determined to have experienced historical soils contamination by petroleum hydrocarbons and produced water (brine), probably from nearby petroleum E&P operations.
- No further remedial action is warranted to address impacts associated with the wastewater release, therefore BJ Services requests closure without further action.

Appendix A

Location Map



Data use subject to license.
© 2004 DeLorme, XMap® 4.5.
www.delorme.com



Appendix B
Site Photographs

Photograph Log

Client: BJ Services Company, USA
Project Name: Hobbs Yard Wash bay Line Leak

Date: February 14, 2004
Project Number: 016-257-M



Photograph 1. Riser pipes (following repairs) adjacent to Area 1.



Photograph 2. Portion of Area 1, soon after release of effluent waters.

Photograph Log

Client: BJ Services Company, USA
Project Name: Hobbs Yard Wash bay Line Leak

Date: February 14, 2004
Project Number: 016-257-M



Photograph 3. Area 2, soon after release of effluent waters.

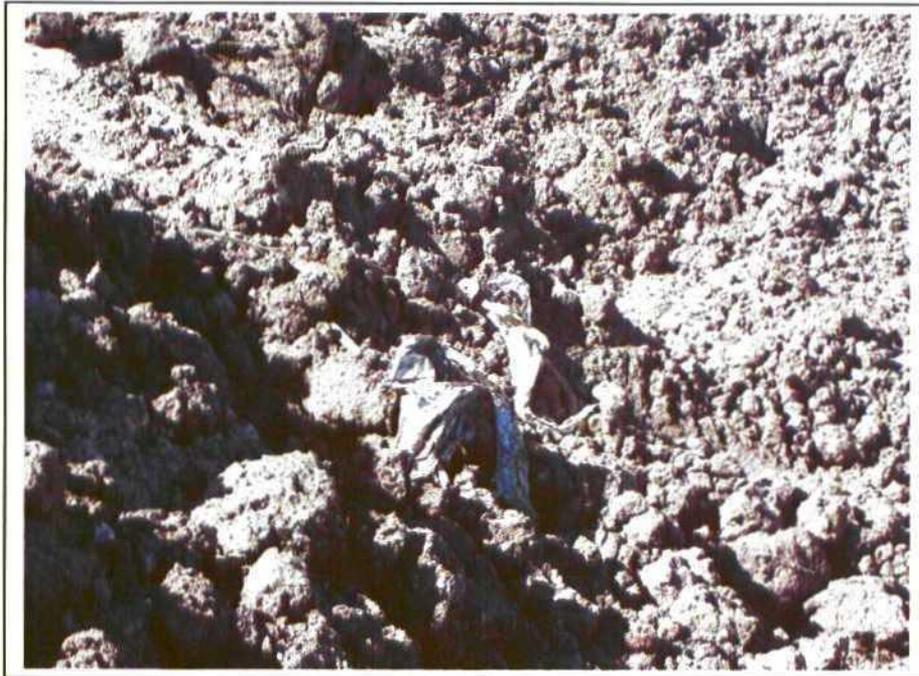


Photograph 4. Oil well pump jack and tank battery, adjacent Area 2.

Photograph Log

Client: BJ Services Company, USA
Project Name: Hobbs Yard Wash bay Line Leak

Date: February 14, 2004
Project Number: 016-257-M



Photograph 5. Trash and debris encountered throughout excavation of Area 2.



Photograph 6. Excavation at Area 2.

Photograph Log

Client: BJ Services Company, USA
Project Name: Hobbs Yard Wash bay Line Leak

Date: February 14, 2004
Project Number: 016-257-M



Photograph 7. Excavation of Area 1.



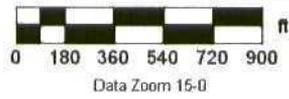
Photograph 8. Excavated portion of Area 1.

Appendix C

Area 1 and Area 2 Locations



Data use subject to license.
© 2004 DeLorme, XMap® 4.5.
www.delorme.com



BJ Services Hobbs Yard Wash Bay Sewer Line Break

Appendix D

Soil Sampling Locations

SAMPLE COLLECTION POINTS

- Characterization Sampling (July 15, 2004)
- Delineation Sampling (July 30, 2004)
- Background Sampling (July 30 & December 8, 2004)
- Confirmation Sampling (September 23, 2004)
- Confirmation Sampling (October 13, 2004)
- Confirmation Sampling (December 8, 2004)
- Confirmation Sampling (December 16, 2004)

NOTE: See Tables 1 through 7 for description of soil sampling locations and depths.



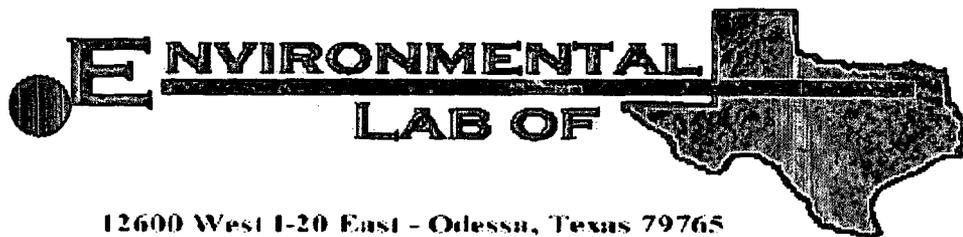
Soil Sampling Locations
Damaged Wash Bay Sewer Line

BJ Services Company, USA - Truck Yard
2708 West County Road
Hobbs, New Mexico 88240



Appendix E

Analytical Laboratory Reports



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Share Step

Environmental & Safety Solutions, Inc.

P.O. Box 869

Mildard, TX 79708-869

Project: B.J. Wash Bay Leak

Project Number: 016-257-M

Location: Nore G ven

Lab Order Number: 409 023

Report Date: 07/15/04

ETec hEnviromental &Saf etySol uti ons , I re .
P.O. Box 8469
M d l ar d T X 79 7088469

Projec t B J . Wis h BayL eak
Projec t Nu mber: 016-257-M
Projec t M nager: S hare B tep

Fax: 563 -2213
Reported:
07/15/04 17:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Wis h BayL i re L eak	4CD9 023 -01	S oi l	07/09 /04 15:3 0	07/09 /04 16:45

Environmental & Safety Solutions, Inc.
 P.O. Box 8469
 Midland TX 79708-8469

Project: B.J. Wash Bay Leak
 Project Number: 016-257-M
 Project Manager: Sharee Bepko

Fax: 563-2213
 Reported:
 07/15/04 17:11

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Wash Bay Line Leak (4G09023-01) Soil									
Gasoline Range Organics C6-C12	408	100	mg/kg dry	10	KK-13-01	07/12/04	07/12/04	HPA8015M	
Diesel Range Organics >C12-C35	7060	100	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	7470	100	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		8.54 %		70-130	"	"	"	"	S-06
Surrogate: 1-Chlorooctadecane		10.4 %		70-130	"	"	"	"	S-06

Environmental & Safety Solutions, Inc.
P.O. Box 8169
Midland TX 79708-8169

Project: B J . Wash Bay Leak
Project Number: 016-257-M
Project Manager: Share Is tep

Fax: 563-2213
Reported:
07/15/04 17:11

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Wash Bay Line Leak (4G09023-01) Soil									
% Solids	76.0		%	1	KG 1209	07/10/04	07/12/04	% calculation	

Environmental & Safety Solutions, Inc.
 P.O. Box 869
 Midland TX 79708-869

Project: B J . Wash Bay Leak
 Project Number: 016-257-M
 Project Manager: Sharelstep

Fax: 563-2213
 Reported:
 07/15/04 17:11

**Total Metals by EPA / Standard Methods
 Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Wash Bay Line Leak (4G09023-01) Soil									
Silver	ND	0.250	mg/kg dry	50	KA1511	07/14/04	07/15/04	EPA6010B	
Mercury	J [0.05263]	0.5000	"	1000	KA1508	07/14/04	07/15/04	7471	J
Arsenic	3.24	0.400	"	50	KA1504	07/14/04	07/14/04	EPA6010B	
Barium	139	0.0500	"	"	"	"	"	"	
Cadmium	1.77	0.0500	"	"	"	"	"	"	
Chromium	10.8	0.250	"	"	"	"	"	"	
Lead	3.12	0.550	"	"	"	"	"	"	
Selenium	ND	0.200	"	"	KA1511	"	07/15/04	"	

Environmental & Safety Solutions, Inc.
 P.O. Box 869
 Midland TX 79708-869

Project: B J . W s h Bay L eak
 Project Number: 016-257-M
 Project Manager: S hare B tep

Fax: 563-2213
 Reported:
 07/15/04 17:11

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting		Spiked Level	Source Result	%REC		RHD	RHD Limit	Notes
		Limit	Units			%REC	Limit			

Batch EG41301 - Solvent Extraction (GC)

Blank (EG41301-BLK1)										
Prepared & Analyzed: 07/12/04										
Gasoline Range Organics C6-C12	ND	10.0	ng/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	37.1		mg/kg	50.0		74.2	70-130			
Surrogate: 1-Chlorooctadecane	38.2		"	50.0		76.4	70-130			

LCS (EG41301-BS1)										
Prepared & Analyzed: 07/12/04										
Gasoline Range Organics C6-C12	407	10.0	ng/kg wet	500		81.4	75-125			
Diesel Range Organics >C12-C35	405	10.0	"	500		81.0	75-125			
Total Hydrocarbon C6-C35	812	10.0	"	1000		81.2	75-125			
Surrogate: 1-Chlorooctane	44.7		mg/kg	50.0		89.4	70-130			
Surrogate: 1-Chlorooctadecane	39.0		"	50.0		78.0	70-130			

LCS Dup (EG41301-BS1)										
Prepared & Analyzed: 07/12/04										
Gasoline Range Organics C6-C12	406	10.0	ng/kg wet	500		81.2	75-125	0.246	20	
Diesel Range Organics >C12-C35	471	10.0	"	500		94.2	75-125	15.1	20	
Total Hydrocarbon C6-C35	876	10.0	"	1000		87.6	75-125	7.58	20	
Surrogate: 1-Chlorooctane	47.0		mg/kg	50.0		94.0	70-130			
Surrogate: 1-Chlorooctadecane	36.5		"	50.0		73.0	70-130			

Calibration Check (EG41301-CCV1)										
Prepared & Analyzed: 07/12/04										
Gasoline Range Organics C6-C12	409		ng/kg	500		81.8	80-120			
Diesel Range Organics >C12-C35	490		"	500		98.0	80-120			
Total Hydrocarbon C6-C35	899		"	1000		89.9	80-120			
Surrogate: 1-Chlorooctane	49.3		"	50.0		98.6	70-130			
Surrogate: 1-Chlorooctadecane	35.0		"	50.0		70.0	70-130			

Environmental & Safety Solutions, Inc.
 P.O. Box 869
 Midland TX 79708-869

Project: B J . Wish Bay Lake
 Project Number: 016-257-M
 Project Manager: Share B tep

Fax: 563-2213
 Reported:
 07/15/04 17:11

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%RE	%RE Limits	RFD	RFD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	-----	------------	-----	-----------	-------

Batch EG41504 - EPA 3050B

Blank (EG41504-BLK1)

Prepared & Analyzed: 07/14/04

Arsenic	ND	0.0080	ng/kg wet							
Barium	ND	0.00100	"							
Cadmium	ND	0.00100	"							
Chromium	ND	0.00500	"							
Lead	ND	0.0110	"							

LCS (EG41504-BS1)

Prepared & Analyzed: 07/14/04

Arsenic	36.4	0.400	ng/kg wet	40.0		91.0	8-115			
Barium	10.4	0.0500	"	10.0		104	8-115			
Cadmium	9.54	0.0500	"	10.0		95.4	8-115			
Chromium	9.8	0.250	"	10.0		98.1	8-115			
Lead	51.1	0.550	"	50.0		102	8-115			

LCS Dup (EG41504-BSD1)

Prepared & Analyzed: 07/14/04

Arsenic	37.0	0.400	ng/kg wet	40.0		92.5	8-115	1.63	20	
Barium	10.4	0.0500	"	10.0		104	8-115	0.00	20	
Cadmium	9.54	0.0500	"	10.0		95.4	8-115	0.00	20	
Chromium	10.0	0.250	"	10.0		100	8-115	1.92	20	
Lead	50.8	0.550	"	50.0		102	8-115	0.50	20	

Calibration Check (EG41504-CCV1)

Prepared & Analyzed: 07/14/04

Arsenic	1.02		ng/kg	1.00		102	90-110			
Barium	1.00		"	1.00		100	90-110			
Cadmium	0.996		"	1.00		99.6	90-110			
Chromium	1.02		"	1.00		102	90-110			
Lead	1.03		"	1.00		103	90-110			

Matrix Spike (EG41504-MS1)

Source: 4G09023-01

Prepared & Analyzed: 07/14/04

Arsenic	47.4	0.400	ng/kg dry	52.6	3.24	81.0	75-125			
Barium	159	0.0500	"	13.2	13.9	152	75-125			QM05
Cadmium	12.7	0.0500	"	13.2	1.77	8.8	75-125			
Chromium	21.9	0.250	"	13.2	10.8	81.1	75-125			
Lead	58.3	0.550	"	65.8	3.12	8.9	75-125			

Environmental & Safety Solutions, Inc.
 P.O. Box 869
 Midland TX 79708-869

Project: B J. Wash Bay Leak
 Project Number: 016-257-M
 Project Manager: Share B tep

Fax: 563-2213
 Reported:
 07/15/04 17:11

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Res u	Reporting Lim	Units	Spike Level	Source Res u l t	%R %	RIC Limits	RHD	RFD Limit	Notes
---------	-------	------------------	-------	----------------	---------------------	---------	---------------	-----	--------------	-------

Batch EG41504 - EPA 3050B

Matrix Spike Dup (EG41504-MSD1)

Source: 4G09023-01

Prepared & Analyzed: 07/14/04

Arsenic	49.4	0.400	ng/kg dry	52.6	3.24	8.8	75-125	4.13	20	
Barium	157	0.0500	"	13.2	13.9	13.6	75-125	1.27	20	QM05
Cadmium	12.6	0.0500	"	13.2	1.77	8.0	75-125	0.791	20	
Chromium	21.8	0.250	"	13.2	10.8	8.3	75-125	0.458	20	
Lead	58.6	0.550	"	65.8	3.12	8.3	75-125	0.513	20	

Batch EG41505 - EPA 3050B

Blank (EG41505-BLK1)

Prepared & Analyzed: 07/14/04

Arsenic	ND	0.00800	ng/kg							
Barium	ND	0.00100	"							
Cadmium	ND	0.00100	"							
Chromium	ND	0.00500	"							
Lead	ND	0.0110	"							
Selenium	ND	0.00400	"							
Silver	ND	0.00500	"							

LCS (EG41505-BS1)

Prepared & Analyzed: 07/14/04

Arsenic	36.4	0.400	ng/kg	40.0		91.0	8-115			
Barium	10.4	0.0500	"	10.0		104	8-115			
Cadmium	9.54	0.0500	"	10.0		95.4	8-115			
Chromium	9.8	0.250	"	10.0		98.1	8-115			
Lead	51.1	0.550	"	50.0		102	8-115			
Selenium	21.0	0.200	"	20.0		105	8-115			
Silver	4.33	0.250	"	5.00		86.6	8-115			

LCS Dup (EG41505-BSD1)

Prepared & Analyzed: 07/14/04

Arsenic	37.0	0.00800	ng/kg	40.0		92.5	8-115	1.63	20	
Barium	10.4	0.00100	"	10.0		104	8-115	0.00	20	
Cadmium	9.54	0.00100	"	10.0		95.4	8-115	0.00	20	
Chromium	10.0	0.00500	"	10.0		100	8-115	1.92	20	
Lead	50.8	0.0110	"	50.0		102	8-115	0.58	20	
Selenium	21.9	0.00400	"	20.0		110	8-115	4.20	20	
Silver	4.34	0.00500	"	5.00		86.8	8-115	0.231	20	

Environmental & Safety Solutions, Inc.
 P.O. Box 869
 Midland TX 79708-869

Project: B J. Wish Bay Leak
 Project Number: 016-257-M
 Project Manager: Share Etep

Fax: 563-2213
 Reported:
 07/15/04 17:11

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Anal yte	Res u	Reporti ng L i mi	Uti ts	Spi ke L evel	Sou rce Res u lt	%R E C	%R E C L i mi ts	RH D	RH D L i mi t	Notes
----------	-------	----------------------	--------	------------------	---------------------	--------	---------------------	------	------------------	-------

Batch EG41505 - EPA 3050B

Calibration Check (EG41505-CCV1)

Prepared & Analyzed: 07/14/04

Ars eni c	1.02		mg/kg	1.00		102	90-110			
Bar i u m	1.00		"	1.00		100	90-110			
Cad mi u m	0.996		"	1.00		99.6	90-110			
Chrom i u m	1.02		"	1.00		102	90-110			
L ead	1.03		"	1.00		103	90-110			
S eleni u m	1.00		"	1.00		100	90-110			
S ilver	0.549		"	0.500		110	90-110			

Matrix Spike (EG41505-MS1)

Source: 4G09023-01RE2

Prepared & Analyzed: 07/14/04

Ars eni c	36.0	0.400	mg/kg	40.0	2.46	88.8	75-125			
Bar i u m	121	0.0500	"	10.0	106	150	75-125			QM05
Cad mi u m	9.63	0.0500	"	10.0	1.34	82.9	75-125			
Chrom i u m	16.6	0.250	"	10.0	8.21	81.9	75-125			
L ead	44.3	0.550	"	50.0	2.37	81.9	75-125			
S eleni u m	20.8	0.200	"	20.0	ND	104	75-125			
S ilver	4.08	0.250	"	5.00	ND	81.6	75-125			

Matrix Spike Dup (EG41505-MSD1)

Source: 4G09023-01RE2

Prepared & Analyzed: 07/14/04

Ars eni c	37.5	0.400	mg/kg	40.0	2.46	87.6	75-125	4.08	20	
Bar i u m	120	0.0500	"	10.0	106	140	75-125	0.80	20	QM05
Cad mi u m	9.54	0.0500	"	10.0	1.34	82.0	75-125	0.939	20	
Chrom i u m	16.5	0.250	"	10.0	8.21	82.9	75-125	0.604	20	
L ead	44.5	0.550	"	50.0	2.37	81.3	75-125	0.450	20	
S eleni u m	21.0	0.200	"	20.0	ND	105	75-125	0.957	20	
S ilver	4.14	0.250	"	5.00	ND	82.8	75-125	1.46	20	

Batch EG41508 - EPA 7471A

Blank (EG41508-BLK1)

Prepared: 07/14/04 Analyzed: 07/15/04

Mercur y	ND	0.0005000	ng/kg wet							
----------	----	-----------	-----------	--	--	--	--	--	--	--

Environmental & Safety Solutions, Inc.
 P.O. Box 8169
 Midland TX 79708-8169

Project: B J . Wash Bay Leak
 Project Number: 016-257-M
 Project Manager: Share Is tep

Fax: 563-2213
 Reported:
 07/15/04 17:11

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Res u	Reporting L i m i	U n i t s	S p i k e L e v e l	S o u r c e R e s u l t	%R E C %R E C	R I D L i m i t s	R I D R I D	L i m i t	Notes
Batch EG41508 - EPA 7471A										
LCS (EG41508-BS1) Prepared: 07/14/04 Analyzed: 07/15/04										
Mercury	0.0575	0.02500	ng/kg wet	0.0500		115	8-115			
LCS Dup (EG41508-BSD1) Prepared: 07/14/04 Analyzed: 07/15/04										
Mercury	0.0570	0.02500	ng/kg wet	0.0500		114	8-115	0.83	20	
Calibration Check (EG41508-CCV1) Prepared: 07/14/04 Analyzed: 07/15/04										
Mercury	0.00098		ng/kg	0.00100		980	90-110			
Batch EG41511 - EPA 3050B										
Blank (EG41511-BLK1) Prepared: 07/14/04 Analyzed: 07/15/04										
Silver	ND	0.00500	ng/kg wet							
Selenium	ND	0.00400	"							
LCS (EG41511-BS1) Prepared: 07/14/04 Analyzed: 07/15/04										
Selenium	21.0	0.200	ng/kg wet	20.0		105	8-115			
Silver	4.33	0.250	"	5.00		86.6	75-125			
LCS Dup (EG41511-BSD1) Prepared: 07/14/04 Analyzed: 07/15/04										
Selenium	21.9	0.200	ng/kg wet	20.0		110	8-115	4.20	20	
Silver	4.34	0.250	"	5.00		86.8	75-125	0.231	20	
Calibration Check (EG41511-CCV1) Prepared: 07/14/04 Analyzed: 07/15/04										
Silver	0.549		ng/kg	0.500		110	90-110			
Selenium	1.00		"	1.00		100	90-110			
Matrix Spike (EG41511-MS1) Source: 4G09023-01 Prepared: 07/14/04 Analyzed: 07/15/04										
Selenium	27.4	0.200	ng/kg dry	26.3	ND	104	75-125			
Silver	5.37	0.250	"	6.58	ND	86.6	75-125			

Environmental & Safety Solutions, Inc.
P.O. Box 869
Midland TX 79708-869

Project: B.J. Wash Bay Leak
Project Number: 016-257-M
Project Manager: Sharel Stepp

Fax: 563-2213
Reported:
07/15/04 17:11

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RFD	RFD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EG41511 - EPA 3050B

Matrix Spike Dup (EG41511-MSD1)

Source: 4G09023-01

Prepared: 07/14/04 Analyzed: 07/15/04

Selenium	27.6	0.200	ng/kg dry	26.3	ND	105	75-125	0.727	20	
Silver	5.45	0.250	"	6.58	ND	2.8	75-125	1.48	20	

ETech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX 79708-8469

Project: B.J. Walsh Bay Lake
Project Number: 016-257-M
Project Manager: Share B tep

Fax: 563-2213
Reported:
07/15/04 17:11

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analytical concentration / or matrix interference's.
- QM05 The spike recovery was outside acceptable limits for the MS and/or MSD due to matrix interference. The LCS and/or LCS D were within acceptable limits showing that the laboratory's control and the data is acceptable.
- J Detected but below the Reporting Limit; therefore, results are estimated concentration (CLPJ -H ag).
- DEF Analyte DEFECTED
- ND Analyte NOT DEFECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RID Relative Percent Difference
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:

Ronald K. Tuttle

Date:

7/15/04

Ronald K. Tuttle, QA Officer

Coley D. Keene, Lab Director, Org Tech Director

Jeanne M. Murray, Org Tech Director

Janes L. Hawkins, Chemist/Geologist

Sara Molina, Chemist

Sandra Bexiga, Lab Tech

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 12 of 12

**Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In**

Client: E Tech Env.

Date/Time: 07-09-04 @ 1700

Order #: 4 G09023

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	No	<input type="checkbox"/> C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	<input checked="" type="checkbox"/> Yes	No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	NO LABELS - WRITTEN ON LID
Container labels legible and intact?	Yes	No	NO LABELS - WRITTEN ON LID
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	No	
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	No	
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	No	
QC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

Corrective Action Taken:

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765

CHAIN OF CUSTODY RECORD AND ANALYSIS REPORT

Project Manager: S KANE ESTER

Company Name: Etech Environmental

Company Address: P.O. Box 8469

City/State/Zip: Midland, TX 79708

Telephone No: 563-2200

Fax No: 563-2213

Sampler Signature: 

Project Name: BT WASH BAY LEAK

Project #: 016-257-M

Project Loc: _____

PO #: _____

1109023

LAB # (lab use only)

-01

WASH BAY LINE LEAK

Date Sampled: 7/9/04

Time Sampled: 3:30

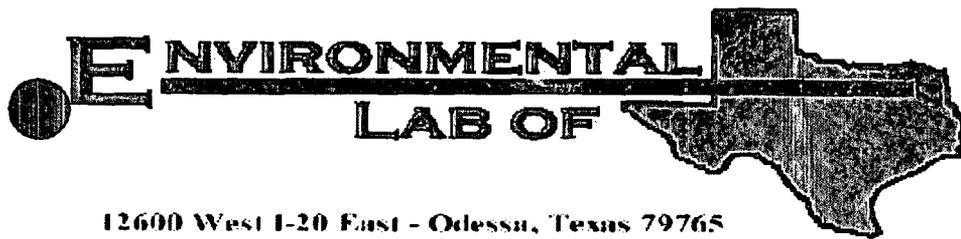
No. of Containers: 4

TCLP		TOTAL		Analyze For:	
As		As		As	
Ag		Ag		Ag	
Ba		Ba		Ba	
Ca		Ca		Ca	
Cr		Cr		Cr	
Pb		Pb		Pb	
Hg		Hg		Hg	
Sb		Sb		Sb	
Se		Se		Se	
Metals: As Ag Ba Ca Cr Pb Hg Se		X		Metals: As Ag Ba Ca Cr Pb Hg Se	
BAR / ESP / CEC				BAR / ESP / CEC	
Arsenic (Ca, SO4, CO3, HCO3)				Arsenic (Ca, SO4, CO3, HCO3)	
Cadmium (Ca, Mg, Na, K)				Cadmium (Ca, Mg, Na, K)	
TPH: 418, 6015M, DDS, 1006		X		TPH: 418, 6015M, DDS, 1006	
Other (Specify):				Other (Specify):	
Hex				Hex	
HNO3				HNO3	
H2O				H2O	
NaOH				NaOH	
H2SO4				H2SO4	
Meth				Meth	
Other (Specify)				Other (Specify)	
Water				Water	
Sludge				Sludge	
Soil		X		Soil	
NORM				NORM	
Semi-volatiles				Semi-volatiles	
BTEX 80219/5030 or BTEX 8260				BTEX 80219/5030 or BTEX 8260	
RCI				RCI	
NORM				NORM	
RUSH TAT (Pre-Schedule)		X		RUSH TAT (Pre-Schedule)	
Standard TAT				Standard TAT	

Special Instructions: Composite all four before running

Sample Containers Intact?
Temperature Upon Receipt: Rec 0°C
Laboratory Comments:

Retransmitted by:	Date	Time	Received by:	Date	Time
	7/9/04	4:45			
Retransmitted by:			Received by ELOT:	7-09-04	1645



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Fred Holmes

E Tech Environmental & Safety Solutions, Inc.

P.O. Box 8469

Midland, TX 79708-8469

Project: BJ Hobbs Washbay Line Leak

Project Number: 016-257-M

Location: Hobbs, NM

Lab Order Number: 4G22014

Report Date: 07/30/04

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Area 2 Central 3'	4G22014-01	Soil	07/21/04 11:00	07/22/04 14:15
Area 2 North Central 1'	4G22014-02	Soil	07/21/04 11:15	07/22/04 14:15
Area 2 South Central 1'	4G22014-03	Soil	07/21/04 11:45	07/22/04 14:15
Area 2 East Central 1'	4G22014-04	Soil	07/21/04 11:55	07/22/04 14:15
Area 2 West Central 2'	4G22014-05	Soil	07/21/04 12:25	07/22/04 14:15
Area 1 North 9 in.	4G22014-06	Soil	07/21/04 12:15	07/22/04 14:15
Area 1 Central 6 in.	4G22014-07	Soil	07/21/04 12:30	07/22/04 14:15
Area 1 South #2 1'	4G22014-08	Soil	07/21/04 13:00	07/22/04 14:15
Field 6 in.	4G22014-09	Soil	07/21/04 13:15	07/22/04 14:15

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Area 2 Central 3' (4G22014-01) Soil									
Gasoline Range Organics C6-C12	24.3	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	70.1	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	94.4	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		81.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.0 %	70-130		"	"	"	"	
Area 2 North Central 1' (4G22014-02) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		82.2 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		71.2 %	70-130		"	"	"	"	
Area 2 South Central 1' (4G22014-03) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		95.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		71.8 %	70-130		"	"	"	"	
Area 2 East Central 1' (4G22014-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		76.2 %	70-130		"	"	"	"	
Area 2 West Central 2' (4G22014-05) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.4 %	70-130		"	"	"	"	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area 1 North 9 in. (4G22014-06) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	47.5	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	47.5	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.0 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		73.4 %	70-130		"	"	"	"	
Area 1 Central 6 in. (4G22014-07) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	
Diesel Range Organics >C12-C35	65.3	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	65.3	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		87.8 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		74.0 %	70-130		"	"	"	"	
Area 1 South #2 1' (4G22014-08) Soil									
Gasoline Range Organics C6-C12	J [8.74]	10.0	mg/kg dry	1	EG42213	07/23/04	07/24/04	EPA 8015M	J
Diesel Range Organics >C12-C35	96.3	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	96.3	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		89.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		79.2 %	70-130		"	"	"	"	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

**General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area 2 Central 3' (4G22014-01) Soil									
% Solids	77.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Area 2 North Central 1' (4G22014-02) Soil									
% Solids	91.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Area 2 South Central 1' (4G22014-03) Soil									
% Solids	84.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Area 2 East Central 1' (4G22014-04) Soil									
% Solids	86.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Area 2 West Central 2' (4G22014-05) Soil									
% Solids	82.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Area 1 North 9 in. (4G22014-06) Soil									
% Solids	90.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Area 1 Central 6 in. (4G22014-07) Soil									
% Solids	90.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Area 1 South #2 1' (4G22014-08) Soil									
% Solids	85.0		%	1	EG42604	07/22/04	07/22/04	% calculation	
Field 6 in. (4G22014-09) Soil									
% Solids	97.0		%	1	EG42604	07/22/04	07/22/04	% calculation	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Total Metals by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Field 6 in. (4G22014-09) Soil									
Arsenic	2.22	0.400	mg/kg dry	50	EG42912	07/23/04	07/28/04	EPA 6010B	
Chromium	7.78	0.250	"	"	"	"	"	"	
Lead	ND	0.550	"	"	"	"	"	"	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EG42213 - Solvent Extraction (GC)

Blank (EG42213-BLK1)		Prepared & Analyzed: 07/23/04								
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	41.2		mg/kg	50.0		82.4	70-130			
Surrogate: 1-Chlorooctadecane	37.0		"	50.0		74.0	70-130			

Blank (EG42213-BLK2)		Prepared: 07/23/04 Analyzed: 07/24/04								
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	38.3		mg/kg	50.0		76.6	70-130			
Surrogate: 1-Chlorooctadecane	38.2		"	50.0		76.4	70-130			

LCS (EG42213-BS1)		Prepared & Analyzed: 07/23/04								
Gasoline Range Organics C6-C12	415	10.0	mg/kg wet	500		83.0	75-125			
Diesel Range Organics >C12-C35	465	10.0	"	500		93.0	75-125			
Total Hydrocarbon C6-C35	880	10.0	"	1000		88.0	75-125			
Surrogate: 1-Chlorooctane	52.7		mg/kg	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	37.5		"	50.0		75.0	70-130			

LCS (EG42213-BS2)		Prepared: 07/23/04 Analyzed: 07/24/04								
Gasoline Range Organics C6-C12	414	10.0	mg/kg wet	500		82.8	75-125			
Diesel Range Organics >C12-C35	459	10.0	"	500		91.8	75-125			
Total Hydrocarbon C6-C35	873	10.0	"	1000		87.3	75-125			
Surrogate: 1-Chlorooctane	49.5		mg/kg	50.0		99.0	70-130			
Surrogate: 1-Chlorooctadecane	35.7		"	50.0		71.4	70-130			

Calibration Check (EG42213-CCV1)		Prepared & Analyzed: 07/23/04								
Gasoline Range Organics C6-C12	418		mg/kg	500		83.6	80-120			
Diesel Range Organics >C12-C35	480		"	500		96.0	80-120			
Total Hydrocarbon C6-C35	898		"	1000		89.8	80-120			
Surrogate: 1-Chlorooctane	53.4		"	50.0		107	70-130			
Surrogate: 1-Chlorooctadecane	35.8		"	50.0		71.6	70-130			

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG42213 - Solvent Extraction (GC)										
Calibration Check (EG42213-CCV2)				Prepared: 07/23/04 Analyzed: 07/24/04						
Gasoline Range Organics C6-C12	428		mg/kg	500		85.6	80-120			
Diesel Range Organics >C12-C35	435		"	500		87.0	80-120			
Total Hydrocarbon C6-C35	863		"	1000		86.3	80-120			
Surrogate: 1-Chlorooctane	51.0		"	50.0		102	70-130			
Surrogate: 1-Chlorooctadecane	36.5		"	50.0		73.0	70-130			
Matrix Spike (EG42213-MS1)				Source: 4G22007-01		Prepared & Analyzed: 07/23/04				
Gasoline Range Organics C6-C12	542	10.0	mg/kg dry	568	ND	95.4	75-125			
Diesel Range Organics >C12-C35	613	10.0	"	568	ND	108	75-125			
Total Hydrocarbon C6-C35	1160	10.0	"	1140	ND	102	75-125			
Surrogate: 1-Chlorooctane	52.4		mg/kg	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	39.0		"	50.0		78.0	70-130			
Matrix Spike (EG42213-MS2)				Source: 4G22020-01		Prepared: 07/23/04 Analyzed: 07/24/04				
Gasoline Range Organics C6-C12	421	10.0	mg/kg dry	500	ND	84.2	75-125			
Diesel Range Organics >C12-C35	510	10.0	"	500	ND	102	75-125			
Total Hydrocarbon C6-C35	931	10.0	"	1000	ND	93.1	75-125			
Surrogate: 1-Chlorooctane	54.3		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	37.8		"	50.0		75.6	70-130			
Matrix Spike Dup (EG42213-MSD1)				Source: 4G22007-01		Prepared & Analyzed: 07/23/04				
Gasoline Range Organics C6-C12	526	10.0	mg/kg dry	568	ND	92.6	75-125	3.00	20	
Diesel Range Organics >C12-C35	597	10.0	"	568	ND	105	75-125	2.64	20	
Total Hydrocarbon C6-C35	1120	10.0	"	1140	ND	98.2	75-125	3.51	20	
Surrogate: 1-Chlorooctane	54.3		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	38.8		"	50.0		77.6	70-130			
Matrix Spike Dup (EG42213-MSD2)				Source: 4G22020-01		Prepared: 07/23/04 Analyzed: 07/24/04				
Gasoline Range Organics C6-C12	428	10.0	mg/kg dry	500	ND	85.6	75-125	1.65	20	
Diesel Range Organics >C12-C35	498	10.0	"	500	ND	99.6	75-125	2.38	20	
Total Hydrocarbon C6-C35	926	10.0	"	1000	ND	92.6	75-125	0.539	20	
Surrogate: 1-Chlorooctane	54.4		mg/kg	50.0		109	70-130			
Surrogate: 1-Chlorooctadecane	38.1		"	50.0		76.2	70-130			

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG42604 - General Preparation (Prep)										
Blank (EG42604-BLK1)					Prepared & Analyzed: 07/22/04					
% Solids	100		%							
Duplicate (EG42604-DUP1)					Source: 4G22001-01 Prepared & Analyzed: 07/22/04					
% Solids	70.0		%		72.0			2.82	20	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Total Metals by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EG42912 - EPA 3050B										
Blank (EG42912-BLK1) Prepared: 07/23/04 Analyzed: 07/28/04										
Lead	ND	0.0110	mg/kg wet							
Chromium	ND	0.00500	"							
Arsenic	ND	0.00800	"							
LCS (EG42912-BS1) Prepared: 07/23/04 Analyzed: 07/28/04										
Lead	51.8	0.0110	mg/kg wet	55.0		94.2	85-115			
Chromium	9.94	0.00500	"	10.0		99.4	85-115			
Arsenic	38.2	0.00800	"	40.0		95.5	85-115			
Calibration Check (EG42912-CCV1) Prepared: 07/23/04 Analyzed: 07/28/04										
Chromium	1.06		mg/kg	1.00		106	90-110			
Lead	1.05		"	1.00		105	90-110			
Arsenic	1.04		"	1.00		104	0-200			
Matrix Spike (EG42912-MS1) Source: 4G22006-01 Prepared: 07/23/04 Analyzed: 07/28/04										
Arsenic	41.4	0.400	mg/kg dry	42.6	1.52	93.6	75-125			
Chromium	16.4	0.250	"	10.6	8.05	78.8	75-125			
Lead	46.6	0.550	"	58.5	ND	79.7	75-125			
Matrix Spike Dup (EG42912-MSD1) Source: 4G22006-01 Prepared: 07/23/04 Analyzed: 07/28/04										
Arsenic	41.5	0.400	mg/kg dry	42.6	1.52	93.8	75-125	0.241	20	
Chromium	16.5	0.250	"	10.6	8.05	79.7	75-125	0.608	20	
Lead	45.6	0.550	"	58.5	ND	77.9	75-125	2.17	20	

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

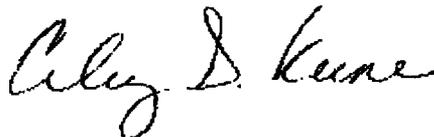
Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:



Date: 07/30/04 12:03

Raland K. Tuttle, QA Officer
Celey D. Keene, Lab Director, Org. Tech Director
Jeanne Mc Murrey, Inorg. Tech Director

James L. Hawkins, Chemist/Geologist
Sara Molina, Chemist
Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: BJ Hobbs Washbay Line Leak
Project Number: 016-257-M
Project Manager: Fred Holmes

Fax: 563-2213
Reported:
07/30/04 12:03

Environmental Lab of Texas

Variance / Corrective Action Report – Sample Log-In

Client: E Tech Env.

Date/Time: 07-22-04 @ 1530

Order #: 4622014

Initials: JMM

Sample Receipt Checklist

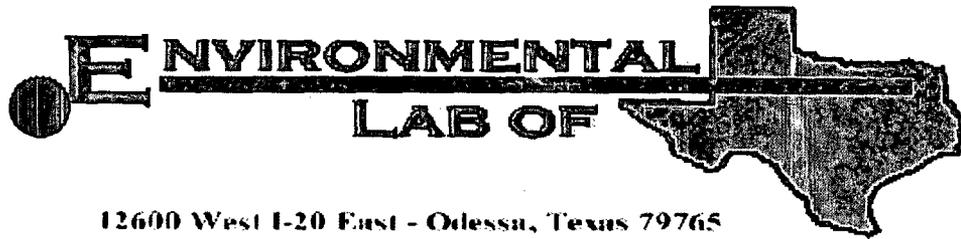
Temperature of container/cooler?	<input checked="" type="checkbox"/> Yes	No	0.5 C
Shipping container/cooler in good condition?	<input checked="" type="checkbox"/> Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	<input checked="" type="checkbox"/> Yes	No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	NO LABELS - WRITTEN ON LIDS
Container labels legible and intact?	Yes	No	NO LABELS - WRITTEN ON LIDS
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	No	
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	No	
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	No	
QC samples have zero headspace?	<input checked="" type="checkbox"/> Yes	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____
 Regarding: _____

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Shane Estep

ETech Environmental & Safety Solutions, Inc.

P. O. Box 8469

Midland, TX 79708-8469

Project: Hbbs Wash Bay Line Leak

Project Number: 016-257-M

Location: Hbbs, NM

Lab Order Number: 4122001

Report Date: 09/23/04

ETech Environmental Safety Solutions, Inc.
P. O. Box 8469
Midland, TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
Project Number: 016-257-M
Project Manager: Shane Estep

Fax 563-2213
Reported:
09/23/04 16:48

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Aea 2 Central Bottom 3.5 ft.	4122001-01	Soil	09/21/04 11:00	09/21/04 17:10
Aea 2 South Central Bottom 6 inch	4122001-02	Soil	09/21/04 11:15	09/21/04 17:10
Aea 2 East Central Bottom 6 inch	4122001-03	Soil	09/21/04 11:20	09/21/04 17:10
Aea 2 West Central Bottom 6 inch	4122001-04	Soil	09/21/04 13:00	09/21/04 17:10
Aea 2 North Central Bottom 6 inch	4122001-05	Soil	09/21/04 13:15	09/21/04 17:10
Aea 1 North 8 inch	4122001-06	Soil	09/21/04 13:30	09/21/04 17:10
Aea 1 Central 8 inch	4122001-07	Soil	09/21/04 13:35	09/21/04 17:10
Aea 1 South Central 2'	4122001-08	Soil	09/21/04 13:40	09/21/04 17:10
Aea 1 South SE Bottom 2'	4122001-09	Soil	09/21/04 13:45	09/21/04 17:10
Aea 1 South NW Bottom 2'	4122001-10	Soil	09/21/04 13:50	09/21/04 17:10

ETech Environmental Safety Solutions, Inc.
P. O. Box 8469
Midland, TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
Project Number: 016-257-M
Project Manager: Shane Estep

Fax 563-2213
Reported:
09/23/04 16:48

Organics by GC
Environmental Lab of Texas

Anal yte	Resul	Reporting Limit	Units	Dil ution	Batch	Prepared	Anal yz ed	Method	Notes
Area 2 Central Bottom 3.5 ft. (4122001-01) Soil									
Gasoline Range Organics C6-C12	28.5	10.0	mg/k g dy	1	EI 42113	09/22/04	09/23/04	EP A8 015 M	
Diesel Range Organics >C12-C35	504	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	533	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		112 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		130 %	70-130		"	"	"	"	
Area 2 South Central Bottom 6 inch (4122001-02) Soil									
Gasoline Range Organics C6-C12	35.0	10.0	mg/k g dy	1	EI 42113	09/22/04	09/23/04	EP A8 015 M	
Diesel Range Organics >C12-C35	894	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	929	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		101 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-130		"	"	"	"	
Area 2 East Central Bottom 6 inch (4122001-03) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/k g dy	1	EI 42113	09/22/04	09/23/04	EP A8 015 M	
Diesel Range Organics >C12-C35	J [7.58]	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		114 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		121 %	70-130		"	"	"	"	
Area 2 West Central Bottom 6 inch (4122001-04) Soil									
Gasoline Range Organics C6-C12	12.5	10.0	mg/k g dy	1	EI 42113	09/22/04	09/23/04	EP A8 015 M	
Diesel Range Organics >C12-C35	394	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	407	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		107 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		126 %	70-130		"	"	"	"	
Area 2 North Central Bottom 6 inch (4122001-05) Soil									
Gasoline Range Organics C6-C12	J [8.92]	10.0	mg/k g dy	1	EI 42113	09/22/04	09/23/04	EP A8 015 M	J
Diesel Range Organics >C12-C35	674	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	674	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		104 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		117 %	70-130		"	"	"	"	

ETech Environmental Safety Solutions, Inc.
 P. O. Box 8469
 Mand TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
 Project Number: 016-257-M
 Project Manager: Shane Estep

Fax 563-2213
 Reported:
 09/23/04 16:48

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area 1 North 8 inch (4I22001-06) Soil									
Gasoline Range Organics C6-C12	26.1	10.0	mg/kg dry	1	EI 421B	09/22/04	09/23/04	EPA8015M	
Diesel Range Organics >C12-C35	936	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	962	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		108 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		129 %	70-130		"	"	"	"	
Area 1 Central 8 inch (4I22001-07) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI 421B	09/22/04	09/23/04	EPA8015M	
Diesel Range Organics >C12-C35	516	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	516	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		91.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		112 %	70-130		"	"	"	"	
Area 1 South Central 2' (4I22001-08) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI 421B	09/22/04	09/23/04	EPA8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		84.4 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		72.8 %	70-130		"	"	"	"	
Area 1 South SE Bottom 2' (4I22001-09) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EI 421B	09/22/04	09/23/04	EPA8015M	
Diesel Range Organics >C12-C35	J [7.50]	10.0	"	"	"	"	"	"	J
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		105 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		80.4 %	70-130		"	"	"	"	
Area 1 South NW Bottom 2' (4I22001-10) Soil									
Gasoline Range Organics C6-C12	16.9	10.0	mg/kg dry	1	EI 421B	09/22/04	09/23/04	EPA8015M	
Diesel Range Organics >C12-C35	66.3	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	83.2	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		84.6 %	70-130		"	"	"	"	
Surrogate: 1-Chlorooctadecane		70.8 %	70-130		"	"	"	"	

ETech Environmental Safety Solutions, Inc.
 P. O. Box 8469
 Midland, TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
 Project Number: 016-257-M
 Project Manager: Shane Estep

Fax 563-2213
 Reported:
 09/23/04 16:48

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Area 2 Central Bottom 3.5 ft. (4122001-01) Soil									
Chloride	2640	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	93.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 2 South Central Bottom 6 inch (4122001-02) Soil									
Chloride	3190	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	95.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 2 East Central Bottom 6 inch (4122001-03) Soil									
Chloride	993	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	97.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 2 West Central Bottom 6 inch (4122001-04) Soil									
Chloride	5320	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	91.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 2 North Central Bottom 6 inch (4122001-05) Soil									
Chloride	6700	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	97.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 1 North 8 inch (4122001-06) Soil									
Chloride	744	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	96.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 1 Central 8 inch (4122001-07) Soil									
Chloride	851	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	98.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 1 South Central 2' (4122001-08) Soil									
Chloride	1060	20.0	mg/kg g Wet	2	EI 42309	09/22/04	09/23/04	SW846 9253	
% Solids	88.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

ETech Environmental Safety Solutions, Inc.
P. O. Box 8469
Midland, TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
Project Number: 016-257-M
Project Manager: Shane Estep

Fax 563-2213
Reported:
09/23/04 16:48

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area 1 South SE Bottom 2' (4I22001-09) Soil									
Chloride	2130	20.0	mg/kg Wet	2	EI 42309	09/22/04	09/23/04	SW 846 9253	
% Solids	92.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	
Area 1 South NW Bottom 2' (4I22001-10) Soil									
Chloride	709	20.0	mg/kg Wet	2	EI 42309	09/22/04	09/23/04	SW 846 9253	
% Solids	88.0		%	1	EI 42301	09/22/04	09/22/04	% calculation	

ETech Environmental Safety Solutions, Inc.
 P. O. Box 8469
 Midland TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
 Project Number: 016-257-M
 Project Manager: Shane Estep

Fax 563-2213
 Reported:
 09/23/04 16:48

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EI42113 - Solvent Extraction (GC)

Blank (EI42113-BLK1) Prepared 09/21/04 Analyzed 09/22/04

Gasoline Range Organics C6-C12	ND	10.0	mg/kg g vet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	49.9		mg/kg	50.0		99.8	70-130			
Surrogate: 1-Chlorooctadecane	44.3		"	50.0		88.6	70-130			

Blank (EI42113-BLK2) Prepared 09/22/04 Analyzed 09/23/04

Gasoline Range Organics C6-C12	ND	10.0	mg/kg g vet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	46.4		mg/kg	50.0		92.8	70-130			
Surrogate: 1-Chlorooctadecane	36.9		"	50.0		73.8	70-130			

LCS (EI42113-BS1) Prepared 09/21/04 Analyzed 09/22/04

Gasoline Range Organics C6-C12	432	10.0	mg/kg g vet	500		86.4	75-125			
Diesel Range Organics >C12-C35	528	10.0	"	500		106	75-125			
Total Hydrocarbon C6-C35	960	10.0	"	1000		96.0	75-125			
Surrogate: 1-Chlorooctane	58.8		mg/kg	50.0		118	70-130			
Surrogate: 1-Chlorooctadecane	56.4		"	50.0		113	70-130			

LCS (EI42113-BS2) Prepared 09/22/04 Analyzed 09/23/04

Gasoline Range Organics C6-C12	415	10.0	mg/kg g vet	500		83.0	75-125			
Diesel Range Organics >C12-C35	504	10.0	"	500		101	75-125			
Total Hydrocarbon C6-C35	919	10.0	"	1000		91.9	75-125			
Surrogate: 1-Chlorooctane	52.7		mg/kg	50.0		105	70-130			
Surrogate: 1-Chlorooctadecane	43.6		"	50.0		87.2	70-130			

Calibration Check (EI42113-CCV1) Prepared 09/21/04 Analyzed 09/22/04

Gasoline Range Organics C6-C12	460		mg/kg g	500		92.0	80-120			
Diesel Range Organics >C12-C35	578		"	500		116	80-120			
Total Hydrocarbon C6-C35	1040		"	1000		104	80-120			
Surrogate: 1-Chlorooctane	53.8		"	50.0		108	70-130			
Surrogate: 1-Chlorooctadecane	60.7		"	50.0		121	70-130			

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch EI42113 - Solvent Extraction (GC)

Calibration Check (EI42113-CCV2)

Prepared 09/22/04 Analyzed 09/23/04

Gasoline Range Organics C6-C12	447		mg/kg	500		89.4	80-120			
Diesel Range Organics >C12-C35	514		"	500		103	80-120			
Total Hydrocarbon C6-C35	961		"	1000		96.1	80-120			
Surrogate: 1-Chlorooctane	57.0		"	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	57.5		"	50.0		115	70-130			

Matrix Spike (EI42113-MS1)

Source: 4I21002-24

Prepared 09/21/04 Analyzed 09/22/04

Gasoline Range Organics C6-C12	568	10.0	mg/kg dry	543	8.89	103	75-125			
Diesel Range Organics >C12-C35	864	10.0	"	543	307	103	75-125			
Total Hydrocarbon C6-C35	1430	10.0	"	1090	307	103	75-125			
Surrogate: 1-Chlorooctane	58.7		mg/kg	50.0		117	70-130			
Surrogate: 1-Chlorooctadecane	62.6		"	50.0		125	70-130			

Matrix Spike (EI42113-MS2)

Source: 4I22001-08

Prepared 09/22/04 Analyzed 09/23/04

Gasoline Range Organics C6-C12	506	10.0	mg/kg dry	568	ND	89.1	75-125			
Diesel Range Organics >C12-C35	612	10.0	"	568	ND	108	75-125			
Total Hydrocarbon C6-C35	1120	10.0	"	1140	ND	98.2	75-125			
Surrogate: 1-Chlorooctane	56.9		mg/kg	50.0		114	70-130			
Surrogate: 1-Chlorooctadecane	47.8		"	50.0		95.6	70-130			

Matrix Spike Dup (EI42113-MSD1)

Source: 4I21002-24

Prepared 09/21/04 Analyzed 09/22/04

Gasoline Range Organics C6-C12	550	10.0	mg/kg dry	543	8.89	99.7	75-125	3.22	20	
Diesel Range Organics >C12-C35	839	10.0	"	543	307	98.0	75-125	2.94	20	
Total Hydrocarbon C6-C35	1390	10.0	"	1090	307	99.4	75-125	2.84	20	
Surrogate: 1-Chlorooctane	61.9		mg/kg	50.0		124	70-130			
Surrogate: 1-Chlorooctadecane	62.9		"	50.0		126	70-130			

Matrix Spike Dup (EI42113-MSD2)

Source: 4I22001-08

Prepared 09/22/04 Analyzed 09/23/04

Gasoline Range Organics C6-C12	517	10.0	mg/kg dry	568	ND	91.0	75-125	2.15	20	
Diesel Range Organics >C12-C35	641	10.0	"	568	ND	113	75-125	4.63	20	
Total Hydrocarbon C6-C35	1160	10.0	"	1140	ND	102	75-125	3.51	20	
Surrogate: 1-Chlorooctane	59.4		mg/kg	50.0		119	70-130			
Surrogate: 1-Chlorooctadecane	49.7		"	50.0		99.4	70-130			

ETech Environmental Safety Solutions, Inc.
 P. O. Box 8469
 MandTX, 79708-8469

Project: Hobbs Wash Bay Line Leak
 Project Number: 016-257-M
 Project Manager: Shane Estep

Fax 563-2213
 Reported:
 09/23/04 16:48

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI42301 - % Solids										
Blank (EI42301-BLK1) Prepared & Analyzed 09/22/04										
% Solids	100		%							
Duplicate (EI42301-DUP1) Source: 4I21003-01 Prepared & Analyzed 09/22/04										
% Solids	97.0		%		98.0			1.03	20	
Batch EI42309 - Water Extraction										
Blank (EI42309-BLK1) Prepared 09/22/04 Analyzed 09/23/04										
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EI42309-MS1) Source: 4I21003-01 Prepared 09/22/04 Analyzed 09/23/04										
Chloride	510	20.0	mg/kg Wet	500	0.00	102	80-120			
Matrix Spike Dup (EI42309-MSD1) Source: 4I21003-01 Prepared 09/22/04 Analyzed 09/23/04										
Chloride	500	20.0	mg/kg Wet	500	0.00	100	80-120	1.98	20	
Reference (EI42309-SRM1) Prepared & Analyzed 09/23/04										
Chloride	4940		mg/kg	5000		98.8	80-120			

ETech Environmental Safety Solutions, Inc.
P. O. Box 8469
Midland, TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
Project Number: 016-257-M
Project Manager: Shane Estep

Fax 563-2213
Reported:
09/23/04 16:48

Notes and Definitions

J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLPJ - Flag).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dy Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

Report Approved By:

Roland K Tuttle

Date:

9/23/04

Roland K Tuttle, Lab Manager
Coley D. Keene, Lab Director, Oq. Tech Director
Peggy Allen, QAC Officer

Jeanne M Mirrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Biezugbe, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 9 of 9

**Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In**

Client: E Tech Env.

Date/Time: 09-22-04 @ 0800

Order #: 4I22001

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	No	1.5	C
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	No		
Custody Seals intact on shipping container/cooler?	Yes	No	Not present	
Custody Seals intact on sample bottles?	Yes	No	Not present	
Chain of custody present?	<input checked="" type="radio"/> Yes	No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="radio"/> Yes	No		
Chain of Custody signed when relinquished and received?	<input checked="" type="radio"/> Yes	No		
Chain of custody agrees with sample label(s)	<input checked="" type="radio"/> Yes	No		
Container labels legible and intact?	<input checked="" type="radio"/> Yes	No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="radio"/> Yes	No		
Samples in proper container/bottle?	<input checked="" type="radio"/> Yes	No		
Samples properly preserved?	<input checked="" type="radio"/> Yes	No		
Sample bottles intact?	<input checked="" type="radio"/> Yes	No		
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	No		
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	No		
Sufficient sample amount for indicated test?	<input checked="" type="radio"/> Yes	No		
Samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	No		
VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	No	Not Applicable	

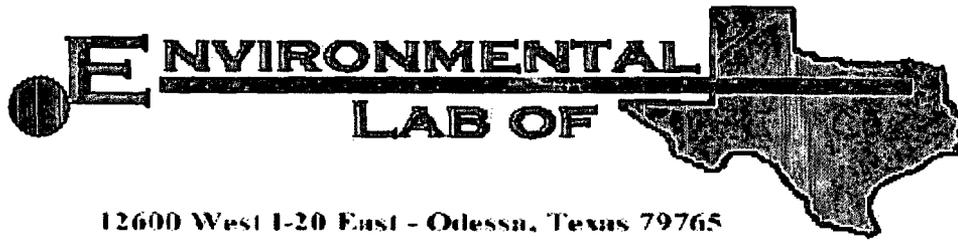
Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding: _____

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Shane Estep

ETech Environmental & Safety Solutions, Inc

P. O. Box 8469

Midland, TX 79708-8469

Project: B. J. Wish Bay Leak

Project Number: 016-257-M

Location: Hobbs, NM

Lab Order Number: 4J13004

Report Date: 10/18/04

ETech Environmental & Safety Solutions, Inc
P. O. Box 8469
Midland TX, 79708-8469

Project: B. J. Wash Bay Leak
Project Number: 016-257-M
Project Manager: Shane Estep

Fax 563-2213
Reported:
10/18/04 17:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Area 1 South 12 inch	4J13004-01	Soil	10/11/04 11:30	10/13/04 11:07
Area 1 Central 12 inch	4J13004-02	Soil	10/11/04 11:40	10/13/04 11:07
Area 1 North 12 inch	4J13004-03	Soil	10/11/04 11:45	10/13/04 11:07

ETech Environmental & Safety Solutions, Inc
 P. O. Box 8469
 Midland TX, 79708-8469

Project: B. J. Wash Bay Leak
 Project Number: 016-257-M
 Project Manager: Shane Estep

Fax 563-2213
 Reported:
 10/18/04 17:31

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Area 1 South 12 inch (4J13004-01) Soil									
Gasoline Range Organics C6-C12	ND	10.0	ng/kg dry	1	E41306	10/13/04	10/13/04	EPA8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		98.2 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		111 %	70-130	"	"	"	"	"	
Area 1 Central 12 inch (4J13004-02) Soil									
Gasoline Range Organics C6-C12	ND	10.0	ng/kg dry	1	E41306	10/13/04	10/13/04	EPA8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.4 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		112 %	70-130	"	"	"	"	"	
Area 1 North 12 inch (4J13004-03) Soil									
Gasoline Range Organics C6-C12	ND	10.0	ng/kg dry	1	E41306	10/13/04	10/13/04	EPA8015M	
Diesel Range Organics >C12-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		97.0 %	70-130	"	"	"	"	"	
Surrogate: 1-Chlorooctadecane		109 %	70-130	"	"	"	"	"	

ETech Environmental & Safety Solutions, Inc
P. O. Box 8469
Midland TX, 79708-8469

Project: B. J. Wash Bay Leak
Project Number: 016-257-M
Project Manager: Shane Estep

Fax 563-2213
Reported:
10/18/04 17:31

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Bath	Prepared	Analyzed	Method	Notes
Area 1 South 12 inch (4J13004-01) Soil									
Chloride	1020	20.0	ng/kg Wet	2	EA1814	10/13/04	10/18/04	SW846 9253	
% Moisture	18.0		%	1	EA1403	10/13/04	10/14/04	% calculation	
Area 1 Central 12 inch (4J13004-02) Soil									
Chloride	160	20.0	ng/kg Wet	2	EA1814	10/13/04	10/18/04	SW846 9253	
% Moisture	16.0		%	1	EA1403	10/13/04	10/14/04	% calculation	
Area 1 North 12 inch (4J13004-03) Soil									
Chloride	ND	20.0	ng/kg Wet	2	EA1814	10/13/04	10/18/04	SW846 9253	
% Moisture	20.0		%	1	EA1403	10/13/04	10/14/04	% calculation	

ETech Environmental & Safety Solutions, Inc
 P. O. Box 8469
 Midland TX, 79708-8469

Project: B. J. Wish Bay Leak
 Project Number: 016-257-M
 Project Manager: Shane Estep

Fax 563-2213
 Reported:
 10/18/04 17:31

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting	Units	Spike	Source	%REC	RPD	RPD	Notes
		Limit		Level	Result	Limits			

Batch EJ41306 - Solvent Extraction (GC)

Blank (EJ41306-BLK1) Prepared & Analyzed: 10/13/04									
Gasoline Range Organics C6-C12	ND	10.0	ng/kg wet						
Diesel Range Organics >C12-C35	ND	10.0	"						
Total Hydrocarbon C6-C35	ND	10.0	"						
Surrogate: 1-Chlorooctane	55.6		mg/kg	50.0		111	70-130		
Surrogate: 1-Chlorooctadecane	62.2		"	50.0		124	70-130		

LCS (EJ41306-BS1) Prepared & Analyzed: 10/13/04									
Gasoline Range Organics C6-C12	444	10.0	ng/kg wet	500		88.8	75-125		
Diesel Range Organics >C12-C35	460	10.0	"	500		92.0	75-125		
Total Hydrocarbon C6-C35	904	10.0	"	1000		90.4	75-125		
Surrogate: 1-Chlorooctane	59.0		mg/kg	50.0		118	70-130		
Surrogate: 1-Chlorooctadecane	62.6		"	50.0		125	70-130		

Calibration Check (EJ41306-CCV1) Prepared & Analyzed: 10/13/04									
Gasoline Range Organics C6-C12	512		ng/kg	500		102	80-120		
Diesel Range Organics >C12-C35	588		"	500		118	80-120		
Total Hydrocarbon C6-C35	1100		"	1000		110	80-120		
Surrogate: 1-Chlorooctane	49.0		"	50.0		98.0	70-130		
Surrogate: 1-Chlorooctadecane	54.9		"	50.0		110	70-130		

Matrix Spike (EJ41306-MS1) Source: 4J13004-01 Prepared & Analyzed: 10/13/04									
Gasoline Range Organics C6-C12	493		ng/kg	500	ND	98.6	75-125		
Diesel Range Organics >C12-C35	553		"	500	ND	111	75-125		
Total Hydrocarbon C6-C35	1050		"	1000	ND	105	75-125		
Surrogate: 1-Chlorooctane	51.5		"	50.0		103	70-130		
Surrogate: 1-Chlorooctadecane	53.7		"	50.0		107	70-130		

Matrix Spike Dup (EJ41306-MSD1) Source: 4J13004-01 Prepared & Analyzed: 10/13/04									
Gasoline Range Organics C6-C12	517		ng/kg	500	ND	103	75-125	4.75	20
Diesel Range Organics >C12-C35	543		"	500	ND	109	75-125	1.82	20
Total Hydrocarbon C6-C35	1060		"	1000	ND	106	75-125	0.948	20
Surrogate: 1-Chlorooctane	53.1		"	50.0		106	70-130		
Surrogate: 1-Chlorooctadecane	54.7		"	50.0		109	70-130		

ETech Environmental & Safety Solutions, Inc
 P. O. Box 8469
 Midland TX, 79708-8469

Project: B. J. Wash Bay Leak
 Project Number: 016-257-M
 Project Manager: Shane Estep

Fax 563-2213
 Reported:
 10/18/04 17:31

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ41403 - % Solids										
Blank (EJ41403-BLK1)										
					Prepared: 10/13/04 Analyzed: 10/14/04					
%Moisture	0.0		%							
Duplicate (EJ41403-DUP1)										
					Source: 4J08007-01 Prepared: 10/13/04 Analyzed: 10/14/04					
%Moisture	12.0		%		12.0			0.00	20	
Batch EJ41814 - Water Extraction										
Blank (EJ41814-BLK1)										
					Prepared: 10/11/04 Analyzed: 10/18/04					
Chloride	ND	20.0	ng/kg Wet							
Matrix Spike (EJ41814-MS1)										
					Source: 4J08006-02 Prepared: 10/11/04 Analyzed: 10/18/04					
Chloride	468	20.0	ng/kg Wet	500	0.00	93.6	80-120			
Matrix Spike Dup (EJ41814-MSD1)										
					Source: 4J08006-02 Prepared: 10/11/04 Analyzed: 10/18/04					
Chloride	478	20.0	ng/kg Wet	500	0.00	95.6	80-120	2.11	20	
Reference (EJ41814-SRM1)										
					Prepared & Analyzed: 10/18/04					
Chloride	5000		ng/kg	5000		100	80-120			

ETech Environmental & Safety Solutions, Inc
P. O. Box 8469
Midland TX, 79708-8469

Project: B. J. Wash Bay Leak
Project Number: 016-257-M
Project Manager: Shane Estep

Fax 563-2213
Reported:
10/18/04 17:31

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Roland K Tuttle

Date:

10/18/04

Roland K Tuttle, Lab Manager
Coley D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QO Officer

Jeanne McMurrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Biezuge, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client: E Tech Env.

Date/Time: 10-13-04 @ 1200

Order #: 4 J13004

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	-1.0 C
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Custody Seals intact on shipping container/cooler?	<input type="radio"/> Yes	<input type="radio"/> No	<u>Not present</u>
Custody Seals intact on sample bottles?	<input type="radio"/> Yes	<input type="radio"/> No	<u>Not present</u>
Chain of custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Chain of Custody signed when relinquished and received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Chain of custody agrees with sample label(s)	<input type="radio"/> Yes	<input type="radio"/> No	<u>No Label - written on lid</u>
Container labels legible and intact?	<input type="radio"/> Yes	<input type="radio"/> No	<u>No Label - written on lid</u>
Sample Matrix and properties same as on chain of custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples in proper container/bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient sample amount for indicated test?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Can samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not Applicable

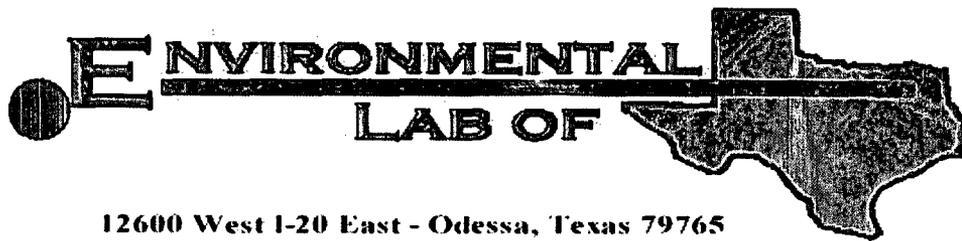
Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding: _____

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Shane B tep

ETech Env i ronmental & Saf ety Soluti ons , Inc.

P. O. Box 840

Midland, TX 79 708-840

Project: BJ Serv i ces - Hbbs

Project Number: 016-257-M

Locati on: Hbbs , NM

Lab Order Number: 4L07002

Report Date: 12/08/04

ETech Environmental & Safety Solutions, Inc.
P. O. Box 8469
Midland TX, 79708-8469

Project: Bl Services - Hbbs
Project Number: 016-257-M
Project Manager: Shane B tep

Fax: 563-2213
Reported:
12/08/04 14:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1-North (14 in. bgs)	4L07002-01	Soil	12/06/04 00:00	12/07/04 08:11
2-South (14 in. bgs)	4L07002-02	Soil	12/06/04 00:00	12/07/04 08:11
3-East (14 in. bgs)	4L07002-03	Soil	12/06/04 00:00	12/07/04 08:11
4-West (14 in. bgs)	4L07002-04	Soil	12/06/04 00:00	12/07/04 08:11
5-Central (14 in. bgs)	4L07002-05	Soil	12/06/04 00:00	12/07/04 08:11
6-Background (6 in. bgs)	4L07002-06	Soil	12/06/04 00:00	12/07/04 08:11

ETech Environmental & Safety Solutions, Inc.
P. O. Box 846
Midland TX, 79 708-846

Project: BJ Services - Hobbs
Project Number: 016-257-M
Project Manager: Shane B tep

Fax: 563-2213
Reported:
12/08/04 14:59

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
1-North (14 in. bgs) (4L07002-01) Soil									
Chloride	189	20.0	mg/kg Wt	2	EA0807	12/07/04	12/08/04	SW8469 253	
2-South (14 in. bgs) (4L07002-02) Soil									
Chloride	248	20.0	mg/kg Wt	2	EA0807	12/07/04	12/08/04	SW8469 253	
3-East (14 in. bgs) (4L07002-03) Soil									
Chloride	681	20.0	mg/kg Wt	2	EA0807	12/07/04	12/08/04	SW8469 253	
4-West (14 in. bgs) (4L07002-04) Soil									
Chloride	236	20.0	mg/kg Wt	2	EA0807	12/07/04	12/08/04	SW8469 253	
5-Central (14 in. bgs) (4L07002-05) Soil									
Chloride	ND	20.0	mg/kg Wt	2	EA0807	12/07/04	12/08/04	SW8469 253	
6-Background (6 in. bgs) (4L07002-06) Soil									
Chloride	ND	20.0	mg/kg Wt	2	EA0807	12/07/04	12/08/04	SW8469 253	

ETech Environmental & Safety Solutions, Inc.
 P. O. Box 846
 Midland TX, 79 708-846

Project: BJ Services - Hbbs
 Project Number: 016-257-M
 Project Manager: Shane B tep

Fax: 563-2213
 Reported:
 12/08/04 14:59

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Batch EL40807 - Water Extraction										
Blank (EL40807-BLK1)					Prepared: 12/06/04 Analyzed: 12/08/04					
Chloride	ND	20.0	mg/kg Wt							
Matrix Spike (EL40807-MS1)					Source: 4L06007-01 Prepared: 12/06/04 Analyzed: 12/08/04					
Chloride	500	20.0	mg/kg Wt	500	0.00	100	80-120			
Matrix Spike Dup (EL40807-MSD1)					Source: 4L06007-01 Prepared: 12/06/04 Analyzed: 12/08/04					
Chloride	510	20.0	mg/kg Wt	500	0.00	102	80-120	1.98	20	
Reference (EL40807-SRM1)					Prepared & Analyzed: 12/08/04					
Chloride	5000		mg/kg	5000		100	80-120			

ETech Environmental & Safety Solutions, Inc.
P. O. Box 846
Midland TX, 79 708-846

Project: BJ Services - Hbbs
Project Number: 016-257-M
Project Manager: Shane B tep

Fax: 563-2213
Reported:
12/08/04 14:59

Notes and Definitions

DF Analyte DELETED
ND Analyte NOT DELETED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By:

Roland K Tuttle

Date:

12/8/2004

Roland K. Tuttle, Lab Manager
Gley D. Keene, Lab Director, Org Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client: E Tech Env.

Date/Time: 12-07-04 @ 0811

Order #: 4L 07002

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	16.5 C
Shipping container/cooler in good condition?	Yes	No	N/A
Custody Seals intact on shipping container/cooler?	Yes	No	Not present N/A
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	<input checked="" type="checkbox"/> Yes	No	
Sample Instructions complete on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Chain of Custody signed when relinquished and received?	<input checked="" type="checkbox"/> Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	No label - written on lid
Container labels legible and intact?	Yes	No	No label - written on lid
Sample Matrix and properties same as on chain of custody?	<input checked="" type="checkbox"/> Yes	No	
Samples in proper container/bottle?	<input checked="" type="checkbox"/> Yes	No	
Samples properly preserved?	<input checked="" type="checkbox"/> Yes	No	
Sample bottles intact?	<input checked="" type="checkbox"/> Yes	No	
Preservations documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Containers documented on Chain of Custody?	<input checked="" type="checkbox"/> Yes	No	
Sufficient sample amount for indicated test?	<input checked="" type="checkbox"/> Yes	No	
All samples received within sufficient hold time?	<input checked="" type="checkbox"/> Yes	No	
VOC samples have zero headspace?	Yes	No	<input checked="" type="checkbox"/> Not Applicable

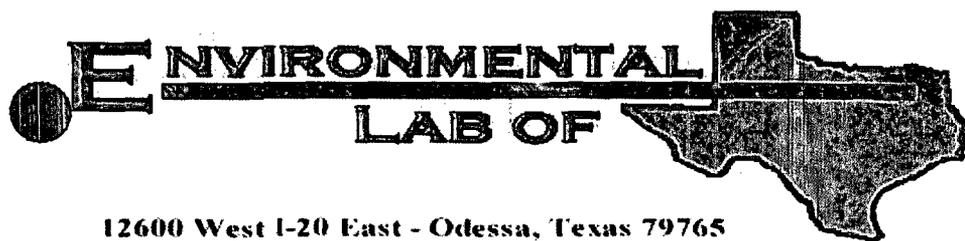
Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

Corrective Action Taken:



12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Shane Estep

E Tech Environmental & Safety Solutions, Inc.

P.O. Box 8469

Midland, TX 79708-8469

Project: Hobbs Wash Bay Line Leak

Project Number: 016-257

Location: None Given

Lab Order Number: 4L10007

Report Date: 12/16/04

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
12/16/04 09:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
East Side-12 inch	4L10007-01	Soil	12/10/04 09:45	12/10/04 11:25

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
12/16/04 09:28

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
East Side-12 inch (4L10007-01) Soil									
Chloride	53.2	20.0	mg/kg Wet	2	EL41403	12/10/04	12/14/04	SW 846 9253	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 2 of 5

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

Project: Hobbs Wash Bay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
12/16/04 09:28

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL41403 - Water Extraction										
Blank (EL41403-BLK1) Prepared: 12/10/04 Analyzed: 12/14/04										
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EL41403-MS1) Source: 4L10001-01 Prepared: 12/10/04 Analyzed: 12/14/04										
Chloride	681	20.0	mg/kg Wet	500	213	93.6	80-120			
Matrix Spike Dup (EL41403-MSD1) Source: 4L10001-01 Prepared: 12/10/04 Analyzed: 12/14/04										
Chloride	691	20.0	mg/kg Wet	500	213	95.6	80-120	1.46	20	
Reference (EL41403-SRM1) Prepared & Analyzed: 12/14/04										
Chloride	4940		mg/kg	5000		98.8	80-120			

E Tech Environmental & Safety Solutions, Inc.
P.O. Box 8469
Midland TX, 79708-8469

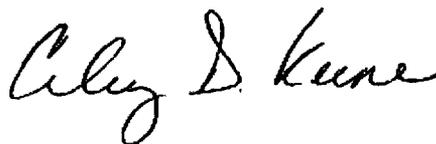
Project: Hobbs Wash Bay Line Leak
Project Number: 016-257
Project Manager: Shane Estep

Fax: 563-2213
Reported:
12/16/04 09:28

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
LCS Laboratory Control Spike
MS Matrix Spike
Dup Duplicate

Report Approved By: _____



Date: _____

12/16/2004

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 4 of 5

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: Hobbs Wash Bay Line Leak
Project #: 016-257

Project Manager: Shane Sstep
Company Name: Steck

Company Address: 17800 W. Hwy 80 East
City/State/Zip: Odessa, TX, 79765

Telephone No: 5703-2200 Fax No: 5703-2213

Sampler Signature: Jaimie Craig

TCLP:	Metals: As Ag Ba Cd Cr Pb Hg Se	Analyze For:
	SAR / ESP / CEC	
TOTAL:	TPH: 418, 1 8015M 1005 1006	
	Carbon (Ca, Mg, Na, K)	
	Arions (Cl, SO4, CO3, HCO3)	
	Semivolatiles	
	Volatiles	
	BTEX 8021B/5030	
	RCl	
	N.O.R.M.	
	Total Gamma	
	Standard TAT (Pre-Schedule)	

Matrix	Preservative		No. of Containers	Time Sampled	Date Sampled							
	Ice	HNO3				HCl	NaOH	H2SO4	None	Other (Specify)	Water	Sludge
			4oz glass	9:45am	12-10-04							

FIELD CODE	Date	Time	Received by:	Date	Time	Received by: ELOT
01 EAST SIDE - 12"	12-10-04	11:25 AM	Jaimie Craig	12-10-04	11:25	Jaimie Craig

Special Instructions:

Relinquished by: Jaimie Craig Date: 12-10-04 Time: 11:25 AM

Received by: Jaimie Craig Date: 12-10-04 Time: 11:25

Sample Containers Used? Y N

Temperature Upon Receipt: 22.5 C

Laboratory Comments:

Environmental Lab of Texas Variance / Corrective Action Report – Sample Log-In

Client: E Tech Env.

Date/Time: 12-10-04 @ 1125

Order #: 4L10007

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	22.5	C
Shipping container/cooler in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A	
Custody Seals intact on shipping container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present ^{N/A}	
Custody Seals intact on sample bottles?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Not present	
Chain of custody present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Instructions complete on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of Custody signed when relinquished and received?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Chain of custody agrees with sample label(s)	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Container labels legible and intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample Matrix and properties same as on chain of custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples in proper container/bottle?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Samples properly preserved?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sample bottles intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Preservations documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Containers documented on Chain of Custody?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
Sufficient sample amount for indicated test?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
All samples received within sufficient hold time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No		
VOC samples have zero headspace?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<u>Not Applicable</u>	

Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____
Regarding: _____

Corrective Action Taken:

Appendix F

Non-Hazardous Waste Manifests

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26205**

1. PAGE 1 OF 1

2. TRAILER NO.

G
E
N
E
R
A
T
O
R
S
D
I
S
P
O
S
I
T
L
Y

3. COMPANY NAME
BJ Services Company USA
PHONE NO.

4. ADDRESS
2708 West County Road
CITY STATE ZIP
Hobbs N.M. 88240

5. PICK-UP DATE
09/20/04
6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
1	CM	12	Y	

a. **Non-Hazardous, Non Regulated Waste**

d. **WT 27,420**

12. COMMENTS OR SPECIAL INSTRUCTIONS:

WP0904466

13. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO.	24-HOUR EMERGENCY NO.
Kenneth Slaughter		505-887-4048

14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME **James Kennedy**
James Kennedy

SIGNATURE **[Signature]** DATE **9-20-04**

15. TRANSPORTER (1)

NAME: **Tripod Inc**
TEXAS I.D. NO. **85589**

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

16. TRANSPORTER (2)

NAME:
TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

17. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME **DANIEL HARRISON**
[Signature] DATE **9-20-04**

18. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME
SIGNATURE DATE

Lea Land, Inc.

ADDRESS:
Mile Marker 64, U.S. Hwy 62/180,
30 Miles East of Carlsbad, NM

PHONE:
505-887-4048

PERMIT NO.
SWM #131401 - New Mexico

19. COMMENTS

20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE
[Signature]

CELL NO. **2** DATE **9/20/04** TIME **12:05**

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. 26206

1. PAGE 1 OF 1

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BJ Services Company USA PHONE NO.	4. ADDRESS 2708 West County Road CITY: Hobbs STATE: N.M. ZIP: 88240	5. PICK-UP DATE 9/20/04	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED: Non-Hazardous, Non Regulated Waste		8. CONTAINERS No. 1 Type cm	9. TOTAL QUANTITY 12
E M P L O Y E E M P L O Y E E M P L O Y E	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT 23,760		10. UNIT Wt/Vol Y	11. TEXAS WASTE ID #
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME: Kenneth Slaughter PHONE NO.: 505-887-4048 24-HOUR EMERGENCY NO.: WP 090446			
T R A N S P O R T E R S	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
	PRINTED/TYPED NAME James Kennedy	SIGNATURE <i>James Kennedy</i>	DATE 9-20-04	
D I S P O S I T E	15. TRANSPORTER (1) NAME: Tripod INC TEXAS I.D. NO. 85589 IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	16. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	17. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME Della Winkles SIGNATURE <i>Della Winkles</i> DATE 9-20-04	
	18. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE		19. COMMENTS	
L E A L A N D L A N D I N C.	Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.		
AUTHORIZED SIGNATURE <i>John Butler</i>		CELL NO. 2	DATE 9/20/04	TIME 1210

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST NO. 26207 1. PAGE 1 OF 1 2. TRAILER NO.

G E	3. COMPANY NAME <u>BJ Services Company USA</u>	4. ADDRESS <u>2709 West County Road</u>	5. PICK-UP DATE <u>9/20/04</u>
	PHONE NO.	CITY STATE ZIP <u>Hobbs N.M. 88240</u>	6. TRRCC I.D. NO.

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS		9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
		No.	Type			
a.	<u>Non-Hazardous, Non Regulated Waste</u>	<u>1</u>	<u>CM</u>	<u>12</u>	<u>Y</u>	
b.						
c.						
d.	<u>WT 28,340</u>					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
WP 0904466

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME <u>Kenneth Slaughter</u>	PHONE NO.	24-HOUR EMERGENCY NO. <u>505-887-4048</u>
----------------------------------	-----------	--

14. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME <u>James Kennedy</u>	SIGNATURE <u>James Kennedy</u>	DATE <u>9-20-04</u>
--	-----------------------------------	------------------------

15. TRANSPORTER (1) NAME: <u>Tripod inc</u> TEXAS I.D. NO. <u>85589</u> IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	16. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:
---	--

17. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME <u>Odell Winkles</u> SIGNATURE <u>Odell Winkles</u> DATE <u>9-20-04</u>	18. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME _____ SIGNATURE _____ DATE _____
--	---

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

PERMIT NO. <u>SWM #131401 - New Mexico</u>	19. COMMENTS
---	--------------

20. **DISPOSAL FACILITY'S CERTIFICATION:** I hereby certify that the above-described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE <u>[Signature]</u>	CELL NO. <u>2</u>	DATE <u>9/20/04</u>	TIME
--	----------------------	------------------------	------

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. 26208

1. PAGE 1 OF 1

2. TRAILER NO.

G	3. COMPANY NAME BJ Services Company USA		4. ADDRESS 2708 West County Road		5. PICK-UP DATE SEPT 21, 2004	
	PHONE NO.		CITY Hobbs	STATE NM	ZIP 88240	6. TNRCC I.D. NO.
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No.	9. TOTAL QUANTITY
N	a. NONHAZARDOUS, NON RECLAIMED WASTE				Type CM	10. UNIT Wt/Vol.
E	b.					11. TEXAS WASTE ID #
R	c.					
A	d. WT 48,400					
T	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT 0904466					
R	13. IN CASE OF EMERGENCY OR SPILL, CONTACT					
T	NAME Kinneth Slaughter		PHONE NO.		24-HOUR EMERGENCY NO. 505-887-4048	
O	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.					
R	PRINTED/TYPED NAME James Kennedy			SIGNATURE <i>[Signature]</i>		DATE 9-20-04
T	15. TRANSPORTER (1)			16. TRANSPORTER (2)		
R	NAME: Tripod Inc			NAME:		
A	TEXAS I.D. NO. 85589			TEXAS I.D. NO.		
N	IN CASE OF EMERGENCY CONTACT:			IN CASE OF EMERGENCY CONTACT:		
S	EMERGENCY PHONE:			EMERGENCY PHONE:		
P	17. TRANSPORTER (1): Acknowledgment of receipt of material			18. TRANSPORTER (2): Acknowledgment of receipt of material		
O	PRINTED/TYPED NAME Odell Winkles			PRINTED/TYPED NAME		
R	SIGNATURE <i>[Signature]</i> DATE 9-21-04			SIGNATURE DATE		
T	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
E	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS			
S	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
I	AUTHORIZED SIGNATURE <i>[Signature]</i>		CELL NO. 2	DATE 9-21-04	TIME 1010	

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26209**

1. PAGE 1 OF ___

2. TRAILER NO.

G

3. COMPANY NAME

BJ Services Company USA

PHONE NO.

4. ADDRESS

2708 West County Road

CITY

STATE

ZIP

Hobbs

N.M.

88240

5. PICK-UP DATE

Sept 21, 2004

6. TNRCC I.D. NO.

E

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

Non-Hazardous, Non Regulated Waste

8. CONTAINERS
No. Type

1 CM

9. TOTAL QUANTITY

24

10. UNIT Wt/Vol.

Y

11. TEXAS WASTE ID #

N

E

R

12. COMMENTS OR SPECIAL INSTRUCTIONS:

WT 5, 820

WP 0904466

A

13. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME

PHONE NO.

24-HOUR EMERGENCY NO.

T

14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

R

PRINTED/TYPED NAME

James Kennedy

SIGNATURE

James Kennedy

DATE

9-21-04

T

15. TRANSPORTER (1)

NAME: **Tripod Inc**

TEXAS I.D. NO. **85589**

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

16. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

R

17. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME **DANIEL HARRISON**

SIGNATURE *Daniel Harrison* DATE **9-21-04**

18. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME _____

SIGNATURE _____ DATE _____

D

Lea Land, Inc.

ADDRESS:

Mile Marker 64, U.S. Hwy 62/180,
30 Miles East of Carlsbad, NM

PHONE:

505-887-4048

I

PERMIT NO.

SWM #131401 - New Mexico

19. COMMENTS

S

20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes:

L

AUTHORIZED SIGNATURE

[Signature]

CELL NO.

2

DATE

09-21-04

TIME

0715

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. 26210

1. PAGE 1 OF ___

2. TRAILER NO.

G	3. COMPANY NAME <i>BJ Services Company USA</i>		4. ADDRESS <i>2708 West County Road</i>			5. PICK-UP DATE <i>Sept 21, 2004</i>				
	PHONE NO.		CITY <i>Hobbs</i>	STATE <i>NM</i>	ZIP <i>88240</i>	6. TNRCC I.D. NO.				
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:					8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #	
N	a. <i>Non-Hazardous, Non Regulated Waste</i>					1	CM	12	Y	
E	b.									
R	c.									
A	d. <i>WT- 27080</i>									
T	12. COMMENTS OR SPECIAL INSTRUCTIONS:					13. IN CASE OF EMERGENCY OR SPILL, CONTACT				
R						NAME		PHONE NO.		24-HOUR EMERGENCY NO.
O						<i>Kinwith Slaughter</i>		<i>505-887-4048</i>		<i>WP0904466</i>
S	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.									
	PRINTED/TYPED NAME <i>James Kennedy</i>					SIGNATURE <i>James Kennedy</i>			DATE <i>9-21-04</i>	
T	15. TRANSPORTER (1)					16. TRANSPORTER (2)				
R	NAME: <i>Tripod Inc</i>					NAME:				
A	TEXAS I.D. NO. <i>85589</i>					TEXAS I.D. NO.				
N	IN CASE OF EMERGENCY CONTACT:					IN CASE OF EMERGENCY CONTACT:				
S	EMERGENCY PHONE:					EMERGENCY PHONE:				
P	17. TRANSPORTER (1): Acknowledgment of receipt of material					18. TRANSPORTER (2): Acknowledgment of receipt of material				
O	PRINTED/TYPED NAME <i>Debra Winkler</i>					PRINTED/TYPED NAME				
R	SIGNATURE <i>Debra Winkler</i> DATE <i>9-21-04</i>					SIGNATURE DATE				
E	Lea Land, Inc.			ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE: 505-887-4048			
D	PERMIT NO. SWM #131401 - New Mexico					19. COMMENTS				
F	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.									
I	AUTHORIZED SIGNATURE <i>[Signature]</i>				CELL NO. <i>2</i>		DATE <i>09-21-04</i>		TIME <i>0910</i>	
S										
P										
O										
L										
Y										

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26211**

1. PAGE 1 OF ___

2. TRAILER NO.

G E	3. COMPANY NAME BJ SERVICES	4. ADDRESS 2208 WEST COUNTY ROAD	5. PICK-UP DATE SEPT 20, 2004
	PHONE NO.	CITY STATE ZIP 14013135 08240	6. TNRCC I.D. NO.

N E R A	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
	a. NONHAZARDOUS, NON REGULATED WASTE	1 CM	24	Y	
	b.				
	c.				
	d. WT 47,380				

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME	PHONE NO.	24-HOUR EMERGENCY NO.
KINNEYA SLAUGHTER		505-887-4048

14. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME James Kennedy	SIGNATURE <i>James Kennedy</i>	DATE 9-21-04
--	-----------------------------------	------------------------

15. TRANSPORTER (1)	16. TRANSPORTER (2)
NAME: TRIPOD, INC.	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:

17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME DANIEL HARTSON	PRINTED/TYPED NAME
SIGNATURE <i>Daniel Hartson</i> DATE 9-21-04	SIGNATURE DATE

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
---	--------------

20. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE <i>Bluesphur</i>	CELL NO. 2	DATE 09-21-04	TIME 0940
--	----------------------	-------------------------	---------------------

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **25523**

1. PAGE 1 OF ___

2. TRAILER NO.

G
E
N
E
R
A
T
O
R

T
R
A
N
S
P
O
R
T
E
R

D
I
S
P
O
S
I
T
Y

3. COMPANY NAME BJ Services	4. ADDRESS 2708 West County Road	5. PICK-UP DATE SEPT 23 2004
PHONE NO.	CITY STATE ZIP Hobbs NM 88240	6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. Non Hazardous, non regulated waste	1 cm			
b.				
c.				
d. WT 45780				

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME Kenneth Slaughter	PHONE NO.	24-HOUR EMERGENCY NO. 505-887-4048
----------------------------------	-----------	--

14. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME Glennys Marriott	SIGNATURE <i>Glennys Marriott</i>	DATE 9-23-2004
---	--------------------------------------	--------------------------

15. TRANSPORTER (1)	16. TRANSPORTER (2)
NAME: TriPod Inc	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:

17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME DANIEL HARRISON	PRINTED/TYPED NAME
SIGNATURE <i>D Harrison</i>	SIGNATURE
DATE 9-23-04	DATE

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
---	--------------

20. **DISPOSAL FACILITY'S CERTIFICATION:** I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE <i>[Signature]</i>	CELL NO. 2	DATE 9/23/04	TIME 1300
--	----------------------	------------------------	---------------------

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

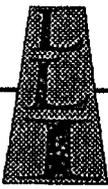
NON-HAZARDOUS WASTE MANIFEST

NO. 26212

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BJ SERVICES	4. ADDRESS 2708 WEST COUNTY RD	5. PICK-UP DATE SEP 21 2004	
	PHONE NO.	CITY NO 385	STATE OK	ZIP 73140
E N E R G Y	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No.	9. TOTAL QUANTITY
	a. NON-HAZARDOUS, NON REGULATED WASTE		1	CM
	b.			
	c.			
A U T H O R I Z E D	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT 24,900 24,900			
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
T R A N S P O R T E R S	NAME RINNEETH SLAUGHTER	PHONE NO. 505-887-4048	24-HOUR EMERGENCY NO.	
	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
D I S P O S I T O R Y	PRINTED/TYPED NAME Glenys Marriott	SIGNATURE <i>Glenys Marriott</i>	DATE 9-24-2004	
	15. TRANSPORTER (1)	16. TRANSPORTER (2)		
	NAME: TRIPOD, INC.	NAME:		
	TEXAS I.D. NO.	TEXAS I.D. NO.		
S I G N A T U R E	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:	
	EMERGENCY PHONE:		EMERGENCY PHONE:	
S I G N A T U R E	17. TRANSPORTER (1): Acknowledgment of receipt of material		18. TRANSPORTER (2): Acknowledgment of receipt of material	
	PRINTED/TYPED NAME Floyd Sutton	PRINTED/TYPED NAME		
S I G N A T U R E	SIGNATURE <i>Floyd Sutton</i>	DATE 9-24	DATE	
	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS		
20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.				
AUTHORIZED SIGNATURE <i>[Signature]</i>		CELL NO. 2	DATE 09/23/04	TIME 0810



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26213**

1. PAGE 1 OF ___

2. TRAILER NO.

G
E
N
E
R
A
T
O
R

3. COMPANY NAME
B.J. SERVICES
PHONE NO.

4. ADDRESS
2708 WEST COUNTY ROAD
CITY STATE ZIP
110935 89240

5. PICK-UP DATE
SEPT 21 2004
6. TNRC I.D. NO.

E
N
E
R

7. NAME OR DESCRIPTION OF WASTE SHIPPED:
a. **NON REGULATED, NON HAZARDOUS, WASTE**
b.
c.
d. **WT 46080**

8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
1	CM			

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**
NAME PHONE NO. 24-HOUR EMERGENCY NO.
KINNEETH SLAUGHTER 505-887-4049

14. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME SIGNATURE DATE
Glenys Marriott Glenys Marriott 9-23-2004

15. **TRANSPORTER (1)**
NAME: **TRIPOT, INC.**
TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

16. **TRANSPORTER (2)**
NAME:
TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

17. **TRANSPORTER (1):** Acknowledgment of receipt of material
PRINTED/TYPED NAME **DANIEL HARRISON**
SIGNATURE **[Signature]** DATE **9-23-04**

18. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME
SIGNATURE DATE

D
I
S
P
O
S
I
T
O
R
Y

Lea Land, Inc. ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM PHONE: 505-887-4048

PERMIT NO. **SWM #131401 - New Mexico**

19. COMMENTS

20. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above-described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE **[Signature]** CELL NO. **2** DATE **9/23/04** TIME **0800**

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26216**

1. PAGE 1 OF ___

2. TRAILER NO.

G E	3. COMPANY NAME BJ SERVICES	4. ADDRESS 2700 WEST COUNTY ROAD	5. PICK-UP DATE SEPT 21, 2004
	PHONE NO.	CITY HOBBS	STATE OK
		ZIP 73301	6. TNRCC I.D. NO.

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS		9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
		No.	Type			
	a. NON-HAZARDOUS, NON-REGULATED WASTE	1	CM			
	b.					
	c.					
	d. WT 44,220					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME KINNETH SLAUGHTER	PHONE NO. 505-887-4048	24-HOUR EMERGENCY NO.
----------------------------------	----------------------------------	-----------------------

14. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME Glenns Marriott	SIGNATURE <i>Glenns Marriott</i>	DATE 9-23-2004
--	-------------------------------------	--------------------------

15. TRANSPORTER (1)	16. TRANSPORTER (2)
NAME: TRIPOD, INC.	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:

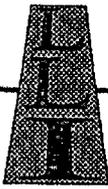
17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME DANIEL HARRISON	PRINTED/TYPED NAME
SIGNATURE <i>Daniel Harrison</i>	SIGNATURE
DATE 9-23-04	DATE

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
---	--------------

20. **DISPOSAL FACILITY'S CERTIFICATION:** I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE <i>[Signature]</i>	CELL NO. 2	DATE 9/23/04	TIME 1031
--	----------------------	------------------------	---------------------



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **25781**

1. PAGE 1 OF ___

2. TRAILER NO. _____

G
E
N
E
R
A
T
O
R

R
E
S
P
O
N
S
I
B
L
E

D
I
S
P
O
S
I
T
Y

3. COMPANY NAME
BS SERVICES
PHONE NO. _____

4. ADDRESS
2708 West County Road
CITY **Hobbs** STATE **N.M.** ZIP **88240**

5. PICK-UP DATE
SEPT 24, 2004
6. TNRCC I.D. NO. _____

7. NAME OR DESCRIPTION OF WASTE SHIPPED:
a. **Non Hazardous, Non Regulated Waste**
b. _____
c. _____
d. **WT 42,600**

8. CONTAINERS No.	Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
1	CM			

12. COMMENTS OR SPECIAL INSTRUCTIONS: _____

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**
NAME **Kenneth Slaughter** PHONE NO. _____ 24-HOUR EMERGENCY NO. **505-887-4048**

14. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME **Glennys Marriott** SIGNATURE **Glennys Marriott** DATE **09-23-2004**

15. **TRANSPORTER (1)**
NAME: **Tripod Inc**
TEXAS I.D. NO. _____
IN CASE OF EMERGENCY CONTACT: _____
EMERGENCY PHONE: _____

16. **TRANSPORTER (2)**
NAME: _____
TEXAS I.D. NO. _____
IN CASE OF EMERGENCY CONTACT: _____
EMERGENCY PHONE: _____

17. **TRANSPORTER (1): Acknowledgment of receipt of material**
PRINTED/TYPED NAME **DANIEL HARRISON**
SIGNATURE **[Signature]** DATE **9/23/04**

18. **TRANSPORTER (2): Acknowledgment of receipt of material**
PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____

Lea Land, Inc. ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM PHONE: 505-887-4048

PERMIT NO. **SWM #131401 - New Mexico**

19. COMMENTS _____

20. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE **[Signature]**

CELL NO. **2**

DATE **9/24/04**

TIME **0730**

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26214**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BJ SERVICES		4. ADDRESS 2708 WEST COUNTY ROAD			5. PICK-UP DATE SEPT 21 2004		
	PHONE NO.		CITY 14013BS	STATE 88240	ZIP	6. TNRCC I.D. NO.		
N E R T E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. NON HAZARDOUS, NON REGULATED WASTE				1	CM		
	b.							
	c.							
A U T H O R I Z E D	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT 23,980							
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT							
T R A N S P O R T E R S	NAME KINNETH SLAUGHTER		PHONE NO. 505-887-4048			24-HOUR EMERGENCY NO.		
	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.							
D I S P O S I T I O N	PRINTED/TYPED NAME Dora Sylvia Smith				SIGNATURE <i>[Signature]</i>		DATE 9/23/04	
	15. TRANSPORTER (1)				16. TRANSPORTER (2)			
	NAME: TRIPOD, INC.				NAME:			
	TEXAS I.D. NO.				TEXAS I.D. NO.			
L E A L A N D	IN CASE OF EMERGENCY CONTACT:				IN CASE OF EMERGENCY CONTACT:			
	EMERGENCY PHONE:				EMERGENCY PHONE:			
	17. TRANSPORTER (1): Acknowledgment of receipt of material				18. TRANSPORTER (2): Acknowledgment of receipt of material			
PRINTED/TYPED NAME ODELL WINKLES				PRINTED/TYPED NAME				
SIGNATURE <i>[Signature]</i> DATE 9-24-04				SIGNATURE DATE				
Lea Land, Inc.			ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE: 505-887-4048		
PERMIT NO. SWM #131401 - New Mexico				19. COMMENTS				
20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.								
AUTHORIZED SIGNATURE <i>[Signature]</i>				CELL NO. 02	DATE 9/24/04	TIME 1425		

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26215**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BJ SERVICES	4. ADDRESS 2708 WEST COUNTY ROAD	5. PICK-UP DATE SEPT 21 2004	
	PHONE NO.	CITY NOBLES	STATE OK	ZIP 73140
E N E R G Y	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY
	a. NONHAZARDOUS, NON REGULATED WASTE		1 CM	
	b.			
	c.			
R E C E I V E R	d. WT 56,120			
	12. COMMENTS OR SPECIAL INSTRUCTIONS:			
A U T H O R I Z E D	13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
	NAME KINNEETH SLAUGHTER	PHONE NO. 505-887-4049	24-HOUR EMERGENCY NO.	
O F F I C I A L	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
	PRINTED/TYPED NAME Glennys Marriott	SIGNATURE <i>Glennys Marriott</i>	DATE 9-24-2004	
T R A N S P O R T E R S	15. TRANSPORTER (1)	16. TRANSPORTER (2)		
	NAME: TRIPOD, INC	NAME:		
	TEXAS I.D. NO.	TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:		
R E C E I V E R	EMERGENCY PHONE:	EMERGENCY PHONE:		
	17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material		
S I G N A T U R E	PRINTED/TYPED NAME DANIEL HARRISON	PRINTED/TYPED NAME		
	SIGNATURE <i>Daniel Harrison</i>	SIGNATURE	DATE 9-24-04	DATE
D I S P O S I T O R Y	Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS		
L Y	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.			
	AUTHORIZED SIGNATURE <i>[Signature]</i>	CELL NO. 2	DATE 09/24/04	TIME 0750

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. 26258

1. PAGE 1 OF

2. TRAILER NO.

G	3. COMPANY NAME BJ Services		4. ADDRESS 2708 West County Road		5. PICK-UP DATE Sept 25, 2004	
	PHONE NO.		CITY Hobbs	STATE NM	ZIP 88240	6. TNRCC I.D. NO.
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No. Type	9. TOTAL QUANTITY
N	a. Non Hazardous, Non Regulated Waste				1	cm
E	b.					
R	c.					
A	d. W P 29,660					
T	12. COMMENTS OR SPECIAL INSTRUCTIONS: W P 0904466					
O	13. IN CASE OF EMERGENCY OR SPILL, CONTACT					
R	NAME		PHONE NO.		24-HOUR EMERGENCY NO.	
T	Kenneth Slaughter		505-887-4048			
O	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.					
R	PRINTED/TYPED NAME		SIGNATURE		DATE	
T	15. TRANSPORTER (1)		16. TRANSPORTER (2)			
R	NAME: Triped Inc		NAME:			
A	TEXAS I.D. NO.		TEXAS I.D. NO.			
N	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:			
S	EMERGENCY PHONE:		EMERGENCY PHONE:			
P	17. TRANSPORTER (1): Acknowledgment of receipt of material			18. TRANSPORTER (2): Acknowledgment of receipt of material		
O	PRINTED/TYPED NAME: DANIEL HADISON		PRINTED/TYPED NAME:			
R	SIGNATURE: <i>[Signature]</i>		DATE: 9-24-04		SIGNATURE: _____ DATE: _____	
T	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
E	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS			
I	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
S	AUTHORIZED SIGNATURE <i>[Signature]</i>		CELL NO. 2		DATE 09-24-04	
P					TIME 1000	
O						
L						
Y						

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26259**

1. PAGE 1 OF

2. TRAILER NO.

G
E
N
E
R
A
T
O
R
S
D
I
S
P
O
S
I
T
L
Y

3. COMPANY NAME
BJ SERVICES
PHONE NO.

4. ADDRESS
2708 West County Road
CITY **Hobbs** STATE **N.M.** ZIP **88240**

5. PICK-UP DATE
SEP 24 2004
6. TNRCC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:
a. **Non Hazardous, Non Regulated waste**
b.
c.
d. **WT 53080**

8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
1	CM		

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**
NAME **KINWETH SLAUGHTER** PHONE NO. **505-887-4048** 24-HOUR EMERGENCY NO.

14. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME _____ SIGNATURE **Ray Davis** DATE **9/24/04**

15. **TRANSPORTER (1)**
NAME: **Tripod Inc**
TEXAS I.D. NO.:
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

16. **TRANSPORTER (2)**
NAME:
TEXAS I.D. NO.:
IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:

17. **TRANSPORTER (1):** Acknowledgment of receipt of material
PRINTED/TYPED NAME **T**
SIGNATURE _____ DATE _____

18. **TRANSPORTER (2):** Acknowledgment of receipt of material
PRINTED/TYPED NAME _____
SIGNATURE _____ DATE _____

Lea Land, Inc. ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM PHONE: 505-887-4048

PERMIT NO. **SWM #131401 - New Mexico**

19. COMMENTS

20. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE **[Signature]**

CELL NO. **2** DATE **9/24/04** TIME **10:30**

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. 26260

1. PAGE 1 OF

2. TRAILER NO.

G
E
N
E
R
A
T
O
R

T
R
A
N
S
P
O
R
T
E
R

D
I
S
P
O
S
I
T
L
Y

3. COMPANY NAME

BJ Services
PHONE NO.

4. ADDRESS

2708 West County Road
CITY STATE ZIP
Hobbs NM 88240

5. PICK-UP DATE

SEP 24 2004
6. TNRC I.D. NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

a. Non Hazardous, Non Regulated Waste

8. CONTAINERS
No. Type

1 CM

9. TOTAL QUANTITY

10. UNIT Wt/Vol.

11. TEXAS WASTE ID #

12. COMMENTS OR SPECIAL INSTRUCTIONS:

WT 45160

13. IN CASE OF EMERGENCY OR SPILL, CONTACT

NAME

PHONE NO.

24-HOUR EMERGENCY NO.

Kenneth Slaughter

505-887-4048

14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME

SIGNATURE

Ray Adams

DATE
9/24/04

15. TRANSPORTER (1)

NAME: Triped Inc

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

17. TRANSPORTER (1): Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE

DATE

16. TRANSPORTER (2)

NAME:

TEXAS I.D. NO.

IN CASE OF EMERGENCY CONTACT:

EMERGENCY PHONE:

18. TRANSPORTER (2): Acknowledgment of receipt of material

PRINTED/TYPED NAME

SIGNATURE

DATE

Lea Land, Inc.

ADDRESS:

Mile Marker 64, U.S. Hwy 62/180,
30 Miles East of Carlsbad, NM

PHONE:

505-887-4048

PERMIT NO.

SWM #131401 - New Mexico

19. COMMENTS

20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

[Signature]

CELL NO.

2

DATE

9/24/04

TIME

1410

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26261**

1. PAGE 1 OF ___

2. TRAILER NO.

G E	3. COMPANY NAME BJ SERVICES	4. ADDRESS 2708 West County Road	5. PICK-UP DATE SEPT 24 2004
	PHONE NO.	CITY STATE ZIP Hobbs NM 88240	6. TNRCC I.D. NO.

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS		9. TOTAL	10. UNIT	11. TEXAS
		No.	Type	QUANTITY	Wt/Vol.	WASTE ID #
a.	Non Hazardous, Non Regulated Waste	1	CM			
b.						
c.						
d.	WT 45600					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO.	24-HOUR EMERGENCY NO.
------	-----------	-----------------------

14. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME James Tuttle	SIGNATURE 	DATE
---	---------------	------

15. TRANSPORTER (1) NAME: Tripod Inc TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	16. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:
--	--

17. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME: DANIEL HANVISON SIGNATURE: DATE: 9-24-04	18. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME: SIGNATURE: DATE:
---	--

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

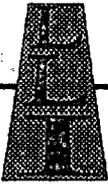
PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
---	--------------

20. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE 	CELL NO. 2	DATE 9/24/04	TIME 1000
--------------------------	----------------------	------------------------	---------------------

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048



LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST	NO. 26257	1. PAGE 1 OF ___	2. TRAILER NO.
-------------------------------------	------------------	------------------	----------------

G E	3. COMPANY NAME BS Services	4. ADDRESS 2708 West County Rd	5. PICK-UP DATE SEP 25 2009
	PHONE NO.	CITY STATE ZIP Hobbs NM 88240	6. TNRC I.D. NO.

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS		9. TOTAL	10. UNIT	11. TEXAS
		No.	Type	QUANTITY	Wt/Vol.	WASTE ID #
a.	NON HAZARDOUS, NON REGULATED WASTE	1	CM			
b.						
c.						
d.	20,400					

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME Kenneth Slaughter	PHONE NO.	24-HOUR EMERGENCY NO. 505-887-4048
----------------------------------	-----------	--

14. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME	SIGNATURE	DATE
--------------------	-----------	------

<p>15. TRANSPORTER (1)</p> <p>NAME: Tripod Inc</p> <p>TEXAS I.D. NO.</p> <p>IN CASE OF EMERGENCY CONTACT:</p> <p>EMERGENCY PHONE:</p>	<p>16. TRANSPORTER (2)</p> <p>NAME:</p> <p>TEXAS I.D. NO.</p> <p>IN CASE OF EMERGENCY CONTACT:</p> <p>EMERGENCY PHONE:</p>
---	---

<p>17. TRANSPORTER (1): Acknowledgment of receipt of material</p> <p>PRINTED/TYPED NAME Floyd Sutton</p> <p>SIGNATURE Floyd Sutton DATE 9-25-</p>	<p>18. TRANSPORTER (2): Acknowledgment of receipt of material</p> <p>PRINTED/TYPED NAME</p> <p>SIGNATURE DATE</p>
---	--

<p>Lea Land, Inc.</p>	<p>ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM</p>	<p>PHONE: 505-887-4048</p>
-----------------------	--	--------------------------------

<p>PERMIT NO. SWM #131401 - New Mexico</p>	<p>19. COMMENTS</p>
---	---------------------

20. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

<p>AUTHORIZED SIGNATURE [Signature]</p>	<p>CELL NO. 2</p>	<p>DATE 09-25-04</p>	<p>TIME 0800</p>
--	------------------------------	---------------------------------	-----------------------------

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26264**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BJ Services	4. ADDRESS 2708 West County Road	5. PICK-UP DATE SEPT 25, 2004	
	PHONE NO.	CITY Hobbs	STATE NM	ZIP 88240
N E R A T O R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No.	9. TOTAL QUANTITY
	a. Non-Hazardous, Non Regulated Waste		1	cm
	b.			
	c.			
R E C E I V E R	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT 24 560		11. TEXAS WASTE ID #	
	WP 0904466			
T R A N S P O R T E R	13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
	NAME KINNEETH SLAUGHTER	PHONE NO. 505-8874048	24-HOUR EMERGENCY NO.	
D I S P O S I T O R	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
	PRINTED/TYPED NAME	SIGNATURE		DATE
	15. TRANSPORTER (1)	16. TRANSPORTER (2)		
	NAME: TRIPOD INC	NAME:		
TEXAS I.D. NO.	TEXAS I.D. NO.			
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:			
EMERGENCY PHONE:	EMERGENCY PHONE:			
17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material			
PRINTED/TYPED NAME Floyd Sutton	PRINTED/TYPED NAME			
SIGNATURE Floyd Sutton DATE 9-25	SIGNATURE DATE			
Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048	
PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS			
20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.				
AUTHORIZED SIGNATURE [Signature]	CELL NO. 2	DATE 09-25-04	TIME 0810	

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26265**

1. PAGE 1 OF ___

2. TRAILER NO.

G	3. COMPANY NAME BJ Services		4. ADDRESS 2708 West County Road			5. PICK-UP DATE Sept 25, 2004			
	PHONE NO.		CITY Hobbs	STATE NM	ZIP 88240	6. TNRCC I.D. NO.			
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:					8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
N	a. Non-Hazardous, Non Regulated Waste					1	CM		
E	b.								
R	c.								
A	d. WT 30,100								
T	12. COMMENTS OR SPECIAL INSTRUCTIONS: WP 0904466								
O	13. IN CASE OF EMERGENCY OR SPILL, CONTACT								
R	NAME			PHONE NO.			24-HOUR EMERGENCY NO.		
T	Kenneth Slaughter						505-887-4048		
O	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.								
R	PRINTED/TYPED NAME				SIGNATURE			DATE	
T	15. TRANSPORTER (1)				16. TRANSPORTER (2)				
R	NAME: Tripod Inc				NAME:				
A	TEXAS I.D. NO.				TEXAS I.D. NO.				
N	IN CASE OF EMERGENCY CONTACT:				IN CASE OF EMERGENCY CONTACT:				
S	EMERGENCY PHONE:				EMERGENCY PHONE:				
P	17. TRANSPORTER (1): Acknowledgment of receipt of material				18. TRANSPORTER (2): Acknowledgment of receipt of material				
O	PRINTED/TYPED NAME Floyd Sothen				PRINTED/TYPED NAME				
R	SIGNATURE Floyd Sothen DATE 9-25				SIGNATURE DATE				
S	Lea Land, Inc.			ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE: 505-887-4048		
D	PERMIT NO. SWM #131401 - New Mexico				19. COMMENTS				
I	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.								
S	AUTHORIZED SIGNATURE			CELL NO.		DATE		TIME	
P	[Signature]			2		9-25-04		0900	
O									
L									
I									
T									
A									
L									

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

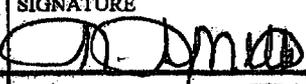
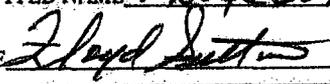
1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

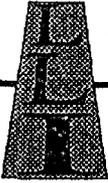
NON-HAZARDOUS WASTE MANIFEST

NO. 26194

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BP PIPELINE NA, INC PHONE NO. 806 632-3235	4. ADDRESS 502 N. WEST AVE CITY LEVELLAND, TX STATE TX ZIP 79336	5. PICK-UP DATE DEC 08, 2004	
	6. TNRCC I.D. NO.			
N E M O S I T Y	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS	9. TOTAL QUANTITY
	a. NON HAZARDOUS, NON REGULATED WASTE		No. 1	Type CM
	b.			
	c.			
	d. WT 39620			
	12. COMMENTS OR SPECIAL INSTRUCTIONS:			
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
	NAME	PHONE NO.	24-HOUR EMERGENCY NO.	
	KINNEEN SLAUGHTER	505-887-4048		
	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
	PRINTED/TYPED NAME Sylvia Smith	SIGNATURE 	DATE 12/8/04	
T R A N S P O R T E R S	15. TRANSPORTER (1) NAME: TRIPOD, INC TEXAS I.D. NO. 05589 IN CASE OF EMERGENCY CONTACT: K. SLAUGHTER EMERGENCY PHONE: 505-887-4048	16. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		
	17. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME Floyd Sutton SIGNATURE  DATE 12-08	18. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE		
	19. COMMENTS			
D I S P O S I T Y	Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico			
	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.			
	AUTHORIZED SIGNATURE 	CELL NO. 2	DATE 12/8/04	TIME 0805



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26263**

1. PAGE 1 OF ___

2. TRAILER NO.

G E	3. COMPANY NAME BS Services	4. ADDRESS 2708 W. County Road	5. PICK-UP DATE DEC 08, 2004
	PHONE NO.	CITY Hobbs STATE NM ZIP 88240	6. TNRCC I.D. NO.

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. Non Hazardous, Non-Regulated Waste	1 CM			
	b.				
	d. WT-30,620				

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME Kenneth Slaughter	PHONE NO.	24-HOUR EMERGENCY NO. 505-887-4048
----------------------------------	-----------	--

14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME	SIGNATURE	DATE
--------------------	-----------	------

T R A N S P O R T E R S	15. TRANSPORTER (1)	16. TRANSPORTER (2)
	NAME: Tripod Inc	NAME:
	TEXAS I.D. NO.	TEXAS I.D. NO.
	IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:

17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME Floyd Sutton	PRINTED/TYPED NAME
SIGNATURE Floyd Sutton DATE 12-08-04	SIGNATURE DATE

D I S P O S I T A L Y	Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
---	----------------	---	-------------------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
---	--------------

20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE 	CELL NO. 2	DATE 12-08-04	TIME 0810
--------------------------	----------------------	-------------------------	---------------------

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

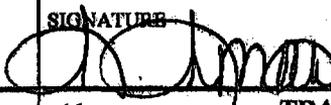
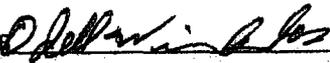
1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26269**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BJ SERVICES	4. ADDRESS 2708 County Road	5. PICK-UP DATE DEC 8, 2004	
	PHONE NO.	CITY HOBBBS, NM	STATE NM	ZIP 88240
N E R T I S T R Y	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY
	a. NON HAZARDOUS, NON REGULATED WASTE		1 CM	
	b.			
	c.			
	d. WT-24080			
	12. COMMENTS OR SPECIAL INSTRUCTIONS: WP 0904466			
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
	NAME KIN SLAUGHTER	PHONE NO.	24-HOUR EMERGENCY NO. 505-887-4048	
	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
	PRINTED/TYPED NAME Sylvia Smith	SIGNATURE 	DATE 12/8/04	
	15. TRANSPORTER (1)	16. TRANSPORTER (2)		
	NAME:	NAME:		
	TEXAS I.D. NO.	TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:		
	EMERGENCY PHONE:	EMERGENCY PHONE:		
	17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material		
	PRINTED/TYPED NAME Odell Winkles	PRINTED/TYPED NAME		
	SIGNATURE 	SIGNATURE		
	DATE 11-8-04	DATE		
	Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS		
	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.			
	AUTHORIZED SIGNATURE 	CELL NO. 2	DATE 12-08-04	TIME 1305

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26290**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME B.J SERVICES	4. ADDRESS 2708 County Road	5. PICK-UP DATE DEC 8, 2004			
	PHONE NO. 2	CITY STATE ZIP HOBBS, NM 88240	6. TNRC I.D. NO.			
N E R A T O R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. NON HAZARDOUS, NON REGULATED WASTE		1 CM			
	b.					
	c.					
A U T H O R I Z E D	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT27140 WP 0904466					
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT					
D I S P O S I T O R	NAME		PHONE NO.		24-HOUR EMERGENCY NO.	
	KIM SLAUGHTER		505-887-4040			
T R A N S P O R T E R S	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.					
	PRINTED/TYPED NAME Sylvia Smith		SIGNATURE <i>[Signature]</i>		DATE 12/8/04	
D I S P O S I T O R	15. TRANSPORTER (1)		16. TRANSPORTER (2)			
	NAME:		NAME:			
D I S P O S I T O R	TEXAS I.D. NO.		TEXAS I.D. NO.			
	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:			
D I S P O S I T O R	EMERGENCY PHONE:		EMERGENCY PHONE:			
	17. TRANSPORTER (1): Acknowledgment of receipt of material			18. TRANSPORTER (2): Acknowledgment of receipt of material		
D I S P O S I T O R	PRINTED/TYPED NAME Odell Winkles		PRINTED/TYPED NAME			
	SIGNATURE <i>[Signature]</i> DATE 11-9-04		SIGNATURE DATE			
D I S P O S I T O R	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS			
D I S P O S I T O R	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE <i>[Signature]</i>		CELL NO. 2	DATE 12/8/04	TIME 0805	

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26291**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME B J SERVICES	4. ADDRESS 2708 WEST COUNTY ROAD	5. PICK-UP DATE DEC 08, 2004	
	PHONE NO.	CITY HOBBS NM	STATE NM	ZIP 88240
N E R T I C A T I O N	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY
	a. NON HAZARDOUS, NON REGULATED WASTE		1 CM	
	b.			
	c.			
R E C E I V E R	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT 28540 WP. 0904460			
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
T R A N S P O R T E R	NAME KIN SLAUGHTER	PHONE NO. 505-887-4048	24-HOUR EMERGENCY NO.	
	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
R E C E I V E R	PRINTED/TYPED NAME Sylvia Smith	SIGNATURE 	DATE 12/8/04	
	15. TRANSPORTER (1)	16. TRANSPORTER (2)		
T R A N S P O R T E R S	NAME:	NAME:		
	TEXAS I.D. NO.	TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:		
	EMERGENCY PHONE:	EMERGENCY PHONE:		
D I S P O S I T O R Y	17. TRANSPORTER (1): Acknowledgment of receipt of material		18. TRANSPORTER (2): Acknowledgment of receipt of material	
	PRINTED/TYPED NAME L. B. Pool	PRINTED/TYPED NAME		
D I S P O S I T O R Y	SIGNATURE L. B. Pool	DATE 12-8-04	SIGNATURE	
	ADDRESS: Lea Land, Inc.		PHONE: 505-887-4048	
	Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		19. COMMENTS	
A U T H O R I Z E D	PERMIT NO. SWM #131401 - New Mexico	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.		
	AUTHORIZED SIGNATURE 	CELL NO. 2	DATE 12/8/04	TIME 0805

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST NO. 26292 1. PAGE 1 OF ___ 2. TRAILER NO. _____

G E	3. COMPANY NAME B J SERVICES	4. ADDRESS 2708 WEST COUNTY ROAD	5. PICK-UP DATE DEC 08, 2004
	PHONE NO. _____	CITY STATE ZIP MOBIS NM	6. TNRC I.D. NO. _____

N E R	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS		9. TOTAL QUANTITY	10. UNIT WU/Vol.	11. TEXAS WASTE ID #
		No.	Type			
a.	NONHAZARDOUS, NON REGULATED WASTE	1	CM			
b.						
c.						
d.	WT- 27,140					

12. COMMENTS OR SPECIAL INSTRUCTIONS:
WP 0904466

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME KIN SLAUGHTER	PHONE NO. 505-887-4048	24-HOUR EMERGENCY NO. 505-887-4048
------------------------------	----------------------------------	--

14. **GENERATOR'S CERTIFICATION:** I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME	SIGNATURE	DATE
--------------------	-----------	------

15. TRANSPORTER (1)	16. TRANSPORTER (2)
NAME:	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:

17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME ODELL WINKLES	PRINTED/TYPED NAME _____
SIGNATURE <i>Odell Winkles</i> DATE 12-8-04	SIGNATURE _____ DATE _____

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
---	--------------

20. **DISPOSAL FACILITY'S CERTIFICATION:** I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE <i>[Signature]</i>	CELL NO. 2	DATE 12-08-04	TIME 0800
--	----------------------	-------------------------	---------------------

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4237

NON-HAZARDOUS WASTE MANIFEST

NO. **26293**

1. PAGE 1 OF ___

2. TRAILER NO.

G	3. COMPANY NAME BJ SERVICES		4. ADDRESS 2708 WEST COUNTY ROAD			5. PICK-UP DATE DEC 08, 2004			
	PHONE NO.		CITY HOBBS	STATE NM	ZIP 88240	6. TNRC I.D. NO.			
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:					8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
N	a. NON HAZARDOUS, NON REGULATED WASTE					1			
E	b.								
R	c.								
A	d. WT - 28,380								
T	12. COMMENTS OR SPECIAL INSTRUCTIONS: WP 0904466								
O	13. IN CASE OF EMERGENCY OR SPILL, CONTACT								
R	NAME KIM SLAUGHTER			PHONE NO. 505-887-4048			24-HOUR EMERGENCY NO.		
T	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.								
R	PRINTED/TYPED NAME Sylvia Smith				SIGNATURE <i>[Signature]</i>			DATE 12/8/04	
T	15. TRANSPORTER (1)				16. TRANSPORTER (2)				
R	NAME:				NAME:				
A	TEXAS I.D. NO.				TEXAS I.D. NO.				
N	IN CASE OF EMERGENCY CONTACT:				IN CASE OF EMERGENCY CONTACT:				
S	EMERGENCY PHONE:				EMERGENCY PHONE:				
P	17. TRANSPORTER (1): Acknowledgment of receipt of material				18. TRANSPORTER (2): Acknowledgment of receipt of material				
O	PRINTED/TYPED NAME L. B. Pool				PRINTED/TYPED NAME _____				
R	SIGNATURE L. B. Pool DATE 12-8-04				SIGNATURE _____ DATE _____				
S	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE: 505-887-4048			
D	PERMIT NO. SWM #131401 - New Mexico				19. COMMENTS				
I	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.								
S	AUTHORIZED SIGNATURE <i>[Signature]</i>			CELL NO. 2		DATE 12-08-04		TIME 1310	
P									
O									
L									
I									
T									
R									
S									

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. 26294

1. PAGE 1 OF ___

2. TRAILER NO.

G	3. COMPANY NAME BJ SERVICES		4. ADDRESS 2700 WEST COUNTY ROAD			5. PICK-UP DATE DEC 8, 2004			
	PHONE NO.		CITY HOBBS NM 89240	STATE	ZIP	6. TNRCC I.D. NO.			
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:					8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
N	a. NON HAZARDOUS, NON REGULATED WASTE					1	CM		
E	b.								
R	c.								
A	d.								
T	12. COMMENTS OR SPECIAL INSTRUCTIONS: WT 41,040 WP 0904466								
O	13. IN CASE OF EMERGENCY OR SPILL, CONTACT								
R	NAME KIM SLAUGHTER 1			PHONE NO. 505-887-4048			24-HOUR EMERGENCY NO.		
T	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.								
S	PRINTED/TYPED NAME Glennys Marriott				SIGNATURE Glennys Marriott			DATE 12-8-04	
P	15. TRANSPORTER (1)				16. TRANSPORTER (2)				
	NAME:				NAME:				
	TEXAS I.D. NO.				TEXAS I.D. NO.				
	IN CASE OF EMERGENCY CONTACT:				IN CASE OF EMERGENCY CONTACT:				
O	EMERGENCY PHONE:				EMERGENCY PHONE:				
	17. TRANSPORTER (1): Acknowledgment of receipt of material				18. TRANSPORTER (2): Acknowledgment of receipt of material				
	PRINTED/TYPED NAME _____				PRINTED/TYPED NAME _____				
	SIGNATURE _____ DATE _____				SIGNATURE _____ DATE _____				
D	Lea Land, Inc.			ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE: 505-887-4048		
	PERMIT NO. SWM #131401 - New Mexico				19. COMMENTS				
	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.								
L	AUTHORIZED SIGNATURE [Signature]				CELL NO. 2		DATE 12/8/04		TIME 0830

GENERATOR: COPIES 1 & 6

DISPOSAL SITE: COPIES 2 & 3

TRANSPORTERS: COPIES 4 & 5

COPY 1

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26295**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME BJ SERVICES		4. ADDRESS 2708 WEST COUNTY ROAD			5. PICK-UP DATE DEC 8, 2004			
	PHONE NO.		CITY HOBBS, NM	STATE NM	ZIP 88240	6. TNRCC I.D. NO.			
E N E R G Y	7. NAME OR DESCRIPTION OF WASTE SHIPPED:					8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. NON HAZARDOUS, NON REGULATED WASTE					1	CM		
	b.								
	c.								
R E C E I V E R	d. WT-27320								
	12. COMMENTS OR SPECIAL INSTRUCTIONS: WP 0904466								
A U T H O R I Z E D	13. IN CASE OF EMERGENCY OR SPILL, CONTACT								
	NAME KIN SLAUGHTER			PHONE NO.			24-HOUR EMERGENCY NO. 505-887-4048		
O P E R A T O R	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.								
	PRINTED/TYPED NAME Glennys Merriott					SIGNATURE Glennys Merriott		DATE 12-08-04	
T R A N S P O R T E R S	15. TRANSPORTER (1)					16. TRANSPORTER (2)			
	NAME:					NAME:			
	TEXAS I.D. NO.					TEXAS I.D. NO.			
	IN CASE OF EMERGENCY CONTACT:					IN CASE OF EMERGENCY CONTACT:			
R E C E I V E R	EMERGENCY PHONE:					EMERGENCY PHONE:			
	17. TRANSPORTER (1): Acknowledgment of receipt of material					18. TRANSPORTER (2): Acknowledgment of receipt of material			
	PRINTED/TYPED NAME L.B. Pool					PRINTED/TYPED NAME			
D I S P O S I T A L Y	SIGNATURE L.B. Pool					SIGNATURE			
	DATE 12-8-04					DATE			
	Lea Land, Inc.			ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE: 505-887-4048		
PERMIT NO. SWM #131401 - New Mexico					19. COMMENTS				
20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.									
AUTHORIZED SIGNATURE [Signature]					CELL NO. 2	DATE 12-08-04	TIME		

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26296**

1. PAGE 1 OF ___

2. TRAILER NO. _____

G	3. COMPANY NAME BJ SERVICES		4. ADDRESS 2708 WEST COUNTY ROAD		5. PICK-UP DATE DEC 08 2004	
	PHONE NO. _____		CITY STATE ZIP HOBBS, NM 88240		6. TNRC I.D. NO. _____	
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:				8. CONTAINERS No. Type	9. TOTAL QUANTITY
N	a. NON HAZARDOUS, NON REGULATED				1	CM
E	b. _____					
R	c. _____					
A	d. WT 28,660					
T	12. COMMENTS OR SPECIAL INSTRUCTIONS: WP 0904466					
O	13. IN CASE OF EMERGENCY OR SPILL, CONTACT					
R	NAME KIN SAUGHTER		PHONE NO. 505-887-4048		24-HOUR EMERGENCY NO. _____	
T	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.					
S	PRINTED/TYPED NAME Glennys Marriott			SIGNATURE Glennys Marriott		DATE 12-08-04
T R A N S P O R T E R S	15. TRANSPORTER (1)			16. TRANSPORTER (2)		
	NAME:			NAME:		
	TEXAS I.D. NO.			TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT:			IN CASE OF EMERGENCY CONTACT:		
EMERGENCY PHONE:			EMERGENCY PHONE:			
17. TRANSPORTER (1): Acknowledgment of receipt of material			18. TRANSPORTER (2): Acknowledgment of receipt of material			
PRINTED/TYPED NAME L.B. Pool			PRINTED/TYPED NAME _____			
SIGNATURE L.B. Pool DATE 12-8-04			SIGNATURE _____ DATE _____			
D I S P O S I T L Y	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS _____			
	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
AUTHORIZED SIGNATURE Glennys Marriott			CELL NO. 2	DATE 08-08-04	TIME 1045	

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26299**

1. PAGE 1 OF ___

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME B J SERVICES PHONE NO.	4. ADDRESS 2708 COUNTY ROAD CITY STATE ZIP WABBS NM 88240	5. PICK-UP DATE SEP 8, 2004
	7. NAME OR DESCRIPTION OF WASTE SHIPPED: a. NON HAZARDOUS, NON REGULATED WASTE b. c. d. WT - 45,740		6. TNRC I.D. NO.
A T R A N S P O R T E R	12. COMMENTS OR SPECIAL INSTRUCTIONS: WP 0904466		8. CONTAINERS No. Type 1 CM
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT NAME PHONE NO. 24-HOUR EMERGENCY NO. KIN SLAUGHTER 505-887-4040		9. TOTAL QUANTITY
D I S P O S I T O R Y	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.		
	PRINTED/TYPED NAME	SIGNATURE	DATE
D I S P O S I T O R Y	15. TRANSPORTER (1) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	16. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:	10. UNIT Wt/Vol.
	17. TRANSPORTER (1): Acknowledgment of receipt of material PRINTED/TYPED NAME DANIEL HARRISON SIGNATURE <i>[Signature]</i> 12-8-04	18. TRANSPORTER (2): Acknowledgment of receipt of material PRINTED/TYPED NAME SIGNATURE DATE	11. TEXAS WASTE ID #
D I S P O S I T O R Y	Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
	PERMIT NO. SWM #131401 - New Mexico	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.	
A U T H O R I Z E D	AUTHORIZED SIGNATURE Glennys Trarrett	CELL NO. 2	DATE 08-08-04
			TIME 1300

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

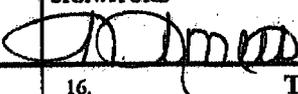
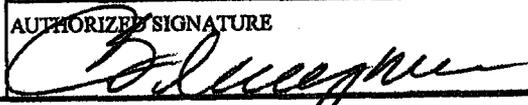
1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26300**

1. PAGE 1 OF ___

2. TRAILER NO.

G	3. COMPANY NAME B J SERVICES	4. ADDRESS 2700 COUNTY ROAD	5. PICK-UP DATE DEC 12 2004			
	PHONE NO.	CITY STATE ZIP HOBBBS NM 80240	6. TNRC I.D. NO.			
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:		8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
	a. NON HAZARDOUS, NON REGULATED WASTE		1	CM		
	b.					
	c.					
R	d. 43,320					
	12. COMMENTS OR SPECIAL INSTRUCTIONS: WP 0904466					
A	13. IN CASE OF EMERGENCY OR SPILL, CONTACT					
	NAME KIN SLAUGHTER	PHONE NO. 505-887-4048	24-HOUR EMERGENCY NO.			
O	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.					
	PRINTED/TYPED NAME Sylvia Smith	SIGNATURE 		DATE 12/10/04		
T	15. TRANSPORTER (1)			16. TRANSPORTER (2)		
	NAME:			NAME:		
	TEXAS I.D. NO.			TEXAS I.D. NO.		
	IN CASE OF EMERGENCY CONTACT:			IN CASE OF EMERGENCY CONTACT:		
R	EMERGENCY PHONE:			EMERGENCY PHONE:		
	17. TRANSPORTER (1): Acknowledgment of receipt of material			18. TRANSPORTER (2): Acknowledgment of receipt of material		
	PRINTED/TYPED NAME _____			PRINTED/TYPED NAME _____		
	SIGNATURE _____ DATE _____			SIGNATURE _____ DATE _____		
D	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS			
F	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE 		CELL NO. 2	DATE 12-08-04	TIME 1600	

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26359**

1. PAGE 1 OF ___

2. TRAILER NO.

G E	3. COMPANY NAME BJ SERVICES	4. ADDRESS 2708 West County Rd	5. PICK-UP DATE DEC 8, 2004
	PHONE NO.	CITY STATE ZIP Hobbs NM 88240	6. TNRCC I.D. NO.

N E R A	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. Non-Hazardous, Non Regulated Waste	1 CM			
	b.				
	d. WT - 28,540				

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO.	24-HOUR EMERGENCY NO.
Kenneth Slaughter		505-887-4048

14. GENERATOR'S CERTIFICATION: I Hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME	SIGNATURE	DATE
--------------------	-----------	------

T R A N S P O R T E R S	15. TRANSPORTER (1)	16. TRANSPORTER (2)
	NAME: Tripod Inc	NAME:
	TEXAS I.D. NO.	TEXAS I.D. NO.

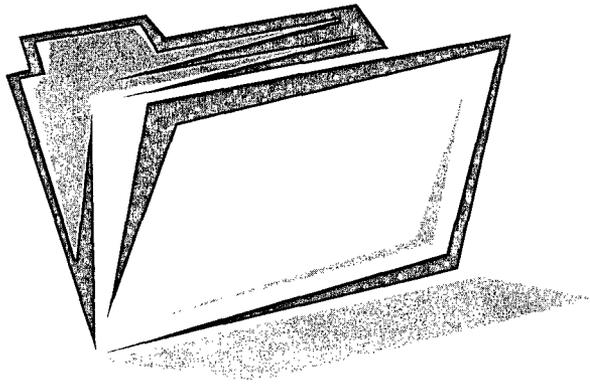
17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME Floyd So Hou	PRINTED/TYPED NAME
SIGNATURE Floyd So Hou DATE 12-08	SIGNATURE DATE

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
---	--------------

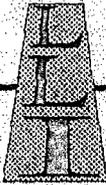
20. DISPOSAL FACILITY'S CERTIFICATION: I Hereby certify that the above-described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE [Signature]	CELL NO. 2	DATE 12-08-04	TIME 0805
--	----------------------	-------------------------	---------------------



REPRODUCTION OF DOCUMENTS
IN THIS FILE CANNOT BE
IMPROVED DUE TO CONDITION
OF ORIGINALS





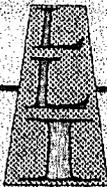
LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST		NO. 26205	1. PAGE 1 OF <u> </u>	2. TRAILER NO.
G	3. COMPANY NAME	4. ADDRESS		5. PICK-UP DATE
	PHONE NO.	CITY	STATE	ZIP
E	7. NAME OR DESCRIPTION OF WASTE SHIPPED:			6. TNRCC I.D. NO.
	a.			8. CONTAINERS No. Type
N	b.			9. TOTAL QUANTITY
	c.			10. UNIT Wt/Vol.
E	d.			11. TEXAS WASTE ID #
	12. COMMENTS OR SPECIAL INSTRUCTIONS:			
A	13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
	NAME	PHONE NO.	24-HOUR EMERGENCY NO.	
T	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.			
	PRINTED/TYPED NAME	SIGNATURE	DATE	
O	15. TRANSPORTER (1)		16. TRANSPORTER (2)	
	NAME:	TEXAS I.D. NO.	NAME:	TEXAS I.D. NO.
R	IN CASE OF EMERGENCY CONTACT:		IN CASE OF EMERGENCY CONTACT:	
	EMERGENCY PHONE:		EMERGENCY PHONE:	
A	17. TRANSPORTER (1): Acknowledgment of receipt of material		18. TRANSPORTER (2): Acknowledgment of receipt of material	
	PRINTED/TYPED NAME	SIGNATURE	PRINTED/TYPED NAME	SIGNATURE
N	DATE		DATE	
	SIGNATURE		SIGNATURE	
D	Lea Land, Inc.		Mile Marker 64, U.S. Hwy 62/180,	
	ADDRESS:		30 Miles East of Carlsbad, NM	
I	PERMIT NO.		PHONE:	
	SWM #131401 - New Mexico		505-887-4048	
S	19. COMMENTS			
	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.			
C	AUTHORIZED SIGNATURE		CELL NO.	DATE
	DATE		TIME	
P	DATE		TIME	
	DATE		TIME	
O	DATE		TIME	
	DATE		TIME	
L	DATE		TIME	
	DATE		TIME	
I	DATE		TIME	
	DATE		TIME	
T	DATE		TIME	
	DATE		TIME	
R	DATE		TIME	
	DATE		TIME	
E	DATE		TIME	
	DATE		TIME	
S	DATE		TIME	
	DATE		TIME	
D	DATE		TIME	
	DATE		TIME	
F	DATE		TIME	
	DATE		TIME	
A	DATE		TIME	
	DATE		TIME	
C	DATE		TIME	
	DATE		TIME	
P	DATE		TIME	
	DATE		TIME	
I	DATE		TIME	
	DATE		TIME	
S	DATE		TIME	
	DATE		TIME	
O	DATE		TIME	
	DATE		TIME	
L	DATE		TIME	
	DATE		TIME	
I	DATE		TIME	
	DATE		TIME	
T	DATE		TIME	
	DATE		TIME	
R	DATE		TIME	
	DATE		TIME	
E	DATE		TIME	
	DATE		TIME	
S	DATE		TIME	
	DATE		TIME	
A	DATE		TIME	
	DATE		TIME	
N	DATE		TIME	
	DATE		TIME	
E	DATE		TIME	
	DATE		TIME	
N	DATE		TIME	
	DATE		TIME	
E	DATE		TIME	
	DATE		TIME	
R	DATE		TIME	
	DATE		TIME	
A	DATE		TIME	
	DATE		TIME	
T	DATE		TIME	
	DATE		TIME	
O	DATE		TIME	
	DATE		TIME	
G	DATE		TIME	
	DATE		TIME	



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

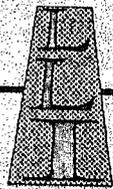
NON-HAZARDOUS WASTE MANIFEST

NO **26206**

1. PAGE 1 OF 1

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME <i>Lea Land, Inc.</i>	4. ADDRESS <i>1300 West Main Street, Oklahoma City, OK 73106</i>			5. PICK-UP DATE <i>11/16/87</i>	
	PHONE NO. <i>(505) 236-4257</i>	CITY <i>Oklahoma City</i>	STATE <i>OK</i>	ZIP <i>73106</i>	6. TNRC I.D. NO.	
	7. NAME OR DESCRIPTION OF WASTE SHIPPED: <i>Asphalt</i>			8. CONTAINERS No. <i>1</i> Type <i>Drum</i>	9. TOTAL QUANTITY <i>12</i>	10. UNIT Wt/Vol <i>Y</i>
	12. COMMENTS OR SPECIAL INSTRUCTIONS: <i>See manifest</i>					
A T O R	13. IN CASE OF EMERGENCY OR SPILL, CONTACT					
	NAME <i>James Kennedy</i>	PHONE NO. <i>505-236-4257</i>	24-HOUR EMERGENCY NO.			
R E C E I V E R	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.					
	PRINTED/TYPED NAME <i>James Kennedy</i>		SIGNATURE <i>[Signature]</i>		DATE <i>6/20/87</i>	
	15. TRANSPORTER (1) NAME: <i>[Name]</i>		16. TRANSPORTER (2) NAME: <i>[Name]</i>			
	TEXAS I.D. NO. <i>85587</i>		TEXAS I.D. NO.			
	IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:		IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:			
D I S P O S I T O R	17. TRANSPORTER (1): Acknowledgment of receipt of material		18. TRANSPORTER (2): Acknowledgment of receipt of material			
	PRINTED/TYPED NAME		PRINTED/TYPED NAME			
	SIGNATURE DATE		SIGNATURE DATE			
L E A L A N D	Lea Land, Inc.		ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		PHONE: 505-887-4048	
	PERMIT NO. SWM #131401 - New Mexico		19. COMMENTS			
L E A L A N D	20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.					
	AUTHORIZED SIGNATURE <i>[Signature]</i>		CELL NO.	DATE <i>11/16/87</i>	TIME	



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26207**

1. PAGE 1 OF 1

2. TRAILER NO.

G
E
N
E
R
A
T
O
R

3. COMPANY NAME
PHONE NO.

4. ADDRESS
CITY STATE ZIP

5. PICK-UP DATE

6. TNRC ID NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:

8. CONTAINERS
No. Type

9. TOTAL QUANTITY

10. UNIT Wt/Vol

11. TEXAS WASTE ID #

a.	b.	c.	d.

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. IN CASE OF EMERGENCY OR SPILL, CONTACT
NAME PHONE NO. 24-HOUR EMERGENCY NO.

14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME SIGNATURE DATE

15. TRANSPORTER (1)
NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:

16. TRANSPORTER (2)
NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:

17. TRANSPORTER (1): Acknowledgment of receipt of material
PRINTED/TYPED NAME SIGNATURE DATE

18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME SIGNATURE DATE

D
I
S
P
O
S
I
T
O
R
Y

Lea Land, Inc. ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM PHONE: 505-887-4048

PERMIT NO. SWM #131401 - New Mexico

19. COMMENTS

20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that this facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE CELL NO. DATE TIME

LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO. **26208**

1. PAGE 1 OF 1

2. TRAILER NO.

GENERATOR	3. COMPANY NAME <i>Eastman Kodak Company</i>		4. ADDRESS <i>10000 Eastman Drive</i>			5. PICK-UP DATE				
	PHONE NO.		CITY	STATE	ZIP	6. TNRC ID NO.				
	7. NAME OR DESCRIPTION OF WASTE SHIPPED						8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
	a.							12		
DISPOSAL	12. COMMENTS OR SPECIAL INSTRUCTIONS						13. IN CASE OF EMERGENCY OR SPILL, CONTACT			
	NAME		PHONE NO.		24-HOUR EMERGENCY NO.					
TRANSPORTERS	14. GENERATOR'S CERTIFICATION: I Herby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC									
	PRINTED/TYPED NAME <i>James Kennedy</i>					SIGNATURE <i>James Kennedy</i>			DATE <i>9-20-88</i>	
	15. TRANSPORTER (1) NAME: <i>TT Trucking</i> TEXAS I.D. NO. <i>85581</i> IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:					16. TRANSPORTER (2) NAME: TEXAS I.D. NO. IN CASE OF EMERGENCY CONTACT: EMERGENCY PHONE:				
	17. TRANSPORTER (1): Acknowledgment of receipt of material					18. TRANSPORTER (2): Acknowledgment of receipt of material				
DISPOSAL	PRINTED/TYPED NAME					PRINTED/TYPED NAME				
	SIGNATURE					SIGNATURE				
	DATE					DATE				
DISPOSAL	Lea Land, Inc.			ADDRESS Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM			PHONE 505-887-4048			
	PERMIT NO. SWM #131401 - New Mexico			19. COMMENTS						
DISPOSAL	20. DISPOSAL FACILITY'S CERTIFICATION: I Herby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.									
	AUTHORIZED SIGNATURE					CELL NO.		DATE		TIME



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST NO. **26209** 1. PAGE 1 OF _____ 2. TRAILER NO. _____

G E N E R A T O R	3. COMPANY NAME <i>James Kennedy</i>	4. ADDRESS <i>1300 West Main Street</i>	5. PICK-UP DATE
	PHONE NO.	CITY STATE ZIP	6. TNRC ID NO.

E N T R Y	7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No.	9. TOTAL QUANTITY	10. UNIT Wt/Vol	11. TEXAS WASTE ID #
	a.		<i>24</i>		
	b.				
	c.				

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. **IN CASE OF EMERGENCY OR SPILL, CONTACT**

NAME	PHONE NO.	24-HOUR EMERGENCY NO.
------	-----------	-----------------------

14. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

15. TRANSPORTER (1)	16. TRANSPORTER (2)
PRINTED/TYPED NAME <i>James Kennedy</i>	SIGNATURE <i>James Kennedy</i>
	DATE <i>9-21-04</i>

17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
NAME: <i>James Kennedy</i>	NAME:
TEXAS I.D. NO.	TEXAS I.D. NO.
IN CASE OF EMERGENCY CONTACT:	IN CASE OF EMERGENCY CONTACT:
EMERGENCY PHONE:	EMERGENCY PHONE:

17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME <i>James Kennedy</i>	PRINTED/TYPED NAME
SIGNATURE <i>James Kennedy</i>	SIGNATURE
DATE <i>9-21-04</i>	DATE

Lea Land, Inc	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
---------------	---	---------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
-------------------------------------	--------------

20. **DISPOSAL FACILITY'S CERTIFICATION:** I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
----------------------	----------	------	------



LEA LAND LANDFILL NEW MEXICO

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST

NO **26210**

1. PAGE 1 OF

2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME <i>Lea Land Inc</i>	4. ADDRESS <i>1300 West Main Street Oklahoma City, OK 73106</i>			5. PICK-UP DATE <i>8-21-91</i>		
	PHONE NO. <i>405-236-4257</i>	CITY <i>Oklahoma City</i>	STATE <i>OK</i>	ZIP <i>73106</i>	6. TNRCC I.D. NO.		
N E M O S I T Y	7. NAME OR DESCRIPTION OF WASTE SHIPPED:			8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
	a. <i>General Household Waste</i>			1		12	
	b.						
	c.						
A U T H O R I Z E D	12. COMMENTS OR SPECIAL INSTRUCTIONS:						
	13. IN CASE OF EMERGENCY OR SPILL, CONTACT						
	NAME	PHONE NO.	24-HOUR EMERGENCY NO.				
	14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.						
T R A N S P O R T E R S	PRINTED/TYPED NAME		SIGNATURE		DATE		
	<i>James Kennedy</i>		<i>[Signature]</i>		<i>8-21-91</i>		
	15. TRANSPORTER (1)	NAME:		16. TRANSPORTER (2)	NAME:		
	TEXAS I.D. NO.	IN CASE OF EMERGENCY CONTACT:		TEXAS I.D. NO.	IN CASE OF EMERGENCY CONTACT:		
EMERGENCY PHONE:				EMERGENCY PHONE:			
17. TRANSPORTER (1): Acknowledgment of receipt of material				18. TRANSPORTER (2): Acknowledgment of receipt of material			
PRINTED/TYPED NAME		SIGNATURE		PRINTED/TYPED NAME		SIGNATURE	
SIGNATURE		DATE		SIGNATURE		DATE	
D I S P O S I T Y	Lea Land, Inc.		ADDRESS:		PHONE:		
			Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM		505-887-4048		
PERMIT NO. SWM #131401 - New Mexico			19. COMMENTS				
20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.							
AUTHORIZED SIGNATURE			CELL NO.		DATE		TIME



LEA LAND LANDFILL NEW MEXICO

MILE-MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (505) 887-4048

LEA LAND INC.

1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257

NON-HAZARDOUS WASTE MANIFEST NO. **26211** 1. PAGE 1 OF 1 2. TRAILER NO.

G E N E R A T O R	3. COMPANY NAME <i>Lea Land Inc.</i>	4. ADDRESS <i>1300 West Main Street</i>	5. PICK-UP DATE <i>12/1/88</i>
	PHONE NO. <i>505-236-4257</i>	CITY STATE ZIP <i>OKLAHOMA CITY OK 73106</i>	6. TNRC ID NO.

7. NAME OR DESCRIPTION OF WASTE SHIPPED:	8. CONTAINERS No. Type	9. TOTAL QUANTITY	10. UNIT Wt/Vol.	11. TEXAS WASTE ID #
a. <i>Asphalt</i>	<i>24</i>	<i>24</i>	<i>Y</i>	
b.				
c.				
d.				

12. COMMENTS OR SPECIAL INSTRUCTIONS:

13. IN CASE OF EMERGENCY OR SPILL, CONTACT		
NAME	PHONE NO.	24-HOUR EMERGENCY NO.

14. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations, and are the same materials previously approved by LEA LAND, INC.

PRINTED/TYPED NAME <i>Tommy...</i>	SIGNATURE <i>[Signature]</i>	DATE <i>12/1/88</i>
---------------------------------------	---------------------------------	------------------------

15. TRANSPORTER (1)	16. TRANSPORTER (2)
NAME: <i>[Name]</i>	NAME: <i>[Name]</i>
TEXAS I.D. NO. <i>[No.]</i>	TEXAS I.D. NO. <i>[No.]</i>
IN CASE OF EMERGENCY CONTACT: <i>[Contact]</i>	IN CASE OF EMERGENCY CONTACT: <i>[Contact]</i>
EMERGENCY PHONE: <i>[Phone]</i>	EMERGENCY PHONE: <i>[Phone]</i>

17. TRANSPORTER (1): Acknowledgment of receipt of material	18. TRANSPORTER (2): Acknowledgment of receipt of material
PRINTED/TYPED NAME <i>[Name]</i>	PRINTED/TYPED NAME <i>[Name]</i>
SIGNATURE <i>[Signature]</i>	SIGNATURE <i>[Signature]</i>
DATE <i>[Date]</i>	DATE <i>[Date]</i>

Lea Land, Inc.	ADDRESS: Mile Marker 64, U.S. Hwy 62/180, 30 Miles East of Carlsbad, NM	PHONE: 505-887-4048
----------------	---	------------------------

PERMIT NO. SWM #131401 - New Mexico	19. COMMENTS
--	--------------

20. DISPOSAL FACILITY'S CERTIFICATION: I hereby certify that the above described wastes were delivered to this facility, that the facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE	CELL NO.	DATE	TIME
----------------------	----------	------	------

Price, Wayne

From: Price, Wayne
Sent: Friday, January 10, 2003 1:03 PM
To: 'Jason_Goodwin@bjsservices.com'
Subject: RE: Hobbs Sump Investigation.

No, but I will file the Approved E-mail as OCD's verification of approval!

-----Original Message-----

From: Jason_Goodwin@bjsservices.com [mailto:Jason_Goodwin@bjsservices.com]
Sent: Friday, January 10, 2003 12:00 PM
To: Price, Wayne
Subject: RE: Hobbs Sump Investigation.

Will you be sending me a letter to the same effect?

Jason Goodwin
HSE Specialist
Phone: 281-357-2573
Fax: 281-357-2585

"Price, Wayne"
<WPrice@state.nm.us>

01/10/2003 09:35
AM

To: "'Jason_Goodwin@bjsservices.com'"
<Jason_Goodwin@bjsservices.com>
CC:
Subject: RE: Hobbs Sump Investigation.

APPROVED!!

Please be advised that NMOCD approval of this plan does not relieve BJ Services of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve BJ Services of responsibility for compliance with any other federal, state, or local laws and/or regulations.

-----Original Message-----

From: Jason_Goodwin@bjsservices.com [mailto:Jason_Goodwin@bjsservices.com]
Sent: Wednesday, January 08, 2003 3:51 PM
To: wprice@state.nm.us
Subject: Hobbs Sump Investigation.

Wayne,

As per our conversation the new sump and concrete will be replaced by placing a prefabricated concrete sump in place and pouring new concrete up to the sump. Plastic will be placed into the area prior to reconstructing the sump. Expansion joints will be sealed using a polysulfide joint

sealant to prevent migration of liquids between the old and new concrete and between the concrete and sump. The entire impacted area is covered by concrete (acid dock) to prevent further filtration of contaminants left in place to groundwater. Thankyou for taking the time to review this matter.

Jason Goodwin
HSE Specialist
Phone: 281-357-2573
Fax: 281-357-2585

Price, Wayne

From: Price, Wayne
Sent: Tuesday, January 07, 2003 1:35 PM
To: 'Jason_Goodwin@bjsservices.com'
Subject: RE: Hobbs ???

Dear Jason:

I have the following questions:

1. Did BJ remove any contaminated soil, if so how much and where was it disposed of?
2. Are you planning on placing a barrier over the top the the excavated area?

-----Original Message-----

From: Jason_Goodwin@bjsservices.com [mailto:Jason_Goodwin@bjsservices.com]
Sent: Friday, January 03, 2003 8:16 AM
To: wprice@state.nm.us
Subject: Hobbs ???

Wayne,

In regards to our sump investigation at Hobbs. We currently have an open hole from our investigation and would like to possibly re-insert a new sump. Can you tell me whether you expect the state to recommend any further investigation?

Thanks,

Jason Goodwin
HSE Specialist
Phone: 281-357-2573
Fax: 281-357-2585

Price, Wayne

From: Price, Wayne
Sent: Tuesday, January 07, 2003 1:59 PM
To: 'Jason_Goodwin@bjsservices.com'
Subject: RE: Hobbs ???

Will the new sump have secondary containment with leak detection?

-----Original Message-----

From: Jason_Goodwin@bjsservices.com [mailto:Jason_Goodwin@bjsservices.com]
Sent: Tuesday, January 07, 2003 2:00 PM
To: Price, Wayne
Subject: RE: Hobbs ???

Wayne,

BJ was very limited on the amount of soil it could remove. BJ only removed approximately 3 yards if that. We have some very serious overhead constraints from the proximity of the acid dock. In order for BJ to remove any more soil we would have to remove part of the existing acid dock. The soils removed are being profiled using samples collected and should be disposed of as non-hazardous within the week. The sample collected by Ecological represent the worst of the contamination still present in the bottom of the excavation. No detectable concentrations were reported in soils after 14 feet and groundwater is currently being monitored using the existing monitoring well network downgradient from the former sump.

BJ Services plans to re-install another sump in the same hole that will be constructed to protect underlying soils.

Let me know,

Jason Goodwin
HSE Specialist
Phone: 281-357-2573
Fax: 281-357-2585

"Price, Wayne"
<WPrice@state.nm.us>

01/07/2003 02:34
PM

To: "'Jason_Goodwin@bjsservices.com'"
<Jason_Goodwin@bjsservices.com>
cc:
Subject: RE: Hobbs ???

Dear Jason:

I have the following questions:

1. Did BJ remove any contaminated soil, if so how much and where was it disposed of?
2. Are you planning on placing a barrier over the top the the excavated area?

-----Original Message-----

From: Jason_Goodwin@bjsservices.com [mailto:Jason_Goodwin@bjsservices.com]

Sent: Friday, January 03, 2003 8:16 AM

To: wprice@state.nm.us

Subject: Hobbs ???

Wayne,

In regards to our sump investigation at Hobbs. We currently have an open hole from our investigation and would like to possibly re-insert a new sump. Can you tell me whether you expect the state to recommend any further investigation?

Thanks,

Jason Goodwin
HSE Specialist
Phone: 281-357-2573
Fax: 281-357-2585



October 16, 2002

FEDEX AIRBILL 0938467110

Mr. Wayne Price
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RECEIVED
OCT 18 2002
Environmental Bureau
Oil Conservation Division

RE: BJ Services Company, USA, Hobbs District, Acid Dock Sump Investigation

Dear Mr. Price,

BJ Services Company, U.S.A. (BJ Services) has enclosed a copy of the final report regarding the Acid Dock Sump Investigation conducted by Weston Solutions at its Hobbs, New Mexico District.

Upon your request BJ Services also analyzed two additional samples for total chlorides. Samples were both analyzed to determine the potential impact to soil. Samples BH-1 (5-7) and BH-1 (44-46) reported concentrations of 28 mg/kg and 108 mg/kg, respectively.

After evaluating the results of the investigation, BJ Services believes no further action is warranted since the release does not appear to present a risk to human health or the environment.

If you have any questions or concerns during your review of this report, please contact me at (281) 357-2573.

Sincerely,

Jason Goodwin
HSE Specialist

Cc: Jo Ann Cobb - Tomball
John Adcock - Hobbs



Weston Solutions, Inc.
Barton Oaks Plaza Two
901 South Mopac Expwy., Suite 475
Austin, Texas 78746
512-651-7100 • Fax 512-651-7101

29 September 2002

Mr. Jason Goodwin
BJ Services Company, U.S.A.
11211 FM 2920
Tomball, Texas 77375

RECEIVED
OCT 18 2002
Environmental Bureau
Oil Conservation Division

Re: Acid Sump Soil Sampling Results
Hobbs Facility, New Mexico

Dear Mr. Goodwin:

This report presents the results of an environmental investigation conducted on 9 and 10 July 2002 by Weston Solutions, Inc. (WESTON®) personnel at the BJ Services Company U.S.A. (BJ Services) Facility in Hobbs, New Mexico. The purpose of the investigation was to collect subsurface soil samples to characterize the vertical and lateral extent of contamination at a former acid sump at the site, then prepare a report of the findings and recommend activities leading to closure of the former acid sump area.

BACKGROUND

The former acid sump is part of the acid dock area at the BJ Services facility, located at 2708 West County Road in Hobbs, New Mexico. The acid dock consists of an overhead tank containing hydrochloric acid with a concrete containment wall, a concrete truck loading dock, a reclaim tank, a new sump (west of the former sump), and the former sump (Figure 1). BJ Services personnel recently observed fluids coming up around the outside of the former sump. Subsequent to observations made by BJ Services, Mr. Wayne Price of the New Mexico Oil Conservation Division (NMOCD) was notified that BJ Services had plans to remove the sump and notify the OCD of its findings. The fiberglass sump was subsequently removed with a backhoe and placed behind the acid dock. The resulting excavation is approximately 5-ft wide by 5-ft deep. Soil on the northern side of the excavation was visibly stained and hydrocarbon odors were noted. One soil sample was collected from the northern side of the excavation by Eco-logical Environmental Services, Inc., in Midland, Texas. The sample was analyzed for benzene, toluene, ethylbenzene, xylene (BTEX), total BTEX, total petroleum hydrocarbons (TPH) as gasoline range organics (GRO) and as diesel range organics (DRO), and Method 8260B volatile organic compounds, and 8270C semi-volatile organic compounds using the Toxicity Characteristic Leaching Procedure (TCLP). Results of the sampling indicated that the concentrations of total BTEX (1,598 mg/kg), TPH as gasoline (29,900 mg/kg), and TPH as diesel (14,700 mg/kg) exceeded the NMOCD action levels (50, 1000, and 1000 mg/kg, respectively). The initial findings were subsequently conveyed to Mr. Wayne Price of the NMOCD.

Based on previous groundwater monitoring reports for the facility, groundwater is approximately 55 to 60 ft below ground surface (bgs) level.

BOREHOLE DRILLING AND SOIL SAMPLING ACTIVITIES

An air rotary drill rig was used to advance four soil borings, one at the former sump location to determine the vertical extent of the release at the source, and the other three to assess the lateral and vertical extent of the release. The borehole locations are shown on Figure 1. Borehole No. 1 (BH1) is located in the former sump excavation and was advanced to a depth of 51 ft, near the top of the water table. The other three borings were located as close to the former sump as possible given the logistical constraints associated with the operations of the facility. BH2 is located east of the new sump and was advanced to a depth of 41 ft. BH3 is located south of the truck loading dock and was advanced to a depth of 30 ft. BH4 is located north of the two sump locations, outside of the containment wall, and was advanced to a depth of 30 ft.

Soil samples were collected continuously from BH1 to establish the vertical extent of the release at the source area. Soil samples were collected from the other three boreholes at 5-ft intervals for the first 20 ft, and every 10 ft thereafter. Samples also were collected at points where significant changes in lithology were observed; and/or where field screening instruments, or visual or olfactory indications, noted the potential presence of contamination during drilling. After soil sampling was completed, each borehole was grouted from bottom to top. Groundwater was not encountered in any of the boreholes.

Following collection, each soil sample was placed into a laboratory-supplied container and then into an individual Ziploc bag to minimize the potential for cross-contamination during transport. Samples were stored in a cooler on ice and shipped to AnalySys, Inc. (AnalySys), in Austin, Texas. Chain-of-custody (COC) forms were completed for each cooler. Information on the COC forms includes the sample ID, date and time of sample collection, type of analyses to be performed, preservation method, and the signature of the person relinquishing the samples. AnalySys provided the sample containers, COC forms, and coolers.

The soil samples were analyzed for BTEX by the U.S. Environmental Protection Agency (EPA) SW-846 Method 8260B and for TPH (GRO and DRO) by EPA Method 8015 (modified). WESTON personnel coordinated with AnalySys to ensure that the required laboratory methods, practical quantitation limits, and quality assurance objectives were met.

One blind field duplicate was collected to evaluate the reproducibility of the analytical results. The duplicate sample was collected from BH1. The duplicate sample was analyzed for the same parameters as the original sample. Because disposable sampling equipment was used, no equipment rinsate blank was collected. Because the samples were analyzed for organics, a trip blank was supplied by the laboratory and analyzed for BTEX. AnalySys performed internal quality control (QC) analyses on representative samples in each lab batch. QC analyses included

relative percent differences and matrix spike recovery results. A Borehole Lithologic Logging Form describing the lithologic composition, photoionization detector readings, and sample location/depth was maintained for each borehole, and these forms are provided as Attachment 1.

Decontamination and Waste Disposal

The air rotary drill rig was steamed cleaned between boreholes using the on-site high-pressure steam cleaner.

Drill cuttings were placed in 55-gallon drums and moved by local BJ Services personnel to a designated storage area pending characterization for disposal by BJ Services. Previous analytical results indicated these soils are not Resource Conservation and Recovery Act (RCRA) characteristically hazardous, and no additional hazard waste classification analyses are anticipated. Following characterization, BJ Services personnel will arrange for the disposal of the soil in accordance with state and federal regulations.

Personal protective equipment (PPE) was disposed of in appropriate waste containers at the Hobbs facility.

ANALYTICAL RESULTS

Table 1 summarizes the reported analytical results for the soil sampling. Copies of the COC forms are provided as Attachment 2.

Benzene was detected in the first two shallow samples collected from BH1 (5-7 ft and 8-10 ft) at concentrations of 56.8 and 36.5 ug/kg, respectively (0.0568 and 0.0365 mg/kg). These concentrations are four orders of magnitude less than the NMOCD recommended benzene remediation action level of 10 mg/kg. Benzene was not detected above the reported quantitation limit (RQL) in any of the deeper samples from BH1, or in any of the samples collected from the other three boreholes. A duplicate sample, indicated as BJHOBBS-BH1-Dup on the COC, was collected from BH1. The results from the duplicate sample were consistent with the results from the initial sample (Sample BJHOBBS-BH1-15-17 in Table 1).

Total BTEX was detected in the first three samples collected from BH1 (5-7 ft, 8-10 ft, and 12-14 ft) at concentrations of 95.0, 12.7, and 2.5 mg/kg, respectively. One of the sample concentrations (95.0 mg/kg at 5-7 ft) exceeds the NMOCD recommended total BTEX remediation action level of 50 mg/kg. Total BTEX was not detected above the RQL in any of the deeper samples from BH1, or in any of the samples collected from the other three boreholes.

TPH as gasoline (GRO) and diesel (DRO) was detected in the first three samples collected from BH1 (5-7 ft, 8-10 ft, and 12-14 ft) at GRO concentrations of 5610, 3510, and 357 mg/kg, respectively, and DRO concentrations of 13500, 5980, and 804 mg/kg, respectively. GRO and DRO concentrations from the upper two shallow samples (5-7 ft and 8-10 ft) exceed the NMOCD recommended TPH remediation action level of 1000 mg/kg. TPH as diesel was also

detected in one shallow sample from BH2 (5-7 ft) at a concentration of 257 mg/kg. TPH was not detected above the RQL in any of the deeper samples from BH1 or BH2, or in any of the samples collected from the other two boreholes.

None of the soil samples from the outside two boreholes (BH3 and BH4) contained any of the constituents at concentrations above the laboratory reporting limits. Therefore, an unaffected perimeter for BTEX and TPH has been established for the acid sump area.

The trip blank sample was analyzed for BTEX to assess cross-contamination. No BTEX compounds were detected above the laboratory reporting limits (Table 1).

CONCLUSIONS

The following conclusions were made based on the sampling data:

- Benzene concentrations, detected in borehole BH1, were below NMOCD recommended action levels within surface soil above 12 ft.
- Total BTEX concentrations, detected in borehole BH1, exceeded NMOCD action levels only within surface soil above 7 ft.
- TPH concentrations, detected in borehole BH1, were reported at concentrations above action levels only within surface soil above 10 ft. The sample from borehole BH2 also displayed concentrations of TPH, but well below recommended action levels. No other samples collected displayed detectable concentrations of TPH.
- The vertical and horizontal extent of the release from the former acid dock sump has been delineated. None of the contaminants were found deeper than 14 ft. Soil samples collected from boreholes BH2, BH3, and BH4 reported no detectable concentrations above action levels.

RECOMMENDATIONS

WESTON recommends that further remediation actions are not warranted for the former acid sump. Although some of the reported concentrations exceed NMOCD action levels at depths up to 10 feet, further excavation is constrained by the presence of operating equipment, piping, and tanks. This recommendation for no further action is based on the following: relatively low concentrations of the constituents were detected and only at shallow depths; the affected area appears to be confined to the vicinity of the former sump; the source has been removed; and none of the constituents appear capable of migrating to the water table. Qualitatively, the release does not appear to represent a risk to human health and the environment.



CLOSING

WESTON is pleased to provide this report to BJ Services. If you have any questions or comments, please contact Bob Chapin at (512) 651-7113.

Very truly yours,

WESTON SOLUTIONS, INC.

A handwritten signature in cursive script that reads "Bruce L. Wedgeworth".

Bruce Wedgeworth
Technical Manager

Robert I. Chapin
Client Services Manager

Attachments

**TABLE I
REPORTED ANALYTICAL RESULTS**

**BJ Services Company, U.S.A.
Hobbs Facility, New Mexico**

Sample Name	Lab ID	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes		Units	RQL	Blank	Date Analyzed	Method
						m,p-	o-					
BJHOBBS-BH1-5-7	131421	7/9/2002	56.8	20100	19700	28900	26200	µg/kg	20 / 1000 ^a	<20 / <1000 ^a	7/16-17/2002	8260b
BJHOBBS-BH1-8-10	131422	7/9/2002	36.5	4750	588	2690	4640	µg/kg	100 / 20 ^b	<100 / <20 ^b	7/16-17/2002	8260b
BJHOBBS-BH1-12-14	131424	7/9/2002	<20	93.7	177	448	1810	µg/kg	20	<20	7/30/2002	8260b
BJHOBBS-BH1-15-17	131425	7/9/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-BH1-Dup	131426	7/9/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-BH1-44-46	131433	7/9/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-BH2-5-7	131434	7/10/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-BH2-39-41	131439	7/10/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-TB	131440	7/10/2002	<1	<1	<1	<1	<1	µg/L	1	<1	7/19/2002	8260b
BJHOBBS-BH3-5-7	131441	7/9/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-BH3-28-30	131445	7/9/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-BH4-5-7	131446	7/10/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b
BJHOBBS-BH4-28-30	131450	7/10/2002	<20	<20	<20	<20	<20	µg/kg	20	<20	7/16/2002	8260b

a - In BJHOBBS-BH1-5-7 benzene RQL = 20 µg/kg. For all other BTEX constituents in this sample RQL = 1000 µg/kg.
b - In BJHOBBS-BH1-8-10 o-xylene RQL = 100 µg/kg. For all other BTEX constituents in this sample RQL = 20 µg/kg.

**TABLE I
REPORTED ANALYTICAL RESULTS**

**BJ Services Company, U.S.A.
Hobbs Facility, New Mexico**

Sample Name	Lab ID	Date Sampled	TPH by GC (mg/kg)		RQL (mg/kg)	Blank (mg/kg)	Date Analyzed	Method
			As gasoline	As diesel				
BJHOBBS-BH1-5-7	131421	7/9/2002	5610	13500	50 / 500 ^c	<50 / <500 ^c	7/23,26/2002	8015 mod.
BJHOBBS-BH1-8-10	131422	7/9/2002	3510	5980	50 / 500 ^d	<50 / <500 ^d	7/23,26/2002	8015 mod.
BJHOBBS-BH1-12-14	131424	7/9/2002	357	804	5	<5	7/30/2002	8015 mod.
BJHOBBS-BH1-15-17	131425	7/9/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH1-Dup	131426	7/9/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH1-44-46	131433	7/9/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH2-5-7	131434	7/10/2002	<5	257	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH2-39-41	131439	7/10/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH3-5-7	131441	7/9/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH3-28-30	131445	7/9/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH4-5-7	131446	7/10/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.
BJHOBBS-BH4-28-30	131450	7/10/2002	<5	<5	5	<5	7/23,26/2002	8015 mod.

c - In BJHOBBS-BH1-5-7 TPH gasoline RQL = 50 mg/kg, and TPH diesel RQL = 500 mg/kg.

d - In BJHOBBS-BH1-8-10 TPH gasoline RQL = 50 mg/kg, and TPH diesel RQL = 500 mg/kg.

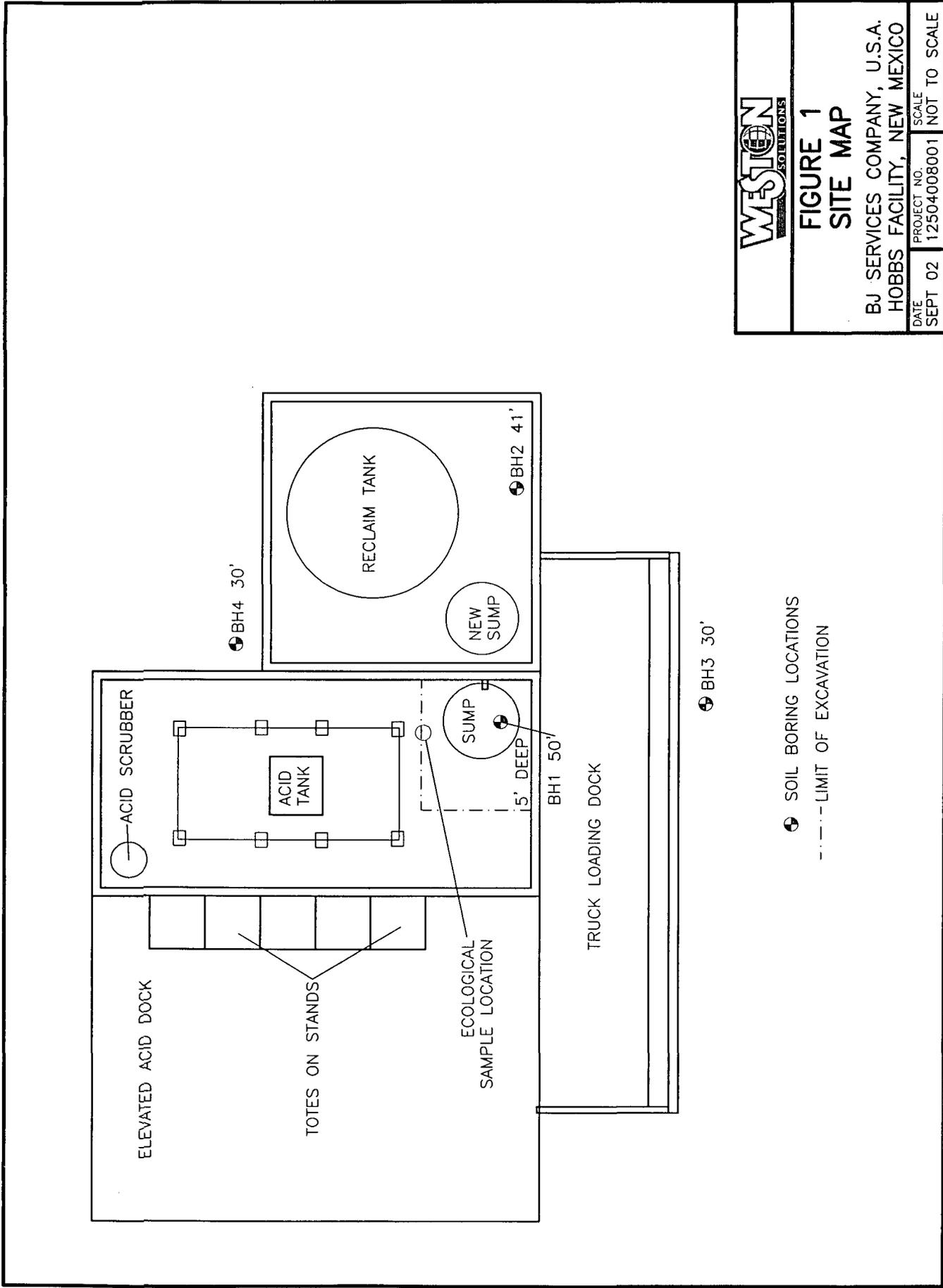


FIGURE 1 SITE MAP

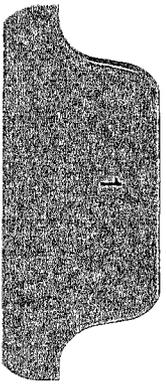
BJ SERVICES COMPANY, U.S.A.
HOBBS FACILITY, NEW MEXICO

DATE	PROJECT NO.	SCALE
SEPT 02	12504008001	NOT TO SCALE

H:\BJ SERVICE\NEW SITE.DWG



● SOIL BORING LOCATIONS
- - - - - LIMIT OF EXCAVATION



**ATTACHMENT 1
LITHOLOGIC LOGS**



Barton Oaks Plaza Two
 901 S. MoPac Expwy, Ste. 475
 Austin, Texas 78746
 512-651-7100 / Fax: 512-651-7101

BORING ID: **BH-1**

PROJECT INFORMATION

DRILLING INFORMATION

PROJECT:	BJ Services Company	DRILLING COMPANY:	Eades Drilling & Pump Service
SITE LOCATION:	Hobbs, NM	DRILLING METHOD:	Air Rotary
JOB NUMBER:	12054.008.001	BORING DIAMETER:	
PROJECT MANAGER:	Robert Chapin	TOTAL DEPTH:	51'
LOGGED BY:	B. Wedgeworth	GROUND ELEVATION:	NORTHING
DATE(S) DRILLED:	07/09/02	TOP OF CASING ELEV:	EASTING

REMARKS:

DEPTH	LITHOLOGY	USCS	DESCRIPTION	OVM	WELL COMPLETION	INSTALLATION NOTES
0			Sump Excavation			
5		SM	Medium brown Silty sand moist, HC odor Hard at 7', Some caliche gravels	132		
10		ML	Med. brown and gray, Silt (decomposed caliche) moist caliche gravels, HC odor.	134 77		
11.0		Calic	Hard caliche in shoe at 11.0' Hard again @ 12.5'	6.6		
15		ML	White, Sandy silt	10		
20			Silty sand, moist, HC or HCL odor	16 15		
25		SM	Hard @ 23'	3.1		
30			Reddish brown, note: pH =8	3.2		
35			Slight HC odor - no staining	2.5		
40			Slight HC odor.	0		
45			Some gravel btw 38.5' & 39' (pieces of sandstone)	0.2		
50			Slight HC odor	0		
51			Black, no sample collected			



Barton Oaks Plaza Two
 901 S. MoPac Expwy, Ste. 475
 Austin, Texas 78746
 512-651-7100 / Fax: 512-651-7101

BORING ID: **BH-2**

PROJECT INFORMATION

DRILLING INFORMATION

PROJECT: **BJ Services Company**
 SITE LOCATION: **Hobbs, NM**
 JOB NUMBER: **12054.008.001**
 PROJECT MANAGER: **Robert Chapin**
 LOGGED BY: **B. Wedgeworth**
 DATE(S) DRILLED: **07/10/02**

DRILLING COMPANY: **Eades Drilling & Pump Service**
 DRILLING METHOD: **Air Rotary**
 BORING DIAMETER:
 TOTAL DEPTH: **41'**

GROUND ELEVATION:	NORTHING	EASTING
TOP OF CASING ELEV:		

REMARKS:

DEPTH	LITHOLOGY	USCS	DESCRIPTION	OVM	WELL COMPLETION	INSTALLATION NOTES
0		AC	8" steel reinforced concrete sump floor			
		MH	dark brown, sandy silt, some gravels, moist, slight HC odor			
5		ML	Lt brown to white, increasing gravel content	0		
10		SM	Medium brown, silty sand, moist, no HC odor or staining	0		
15		SP	Tan to pink, poorly graded sand, somewhat indurated, dry, no odor	0		
20			loose, slight HC odor	0		
25				0		
30				0		
35				0		
40				0		



Barton Oaks Plaza Two
 901 S. MoPac Expwy, Ste. 475
 Austin, Texas 78746
 512-651-7100 / Fax: 512-651-7101

Boring/Well Log

BORING ID: **BH-3**

PROJECT INFORMATION

DRILLING INFORMATION

PROJECT: **BJ Services Company**
 SITE LOCATION: **Hobbs, NM**
 JOB NUMBER: **12054.008.001**
 PROJECT MANAGER: **Robert Chapin**
 LOGGED BY: **B. Wedgeworth**
 DATE(S) DRILLED: **07/09/02**

DRILLING COMPANY: **Eades Drilling & Pump Service**
 DRILLING METHOD: **Air Rotary**
 BORING DIAMETER:
 TOTAL DEPTH: **30'**

GROUND ELEVATION:	NORTHING	EASTING
TOP OF CASING ELEV:		

REMARKS:

DEPTH	LITHOLOGY	USCS	DESCRIPTION	OVM	WELL COMPLETION	INSTALLATION NOTES
0			White to light brown, Silty Sand moist, some gravel.			
5		SM				
		calic	fractured caliche starting about 6 feet			
10		SM	At 10', less caliche, Caliche not solid - appears as lenses.			
		Calic	Becoming hard (caliche) at 12' Caliche ends at 14.5'			
15		SM				
20		GM	White to tan to red, Silty Gravel Dry to moist. Gravel 1/4" to 1" dia. Gravels are caliche			
25		SP	Poorly graded fine sand, some silt. No gravel. No HC odor			
30						



Barton Oaks Plaza Two
 901 S. MoPac Expwy, Ste. 475
 Austin, Texas 78746
 512-651-7100 / Fax: 512-651-7101

BORING ID: **BH-4**

PROJECT INFORMATION

DRILLING INFORMATION

PROJECT: **BJ Services Company**
 SITE LOCATION: **Hobbs, NM**
 JOB NUMBER: **12054.008.001**
 PROJECT MANAGER: **Robert Chapin**
 LOGGED BY: **B. Wedgeworth**
 DATE(S) DRILLED: **07/10/02**

DRILLING COMPANY: **Eades Drilling & Pump Service**
 DRILLING METHOD: **Air Rotary**
 BORING DIAMETER:
 TOTAL DEPTH: **30'**

GROUND ELEVATION:	NORTHING	EASTING
TOP OF CASING ELEV:		

REMARKS:

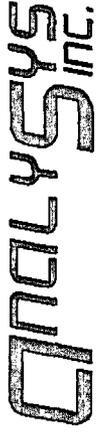
DEPTH	LITHOLOGY	USCS	DESCRIPTION	OVM	WELL COMPLETION	INSTALLATION NOTES
0	[Dotted pattern]	ML	Dark brown Sandy silt, moist, no HC odor, no gravels	0		
5			Color change to white @ 9.5'	0		
10	[Dotted pattern]	SS	White to gray Sandstone, highly fractured, hard, some silty sand	0		
15			Light brown Poorly graded sand, moist, some sandstone gravels	0		
20	[Dotted pattern]	SP		0		
25				0		
30				0		



ATTACHMENT 2
CHAIN-OF-CUSTODY FORMS

CHAIN-OF-CUSTODY

WWW.ANALYSYSINC.COM



Send Reports To:

Company Name Weston Solutions, Inc.
 Address 6501 America's Parkway NE, Suite 800
 City Albuquerque State NM Zip 87110
 ATTN: Bruce Wedgeworth
 Phone 505-284-6227 Fax 505-284-2616

Bill to (if different):

Company Name B.J. Services Company USA
 Address 11211 FM 2920
 City Tomball State TX Zip 77375
 ATTN: Jason Goodwin
 Phone 281-257-2573 Fax 281-257-2585

Rush Status (must be confirmed with lab mgr.):

Project Name/PO#: Acid Stamp Sampler: B. Wedgeworth

Analyses Requested (1)
 Please attach explanatory information as required

TECH - BRO 8015
 TECH - BRO 8015
 BTEX
 BRO 8020

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	Comments
BJHOBBS - BH1 - 5-7	7/9/02	1135	1	X				
BJHOBBS - BH1 - 8-10	7/9/02	1150	1	X				
BJHOBBS - BH1 - 10-12	7/9/02	1210	1	X				Hold
BJHOBBS - BH1 - 12-14	7/9/02	1225	1	X				Hold
BJHOBBS - BH1 - 15-17	7/9/02	1240	1	X				
BJHOBBS - BH1 - DUF	7/9/02	1240	1	X				
BJHOBBS - BH1 - 17-19	7/9/02	1245	1	X				Hold
BJHOBBS - BH1 - 21-21	7/9/02	1255	1	X				Hold
BJHOBBS - BH1 - 21-23	7/9/02	1305	1	X				Hold
BJHOBBS - BH1 - 27-31	7/9/02	1345	1	X				Hold

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting limits (MDL/PQL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Pollutants or ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Sample Relinquished By			Sample Received By		
Name	Affiliation	Date	Name	Affiliation	Date
B. Wedgeworth	Weston Solutions, Inc.	7/11/02			
Bruce Wedgeworth					

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]





June 9, 1997

CERTIFIED MAIL NO. P 414 631 830
RETURN RECEIPT REQUESTED

Mr. Mark Ashley
State of New Mexico
Energy, Minerals, and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
State Land Office Building
Santa Fe, NM 87505

RE: Wastewater Tank System Closure Report
BJ Services Company, U.S.A.
Hobbs, New Mexico Facility

Dear Mr. Ashley:

Please find enclosed the final report, *Wastewater Tank System Closure Report: Four Wastewater Tanks, BJ Services Company, U.S.A. , Hobbs, New Mexico Facility*. This report documents the closure activities and presents all relevant information related to the closure. If you have any questions or concerns regarding the information presented, please call me at (281) 363-7521.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rick N. Johnson'. The signature is written in a cursive style with a long, sweeping horizontal line extending to the right.

Rick N. Johnson
Environmental Specialist

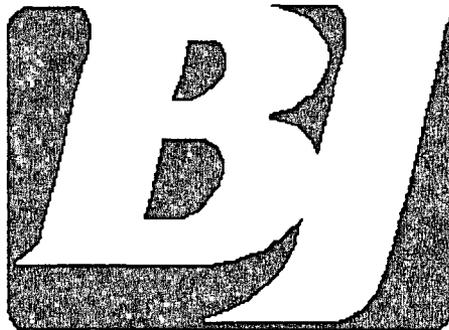
c: Wayne Price, OCD Hobbs Office (1 copy)
Dan Miller, BJ Services Company (1 copy)
JoAnn Cobb, BJ Services Company, U.S.A. (w/o enclosure)
Charles Smith, BJ Services Company, U.S.A. (w/o enclosure)

WASTEWATER TANK SYSTEM REMOVAL REPORT

**Four Wastewater Tanks
BJ Services Company, U.S.A.
Hobbs, New Mexico Facility**

June 9, 1997

Prepared by



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

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	FIELD ACTIVITIES.....	2
2.1	Preparation for Removal.....	2
2.2	Tank Removal and Field Observations.....	3
2.3	Excavation Observations and Sampling	3
2.4	Waste Soil Management.....	4
3.0	CONCLUSIONS AND RECOMMENDATIONS.....	6
3.1	Conclusions.....	6
3.2	Site Specific Considerations	6
3.3	Recommendations	7

FIGURES

TABLES

APPENDICES

FIGURES

Figure 1	Site Location Map
Figure 2	Site Layout Map
Figure 3	Former Wastewater Tank System Diagram
Figure 4	Excavation Dimension and Sample Location Diagram

TABLES

Table 1	Laboratory Analytical Results of Detected Organic Constituents
Table 2	Laboratory Analytical Results of Detected Inorganic Constituents

APPENDICES

Appendix A	Bill-of-Lading for Liquid Disposal
Appendix B	R & B Environmental Waste Characterization Report
Appendix C	Solids Disposal Application and OCD Approval Forms
Appendix D	Bills-of-Lading for Solids Disposal
Appendix E	Photographs of Removal
Appendix F	Removal Contractor Report and Certificate of Tank Destruction
Appendix G	Soil Analytical Laboratory Report
Appendix H	Soil Disposal Documentation

1.0 INTRODUCTION

On March 3, 4, and 5, 1997, four partially underground wastewater storage tanks were permanently removed from service from the BJ Services Company, U.S.A. (BJ Services) facility in Hobbs, New Mexico (see Figures 1 and 2). These tanks were removed based on procedures outlined in the workplan dated November 18, 1996 and approved by the State of New Mexico's Oil Conservation Division (OCD) in a letter dated December 17, 1996.

The removals were performed in accordance with OCD's February 1993 "Unlined Surface Impoundment Closure Guidelines" (Closure Guidelines), the OCD approved workplan, and the conditions in the OCD workplan approval letter. These tanks have been removed from the ground and properly disposed.

2.0 FIELD ACTIVITIES

All field activities related to the removal of the tanks were carried out from January 24 to April 13, 1997. The following sections outline each step of the removal process.

2.1 Preparation for Removal

2.1.1 Liquid Disposal

The tank system liquids were removed by Sonny's Oilfield Services (Sonny's) and transported for treatment at the local publicly-owned treatment works (POTW). Appendix A contains the bill-of-lading for these liquids.

2.1.2 Tank Solids Disposal

Prior to their removal, the wastewater tanks were cleaned and the accumulated solids were properly disposed. R & B Environmental (R & B) drew a four-point composite sample of the material from each tank and volumetrically combined these samples into one, representative, composite sample. This sample was placed in a cooler on ice and was overnighted to Southern Petroleum Laboratories (SPL) using QA/QC procedures.

The analytical results indicated that the material was characteristically non-hazardous (see Appendix B for the R & B report). Therefore, Controlled Recovery, Inc. (CRI) determined that the non-exempt material could be disposed of at their OCD approved disposal site in Hobbs, New Mexico. CRI filed an application with OCD to dispose of the material and verbal approval was granted by Mr. Mark Ashley on February 26, 1997 (see Appendix C for application and approval form).

2.1.3 Tank Cleaning

Sonny's was contracted to remove the material from the tanks, clean the tanks, and transport the material to CRI's disposal facility as approved by OCD. The tanks were cleaned by Sonny's using high pressure brine water and a vacuum truck from February 27 through March 2 (see Appendix D for bills-of-lading).

Tank B (see Figure 3) contained approximately two feet of a material too solid to remove by the procedure outlined above. This material was believed to be concrete and was left in the tank to be removed with the tank.

2.2 Tank Removal and Field Observations

The wastewater tanks were removed by Constructive Solutions, Inc. [CSI] from March 3 to March 6, 1997. BJ Services corporate environmental personnel witnessed the entire removal and documented the field activities. Once the fence surrounding the perimeter of the tanks was removed, excavation of the soils surrounding the tanks commenced.

The wastewater tank system consisted of one 800 gallon and three 12,000 gallon fiberglass tanks. There was an eight-inch polyvinyl chloride (PVC) line entering the small tank and a four-inch PVC line entering each of the larger tanks from the southwest. There was also four-inch PVC line running between each of the tanks. It is unclear from field observations what the liquid flow direction was between the tanks, if any. A layout diagram of the former tank system and associated piping is presented as Figure 3.

Once sufficient soil from around the tanks was removed, CSI maneuvered the tanks out of the excavation and loaded the tanks onto a truck for disposal off-site. Visual inspection upon removal revealed no holes in the body of the tanks; however, the tanks were stained on the outside around the piping juncture cut-outs. Appendix E contains photodocumentation of the removals, while Appendix F contains the contractor report and the tank destruction certificate from CSI.

2.3 Excavation Observations and Soil Sampling

Throughout the removal procedure, CSI and BJ Services environmental personnel observed the soil surrounding the tanks to detect any indication of release. The soil was also field screened using an organic vapor monitor (OVM) [MiniRae] by employing a heated headspace procedure. Soil in the immediate area of the piping-tank junctures and

directly beneath the tanks appeared to be impacted by operation of the former tank system.

Visual impact of surrounding soils was observed directly beneath the three large tanks and in the south and east sidewall. The tank pit was over-excavated to the maximum dimensions of approximately 60 feet by 20 feet by 22 feet (L x W x D) with a 10 feet by 20 feet by 10 feet shelf on the west wall and a 5 feet by 6 feet by 50 feet shelf along the north wall (see Figure 4 for approximate excavation dimensions). Although visual impact was still observed in the bottom and two sidewalls of the excavation, over-excavation beyond these dimensions was impossible due to the space constraints of the facility.

Representative composite confirmation samples were taken from the bottom and sidewalls of the excavation by CSI with the assistance of the excavator and witnessed by BJ Services and OCD environmental personnel (see Figure 4 for sample locations). No sample was collected from the north sidewall due to the size of the excavation (the excavator could not reach this side wall) and safety concerns associated with a person entering the unshored excavation. BJ Services and OCD personnel agreed that this sidewall was not visually impacted and that no sample was necessary. These samples were immediately placed on ice and overnighted to EPIC Laboratories, Inc. (EPIC) in Carrollton, Texas. Laboratory analysis of these samples indicate that chemical constituents remain in the soil above the OCD remediation levels derived for this site (see Table 1 and 2 for data summary and the laboratory reports are presented in Appendix G). Clean soil was imported and used to backfill the majority of the excavation, while some soil excavated from a clean location at the site was used to backfill the remainder of the excavation.

2.4 Waste Soil Management

Excavated and over-excavated soils, which were segregated into 'visually impacted' and 'possibly non-impacted' stockpiles, were placed on plastic and covered. Representative

composite samples of these stockpiles were analyzed to determine the final disposition of the soil. Analytical results of the stockpile composite samples indicated that both were above OCD action levels, but were not characteristically hazardous. Therefore, the tank pit soils were disposed of, after OCD approval, at the CSI OCD disposal facility (operated as Rhino Environmental Goo Yea Landfarm) in Hobbs, New Mexico. Impacted soil disposal documentation is presented in Appendix H.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

The wastewater tank system was removed and space-limited remedial overexcavation was performed in accordance with the OCD approved workplan, the OCD approval letter, and the applicable closure guidelines. The tank system fluids, accumulated solids, tanks, and waste soil were all disposed of properly. Chemical constituents above OCD soil remediation levels derived for this site remain in the soil directly below, and in the south and east sidewalls surrounding the former tank system.

3.2 Site-Specific Considerations

The source has been removed and chemical residuals reside in sub-surface soils (i.e., > two feet). Planned construction activities in this area include the placement of a footing slab to support a process tank. Placement of this footing slab will aid in reducing sub-surface impacted soil from leaching chemical residues to the shallow groundwater. This is achieved by "capping" an area, thereby preventing rainfall from absorbing into the soil. This eliminates the transport mechanism by which chemical residues are released from soil to shallow groundwater directly underneath the footing slab.

There are two groundwater monitoring wells (MW-10 and MW-11) cross- and down-gradient (south and east) of the former tank system excavation (see Figure 2). These wells are associated with the remediation of an upgradient area. This remediation effort includes a biosparge system which functions to increase the dissolved oxygen content in the groundwater, thereby encouraging aerobic degradation of organic compounds by indigenous organisms. BJ Services currently collects data from MW-10 and MW-11 (and from the other wells at the facility) to monitor the effectiveness of this system and to detect organic compound concentration fluctuations in the groundwater. To monitor the effectiveness of the biosparge system, data such as dissolved oxygen and iron content are being collected. Quarterly groundwater monitoring reports are being sent to the OCD

which include groundwater elevation data, analytical data from the on-site monitoring wells, and an assessment of the effectiveness of the biosparge system.

3.3 Recommendations

The following recommendations are designed to address the remediation of media effected, or with the potential to be effected, by operation of the former wastewater tank system:

- ⇒ Leave the chemical residues which reside in subsurface soil in place and allow natural attenuation of these compounds by indigenous organisms;
- ⇒ Install the planned footing slab which will eliminate the transport mechanism from soil to shallow groundwater for chemical residuals in the areas covered by the slab, thereby reducing potential groundwater impact; and,
- ⇒ Continue the monitoring of this area in the quarterly monitoring already in progress at the facility. This includes monitoring of chemical concentrations and bioremediation indicator parameters in the two wells near the former tank system.

FIGURES

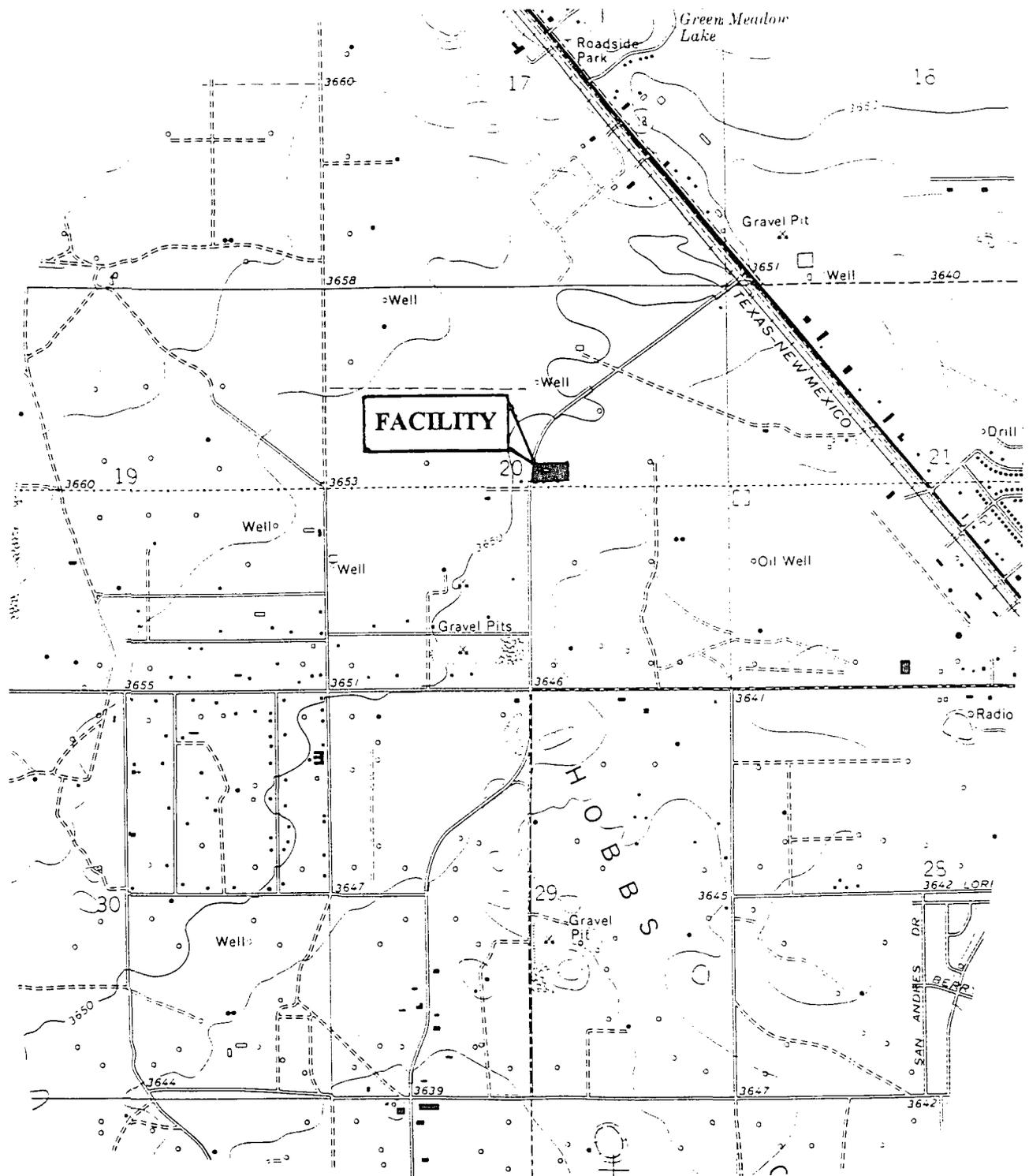


Figure 1: Site Location Map

Last Revised: 3/27/97

BJ Services Company, U.S.A.
 8701 New Trails Drive
 The Woodlands, TX 77381

Facility Name: BJ Services Company, U.S.A.
 Facility Address: 2708 West County Road
 Hobbs, New Mexico

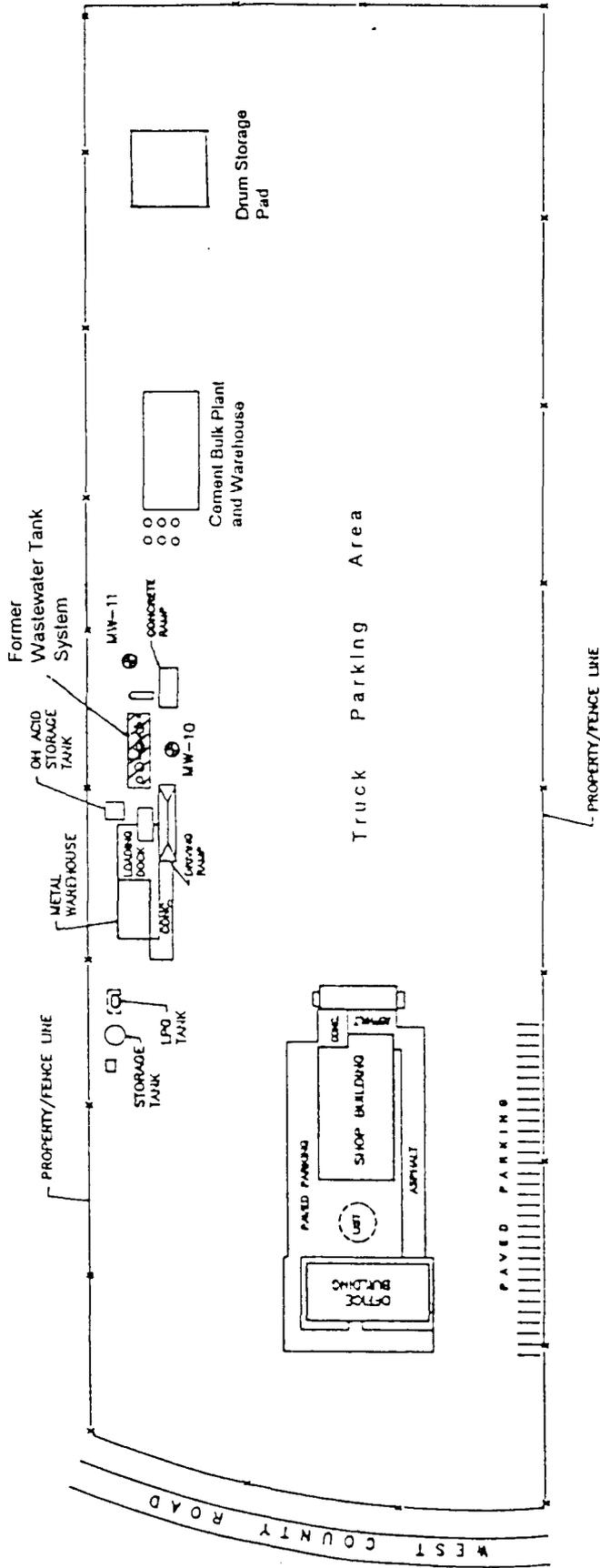


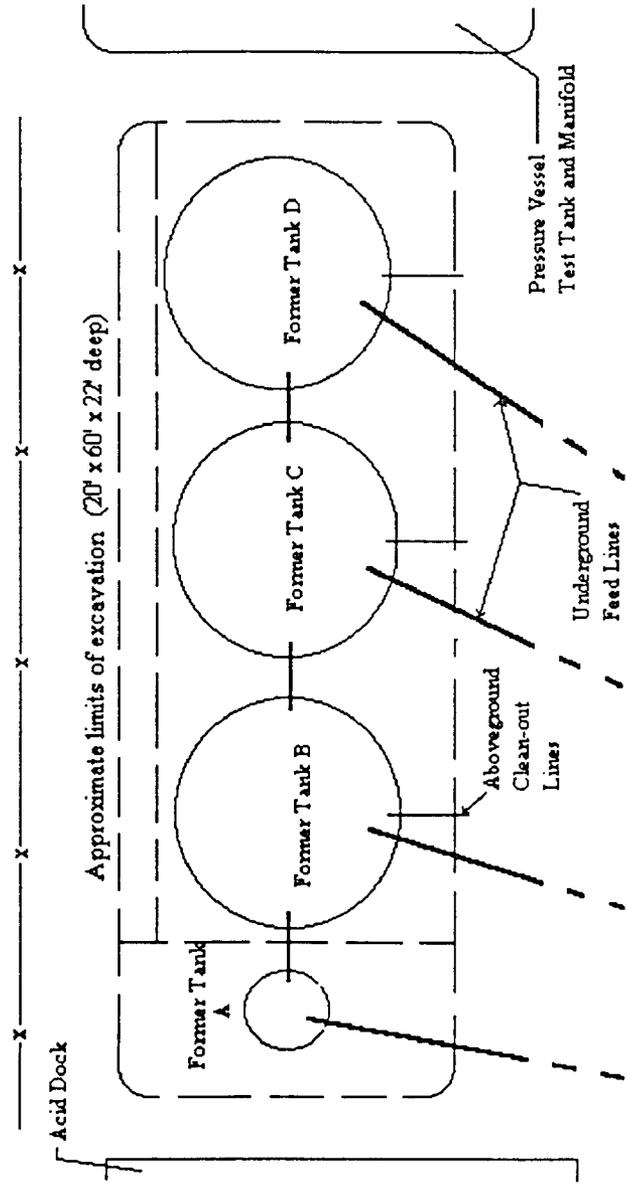
Figure 2: Site Layout Map

Last Revision: 3/27/97

Facility Name: BJ Services Company, U.S.A.
Facility Address: 2708 West County Road
Hobbs, New Mexico



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

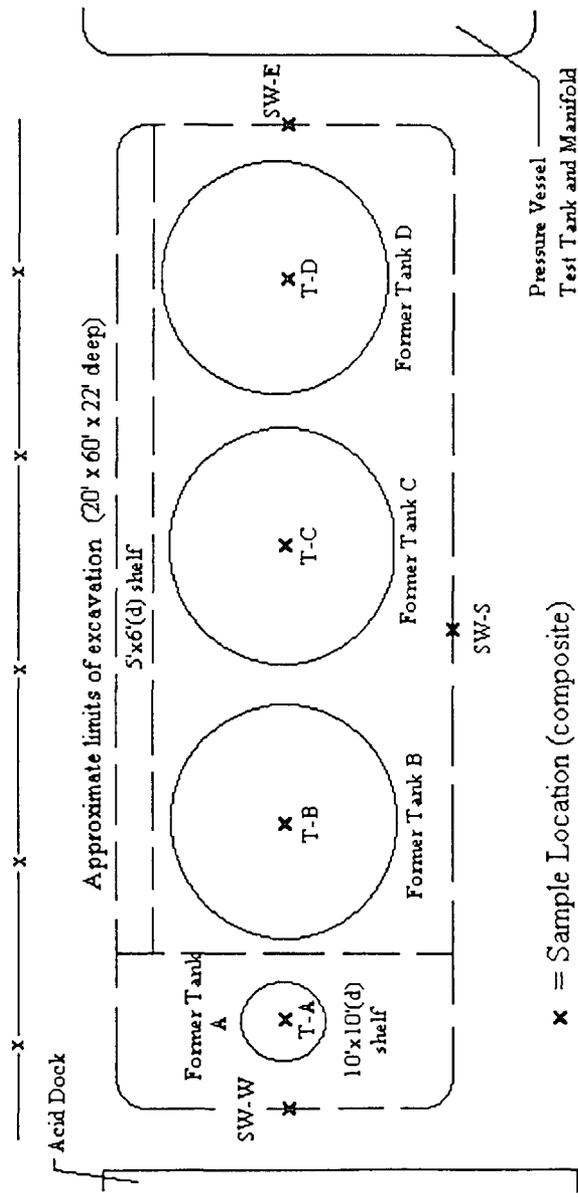


BJ Services Company, U.S.A.
 8701 New Trails Drive
 The Woodlands, Texas 77381

Figure 3: Former Wastewater Tank System Diagram

Last Revision: 3/27/97 Not to Scale

Facility Name: BJ Services Company, U.S.A.
 Facility Address: 2708 West County Road
 Hobbs, New Mexico



x = Sample Location (composite)



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

Figure 4: Excavation Dimension and Sample Location Diagram

Last Revision: 3/27/97 Not to Scale

Facility Name: BJ Services Company, U.S.A.
 Facility Address: 2708 West County Road
 Hobbs, New Mexico

TABLES

Table 1
Wastewater Tank Removal and Site Assessment Report
Laboratory Analytical Results of Detected Organic Constituents

Sample I.D.	Sample Location	Sample Type	Sample Purpose	Sample Date	Total Petroleum Hydrocarbons (mg/kg) (EPA Method 418.1)	Total Petroleum Hydrocarbons as Diesel (mg/kg) (EPA Method 8130)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Fluorene (mg/kg)	Naphthalene (mg/kg)	Phenanthrene (mg/kg)
South Stockpile	South Stockpile	5 pt. Composite	Waste Management	5-Mar-97	1420	NA	BDL	BDL	BDL	BDL	NA	NA	NA
East Stockpile	East Stockpile	5 pt. Composite	Waste Management	5-Mar-97	444	NA	BDL	0.063	0.120	0.6	NA	NA	NA
SW-S	South Sidewall	5 pt. Composite	Confirmation	5-Mar-97	NA	290	BDL	0.065	0.110	<0.88	NA	NA	NA
SW-E	East Sidewall	3 pt. Composite	Confirmation	5-Mar-97	NA	2500	<0.023	0.15	1.3	3.8	NA	NA	NA
SW-W	West Sidewall	3 pt. Composite	Confirmation	5-Mar-97	NA	4.4	BDL	BDL	0.011	0.019	NA	NA	NA
T-A	Below Tank A	5 pt. Composite	Confirmation	5-Mar-97	NA	110	BDL	BDL	BDL	BDL	NA	NA	NA
T-B	Below Tank B	5 pt. Composite	Confirmation	5-Mar-97	<19100	NA	BDL	0.7	1.9	2.1	1.5	<18	1.8
T-C	Below Tank C	5 pt. Composite	Confirmation	5-Mar-97	<21700	NA	BDL	BDL	0.015	0.1	NA	NA	NA
T-D	Below Tank D	5 pt. Composite	Confirmation	5-Mar-97	NA	160	BDL	BDL	0.069	0.43	NA	NA	NA

BDL = Below Detection Limit
 NA = Not Analyzed

Table 2
Wastewater Tank Removal and Site Assessment Report
Laboratory Analytical Results of Detected Inorganic Constituents

Sample I.D.	Sample Location	Sample Type	Sample Purpose	Sample Date	TCLP Arsenic (mg/L)	TCLP Barium (mg/L)	Total Barium (mg/kg)	Total Cadmium (mg/kg)	Total Chromium (mg/kg)	Total Lead (mg/kg)
South Stockpile	South Stockpile	5 pt. Composite	Waste Management	5-Mar-97	BDL	1.2	NA	NA	NA	NA
East Stockpile	East Stockpile	5 pt. Composite	Waste Management	5-Mar-97	0.04	1.3	NA	NA	NA	NA
SW-S	South Sidewall	5 pt. Composite	Confirmation	5-Mar-97	NA	NA	NA	NA	NA	NA
SW-E	East Sidewall	3 pt. Composite	Confirmation	5-Mar-97	NA	NA	76	BDL	5.6	9.7
SW-W	West Sidewall	3 pt. Composite	Confirmation	5-Mar-97	NA	NA	NA	NA	NA	NA
T-A	Below Tank A	5 pt. Composite	Confirmation	5-Mar-97	NA	NA	NA	NA	NA	NA
T-B	Below Tank B	5 pt. Composite	Confirmation	5-Mar-97	NA	NA	360	1.8	3.7	18
T-C	Below Tank C	5 pt. Composite	Confirmation	5-Mar-97	NA	NA	NA	NA	NA	NA
T-D	Below Tank D	5 pt. Composite	Confirmation	5-Mar-97	NA	NA	NA	NA	NA	NA

BDL = Below Detection Limit

NA = Not Analyzed

APPENDICES

APPENDIX A
BILL-OF-LADING FOR LIQUID DISPOSAL

APPENDIX B

R & B ENVIRONMENTAL WASTE CHARACTERIZATION REPORT

R & B Environmental
P. O. Box 1022
Hobbs, New Mexico 88240
(505) 392-8844

*Contracted by
CRE - billed
directly to BJ*

February 17, 1997

Mr. Dan Miller
B J Services
2708 North West County Road
Hobbs, New Mexico 88240

**RE: Waste Characterization
Wash Bay Waste Storage Facility
2708 North West County Road
Hobbs, New Mexico**

R & B Project No. B01501

Mr. Miller:

R & B Environmental has completed waste characterization operations at the above listed site as requested by B J Services. The purpose of the sampling event was to characterize the subject waste for waste classification in accordance with RCRA Subtitle C regulations. The scope of work included collecting a composite sample of the subject waste, submitting the sample for laboratory analysis, and documenting the sampling event.

The subject waste consisted of semi-solid sediments contained in underground storage tanks at the waste storage facility located near the northern boundary of B J Services equipment yard. It is our understanding the purpose of the facility is to store waste generated during equipment cleaning operations, typically wash/rinse water, soap, dirt, and any residues that accumulated on the equipment during service in the oilfield.

R & B personnel inspected the facility and sampled the subject waste on January 24, 1997. The facility contained three fiberglass tanks and one sump. Four-point composite samples were obtained from each storage vessel and volumetrically combined to form one composite sample (SC-1).

Prior to collecting samples, the sampling equipment was decontaminated using Liquinox detergent and a distilled water rinse. A soapy water solution and water rinse were used to clean sampling equipment between samples.

SC-1 was placed into glass jars with teflon-lined lids and zero head space, labeled, sealed with QA/QC seals, and preserved on ice in accordance with EPA protocol for laboratory shipment.

The sample was shipped to SPL Laboratory in Houston for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), RCRA metals, and solid waste characteristics (ignitability, corrosivity, reactivity, and toxicity) analysis.

The laboratory analytical results recorded concentrations well below EPA Regulatory Limits and classify the waste as characteristically non-hazardous. A summary of the analytical results are presented in the enclosed tables. Facsimile copies of the laboratory results are attached. We expect to receive the actual laboratory report this week and will forward copies, including chains-of-custody, to you upon receipt.

R & B Environmental appreciates this opportunity to provide you with our professional services. If you have any questions concerning this project, or if we may be of further service, please do not hesitate to contact us.

Respectfully,

R & B Environmental
BC1501.SAM



F. Wesley Root
Geologist / Hydrologist

Enclosures

TABLE 1 SUMMARY OF SAMPLE ANALYTICAL RESULTS TCLP VOLATILE ORGANIC COMPOUNDS (VOCs) B J Services Wash Bay Storage Facility R & B Project No. B01501			
Volatile Organic Compound Name	Sample ID SC-1 01/24/97	Practical Quantitation Limit (ug/L)	Regulatory Limit (ug/L)
Benzene	190	50	500
2-Butanone	ND	200	200,000
Carbon Tetrachloride	ND	50	500
Chlorobenzene	ND	50	100,000
Chloroform	ND	50	6,000
1,2-Dichloroethane	ND	50	500
1,1-Dichloroethene	ND	50	700
Tetrachloroethene	ND	50	700
Trichloroethene	ND	50	500
Vinyl Chloride	ND	100	200

Analyses were performed using EPA Method 1311 / 8240 by SPL Laboratories.
All results are reported in micrograms per liter; ug/L (parts per billion; ppb) Results listed in bold type exceed EPA Limits.
ND = Non Detect (concentration less than PQL)

TABLE 2 SUMMARY OF SAMPLE ANALYTICAL RESULTS TCLP SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) B J Services Wash Bay Storage Facility R & B Project No. B01501			
Volatile Organic Compound Name	Sample ID SC-1 01/24/97	Practical Quantitation Limit (ug/L)	Regulatory Limit (ug/L)
ortho-Cresol	ND	50	200,000
meta, para-Cresols	ND	100	200,000
1,4-Dichlorobenzene	ND	50	7,500
2,4-Dinitrotoluene	ND	50	130
Hexachlorobenzene	ND	50	130
Hexachlorobutadiene	ND	50	500
Hexachlorocethane	ND	50	3,000
Nitrobenzene	ND	50	2,000
Pentachlorophenol	ND	250	100,000
Pyridine	ND	50	5,000
2, 4, 5-Trichlorophenol	ND	100	400,000
2, 4, 6-Trichlorophenol	ND	50	2,000

Analyses were performed using EPA Method 1311 / 8270 by SPL Laboratories.
All results are reported in micrograms per liter; ug/L (parts per billion; ppb) Results listed in bold type exceed EPA Limits.
ND = Non Detect (concentration less than PQL)

TABLE 3 SUMMARY OF SAMPLE ANALYTICAL RESULTS RCI & TCLP METALS B J Services Wash Bay Storage Facility R & B Project No. B01501				
Tested Parameter Name	Units	Sample ID SC-1 01/24/97	Detection Limit	Regulatory Limit
Reactivity (Cyanide)	mg/Kg	ND	10	250
Reactivity (Sulfide)	mg/Kg	ND	100	500
Soil pH	pH units	5.64	N/A	2 to 12.5
Flash & Fire Point	degrees F	>210	N/A	>140
Arsenic (As)	mg/L	ND	0.20	5.00
Selenium (Se)	mg/L	ND	0.20	1.00
Cadmium (Cd)	mg/L	ND	0.01	1.00
Chromium (Cr)	mg/L	ND	0.02	5.00
Lead (Pb)	mg/L	ND	0.10	5.00
Silver (Ag)	mg/L	ND	0.01	5.00
Barium (Ba)	mg/L	ND	1.00	100.00
Mercury (Hg)	mg/L	ND	0.0004	0.20

Analyses were performed by SPL Laboratories.
 using EPA Methods: 1311 / 6010A, 7470, SW846/7 3.4.2, 7.3 3.2, 9045C, ASTM D92-85.
 Results listed in bold type exceed EPA Limits. ND = Non Detect (concentration less than detection limit)

Certificate of Analysis No. H9-9701B55-01

R & B Environmental
 P.O. Box 1022
 Hobbs, NM 88240
 ATTN: Wesley Root

02/14/97

PROJECT: BJ Services
 SITE: Hobbs New Mexico
 SAMPLED BY: R & B Services
 SAMPLE ID: SC-1

PROJECT NO: B01501
 MATRIX: LEACHATE
 DATE SAMPLED: 01/24/97 14:25:00
 DATE RECEIVED: 01/29/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS	RL Δ
Benzene	190	50	ug/L	500
2-Butanone	ND	200	ug/L	200000
Carbon Tetrachloride	ND	50	ug/L	500
Chlorobenzene	ND	50	ug/L	100000
Chloroform	ND	50	ug/L	6000
1,2-Dichloroethane	ND	50	ug/L	500
1,1-Dichloroethene	ND	50	ug/L	700
Tetrachloroethene	ND	50	ug/L	700
Trichloroethene	ND	50	ug/L	500
Vinyl Chloride	ND	100	ug/L	200

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
4-Bromofluorobenzene	50 ug/L	100	86	115
1,2-Dichloroethane-d4	50 ug/L	96	76	114
Toluene-d8	50 ug/L	105	88	110

ANALYZED BY: GT DATE/TIME: 01/31/97 14:46:00
 LEACHATE PREP(ZHE) BY: WLR DATE/TIME: 01/30/97

METHOD: 1311/8240, TCLP Volatiles

NOTES: * - Practical Quantitation Limit ND - Not Detected
 NA - Not Analyzed
 Δ - Regulatory Limit. Reference Federal Register 55, 11862 (3/29/90), RFA Toxicity Characteristic Final Rule.

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Certificate of Analysis No. H9-9701B55-01

R & B Environmental
 P.O. Box 1022
 Hobbs, NM 88240
 ATTN: Wesley Root

02/14/97

PROJECT: BJ Services
 SITE: Hobbs New Mexico
 SAMPLED BY: R & B Services
 SAMPLE ID: SC-1

PROJECT NO: B01501
 MATRIX: LEACHATE
 DATE SAMPLED: 01/24/97 14:25:00
 DATE RECEIVED: 01/29/97

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS	RL ▲
ortho-Cresol	ND	50	ug/L	200000
meta, para-Cresols	ND	100	ug/L	200000
1,4-Dichlorobenzene	ND	50	ug/L	7500
2,4-Dinitrotoluene	ND	50	ug/L	130
Hexachlorobenzene	ND	50	ug/L	130
Hexachlorobutadiene	ND	50	ug/L	500
Hexachloroethane	ND	50	ug/L	3000
Nitrobenzene	ND	50	ug/L	2000
Pentachlorophenol	ND	250	ug/L	100000
Pyridine	ND	50	ug/L	5000
2,4,5-Trichlorophenol	ND	100	ug/L	400000
2,4,6-Trichlorophenol	ND	50	ug/L	2000

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
Nitrobenzene-d5	50 ug/L	106	35	114
2-Fluorobiphenyl	50 ug/L	94	43	116
Terphenyl-d14	50 ug/L	83	33	141
Phenol-d5	75 ug/L	102	10	110
2-Fluorophenol	75 ug/L	88	21	110
2,4,6-Tribromophenol	75 ug/L	85	10	123

ANALYZED BY: SC DATE/TIME: 02/04/97 17:45:00
 LEACHATE EXTRACTION BY: SP DATE/TIME: 01/31/97 13:00:00
 METHOD: 1311/8270, TCLP Semivolatiles
 NOTES: * - Practical Quantitation Limit ND - Not Detected
 NA - Not Analyzed
 ▲ - Regulatory Limit. Reference Federal Register 55, 11862 (3/29/90), RCRA Toxicity Characteristic Final Rule.

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance

Certificate of Analysis No. H9-9701B55-01

R & B Environmental
 P.O. Box 1022
 Hobbs, NM 88240
 ATTN: Wesley Root

DATE: 02/14/97

PROJECT: BJ Services
 SITE: Hobbs New Mexico
 SAMPLED BY: R & B Services
 SAMPLE ID: SC-1

PROJECT NO: B01501
 MATRIX: SLUDGE
 DATE SAMPLED: 01/24/97 14:25:00
 DATE RECEIVED: 01/29/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Flash and Fire Point- C.O.C. Method ASTM D92-85 Analyzed by: TB Date: 02/04/97	>210		°F
Mercury, TCLP Leachate Method 7470 A*** Analyzed by: PC Date: 02/10/97	ND	0.0004	mg/L
Acid Digestion of TCLP Leachate, ICP Method 3010A *** Analyzed by: MM Date: 01/31/97	01/31/97		
Lead, TCLP Leachate Method 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.1	mg/L
Soil pH Measured in Water Method 9045C *** Analyzed by: LAR Date: 01/30/97	5.64		pH units
TCLP Leachate Extraction Method 1311 *** Analyzed by: WLR Date: 01/30/97	01/30/97		

ND - Not detected.

Notes: **Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Certificate of Analysis No. H9-9701B55-01

R & B Environmental
 P.O. Box 1022
 Hobbs, NM 88240
 ATTN: Wesley Root

DATE: 02/14/97

PROJECT: BJ Services
 SITE: Hobbs New Mexico
 SAMPLED BY: R & B Services
 SAMPLE ID: SC-1

PROJECT NO: B01501
 MATRIX: SLUDGE
 DATE SAMPLED: 01/24/97 14:25:00
 DATE RECEIVED: 01/29/97

ANALYTICAL DATA

PARAMETER	RESULTS	DETECTION LIMIT	UNITS
Silver, TCLP Leachate Method 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.01	mg/L
Arsenic, TCLP Leachate Method 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.2	mg/L
Barium, TCLP Leachate Method 6010A *** Analyzed by: JM Date: 02/04/97	ND	1	mg/L
Cadmium, TCLP Leachate Method 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.01	mg/L
Chromium, TCLP Leachate Method 6010A *** Analyzed by: JM Date: 02/04/97	ND	0.02	mg/L
Cyanide-Reactive Method 7.313.2 *** Analyzed by: IP Date: 02/05/97	ND	10	mg/Kg

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
 **Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
 ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Certificate of Analysis No. H9-9701B55-01

R & B Environmental
P.O. Box 1022
Hobbs, NM 88240
ATTN: Wesley Root

DATE: 02/14/97

PROJECT: BJ Services
SITE: Hobbs New Mexico
SAMPLED BY: R & B Services
SAMPLE ID: SC-1

PROJECT NO: B01501
MATRIX: SLUDGE
DATE SAMPLED: 01/24/97 14:25:00
DATE RECEIVED: 01/29/97

PARAMETER	ANALYTICAL DATA	RESULTS	DETECTION LIMIT	UNITS
TCLP Leachate Extraction Method 1311 *** Analyzed by: WLR Date: 01/30/97		01/30/97		
Zero Headspace extraction Method 1311 Analyzed by: WLR Date: 01/30/97		01/30/97		
Selenium, TCLP Leachate Method 6010A *** Analyzed by: JM Date: 02/04/97		ND	0.2	mg/L
Sulfide-Reactive Method 7.3.4.2 *** Analyzed by: IP Date: 02/05/97		ND	100	mg/Kg

ND - Not detected.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 18th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: The analyses are performed in accordance with EPA guidelines for quality assurance.

APPENDIX C

SOLIDS DISPOSAL APPLICATION AND OCD APPROVAL FORMS

02-18-1997 10:21AM
Box 1700
Hobbs, NM 88241-1980
District II - (505) 748-1283
P. S. First
Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Road
Aztec, NM 87410
District IV - (505) 827-7131

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

Originated 8/8/97

Submit Origin:
Plus 1 Cop
to appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator B J Services
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site Hobbs yard
2. Management Facility Destination Controlled Recovery, Inc.	6. Transporter Sonny's
3. Address of Facility Operator P.O. Box 369 Hobbs,	8. State New Mexico
7. Location of Material (Street Address or ULSTR) 2708 West County Road Hobbs, NM	
9. <u>Circle One:</u> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

The following analytical is from the B J Services Hobbs yard. The waste was generated by washing trucks. I have included a certificate of waste and a chain of custody.

Estimated Volume 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Billie Charo TITLE: office manager DATE: 02/18/97
Waste Management Facility Authorized Agent

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

(This space for State Use)

APPROVED BY: _____	TITLE: _____	DATE: _____
APPROVED BY: _____	TITLE: _____	DATE: _____

**CERTIFICATE OF WASTE STATUS
NON-EXEMPT WASTE MATERIAL
"AS REQUIRED BY NEW MEXICO OIL CONSERVATION DIVISION"**

COMPANY/GENERATOR B J Services

ADDRESS 2708 West County Road Hobbs, New Mexico

GENERATING SITE B J Services Hobbs Yard

COUNTY Lea STATE NM

TYPE OF WASTE Sump sludge

ESTIMATED VOLUME 400 bbls

GENERATING PROCESS washing trucks

REMARKS _____

NMOCD FACILITY CONTROLLED RECOVERY INC.

TRUCKING COMPANY Sonny's

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 "hazardous or listed waste" pursuant to the provisions of 40 CFR, Part 261, Subparts C and D, has not 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.

AGENT _____
SIGNATURE

NAME Dan Miller
PRINTED

ADDRESS 2708 West County Road Hobbs, NM 88240

DATE 02/18/97

District I - (505) 393-0100
 P. O. Box 1980
 Hobbs, NM 88241-1980
 District II - (505) 748-1283
 811 S. Fr.
 Artesia, NM 88210
 District III - (505) 334-6178
 1000 Rio Blasus 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-150
 Originated 2/8/95
 Submit Original
 Plus 1 Copy
 to appropriate
 District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/> <i>2/28/97 per Billie Charo</i>	4. Generator B J Services
Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	5. Originating Site Hobbs yard
2. Management Facility Destination Controlled Recovery, Inc.	6. Transporter Sonny's
3. Address of Facility Operator P.O. Box 369 Hobbs,	8. State New Mexico
7. Location of Material (Street Address or ULSTR) 2708 West County Road Hobbs, NM	
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

The following analytical is from the B J Services Hobbs yard. The waste was generated by washing trucks. I have included a certificate of waste and a chain of custody.

ALL: MR. HAN MARSH - VERBAL APPROVAL
 2/28/97
[Signature]

OLU HOBBS
 RECEIVED
 FEB 18 1997

Estimated Volume 400 bbls cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: *Billie Charo* TITLE: office manager DATE: 02/18/97
Waste Management Facility/Authorized Agent
 TYPE OR PRINT NAME: Billie Charo TELEPHONE NO. (505) 393-1079

(This space for State Use)

APPROVED BY: _____ TITLE: State Rep DATE: 2/18/97

APPROVED BY: _____ TITLE: _____ DATE: _____

APPENDIX D

BILLS-OF-LADING FOR SOLIDS DISPOSAL

P.O. Box 1438
 Hobbs, N.M. 88240
 (505) 393-4521

Sonny's

OILFIELD SERVICES, INC.

HB NO. 42720

Name B S Service
 Address _____

Date 7-7
 Lease Hobbsyd
 Well No. _____
 Order # John

DESTINATION FROM: Hobbsyd TO: CB1

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	<u>T/P 260 BBLs. B5+W TO (CB1)</u>	<u>660.00</u>	<u>11</u>	<u>660.00</u>

Time Start _____ Type Fld. Used B5+W Loaded Miles 40
 Time Stop _____ Equipment ?? Unloaded Miles 40
 Total Hours 4 Mileage _____ Total Miles 80
 Operator: John Off Road Miles _____
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	<u>660.00</u>
Tax	<u>34.65</u>
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	<u>694.65</u>

Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy

Sonny's

OILFIELD SERVICES, INC.

HB NO. 42703

P.O. Box 1438
Hobbs, N.M. 88240
(505) 393-4521

Name BJ Services

Address _____

Date 2-28-97

Lease Yard

Well No. _____

Order # _____

DESTINATION FROM: _____ TO: _____

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	<i>Transport Unit with operator to</i>	<i>57.00</i>	<i>2</i>	<i>114.00</i>
	<i>haul 30 bbls of Blw to Yard</i>	<i>.20</i>	<i>30</i>	<i>6.00</i>
	<i>Use water to jet-out tanks.</i>			

Time Start 2:00 Type Flid. Used B/w Loaded Miles 3
 Time Stop 4:00 Equipment 31 Unloaded Miles 3
 Total Hours 2 Mileage 6 Total Miles 6
 Operator: Virgil Woods Off Road Miles _____
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	<u>120.00</u>
Tax	<u>6.30</u>
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	<u><u>126.30</u></u>

Date _____ Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy

Sonny's

OILFIELD SERVICES, INC.

P.O. Box 1438
 Hobbs, N.M. 88240
 (505) 393-4521

Name ST Services
 Address _____

Date 2-28-97

Lease Yard

Well No. _____

Order # _____

DESTINATION FROM: Loc. TO: CRI

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	<u>Vacuum unit with operator to pull fluid from tanks and dispose of 130 bbls as directed.</u>	<u>60.00</u>	<u>6</u>	<u>360.00</u>

Time Start 17:00 Type Fld. Used off r w Loaded Miles 39
 Time Stop 6:00 Equipment 32 Unloaded Miles 39
 Total Hours 6 Mileage 78 Total Miles 78
 Operator: Tho Off Road Miles _____
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	<u>360.00</u>
Tax	<u>18.90</u>
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	<u>378.90</u>

Date _____ Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy

Sonny's

OILFIELD SERVICES, INC.

P.O. Box 1438
Hobbs, N.M. 88240
(505) 393-4521

Name BI
Address _____

Date 2-28-97

Lease Hobbs Yd

Well No. _____

Order # _____

DESTINATION FROM: BI TO: CRI

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	LOAD & T/P 260 bbl B/S+W to CRI From Tanks	60.00	9.5	570.00

Time Start 9:00 Type Fld. Used BS+W Loaded Miles _____
 Time Stop 5:30 Equipment 36 Unloaded Miles _____
 Total Hours 9 1/2 Mileage _____ Total Miles _____
 Operator: Jim Sawyer Off Road Miles _____
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	570.00
Tax	29.93
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	599.93

Date _____ Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy

Sonny's

OIL FIELD SERVICES, INC.

P.O. Box 1438
 Hobbs, N.M. 88240
 (505) 393-4521

Name BJ Services
 Address _____

Date 2-28-97
 Lease BTA
 Well No. Byris 5WD
 Order # Darrell

DESTINATION FROM: Yard TO: Loc.

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	<u>Transport 120 bbls of Acid to location.</u>	<u>57.00</u>	<u>12</u>	<u>684.00</u>
	<u>Stand by for fluid to be pulled from unit.</u>			

Time Start 3:00 Am Type Fld. Used _____ Loaded Miles 22
 Time Stop 3:00 Pm Equipment _____ Unloaded Miles 22
 Total Hours 12 Mileage 44 Total Miles 44
 Operator: Randy Off Road Miles 2
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	<u>684.00</u>
Tax	<u>35.91</u>
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	<u>719.91</u>

Date _____ Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy

P.O. Box 1438
 Hobbs, N.M. 88240
 (505) 393-4521

Sonny's

OILFIELD SERVICES, INC.

Name BJ Services
 Address _____

Date 3-1-97
 Lease Yard
 Well No. _____
 Order # _____

DESTINATION FROM: Yard TO: Loc.

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	Furnished transport unit with operator to haul 100 Hhp of B/w to location. Used water to put tanks on vacuum units. Could empty tanks.	57.00	12	684.00
		.40	100	40.00

Time Start 7:00 am Type Fld. Used B/w Loaded Miles 2
 Time Stop 7:00 pm Equipment 31 Unloaded Miles 2
 Total Hours 12 Mileage _____ Total Miles 4
 Operator: Virgil Woods Off Road Miles 1
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	<u>724.00</u>
Tax	<u>38.01</u>
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	<u>762.01</u>

Date _____ Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy

Sonny's

OILFIELD SERVICES, INC.

P.O. Box 1438
 Hobbs, N.M. 88240
 (505) 393-4521

Name BJ
 Address _____

Date 3-1
 Lease Hobbs 46
 Well No. _____
 Order # _____

DESTINATION FROM: BJ YARD TO: CRI

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	<u>T/P 260 bbl BSW to CRI</u>	<u>60.00</u>	<u>11</u>	<u>660.00</u>

Time Start 7:00 Type Fld. Used BSW Loaded Miles 40
 Time Stop 6:00 Equipment 36 Unloaded Miles 40
 Total Hours 11 Mileage _____ Total Miles 80
 Operator: Jim Sney Off Road Miles _____
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	<u>660.00</u>
Tax	<u>34.65</u>
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	<u>694.65</u>

Date _____ Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy

Sonny's

OILFIELD SERVICES, INC.

P.O. Box 1438
Hobbs, N.M. 88240
(505) 393-4521

Name BJ
Address _____

Date 3-2

Lease Hobbs Y6
Well No. _____

DESTINATION FROM: BJ TO: CRI

Order # Dan

CODE	DESCRIPTION OF WORK	RATE	HOURS BBLs.	AMOUNT
	<u>T/P 260 bbl BS/W + O</u> <u>CRI</u>	<u>60.00</u>	<u>11.5</u>	<u>690.00</u>

Time Start 7:30 Type Fld. Used BS/W Loaded Miles _____
 Time Stop 7:00 Equipment 3/6 Unloaded Miles _____
 Total Hours 1 1/2 Mileage _____ Total Miles _____
 Operator: [Signature] Off Road Miles _____
 Company Representative: _____

Fuel Adj. Cost	
Sub Total	<u>690.00</u>
Tax	<u>36.23</u>
Chemical	
Brine Water	
Fuel	
Fresh Water	
TOTAL	<u>726.23</u>

Date _____ Accepted _____

White - File Copy Canary - Invoice Copy Pink - Yard Copy Gold - Customer Copy



A.A. OILFIELD SERVICE, INC.

P.O. BOX 5208
HOBBS, NEW MEXICO 88241-5208

WORK TICKET

INVOICE DATE: 3/05/91
INVOICE NO.: 107032

CUSTOMER NO: 2070

WEADON:

SOLD TO

53 SERVICES COMPANY
P.O. BOX 4442
HOUSTON TX 77214

LOCATION: HOBBS PARK
AUTHORIZED BY: [Signature]

QUANTITY	DESCRIPTION	PRICE/UNIT	AMOUNT
TICKET # 73202	DATE 3/05/91	TICKET # DATE	TIME # DATE
	PET #1 YAMBUUGH - DISBORN - PROOF PULLED 3 BALS SPILLED - LIGHT FROM PET AND HAULED TO O.P.E. - SETTED OUT AT O.R.E.		
5.00	VACUUM TRUCK	\$36.00/HR	\$180.00
0.10	CONTROLLED RECOVERY INC - DISPOSAL	\$2.00/BL	\$2.00
0.00	CONTROLLED RECOVERY INC - CALL OUT CHARGE	\$50.00/17	\$50.00
0.00	CONTROLLED RECOVERY INC - JET CUT	\$40.00/17	\$40.00

INVOICE SUB-TOTAL ----- \$300.00
GROSS RECEIPTS TAX 6.0002 ----- \$18.02
INVOICE TOTAL ----- \$318.02

Handwritten notes:
11/20/91
RWT 3/2/91

OPERATOR: _____
APPROVED BY: _____

THIS IS NOT AN INVOICE



A.A. OILFIELD SERVICE, INC.

P.O. BOX 5208
HOBBS, NEW MEXICO 88241-5208

WORK TICKET

INVOICE DATE: 3/05/97
INVOICE NO.: 107532

CUSTOMER NO: 2070

VENDOR:

SOLD TO

SO SERVICES COMPANY
P O BOX 4442
HOUSTON TX 77011

LOCATION: HOBBS TANK
AUTHORIZED BY: L. WALLER

QUANTITY	DESCRIPTION	UNIT	AMOUNT
TICKET #	DATE	TICKET #	DATE
73202	3/05/97		
	#27 1/2 YARBROUGH 5:30PM-2:00PM PULLED 3 BALS SPILLED FLUID FROM PIT AND HAULED TO OFFICE. SETTED OUT AT O.R.I.		
1.00	VACUUM TRUCK	\$28.00HR	\$28.00
1.00	CONTROLLED RECOVERY INC.	\$24.00BL	\$24.00
1.00	DISPOSAL		
1.00	CONTROLLED RECOVERY INC.	\$50.00LT	\$50.00
	CALL OUT CHARGE		
1.00	CONTROLLED RECOVERY INC.	\$40.00PT	\$40.00
	JET OUT		
	INVOICE SUB-TOTAL		\$300.25
	GROSS RECEIPTS TAX 6.000%		\$18.02
	INVOICE TOTAL		\$318.27

Handwritten notes:
Hobbs NM
3/5/97
RWS

OPERATOR: _____

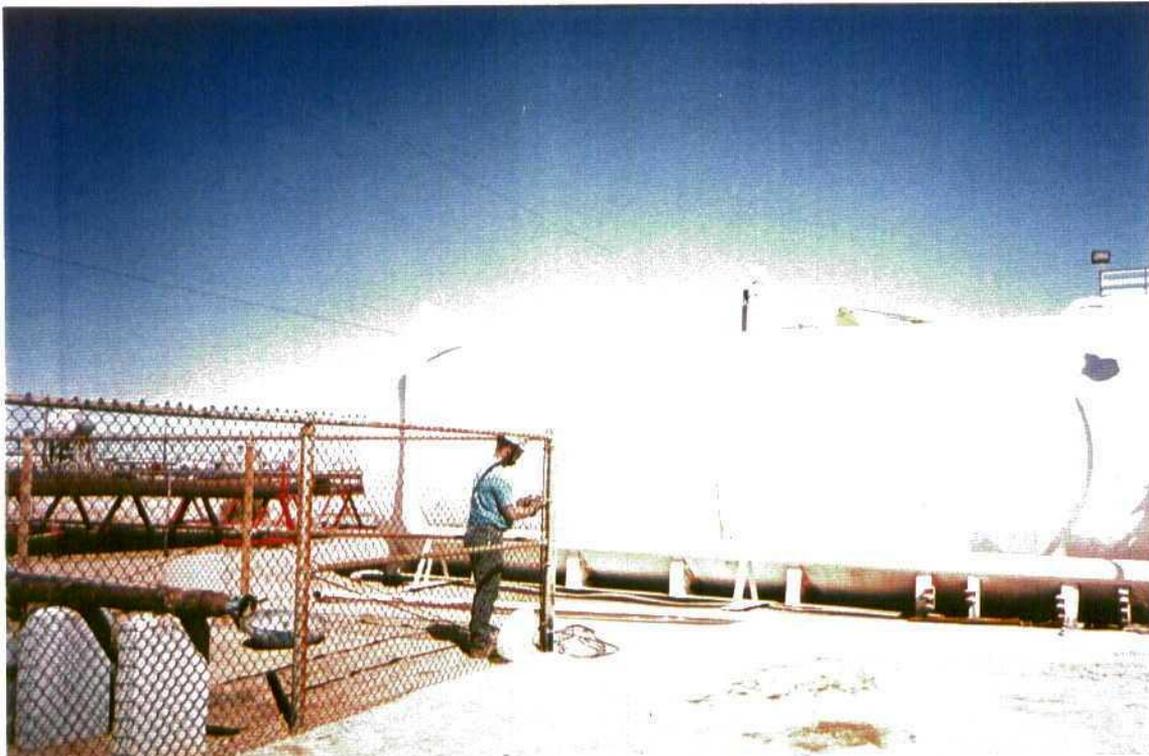
APPROVED BY: _____

THIS IS NOT AN INVOICE

APPENDIX E
PHOTOGRAPHS OF REMOVAL



Photograph #1
Three 12,000 gallon wastewater tanks prior to removal



Photograph #2
Fence removal



Photograph #3

All four wastewater tanks prior to removal; excavator positioning to begin digging



Photograph #4

800 gallon wastewater tank exposed



Photograph #5
All four wastewater tanks exposed



Photograph #6
Three large wastewater tanks exposed; 800 gallon tank removed



Photograph #7
Tank C showing piping juncture; Notice stain radiating down from piping juncture



Photograph #8
Capping of pipes coming into the tanks (typical)



Photograph #9
Soil at the bottom of tanks between Tanks B and C



Photograph #10
Soil immediately below Tank C



Photograph #11
Tank C being loaded onto trailer for transport to Rhino landfill (typical loading procedure)



Photograph #12
Stained soil on east sidewall next to Tank D (near piping juncture)



Photograph #13

Condition of tank pit after all four wastewater tanks removed (no overexcavation)



Photograph #14

South sidewall showing visually impacted layer and capped piping



Photograph #15
Tank pit facing west wall after overexcavation (deepest point = 22 feet)



Photograph #16
Visually impacted soil



Photograph #17
Visually non-impacted stockpile segregated showing stockpile sampling



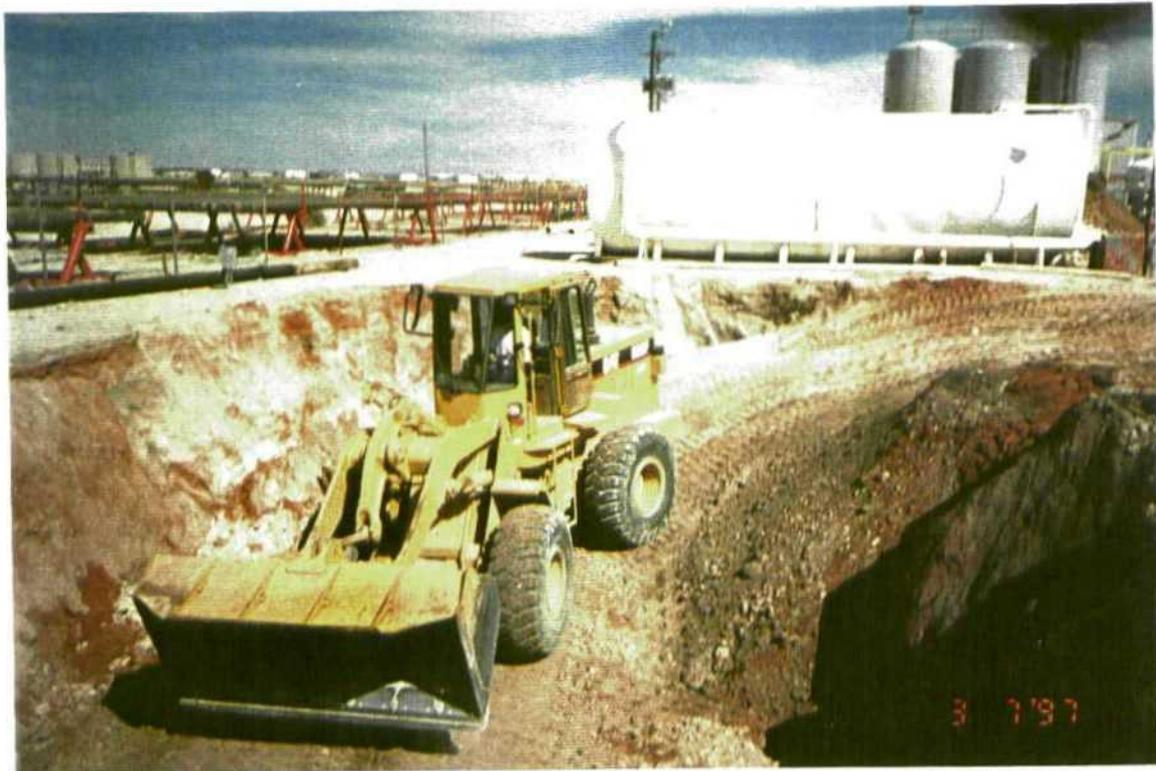
Photograph #18
Visually impacted soil stockpile segregated



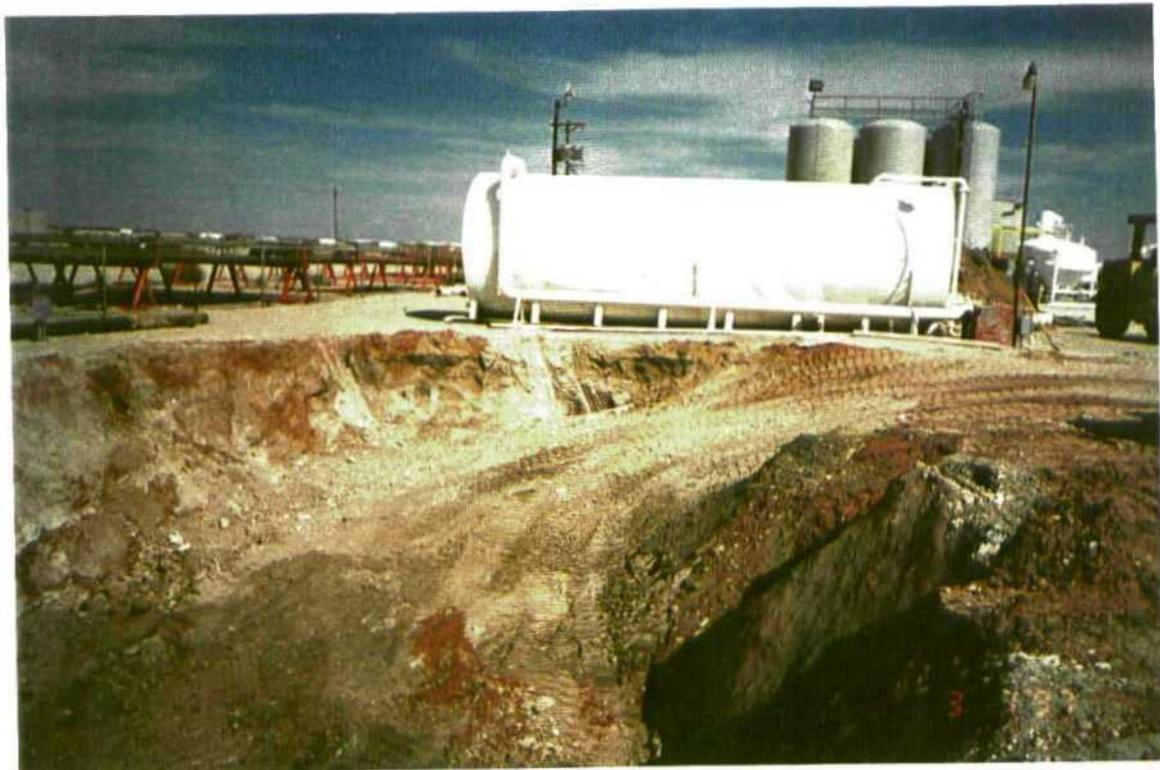
Photograph #19
Soil field screening method



Photograph #20
Tank excavation partially backfilled



Photograph #21
Backfilling excavation



Photograph #22
Tank excavation partially backfilled

APPENDIX F

**REMOVAL CONTRACTOR REPORT AND CERTIFICATE OF TANK
DESTRUCTION**



Engineering and
Construction
Services

Constructive Solutions, Inc.

Building a Better Environment

BJ Services Company, USA
UST Removal Report - Hobbs, NM

April 21, 1997

SUMMARY REPORT

BJ Services Company, USA (BJ Services) currently operates a well service and truck fleet maintenance facility located at 2708 West County Road in Hobbs, New Mexico. Constructive Solutions Inc. (CSI) was retained by BJ Services to provide underground storage tank (UST) removal activities at the previously referenced property. The UST removal consisted of three 12,000 gal. USTs and one 800 gal. UST.

On December 17, 1996 New Mexico Energy, Minerals & Natural Resources Department, Oil Conversation Division, (OCD) issued their approval of BJ Services plan to remove and remediate the tanks and any contaminated soils at the Hobbs site. CSI submitted a cost estimate to BJ Services on January 6, 1997 for the removal of the above mentioned tanks. Upon the acceptance of CSI's bid, removal activities were scheduled for the week of March 3-7, 1997.

Tank removal activities commenced on Monday, March 3, 1997 and were completed on Wednesday, March 5, 1997. During removal activities hydrocarbon contaminated soils were encountered in tank cavity containing the three 12,000 gal. tanks. This soil was excavated to a depth of 21' without finding the extent of the contamination. All excavated soils were stockpiled on plastic while awaiting disposal. Upon completion of the overexcavation, the tank cavities dimensions were approximately 64' x 23' x 21'.

Backfill activities began on March 7, 1997 with the placement of approximately 200 cyd. of soils that was located on site. An additional 694 cyd. was delivered on site to complete backfill operations. Soil disposal began on April 1, 1997 with soils going to Rhino Environmental Services OCD landfarm. A total of 1,109.37 tons of soil was transported and disposed in the Goo Yea facility.

A handwritten signature in black ink, appearing to read 'Andrew J. Lardoll', is written over a horizontal line.

Andrew J. Lardoll
Project Manager
Constructive Solutions Inc.



Engineering and
Construction
Services

Constructive Solutions, Inc.

Building a Better Environment

**CERTIFICATE OF DESTRUCTION
BILL OF SALE**

Seller of Tanks
BJ Services USA
8701 New Trails Drive
The Woodlands, TX 77381

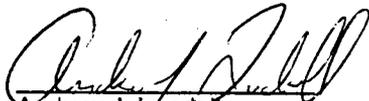
Tank Facility
BJ Services, Hobbs
2708 West County Road
Hobbs, NM 88240

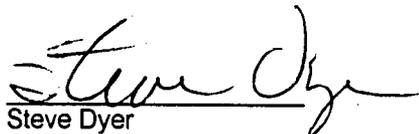
Buyer of Tanks
Constructive Solutions Inc.
P.O. Box 25547
Albuquerque, NM 87125

Tank Identification: (3) - 12,000 gallon and (1) 800 gallon oil / gas well waste water tanks

The ownership of the above referenced tank was transferred to Constructive Solutions Inc. (CSI). Upon transfer of ownership to CSI, all future liabilities connected with the tanks from the date of the destruction was relieved from the former tank owner.

I certify that the above described tanks have been disposed of in accordance with all applicable local, state and federal regulations.


Andrew J. Landolf
Project Manager


Steve Dyer
Albuquerque Operations Manager

APPENDIX G
SOIL ANALYTICAL LABORATORY REPORT



LABORATORIES, INC.

ANALYTICAL AND QUALITY CONTROL REPORT

Andy Landoll
RHINO ENVIRONMENTAL, INC.
P.O. Box 25547
300 Broadway NE, 87102
Albuquerque, NM 87125

03/11/1997

EPIC Job Number: 97.00820

Enclosed is the Analytical and Quality Control report for the following samples submitted to the Dallas Division of EPIC Laboratories, Inc. for analysis. Reproduction of this analytical report is permitted only in its entirety.

<u>Sample Number</u>	<u>Sample Description</u>	<u>Date Taken</u>	<u>Date Received</u>
329513	South Stock Pile Composite	03/06/1997	03/07/1997
329514	East Stock Pile Composite	03/06/1997	03/07/1997

EPIC Laboratories, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were within quality control criteria.

Instrument calibration: All calibrations were within method quality control criteria.

Analysis Comments: No Unusual Comments


Jim Rowley
Project Manager

1548 Valwood Parkway, Suite 118, Carrollton, Texas 75006
2621 Ridgpoint Drive, Suite 135, Austin, Texas 78754
13802 Placid Brook Court, Houston, Texas 77059

(972) 406-8100
(512) 928-8905
(281) 286-1400

Fax: (972) 484-2969
Fax: (512) 928-3208
Fax: (281) 256-2424

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/11/1997

EPIC Job Number: 97.00820

Page No.: 2

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Prep	Run	Method Reference
							Batch No.	Batch No.	
SAMPLE NO.	SAMPLE DESCRIPTION						DATE-TIME TAKEN		
329513	South Stock Pile Composite						03/06/1997 09:50		
Cyanide, Reactive	<0.25		mg/kg	0.25	03/07/1997	kwo		497	S-7.3.3.1
pH, Corrosivity	8.17		units	N/A	03/10/1997	kwo		1405	S-7.2.2
Sulfide, Reactive	30		mg/kg	12.5	03/07/1997	kwo		520	S-7.3.4.1
TPH-418.1 (Nonaqueous)	1420		ug/g	10	03/10/1997	bss		1280	E-418.1
ICP Metals - Aqueous	complete				03/10/1997	jmc		1595	
TCLP NON-VOLATILE EXTRACTION	c			COMPLETE	03/11/1997	nmw	524		S-1311
EXTRACTION, ZHE VOLATILE	c	3-7-9		COMPLETE	03/10/1997	jwh	538		S-1311
TCLP-Prep AA, ICP	c			COMPLETE	03/10/1997	nmw	1204		S-3010A
TCLP-Arsenic, ICP	<0.03		mg/L	0.03	03/10/1997	jmc	1204	1528	S-6010A
TCLP-Barium, ICP	1.2		mg/L	0.01	03/10/1997	jmc	1204	1415	S-6010A
TCLP-Cadmium, ICP	<0.01		mg/L	0.01	03/10/1997	jmc	1204	1590	S-6010A
TCLP-Chromium, ICP	<0.01		mg/L	0.01	03/10/1997	jmc	1204	1589	S-6010A
TCLP-Lead, ICP	<0.03		mg/L	0.03	03/10/1997	jmc	1204	1598	S-6010A
TCLP-Mercury, CVAA	<0.02	EDL	mg/L	0.0002	03/10/1997	bwb		1342	S-7470A
TCLP-Selenium, ICP	<0.04		mg/L	0.04	03/10/1997	jmc	1204	1527	S-6010A
TCLP-Silver, ICP	<0.01		mg/L	0.01	03/10/1997	jmc	1204	1580	S-6010A
Ignitability	DNB	DNB			03/10/1997	bss		311	ASTM D4982-89
EXTRACTION, TCLP SEMI-VOLATILE	c	3-7-9			03/07/1997	jwh	447		S-1311
EPA 8020-NONAQ									
Benzene	<10		ug/kg	10	03/07/1997	zst		929	S-8020A
Ethylbenzene	<10		ug/kg	10	03/07/1997	zst		929	S-8020A
Toluene	<10		ug/kg	10	03/07/1997	zst		929	S-8020A
Xylenes, Total	<10		ug/kg	10	03/07/1997	zst		929	S-8020A
SURR: a,a,a-TFT	96		% Rec	50-130	03/07/1997	zst		929	
BN/A ANALYSIS	c					dtw		240	E-625/S-8270
Prep, TCLP - BNA	c	3-10-		complete	03/10/1997	jwh	438		S-3510
TCLP-ACID EXTRACTABLES - 8270									
TCLP-Cresols, Total	<0.066		mg/L	0.066	03/10/1997	dtw	438	421	S-8270A
TCLP-Pentachlorophenol	<0.33		mg/L	0.33	03/10/1997	dtw	438	421	S-8270A
TCLP-2,4,5-Trichlorophenol	<0.066		mg/L	0.066	03/10/1997	dtw	438	421	S-8270A
TCLP-2,4,6-Trichlorophenol	<0.066		mg/L	0.066	03/10/1997	dtw	438	421	S-8270A
SURR: 2-Fluorophenol	66		% Rec	21-100	03/10/1997	dtw	438	421	S-8270A
SURR: Phenol-d5	56		% Rec	10-94	03/10/1997	dtw	438	421	S-8270A
SURR: 2,4,6-Tribromophenol	68		% Rec	10-123	03/10/1997	dtw	438	421	S-8270A
TCLP-BASE NEUTRALS - 8270									
TCLP-1,4-Dichlorobenzene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A
TCLP-2,4-Dinitrotoluene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A
TCLP-Hexachlorobenzene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A

DNB - Does not burn.

EDL - Elevated Detection Limit due to matrix interference.

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/11/1997

EPIC Job Number: 97.00820

Page No.: 3

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting	Date	Analyst	Prep	Run	Method Reference
				Limit	Analyzed	Initials	Batch No.	Batch No.	
SAMPLE NO. 329513	SAMPLE DESCRIPTION South Stock Pile Composite					DATE-TIME TAKEN 03/06/1997 09:50			
TCLP-Hexachlorobutadiene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A
TCLP-Hexachloroethane	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A
TCLP-Nitrobenzene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A
TCLP-Pyridine	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A
SURR: 2-Fluorobiphenyl	84		% Rec	43-116	03/10/1997	dtw	438	420	S-8270A
SURR: Nitrobenzene-d5	80		% Rec	35-114	03/10/1997	dtw	438	420	S-8270A
SURR: Terphenyl-d14	88		% Rec	33-141	03/10/1997	dtw	438	420	S-8270A
TCLP-8240									
TCLP-Benzene	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-2-Butanone (MEK)	<0.50		mg/L	0.50	03/08/1997	acg		1175	S-8240A
TCLP-Carbon Tetrachloride	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-Chlorobenzene	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-Chloroform	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-1,2-Dichloroethane	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-1,1-Dichloroethene	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-Tetrachloroethene	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-Trichloroethene	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A
TCLP-Vinyl chloride	<0.05		mg/L	0.05	03/08/1997	acg		1175	S-8240A
SURR: 1,2-Dichloroethane-d4	107		% Rec	76-114	03/08/1997	acg		1175	S-8240A
SURR: Toluene-d8	101		% Rec	88-110	03/08/1997	acg		1175	S-8240A
SURR: 4-Bromofluorobenzene	108		% Rec	86-115	03/08/1997	acg		1175	S-8240A
SAMPLE NO. 329514	SAMPLE DESCRIPTION East Stock Pile Composite					DATE-TIME TAKEN 03/06/1997 11:01			
Cyanide, Reactive	<0.25		mg/kg	0.25	03/07/1997	kwo	497		S-7.3.3.1
pH, Corrosivity	8.36		units	N/A	03/10/1997	kwo	1405		S-7.2.2
Sulfide, Reactive	<12.5		mg/kg	12.5	03/07/1997	kwo	520		S-7.3.4.1
TPH-418.1 (Nonaqueous)	444		ug/g	10	03/10/1997	bss	1280		E-418.1
ICP Metals - Aqueous	complete				03/10/1997	jmc		1595	
TCLP NON-VOLATILE EXTRACTION	c			COMPLETE	03/11/1997	nmw	524		S-1311
EXTRACTION, ZHE VOLATILE	c 3-7-9			COMPLETE	03/10/1997	jwh	538		S-1311
TCLP-Prep AA, ICP	c			COMPLETE	03/10/1997	nmw	1204		S-3010A
TCLP-Arsenic, ICP	0.04		mg/L	0.03	03/10/1997	jmc	1204	1528	S-6010A
TCLP-Barium, ICP	1.3		mg/L	0.01	03/10/1997	jmc	1204	1415	S-6010A
TCLP-Cadmium, ICP	<0.01		mg/L	0.01	03/10/1997	jmc	1204	1590	S-6010A

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/11/1997

EPIC Job Number: 97.00820

Page No.: 4

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference	
SAMPLE NO.	SAMPLE DESCRIPTION							DATE-TIME TAKEN		
329514	East Stock Pile Composite							03/06/1997 11:01		
TCLP-Chromium, ICP	<0.01		mg/L	0.01	03/10/1997	jmc	1204	1589	S-6010A	
TCLP-Lead, ICP	<0.03		mg/L	0.03	03/10/1997	jmc	1204	1598	S-6010A	
TCLP-Mercury, CVAA	<0.02	EDL	mg/L	0.0002	03/10/1997	bwb		1342	S-7470A	
TCLP-Selenium, ICP	<0.04		mg/L	0.04	03/10/1997	jmc	1204	1527	S-6010A	
TCLP-Silver, ICP	<0.01		mg/L	0.01	03/10/1997	jmc	1204	1580	S-6010A	
Ignitability	DNB	DNB			03/10/1997	bss		311	ASTM D4982-89	
EXTRACTION, TCLP SEMI-VOLATILE	c	3-7-9			03/07/1997	jwh	447		S-1311	
EPA 8020-NONAQ										
Benzene	<10		ug/kg	10	03/07/1997	zst		929	S-8020A	
Ethylbenzene	120		ug/kg	10	03/07/1997	zst		929	S-8020A	
Toluene	63		ug/kg	10	03/07/1997	zst		929	S-8020A	
Xylenes, Total	600		ug/kg	10	03/07/1997	zst		929	S-8020A	
SURR: a,a,a-TFT	88		% Rec	50-130	03/07/1997	zst		929		
BN/A ANALYSIS	c					dtw		240	E-625/S-8270	
Prep, TCLP - BNA	c	3-10-		complete	03/10/1997	jwh	438		S-3510	
TCLP-ACID EXTRACTABLES - 8270										
TCLP-Cresols, Total	<0.066		mg/L	0.066	03/10/1997	dtw	438	421	S-8270A	
TCLP-Pentachlorophenol	<0.33		mg/L	0.33	03/10/1997	dtw	438	421	S-8270A	
TCLP-2,4,5-Trichlorophenol	<0.066		mg/L	0.066	03/10/1997	dtw	438	421	S-8270A	
TCLP-2,4,6-Trichlorophenol	<0.066		mg/L	0.066	03/10/1997	dtw	438	421	S-8270A	
SURR: 2-Fluorophenol	62		% Rec	21-100	03/10/1997	dtw	438	421	S-8270A	
SURR: Phenol-d5	54		% Rec	10-94	03/10/1997	dtw	438	421	S-8270A	
SURR: 2,4,6-Tribromophenol	68		% Rec	10-123	03/10/1997	dtw	438	421	S-8270A	
TCLP-BASE NEUTRALS - 8270										
TCLP-1,4-Dichlorobenzene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A	
TCLP-2,4-Dinitrotoluene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A	
TCLP-Hexachlorobenzene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A	
TCLP-Hexachlorobutadiene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A	
TCLP-Hexachloroethane	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A	
TCLP-Nitrobenzene	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A	
TCLP-Pyridine	<0.066		mg/L	0.066	03/10/1997	dtw	438	420	S-8270A	
SURR: 2-Fluorobiphenyl	76		% Rec	43-116	03/10/1997	dtw	438	420	S-8270A	
SURR: Nitrobenzene-d5	76		% Rec	35-114	03/10/1997	dtw	438	420	S-8270A	
SURR: Terphenyl-d14	80		% Rec	33-141	03/10/1997	dtw	438	420	S-8270A	
TCLP-8240										
TCLP-Benzene	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A	
TCLP-2-Butanone (MEK)	<0.50		mg/L	0.50	03/08/1997	acg		1175	S-8240A	
TCLP-Carbon Tetrachloride	<0.025		mg/L	0.025	03/08/1997	acg		1175	S-8240A	

DNB - Does not burn.

EDL - Elevated Detection Limit due to matrix interference.

ANALYTICAL REPORT

Andy Landoll
RHINO ENVIRONMENTAL, INC.
P.O. Box 25547
300 Broadway NE, 87102
Albuquerque, NM 87125

03/11/1997

EPIC Job Number: 97.00820

Page No.: 5

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting Date		Analyst Initials	Prep	Run	Method Reference
				Limit	Analyzed		Batch No.	Batch No.	
SAMPLE NO. 329514	SAMPLE DESCRIPTION East Stock Pile Composite						DATE-TIME TAKEN 03/06/1997 11:01		
TCLP-Chlorobenzene	<0.025		mg/L	0.025	03/08/1997	acg	1175	S-8240A	
TCLP-Chloroform	<0.025		mg/L	0.025	03/08/1997	acg	1175	S-8240A	
TCLP-1,2-Dichloroethane	<0.025		mg/L	0.025	03/08/1997	acg	1175	S-8240A	
TCLP-1,1-Dichloroethene	<0.025		mg/L	0.025	03/08/1997	acg	1175	S-8240A	
TCLP-Tetrachloroethene	<0.025		mg/L	0.025	03/08/1997	acg	1175	S-8240A	
TCLP-Trichloroethene	<0.025		mg/L	0.025	03/08/1997	acg	1175	S-8240A	
TCLP-Vinyl chloride	<0.05		mg/L	0.05	03/08/1997	acg	1175	S-8240A	
SURR: 1,2-Dichloroethane-d4	103		% Rec	76-114	03/08/1997	acg	1175	S-8240A	
SURR: Toluene-d8	102		% Rec	88-110	03/08/1997	acg	1175	S-8240A	
SURR: 4-Bromofluorobenzene	107		% Rec	86-115	03/08/1997	acg	1175	S-8240A	

QUALITY CONTROL REPORT
Continuing Calibration Verification
(CCV)

JOB NUMBER: 97.00820

Analyte	Prep	Run	Method	CCV		CCV	Date	
	Batch	Batch		True	Conc	%		
	No.	No.		Value	Units	Found	Flag	
Cyanide, Reactive		497	S-7.3.3.1	1.0	mg/kg	1.02	102	03/07/1997
Sulfide, Reactive		520	S-7.3.4.1	1000	mg/kg	1000	100	03/07/1997
TPH-418.1 (Nonaqueous)		1280	E-418.1	104	ug/g	106.5	102	03/07/1997
TCLP-Arsenic, ICP		1528	S-6010A	1.00	mg/L	1.02	102	03/10/1997
TCLP-Barium, ICP		1415	S-6010A	1.00	mg/L	1.00	100	03/10/1997
TCLP-Cadmium, ICP		1590	S-6010A	1.00	mg/L	1.02	102	03/10/1997
TCLP-Chromium, ICP		1589	S-6010A	1.00	mg/L	1.04	104	03/10/1997
TCLP-Lead, ICP		1598	S-6010A	1.00	mg/L	1.02	102	03/10/1997
TCLP-Mercury, CVAA		1342	S-7470A	0.50	mg/L	0.51	102	03/10/1997
TCLP-Selenium, ICP		1527	S-6010A	1.00	mg/L	1.05	105	03/10/1997
TCLP-Silver, ICP		1580	S-6010A	1.00	mg/L	1.02	102	03/10/1997
EPA 8020-NONAQ			S-8020A					
Benzene		929	S-8020A	20	ug/kg	18	90	03/07/1997
Ethylbenzene		929	S-8020A	20	ug/kg	26	130	03/07/1997
Toluene		929	S-8020A	20	ug/kg	17	85	03/07/1997
Xylenes, Total		929	S-8020A	60	ug/kg	78	130	03/07/1997
TCLP-ACID EXTRACTABLES - 8270			S-8270A					
TCLP-Cresols, Total		421	S-8270A	0.148	mg/L	0.160	108	03/10/1997
TCLP-Pentachlorophenol		421	S-8270A	0.080	mg/L	0.071	89	03/10/1997
TCLP-2,4,5-Trichlorophenol		421	S-8270A	0.080	mg/L	0.065	81	03/10/1997

Method References and Codes

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

- E-100 through 493: "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.
- E-601 through 625: "Guidelines Establishing Test Procedures for the Analysis of Pollutants", U.S. EPA, 40CFR, Part 136, rev. 1990.
- S-1000 through 9999: "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd Edition, 1986.
- A: "Standard Methods for the Examination of Water and Wastewater", 16th Edition, APHA, 1985.
- SM: "Standard Methods for the Examination of Water and Wastewater", 18th Edition, APHA, 1992.
- D: ASTM Method
- M: Method has been modified
- *: Other Reference

QUALITY CONTROL REPORT
Continuing Calibration Verification
(CCV)

JOB NUMBER: 97.00820

Analyte	Prep	Run	Method	CCV		CCV	Date
	Batch	Batch		True	Units	Conc	
	No.	No.		Value		Found	Flag
TCLP-2,4,6-Trichlorophenol		421	S-8270A	0.080	mg/L	0.067	84
TCLP-BASE NEUTRALS - 8270			S-8270A				
TCLP-1,4-Dichlorobenzene		420	S-8270A	0.080	mg/L	0.072	90
TCLP-2,4-Dinitrotoluene		420	S-8270A	0.080	mg/L	0.070	88
TCLP-Hexachlorobenzene		420	S-8270A	0.080	mg/L	0.062	78
TCLP-Hexachlorobutadiene		420	S-8270A	0.080	mg/L	0.066	83
TCLP-Hexachloroethane		420	S-8270A	0.080	mg/L	0.066	83
TCLP-Nitrobenzene		420	S-8270A	0.080	mg/L	0.068	85
TCLP-Pyridine		420	S-8270A	0.080	mg/L	0.082	103
TCLP-8240			S-8240A				
TCLP-Benzene		1175	S-8240A	0.020	mg/L	0.021	105
TCLP-2-Butanone (MEK)		1175	S-8240A	0.020	mg/L	0.028	140
TCLP-Carbon Tetrachloride		1175	S-8240A	0.020	mg/L	0.025	125
TCLP-Chlorobenzene		1175	S-8240A	0.020	mg/L	0.022	110
TCLP-Chloroform		1175	S-8240A	0.020	mg/L	0.020	100
TCLP-1,2-Dichloroethane		1175	S-8240A	0.020	mg/L	0.020	100
TCLP-1,1-Dichloroethene		1175	S-8240A	0.020	mg/L	0.019	95
TCLP-Tetrachloroethene		1175	S-8240A	0.020	mg/L	0.019	95
TCLP-Trichloroethene		1175	S-8240A	0.020	mg/L	0.020	100
TCLP-Vinyl chloride		1175	S-8240A	0.020	mg/L	0.016	80

Method References and Codes

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

- E-100 through 493: "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.
- E-601 through 625: "Guidelines Establishing Test Procedures for the Analysis of Pollutants", U.S. EPA, 40CFR, Part 136, rev. 1990.
- S-1000 through 9999: "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd Edition, 1986.
- A: "Standard Methods for the Examination of Water and Wastewater", 16th Edition, APHA, 1985.
- SM: "Standard Methods for the Examination of Water and Wastewater", 18th Edition, APHA, 1992.
- D: ASTM Method
- M: Method has been modified
- *: Other Reference

QUALITY CONTROL REPORT BLANKS

JOB NUMBER: 97.00820

Analyte	Prep	Run	Blank Value	Flag	Units	Reporting	Date
	Batch No.	Batch No.				Limit	Analyzed
Cyanide, Reactive		497	<0.25		mg/kg	0.25	03/07/1997
Sulfide, Reactive		520	<12.5		mg/kg	12.5	03/07/1997
TPH-418.1 (Nonaqueous)		1280	<10		ug/g	10	03/07/1997
TCLP-Arsenic, ICP	1204	1528	<0.03		mg/L	0.03	03/10/1997
TCLP-Barium, ICP	1204	1415	<0.01		mg/L	0.01	03/10/1997
TCLP-Cadmium, ICP	1204	1590	<0.01		mg/L	0.01	03/10/1997
TCLP-Chromium, ICP	1204	1589	<0.01		mg/L	0.01	03/10/1997
TCLP-Lead, ICP	1204	1598	<0.03		mg/L	0.03	03/10/1997
TCLP-Mercury, CVAA		1342	<0.0002		mg/L	0.0002	03/10/1997
TCLP-Selenium, ICP	1204	1527	<0.04		mg/L	0.04	03/10/1997
TCLP-Silver, ICP	1204	1580	<0.01		mg/L	0.01	03/10/1997
TCLP-ACID EXTRACTABLES - 8270							
TCLP-Cresols, Total	438	421	<0.066		mg/L	0.066	03/10/1997
TCLP-Pentachlorophenol	438	421	<0.33		mg/L	0.33	03/10/1997
TCLP-2,4,5-Trichlorophenol	438	421	<0.066		mg/L	0.066	03/10/1997
TCLP-2,4,6-Trichlorophenol	438	421	<0.066		mg/L	0.066	03/10/1997
TCLP-BASE NEUTRALS - 8270							
TCLP-1,4-Dichlorobenzene	438	420	<0.066		mg/L	0.066	03/10/1997
TCLP-2,4-Dinitrotoluene	438	420	<0.066		mg/L	0.066	03/10/1997
TCLP-Hexachlorobenzene	438	420	<0.066		mg/L	0.066	03/10/1997
TCLP-Hexachlorobutadiene	438	420	<0.066		mg/L	0.066	03/10/1997
TCLP-Hexachloroethane	438	420	<0.066		mg/L	0.066	03/10/1997
TCLP-Nitrobenzene	438	420	<0.066		mg/L	0.066	03/10/1997
TCLP-Pyridine	438	420	<0.066		mg/L	0.066	03/10/1997
TCLP-8240							
TCLP-Benzene		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-2-Butanone (MEK)		1175	<0.50		mg/L	0.50	03/08/1997
TCLP-Carbon Tetrachloride		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-Chlorobenzene		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-Chloroform		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-1,2-Dichloroethane		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-1,1-Dichloroethene		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-Tetrachloroethene		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-Trichloroethene		1175	<0.025		mg/L	0.025	03/08/1997
TCLP-Vinyl chloride		1175	<0.05		mg/L	0.05	03/08/1997

Advisory Control Limits for Blanks

Metals/Wet Chemistry/Conventionals/GC - All compounds should be less than the Reporting Limit.

GC/MS Semi-Volatiles - All compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the Reporting Limit.

GC/MS Volatiles - Toluene, Methylene chloride, Acetone and Chloroform should be less than 5 times the Reporting Limit. All other volatile compounds should be less than the Reporting Limit.

QUALITY CONTROL REPORT
Laboratory Control Sample
(LCS)

JOB NUMBER: 97.00820

Analyte	Prep	Run	LCS		LCS	LCS	LCS	LCS	LCS		Date Analyzed
	Batch No.	Batch No.	True Conc	Units	Conc Found	% Rec.	Dup Conc. Found	Dup % Rec	% RPD	Flag	
Cyanide, Reactive		497	1000	mg/kg	228	23					03/07/1997
pH, Corrosivity		1405	9.18	units	9.08	99					03/10/1997
Sulfide, Reactive		520	250	mg/kg	260	104					03/07/1997
TPH-418.1 (Nonaqueous)		1280	2660	ug/g	2557	96					03/07/1997
TCLP-Arsenic, ICP	1204	1528	1.00	mg/L	0.96	96					03/10/1997
TCLP-Barium, ICP	1204	1415	1.00	mg/L	0.94	94					03/10/1997
TCLP-Cadmium, ICP	1204	1590	1.00	mg/L	0.94	94					03/10/1997
TCLP-Chromium, ICP	1204	1589	1.00	mg/L	0.96	96					03/10/1997
TCLP-Lead, ICP	1204	1598	1.00	mg/L	0.95	95					03/10/1997
TCLP-Mercury, CVAA		1342	0.50	mg/L	0.41	82	0.52	104	24		03/10/1997
TCLP-Selenium, ICP	1204	1527	1.00	mg/L	0.95	95					03/10/1997
TCLP-Silver, ICP	1204	1580	1.00	mg/L	1.03	103					03/10/1997
EPA 8020-NONAQ											
Benzene		929	100	ug/kg	117	117					03/07/1997
Ethylbenzene		929	100	ug/kg	139	139					03/07/1997
Toluene		929	100	ug/kg	119	119					03/07/1997
Xylenes, Total		929	200	ug/kg	271	136					03/07/1997
TCLP-ACID EXTRACTABLES - 8270											
TCLP-Cresols, Total	438	421	0.30	mg/L	0.170	57	0.169	56	0.7		03/10/1997
TCLP-Pentachlorophenol	438	421	0.10	mg/L	0.048	48	0.046	46	4.3		03/10/1997
TCLP-2,4,5-Trichlorophenol	438	421	0.10	mg/L	0.039	39	0.038	38	2.6		03/10/1997
TCLP-2,4,6-Trichlorophenol	438	421	0.10	mg/L	0.062	62	0.059	59	5		03/10/1997
TCLP-BASE NEUTRALS - 8270											
TCLP-1,4-Dichlorobenzene	438	420	0.10	mg/L	0.072	72	0.071	71	1.4		03/10/1997
TCLP-2,4-Dinitrotoluene	438	420	0.10	mg/L	0.063	63	0.061	61	3.2		03/10/1997
TCLP-Hexachlorobenzene	438	420	0.10	mg/L	0.061	61	0.059	59	3.3		03/10/1997
TCLP-Hexachlorobutadiene	438	420	0.10	mg/L	0.057	57	0.057	57	0		03/10/1997
TCLP-Hexachloroethane	438	420	0.10	mg/L	0.059	59	0.058	58	1.7		03/10/1997
TCLP-Nitrobenzene	438	420	0.10	mg/L	0.062	62	0.062	62	0		03/10/1997
TCLP-Pyridine	438	420	0.10	mg/L	0.074	74	0.067	67	9.9		03/10/1997
TCLP-8240											
TCLP-Benzene		1175	0.020	mg/L	0.021	105	0.019	95	10		03/08/1997
TCLP-2-Butanone (MEK)		1175	0.020	mg/L	0.028	140	0.031	155	10		03/08/1997
TCLP-Carbon Tetrachloride		1175	0.020	mg/L	0.026	130	0.028	140	7.4		03/08/1997
TCLP-Chlorobenzene		1175	0.020	mg/L	0.020	100	0.020	100	0		03/08/1997
TCLP-Chloroform		1175	0.020	mg/L	0.020	100	0.018	90	11		03/08/1997
TCLP-1,2-Dichloroethane		1175	0.020	mg/L	0.020	100	0.020	100	0		03/08/1997
TCLP-1,1-Dichloroethene		1175	0.020	mg/L	0.020	100	0.017	85	16		03/08/1997
TCLP-Tetrachloroethene		1175	0.020	mg/L	0.019	95	0.020	100	5.1		03/08/1997
TCLP-Trichloroethene		1175	0.020	mg/L	0.020	100	0.020	100	0		03/08/1997
TCLP-Vinyl chloride		1175	0.020	mg/L	0.013	65	0.016	80	21		03/08/1997

Advisory Control Limits for LCS

Inorganic Parameters - The LCS recovery should be 80-120%.

QUALITY CONTROL REPORT
Matrix Spike / Matrix Spike Duplicate
(MS / MSD)

JOB NUMBER: 97.00820

Analyte	Prep	Run	MS/MSD	Conc.	Units	Sample	Conc.	MS	Conc.	MSD	RPD	Flag	Date
	Batch	Batch	Sample	Spike			MS	%	MSD	%			
	No.	No.	Number	Added		Result	Result	Rec.	Result	Rec.			Analized
TPH-418.1 (Nonaqueous)		1280	329482	500	ug/g	55	532	95	497	88	7.6		03/07/1997
TPH-418.1 (Nonaqueous)		1280	329578	125	ug/g	<10	114	91	122	98	6.8		03/11/1997
TCLP-Arsenic, ICP	1204	1528	329513	1.00	mg/L	<0.03	1.04	104	1.03	103	1		03/10/1997
TCLP-Barium, ICP	1204	1415	329513	1.00	mg/L	1.2	2.2	100	2.2	100	0		03/10/1997
TCLP-Cadmium, ICP	1204	1590	329513	1.00	mg/L	<0.01	0.93	93	0.91	91	2.2		03/10/1997
TCLP-Chromium, ICP	1204	1589	329513	1.00	mg/L	<0.01	0.98	98	0.96	96	2.1		03/10/1997
TCLP-Lead, ICP	1204	1598	329513	1.00	mg/L	<0.03	0.96	96	0.96	96	0		03/10/1997
TCLP-Selenium, ICP	1204	1527	329513	1.00	mg/L	<0.04	0.96	96	0.97	97	1		03/10/1997
TCLP-Silver, ICP	1204	1580	329513	1.00	mg/L	<0.01	1.01	101	1.01	101	0		03/10/1997
TCLP-Silver, ICP		1580	329000	1.00	mg/L	<0.01	1.01	101	1.01	101	0		03/10/1997
EPA 8020-NONAQ			329482										
Benzene		929	329482	100	ug/kg	<10	114	114	109	109	4.5		03/07/1997
Ethylbenzene		929	329482	100	ug/kg	<10	138	138	130	130	6		03/07/1997
Toluene		929	329482	100	ug/kg	<10	109	109	104	104	4.7		03/07/1997
Xylenes, Total		929	329482	200	ug/kg	<10	269	135	251	126	6.9		03/07/1997
TCLP-8240			329513										
TCLP-Benzene		1175	329513	0.020	mg/L	<0.025	0.023	115	0.020	100	14		03/08/1997
TCLP-2-Butanone (MEK)		1175	329513	0.020	mg/L	<0.50	0.017	85	0.018	90	5.7		03/08/1997
TCLP-Carbon Tetrachloride		1175	329513	0.020	mg/L	<0.025	0.025	125	0.026	130	3.9		03/08/1997
TCLP-Chlorobenzene		1175	329513	0.020	mg/L	<0.025	0.025	125	0.022	110	13		03/08/1997
TCLP-Chloroform		1175	329513	0.020	mg/L	<0.025	0.021	105	0.018	90	15		03/08/1997
TCLP-1,2-Dichloroethane		1175	329513	0.020	mg/L	<0.025	0.023	115	0.021	105	9.1		03/08/1997
TCLP-1,1-Dichloroethene		1175	329513	0.020	mg/L	<0.025	0.021	105	0.018	90	15		03/08/1997
TCLP-Tetrachloroethene		1175	329513	0.020	mg/L	<0.025	0.023	115	0.020	100	14		03/08/1997
TCLP-Trichloroethene		1175	329513	0.020	mg/L	<0.025	0.022	110	0.020	100	9.5		03/08/1997
TCLP-Vinyl chloride		1175	329513	0.020	mg/L	<0.05	0.017	85	0.017	85	0		03/08/1997

Advisory Control Limits for MS/MSDs

Inorganic Parameters - The spike recovery should be 75-125% if the spike amount value is greater than or equal to one fourth of the sample result value. The RPD for the MS/MSD should be less than 20.

NOTE: Matrix Spike Samples may not be samples from this job.

QUALITY CONTROL REPORT
DUPLICATES

JOB NUMBER: 97.00820

<u>Analyte</u>	<u>Prep Batch No.</u>	<u>Run Batch No.</u>	<u>Sample Result</u>	<u>Duplicate Sample Result</u>	<u>Units</u>	<u>RPD</u>	<u>Flag</u>	<u>Date Analyzed</u>
pH, Corrosivity		1405	8.17	8.22	units	0.6		03/10/1997

Advisory Control Limits for Spikes

The spike recovery should be 75-125% if the spike amount is greater than or equal to one fourth of the sample result value.

NOTE: Spike Samples may not be samples from this job.

Advisory Control Limits for Duplicates

The RPD for the sample and duplicate should be less than 20.



LABORATORIES, INC.

ANALYTICAL AND QUALITY CONTROL REPORT

Andy Landoll
RHINO ENVIRONMENTAL, INC.
P.O. Box 25547
300 Broadway NE, 87102
Albuquerque, NM 87125

03/19/1997

EPIC Job Number: 97.00840

Enclosed is the Analytical and Quality Control report for the following samples submitted to the Dallas Division of EPIC Laboratories, Inc. for analysis. Reproduction of this analytical report is permitted only in its entirety.

<u>Sample Number</u>	<u>Sample Description</u>	<u>Date Taken</u>	<u>Date Received</u>
329561	SW-E	03/06/1997	03/07/1997
329562	SW-S	03/06/1997	03/07/1997
329563	SW-W	03/06/1997	03/07/1997
329564	T-A	03/06/1997	03/07/1997
329565	T-B	03/06/1997	03/07/1997
329566	T-C	03/06/1997	03/07/1997
329567	T-D	03/06/1997	03/07/1997

RECEIVED MAR 24 1997

EPIC Laboratories, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Holding Times: All holding times were within method criteria.

Method Blanks: All method blanks were within quality control criteria.

Instrument calibration: All calibrations were within method quality control criteria.

Analysis Comments: No Unusual Comments


Jim Rowley
Project Manager

1555 Valwood Parkway, Suite 100, Carrollton, Texas 75006
2621 Ridgepoint Drive, Suite 135, Austin, Texas 78754
13802 Placid Brook Court, Houston, Texas 77059

(972) 406-8100
(512) 928-8905
(281) 286-1400

Fax: (972) 484-2969
Fax: (512) 928-3208
Fax: (281) 286-2424

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/19/1997

EPIC Job Number: 97.00840

Page No.: 2

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting	Date	Analyst	Prep	Run	Method Reference	
				Limit	Analyzed	Initials	Batch	Batch		
SAMPLE NO.	SAMPLE DESCRIPTION							DATE-TIME TAKEN		
329561	SW-E							03/06/1997 11:52		
Prep, ICP Nonaqueous	c			COMPLETE	03/11/1997	nmw	1161		S-3050A	
ICP Metals - Nonaqueous	COMPLETE			COMPLETE	03/11/1997	jcm		1442		
Arsenic, ICP	<3.0		ug/g	3.0	03/11/1997	jcm	1161	1379	S-6010A	
Barium, ICP	76		ug/g	1.0	03/11/1997	jcm	1161	1260	S-6010A	
Cadmium, ICP	<1.0		ug/g	1.0	03/11/1997	jcm	1161	1551	S-6010A	
Chromium, ICP	5.6		ug/g	1.0	03/11/1997	jcm	1161	1551	S-6010A	
Lead, ICP	9.7		ug/g	3.0	03/11/1997	jcm	1161	1489	S-6010A	
Mercury, CVAA	<0.02		ug/g	0.02	03/10/1997	bwb		1017	S-7470A	
Selenium, ICP	<4.0		ug/g	4.0	03/11/1997	jcm	1161	1386	S-6010A	
Silver, ICP	<1.0	BS	ug/g	1.0	03/11/1997	jcm	1161	1385	S-6010A	
EPA 8020-NONAQ										
Benzene	23		ug/kg	10	03/12/1997	zst		934	S-8020A	
Ethylbenzene	1300		ug/kg	10	03/12/1997	zst		934	S-8020A	
Toluene	150		ug/kg	10	03/12/1997	zst		934	S-8020A	
Xylenes, Total	3800		ug/kg	10	03/12/1997	zst		934	S-8020A	
SURR: a,a,a-TFT	106		% Rec	50-130	03/12/1997	zst		934		
Prep, DRO (Nonaqueous)	c	3-11-			03/12/1997	jwh	55		S-8015M	
DRO-Nonaqueous										
TPH as Diesel	2500		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Kerosene	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Mineral Spirits	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Oil	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Naptha - Medium Alaphatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Naptha - Light Aromatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	

SAMPLE NO.	SAMPLE DESCRIPTION							DATE-TIME TAKEN		
329562	SW-S							03/06/1997 11:56		
EPA 8020-NONAQ										
Benzene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A	
Ethylbenzene	110		ug/kg	10	03/10/1997	zst		931	S-8020A	
Toluene	65		ug/kg	10	03/10/1997	zst		931	S-8020A	
Xylenes, Total	880		ug/kg	10	03/10/1997	zst		931	S-8020A	
SURR: a,a,a-TFT	120		% Rec	50-130	03/10/1997	zst		931		
Prep, DRO (Nonaqueous)	c	3-11-			03/12/1997	jwh	55		S-8015M	
DRO-Nonaqueous										

BS - MS/MSD outside acceptance criteria, bench spike was 85-115%.

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/19/1997

EPIC Job Number: 97.00840

Page No.: 3

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting	Date	Analyst	Prep	Run	Method Reference	
				Limit	Analyzed	Initials	Batch	Batch		
SAMPLE NO.			SAMPLE DESCRIPTION				DATE-TIME TAKEN			
329562			SW-S				03/06/1997 11:56			
TPH as Diesel	290		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Kerosene	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Mineral Spirits	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Oil	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Naptha - Medium Alaphatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	
Naptha - Light Aromatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M	

SAMPLE NO.	SAMPLE DESCRIPTION	DATE-TIME TAKEN
329563	SW-W	03/06/1997 12:45

EPA 8020-NONAO									
Benzene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
Ethylbenzene	11		ug/kg	10	03/10/1997	zst		931	S-8020A
Toluene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
Xylenes, Total	19		ug/kg	10	03/10/1997	zst		931	S-8020A
SURR: a,a,a-TFT	92		% Rec	50-130	03/10/1997	zst		931	
Prep, DRO (Nonaqueous)	c	3-11-			03/12/1997	jwh	55		S-8015M
DRO-Nonaqueous									
TPH as Diesel	4.4		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Kerosene	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Mineral Spirits	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Oil	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Naptha - Medium Alaphatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Naptha - Light Aromatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M

SAMPLE NO.	SAMPLE DESCRIPTION	DATE-TIME TAKEN
329564	T-A	03/06/1997 12:23

EPA 8020-NONAO									
Benzene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
Ethylbenzene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
Toluene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
Xylenes, Total	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
SURR: a,a,a-TFT	107		% Rec	50-130	03/10/1997	zst		931	

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/19/1997

EPIC Job Number: 97.00840

Page No.: 4

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting	Date	Analyst	Prep	Run	Method Reference
				Limit	Analyzed	Initials	Batch	Batch	
SAMPLE NO. 329564	SAMPLE DESCRIPTION T-A				DATE-TIME TAKEN 03/06/1997 12:23				
Prep, DRO (Nonaqueous)	c	3-11-			03/12/1997	jwh	55		S-8015M
DRO-Nonaqueous									
TPH as Diesel	110		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Kerosene	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Mineral Spirits	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Oil	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Naptha - Medium Alaphatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Naptha - Light Aromatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
SAMPLE NO. 329565	SAMPLE DESCRIPTION T-B				DATE-TIME TAKEN 03/06/1997 12:17				
TPH-418.1 (Nonaqueous)	19100		ug/g	10	03/11/1997	bas		1280	E-418.1
Prep, ICP Nonaqueous	c			COMPLETE	03/11/1997	nmw	1161		S-3050A
ICP Metals - Nonaqueous	COMPLETE			COMPLETE	03/11/1997	jcm		1442	
Arsenic, ICP	<3.0		ug/g	3.0	03/11/1997	jcm	1161	1379	S-6010A
Barium, ICP	380		ug/g	1.0	03/11/1997	jcm	1161	1260	S-6010A
Cadmium, ICP	1.8		ug/g	1.0	03/11/1997	jcm	1161	1551	S-6010A
Chromium, ICP	3.7		ug/g	1.0	03/11/1997	jcm	1161	1551	S-6010A
Lead, ICP	18		ug/g	3.0	03/11/1997	jcm	1161	1489	S-6010A
Mercury, CVAA	<0.02		ug/g	0.02	03/12/1997	bwb		1018	S-7470A
Selenium, ICP	<4.0		ug/g	4.0	03/11/1997	jcm	1161	1386	S-6010A
Silver, ICP	<1.0		ug/g	1.0	03/11/1997	jcm	1161	1385	S-6010A
EPA 8020-NONAQ									
Benzene	<150		ug/kg	93	03/10/1997	zst		931	S-8020A
Ethylbenzene	1900		ug/kg	93	03/10/1997	zst		931	S-8020A
Toluene	700		ug/kg	93	03/10/1997	zst		931	S-8020A
Xylenes, Total	21000		ug/kg	93	03/10/1997	zst		931	S-8020A
SURR: a,a,a-TFT	106		% Rec	0	03/10/1997	zst		931	
BN/A ANALYSIS	c					dtw		240	E-625/S-8270
Prep, BNA NONAQUEOUS	c	3-13-			03/13/1997	jwh	543		
BASE/NEUTRALS - 8270									
Acenaphthene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Acenaphthylene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Anthracene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Benzo(a)anthracene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/19/1997

EPIC Job Number: 97.00840

Page No.: 5

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Prep	Run	Method Reference
							Batch No.	Batch No.	
SAMPLE NO. 329565	SAMPLE DESCRIPTION T-B					DATE-TIME TAKEN 03/06/1997 12:17			
Benzo(b)fluoranthene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Benzo(k)fluoranthene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Benzo(g,h,i)perylene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Benzo(a)pyrene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Chrysene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Dibenz(a,h)anthracene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Fluoranthene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Fluorene	1500		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Indeno(1,2,3-cd)pyrene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Naphthalene	18000		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Phenanthrene	1800		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
Pyrene	<660		ug/kg	660	03/19/1997	dtw	543	331	S-8270A
SURR: 2-Fluorobiphenyl	82		% Rec	30-115	03/19/1997	dtw	543	331	S-8270A
SURR: Nitrobenzene-d5	82		% Rec	23-120	03/19/1997	dtw	543	331	S-8270A
SURR: Terphenyl-d14	90		% Rec	18-137	03/19/1997	dtw	543	331	S-8270A
SAMPLE NO. 329566	SAMPLE DESCRIPTION T-C					DATE-TIME TAKEN 03/06/1997 12:06			
TPH-418.1 (Nonaqueous)	21700		ug/g	10	03/11/1997	bss		1280	E-418.1
EPA 8020-NONAQ									
Benzene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
Ethylbenzene	15		ug/kg	10	03/10/1997	zst		931	S-8020A
Toluene	<10		ug/kg	10	03/10/1997	zst		931	S-8020A
Xylenes, Total	100		ug/kg	10	03/10/1997	zst		931	S-8020A
SURR: a,a,a-TFT	116		% Rec	50-130	03/10/1997	zst		931	
SAMPLE NO. 329567	SAMPLE DESCRIPTION T-D					DATE-TIME TAKEN 03/06/1997 11:39			
EPA 8020-NONAQ									
Benzene	<10		ug/kg	10	03/12/1997	zst		934	S-8020A
Ethylbenzene	69		ug/kg	10	03/12/1997	zst		934	S-8020A
Toluene	<10		ug/kg	10	03/12/1997	zst		934	S-8020A

ANALYTICAL REPORT

Andy Landoll
 RHINO ENVIRONMENTAL, INC.
 P.O. Box 25547
 300 Broadway NE, 87102
 Albuquerque, NM 87125

03/19/1997

EPIC Job Number: 97.00840

Page No.: 6

Project Description: BJ Services Hobbs, NM

Analyte	Result	Flag	Units	Reporting Limit	Date Analyzed	Analyst Initials	Prep	Run	Method Reference
							Batch No.	Batch No.	
SAMPLE NO. 329567	SAMPLE DESCRIPTION T-D						DATE-TIME TAKEN 03/06/1997 11:39		
Xylenes, Total	430		ug/kg	10	03/12/1997	zst		934	S-8020A
SURR: a,a,a-TFT	81		% Rec	50-130	03/12/1997	zst		934	
Prep, DRO (Nonaqueous)	c	3-11-			03/12/1997	jwh	55		S-8015M
DRO-Nonaqueous									
TPH as Diesel	180		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Kerosene	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Mineral Spirits	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Oil	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Naptha - Medium Alaphatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M
Naptha - Light Aromatic	<1.0		ug/g	1.0	03/13/1997	dtw	55	42	S-8015M

QUALITY CONTROL REPORT
Continuing Calibration Verification
(CCV)

JOB NUMBER: 97.00840

Analyte	Prep	Run	Method	CCV		CCV	Date	
	Batch	Batch		True	Conc	‡		
	No.	No.		Value	Units	Found	Rec	
TPH-418.1 (Nonaqueous)		1280	E-418.1	104	ug/g	106.5	102	03/07/1997
Arsenic, ICP		1379	S-6010A	1.00	mg/L	1.03	103	03/11/1997
Barium, ICP		1260	S-6010A	1.00	mg/L	0.98	98	03/11/1997
Cadmium, ICP		1551	S-6010A	1.00	mg/L	1.03	103	03/11/1997
Chromium, ICP		1551	S-6010A	1.00	mg/L	1.04	104	03/11/1997
Lead, ICP		1489	S-6010A	1.00	mg/L	1.05	105	03/11/1997
Mercury, CVAA		1017	S-7470A	0.50	ug/g	0.51	102	03/10/1997
Mercury, CVAA		1018	S-7470A	0.50	ug/g	0.53	106	03/12/1997
Selenium, ICP		1386	S-6010A	1.00	mg/L	1.05	105	03/11/1997
Silver, ICP		1385	S-6010A	1.00	mg/L	1.02	102	03/11/1997
EPA 8020-NONAQ			S-8020A					
Benzene		931	S-8020A	20	ug/kg	20	100	03/10/1997
Ethylbenzene		931	S-8020A	20	ug/kg	23	115	03/10/1997
Toluene		931	S-8020A	20	ug/kg	22	110	03/10/1997
Xylenes, Total		931	S-8020A	60	ug/kg	67	112	03/10/1997
EPA 8020-NONAQ			S-8020A					
Benzene		934	S-8020A	20	ug/kg	19	95	03/12/1997
Ethylbenzene		934	S-8020A	20	ug/kg	27	135	03/12/1997
Toluene		934	S-8020A	20	ug/kg	20	100	03/12/1997
Xylenes, Total		934	S-8020A	60	ug/kg	77	128	03/12/1997

Method References and Codes

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

E-100 through 493: "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

E-601 through 625: "Guidelines Establishing Test Procedures for the Analysis of Pollutants", U.S. EPA, 40CFR, Part 136, rev. 1990.

S-1000 through 9999: "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd Edition, 1986.

A: "Standard Methods for the Examination of Water and Wastewater", 16th Edition, APHA, 1985.

SM: "Standard Methods for the Examination of Water and Wastewater", 18th Edition, APHA, 1992.

D: ASTM Method

M: Method has been modified

*: Other Reference

QUALITY CONTROL REPORT
Continuing Calibration Verification
(CCV)

JOB NUMBER: 97.00840

Analyte	Prep	Run	Method	CCV		CCV	Date		
	Batch	Batch		True	Conc	‡			
	No.	No.		Value	Units	Found	Rec	Flag	Analyzed
DRO-Nonaqueous			S-8015M						
TPH as Diesel		42	S-8015M	500	ug/g	486	97		03/13/1997
Kerosene		42	S-8015M	100	ug/g	100	100		03/13/1997
Mineral Spirits		42	S-8015M	100	ug/g	100	100		03/13/1997
Oil		42	S-8015M	100	ug/g	100	100		03/13/1997
Naptha - Medium Alaphatic		42	S-8015M	100	ug/g	100	100		03/13/1997
Naptha - Light Aromatic		42	S-8015M	100	ug/g	100	100		03/13/1997
BASE/NEUTRALS - 8270			S-8270A						
Acenaphthene		331	S-8270A	50	ug/kg	45	90		03/19/1997
Benzo(a)pyrene		331	S-8270A	50	ug/kg	52	104		03/19/1997
Fluoranthene		331	S-8270A	50	ug/kg	57	114		03/19/1997

Method References and Codes

The Quality Control report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

E-100 through 493: "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

E-601 through 625: "Guidelines Establishing Test Procedures for the Analysis of Pollutants", U.S. EPA, 40CFR, Part 136, rev. 1990.

S-1000 through 9999: "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd Edition, 1986.

A: "Standard Methods for the Examination of Water and Wastewater", 16th Edition, APHA, 1985.

SM: "Standard Methods for the Examination of Water and Wastewater", 18th Edition, APHA, 1992.

D: ASTM Method

M: Method has been modified

*: Other Reference

QUALITY CONTROL REPORT BLANKS

JOB NUMBER: 97.00840

Analyte	Prep	Run	Blank Value	Flag	Units	Reporting Limit	Date Analyzed
	Batch No.	Batch No.					
TPH-418.1 (Nonaqueous)		1280	<10		ug/g	10	03/07/1997
Arsenic, ICP	1161	1379	<3.0		ug/g	3.0	03/11/1997
Barium, ICP	1161	1260	<1.0		ug/g	1.0	03/11/1997
Cadmium, ICP	1161	1551	<1.0		ug/g	1.0	03/11/1997
Chromium, ICP	1161	1551	<1.0		ug/g	1.0	03/11/1997
Lead, ICP	1161	1489	<3.0		ug/g	3.0	03/11/1997
Mercury, CVAA		1017	<0.0002		ug/g	0.02	03/10/1997
Mercury, CVAA		1018	<0.0002		ug/g	0.02	03/12/1997
Selenium, ICP	1161	1386	<4.0		ug/g	4.0	03/11/1997
Silver, ICP	1161	1385	<1.0		ug/g	1.0	03/11/1997
EPA 8020-NONAQ							
Benzene		931	<10		ug/kg	10	03/10/1997
Ethylbenzene		931	<10		ug/kg	10	03/10/1997
Toluene		931	<10		ug/kg	10	03/10/1997
Xylenes, Total		931	<10		ug/kg	10	03/10/1997
EPA 8020-NONAQ							
Benzene		934	<10		ug/kg	10	03/12/1997
Ethylbenzene		934	<10		ug/kg	10	03/12/1997
Toluene		934	<10		ug/kg	10	03/12/1997
Xylenes, Total		934	<10		ug/kg	10	03/12/1997
DRD-Nonaqueous							
TPH as Diesel	55	42	<1.0		ug/g	1.0	03/13/1997
Kerosene	55	42	<1.0		ug/g	1.0	03/13/1997
Mineral Spirits	55	42	<1.0		ug/g	1.0	03/13/1997
Oil	55	42	<1.0		ug/g	1.0	03/13/1997
Naptha - Medium Alaphatic	55	42	<1.0		ug/g	1.0	03/13/1997
Naptha - Light Aromatic	55	42	<1.0		ug/g	1.0	03/13/1997
BASE/NEUTRALS - 8270							
Acenaphthene	543	331	<660		ug/kg	660	03/19/1997
Acenaphthylene	543	331	<660		ug/kg	660	03/19/1997
Anthracene	543	331	<660		ug/kg	660	03/19/1997
Benzo(a)anthracene	543	331	<660		ug/kg	660	03/19/1997
Benzo(b)fluoranthene	543	331	<660		ug/kg	660	03/19/1997
Benzo(k)fluoranthene	543	331	<660		ug/kg	660	03/19/1997
Benzo(g,h,i)perylene	543	331	<660		ug/kg	660	03/19/1997
Benzo(a)pyrene	543	331	<660		ug/kg	660	03/19/1997

Advisory Control Limits for Blanks

Metals/Wet Chemistry/Conventionals/GC - All compounds should be less than the Reporting Limit.

GC/MS Semi-Volatiles - All compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the Reporting Limit.

GC/MS Volatiles - Toluene, Methylene chloride, Acetone and Chloroform should be less than 5 times the Reporting Limit. All other volatile compounds should be less than the Reporting Limit.

QUALITY CONTROL REPORT
BLANKS

JOB NUMBER: 97.00840

<u>Analyte</u>	<u>Prep Batch No.</u>	<u>Run Batch No.</u>	<u>Blank Value</u>	<u>Flag</u>	<u>Units</u>	<u>Reporting Limit</u>	<u>Date Analyzed</u>
Chrysene	543	331	<660		ug/kg	660	03/19/1997
Dibenz (a,h) anthracene	543	331	<660		ug/kg	660	03/19/1997
Fluoranthene	543	331	<660		ug/kg	660	03/19/1997
Fluorene	543	331	<660		ug/kg	660	03/19/1997
Indeno (1,2,3-cd) pyrene	543	331	<660		ug/kg	660	03/19/1997
Naphthalene	543	331	<660		ug/kg	660	03/19/1997
Phenanthrene	543	331	<660		ug/kg	660	03/19/1997
Pyrene	543	331	<660		ug/kg	660	03/19/1997

Advisory Control Limits for Blanks

Metals/Wet Chemistry/Conventionals/GC - All compounds should be less than the Reporting Limit.

GC/MS Semi-Volatiles - All compounds should be less than the Reporting Limit except for phthalates which should be less than 5 times the Reporting Limit.

GC/MS Volatiles - Toluene, Methylene chloride, Acetone and Chloroform should be less than 5 times the Reporting Limit. All other volatile compounds should be less than the Reporting Limit.

QUALITY CONTROL REPORT
Laboratory Control Sample
(LCS)

JOB NUMBER: 97.00840

Analyte	Prep	Run	LCS		LCS	LCS	LCS	LCS	LCS	Date	
	Batch	Batch	True	Units	Conc	%	Dup Conc.	Dup	%		
	No.	No.	Conc		Found	Rec.	Found	% Rec	RPD	Flag	Analyzed
TPH-418.1 (Nonaqueous)		1280	2660	ug/g	2557	96					03/07/1997
Arsenic, ICP	1161	1379	100	ug/g	90	90					03/11/1997
Barium, ICP	1161	1260	100	ug/g	93	93					03/11/1997
Cadmium, ICP	1161	1551	100	ug/g	96	96					03/11/1997
Chromium, ICP	1161	1551	100	ug/g	97	97					03/11/1997
Lead, ICP	1161	1489	100	ug/g	99	99					03/11/1997
Mercury, CVAA		1017	0.50	ug/g	0.52	104					03/10/1997
Mercury, CVAA		1018	0.50	ug/g	0.50	100					03/12/1997
Selenium, ICP	1161	1386	100	ug/g	95	95					03/11/1997
Silver, ICP	1161	1385	100	ug/g	92	92					03/11/1997
EPA 8020-NONAQ											
Benzene		931	100	ug/kg	93	93					03/10/1997
Ethylbenzene		931	100	ug/kg	130	130					03/10/1997
Toluene		931	100	ug/kg	98	98					03/10/1997
Xylenes, Total		931	200	ug/kg	263	132					03/10/1997
EPA 8020-NONAQ											
Benzene		934	100	ug/kg	120	120					03/12/1997
Ethylbenzene		934	100	ug/kg	113	113					03/12/1997
Toluene		934	100	ug/kg	109	109					03/12/1997
Xylenes, Total		934	200	ug/kg	220	110					03/12/1997
DRO-Nonaqueous											
TPH as Diesel	55	42	500	ug/g	559	112	510	102	9.2		03/13/1997
Kerosene	55	42	100	ug/g	100	100	100	100			03/13/1997
Mineral Spirits	55	42	100	ug/g	100	100	100	100			03/13/1997
Oil	55	42	100	ug/g	100	100	100	100			03/13/1997
Naptha - Medium Alaphatic	55	42	100	ug/g	100	100	100	100			03/13/1997
Naptha - Light Aromatic	55	42	100	ug/g	100	100	100	100			03/13/1997
BASE/NEUTRALS - 8270											
Acenaphthene	543	331	100	ug/kg	61	61	66	66	7.9		03/19/1997
Pyrene	543	331	100	ug/kg	70	70	72	72	2.8		03/19/1997

Advisory Control Limits for LCS

Inorganic Parameters - The LCS recovery should be 80-120%.

QUALITY CONTROL REPORT
Matrix Spike / Matrix Spike Duplicate
(MS / MSD)

JOB NUMBER: 97.00840

Analyte	Prep	Run	MS/MSD	Conc.	Units	Sample	Conc.	MS	Conc.	MSD	RPD	Flag	Date
	Batch	Batch	Sample	Spike			MS	%	MSD	%			
	No.	No.	Number	Added		Result	Result	Rec.	Result	Rec.			Analyzed
TPH-418.1 (Nonaqueous)		1280	329482	500	ug/g	55	532	95	497	88	7.6		03/07/1997
TPH-418.1 (Nonaqueous)		1280	329578	125	ug/g	<10	114	91	122	98	6.8		03/11/1997
Arsenic, ICP	1161	1379	329561	100	ug/g	<3.0	89	89	89	89	0		03/11/1997
Barium, ICP	1161	1260	329561	100	ug/g	76	167	91	175	99	8.4		03/11/1997
Cadmium, ICP	1161	1551	329561	100	ug/g	<1.0	84	84	80	80	4.9		03/11/1997
Chromium, ICP	1161	1551	329561	100	ug/g	5.6	98	92	84	78	16		03/11/1997
Lead, ICP	1161	1489	329561	100	ug/g	9.7	96	86	83	73	16		03/11/1997
Mercury, CVAA		1017	329081	0.50	ug/g	<0.02	0.47	94	0.50	100	6.1		03/10/1997
Mercury, CVAA		1018	329565	0.50	ug/g	<0.02	0.45	90	0.49	98	8.5		03/12/1997
Selenium, ICP	1161	1386	329561	100	ug/g	<4.0	83	83	71	71	16		03/11/1997
Silver, ICP	1161	1385	329561	100	ug/g	<1.0	62	62	50	50	21	BS	03/11/1997
EPA 8020-NONAQ			329563										
Benzene		931	329563	100	ug/kg	<10	130	130	131	131	0.8		03/10/1997
Ethylbenzene		931	329563	100	ug/kg	11	150	139	150	139	0		03/10/1997
Toluene		931	329563	100	ug/kg	<10	119	119	128	128	7.3		03/10/1997
Xylenes, Total		931	329563	200	ug/kg	19	298	140	299	140	0.4		03/10/1997
EPA 8020-NONAQ			329727										
Benzene		934	329727	100	ug/kg	<10	125	125	129	129	3.1		03/12/1997
Ethylbenzene		934	329727	100	ug/kg	<10	139	139	145	145	4.2		03/12/1997
Toluene		934	329727	100	ug/kg	<10	123	123	130	130	5.5		03/12/1997
Xylenes, Total		934	329727	200	ug/kg	<10	272	136	281	141	3.3		03/12/1997

BS - MS/MSD outside acceptance criteria, bench spike was 85-115%.

Advisory Control Limits for MS/MSDs

Inorganic Parameters - The spike recovery should be 75-125% if the spike amount value is greater than or equal to one fourth of the sample result value. The RPD for the MS/MSD should be less than 20.

NOTE: Matrix Spike Samples may not be samples from this job.



LABORATORIES, INC.
 1548 VALWOOD PARKWAY, SUITE 118
 CARROLLTON, TEXAS 75006
 DALLAS (972) 406-8100
 AUSTIN (512) 928-8905

CHAIN OF CUSTODY RECORD

COMPANY CSI/RINDO ENVIRONMENTAL
 ADDRESS P.O. BOX 25547 ALBUQUERQUE, NM 87125
 PHONE 1-505-242-6464 FAX (505) 247-4941
 PROJECT NAME/LOCATION 6J SERVICES HEADS, N11
 PROJECT NUMBER N11-97-001
 PROJECT MANAGER ANDY LANDOLL

REPORT TO: _____
 INVOICE TO: _____
 P.O. NO. _____
 EPIC QUOTE NO. _____

SAMPLED BY
ERNIE J. McFERRON
 (PRINT NAME)

SIGNATURE

(PRINT NAME)

SIGNATURE

and Type of Containers
23

DATE	TIME	SAMPLE ID/DESCRIPTION	MATRIX	GRAB	COMP	HI	NaOH	HNO ₃	H ₂ SO ₄	OTHER	ANALYSES					COMMENTS
											TPH METH. 8020	TPH METH. 8015	TPH METH. 8015	PAH	TCF VOLATILES SEMI	
3/6/97	11:52	SOUTH STOCK PILE COMPOSITE	Soil		X						X	X	X	X	24HR ON BTEX: TPH & BUST ON TELP - RCI	
3/6/97	11:01	EAST STOCK PILE (COMPOSITE)	Soil		X						X	X	X	X	24HR ON BTEX: TPH & BUST ON TELP - RCI	
3/6/97	11:52	SW-E	Soil		X						X	X	X	X	7 DAY TELP AROUND	
3/6/97	11:56	SW-S	Soil		X						X	X	X	X	7 DAY TELP AROUND	
3/6/97	12:45	SW-W	Soil		X						X	X	X	X	7 DAY TELP AROUND	
3/6/97	12:23	T-A	Soil		X						X	X	X	X	" " " " " "	
3/6/97	12:17	T-B	Soil		X						X	X	X	X	" " " " " "	
3/6/97	12:06	T-C	Soil		X						X	X	X	X	" " " " " "	
3/6/97	11:39	T-D	Soil		X						X	X	X	X	" " " " " "	
NOTE ON SAMPLES SW-E, SW-S, SW-W, T-A & T-D CARBLES SHOW ERR 418 THEY NEED TO BE TPA 8015																

CONDITION OF SAMPLE: BOTTLES INTACT? YES / NO
 FIELD FILTERED? YES / NO

COC SEALS PRESENT AND INTACT? YES / NO
 VOLATILES FREE OF HEADSPACE? YES / NO

TEMPERATURE UPON RECEIPT:
 Bottles supplied by EPIC? YES / NO

SAMPLE REMAINDER DISPOSAL: RETURN SAMPLE REMAINDER TO CLIENT VIA

I REQUEST EPIC TO DISPOSE OF ALL SAMPLE REMAINDERS

DATE 03/06/97 TIME 13:40

RECEIVED BY:

DATE 03/06/97 TIME 10:00

RECEIVED FOR EPIC BY:

RELIQUISHED BY:

DATE 03/06/97 TIME 13:40

RELIQUISHED BY: _____

DATE 3/7/97 TIME 10:00

RECEIVED FOR EPIC BY:

METHOD OF SHIPMENT

REMARKS:

APPENDIX H
SOIL DISPOSAL DOCUMENTATION

CERTIFICATE OF WASTE STATUS

NON-EXEMPT WASTE MATERIAL

ORIGINATION LOCATION: BT Services Company, U.S.A. Hobbs, NM District
SOURCE: Backfill soil surrounding 4 wastewater tanks
DISPOSAL LOCATION: Goo Yea Landfarm

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 the BT Services Company, U.S.A.
_____ concur with the status of the waste from the subject
site.

Name: Rick N. Johnson
Title: Environmental Specialist
Address: 8701 New Trails Drive
The Woodlands, TX 77301
Signature: Rick N. Johnson
Date: 3-13-97

BJ - Hobbs Soil Disposal

Manifest #	Gross Weight	Tare Weight	Net Weight	Tons
160228	78,720	32,340	46,380	23.19
160229	78,790	32,340	46,450	23.23
160230	80,990	32,340	48,650	24.33
160231	80,330	32,330	48,000	24.00
160232	85,880	32,390	53,490	26.75
160233	80,980	32,000	48,980	24.49
160234	70,990	33,800	37,190	18.60
160235	78,930	32,340	46,590	23.30
160236	77,780	32,340	45,440	22.72
160237	74,640	32,390	42,250	21.13
160238	87,300	30,060	57,240	28.62
160239	79,590	32,960	46,630	23.32
160240	78,220	31,780	46,440	23.22
160241	82,110	32,390	49,720	24.86
160242	76,110	30,060	46,050	23.03
160243	84,000	32,960	51,040	25.52
160244	74,450	31,780	42,670	21.34
160245	75,440	30,060	45,380	22.69
160246	83,530	32,390	51,140	25.57
160256	78,920	32,960	45,960	22.98
160366	85,600	31,780	53,820	26.91
160367	75,750	31,780	43,970	21.99
160368	75,080	32,960	42,120	21.06
160369	74,620	30,060	44,560	22.28
160370	82,160	32,390	49,770	24.89
160371	72,960	30,060	42,900	21.45
160372	76,170	31,780	44,390	22.20
160373	82,560	32,960	49,600	24.80
160374	81,370	32,390	48,980	24.49
160375	78,530	30,060	48,470	24.24
160376	78,780	31,780	47,000	23.50
160377	75,900	32,960	42,940	21.47
160378A	81,990	32,390	49,600	24.80
160378B	57,010	32,390	24,620	12.31
160379	79,120	32,390	46,730	23.37
1220664	81,620	32,390	49,230	24.62
1220665	80,160	32,390	47,770	23.89
1220683	82,250	32,960	49,290	24.65
1220686	68,290	30,060	38,230	19.12
1220687	80,930	30,060	50,870	25.44
1220688	87,550	32,390	55,160	27.58
1220689	82,140	32,960	49,180	24.59
1220690	78,200	31,780	46,420	23.21
1220691	87,120	30,060	57,060	28.53
1220693	84,080	32,960	51,120	25.56
1220694	81,380	31,780	49,600	24.80
1220695	81,430	31,780	49,650	24.83

TOTALS	3,720,450	1,501,710	2,218,740	1,109.37
--------	-----------	-----------	-----------	----------



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <i>B. J. SERVICES COMPANY, U.S.A. 2708 W. COUNTY RD. HOBBS, NM 88240</i>				A. State Manifest Document No. № 160228	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7207				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address <i>C.S.I. P.O. BOX 25547 ALBUQUERQUE, NM 87102</i>				D. Transporter's Phone <i>505-242-6464</i> Contact Person: <i>A. Landoll</i>	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address <i>RHINO Environmental 600 YEA Landfarm LEA COUNTY, NM</i>				F. Facility's Phone <i>1-800-762-0241</i> Contact Person: <i>J. Menicucci</i>	
10. Facility ID Number <i>SE/4 SEC. 14 T. 11 SR 38 E Lea county</i>					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <i>Non Hazardous Waste</i>		<i>BULK</i>	<i>23.19</i>	<i>Tons</i>	
b.					
G. Additional Description for Materials Listed Above <i>Hydrocarbon Impacted Soil</i>					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name <i>Don</i>			Signature <i>[Signature]</i>		Date
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <i>Michael Soriano #550-111</i>			Signature <i>[Signature]</i>		Date <i>4/1/97</i>
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name <i>KOYCE COOPER</i>		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature <i>[Signature]</i>			Date <i>4-1-97</i>



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

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of <u>1</u>
3. Generator's Name, Contact Person, and Mailing Address <u>B.J. Services Company U.S.A.</u> <u>2708 W. County Rd.</u> <u>HOBBS, NM 88240</u>		A. State Manifest Document No. <u>NE 160229</u>	
		4. Generator's Phone (505) <u>392-5556</u> Generator's Fax (505) <u>392-7307</u>	
5. Generator's Facility Name, Contact Person, and Physical Address		B. Generator's Facility ID No.	
6. Generator's Facility Phone () Generator's Fax ()		C. Generator's Tank Owner ID No.	
7. Transporter 1 Company Name and Address <u>C.S.I.</u> <u>P.O. BOX 25547</u> <u>Albuquerque, NM 87102</u>		D. Transporter's Phone <u>(505) 242-6464</u> Contact Person: <u>Andy Landoll</u>	
8. Transporter 2 Company Name and Address		E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address <u>RHINO Environmental</u> <u>600 Yea Landfarm</u> <u>Lea County, NM</u>		F. Facility's Phone <u>1-800-762-0291</u> Contact Person: <u>J. Menicucci</u>	
10. Facility ID Number <u>SE 1/4 SEC. 14 T. 11 S. R. 38 E Lea County</u>			
11. Waste Description (including Proper Class, and ID)	12. Containers	13. Total Quantity	14. Unit
a. <u>NON Hazardous Waste</u>	<u>Bulk</u>	<u>23.23</u>	<u>Tons</u>
b.			
G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>			
16. Special Handling Instructions and Additional Information			
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.			
17. Printed/Typed Name		Signature	Date
		<u>[Signature]</u>	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
<u>Michael Soriano #550-111</u>		<u>[Signature]</u>	<u>7/2/97</u>
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
20. Discrepancy Indication Space			
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20.			
Printed/Typed Name		Signature	Date
<u>KAYCE COOPER</u>		<u>[Signature]</u>	<u>4-2-97</u>



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of 1
3. Generator's Name, Contact Person, and Mailing Address BS Services Company U.S.A. 2708 W. County Rd. Hobbs NM 88240		A. State Manifest Document No. NE 160230	
		4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307	
5. Generator's Facility Name, Contact Person, and Physical Address		B. Generator's Facility ID No.	
6. Generator's Facility Phone () Generator's Fax ()		C. Generator's Tank Owner ID No.	
7. Transporter 1 Company Name and Address CSI P.O. Box 25547 Albuquerque, NM 87102		D. Transporter's Phone (505) 742-6464 Contact Person: Andy Landoll	
Transporter 2 Company Name and Address		E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address RHINO Environmental 600 YEA LANDFARM Lea County, NM		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
10. Facility ID Number SE/4 SEC. 14 T. 11 S R38E Lea County			
11. Waste Description (including Proper Class, and ID)	12. Containers	13. Total Quantity	14. Unit
a. Non Hazardous waste	41K	24.33	TONS
b.			
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil			
16. Special Handling Instructions and Additional Information			
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.			
17. Printed/Typed Name		Signature	Date
[Signature]		[Signature]	4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
Michael Soriano 550-111		[Signature]	4-2-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
20. Discrepancy Indication Space			
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20.			
Printed/Typed Name		Signature	Date
ROYCE COOPER		[Signature]	4-2-97



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of 1
3. Generator's Name, Contact Person, and Mailing Address BJ Services Company, USA 2708 W. County Rd Hobbs, NM 88240		A. State Manifest Document No. № 160231	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307		B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address		C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()			
7. Transporter 1 Company Name and Address CSI P.O. Box 25547 Albuquerque, NM 87102		D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll	
8. Transporter 2 Company Name and Address		E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address RHINO Environmental GOC YEA Landfarm Lea County, NM		F. Facility's Phone 1-800-762-0241 Contact Person: J. Mericucci	
10. Facility ID Number SE/4 Sec. 14 T. 11 S R 38 E Lea County			
11. Waste Description (including Proper Class, and ID)	12. Containers	13. Total Quantity	14. Unit
a. Non Hazardous Waste	Bulk	24.00	TONS
b.			
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil			
16. Special Handling Instructions and Additional Information			
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.			
17. Printed/Typed Name		Signature Can Suller	Date 4-14-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name George Gains		Signature George Gains	Date 4-1-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
20. Discrepancy Indication Space			
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20.			
Printed/Typed Name ROCKE COOPER		Signature Rocke Cooper	Date 4-1-97



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <i>BJ Services Company USA 2708 W. County Rd Hobbs, NM 88240</i>				A. State Manifest Document No. № 160232	
				B. Generator's Facility ID No.	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307				C. Generator's Tank Owner ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				6. Generator's Facility Phone () Generator's Fax ()	
7. Transporter 1 Company Name and Address <i>CSI P.O. BOX 25547 Albuquerque, NM 87102</i>				D. Transporter's Phone <i>(505) 242-6464</i> Contact Person: <i>Andy Landoll</i>	
				E. Transporter's Phone Contact Person:	
8. Transporter 2 Company Name and Address				F. Facility's Phone <i>1-800-762-0241</i> Contact Person: <i>J. Menicucci</i>	
9. Designated Facility Name and Site Address <i>Rhino Environmental 600 Yea Landfarm Lea County NM</i>				10. Facility ID Number <i>SE/4 SEC 14 T. 11 SR 38 E Lea County</i>	
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <i>Non Hazardous Waste</i>		<i>Bulk</i>	<i>26.75</i>	<i>TONS</i>	
b.					
G. Additional Description for Materials Listed Above <i>Hydrocarbon Impacted Soil</i>					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature <i>Don Miller</i>		Date <i>4-13-97</i>
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <i>George Goins</i>			Signature <i>George Goins</i>		Date <i>4-2-97</i>
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20.					
Printed/Typed Name <i>ROYCE COOPER</i>			Signature <i>Royce Cooper</i>		Date <i>4-2-97</i>



#37

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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <u>B.S. Services U.S.A. 2708 W. County Rd. Hobbs, NM 88240</u>				A. State Manifest Document No. <u>№ 160233</u>	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address <u>C.S.I. P.O. Box 25547 Albuquerque, NM 87102</u>				D. Transporter's Phone <u>(505) 242-6464</u> Contact Person: <u>Andy Landoll</u>	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address <u>RHINO Environmental 600 Yea Land Farm Lea County NM</u>				F. Facility's Phone <u>1-800-762-0241</u> Contact Person: <u>J. Menicucci</u>	
10. Facility ID Number <u>SE/4sec.14 T.IISR38E Lea County</u>					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <u>Non Hazardous waste</u>		<u>Bulk</u>	<u>24.49</u>	<u>Tons</u>	
b.					
G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature <u>Don Miller</u>		Date <u>4-13-97</u>
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <u>Jerry Kennedy Sr.</u>			Signature <u>JMK</u>		Date <u>4/13/97</u>
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name <u>George Gains</u>		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature <u>George Gains</u>		Date <u>4-3-97</u>	



#73

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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <i>1</i>	
3. Generator's Name, Contact Person, and Mailing Address <i>B.J. Services U.S.A. 2708 W. County Rd Hobbs, NM 88240</i>				A. State Manifest Document No. <i>NE 160234</i>	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()				D. Transporter's Phone <i>(505) 242-6464</i> Contact Person: <i>Andy Landoll</i>	
7. Transporter 1 Company Name and Address <i>C.S.I. P.O. Box 25547 Albuquerque, NM 87102</i>				E. Transporter's Phone Contact Person:	
8. Transporter 2 Company Name and Address				F. Facility's Phone <i>1-800-762-0241</i> Contact Person: <i>J. Memicucci</i>	
9. Designated Facility Name and Site Address <i>Rhino Environmental Goo Yea Landfarm Lea County NM</i>				10. Facility ID Number <i>SE/4 SEC. 14 T. 115R 38E Lea County</i>	
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <i>Non Hazardous Waste</i>		<i>Bulk</i>	<i>18.60</i>	<i>Tons</i>	
b.					
G. Additional Description for Materials Listed Above <i>Hydrocarbon Impacted Soil</i>					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature <i>Alan Miller</i>	Date <i>4-13-97</i>	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <i>Terry Kennedy</i>			Signature <i>[Signature]</i>	Date <i>4/3/97</i>	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name <i>George Goins</i>		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature <i>George Goins</i>		Date <i>4-3-97</i>	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BJ Services USA 2708 W. County Rd Hobbs NM 88240				A. State Manifest Document No. № 160235	
				B. Generator's Facility ID No.	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307				C. Generator's Tank Owner ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll	
6. Generator's Facility Phone () Generator's Fax ()				E. Transporter's Phone Contact Person:	
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87103				F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
8. Transporter 2 Company Name and Address				Contact Person:	
9. Designated Facility Name and Site Address Rhino Environmental 600 Yea Landfarm Lea County, NM				Contact Person:	
10. Facility ID Number SE/4 SEC. 14 T. 115 R 38E Lea County				Contact Person:	
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		Bulk	23.30	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Don Miller	Date 4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Mike Sierra by Hange Davis 550-111			Signature	Date 4-3-97	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ROYCE COOPER		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature Royce Cooper		Date 4-3-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of <u>1</u>
3. Generator's Name, Contact Person, and Mailing Address B. J. Services 2708 W. County Rd Hobbs NM 88240		A. State Manifest Document No. NE 160236	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307		B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address		C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()		D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll	
7. Transporter 1 Company Name and Address C. S. I. P.O. Box 25547 Albuquerque, NM 87102		E. Transporter's Phone Contact Person:	
8. Transporter 2 Company Name and Address		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
9. Designated Facility Name and Site Address Rhino Environmental 600 Yea Landfarm Lea County, NM		10. Facility ID Number SE/4 SEC. 14 T-115 R38 E Lea County	
11. Waste Description (including Proper Class, and ID) a. Non Hazardous Waste b.	12. Containers Bulk	13. Total Quantity 22.72	14. Unit Tons
15. Waste Code			
G. Additional Description for Materials Listed Above Hydrocarbon Impacted water in SOIL			
16. Special Handling Instructions and Additional Information			
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.			
17. Printed/Typed Name [Signature]		Signature [Signature]	Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name [Signature]		Signature [Signature]	Date 4-3-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
20. Discrepancy Indication Space			
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Printed/Typed Name ROYCE COOPER			
Signature [Signature]		Date 4-3-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <u>B.J. Services</u> <u>2708 W. Country Rd.</u> <u>Hobbs NM 88240</u>				A. State Manifest Document No. <u>№ 160237</u>	
4. Generator's Phone <u>(505) 392-5556</u> Generator's Fax <u>(505) 392-7307</u>				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address <u>C.S.I.</u> <u>P.O. Box 25547</u> <u>Albuquerque, NM 87102</u>				D. Transporter's Phone <u>(505) 242-6464</u> Contact Person: <u>Andy Landoll</u>	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address <u>Rhino Environmental</u> <u>600 Yeah Landfarm</u> <u>Lea County, NM</u>				F. Facility's Phone <u>1-800-762-0241</u> Contact Person: <u>J. Menicucci</u>	
10. Facility ID Number <u>SE/45EL147-115R38 E Lea County</u>					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <u>Non Hazardous Waste</u>		<u>Bulk</u>	<u>21.13</u>	<u>Tons</u>	
b.					
G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature		Date
			<u>Ken Mullen</u>		<u>4-13-97</u>
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
<u>George Goins 530-113</u>			<u>George Goins</u>		<u>4-8-97</u>
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20.					
Printed/Typed Name		Signature		Date	
<u>ROYCE COOPER</u>		<u>[Signature]</u>		<u>4-8-97</u>	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <u>B.J. Services</u> <u>2708 W. Country Rd.</u> <u>Hobbs NM 88240</u>			A. State Manifest Document No. <u>NE 160238</u>		
4. Generator's Phone <u>(505) 392-5556</u> Generator's Fax <u>(505) 392-7307</u>			B. Generator's Facility ID No.		
5. Generator's Facility Name, Contact Person, and Physical Address			C. Generator's Tank Owner ID No.		
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address <u>C.S.I.</u> <u>P.O. Box 25547</u> <u>Albuquerque, NM 87102</u>			D. Transporter's Phone <u>(505) 342-6464</u> Contact Person: <u>Andy Landoll</u>		
8. Transporter 2 Company Name and Address			E. Transporter's Phone Contact Person:		
9. Designated Facility Name and Site Address <u>Rhino Environmental</u> <u>600 Yeah Landfarm</u> <u>Lea County, NM</u>			F. Facility's Phone <u>1-800-762-0241</u> Contact Person: <u>J. Menicucci</u>		
10. Facility ID Number <u>SE/45 SEC. 147-115A38 E Lea County</u>					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <u>Non Hazardous Waste</u>		<u>Bulk</u>	<u>28.62</u>	<u>Tons</u>	
b.					
G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature	Date	
			<u>John Miller</u>	<u>4-13-97</u>	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
<u>DAVID GOMEZ BARELA LR9</u>			<u>David Gomez</u>	<u>4-8-97</u>	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature		Date	
<u>ROYCE COOPER</u>		<u>Royce Cooper</u>		<u>4-8-97</u>	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BJ SERVICES 2708 W. COUNTY RD HOBBS, NM 88240			A. State Manifest Document No. № 160239		
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307			B. Generator's Facility ID No.		
5. Generator's Facility Name, Contact Person, and Physical Address			C. Generator's Tank Owner ID No.		
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address C. S. I. P.O. Box 25547 Albuquerque, NM 87102			D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll		
8. Transporter 2 Company Name and Address			E. Transporter's Phone Contact Person:		
9. Designated Facility Name and Site Address RHINO Environmental 600 Yeah Landfarm Lea County, NM			F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci		
10. Facility ID Number SE/45 SEC. 147-115R38 E. Lea County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		BULK	23.32	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Dan Mulla		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name L. Ramirez #8 2			Signature Lloyd Stockham		Date 4-8-97
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name NOVCE		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature COOPER		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BS SERVICES 2708 W. COUNTY RD HOBBS, NM 88240			A. State Manifest Document No. № 160240		
			4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7207		
5. Generator's Facility Name, Contact Person, and Physical Address			B. Generator's Facility ID No.		
6. Generator's Facility Phone () Generator's Fax ()			C. Generator's Tank Owner ID No.		
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102			D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll		
8. Transporter 2 Company Name and Address			E. Transporter's Phone Contact Person:		
9. Designated Facility Name and Site Address RHINO Environmental 600 Yeah Landfarm Lea County, NM			F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci		
10. Facility ID Number SE/45 SEC 14.7-115 R38 E Lea County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		BULK	23.22	TONS	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature J. Menicucci	Date 4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name L. Ramirez Trucking LR-5			Signature Lorenzo Ramirez	Date 4-8-97	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name Alice Cooper		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature Alice Cooper		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of 1		
3. Generator's Name, Contact Person, and Mailing Address R.J. Services 2708 W. County Rd Hobbs, NM 88240		A. State Manifest Document No. NE 160241		B. Generator's Facility ID No.	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307		C. Generator's Tank Owner ID No.		D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll	
5. Generator's Facility Name, Contact Person, and Physical Address		E. Transporter's Phone		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
6. Generator's Facility Phone () Generator's Fax ()		G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil		15. Waste Code	
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25542 Albuquerque, NM 87102		16. Special Handling Instructions and Additional Information		17. Printed/Typed Name	
8. Transporter 2 Company Name and Address		17. Printed/Typed Name		Signature Van Miller	
9. Designated Facility Name and Site Address Rhino Environmental 600 Yeah Landfarm Lea County, NM		17. Printed/Typed Name		Date 4-13-97	
10. Facility ID Number SE 145 SEC 14.7 115 R 38 E Lea County		17. Printed/Typed Name		Signature George Gains	
11. Waste Description (including Proper Class, and ID)		17. Printed/Typed Name		Date 4-8-97	
a. Non Hazardous Waste		17. Printed/Typed Name		Signature George Gains	
b. Bulk		17. Printed/Typed Name		Date 4-8-97	
12. Containers		17. Printed/Typed Name		Signature George Gains	
13. Total Quantity 24.86		17. Printed/Typed Name		Date 4-8-97	
14. Unit Tons		17. Printed/Typed Name		Signature George Gains	
15. Waste Code		17. Printed/Typed Name		Date 4-8-97	
16. Special Handling Instructions and Additional Information		17. Printed/Typed Name		Signature George Gains	
17. Printed/Typed Name		17. Printed/Typed Name		Date 4-8-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name George Gains 530-113		17. Printed/Typed Name		Signature George Gains	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		17. Printed/Typed Name		Date 4-8-97	
20. Discrepancy Indication Space		17. Printed/Typed Name		Signature George Gains	
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Printed/Typed Name Wayne Cooper		17. Printed/Typed Name		Date 4-8-97	
Signature Wayne Cooper		17. Printed/Typed Name		Signature Wayne Cooper	
Date 4-8-97		17. Printed/Typed Name		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of 1
3. Generator's Name, Contact Person, and Mailing Address BJ Services 2708 W. County Rd Hobbs, NM 88240		A. State Manifest Document No. № 160242	
		4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307	
5. Generator's Facility Name, Contact Person, and Physical Address		B. Generator's Facility ID No.	
6. Generator's Facility Phone () Generator's Fax ()		C. Generator's Tank Owner ID No.	
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102		D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll	
8. Transporter 2 Company Name and Address		E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address Rhino Environmental Goo Yeah Landfarm Lea County, NM		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
10. Facility ID Number SE/45 SEC 14.7 115 R38E. Lea County			
11. Waste Description (including Proper Class, and ID)	12. Containers	13. Total Quantity	14. Unit
a. Non Hazardous Waste	Bulk	23.03	Tons
b.			
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil			
16. Special Handling Instructions and Additional Information 1			
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.			
17. Printed/Typed Name		Signature Alan Miller	Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name DAVID GOMEZ ZARELA LR9		Signature David M. Gomez	Date 4-8-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
20. Discrepancy Indication Space			
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Printed/Typed Name ROY F COOPER			
Signature Roy Cooper		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address B J Services 3708 W. County Rd Hobbs, NM 88240			A. State Manifest Document No. NE 160243		
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307			B. Generator's Facility ID No.		
5. Generator's Facility Name, Contact Person, and Physical Address			C. Generator's Tank Owner ID No.		
6. Generator's Facility Phone () Generator's Fax ()			D. Transporter's Phone (505) 242-6464 Contact Person: Andy Goodell		
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102			E. Transporter's Phone Contact Person:		
8. Transporter 2 Company Name and Address			F. Facility's Phone 1-800-762-0241 Contact Person: J. Meticucci		
9. Designated Facility Name and Site Address Rhino Environmental 600 Yearh Landfarm Lea County, NM			10. Facility ID Number SE\45 SEC 14. T 11.5 R 38 E, Lea County		
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		BULK	25.52	TONS	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Hans Miller		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name L Ramsey #8			Signature L Ramsey		Date 4-8-97
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ROYCE COOPER		Signature Royce Cooper		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <u>BJS Services</u> <u>2708 W. County Rd</u> <u>Hobbs, NM 88240</u>				A. State Manifest Document No. <u>NE 160244</u>	
				B. Generator's Facility ID No.	
4. Generator's Phone <u>(505) 392-5556</u> Generator's Fax <u>(505) 392-7307</u>				C. Generator's Tank Owner ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				D. Transporter's Phone <u>(505) 242-4464</u> Contact Person: <u>Andy Landell</u>	
6. Generator's Facility Phone () Generator's Fax ()				E. Transporter's Phone Contact Person:	
7. Transporter 1 Company Name and Address <u>C.S.I.</u> <u>PO Box 25547</u> <u>Albuquerque, NM 87102</u>				F. Facility's Phone <u>1-800-762-0241</u> Contact Person: <u>J. MERICUCCI</u>	
8. Transporter 2 Company Name and Address				G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>	
9. Designated Facility Name and Site Address <u>Rhino Environmental</u> <u>Goos Peak Landfarm</u> <u>Lea County NM</u>				10. Facility ID Number <u>SE\45SEC\147115R38 E. Lea County</u>	
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <u>Non Hazardous waste</u>		<u>BULK</u>	<u>21.34</u>	<u>TONS</u>	
b.					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature <u>[Signature]</u>		Date <u>4-13-97</u>
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name <u>L. Ramirez Trucking LR-5</u>			Signature <u>[Signature]</u>		Date <u>4-8-97</u>
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name <u>ROYCE COOPER</u>		Certification of receipt of petroleum-substance waste covered by this manifest except as noted in Item 20. Signature <u>[Signature]</u>		Date <u>4-8-97</u>	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BJ Services 2708 W. County Rd Hobbs NM 88240				A. State Manifest Document No. NE 160245	
4. Generator's Phone (505) 372-5526 Generator's Fax (505) 372-7307				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address CSI P.O. Box 25547 Albuquerque, NM 87102				D. Transporter's Phone 505 242-6464 Contact Person: Andy Lundall	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address Rhino Environmental 600 Yeg Landfarm Lea County, NM				F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
10. Facility ID Number SE\45 SEC\14T115R38E. Lea County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		Bulk	22.69	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Don Miller		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name DAVID GOMEZ BARKLA LR9			Signature David H Barkla		Date 4-8-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ROYCE COOPER		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature Royce Cooper		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <u>B.J. Services</u> <u>2708 W. County Rd</u> <u>Hobbs NM 88240</u>				A. State Manifest Document No. <u>NE 160246</u>	
				B. Generator's Facility ID No.	
4. Generator's Phone <u>(505) 342-5526</u> Generator's Fax <u>(505) 342-7307</u>				C. Generator's Tank Owner ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				D. Transporter's Phone <u>15051242-6464</u> Contact Person: <u>Andy Landoll</u>	
6. Generator's Facility Phone () Generator's Fax ()				E. Transporter's Phone Contact Person:	
7. Transporter 1 Company Name and Address <u>CSI</u> <u>P.O. Box 25547</u> <u>Albuquerque, NM 87102</u>				F. Facility's Phone <u>1-800-762-0241</u> Contact Person: <u>J. Menicucci</u>	
8. Transporter 2 Company Name and Address				G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>	
9. Designated Facility Name and Site Address <u>Rhino Environmental</u> <u>600 Ypa Landfarm</u> <u>Lea County, NM</u>		10. Facility ID Number <u>SE\45SEC\147115R38E, E Lea County</u>			
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <u>Non Hazardous Waste</u>		<u>Bulk</u>	<u>25.57</u>	<u>Tons</u>	
b.					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature		Date
			<u>Don Miller</u>		<u>4-13-97</u>
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
<u>George Goins 530-113</u>			<u>George Goins</u>		<u>4-8-97</u>
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name			Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature		Date
<u>ROCKE COOPER</u>			<u>Rocke Cooper</u>		<u>4-8-97</u>



INSTRUCTIONS ON REVERSE SIDE.

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

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address SS Services Company U.S.A. 2768 W. County Rd. Hobbs, NM 88240				A. State Manifest Document No. NE 160256	
				B. Generator's Facility ID No.	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307				C. Generator's Tank Owner ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone ()		Generator's Fax ()		D. Transporter's Phone 15051242-6464	
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102				Contact Person: Andy Lyndall	
8. Transporter 2 Company Name and Address				E. Transporter's Phone	
8. Transporter 2 Company Name and Address				Contact Person:	
9. Designated Facility Name and Site Address Rhino Environmental Goodyea Landfarm Lea County, NM				F. Facility's Phone 1-500-762-0241	
10. Facility ID Number SE/4SEC. 14T11SR38 E. Lea County				Contact Person: J. Menicucci	
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		Bulk	22.98	TONS	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Jan Miller		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name J. Ramirez #8			Signature Lloyd Stockham		Date 4-8-97
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ADVCEP COOPER		Signature Ray Cooper		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BJ services company, USA 3708 W. Country Rd Hobbs NM 88240			A. State Manifest Document No. No 160366		
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307			B. Generator's Facility ID No.		
5. Generator's Facility Name, Contact Person, and Physical Address			C. Generator's Tank Owner ID No.		
6. Generator's Facility Phone () Generator's Fax ()			D. Transporter's Phone (505) 242-4646 Contact Person: Andy Landoll		
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102			E. Transporter's Phone Contact Person:		
8. Transporter 2 Company Name and Address			F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci		
9. Designated Facility Name and Site Address Rhino Environmental 600 Yeg Landfarm Lea County, NM			10. Facility ID Number SE/4 SEC. 14 T 11 SR 38 E Lea County		
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous waste		Bulk	26.91	TONS	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature J. Menicucci	Date 4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name L. Ramirez Trucking LR-5			Signature L. Ramirez	Date 4-8-97	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name BOUCE COOPER		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature BOUCE COOPER		Date 4-8-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of /		
3. Generator's Name, Contact Person, and Mailing Address B. J. Services U.S.A. 2708 W. County Rd. Hobbs, NM 88240		4. Generator's Phone (505) 392-5526 Generator's Fax (505) 392-7307		A. State Manifest Document No. No 160367	
5. Generator's Facility Name, Contact Person, and Physical Address		6. Generator's Facility Phone () Generator's Fax ()		B. Generator's Facility ID No. C. Generator's Tank Owner ID No.	
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102		8. Transporter 2 Company Name and Address		D. Transporter's Phone (505) 292-6464 Contact Person: Andy Landall	
9. Designated Facility Name and Site Address Rhino Environmental 600 Yeg Landfarm Lea County, NM		10. Facility ID Number SE/4SEC.147115R3BE, LEA COUNTY		E. Transporter's Phone Contact Person:	
11. Waste Description (including Proper Class, and ID) a. Non Hazardous Waste b.		12. Containers Bulk	13. Total Quantity 21.99	14. Unit TONS	15. Waste Code
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name		Signature Dan Miller		Date 4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name L Ramirez #5		Signature Edward Mickham		Date 4-9-97	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ROYCE COOPER		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature Royce Cooper		Date 4-9-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of 1		
3. Generator's Name, Contact Person, and Mailing Address B. J. Services U.S.A. 2708 W. County Rd. Hobbs NM 88240		A. State Manifest Document No. № 160368			
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307		B. Generator's Facility ID No.			
5. Generator's Facility Name, Contact Person, and Physical Address		C. Generator's Tank Owner ID No.			
6. Generator's Facility Phone () Generator's Fax ()		D. Transporter's Phone (505) 242-4464 Contact Person: J. Menicucci			
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102		E. Transporter's Phone Contact Person:			
8. Transporter 2 Company Name and Address		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci			
9. Designated Facility Name and Site Address Rhino Environmental Goo Yee Landfarm Lea County, NM		10. Facility ID Number SE 14 SEC. 14 T 15 R 38 E, Lea County			
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous waste		Bulk	21.06	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name		Signature		Date	
		San Miller		4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date	
		Rivero			
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date	
L. Ramirez #8					
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature			Date
ROYCE COOPER		[Signature]			4-9-97



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address B.J. Services U.S.A. 2708 W. County Rd. Hobbs NM 88240				A. State Manifest Document No. NE 160369	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address C.S.I. PO Box 25547 Albuquerque, NM 87102				D. Transporter's Phone 15051242-6464 Contact Person: J. Menicucci	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address Rhino Environmental Goo Yee Landfarm Lea County, NM				F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
10. Facility ID Number SE\4SEC\14T\15R38E\LEA County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		Bulk	22.28	TONS	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Llan Miller		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name DAVID GOMEZ RANCKA			Signature David H. Rancka		Date 4-9-97
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20.					
Printed/Typed Name ROYCE COOPER			Signature Royce Cooper		Date 4-9-97



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of <u>1</u>
3. Generator's Name, Contact Person, and Mailing Address <u>B.D. Services</u> <u>2708 W. County Rd</u> <u>Hobbs, NM 88240</u>		A. State Manifest Document No. <u>№ 160370</u>	
4. Generator's Phone (505) 392-5556 Generator's Fax (505) 392-7307		B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address		C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()			
7. Transporter 1 Company Name and Address <u>CSI</u> <u>P.O. Box 25547</u> <u>Albuquerque, NM 87102</u>		D. Transporter's Phone <u>15051242-6464</u> Contact Person: <u>J. Mericucci</u>	
8. Transporter 2 Company Name and Address		E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address <u>Rhino Environmental</u> <u>600 Yea Landfarm</u> <u>Lea County NM</u>		F. Facility's Phone <u>1-800-762-0240</u> Contact Person: <u>J. Mericucci</u>	
10. Facility ID Number <u>SE145EC. 147115R3PE. LEA COUNTY</u>			
11. Waste Description (including Proper Class, and ID)	12. Containers	13. Total Quantity	14. Unit
a. <u>Non Hazardous waste</u>	<u>Bulk</u>	<u>24.89</u>	<u>Tons</u>
b.			
G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>			
16. Special Handling Instructions and Additional Information			
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.			
17. Printed/Typed Name		Signature <u>Don Miller</u>	Date <u>4-13-97</u>
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <u>George Boins 530-113</u>		Signature <u>George Boins</u>	Date <u>4-9-97</u>
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature	Date
20. Discrepancy Indication Space			
21. Facility Owner/Operator: Printed/Typed Name <u>COOPER</u>		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature <u>[Signature]</u> Date <u>4-9-97</u>	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of 1		
3. Generator's Name, Contact Person, and Mailing Address B: J Services 2708 W. County Rd Hobbs, NM 88240		A. State Manifest Document No. № 160371		B. Generator's Facility ID No.	
4. Generator's Phone (505) 392-5526 Generator's Fax (505) 392-7307		C. Generator's Tank Owner ID No.			
5. Generator's Facility Name, Contact Person, and Physical Address				D. Transporter's Phone (505) 342-6464 Contact Person: J. Menicucci	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address CSI P.O. Box 25547 Albuquerque, NM 87102		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci		E. Transporter's Phone Contact Person:	
8. Transporter 2 Company Name and Address					
9. Designated Facility Name and Site Address Rhind Environmental Gooxey Land Farm Lea County, NM		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci		E. Transporter's Phone Contact Person:	
10. Facility ID Number SE\45EC.14T115R38E. Lea County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		Bulk	21.45	TONS	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name		Signature Don Miller		Date 4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name DAVIS GOMEZ BARELL #9		Signature David H Borella		Date 4-9-97	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name KARCE COOPER		Signature Karce Cooper		Date 4-9-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of <u>1</u>	
3. Generator's Name, Contact Person, and Mailing Address <u>RJ Services</u> <u>9708 W. County Rd.</u> <u>Hobbs, NM 88240</u>				A. State Manifest Document No. <u>No 160372</u>	
4. Generator's Phone (505) <u>392-5526</u> Generator's Fax (505) <u>392-7307</u>				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address <u>CSI</u> <u>P.O. Box 25547</u> <u>Albuquerque, NM 87102</u>				D. Transporter's Phone <u>(505) 242-6464</u> Contact Person: <u>Andy Landoll</u>	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address <u>Rhino Environmental</u> <u>600 Yca Landfarm</u> <u>Lea County, NM</u>				F. Facility's Phone <u>1-800-762-0241</u> Contact Person: <u>J. Menicucci</u>	
10. Facility ID Number <u>SE\4SEC, 14T 115 R38 E. Lea County</u>					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. <u>Non Hazardous Waste</u>		<u>Bulk</u>	<u>22.20</u>	<u>TONS</u>	
b.					
G. Additional Description for Materials Listed Above <u>Hydrocarbon Impacted Soil</u>					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature <u>[Signature]</u>	Date <u>4-13-97</u>	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name <u>[Signature] #5</u>			Signature <u>[Signature]</u>	Date <u>4-9-97</u>	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name <u>ROYCE COOPER</u>		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature <u>[Signature]</u>		Date <u>4-9-97</u>	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of /	
3. Generator's Name, Contact Person, and Mailing Address BJ SERVICES 2708 W. Country Club Rd Hobbs, NM 88240				A. State Manifest Document No. NE 160373	
4. Generator's Phone (505) 392-5526 Generator's Fax (505) 392-7307				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address CSI P.O. Box 25547 Albuquerque, NM 87102				D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landall	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address Rhino Environmental 600 Yea Landfarm Lea County, NM				F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
10. Facility ID Number SE14 SEC. 14 T 11 S R 38 E. Lea County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous waste		Bulk	24.80	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature D. Menicucci	Date 4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name J. Ramirez #8			Signature Rivers	Date 4-9-97	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature	Date	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Printed/Typed Name KOVCE COOPER					
Signature KOVCE COOPER				Date 4-9-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST			1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BJ Services 2708 W. Country Club Rd Hobbs, NM 88240				A. State Manifest Document No. NE 160374		
				B. Generator's Facility ID No.		
4. Generator's Phone (505) 392-5526 Generator's Fax (505) 392-7307				C. Generator's Tank Owner ID No.		
5. Generator's Facility Name, Contact Person, and Physical Address				D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll		
6. Generator's Facility Phone () Generator's Fax ()				E. Transporter's Phone Contact Person:		
7. Transporter 1 Company Name and Address CSI P.O. Box 25547 Albuquerque, NM 87102				F. Facility's Phone 1-800-762-0341 Contact Person: J. Manicucci		
8. Transporter 2 Company Name and Address : : :				Contact Person:		
9. Designated Facility Name and Site Address Rhino Environmental Goo Yea Landfarm Lea County, NM				Contact Person:		
10. Facility ID Number SE \ 4 SEC. 14 T 115 R 38 E, Lea County				Contact Person:		
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code	
a. Non Hazardous waste		Bulk	24.49	Tons		
b.						
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil						
16. Special Handling Instructions and Additional Information						
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.						
17. Printed/Typed Name			Signature		Date	
			[Signature]		4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date	
George Goins 530-113			[Signature]		4-9-97	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date	
20. Discrepancy Indication Space						
21. Facility Owner/Operator: Printed/Typed Name			Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature			Date
ROYCE COOPER			[Signature]			4-9-97



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BJ Services 2708 W. Country Club Rd Hobbs NM 88240				A. State Manifest Document No. NE 160375	
4. Generator's Phone (505) 392-5526 Generator's Fax (505) 392-7302				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 2554 Albuquerque, NM 87102				D. Transporter's Phone (505) 342-6464 Contact Person: Andy Landoll	
8. Transporter 2 Company Name and Address				E. Transporter's Phone Contact Person:	
9. Designated Facility Name and Site Address Rhino Environmental Goodyea Landfarm Lea County, NM				F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
10. Facility ID Number SE 1/4 Sec. 14 T15 R38 E. Lea County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non-hazardous waste		Bulk	24.24	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Dan Miller		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name DAVID GAMEZ PARELA #9			Signature David H. Parela		Date 4-9-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ROSE COOPER		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature Rose Cooper			Date 4-9-97



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.	2. Page 1 of 1		
3. Generator's Name, Contact Person, and Mailing Address BJ Services 2708 W. Country Club Hobbs, NM 88240		A. State Manifest Document No. NE 160376		B. Generator's Facility ID No.	
4. Generator's Phone (505) 392-5526 Generator's Fax (505) 392-7307		C. Generator's Tank Owner ID No.			
5. Generator's Facility Name, Contact Person, and Physical Address		6. Generator's Facility Phone () Generator's Fax ()		D. Transporter's Phone 15051 242-6464 Contact Person: Andy Landoll	
7. Transporter 1 Company Name and Address C.S.I P.O. Box 25547 Albuquerque, NM 87102		8. Transporter 2 Company Name and Address			
9. Designated Facility Name and Site Address Rhino Environmental 600 Year Land Farm Lea County, NM		E. Transporter's Phone Contact Person:		F. Facility's Phone 1-800-762-0241 Contact Person: J. Menicucci	
10. Facility ID Number SE\45EC.14T115R38 E. Lea County		11. Waste Description (including Proper Class, and ID)			
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		Bulk	23.50	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name		Signature Dan Miller		Date 4-13-97	
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		Date	
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name L. Ramirez #5		Signature Lloyd Stockham		Date 4-9-97	
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ROYCE COOPER		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature Royce Cooper		Date 4-9-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address PJ Services 3708 W. Country Club Hobbs NM 88240			A. State Manifest Document No. No 160377		
4. Generator's Phone (505) 392-5526 Generator's Fax (505) 392-7307			B. Generator's Facility ID No.		
5. Generator's Facility Name, Contact Person, and Physical Address			C. Generator's Tank Owner ID No.		
6. Generator's Facility Phone () Generator's Fax ()					
7. Transporter 1 Company Name and Address C.S.I. P.O. Box 25547 Albuquerque, NM 87102			D. Transporter's Phone (505) 242-6464 Contact Person: Andy Candoli		
8. Transporter 2 Company Name and Address			E. Transporter's Phone Contact Person:		
9. Designated Facility Name and Site Address Rhino Environmental Goo Yea Landfarm Lea County, NM			F. Facility's Phone 1-800-762-0241 Contact Person: J. Memicucci		
10. Facility ID Number SE \ 4 SEC, 14 T 115 R 38 E, Lea County					
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		Bulk	21.47	Tons	
b.					
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name J Ramirez #8			Signature [Signature]		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name J Ramirez #8			Signature Rivera		Date 4-9-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Printed/Typed Name ROYCE COOPER		Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20. Signature [Signature]		Date 4-9-97	



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

INSTRUCTIONS ON REVERSE SIDE.

PETROLEUM-SUBSTANCE WASTE MANIFEST		1. Generator's LPST ID No. or ST ID No.		2. Page 1 of 1	
3. Generator's Name, Contact Person, and Mailing Address BJ SERVICES 2708 W. Country Club Hobbs NM 88240				A. State Manifest Document No. № 160378	
4. Generator's Phone (505) 392-7307 Generator's Fax (505) 392-5556				B. Generator's Facility ID No.	
5. Generator's Facility Name, Contact Person, and Physical Address				C. Generator's Tank Owner ID No.	
6. Generator's Facility Phone () Generator's Fax ()				D. Transporter's Phone (505) 242-6464 Contact Person: Andy Landoll	
7. Transporter 1 Company Name and Address CSI P.O. Box 25547 Albuquerque, NM 87102				E. Transporter's Phone Contact Person:	
8. Transporter 2 Company Name and Address				F. Facility's Phone 1-800-762-0241 Contact Person: J. M. Picucci	
9. Designated Facility Name and Site Address Rhind Environmental 600 Yea Landfarm Lea County, NM				10. Facility ID Number SE 145FC, 14 T11SR38 E. Lea County	
11. Waste Description (including Proper Class, and ID)		12. Containers	13. Total Quantity	14. Unit	15. Waste Code
a. Non Hazardous Waste		BUK	24.80	TONS	
b. Non Hazardous Soils		BUK	12.31	TONS	
G. Additional Description for Materials Listed Above Hydrocarbon Impacted Soil					
16. Special Handling Instructions and Additional Information					
GENERATOR'S CERTIFICATION: I hereby declare the contents of this consignment are fully and accurately described above by shipping name and are classified, packed, marked, and labeled, and are in all respect in proper condition for transport by highway according to applicable federal and state regulations.					
17. Printed/Typed Name			Signature Wan Miller		Date 4-13-97
18. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name George Boins 530-113			Signature George Boins		Date 4-11-97
19. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name			Signature		Date
20. Discrepancy Indication Space					
21. Facility Owner/Operator: Certification of receipt of petroleum-substance wastes covered by this manifest except as noted in Item 20.					
Printed/Typed Name ROYCE COOPER			Signature Mayb Cooper		Date 4-11-97



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

Form approved. OMB No. 2050-0039. expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address B.J. Services Company USA 2708 W. County Rd.						A. State Manifest Document Number 01220664			
4. Generator's Phone (505) 392-5556 Hobbs N.M. 88240						B. State Generator's ID			
5. Transporter 1 Company Name CSI P.O. Box 25547 Alb., N.M. 87102			6. US EPA ID Number			C. State Transporter's ID			
7. Transporter 2 Company Name			8. US EPA ID Number			D. Transporter's Phone 505-242-6464			
9. Designated Facility Name and Site Address Rhino Environmental 600499 Land Farm Lea Co., N.M.						10. US EPA ID Number			
						E. State Transporter's ID			
						F. Transporter's Phone			
						G. State Facility's ID			
						H. Facility's Phone 1-800-762-0241 (9)			
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.	
a.	Hydrocarbon Soils Non-Hazardous					24.62	Tons		
b.									
c.									
d.									
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name				Signature		Month Day Year			
				Dan Miller		4 13 97			
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature		Month Day Year			
George Boins 530-113				George Boins		4 10 97			
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 hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name				Signature		Month Day Year			
ROYCE COOPER				Royce Cooper		4 10 97			



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

Form approved. OMB No. 2050-0039. expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address <i>B.J. Services Company USA 2708 W. County Rd.</i>						A. State Manifest Document Number 01220665			
4. Generator's Phone (<i>505 1392-5556</i>) <i>Hobbs, N.M. 88240</i>						B. State Generator's ID			
5. Transporter 1 Company Name <i>CSI P.D. Box 25547 Alb., N.M. 87102</i>			6. US EPA ID Number			C. State Transporter's ID			
7. Transporter 2 Company Name			8. US EPA ID Number			D. Transporter's Phone <i>505-242-6464</i>			
9. Designated Facility Name and Site Address <i>Rhino Environmental Goose Landfarm Lea Co., N.M.</i>			10. US EPA ID Number			E. State Transporter's ID			
						F. Transporter's Phone			
						G. State Facility's ID			
						H. Facility's Phone <i>1-800-762-0241</i>			
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol	I. Waste No.	
a.	<i>Hydrocarbon Soils Non-Hazardous</i>					<i>23.89</i>	<i>lbs</i>		
b.									
c.									
d.									
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name				Signature		Month Day Year			
				<i>Don Miller</i>		<i>4 13 97</i>			
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature		Month Day Year			
<i>George Goins 530-113</i>				<i>George Goins</i>		<i>4 10 97</i>			
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 hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name				Signature		Date			
<i>ROYCE COOPER</i>				<i>Royce Cooper</i>		<i>4 10 97</i>			



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

Form approved. OMB No. 2050-0039. expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address <i>B. J. Services Company USA 2708 W. County Rd.</i>			A. State Manifest Document Number 01220683		B. State Generator's ID	
4. Generator's Phone (505) <i>392-5556</i> <i>Hobbs, N.M. 88240</i>			C. State Transporter's ID		D. Transporter's Phone	
5. Transporter 1 Company Name <i>CSI P.O. Box 25547 Alb, N.M. 87102</i>			6. US EPA ID Number		E. State Transporter's ID	
7. Transporter 2 Company Name			8. US EPA ID Number		F. Transporter's Phone	
9. Designated Facility Name and Site Address <i>Rhino Environmental 600429 Landfarm Leg Co., N.M.</i>			10. US EPA ID Number		G. State Facility's ID	
					H. Facility's Phone	
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol	15. Waste No.
a.	<i>Hydrocarbon Soils Non-Hazardous</i>			<i>24.65</i>	<i>Tons</i>	
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name			Signature <i>Jan Miller</i>		Month Day Year <i>4 13 97</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name			Signature		Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name <i>L. Remmersy #8</i>			Signature <i>Rivera</i>		Month Day Year <i>12 10 97</i>	
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name <i>ROYCE COOPER</i>			Signature <i>Royce Cooper</i>		Month Day Year <i>1 1 97</i>	

GENERATOR

TRANSPORTER

FACILITY

TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION

P.O. Box 13087

Austin, Texas 78711-3087



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

Form approved. OMB No. 2050-0039. expires 09-30-95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.		
3. Generator's Name and Mailing Address B.J. Services Companu USA 2708 W. Country Rd. Hobbs, NM 88240 4. Generator's Phone (505-242-6464) 392-5556					A. State Manifest Document Number 01220686			
5. Transporter 1 Company Name CSI P.O. Box 25547 Alb., N.M. 87102					6. US EPA ID Number		C. State Transporter's ID	
7. Transporter 2 Company Name					8. US EPA ID Number		D. Transporter's Phone 505-242-6464	
9. Designated Facility Name and Site Address Geoyea Landfarm Lea Cunty. NM Rhino Enivironmental					10. US EPA ID Number		E. State Transporter's ID	
							F. Transporter's Phone	
							G. State Facility's ID	
							H. Facility's Phone 1-800-762-0241	
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Hydrocarbon Soils Non-Hazardous					19.12	Tons	
b.								
c.								
d.								
J. Additional Descriptions for Materials Listed Above					K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information								
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.								
Printed/Typed Name				Signature		Month Day Year		
				<i>Alan Miller</i>		4 13 97		
17. Transporter 1 Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
18. Transporter 2 Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
DAVID GOMZ BARETA				<i>David A. Lorela</i>		4 10 97		
19. Discrepancy Indication Space								
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.								
Printed/Typed Name				Signature		Month Day Year		
ROYCE COOPER				<i>Royce Cooper</i>		6 18 97		



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

Form approved. OMB No. 2050-0039. expires 09-30-95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.			
3. Generator's Name and Mailing Address B.J. Services Company USA 2708 W. County Rd.					A. State Manifest Document Number 01220687				
4. Generator's Phone (505) 392-5556 Hobbs, N.M. 88240					B. State Generator's ID				
5. Transporter 1 Company Name CSI P.O. Box 25547 Alb., N.M. 87102			6. US EPA ID Number		C. State Transporter's ID				
7. Transporter 2 Company Name			8. US EPA ID Number		D. Transporter's Phone 505-242-6464				
9. Designated Facility Name and Site Address Rhino Environmental Gooley Landfarm Lea Co., N.M.			10. US EPA ID Number		E. State Transporter's ID				
					F. Transporter's Phone				
					G. State Facility's ID				
					H. Facility's Phone 1-800-762-0241				
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
	a. Hydrocarbon Soils Non-Hazardous						25.44	TONS	
	b.								
	c.								
	d.								
J. Additional Descriptions for Materials Listed Above					K. Handling Codes for Wastes Listed Above				
15. Special Handling Instructions and Additional Information									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name					Signature			Month Day Year	
					Alan Miller			4 13 97	
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature			Date	
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature			Month Day Year	
DAVID GOMEZ BANETA					David A Baneta			4 10 97	
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name					Signature			Date	
ROYCE COOPER					Royce Cooper			4 13 97	

GENERATOR

TRANSPORTER

FACILITY

TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION

P.O. Box 13087

Austin, Texas 78711-3087



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

Form approved. OMB No. 2050-0039. expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address B.J. Services Company USA 2708 W. County Rd. Hobbs, NM 88240 505-392-5566				A. State Manifest Document Number 01220688		
4. Generator's Phone				B. State Generator's ID		
5. Transporter 1 Company Name CSI PO BOX 25547 Alb. NM 87102		6. US EPA ID Number		C. State Transporter's ID		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 505-242-6464		
9. Designated Facility Name and Site Address Rhino Environmental Gooyea Landfarm Lea Co. NM		10. US EPA ID Number		E. State Transporter's ID		
				F. Transporter's Phone		
				G. State Facility's ID		
				H. Facility's Phone 1-800-762-0241		
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No. Type		13. Total Quantity	14. Unit Wt./Vol	15. Waste No.
	a. Hydrocarbon Soils Non-Hazardous			27.58	tons	
	b.					
	c.					
	d.					
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name				Signature		Month Day Year
				<i>Alan Miller</i>		4 13 92
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name				Signature		Month Day Year
George Goins 530-113				<i>George Goins</i>		4 10 97
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 hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name				Signature		Month Day Year
ROYCE COOPER				<i>Royce Cooper</i>		4 10 96

GENERATOR

TRANSPORTER

FACILITY



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

Form approved. OMB No. 2050-0039. expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address BS Services Company USA 2708 W. County Rd Hobbs, NM 88240				A. State Manifest Document Number 01220689		
4. Generator's Phone (505) 88240 392-5556				B. State Generator's ID		
5. Transporter 1 Company Name CSE P.O. Box 25547 Alb, NM 87102		6. US EPA ID Number		C. State Transporter's ID		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 505-242-6464		
9. Designated Facility Name and Site Address Rhino Env. Goo Yea Landfarm Lea County, N.M.		10. US EPA ID Number		E. State Transporter's ID		
				F. Transporter's Phone		
				G. State Facility's ID		
				H. Facility's Phone 1-800-762-0241		
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a.	Hydrocarbon Soils Non-Haz.			24.59	Tons	
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name		Signature		Month Day Year		
		<i>Don Miller</i>		4 13 97		
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month Day Year		
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month Day Year		
L. Ramirez #8		<i>Rivero</i>		14 10 98		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Date		
ROYCE COOPER		<i>Royce Cooper</i>		4 10 98		



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

Form approved. OMB No. 2050-0039. expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address <i>BS Services, Company USA 2709 W. County Rd Hobbs, NM</i>				A. State Manifest Document Number 01220690		
4. Generator's Phone (<i>505 88240</i>) <i>392-5556</i>				B. State Generator's ID		
5. Transporter 1 Company Name <i>CSI T.I. Box 25547 Alb., N.M. 87102</i>		6. US EPA ID Number		C. State Transporter's ID		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone <i>505-242-6464</i>		
9. Designated Facility Name and Site Address <i>Rhino Enr. Gooyea Landfarm Lea County, N.M.</i>		10. US EPA ID Number		E. State Transporter's ID		
				F. Transporter's Phone		
				G. State Facility's ID		
				H. Facility's Phone <i>1-800-762-0241</i>		
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
	a. <i>Hydrocarbon Soils Non-Haz.</i>				<i>23.21</i>	<i>Tons</i>
	b.					
	c.					
	d.					
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name			Signature <i>Jan Miller</i>		Month Day Year <i>7 13 97</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name			Signature		Date	
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name <i>L. Ramirez #5</i>			Signature <i>Lloyd Stockham</i>		Month Day Year <i>7 10 97</i>	
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name <i>ROYCE COOPER</i>			Signature <i>Royce Cooper</i>		Date <i>7/10/97</i>	



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

Form approved. OMB No. 2050-0039. expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address BS Services, Company USA 2708 W. County Rd Hobbs, N.M. 88240						A. State Manifest Document Number 01220691			
4. Generator's Phone (505) 392-5556						B. State Generator's ID			
5. Transporter 1 Company Name CSI P.O. Box 25547 Alb., N.M., 87102			6. US EPA ID Number			C. State Transporter's ID			
7. Transporter 2 Company Name						D. Transporter's Phone 505-242-6464			
8. US EPA ID Number						E. State Transporter's ID			
9. Designated Facility Name and Site Address Rhino Env. Goodyear Landfarm Lea County, N.M.						F. Transporter's Phone			
10. US EPA ID Number						G. State Facility's ID			
						H. Facility's Phone 1-800-762-0241			
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)					12. Containers No.	13. Total Quantity	14. Unit Wt./Vol	15. Waste No.
a.	Hydrocarbon Soils Non-Haz.						28.53	tons	
b.									
c.									
d.									
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name					Signature <i>Alan Smullen</i>			Month Day Year 4/13/97	
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name					Signature			Date	
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name DAVID GOMEZ RADELA					Signature <i>David A. Radele</i>			Month Day Year 4/16/97	
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name ROYCE COOPER					Signature <i>Royce Cooper</i>			Date 4/16/97	

TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION

P.O. Box 13087

Austin, Texas 78711-3087



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

Form approved. OMB No. 2050-0039. expires 09 30 95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address B.J. Services Company, USA 2708 W. County Rd. 4. Generator's Phone (505) 392-5556 Hobbs, N.M. 88240				A. State Manifest Document Number 01220693		
5. Transporter 1 Company Name CSI P.O. Box 25547 Alb., N.M. 87102				B. State Generator's ID		
6. US EPA ID Number				C. State Transporter's ID		
7. Transporter 2 Company Name				D. Transporter's Phone 505-242-6464		
8. US EPA ID Number				E. State Transporter's ID		
9. Designated Facility Name and Site Address Rhino Environmental 60400 Landfarm Lea Co., N.M.				F. Transporter's Phone		
10. US EPA ID Number				G. State Facility's ID		
				H. Facility's Phone 1-800-762-0241		
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class. and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol	15. Waste No.
a.	Hydrocarbon Soils Non-Hazardous			25.56	Tons	
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name			Signature		Month Day Year	
			Dan Miller		4 13 97	
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name			Signature		Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name			Signature		Month Day Year	
J Ramirez LR-8			Rivers		4 10 97	
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name			Signature		Date	
ROYCE COOPER			Royce Cooper		4 10 97	

TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION

P.O. Box 13087

Austin, Texas 78711-3087



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

Form approved. OMB No. 2050-0039, expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.		
3. Generator's Name and Mailing Address BJ Services Company U.S.A. 708 W. County Rd. Hobbs, N.M. 88240					A. State Manifest Document Number 01220694			
4. Generator's Phone (505) 392-5556					B. State Generator's ID			
5. Transporter 1 Company Name k k k		6. US EPA ID Number		C. State Transporter's ID		D. Transporter's Phone		
7. Transporter 2 Company Name CSI P.O. Box 25547 ALbq. N.M. 87102		8. US EPA ID Number		E. State Transporter's ID (505) 242-6464		F. Transporter's Phone 1-800-762-024		
9. Designated Facility Name and Site Address Rhino Environment 300 Yea Landfarm ^a Lea county N.M.					10. US EPA ID Number		G. State Facility's ID	
					H. Facility's Phone			
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a.	NON-HAZ - HYDROCARBON IMACTED Soils					24.80	lbs	
b.								
c.								
d.								
J. Additional Descriptions for Materials Listed Above					K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information								
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.								
Printed/Typed Name				Signature		Month Day Year		
				<i>Alan Miller</i>		4 13 97		
17. Transporter 1 Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
18. Transporter 2 Acknowledgement of Receipt of Materials								
Printed/Typed Name				Signature		Month Day Year		
<i>L Ramsey #5</i>				<i>Lloyd Smith</i>		4 10 97		
19. Discrepancy Indication Space								
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.								
Printed/Typed Name				Signature		Month Day Year		
<i>ROYCE COOPER</i>				<i>Royce Cooper</i>		10 16 97		

GENERATOR

TRANSPORTER

FACILITY



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

Form approved. OMB No. 2050-0039, expires 09/30/95

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address B.J. Services Company U.S.a. 2708 W. County Rd. Hobbs, N.M. 88240				A. State Manifest Document Number 01220695		
4. Generator's Phone (505) 392-5556				B. State Generator's ID		
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Transporter's ID		
7. Transporter 2 Company Name CSI		8. US EPA ID Number		D. Transporter's Phone		
9. Designated Facility Name and Site Address Rhino Environmental Goo Yea Landfarm Lea County N.M.		10. US EPA ID Number		E. State Transporter's ID		
				F. Transporter's Phone		
				G. State Facility's ID		
				H. Facility's Phone		
11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a.	Non Hazardous Waste Hydrocarbon Impacted Soil			24.83	Tons	
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name		Signature		Month Day Year		
		<i>Dan Miller</i>		4 13 92		
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month Day Year		
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month Day Year		
<i>R Ramirez #5</i>		<i>Randy Smith</i>		4 10 92		
19. Discrepancy Indications (Space)						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Date		
<i>Kyle Cooper</i>		<i>Kyle Cooper</i>		4 16 92		

GENERATOR

TRANSPORTER

FACILITY

HOBBS IRON & METAL — Hobbs, N.M. Date 4-1-97

Load of Soil Trk. 550 PTF

Gross 78720 Contractor Rhino Environmental

Tare 32340 Customer BJ Service

Net _____ To _____

From _____ Driver _____ On _____ Off _____

40646 Weighmaster Brad Craig NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4/2/97

Load of _____ Trk. 550 PTF

Gross 78720 Contractor Rhino

Tare 32340 Customer BJ Services

Net _____ To _____

From _____ Driver _____ On _____ Off _____

40650 Weighmaster Randy Craig NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-29-97

Load of Soil Trk. 550 PTF

Gross 80000 Contractor Rhino Environmental

Tare 32340 Customer BJ Services

Net _____ To _____

From _____ Driver _____ On _____ Off X

40899 Weighmaster XD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-1-97

Load of Soil Trk. 530 PTF

Gross 80330 Contractor Trailer 113

Tare 32330 Customer BJ Services

Net _____ To (Rhino Environmental)

From _____ Driver _____ On _____ Off X

40645 Weighmaster XD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-2-97

Load of Soil Trk. _____ PTF

Gross 80000 Contractor Rhino Environmental from

Tare 32340 Customer BJ Services

Net _____ To _____

From _____ Driver _____ On _____ Off X

40895 Weighmaster XD George Lewis NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-3-97

Load of Soil Trk. 37 PTF _____

Gross 80980 Contractor trailer 37

Tare 32000 Customer Rhino Trucking (Rhino)

Net 48980 To _____

From BT Services

Driver _____ On _____ Off _____

Weighmaster KD NMDA APPROVED LICENSE #003

40897

HOBBS IRON & METAL — Hobbs, N.M. Date 4-3-97

Load of Soil Trk. 73 PTF _____

Gross 70990 Contractor Rhino

Tare 33800 Customer BT Services

Net 37190 To _____

From _____

Driver _____ On _____ Off _____

Weighmaster Bradley NMDA APPROVED LICENSE #003

40658

HOBBS IRON & METAL — Hobbs, N.M. Date 4-3-97

Load of Soil Trk. 550 PTF _____

Gross 76000 Contractor trailer 111

Tare 32340 Customer Rhino - from BT Services

Net 43660 To _____

From _____

Driver _____ On _____ Off X

Weighmaster KD NMDA APPROVED LICENSE #003

40660

HOBBS IRON & METAL — Hobbs, N.M. Date 4-3-97

Load of Soil Trk. 550 PTF _____

Gross 71770 Contractor Rhino Environmental

Tare 32340 Customer BT Services

Net _____ To _____

From _____

Driver _____ On _____ Off _____

Weighmaster Bradley NMDA APPROVED LICENSE #003

40656

HOBBS IRON & METAL — Hobbs, N.M. Date 4-8-97

Load of Soil Trk. 530 PTF _____

Gross 174510 Contractor Rhino Environmental

Tare 32390 Customer BT Services

Net _____ To _____

From Geo L

Driver _____ On _____ Off _____

Weighmaster Bradley NMDA APPROVED LICENSE #003

40915

Load of Soil Trk. 49 PTF _____
Contractor L. Ramirez Trading
Gross 87200 Customer Hino
Tare 30060 To BT Services
From _____
Net _____ Driver _____ On _____ Off X
40904 Weighmaster LD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-8-97
Load of Soil Trk. 8 PTF _____
Contractor L. Ramirez
Gross 79590 Customer BT Service
Tare 32960 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40916 Weighmaster Bob Cruz
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4/8/97
Load of Soil Trk. LR5 PTF _____
Contractor _____
Gross 78220 Customer Rhino Environmental
Tare 31780 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40619 Weighmaster pm
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-8-97
Load of Soil Trk. 530 PTF 113
Contractor BT Services
Gross 82110 Customer Hino
Tare 32390 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40905 Weighmaster LD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-8-97
Load of Soil Trk. 109 PTF _____
Contractor L. Ramirez
Gross 76110 Customer BT Service
Tare 30060 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40902 Weighmaster Bob Cruz
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-8-97

Load of Soil Trk. 118 PTF _____

Contractor L. Ramirez

Gross 64000 Customer BT Service

Tare 32960 To _____

From _____

Net _____ Driver _____ On _____ Off _____

40920 Weighmaster Bud Craig LICENSE #003
NMMA APPROVED

HOBBS IRON & METAL — Hobbs. N.M. Date 4-8-97

Load of Soil Trk. 5 PTF _____

Contractor _____

Gross 74500 Customer Rhino

Tare 31780 To _____

From _____

Net _____ Driver _____ On _____ Off

40923 Weighmaster XD LICENSE #003
NMMA APPROVED

HOBBS IRON & METAL — Hobbs. N.M. Date 4-8-97

Load of Soil Trk. 117 PTF _____

Contractor L. Ramirez

Gross 75000 Customer BT Service

Tare 30060 To _____

From _____

Net _____ Driver _____ On _____ Off _____

40917 Weighmaster Bud Craig LICENSE #003
NMMA APPROVED

HOBBS IRON & METAL — Hobbs. N.M. Date 4-8-97

Load of Soil Trk. 530 PTF 113

Contractor Rhino Environmental

Gross 80000 Customer ~~BT Service~~ BT Service

Tare 32390 To _____

From _____

Net _____ Driver _____ On _____ Off _____

40919 Weighmaster Bud Craig LICENSE #003
NMMA APPROVED

HOBBS IRON & METAL — Hobbs. N.M. Date 4/8/97

Load of Soil Trk. 8 PTF _____

Contractor Rhino Environmental

Gross 70000 Customer Rhino Environmental

Tare 32960 To BT Services

From _____

Net _____ Driver _____ On _____ Off _____

40673 Weighmaster PM LICENSE #003
NMMA APPROVED

HOBBS IRON & METAL — Hobbs, N.M.

Date 09-27

Load of Soil Trk. LLS PTF

Contractor L. Ramirez

Gross 85600 Customer BS Service

Tare 31780 To _____

From _____

Net _____ Driver _____ On _____ Off _____

40670 Weighmaster Paul Ray NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M.

Date 4-9-97

Load of Soil Trk. LL-5 PTF

Contractor _____

Gross 75750 Customer Rhino

Tare 31780 To BS Services

From _____

Net _____ Driver _____ On _____ Off X

40939 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M.

Date 4-9-97

Load of Soil Trk. 8 PTF

Contractor _____

Gross 75030 Customer Rhino

Tare 32960 To _____

From _____

Net _____ Driver _____ On _____ Off X

40943 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M.

Date 4-9-97

Load of Soil Trk. LR9 PTF

Contractor _____

Gross 74520 Customer Rhino

Tare 30060 To BS Services

From _____

Net _____ Driver _____ On _____ Off X

40941 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M.

Date 8-4-97

Load of Soil Trk. S30 PTF

Contractor _____

Gross 02150 Customer Rhino

Tare 32390 To BS Services

From _____

Net _____ Driver _____ On _____ Off X

40938 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-9-97

Load of Soil Trk. LR9 PTF _____

Contractor _____

Gross 72550 Customer Rhino

Tare 30060 To BS Services

From _____

Net _____ Driver _____ On _____ Off X

40930 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-9-97

Load of Soil Trk. S PTF _____

Contractor _____

Gross 75170 Customer Rhino

Tare 31780 To BS Services

From _____

Net _____ Driver _____ On _____ Off X

40942 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-9-97

Load of Soil Trk. 8 PTF _____

Contractor _____

Gross 82550 Customer Rhino

Tare 32960 To BS Services

From _____

Net _____ Driver _____ On _____ Off X

40922 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-9-97

Load of soil Trk. 530 PTF _____

Contractor _____

Gross 81100 Customer Rhino

Tare 32390 To BS Services

From _____

Net _____ Driver _____ On _____ Off X

40944 Weighmaster LD NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-9-97

Load of Soil Trk. LR9 PTF _____

Contractor _____

Gross 78550 Customer Rhino

Tare 30060 To BS Services

From _____

Net _____ Driver _____ On _____ Off _____

40936 Weighmaster LD NMDA APPROVED LICENSE #003

Load of Soil Trk. 425 PTF _____
Contractor L. Ramirez
Gross 78750 Customer BJ Service
Tare 31780 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40937 Weighmaster Brad Croy
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-9-97
Load of Soil Trk. 8 PTF _____
Contractor _____
Gross 75500 Customer Rhino
Tare 32960 To BJ Services
From _____
Net _____ Driver _____ On _____ Off
40934 Weighmaster KD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-11-97
Load of Soil Trk. 530 PTF _____
Contractor _____
Gross 37010 Customer Rhino
Tare 32390 To BJ Services
From _____
Net _____ Driver _____ On _____ Off
40970 Weighmaster KD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-11-97
Load of Soil Trk. 530 PTF _____
Contractor _____
Gross 37010 Customer Rhino
Tare 32390 To BJ Services
From _____
Net _____ Driver _____ On _____ Off
40968 Weighmaster KD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-9-97
Load of Soil Trk. 530 PTF _____
Contractor _____
Gross 75120 Customer Rhino
Tare 32390 To BJ Services
From _____
Net _____ Driver _____ On _____ Off
40940 Weighmaster KD
NMDA APPROVED LICENSE #003

Load of Soil Trk S30 PTF _____
Contractor _____
Gross 81523 Customer Rhino LCSI
Tare 32390 To BS Services
From _____
Net _____ Driver Geo Gains On _____ Off X
40946 Weighmaster YD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-10-97
Load of Soil Trk S30 PTF _____
Contractor _____
Gross 80153 Customer Rhino LCSI
Tare 32390 To BS Services
From _____
Net _____ Driver Geo Gains On _____ Off X
40947 Weighmaster KD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-10-97
Load of Soil Trk LR9 PTF _____
Contractor L. Ramirez
Gross 30250 Customer B.T. Service
Tare 32960 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40945 Weighmaster Brad Cray
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4-10-97
Load of Soil Trk LR9 PTF _____
Contractor L. Ramirez
Gross 60250 Customer BT Service
Tare 30060 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40950 Weighmaster Brad Cray
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs. N.M. Date 4/10/97
Load of Soil Trk #9 PTF _____
Contractor _____
Gross 80400 Customer Rhino Environmental
Tare 30060 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40959 Weighmaster Merrick
NMDA APPROVED LICENSE #003

Load of Soil Trk 530 PTF _____
Contractor _____
Gross _____ Customer DAVID ESTE
Tare 32390 To BS Services
From _____
Net _____ Driver Geo Gains On _____ Off
40961 Weighmaster KD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-10-97
Load of Soil Trk 117 PTF _____
Contractor L. Ramirez
Gross 82140 Customer BJ Services
Tare 32960 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40678 Weighmaster Bradley
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4/10/97
Load of Soil Trk 5 PTF _____
Contractor _____
Gross 78200 Customer Rhino Environmental
Tare 31780 To BS Services
From _____
Net _____ Driver _____ On _____ Off _____
40957 Weighmaster Minnick
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-10-97
Load of _____ Trk #9 PTF _____
Contractor _____
Gross 87120 Customer Rhino
Tare 30060 To _____
From _____
Net _____ Driver _____ On _____ Off _____
40928 Weighmaster Landy Craig
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL — Hobbs, N.M. Date 4-10-97
Load of Soil Trk 8 PTF _____
Contractor _____
Gross 84000 Customer Rhino
Tare 32960 To _____
From _____
Net _____ Driver _____ On _____ Off
40954 Weighmaster KD
NMDA APPROVED LICENSE #003

HOBBS IRON & METAL - Hobbs, N.M.

Date 4-10-97

Load of Sail

Trk. 5 PTF

Contractor

Gross 81500

Customer Rhino

Tare 31780

To BJ Services

From

Net

Driver

On

Off X

40956

Weighmaster XD
NMDA APPROVED

LICENSE #003

HOBBS IRON & METAL - Hobbs, N.M.

Date 4-10-97

Load of Sail

Trk. 5 PTF

Contractor

Gross 81430

Customer Rhino

Tare 31780

To BJ Services

From

Net

Driver

On

Off X

40925

Weighmaster XD
NMDA APPROVED

LICENSE #003



July 10, 1995

Mark
Ms. Kathy Brown
State of New Mexico
Energy, Minerals, and Natural Resources Dept.
Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: May 1995 Monitoring Well Sampling Event
BJ Services Company, U.S.A.
Hobbs, New Mexico

Dear Ms. Brown:

Enclosed is the Monitoring Well Sampling Event Report prepared by Brown and Caldwell for the site previously owned by Western Company of North America in Hobbs, New Mexico. BJ Services Company, U.S.A. acquired the Western Company of North America on April 13, 1995. BJ Services will continue to work with the state to complete this project. I am the Manager, Environmental Services for BJ Services and will be the primary contact for this project. Please contact me at (713) 363-7528 or at the address below for any questions or concerns. I look forward to working with you on this matter.

Sincerely,

Jo Ann Cobb, REM
Manager, Environmental Services

cc: Clint Chamberlain, BJ, Hobbs

B R O W N A N D
C A L D W E L L

June 29, 1995

Ms. Kathy Brown
State of New Mexico
Energy, Minerals, and Natural Resources Dept.
Oil Conservation Division
Post Office Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

19-1892-10

Subject: BJ Services Company, U.S.A.
 Hobbs, New Mexico Facility
 May 1995 Monitoring Well Sampling Event

Dear Ms. Brown:

BJ Services Company, U.S.A. acquired The Western Company of North America (Western) oil well servicing district office in Hobbs, New Mexico effective April 13, 1995. On May 3 and 4, 1995, Brown and Caldwell conducted a groundwater monitoring well sampling event at the BJ Services facility located in Hobbs, New Mexico. The sampling event was conducted to determine concentrations of dissolved-phase hydrocarbons in the groundwater at the facility. The following is a description of the activities conducted during this sampling event.

The depth to groundwater was measured with an oil/water interface probe to the nearest 0.01 foot, and recorded in the field log book. A cumulative table of groundwater elevation data is presented on Table 1. The groundwater elevation data was used to calculate well purge volumes and estimate groundwater gradient and direction. The groundwater flow direction at the facility continues to be generally to the east. The groundwater elevations are 1.0 to 1.5 feet lower than measured in January 1994. Based on the current measurements, the gradient is estimated to be 0.005 feet per foot. A potentiometric surface map is presented in Figure 1.

Approximately 3 feet of phase-separated hydrocarbons (PSH) was detected in MW-4 and 0.2 feet of PSH was detected in MW-1. MW-2 could not be located and is assumed to have been destroyed during facility activities such as grading.

Monitoring well purging was accomplished using a 2-inch diameter stainless steel submersible pump. During purging of each well, pH, temperature, specific conductivity, dissolved oxygen (DO), and oxidation/reduction potential (Redox) readings were collected. These readings were collected at one well volume intervals. Two consecutive readings within five percent (for each of the three parameters: pH, temperature, and specific conductivity) were used to indicate that

Use or disclosure of data contained on this sheet is subject to the restriction specified at the beginning of this document.
Environmental Engineering And Consulting • Analytical Services

1415 LOUISIANA, SUITE 2500, HOUSTON, TX 77002
(713) 759-0999 FAX (713) 759-0952

Ms. Kathy Brown

June 29, 1995

Page 2

groundwater had stabilized. The parameters in each monitoring well typically stabilized after two well volumes had been removed; however, at least three well volumes were removed from each well. The fresh water well was purged by allowing the well pump to remove water and discharge into the associated water storage tank. After purging activities were completed, each monitoring well was allowed to recover to near static water level before a groundwater sample was obtained. MW-1 and MW-4 were not sampled because of PSH present in the wells.

Groundwater samples were collected using disposable bailers. The fresh water well sample was obtained directly from a tap located at the wellhead. Samples were placed directly from the bailer or tap into laboratory cleaned sample containers and labelled. An equipment rinse blank was collected from the submersible pump by pouring distilled water over the pump and collecting the water in laboratory containers. The groundwater samples were then placed on ice, and shipped by overnight courier to BC Analytical in Glendale, California using chain-of-custody procedures.

Purging equipment was cleaned prior to each use by washing with a laboratory grade detergent, rinsing with tap water, and then rinsing with distilled water. Purged water and excess water generated by equipment cleaning operations was placed in the on-site waste collection system for treatment and disposal by BJ Services.

Groundwater samples collected during this sampling event were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020, and nitrate, sulfate, and alkalinity.

Total concentrations of BTEX constituents above the laboratory detection limit were reported in the groundwater samples obtained from each monitoring well except MW-11 and the fresh water well. Total benzene concentrations ranged from 3.0 micrograms per liter ($\mu\text{g/L}$) in MW-8 to 7,960 $\mu\text{g/L}$ in MW-6. Total BTEX concentrations ranged from 12.35 $\mu\text{g/L}$ in MW-8 to 36,900 $\mu\text{g/L}$ in MW-6. A cumulative summary of BTEX analytical results for groundwater samples is included as Table 2. The laboratory analytical reports and chain of custody record are included as Appendix A.

If you have any questions regarding the information contained in this letter report, please call me at (713) 759-0999.

Very truly yours,

BROWN AND CALDWELL



W. Alan Hopkins, P.G.
Project Manager

Robert N. Jennings, P.E.
Manger, Gulf Coast Region

cc: Ms. Jo Ann Cobb, BJ Services/Western Company of North America

Use or disclosure of data contained on this sheet is subject to the restriction specified at the beginning of this document.

Tables

TABLES

Cumulative Groundwater Elevation Data
Cumulative Results of BTEX Analysis for Groundwater Samples

CUMULATIVE GROUNDWATER ELEVATION DATA

Table 1.
Cumulative Groundwater Elevation Data
BJ Services/Western Hobbs Facility
Hobbs, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft) (relative)	Depth to Water from TOC (ft)	Groundwater Elevation (ft)
MW-1	August 10, 1992	101.44	53.22	48.22
	February 9, 1993	101.44	53.03	48.41
	August 18, 1993	101.44	53.1	48.34
	January 26, 1994	101.44	53.31	48.13
	May 3, 1995	101.44	54.64	NA-Free product
MW-2	August 10, 1992	101.5	52.82	48.68
	February 9, 1993	98.75	49.6	49.15
	August 18, 1993	98.75	49.71	49.04
	January 26, 1994	98.75	49.97	48.78
	May 3, 1995	98.75		Well destroyed
MW-3	August 10, 1992	101.44	52.99	48.45
	February 9, 1993	101.44	52.72	48.72
	August 18, 1993	101.44	52.82	48.62
	January 26, 1994	101.44	53.05	48.39
	May 3, 1995	101.44	54.31	47.13
MW-4	August 10, 1992	99.33	50.55	48.78
	February 9, 1993	99.33	50.26	49.07
	August 18, 1993	99.33	50.38	48.95
	January 26, 1994	99.33	50.9	48.43
	May 3, 1995	99.33	54.51	NA-Free product
MW-5	August 10, 1992	101.85	52.38	49.47
	February 9, 1993	101.85	52.06	49.79
	August 18, 1993	101.85	52.16	49.69
	January 26, 1994	101.85	52.5	49.35
	May 3, 1995	101.85	53.57	48.28
MW-6	August 10, 1992	NM	NM	NM
	February 9, 1993	99.25	50.58	48.67
	August 18, 1993	99.25	50.78	48.47
	January 26, 1994	99.25	51	48.25
	May 3, 1995	99.25	52.63	46.62
MW-7	August 10, 1992	NM	NM	NM
	February 9, 1993	98.96	50.53	48.43
	August 18, 1993	98.96	50.74	48.22
	January 26, 1994	98.96	51.01	47.95
	May 3, 1995	98.96	52.25	46.71
MW-8	August 10, 1992	NM	NM	NM
	February 9, 1993	99.12	50.48	48.64
	August 18, 1993	99.12	50.67	48.45
	January 26, 1994	99.12	50.96	48.16
	May 3, 1995	99.12	52.15	46.97
MW-9	August 10, 1992	NM	NM	NM
	February 9, 1993	NM	NM	NM
	April 22, 1993	99.18	49.73	49.45
	July 15, 1993	99.18	49.65	49.53
	August 18, 1993	99.18	49.85	49.33
	January 26, 1994	99.18	50.02	49.16
	May 3, 1995	99.18	51.35	47.83
MW-10	August 10, 1992	NM	NM	NM
	February 9, 1993	NM	NM	NM
	August 18, 1993	98.9	51.54	47.36
	January 26, 1994	98.9	51.9	47
	May 3, 1995	98.9	52.97	45.93
MW-11	August 10, 1992	NM	NM	NM
	February 9, 1993	NM	NM	NM
	August 18, 1993	98.82	51.92	46.9
	January 26, 1994	98.92	52.32	46.6
	May 3, 1995	98.92	53.38	45.54

NA-Free product: Free phase hydrocarbons were encountered in the well. No water level was calculated.

Note: MW-2 could not be located and is assumed destroyed.

NM - Not measured.

CUMULATIVE RESULTS OF BTEX ANALYSIS FOR GROUNDWATER SAMPLES

Table 2.
 Cumulative Results of BTEX Analysis for Groundwater Samples
 BJ Services/Western Hobbs Facility
 Hobbs, New Mexico

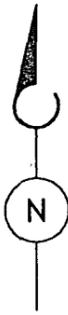
Well ID	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1	8/10/92	5,550	12,090	2,160	7,370
	2/9/93	2,100	6,500	1,300	7,400
	8/19/93	3,200	7,300	1,200	3,700
	1/27/94	1,930	4,580	672	2,390
	5/3/95	NS	NS	NS	NS
MW-2	8/10/93	14.9	<4.0	<4.0	<4.0
	2/9/93	<2.0	<2.0	<2.0	<6.0
	8/19/93	100	12	3	13
	1/27/94	<1.0	1.2	2	2.5
	5/3/95	NS	NS	NS	NS
MW-3	8/10/93	304.9	2,099	6,760	1,586
	2/9/93	130	<10.0	<10.0	190
	8/19/93	560	3,100	630	1,900
	1/27/94	1,070	5,380	510	3,120
	5/4/95	770	3,300	470	1,800
MW-4	8/10/93	2,594	10,360	2,160	6,740
	2/9/93	5,200	15,000	2,200	10,000
	8/19/93	3,000	12,000	<2,000	7,000
	1/27/94	NS	NS	NS	NS
	5/3/95	NS	NS	NS	NS
MW-5	8/10/93	<4.0	<4.0	<4.0	<4.0
	2/9/93	<2.0	<2.0	<2.0	<6.0
	8/10/93	<2.0	<2.0	<2.0	<2.0
	1/27/94	8.7	29.9	4	11.3
	5/3/95	3.7	5.3	0.92	4.6
MW-6	8/10/92	NS	NS	NS	NS
	2/9/93	7,000	19,000	3,100	7,200
	8/19/93	8,100	19,000	3,500	6,400
	1/27/94	7,960	20,200	3,830	6,150
	5/4/95	11,000	17,000	2,900	6,000
MW-7	8/10/92	NS	NS	NS	NS
	2/9/93	<2.0	<2.0	<2.0	<6.0
	8/19/93	<2.0	3	<2.0	<2.0
	1/27/94	1.1	<1.0	<1.0	<1.0
	5/3/95	52	3.4	0.67	2.8
MW-8	8/10/92	NS	NS	NS	NS
	2/9/93	<2.0	<2.0	<2.0	<6.0
	8/19/93	<2.0	<2.0	<2.0	<2.0
	1/27/94	<1.0	<1.0	<1.0	<1.0
	5/3/95	3	4.9	0.75	3.7
MW-9	8/10/92	NS	NS	NS	NS
	2/9/93	NS	NS	NS	NS
	4/22/93	570	380	<50.0	870
	7/15/93	121	7.3	3	458
	8/19/93	390	290	40	250
	1/27/94	327	357	51.1	293
	5/3/95	380	110	19	120
MW-10	8/10/92	NS	NS	NS	NS
	2/9/93	NS	NS	NS	NS
	8/19/93	190	460	<200	240
	1/27/94	13.4	4	5.5	33.6
	5/4/95	980	15	11	84
MW-11	8/10/92	NS	NS	NS	NS
	2/9/93	NS	NS	NS	NS
	8/19/93	<2.0	<2.0	<2.0	<2.0
	1/27/94	<1.0	<1.0	<1.0	<1.0
	5/4/95	<0.3	<0.3	<0.3	<0.6
Fresh Water Well	8/10/92	<4.0	<4.0	<4.0	<4.0
	2/9/93	77	10	<2.0	73
	8/19/93	NS	NS	NS	NS
	1/27/94	<1.0	<1.0	<1.0	<1.0
	5/4/95	<0.3	<0.3	<0.3	<0.6

NS - Not sampled

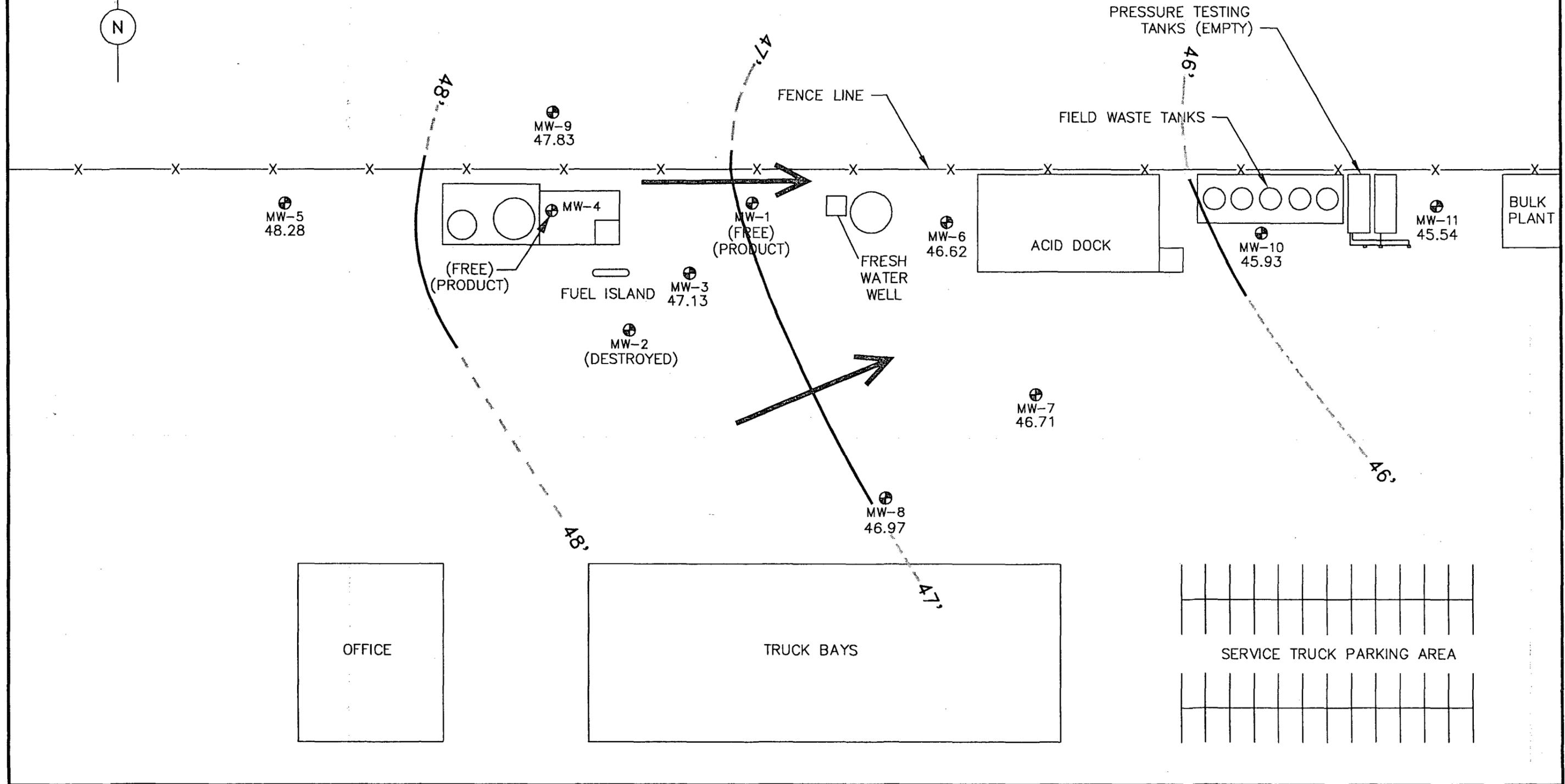
FIGURE

Potentiometric Surface Map

POTENTIOMETRIC SURFACE MAP



HOMCO PROPERTY



T:\1892\POTENTIO 8/29/95 DHD

BROWN AND CALDWELL HOUSTON, TEXAS SUBMITTED: _____ DATE: _____ PROJECT MANAGER APPROVED: _____ DATE: _____ BROWN AND CALDWELL	0 20 40 SCALE: 1" = 40' DRAWN BY: <i>DHD</i> DATE: <i>5/22</i> CHK'D BY: _____ DATE: _____ APPROVED: _____ DATE: _____	LEGEND MW-8 MONITORING WELL LOCATION AND IDENTIFICATION, WATER LEVEL GROUNDWATER FLOW DIRECTION	TITLE: POTENTIOMETRIC SURFACE MAP CLIENT: BJ SERVICES/WESTERN SITE: HOBBS, NEW MEXICO	DATE: 6/29/95 PROJECT NUMBER: 1892-10 FIGURE NUMBER: 1
---	--	---	---	--

Appendices

APPENDICES

Laboratory Analytical Reports

A



LABORATORY ANALYTICAL REPORTS

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

May 16, 1995

Brown and Caldwell Consultants
1415 Louisiana, Suite 2500
Houston, Tx 77002
Attn: Mr. Alan Hopkins

Dear Mr. Hopkins,

Enclosed is the analytical report for chemical testing for samples taken on 04/26/95.
It includes the following:

- 1) Analytical Report of results
- 2) QC summary including LCS/LCSD, MS/MSD, duplicate samples, method blanks, and surrogates.
- 3) Cross reference sheet containing analyte, date analyzed, method, and batch number.
- 4) Case narrative explaining QC deficiencies and/or problems encountered in testing.
- 5) Electronic data in agreed upon format.

If you have any questions, please do not hesitate to call.

Very truly yours,

Brian Moore

Brian Moore
Program Specialist



B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

Case Narrative

All quality objectives were met including holding times, LCS/LCSD, MS/MSD, Duplicate samples, and Method Blanks as applicable.

No analytical difficulties were encountered with any project samples with the following:

All samples for method 8020 BTEX that were received in duplicate were analyzed in duplicate (both voa vials were analyzed and reported). The results for the duplicates all match except samples G95-05-088-7 and G95-05-088-14 (MW-10). Both vials were analyzed a second time, and both vials showed similar results.

ANALYTICAL REPORT

B C Analytical

801 Western Avenue
 Glendale, CA 91201
 818/247-5737
 Fax: 818/247-9797

LOG NO: G95-05-088

Received: 05 MAY 95

Mailed: MAY 16 1995

Mr. Alan Hopkins
 Brown and Caldwell Consultants
 1415 Louisiana, Suite 2500
 Houston, Texas 77002

Project: 1892-10

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED				
05-088-1	MW-9	03 MAY 95				
05-088-2	MW-5	03 MAY 95				
05-088-3	MW-8	03 MAY 95				
05-088-4	MW-7	03 MAY 95				
05-088-5	MW-11	04 MAY 95				
PARAMETER		05-088-1	05-088-2	05-088-3	05-088-4	05-088-5
Nitrate (300.0/9056), mg/L		6.7	30	9.8	9.0	2.8
Sulfate (300.0/9056), mg/L		130	240	130	160	240
Alkalinity (310.1)						
Carbonate Alk (as CaCO3), mg/L		<1	<1	<1	<1	<1
Bicarbonate Alk (as CaCO3), mg/L		500	300	310	450	530
Hydroxide Alk (as CaCO3), mg/L		<1	<1	<1	<1	<1
Total Alkalinity (as CaCO3), mg/L		500	300	310	450	530
EPA 8020 BTEX						
Date Analyzed		05/09/95	05/09/95	05/09/95	05/10/95	05/10/95
Dilution Factor, Times		2	1	1	1	1
Benzene, ug/L		380	3.7	3.0	52	<0.3
Toluene, ug/L		110	5.3	4.9	3.4	<0.3
Ethylbenzene, ug/L		19	0.92	0.75	0.67	<0.3
Total Xylene Isomers, ug/L		120	4.6	3.7	2.8	<0.6
Other EPA 8020 BTEX		---	---	---	---	---



BC Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G95-05-088

Received: 05 MAY 95

Mr. Alan Hopkins
Brown and Caldwell Consultants
1415 Louisiana, Suite 2500
Houston, Texas 77002

Project: 1892-10

REPORT OF ANALYTICAL RESULTS

Page 2

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED		
05-088-6	MW-10	04 MAY 95		
05-088-7	MW-6	04 MAY 95		
05-088-8	MW-3	04 MAY 95		
PARAMETER		05-088-6	05-088-7	05-088-8
Nitrate (300.0/9056), mg/L		1.6	<0.2	5.6
Sulfate (300.0/9056), mg/L		91	8.4	140
Alkalinity (310.1)				
Carbonate Alk (as CaCO3), mg/L		<1	<1	<1
Bicarbonate Alk (as CaCO3), mg/L		480	650	390
Hydroxide Alk (as CaCO3), mg/L		<1	<1	<1
Total Alkalinity (as CaCO3), mg/L		480	650	390
EPA 8020 BTEX				
Date Analyzed		05/10/95	05/12/95	05/12/95
Dilution Factor, Times		5	100	50
Benzene, ug/L		980	11000	770
Toluene, ug/L		15	17000	3300
Ethylbenzene, ug/L		11	2900	470
Total Xylene Isomers, ug/L		84	6000	1800
Other EPA 8020 BTEX		---	---	---



B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G95-05-088

Received: 05 MAY 95

Mr. Alan Hopkins
Brown and Caldwell Consultants
1415 Louisiana, Suite 2500
Houston, Texas 77002

Project: 1892-10

REPORT OF ANALYTICAL RESULTS

Page 3

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED				
05-088-9	MW-9 Dup	03 MAY 95				
05-088-10	MW-5 Dup	03 MAY 95				
05-088-11	MW-8 Dup	03 MAY 95				
05-088-12	MW-7 Dup	03 MAY 95				
05-088-13	MW-11 Dup	04 MAY 95				
PARAMETER	05-088-9	05-088-10	05-088-11	05-088-12	05-088-13	
EPA 8020 BTEX						
Date Analyzed	05/09/95	05/09/95	05/09/95	05/09/95	05/10/95	
Dilution Factor, Times	2	1	1	1	1	
Benzene, ug/L	360	3.7	4.0	53	<0.3	
Toluene, ug/L	110	5.0	5.1	4.6	<0.3	
Ethylbenzene, ug/L	18	0.88	0.86	0.87	<0.3	
Total Xylene Isomers, ug/L	120	4.1	3.5	3.4	<0.6	
Other EPA 8020 BTEX	---	---	---	---	---	

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G95-05-088

Received: 05 MAY 95

Mr. Alan Hopkins
Brown and Caldwell Consultants
1415 Louisiana, Suite 2500
Houston, Texas 77002

Project: 1892-10

REPORT OF ANALYTICAL RESULTS

Page 4

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED			
05-088-14	MW-10 Dup	04 MAY 95			
05-088-15	MW-6 Dup	04 MAY 95			
05-088-16	MW-3 Dup	04 MAY 95			
05-088-17	Dupe-1	04 MAY 95			
PARAMETER		05-088-14	05-088-15	05-088-16	05-088-17
EPA 8020 BTEX					
Date Analyzed		05/10/95	05/12/95	05/12/95	05/11/95
Dilution Factor, Times		5	100	50	100
Benzene, ug/L		980	4900	790	9600
Toluene, ug/L		14	6900	3500	15000
Ethylbenzene, ug/L		9.9	1100	430	2600
Total Xylene Isomers, ug/L		84	2500	1800	5400
Other EPA 8020 BTEX		---	---	---	---



B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G95-05-088

Received: 05 MAY 95

Mr. Alan Hopkins
Brown and Caldwell Consultants
1415 Louisiana, Suite 2500
Houston, Texas 77002

Project: 1892-10

REPORT OF ANALYTICAL RESULTS

Page 5

LOG NO	SAMPLE DESCRIPTION, BLANK WATER SAMPLES	DATE SAMPLED	
05-088-18	Rinse Blank	04 MAY 95	
05-088-19	Trip Blank	04 MAY 95	
PARAMETER		05-088-18	05-088-19
EPA 8020 BTEX			
Date Analyzed		05/11/95	05/11/95
Dilution Factor, Times		1	1
Benzene, ug/L		<0.3	<0.3
Toluene, ug/L		<0.3	<0.3
Ethylbenzene, ug/L		<0.3	<0.3
Total Xylene Isomers, ug/L		<0.6	<0.6
Other EPA 8020 BTEX		---	---



ANALYTICAL REPORT

B C Analytical

801 Western Avenue
Glendale, CA 91201
818/247-5737
Fax: 818/247-9797

LOG NO: G95-05-110

Received: 08 MAY 95

Mr. Alan Hopkins
Brown and Caldwell Consultants
1415 Louisiana, Suite 2500
Houston, Texas 77002

Project: 1892-10

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
05-110-1	Well	04 MAY 95
PARAMETER	05-110-1	
EPA 8020 BTEX /		
Date Analyzed	05/11/95	
Dilution Factor, Times	1	
Benzene, ug/L	<0.3	
Toluene, ug/L	<0.3	
Ethylbenzene, ug/L	<0.3	
Total Xylene Isomers, ug/L	<0.6	
Other EPA 8020 BTEX	---	


Jane Freemyer, Program Manager

: ORDER PLACED FOR CLIENT: Brown and Caldwell Consultants 9505088 :
 : BC ANALYTICAL : GLEN LAB : 15:06:16 15 MAY 1995 - P. 1 :

SAMPLES...	SAMPLE DESCRIPTION..	DETERM.....	DATE.....	METHOD.....	EQUIP.	BATCH..
			ANALYZED			
9505088*1	MW-9	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.09.95	8015M	536-21	95205
9505088*2	MW-5	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.09.95	8015M	536-21	95203
9505088*3	MW-8	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.09.95	8015M	536-21	95203
9505088*4	MW-7	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.10.95	8015M	536-21	95206
9505088*5	MW-11	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.10.95	8015M	536-21	95206
9505088*6	MW-10	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.10.95	8015M	536-21	95206
9505088*7	MW-6	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.12.95	8015M	536-21	95207
9505088*8	MW-3	ANIONS, NO3	05.05.95	300.0	533-23	950505
		ANIONS, SO4	05.05.95	300.0	533-23	950505
		ALK	05.10.95	310.1	533-08	9524
		GAS.BTEX	05.12.95	8015M	536-21	95207
9505088*9	MW-9 Dup	GAS.BTEX	05.09.95	8015M	536-21	95205
9505088*10	MW-5 Dup	GAS.BTEX	05.09.95	8015M	536-21	95203
9505088*11	MW-8 Dup	GAS.BTEX	05.09.95	8015M	536-21	95203
9505088*12	MW-7 Dup	GAS.BTEX	05.09.95	8015M	536-21	95205
9505088*13	MW-11 Dup	GAS.BTEX	05.10.95	8015M	536-21	95205
9505088*14	MW-10 Dup	GAS.BTEX	05.10.95	8015M	536-21	95206
9505088*15	MW-6 Dup	GAS.BTEX	05.12.95	8015M	536-21	95207
9505088*16	MW-3 Dup	GAS.BTEX	05.12.95	8015M	536-21	95207
9505088*17	Dupe-1	GAS.BTEX	05.11.95	8015M	536-21	95207
9505088*18	Rinse Blank	GAS.BTEX	05.11.95	8015M	536-21	95207
9505088*19	Trip Blank	GAS.BTEX	05.11.95	8015M	536-21	95207

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

: ORDER PLACED FOR CLIENT: Brown and Caldwell Consultants 9505110 :
: BC ANALYTICAL : GLEN LAB : 15:06:16 15 MAY 1995 - P. 2 :
=====

SAMPLES... SAMPLE DESCRIPTION.. DETERM..... DATE..... METHOD..... EQUIP. BATCH..
ANALYZED

9505110*1 Well GAS.BTEX 05.11.95 8015M 536-21 95207

Notes: Equipment = BC Analytical identification number for a particular piece of analytical equipment.

ID.NO = BC Analytical employee identification number of analyst.

BC ANALYTICAL

ORDER QC REPORT FOR G9505110

DATE REPORTED : 05/15/95

Page 1

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
1. Nitrate (300.0/905	05.05.95	C5051018*1 950505	23.6	25.0	mg/L	94
2. Nitrate (300.0/905	05.05.95	C5051019*1 950505	23.4	25.0	mg/L	94
3. Sulfate (300.0/905	05.05.95	C5051022*1 950505	98.9	100	mg/L	99
4. Sulfate (300.0/905	05.05.95	C5051023*1 950505	97.4	100	mg/L	97
5. Alkalinity (310.1)		C5051002*1				
Bicarbonate Alk (as CaCO3)	05.10.95	9524	610	596	mg/L	102
Total Alkalinity (as CaCO3)	05.10.95	9524	610	596	mg/L	102
6. Alkalinity (310.1)		C5051003*1				
Bicarbonate Alk (as CaCO3)	05.10.95	9524	622	596	mg/L	104
Total Alkalinity (as CaCO3)	05.10.95	9524	622	596	mg/L	104
7. EPA 8020 BTEX		C5051407*1				
Date Analyzed	05.09.95	95205	05/09/95	05/09/95	Date	N/A
Benzene	05.09.95	95205	15.9	15.2	ug/L	105
Toluene	05.09.95	95205	93.3	97.4	ug/L	96
Ethylbenzene	05.09.95	95205	19.7	20.4	ug/L	97
Total Xylene Isomers	05.09.95	95205	112	119	ug/L	94
8. EPA 8020 BTEX		C5051408*1				
Date Analyzed	05.09.95	95205	05/09/95	05/09/95	Date	N/A
Benzene	05.09.95	95205	14.6	15.2	ug/L	96
Toluene	05.09.95	95205	85.4	97.4	ug/L	88
Ethylbenzene	05.09.95	95205	18.1	20.4	ug/L	89
Total Xylene Isomers	05.09.95	95205	103	119	ug/L	87
9. TPH (8015M/8020)		C5051038*1				
Date Analyzed	05.08.95	95203	05/08/95	05/08/95	Date	N/A
Benzene	05.08.95	95203	13.1	15.2	ug/L	86
Toluene	05.08.95	95203	87.1	97.4	ug/L	89
Ethylbenzene	05.08.95	95203	18.1	20.4	ug/L	89
Total Xylene Isomers	05.08.95	95203	104	119	ug/L	87
TPH (Gasoline Range)	05.08.95	95203	1030	1100	ug/L	94
10. TPH (8015M/8020)		C5051039*1				
Date Analyzed	05.08.95	95203	05/08/95	05/08/95	Date	N/A
Benzene	05.08.95	95203	11.9	15.2	ug/L	78
Toluene	05.08.95	95203	84.6	97.4	ug/L	87
Ethylbenzene	05.08.95	95203	17.4	20.4	ug/L	85
Total Xylene Isomers	05.08.95	95203	98.1	119	ug/L	82
TPH (Gasoline Range)	05.08.95	95203	1010	1100	ug/L	92
11. TPH (8015M/8020)		C5051475*1				
Date Analyzed	05.10.95	95206	05/10/95	05/10/95	Date	N/A
Benzene	05.10.95	95206	13.9	15.2	ug/L	91
Toluene	05.10.95	95206	89.6	97.4	ug/L	92
Ethylbenzene	05.10.95	95206	19.9	20.4	ug/L	98
Total Xylene Isomers	05.10.95	95206	113	119	ug/L	95
TPH (Gasoline Range)	05.10.95	95206	1020	1100	ug/L	93
12. TPH (8015M/8020)		C5051476*1				
Date Analyzed	05.10.95	95206	05/10/95	05/10/95	Date	N/A

BC ANALYTICAL

ORDER QC REPORT FOR G9505110

DATE REPORTED : 05/15/95

Page 2

LABORATORY CONTROL STANDARDS
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	LC RESULT	LT RESULT	UNIT	PERCENT RECOVERY
Benzene	05.10.95	95206	13.4	15.2	ug/L	88
Toluene	05.10.95	95206	89.0	97.4	ug/L	91
Ethylbenzene	05.10.95	95206	20.1	20.4	ug/L	99
Total Xylene Isomers	05.10.95	95206	114	119	ug/L	96
TPH (Gasoline Range)	05.10.95	95206	990	1100	ug/L	90
13. TPH (8015M/8020)	C5051631*1					
Date Analyzed	05.11.95	95207	05/11/95	05/11/95	Date	N/A
Benzene	05.11.95	95207	16.5	15.2	ug/L	109
Toluene	05.11.95	95207	96.6	97.4	ug/L	99
Ethylbenzene	05.11.95	95207	21.4	20.4	ug/L	105
Total Xylene Isomers	05.11.95	95207	121	119	ug/L	102
TPH (Gasoline Range)	05.11.95	95207	1010	1100	ug/L	92
14. TPH (8015M/8020)	C5051632*1					
Date Analyzed	05.11.95	95207	05/11/95	05/11/95	Date	N/A
Benzene	05.11.95	95207	14.7	15.2	ug/L	97
Toluene	05.11.95	95207	91.0	97.4	ug/L	93
Ethylbenzene	05.11.95	95207	20.6	20.4	ug/L	101
Total Xylene Isomers	05.11.95	95207	115	119	ug/L	97
TPH (Gasoline Range)	05.11.95	95207	1090	1100	ug/L	99

BC ANALYTICAL

ORDER QC REPORT FOR G9505110

DATE REPORTED : 05/15/95

Page 1

ADDITIONAL LCS PRECISION (DUPLICATES)
FOR SAMPLES ON THIS ORDER

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	LC1 RESULT	LC2 RESULT	UNIT	RELATIVE % DIFF
1. Nitrate (300.0/905)		05.05.95	950505	23.6	23.4	mg/L	1
2. Sulfate (300.0/905)		05.05.95	950505	98.9	97.4	mg/L	2
3. Alkalinity (310.1)							
Carbonate Alk (as CaCO3)		05.10.95	9524	<1	<1	mg/L	NA
Bicarbonate Alk (as CaCO3)		05.10.95	9524	610	622	mg/L	2
Hydroxide Alk (as CaCO3)		05.10.95	9524	<1	<1	mg/L	NA
Total Alkalinity (as CaCO3)		05.10.95	9524	610	622	mg/L	2
4. EPA 8020 BTEX							
Date Analyzed		05.09.95	95205	05/09/95	05/09/95	Date	N/A
Benzene		05.09.95	95205	15.9	14.6	ug/L	9
Toluene		05.09.95	95205	93.3	85.4	ug/L	9
Ethylbenzene		05.09.95	95205	19.7	18.1	ug/L	8
Total Xylene Isomers		05.09.95	95205	112	103	ug/L	8
5. TPH (8015M/8020)							
Date Analyzed		05.08.95	95203	05/08/95	05/08/95	Date	N/A
Benzene		05.08.95	95203	13.1	11.9	ug/L	10
Toluene		05.08.95	95203	87.1	84.6	ug/L	3
Ethylbenzene		05.08.95	95203	18.1	17.4	ug/L	4
Total Xylene Isomers		05.08.95	95203	104	98.1	ug/L	6
TPH (Gasoline Range)		05.08.95	95203	1030	1010	ug/L	2
6. TPH (8015M/8020)							
Date Analyzed		05.10.95	95206	05/10/95	05/10/95	Date	N/A
Benzene		05.10.95	95206	13.9	13.4	ug/L	4
Toluene		05.10.95	95206	89.6	89.0	ug/L	1
Ethylbenzene		05.10.95	95206	19.9	20.1	ug/L	1
Total Xylene Isomers		05.10.95	95206	113	114	ug/L	1
TPH (Gasoline Range)		05.10.95	95206	1020	990	ug/L	3
7. TPH (8015M/8020)							
Date Analyzed		05.11.95	95207	05/11/95	05/11/95	Date	N/A
Benzene		05.11.95	95207	16.5	14.7	ug/L	12
Toluene		05.11.95	95207	96.6	91.0	ug/L	6
Ethylbenzene		05.11.95	95207	21.4	20.6	ug/L	4
Total Xylene Isomers		05.11.95	95207	121	115	ug/L	5
TPH (Gasoline Range)		05.11.95	95207	1010	1090	ug/L	8

BC ANALYTICAL

ORDER QC REPORT FOR G9505110

DATE REPORTED : 05/15/95

Page 1

MATRIX QC PRECISION (DUPLICATE SPIKES)
FOR SAMPLES ON THIS ORDER

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS RESULT	MSD RESULT	UNIT	RELATIVE % DIFF
1. Nitrate (300.0/905	9505088*1	05.05.95	950505	37.6	37.0	mg/L	2
2. Sulfate (300.0/905	9505088*1	05.05.95	950505	154	153	mg/L	1

BC ANALYTICAL

ORDER QC REPORT FOR G9505110

DATE REPORTED : 05/15/95

Page 1

MATRIX QC ACCURACY (SPIKES)
FOR SAMPLES ON THIS ORDER

PARAMETER	SAMPLE NUMBER	DATE ANALYZED	BATCH NUMBER	MS %	MSD %	TRUE RESULT	UNIT	
1. Nitrate (300.0/905	9505088*1	05.05.95	950505	94	92	39.7	mg/L	
2. Sulfate (300.0/905	9505088*1	05.05.95	950505	NC	NC	158	mg/L	NC

BC ANALYTICAL

ORDER QC REPORT FOR G9505110

DATE REPORTED : 05/15/95

Page 1

METHOD BLANKS AND REPORTING DETECTION LIMIT (RDL)
FOR BATCHES WHICH INCLUDE THIS ORDER

PARAMETER	DATE ANALYZED	BATCH NUMBER	BLANK RESULT	RDL	UNIT	METHOD
1. Nitrate (300.0/905	05.05.95	B505496*1 950505	0	0.1	mg/L	300.0
2. Sulfate (300.0/905	05.05.95	B505498*1 950505	0	0.1	mg/L	300.0
3. Alkalinity (310.1)		B505734*1				
Carbonate Alk (as CaCO3)	05.10.95	9524	<1	10	mg/L	310.1
Bicarbonate Alk (as CaCO3)	05.10.95	9524	0	10	mg/L	310.1
Hydroxide Alk (as CaCO3)	05.10.95	9524	<1	10	mg/L	310.1
Total Alkalinity (as CaCO3)	05.10.95	9524	0	10	mg/L	310.1
4. EPA 8020 BTEX		B505694*1				
Date Analyzed	05.09.95	95205	05/09/95	NA	Date	8015M
Benzene	05.09.95	95205	0	0.3	ug/L	8015M
Toluene	05.09.95	95205	0.14	0.3	ug/L	8015M
Ethylbenzene	05.09.95	95205	0	0.3	ug/L	8015M
Total Xylene Isomers	05.09.95	95205	0.17	0.6	ug/L	8015M
5. TPH (8015M/8020)		B505506*1				
Date Analyzed	05.08.95	95203	05/08/95	NA	Date	8015M.TX
Benzene	05.08.95	95203	0.19	0.5	ug/L	8015M.TX
Toluene	05.08.95	95203	0.14	0.5	ug/L	8015M.TX
Ethylbenzene	05.08.95	95203	0.14	0.5	ug/L	8015M.TX
Total Xylene Isomers	05.08.95	95203	0.43	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	05.08.95	95203	35	50	ug/L	8015M.TX
6. TPH (8015M/8020)		B505728*1				
Date Analyzed	05.10.95	95206	05/10/95	NA	Date	8015M.TX
Benzene	05.10.95	95206	0	0.5	ug/L	8015M.TX
Toluene	05.10.95	95206	0.094	0.5	ug/L	8015M.TX
Ethylbenzene	05.10.95	95206	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	05.10.95	95206	0.11	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	05.10.95	95206	21	50	ug/L	8015M.TX
7. TPH (8015M/8020)		B505806*1				
Date Analyzed	05.11.95	95207	05/11/95	NA	Date	8015M.TX
Benzene	05.11.95	95207	0	0.5	ug/L	8015M.TX
Toluene	05.11.95	95207	0.27	0.5	ug/L	8015M.TX
Ethylbenzene	05.11.95	95207	0	0.5	ug/L	8015M.TX
Total Xylene Isomers	05.11.95	95207	0.33	0.5	ug/L	8015M.TX
TPH (Gasoline Range)	05.11.95	95207	33	50	ug/L	8015M.TX

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 15:06:13 15 MAY 1995 - P. 1 :
=====

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9505088*1							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	45.1	50.0	90	
9505088*2							
8015M	a,a,a-Trifluorotoluene	95203	05/09/95	51.4	50.0	103	
9505088*3							
8015M	a,a,a-Trifluorotoluene	95203	05/09/95	51.6	50.0	103	
9505088*4							
8015M	a,a,a-Trifluorotoluene	95206	05/10/95	51.1	50.0	102	
9505088*5							
8015M	a,a,a-Trifluorotoluene	95206	05/10/95	51.4	50.0	103	
9505088*6							
8015M	a,a,a-Trifluorotoluene	95206	05/10/95	50.1	50.0	100	
9505088*7							
8015M	a,a,a-Trifluorotoluene	95207	05/12/95	50.8	50.0	102	
9505088*8							
8015M	a,a,a-Trifluorotoluene	95207	05/12/95	49.7	50.0	99	
9505088*9							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	45.6	50.0	91	
9505088*10							
8015M	a,a,a-Trifluorotoluene	95203	05/09/95	51.1	50.0	102	
9505088*11							
8015M	a,a,a-Trifluorotoluene	95203	05/09/95	51.8	50.0	104	
9505088*12							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	51.4	50.0	103	
9505088*13							
8015M	a,a,a-Trifluorotoluene	95205	05/10/95	51.2	50.0	102	
9505088*14							
8015M	a,a,a-Trifluorotoluene	95206	05/10/95	49.9	50.0	100	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 15:06:13 15 MAY 1995 - P. 2 :
=====

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
9505088*15							
8015M	a,a,a-Trifluorotoluene	95207	05/12/95	50.6	50.0	101	
9505088*16							
8015M	a,a,a-Trifluorotoluene	95207	05/12/95	47.6	50.0	95	
9505088*17							
8015M	a,a,a-Trifluorotoluene	95207	05/11/95	50.9	50.0	102	
9505088*18							
8015M	a,a,a-Trifluorotoluene	95207	05/11/95	51.6	50.0	103	
9505088*19							
8015M	a,a,a-Trifluorotoluene	95207	05/11/95	51.5	50.0	103	
9505110*1							
8015M	a,a,a-Trifluorotoluene	95207	05/11/95	51.5	50.0	103	

: SURROGATE RECOVERIES :

: BC ANALYTICAL : GLEN LAB : 15:06:15 15 MAY 1995 - P. 1 :

```
=====
```

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
B505506*1*MB							
8015M.TXa	a,a,a-Trifluorotoluene	95203	05/08/95	50.4	50.0	101	
B505694*1*MB							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	51.8	50.0	104	
B505728*1*MB							
8015M.TXa	a,a,a-Trifluorotoluene	95206	05/10/95	51.5	50.0	103	
B505806*1*MB							
8015M.TXa	a,a,a-Trifluorotoluene	95207	05/11/95	52.1	50.0	104	
C5051038*1*LC							
8015M.TXa	a,a,a-Trifluorotoluene	95203	05/08/95	53.6	50.0	107	
C5051038*1*LT							
8015M.TXa	a,a,a-Trifluorotoluene	95203	05/08/95	50.0	50.0	100	
C5051039*1*LC							
8015M.TXa	a,a,a-Trifluorotoluene	95203	05/08/95	51.4	50.0	103	
C5051039*1*LT							
8015M.TXa	a,a,a-Trifluorotoluene	95203	05/08/95	50.0	50.0	100	
C5051407*1*LC							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	54.3	50.0	109	
C5051407*1*LT							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	50.0	50.0	100	
C5051408*1*LC							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	52.7	50.0	105	
C5051408*1*LT							
8015M	a,a,a-Trifluorotoluene	95205	05/09/95	50.0	50.0	100	
C5051475*1*LC							
8015M.TXa	a,a,a-Trifluorotoluene	95206	05/10/95	50.9	50.0	102	
C5051475*1*LT							
8015M.TXa	a,a,a-Trifluorotoluene	95206	05/10/95	50.0	50.0	100	

: SURROGATE RECOVERIES :
: BC ANALYTICAL : GLEN LAB : 15:06:16 15 MAY 1995 - P. 2 :
=====

METHOD	ANALYTE	BATCH	ANALYZED	REPORTED	TRUE	%REC	FLAG
C5051476*1*LC							
8015M.TXa,a,a-Trifluorotoluene		95206	05/10/95	51.0	50.0	102	
C5051476*1*LT							
8015M.TXa,a,a-Trifluorotoluene		95206	05/10/95	50.0	50.0	100	
C5051631*1*LC							
8015M.TXa,a,a-Trifluorotoluene		95207	05/11/95	53.5	50.0	107	
C5051631*1*LT							
8015M.TXa,a,a-Trifluorotoluene		95207	05/11/95	50.0	50.0	100	
C5051632*1*LC							
8015M.TXa,a,a-Trifluorotoluene		95207	05/11/95	52.6	50.0	105	
C5051632*1*LT							
8015M.TXa,a,a-Trifluorotoluene		95207	05/11/95	50.0	50.0	100	





U.S. Environmental Protection Agency

Contract No. 68-W4-0007

**RCRA Enforcement, Permitting, and
Assistance Contract—EPA Zone II**

RECEIVED

AUG 16 1995

Environmental Bureau
Oil Conservation Division

PRC

PRC Environmental Management, Inc.



Printed on recycled paper

July 11, 1995



Mr. Gregory Pashia
Work Assignment Manager
RCRA Enforcement Branch
U.S. EPA Region 6
1445 Ross Avenue
Dallas, TX 75202

**Subject: U.S. EPA Contract No. 68-W4-0007
Work Assignment No. R06032
BJ Western
NMD052377637
Submittal of Inspection Report**

Dear Mr. Pashia:

PRC Environmental Management, Inc. (PRC), is submitting four copies of the Inspection Report and two copies of the videotapes for the April 24 and 25, 1995, compliance evaluation inspection of BJ Western in Hobbs, New Mexico. PRC collected samples at BJ Western in accordance with the sampling procedures outlined in the work assignment-specific quality assurance project plan, dated March 9, 1995. This report documents PRC's activities and observations. One copy of the report contains original photographs and color slides.

Please call me at (214) 754-8765 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Mark Butler".

Mark Butler
Project Manager

Enclosure

cc: Rena McClurg, EPA RPO (letter only)
Arthur Glazer, PRC Program Manager
Stephen Phillips, PRC Regional Manager (letter only)
File

COMPLIANCE EVALUATION INSPECTION

**BJ WESTERN
HOBBS, NEW MEXICO
NMD052377637**

INSPECTION REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Solid Waste
Washington, DC 20460**

Work Assignment No.	:	R06032
EPA Region	:	6
Date Prepared	:	July 11, 1995
Contract No.	:	68-W4-0007
Prepared by	:	PRC Environmental Management, Inc.
Telephone No.	:	214/754-8765
EPA Work Assignment Manager	:	Mr. Greg Pashia
Telephone No.	:	214/665-2287

CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 BACKGROUND	1
3.0 INSPECTION ACTIVITIES	2
3.1 WASTEWATER TREATMENT SYSTEM	3
3.1.1 Sumps	4
3.1.2 Sand Trap Tank	4
3.1.3 Tank A	5
3.1.4 Tank B	6
3.1.5 Tank C	6
3.2 EMPTY DRUM STORAGE AREA	7
3.3 USED OIL STORAGE TANK	7
3.4 SOLVENT RAGS	8
3.5 SOLVENT RECYCLING BY SAFETY-KLEEN CORPORATION	8
4.0 SUMMARY	8

Appendices

A	FACILITY LOCATION MAP
B	FACILITY LAYOUT MAP
C	SAMPLE LOCATION MAP
D	PHOTOGRAPHS
E	INSPECTION NOTES
F	COMPLIANCE EVALUATION INSPECTION CHECKLIST
G	CHAIN-OF-CUSTODY FORMS
H	WEIGHT CALCULATIONS

Attachments

A	MATERIAL SAFETY DATA SHEETS (MSDSs) OF CHEMICAL PRODUCTS HANDLED BY BJ WESTERN
B	TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) ANALYSIS OF SLUDGE FROM SAND TRAP TANK, CONDUCTED BY BJ WESTERN
C	SAFETY-KLEEN SOLVENT RECYCLING MANIFESTS
D	ANALYTICAL DATA FROM SAMPLES COLLECTED DURING THE INSPECTION

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), provided technical assistance to U.S. Environmental Protection Agency (EPA) Region 6 in conducting a compliance evaluation inspection (CEI) of BJ Western, a chemical blending and distributor facility in Hobbs, Lea County, New Mexico (Appendix A). PRC provided assistance to EPA under Resource Conservation and Recovery Act (RCRA) Enforcement, Permitting, and Assistance (REPA) Contract No. 68-W4-0007, Work Assignment No. R06032. This inspection was conducted in conjunction with the EPA Region 6 RCRA Enforcement Branch Pesticide Toxicity Characteristic Leaching Procedure (TCLP) Enforcement Initiative.

This report summarizes the CEI of the BJ Western facility. Section 2.0 provides general facility information; Section 3.0 describes waste management units and inspection activities; and Section 4.0 is a summary. Appendices A through H contain information compiled by PRC, and Attachments A through D contain information provided to PRC.

2.0 BACKGROUND

BJ Western is located at 2708 West County Road, Lea County, Hobbs, New Mexico (Appendix A, Figure A-1). BJ Western was formed by a merger between Western Company of North America and BJ Services. The merger was completed during the week before the inspection was conducted.

BJ Western is a chemical blending and distributor facility that provides drummed and bulk (trucked) volumes of chemicals to the oil production industry. Attachment A contains available material safety data sheets (MSDS) for chemical products handled at the facility. BJ Western has obtained EPA hazardous waste identification number NMD052377637; its latest date of notification was August 18, 1980, as a small-quantity generator.

Following are the facility data:

- Facility Address—2708 West County Road
Hobbs, NM 88240
- Telephone Number—(505) 392-5556

- EPA Identification Number—NMD052377637

3.0 INSPECTION ACTIVITIES

On April 24 and 25, 1995, personnel from EPA and PRC inspected the BJ Western facility. The purpose of the inspection was to conduct (1) an unannounced RCRA CEI of the facility, and (2) any sampling activities necessary to support potential enforcement actions.

After arriving at the facility, personnel from EPA and PRC met with facility representatives to discuss the purpose of the visit and to plan the schedule for completing the CEI activities. During the preliminary meeting, facility representatives outlined the facility history, processes, and waste management activities. The following personnel participated in the preliminary meeting and the CEI activities:

- Gregory Pashia EPA
- Mark Butler PRC
- Jeff Ayers PRC
- Luis Vega PRC
- Lynette Collins PRC
- Jim Frazier BJ Western
 Facility Manager
- Jim Boling BJ Western
 Operations Supervisor
- Clint Chamberlain BJ Western
 District Manager

PRC and EPA personnel began the inspection by conducting a site reconnaissance. Appendix D contains photographs taken during the inspection. Appendix E contains inspection notes. Facility representatives provided PRC with the following documents, which are attached to this report:

- Material Safety Data Sheets (MSDS) of Chemical Products Handled by BJ Western (Attachment A)
- TCLP Analysis of Sludge from Sand Trap Tank, Conducted By BJ Western (Attachment B)
- Safety-Kleen Solvent Recycling Manifests (Attachment C)

The following subsections present information regarding the facility processes, waste management units, and associated sampling activities conducted during the inspection.

3.1 WASTEWATER TREATMENT SYSTEM

The facility's wastewater treatment system, which receives flow from sumps around the facility, consists of four cylindrical fiberglass tanks (Sand Trap Tank and Tanks A, B, and C), which are in-ground, open-top tanks, and are operated in series (Appendix B, Figure B-1). The Sand Trap Tank, which is the first tank in the series, receives all sump flow to the system generated at the facility. According to facility representatives, the Sand Trap Tank's function in the system is to gravity-separate influent solids from liquids. Liquids are then gravity-fed to the remaining series of tanks (Tanks A, B, and C) for subsequent separation of phased liquids. Facility representatives stated that water from Tank B is (1) loaded into trucks for pH neutralization with soda ash, and (2) transported to the City of Hobbs publicly-owned treatment works (POTW). According to facility representatives, once every 2 months, sludge from the Sand Trap Tank is transported off site for commercial disposal at Controlled Recovery, Inc. (CRI). Facility representatives stated that, since September 1992, none of the contents of Tanks A and C have been removed. Facility representatives stated that a composite sample of all phases in the Sand Trap Tank is analyzed once each year for TCLP volatile organic compounds (VOC), TCLP semivolatile organic compounds (SVOC), and TCLP metals (Attachment C).

B

3.1.1 Sumps

Facility representatives stated that influent to the Sand Trap Tank consists of flow from sumps at (1) the truck maintenance shop, (2) the truck washing station, and (3) the product loading bay. All of the sumps are connected in series by underground piping before draining to the Sand Trap Tank. According to facility personnel, floor sumps in the truck maintenance shop are used when the floors are cleaned with a high-pH soap. The truck washing station is used to clean the outside of facility trucks by using a high-pH degreaser. Facility representatives stated that the sump in the product loading bay receives any spills or washdown resulting from product loading during cleaning in that area. Review of the MSDSs (Attachment A) for the chemical products (about 40 different products) handled at the product loading bay, indicate that the constituents of these products include (1) methanol, (2) xylene, (3) trimethylbenzene, (4) isopropanol, (5) acetic acid, (6) isobutanol, (7) hydrochloric acid, (8) diethanolamine, (9) potassium carbonate, (10) sodium diacetate, (11) boric acid, (12) anhydrous ammonia, (13) hydrocarbon distillate, (14) complex hydrocarbon solvent, (15) methyl alcohol, (16) ethylene glycol, (17) heavy aromatic naptha, (18) light aromatic naptha, and (19) citric acid.

As directed by EPA, PRC collected a grab sample (designated BJWest-Outsump-01) of the sludge in the product loading bay sump for analyses for TCLP VOCs, TCLP SVOCs, TCLP metals, total VOCs (SW-846 Method 8240), and specific gravity. ~~Analysis did not detect any constituents at concentrations above toxicity characteristic (TC) regulatory levels (Attachment D) for TCLP VOCs, TCLP SVOCs, and TCLP metals. Analysis for total VOCs detected 4,400 mg/kg of toluene, 13,000 mg/kg of ethylbenzene, and 100,000 mg/kg of xylene (Attachment D). Specific gravity of the sludge was determined to be 1.74 (Attachment D).~~

3.1.2 Sand Trap Tank

The Sand Trap Tank has a diameter of 7.5 feet and a depth of 6 feet. Based on PRC's visual inspection, this tank contained distinct liquid and sludge phases. The measured depth of the liquids was 2.0 feet, and the measured depth of the sludge was 2.2 feet. This provides waste quantities of 2,203 kilograms of the liquids and 5,406 kilograms of the sludge (Appendix H, Table H-1).

As directed by EPA, PRC collected grab samples of the liquid (designated BJWest-Sandtrap-02 and BJWest-Sandtrap-03, a duplicate) and of the sludge (BJWest-Sandtrap-04 and BJWest-Sandtrap-05, a duplicate) for analyses for TCLP VOCs, TCLP SVOCs, TCLP metals, total VOCs, and specific gravity. Sample BJWest-Sandtrap-02 was also analyzed for corrosivity (pH).

~~Analysis of the liquid and sludge for TCLP VOCs, TCLP SVOCs, and TCLP metals did not detect any constituents at concentrations above TC regulatory levels (Attachment D). Analysis of liquid sample BJWest-Sandtrap-02 for total VOCs detected 19 mg/kg of toluene, 20 mg/kg of ethylbenzene, and 150 mg/kg of xylene (Attachment D). Analysis of sludge sample BJWest-Sandtrap-05 (duplicate of BJWest-Sandtrap-04) for total VOCs detected 8.7 mg/kg of toluene, 21 mg/kg of ethylbenzene, and 140 mg/kg of xylene (Attachment D). The pH of the liquid was determined to be 2.25. Specific gravity was determined to be 0.883 for the liquid and 1.97 for the sludge (Attachment D).~~

3.1.3 Tank A

Tank A has a diameter of 12.25 feet and a depth of 16 feet. Based on PRC's visual inspection, this tank contained distinct liquid and sludge phases. The measured depth of the liquids was 8.0 feet, and the measured depth of the sludge was 4.0 feet. This provides quantities of 26,249 kilograms for the liquid and 13,297 kilograms for the sludge (Appendix H, Table H-1).

As directed by EPA, PRC collected grab samples of the liquid (designated BJWest-TankA-06) and of the sludge (BJWest-TankA-07) for analyses for TCLP VOCs, TCLP SVOCs, TCLP metals, total VOCs, pH, and specific gravity. Sample BJWest-TankA-06 was also analyzed for ignitability (flash point).

~~Analysis of the liquid and sludge for TCLP VOCs, TCLP SVOCs, and TCLP metals did not detect any constituents at concentrations above TC regulatory levels (Attachment D). Analysis of the liquid (BJWest-TankA-06) for total VOCs detected 33 mg/kg of ethylbenzene and 350 mg/kg of xylene (Attachment D). Analysis of the sludge (BJWest-TankA-07) for total VOCs detected 7.6 mg/kg of toluene, 17 mg/kg of ethylbenzene, and 95 mg/kg of xylene (Attachment D). The pH was determined to be 2.26 for the liquid and 2.90 for the sludge. The flash point of the liquid was reported by the~~

~~laboratory as greater than 200°F.~~ Specific gravity was determined to be 0.986 for the liquid and 0.999 for the sludge (Attachment D).

3.1.4 Tank B

Tank B has a diameter of 12.25 feet and a depth of 16 feet. Based on PRC's visual inspection, this tank contained distinct liquid and sludge phases. The measured depth of the liquids was 0.25 foot, and the measured depth of the sludge was 6.75 feet. This provides quantities of 714 kilograms for the liquids and 20,148 kilograms for the sludge (Appendix H, Table H-1).

As directed by EPA, PRC collected grab samples of the liquid (designated BJWest-TankB-08) and of the sludge (BJWest-TankB-09) for analyses for TCLP VOCs, TCLP SVOCs, TCLP metals, total VOCs, and specific gravity. Sample BJWest-TankB-08 was also analyzed for flash point.

~~Analysis of the liquid and sludge for TCLP VOCs, TCLP SVOCs, and TCLP metals did not detect any constituents at concentrations above TC regulatory levels (Attachment D). Analysis of the liquid (BJWest-TankB-08) for total VOCs detected 65 mg/kg of ethylbenzene, 270 mg/kg of styrene, and 310 mg/kg of xylene (Attachment D). Analysis of the sludge (BJWest-TankB-09) for total VOCs detected 63 mg/kg of toluene, 80 mg/kg of ethylbenzene, and 380 mg/kg of xylene (Attachment E). The flash point of the liquid was reported by the laboratory as greater than 200°F. Specific gravity was determined to be 0.859 for the liquid and 0.897 for the sludge (Attachment D).~~

3.1.5 Tank C

Tank C has a diameter of 12.25 feet and a depth of 16 feet. Based on PRC's visual inspection, this tank contained distinct liquid and sludge phases. The measured depth of the liquids was 0.5 foot, and the measured depth of the sludge was 11.25 feet. This provides quantities of 1,431 kilograms for the liquids and 34,779 kilograms for the sludge (Appendix H, Table H-1).

As directed by EPA, PRC collected grab samples of the liquid (designated BJWest-TankC-10) and of the sludge (BJWest-TankC-11) for analyses for TCLP VOCs, TCLP SVOCs, TCLP metals, total VOCs, and specific gravity. Sample BJWest-TankC-10 was also analyzed for flash point.

~~Analysis of the liquid and sludge for TCLP VOCs, TCLP SVOCs, and TCLP metals did not detect any constituents at concentrations above TC regulatory levels (Attachment D). Analysis of the liquid (BJWest-TankC-10) for total VOCs detected 48 mg/kg of toluene, 240 mg/kg of styrene, and 63 mg/kg of xylene (Attachment D). Analysis of the sludge (BJWest-TankC-11) for total VOCs detected 1,100 mg/kg of toluene and 230 mg/kg of xylene (Attachment D). The flash point of the liquid was greater than 200°F. Specific gravity was determined to be 0.860 for the liquid and 0.929 for the sludge (Attachment D).~~

3.2 EMPTY DRUM STORAGE AREA

According to facility representatives, BJ Western stores empty drums, and drums of off-specification or unusable product, behind a metal fence located at the northeast corner of the facility (Appendix B, Figure B-1). BJ Western ships all empty drums to West Texas Drum for reconditioning. BJ Western representatives did not know how long any of the drums had been stored on site. During the inspection, about 100 drums were identified in this storage area. Facility representatives identified most of these drums as being empty or containing unusable product. PRC inventoried several of these drums to document drum markings, contents, and volume (Appendix D). As directed by EPA, seven of the inventoried drums were also sampled and analyzed for specific gravity and either (1) flash point (BJWest-Drum02-12, BJWest-Drum03-13, BJWest-Drum11-15, BJWest-Drum15-16, BJWest-Drum17-17, and BJWest-Drum27-18), or (2) pH (BJWest-Drum05-14).

~~The analytical results indicate that the sample from Drum 27 (BJWest-Drum27-18) had a flash point of less than 75°F (Attachment D). Drum 27 contained 45 gallons, which is converted to 145 kilograms by using the specific gravity of the material of 0.847, as determined by the laboratory (Attachment D). Analysis of sample BJWest-Drum05-14 indicated a pH of 11.52 (Attachment D).~~

3.3 USED OIL STORAGE TANK

Used oil generated at the facility is stored in a 750-gallon aboveground storage tank located on the south side of the truck maintenance shop (Appendix B, Figure B-1). During the inspection, facility representatives stated that the contents of the tank were last picked up on January 31, 1995, for off-site recycling by a vendor.

3.4 SOLVENT RAGS

The facility accumulates used rags containing solvent in a trash can located outside the chemical storage warehouse (Appendix B, Figure B-1). These rags are placed in the same container with miscellaneous trash and debris; the container is then placed in a large trash bin behind the bulk storage warehouse. The trash bin is periodically emptied by a waste management vendor and disposed of off site as nonhazardous.

3.5 SOLVENT RECYCLING BY SAFETY-KLEEN CORPORATION

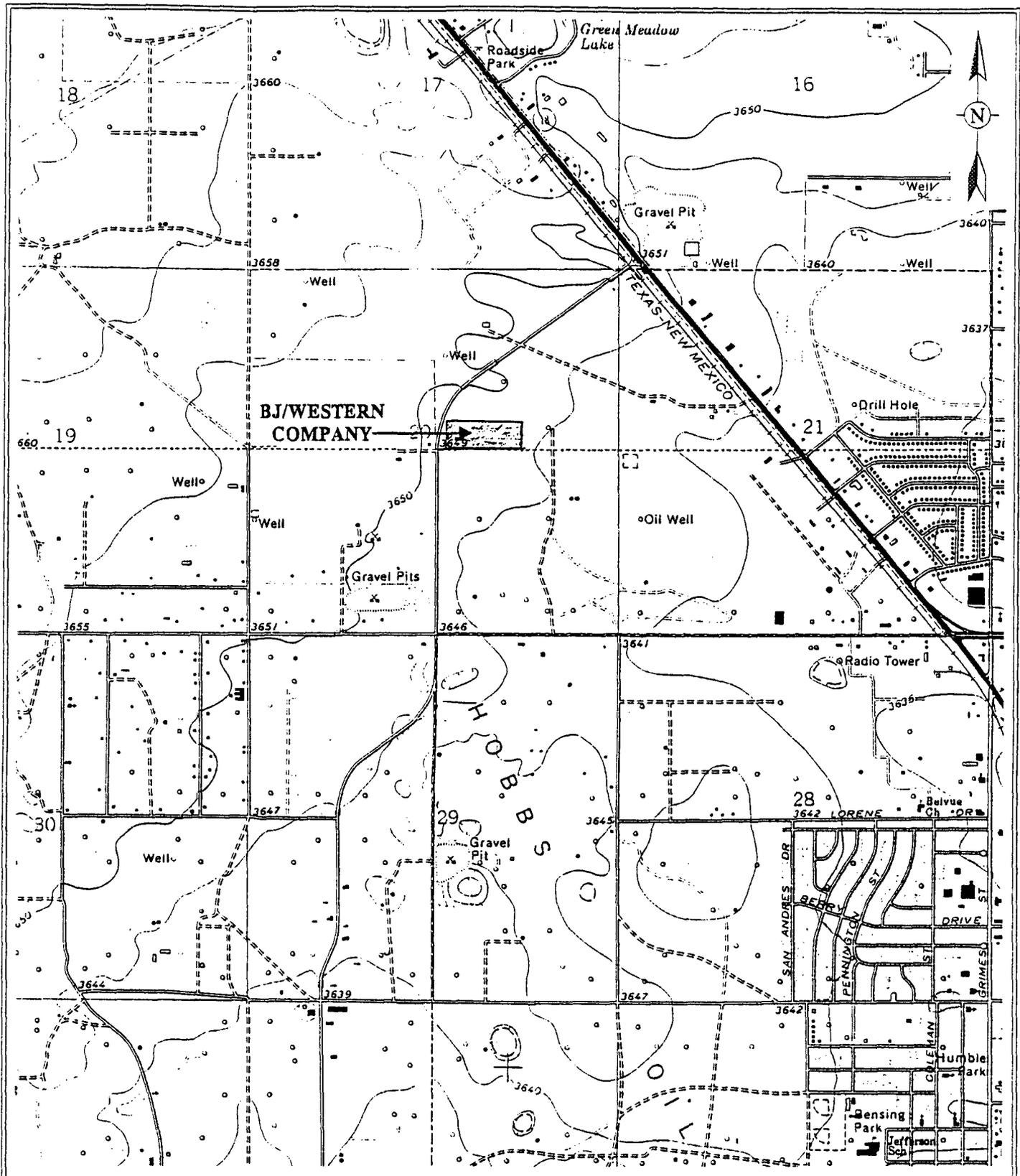
Safety-Kleen Corporation (Safety-Kleen) provides the facility with solvent wash bins located in the truck maintenance shop (Appendix B, Figure B-1). BJ Western uses the solvent wash bins for various cleaning activities. About once every 2 weeks, Safety-Kleen replaces spent solvents in the wash bins with new solvents. According to facility representatives, Safety-Kleen handles the manifesting, transporting, and recycling of the spent solvents. The waste manifests identify the spent solvents as RCRA hazardous waste codes D001, D006, D008, D018, D035, D039, and D040 (Attachment C). Based on the manifests, Safety-Kleen accepts about 60 gallons of spent solvents each month (Attachment C). Safety-Kleen transports the spent solvents to its Midland, Texas, facility.

4.0 SUMMARY

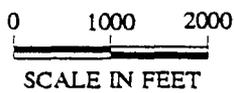
PRC provided technical assistance to EPA Region 6 in conducting a CEI of BJ Western in Hobbs, New Mexico. The facility has EPA identification number NMD052377637, and has provided notification of status as a small-quantity generator. ~~Analyses of the contents of the facility's four wastewater tanks did not detect concentrations of TCLP constituents that are above RCRA regulatory levels. However, based on the analyses for total VOCs, the tanks contained one of the following constituents: toluene, ethylbenzene, styrene, and xylene.~~ Contents of the Sand Trap Tank—which is one of the wastewater treatment tanks—are disposed of off site as nonhazardous wastes. The aqueous phase of Tank B is trucked to the City of Hobbs POTW. ~~Numerous drums in the empty drum storage area contained liquids. Several of these drums were sampled, and Drum 27 contained a material with a flash point of less than 75°F.~~ Solvent rags used in the chemical storage warehouse

are disposed of off site as nonhazardous. Each month, the facility generates about 60 gallons of spent solvents, which are serviced by Safety-Kleen.

APPENDIX A
FACILITY LOCATION MAP
(One Sheet)



QUADRANGLE LOCATION



SCALE IN FEET

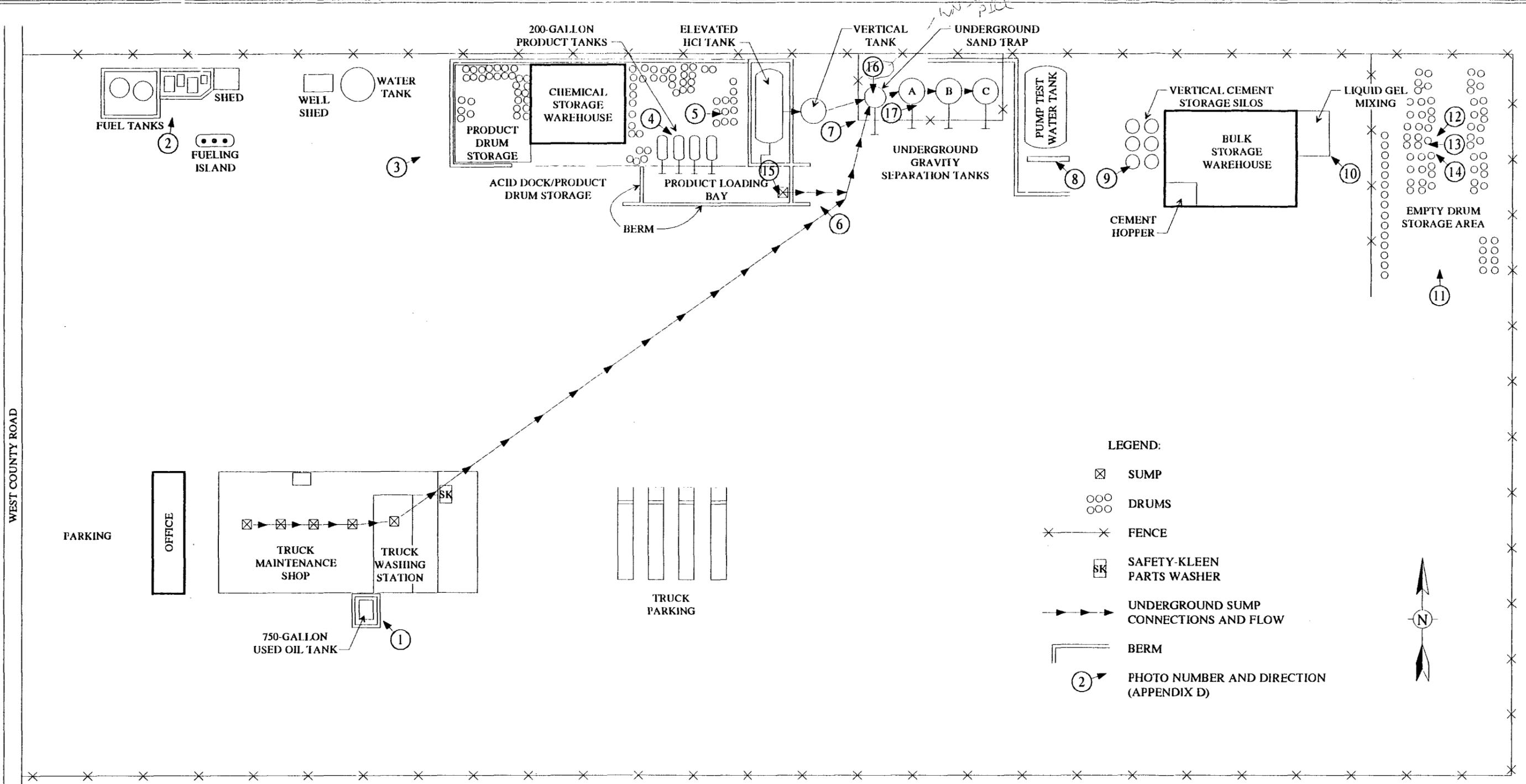
BJ/WESTERN COMPANY
 HOBBS, NEW MEXICO
 NMD052377637

FIGURE A-1
 FACILITY LOCATION MAP

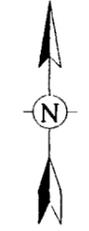
PRC Environmental Management, Inc.

SOURCE: MODIFIED FROM USGS, HOBBS WEST,
 NEW MEXICO QUADRANGLE, 1979

APPENDIX B
FACILITY LAYOUT MAP
(One Sheet)

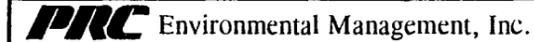


- LEGEND:**
- ☒ SUMP
 - DRUMS
 - ×-× FENCE
 - SK SAFETY-KLEEN PARTS WASHER
 - UNDERGROUND SUMP CONNECTIONS AND FLOW
 - ┌ BERM
 - ② PHOTO NUMBER AND DIRECTION (APPENDIX D)



BJ/WESTERN COMPANY
 HOBBS, NEW MEXICO
 NMD052377637

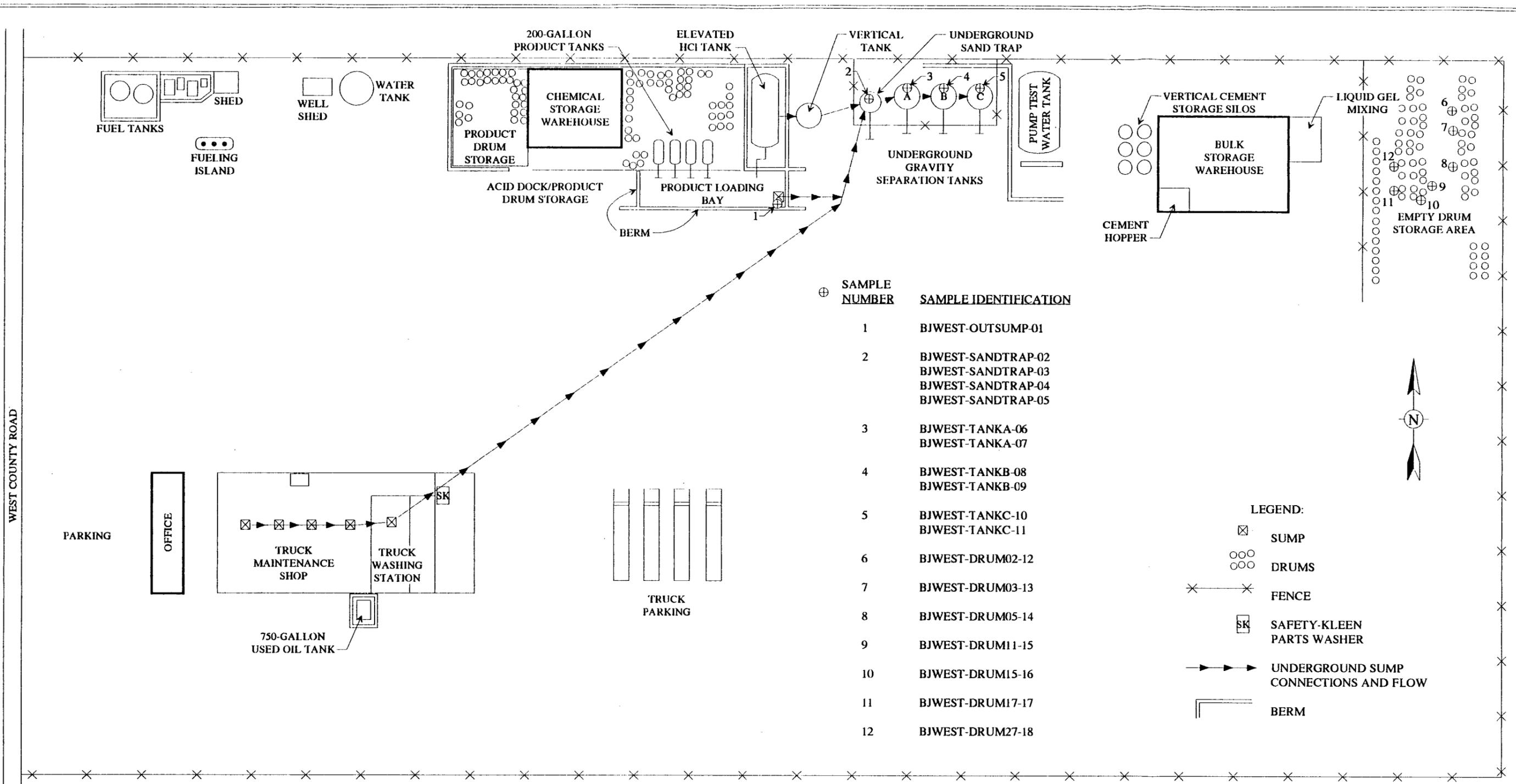
FIGURE B-1
 FACILITY LAYOUT MAP



SOURCE: PRC CEI INSPECTION, APRIL 24/25, 1995

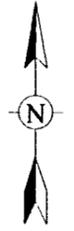
NOT TO SCALE

APPENDIX C
SAMPLE LOCATION MAP
(One Sheet)



⊕ SAMPLE NUMBER	SAMPLE IDENTIFICATION
1	BJWEST-OUTSUMP-01
2	BJWEST-SANDTRAP-02 BJWEST-SANDTRAP-03 BJWEST-SANDTRAP-04 BJWEST-SANDTRAP-05
3	BJWEST-TANKA-06 BJWEST-TANKA-07
4	BJWEST-TANKB-08 BJWEST-TANKB-09
5	BJWEST-TANKC-10 BJWEST-TANKC-11
6	BJWEST-DRUM02-12
7	BJWEST-DRUM03-13
8	BJWEST-DRUM05-14
9	BJWEST-DRUM11-15
10	BJWEST-DRUM15-16
11	BJWEST-DRUM17-17
12	BJWEST-DRUM27-18

- LEGEND:**
- ⊗ SUMP
 - DRUMS
 - ××× FENCE
 - SK SAFETY-KLEEN PARTS WASHER
 - UNDERGROUND SUMP CONNECTIONS AND FLOW
 - ┌ BERM



SOURCE: PRC CEI INSPECTION, APRIL 24/25, 1995

NOT TO SCALE

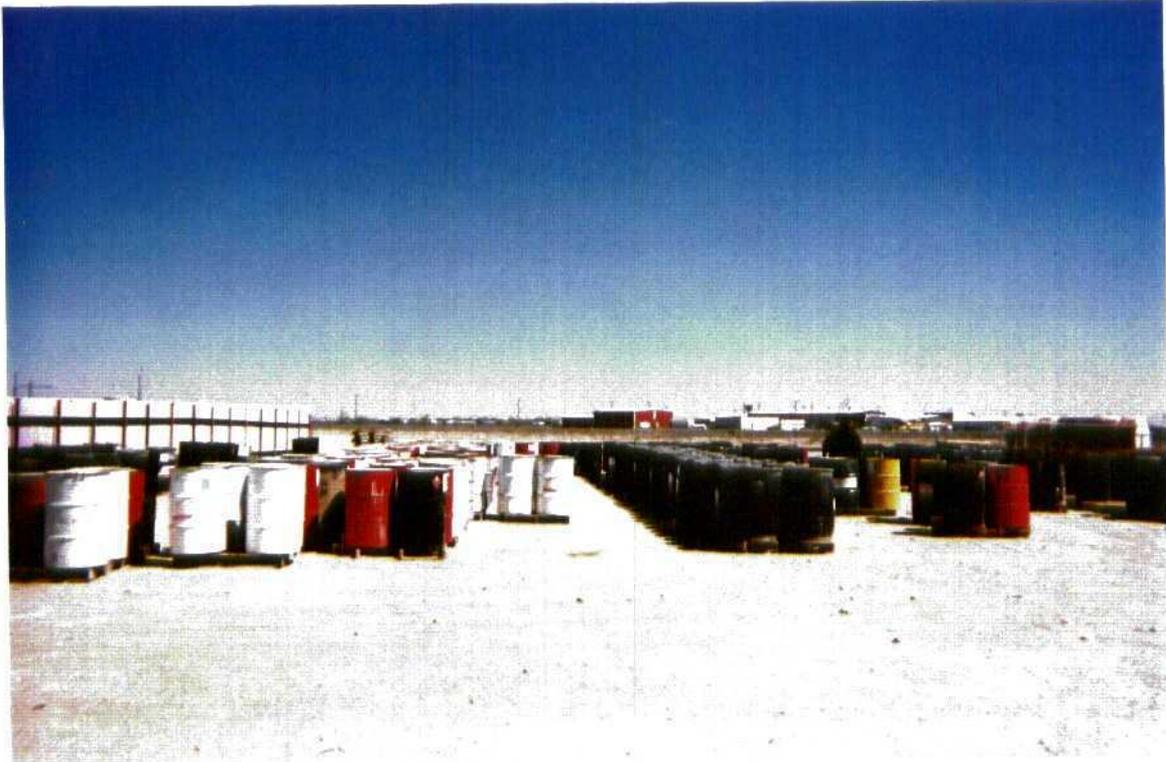
BJ/WESTERN COMPANY
HOBBS, NEW MEXICO
NMD052377637

FIGURE C-1
SAMPLE LOCATION MAP

PRC Environmental Management, Inc.

APPENDIX D
PHOTOGRAPHS
(Nine Sheets)

PHOTOGRAPH NO. 11



Date: 04/24/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: N
Picture Description: Empty drum storage area, located at the northeast corner of the facility

PHOTOGRAPH NO. 12



Date: 04/25/95 Picture Taken by: Luis Vega, PRC Direction Facing: SW
Picture Description: PRC collecting sample BJWest-Drum27-18 from Drum 27, located in the empty drum storage area; note that the drum is marked "bad" and "do not use."

PHOTOGRAPH NO. 13



Date: 04/25/95 Picture Taken by: Luis Vega, PRC Direction Facing: W
Picture Description: PRC collecting sample BJWest-Drum11-15 from Drum 11, located in the empty drum storage area

PHOTOGRAPH NO. 14



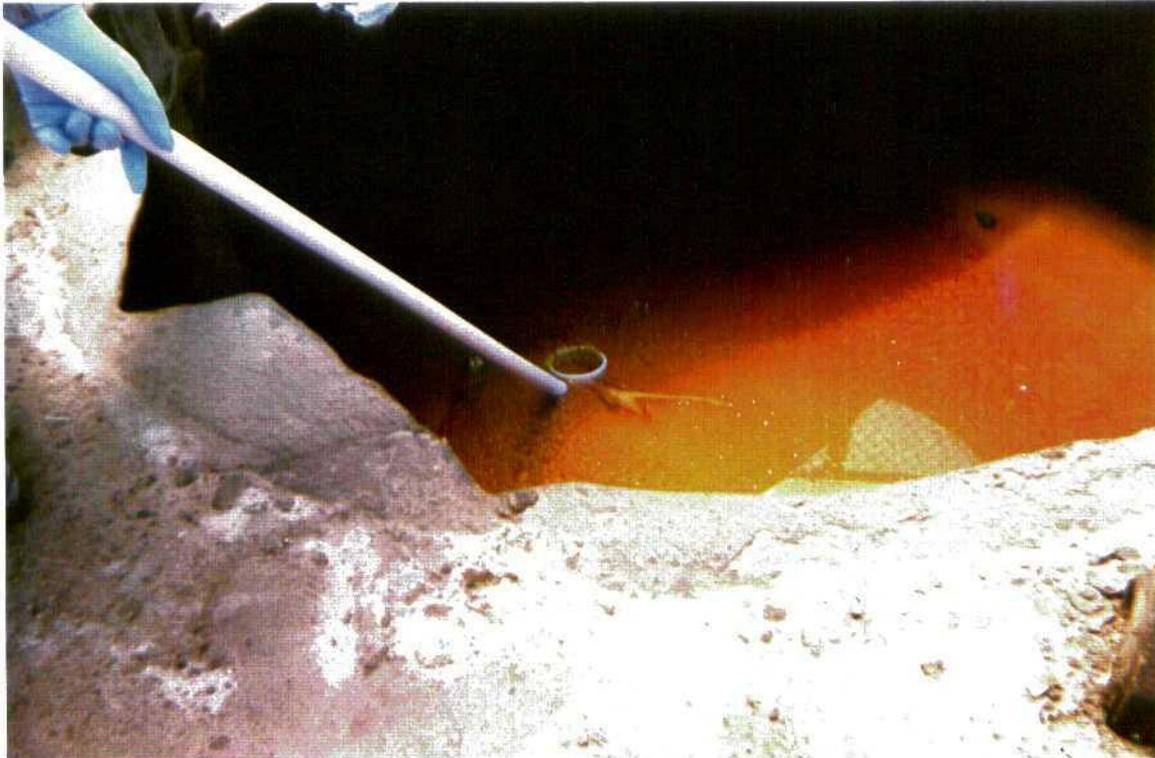
Date: 04/25/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: NW
Picture Description: PRC collecting sample BJWest-Drum02-12 from Drum 02, located in the empty drum storage area; note that the drum is marked "bad."

PHOTOGRAPH NO. 15



Date: 04/24/95 Picture Taken by: Luis Vega, PRC Direction Facing: SE
Picture Description: PRC collecting sample BJWest-Outsump-01 from the product loading bay sump

PHOTOGRAPH NO. 16



Date: 04/24/95 Picture Taken by: Mark Butler, PRC Direction Facing: W
Picture Description: PRC collecting sample BJWest-Sandtrap-02 from the Sand Trap Tank



Date: 04/24/95 Picture Taken by: Luis Vega, PRC Direction Facing: E
Picture Description: PRC collecting samples from Tanks A, B, and C

APPENDIX E
INSPECTION NOTES
(17 Sheets)



Wilson Jones.

Rulings Available:

- 84101 Record
- 84102 Single Entry Ledger
- 84103 Cash
- 84104 Single Entry Ledger (Large)

144 Pages

7-7/8 in. x 5-1/4 in.



0 78910 84101 3

Stock #84101



Filler paper contains minimum of 50% recycled material of which 40% is pre-consumer material and 10% is post-consumer material.

©1994 ACCO USA, Inc. 770 S. ACCO Plaza Wheeling, IL 60090

Made in U.S.A.

17020503214 4-24-95 M. A. Hobbie ①
 WESTERN NMD 852377 637
 CO. OF MATH AMERICA

0830

ENTERED THE FACILITY. ADDRESS:
 2708 W. COUNTY ROAD, HOOBS,
 88240. PM

JIM FRAZIER: FACILITY MANAGER
 JIM BELING: OPERATIONS SUPERVISOR
 CLINT CHANDLER: DISTRICT MANAGER
 INSPECTION TEAM WILL INSPECT

0845

THE FACILITY FIRST BEFORE MEETING
 IN A CONFERENCE ROOM.

0850

GRAG PASHINA REQUESTS INFO ON USA
 OR: LAST PICKUP UP 1-31-95. WILL
 CHECK LATER. PM

0855

BEGIN TOUR
 WESTERN WILL MEET WITH US SOLDIERS
 TO MAKE IT MORE COMPETITIVE. ~~MEET~~
 COMPLETED LAST THURSDAY.

= SAFETY KEEPER(S) PROVIDES ITS
 SOLVENT RECLAIMING. SAFETY
 KEEPER HANDLES THE MAINTENANCE.
 S.K. COMES BY EVERY COUPLE
 WEEKS. TWO S.K. UNITS TOTAL.
 MAINTENANCE STAFF & GENERAL
 MAINTENANCE SHOP. M.S. USES
 TO MAINTAIN VEHICLES (TRUCKS).
 PHOTOS OF M.S. AND S.K. UNIT.

4-24-95 WESTERN
M. Decker 120R0603214

FOUL SUMPS IN THE M.S. USED
TO CLEAN FLOCKS ONLY. SUMP
DRAIN TO A SERIES OF TANKS
OUTSIDE TANK CONTENTS HAULED
OF TO C&E (CONTROLLED RECOVERY
INC.). NEUTRALIZE THE PH AND
TRANSFER THE WATER TO THE
CITY OF HOSS'S WASTEWATER (WW)
TREATMENT. SLUDGE IS TRANSFERRED
TO C&E'S SHIPMENTS HAULED OFF
FROM SHIP TRAP EVERY COUPLE
MONTHS (LAST SHIPMENT MARCH
4/18). T&E RUN ON SURFACE
ONCE PER YEAR. WAYNE SAID
OF OGD SEES RESULTS, FULL
SPECTRUM ANALYSIS, EXCEPT
PESTICIDES AND ACIDS.

- DISCUSS DRUMS IN MAINTENANCE
SHOP. SORT FOR FLOCKS

M.S. A-NIGHT PH.

- DISPOSITION OF FLOCKS (DIT)?

- TRUCK WASHING STATION - USE
TO WASH THE OUTSIDE OF

THE TRACKS OF PH

DEGREASE SUMP ~~BY~~ DISCHARGE

TO TANKS OUTSIDE (STAIN TANKS)

IN INSIDE M.S. SUMP.

*

Mark Aultman
4-24-97

Western
1740603214

(7)

(OPSSA)

- WEST TEXAS OIL DRUM IS ALREADY WESTERN SHIPS ITS EMPTY DRUMS. HOW MANY DRUMS LAST YEAR?
- EMPTY DRUMS SHIPPED TO WEST TEXAS DRUM, AND SOME EMPLOYED THE PICKUP BY CHEMICAL VENDORS.
- DIESEL AND GAS TANKS (ASPHALT GROUND) ARE NOW EMPTY.
- PRACTICE OIL, CONCRETE (WATER), AND MOTOR OIL ABOVE OIL TANKS.
- PUT ARGONISINET MATRIMIA AND 70 SWATH UP THE OIL AND DISPOSE OF IN DRUMS (CRIF), WESTERN SHIPS TO CRI.
- Benzene - contaminated fuel (ABOUT 80' KG). WESTERN HAS A WATER WELL TO ABOUT 150'. USE WELL WATER TO LOAN AND ACID TRANSPORTS CITY WATER WHEN EVEN WHEN ELSE.
- STATE PERSONNEL AND HANDLING CLEANUP OF THE OIL.
- FINE RETURNATION.
- ACID (HIDRON (I-22) FLAMMABLE (METHANE)
- (S-3), (C-3), (C-30), (MUSOL-4), (ASR-5)

(6)

~~Mark Aultman~~

Mark Austin Western
4-24-94 17020603214
(9)

METHANOL (may down wells), HX-2, 1-9
AS-2, ASO-185, R7
= INVENTORY SHEET ONCE PER MONTH
= USEABLE MATERIAL STORED AROUND
FROM THE WASH SIDE, AT DRAWN
IN BY WAREHOUSE (SEPARATELY)
AND ALSO USABLE. CURRENTLY
IN AIR DOCK DRAIN STORAGE
AREA.

- CHEMICAL WAREHOUSE: 300A ASH
FROM SEAL, FACE-SIDE 20,
ACETIC ACID (FREEZES TO SOLID)
GOING BLEND TO THE OIL WAREHOUSE
DRAWN MATERIAL IS THIS ROOM
CONTAINS SAGGED MATERIAL WITH DRAIN
THAT MUST BE PROTECTED
FROM THE WEATHER.

- AIR DOCK CORRIDOR AREA. CONTAINS
SAND MATERIAL AT BEFORE (WILL
GET AT WENTON). PURE OXY-TO-
DAY STOCKPILE
- NO REPACKING HERE,
- E-10 DRUM (NOID-40000 EMULSIFIED)
SPREAD (SAND SHAPE). LINER INSIDE.
- METHANOL WASH OUT DRUM - CONTAIN
AND RECYCLED OR MIXED BY
NEW METHANOL AND SOLD.
DRUM OF P OR IT IS CALLED

~~Handwritten notes, mostly illegible due to crossing out.~~

(8)

Western 170603214 Muck taken 4-24-97 (13)

Separate Solids From Liquids



Gas is Treated by ANGELA HARBY
 Regarding Env. Questions.
 - GRAVITY FLOW. ALL SOLIDS
 IN THE SAND TRAP. OIL FLOWS
 TO THE THIRD TANK.

⇒ KNOXWATER TANK TO PASS
 PUMPY. HIGH PRESSURE
 AMPLIFIED SERVICE. CAN BE
 RECIRCULATE THE WATER
 ⇒ CEMENT STORAGE → USED TO COMBAT
 CASING OIL WELL AFTER PERFORM
 MEET API SPECS

- POWER DRUMS ARE STORED IN THIS
 AREA, AMMONIA PRESSURE IN
 BOXES, ETC.
 - LIQUID GEL MIXING SYSTEM -
 DIESEL-BASED - MIXED BY SURVEY
 AND PUMPED DOWN THE HOLE.
 SPC → SURVEY OBTAIN CONCENTRATION
 - AS WASTES GENERATED.
 - YELLOW TANKS IN OPEN AREA
 ARE SAND.

1066

*

~~... ..~~

12

~~... ..~~

WESTERN 170603214 MUCK TAKEN 4-24-97 (13)

Mark Miller Western 15
4-24-85 FAX 0603214

- PC DRUMS? CONTAIN PARTIAL RESIDUES FROM CONDENSED LIKE MATHLINES IN OTHER EMPTY DRUMS. ~~THE~~ STUART TOWN TOLD US ABOUT THE "PC" DRUMS. JEFF COUNTRY ABOUT 7 DRUMS MARKED PC. ALL OTHER DRUMS ~~BE~~ TOWARD CENTER MARKER "BMD" WILL BE TESTED (JIM FARMER) TO DETERMINE WHETHER THEY ARE BMD. IF BMD, JIM STATED THAT THEY WILL BE DISPOSED OFF SITE. JIM ESTIMATED THAT THERE ARE ABOUT 4 DRUMS MARKED BMD. JAC. WILL INVESTIGATE THH DRUMS THIS AFTERNOON. NO H.I.S. ISSUES SHOULD BE OF A CONCERN WHEN INVESTIGATING THE DRUMS.

- FRESH WATER TANK (WHITE) USED TO TEST PUMPS MAY CONTAIN SUDS. WHITE TANKS THAT NEVER BEEN TESTED. ~~THE~~ TANK DOES NOT KNOW WHETHER ~~THE~~ TANKS ~~ARE~~ ACCUMULATED ANY SUDS. JAC WILL CHECK.

~~Handwritten notes, mostly illegible and crossed out with a diagonal line.~~

(2)

~~1148 1290 1300 1310 1320 1330 1340 1350 1360 1370 1380 1390 1400 1410 1420 1430 1440 1450 1460 1470 1480 1490 1500 1510 1520 1530 1540 1550 1560 1570 1580 1590 1600 1610 1620 1630 1640 1650 1660 1670 1680 1690 1700 1710 1720 1730 1740 1750 1760 1770 1780 1790 1800 1810 1820 1830 1840 1850 1860 1870 1880 1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000~~

Mark Auer Western
4-24-95 170X0003214

~~MS~~ (17)

1148 PRC DISCUSSES A SAMPLING STRATEGY.
1290 JTA AND CRC REMOVE GATE FROM
OUTSUMP, LOCATED IN REID DOCK STRUCTURE.
1300 PRC, COLLECT SAMPLE BTWEST-OUTSUMP-01.
ANALYSES INCLUDE TOTAL UOA, TELP UOA,
TELP ABN, AND TELP MEMES, OF THE
SLUDGE MATERIAL. COLLECT SPIES
FOR BT/WESTERN.

1305 FIELD PH TEST NEUTRAL
1315 FINISARD COLLECTING LIQUID PORTION OF
1325 STARTED COLLECTING LIQUID PORTION OF
SAND TRAP. SAMPLE ID IS BTWEST-SAND
TRAP-02. ON VOLUME ALSO COLLECTED
FOR MS/MSD. SAMPLE BTWEST-SANDTRAP-03
IS A DUPLICATE OF THE LIQUID PORTION.
ANALYSES INCLUDE TOTAL UOA, TELP UOA/
ABN/~~MEMES~~^{MS} AND IDENTIFIABILITY. PH
OF LIQUIDS APPEARED TO BE AROUND
3-5. MS

1355 COMPLETED SAMPLES P2 AND P3 OF
SAND TRAP LIQUIDS. MS
1380 DIAMETER OF SAND TRAP AROUND 7 INCH.
1400 STARTED COLLECTING SLUDGE FROM
SAND TRAP. A SAMPLE ID IS
BTWEST-SANDTRAP-04. ANALYSES INCLUDE
TOTAL UOA, TELP UOA/MEMES. SAMPLE
BTWEST-SANDTRAP-05 IS A DUPLICATE OF 04.

(21)

M. ALLEN weston
4-24-94 17060603214

DEPTH OF LIQUIDS IS 2.0 FEET. DIAMETER OF TANK @ 7.5 FEET. SAND - ~~DEPTH~~ OF NORTH TANK \odot A \odot B \odot C (TANK #) 12 FEET. TANK # IS

A CYCLONARIC TANK (VERTICAL) MOSTLY SURFICED BELOW GROUND. APPROX 4 FEET 1 INCH TO LIQUIDS FROM THE TOP OF THE TANK. ~~RETTAN~~ THICKNESS OF LIQUIDS IS APPROX 8 (IN) FEET. THICKNESS OF SLUDGE

BOTTOMS IS UNKNOWN. PH OF SYSTEMS MATERIAL IS ~~UNKNOWN~~ PH CLOSE OR AT ϕ . LIGHT IMMISCIBLE PHASE ON TOP. PH OF AQUEOUS PHASE IS AROUND ϕ TOO. THE ~~PHASE~~ PHASE OF THIS TANK IS NOT IDENTIFIED AND SHIPPED TO ~~LABS~~ ~~TO BE TREATED~~ ~~BY (M)~~

1555 BEGIN SAMPLING TANK A. SAMPLE 10 IS WEST - TANK A - OBTAINING ANALYSES FOR TOTAL VOL, TELL VOL AND PH, IGNITABILITY, AND CORROSIVITY. ~~PH~~

1605 COMPLETE SAMPLING ϕ B. ~~END~~
1610 STARTING SAMPLING TANK A SLUGS. SAMPLE 10 IS WEST - TANK A - O7. ANALYSES INCLUDE TOTAL VOL

(20)

M. ALLEN weston
4-24-94 17060603214

~~DEPTH OF LIQUIDS IS 2.0 FEET. DIAMETER OF TANK @ 7.5 FEET. SAND - ~~DEPTH~~ OF NORTH TANK \odot A \odot B \odot C (TANK #) 12 FEET. TANK # IS~~
~~A CYCLONARIC TANK (VERTICAL) MOSTLY SURFICED BELOW GROUND. APPROX 4 FEET 1 INCH TO LIQUIDS FROM THE TOP OF THE TANK. ~~RETTAN~~ THICKNESS OF LIQUIDS IS APPROX 8 (IN) FEET. THICKNESS OF SLUDGE~~
~~BOTTOMS IS UNKNOWN. PH OF SYSTEMS MATERIAL IS ~~UNKNOWN~~ PH CLOSE OR AT ϕ . LIGHT IMMISCIBLE PHASE ON TOP. PH OF AQUEOUS PHASE IS AROUND ϕ TOO. THE ~~PHASE~~ PHASE OF THIS TANK IS NOT IDENTIFIED AND SHIPPED TO ~~LABS~~ ~~TO BE TREATED~~ ~~BY (M)~~~~
~~1555 BEGIN SAMPLING TANK A. SAMPLE 10 IS WEST - TANK A - OBTAINING ANALYSES FOR TOTAL VOL, TELL VOL AND PH, IGNITABILITY, AND CORROSIVITY. ~~PH~~~~
~~1605 COMPLETE SAMPLING ϕ B. ~~END~~~~
~~1610 STARTING SAMPLING TANK A SLUGS. SAMPLE 10 IS WEST - TANK A - O7. ANALYSES INCLUDE TOTAL VOL~~

Mad. Butler
western 170X0600214
4-24-95

START SAMPLE 11 TANK C SOLIDS.
SAMPLE 10 IS BS WEST - TANK C - 11.
ANALYSES INCLUDE TCEP LOT,
TCEP ASN, TCEP METALS, TO THE VOT
FINISH SAMPLE 11.
INTERVIEWED JIM FAEICA REGARDING
THE WASTEWATER TREATMENT PROCESS.

AS INDICATED BEFORE, INFLUENT TO
SAND TRAP IS M.S. FLOOD WASH, TRUCK
WASH AND PRODUCT LOADING Sumps.
OIL FROM SAND TRAP IS A SOURCE OF
INFLUENT TO TANK A. TANK A OIL
IS ONLY SOURCE OF INFLUENT TO
TANK B, BUT NO OIL SKIMMER IS
LOCATED IN TANK A. ONLY SOURCE
OF INFLUENT TO TANK C IS SKIMMED
OIL FROM TANK B, BUT NO OIL
SKIMMER IS LOCATED IN TANK B.

NEUTRALIZATION OF AQUEOUS SOLUTION
OF TANK B OCCURS IN TRUCK W/
ADDITION OF SODA ASH BEFORE SHIPMENT
TO HADDS (CITY OF) W/ TREATMENT
TO BEGIN TO CHARACTERIZE THE FULL
FINISHED IDENTIFYING THE DRAWNS. ALL
IDENTIFIED IS A DRAWNS AND MANY
OTHER MATERIALS SEVERAL FULL DRAWNS NOT
WERE NOT COUNTED IF CONTENTS WERE
DENSE HETEROGENEOUS.

1710

1725

1720

1800

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

1930

(26)

WESTERN
M. SUTHER

I have been thinking about you a lot lately and wondering how you are getting on. I hope you are well and happy. I have been busy with work but I always find time to think of my friends. I would love to hear from you soon. Please write when you have a chance. I am always here for you. Love, M. Suther.

M. Suther

WESTERN
M. SUTHER

1948 DEPART THE SITE.

I have been thinking about you a lot lately and wondering how you are getting on. I hope you are well and happy. I have been busy with work but I always find time to think of my friends. I would love to hear from you soon. Please write when you have a chance. I am always here for you. Love, M. Suther.

M. Suther
4-24-95

(27)

WESTERN
M. SUTHER

1948 DEPART THE SITE.

I have been thinking about you a lot lately and wondering how you are getting on. I hope you are well and happy. I have been busy with work but I always find time to think of my friends. I would love to hear from you soon. Please write when you have a chance. I am always here for you. Love, M. Suther.

M. Suther
4-24-95

(29)

WESTERN TUES 4-25-95

(73)

171000Z 24 APR 95 M. NUBBS

0700 ARRIVE AT THE FACILITY. ~~REPLACE~~ TO SAMPLE DRUMS

IN THE BACK (EMPTY DRUM STORAGE AREA).

0710 WESTERN'S SAMPLING CONTAINERS DID NOT HAVE TEFLOW LINERS, HAD CONDENSATION

INSIDE THE CONTAINERS, AND WERE DIRTY

ON THE OUTSIDE OF THE CONTAINERS.

0910 ~~DISPATCHED~~ MESS WENT TO THE OFFICE

TO COMPLETE THE GENERATOR'S CHECKLIST.

~~TOP~~ COMPLETED THE GENERATOR'S CHECKLIST (MS)

~~TOP~~ APPROX THE PROBLEMS WILL BE (MS)

~~TOP~~ OUT THE DIMENSIONS OF THE (MS)

~~TOP~~ TANKS. (MS)

(28)

WESTERN

171000Z 24 APR 95

WESTERN

M. NUBBS

WESTERN
171000Z 24 APR 95

(31)

WESTERN 174206032.14 4/25/95 (31)

[Signature]

0920 SAMPLE BEGIN SAMPLING @ DRUM 02;
COLLECT SAMPLE NO. BSWEST-

DRUM 02-12; ANALYZE FOR
IGNITABILITY ONLY. SPLIT WITH
B1/WESTERN - 16 OUNCE GLASS
VOLUME

0925 END SAMPLING BSWEST-DRUM 02-12.
COLLECTED BY JAINERS & L. COLLINS.

0927 BEGIN SAMPLING @ DRUM 03;
LC & JA COLLECTING BSWEST-

DRUM 03-13 FOR IGNITABILITY ONLY
SPLIT W/ WESTERN, USING 16MM
GLASS DRUM THIEF TO COLLECT ALL
DRUM SAMPLES TODAY.

SAMPLE

0930 END SAMPLING @ DRUM 03

0935 BEGIN SAMPLING @ DRUM 05;

SAMPLE

LC & JA COLLECTING BSWEST-
DRUM 05-14 FOR CORROSIIVITY.
COLLECTING SPLIT FOR WESTERN,
1-LITER POLYETHYLENE BOTTLE

16MM GLASS DRUM THIEF

END SAMPLING AT DRUM 05

0940

0943

BEGIN SAMPLING DRUM 11 FOR

IGNITABILITY; COLLECT BSWEST-DRUM 11-

15 USING 16MM GLASS DRUM THIEF.

16 OZ. GLASS JAR FOR VOLUME

[Faint handwritten notes]

~~*[Large handwritten scribble]*~~
[Signature]

WESTERN
174R0603214

(33)

4/25/95

END SAMPLING AT DRUM 11.
 BEGIN SAMPLING DRUM 15 TO
 COLLECT IGNITABILITY SAMPLE
 NO. BJWEST-DRUM15-16.
 JA & LC USE GLASS DRUM THIEF
 END SAMPLING DRUM 15
 JA & LC BEGIN SAMPLING DRUM 17
 TO COLLECT IGNITABILITY
 SAMPLE NO. BJWEST-DRUM17-17,
 USING GLASS DRUM THIEF
 END SAMPLING DRUM 17
 BEGIN SAMPLING DRUM 27 FOR
 IGNITABILITY SAMPLE NO.
 BJWEST-DRUM 27-18; USING
 GLASS DRUM THIEF; SPLIT
 ALL SAMPLES WITH WESTERN/
 BJ; LC & JA-SAMPLE COLLECTORS
 END SAMPLING DRUM 27.
 JA & LC CONTINUE DRUM
 INVENTORY TO DETERMINE
 HAZARDOUS WASTE VOLUME.

Mark ~~Swartz~~
 MERS complete generate checklist.
 DEPART TO THE FACILITY. IAC will
 need to get THE DIMENSIONS
 OF THE WW TANKS.

0950

0952

0955

0958

1000

1003

1005

1010

1015

~~1020~~

1020

1050

(Faint, mostly illegible handwritten notes and bleed-through from the reverse side of the page.)

(32)

APPENDIX F
COMPLIANCE EVALUATION INSPECTION CHECKLIST
(Eight Sheets)

L-30 IGN.
 PAC-FOAM-3 Methanol 12%
 E-18 Methanol 15%
 EL COMPLEXOR T.I.C. IGN.



B-31 Don't Sample
 CL-2L Methanol 60-80%
 55 gal drum = 33" 55 gal pail = 33"

Facility: BJ WESTERN
 Date: 4/24/95
 Page: 1 of 2

NUMBER	COLOR	TYPE	MARKINGS	CONTENTS	VOLUME	REMARKS
Ø1	RED	STEEL	CL-30, GEL COMPLEXER, COMBUSTIBLE LIQUID	Amber liquid top phase White viscous bottom phase	3"	275
Ø2	BLACK	POLY	BAD, 7/13, FULL, T.I.C.	AMBER LIQUID	33"	101 Ignit. 0920 *
Ø3	RED	STEEL	CL-30, GEL COMPLEXER, COMBUSTIBLE LIQUID	same desc. as Ø1	26"	30 Ignit. *
Ø4	BLACK	POLY	FRAC-FOAM-2, No Good, FLAMMABLE LIQUID, 11/25,	WHITE VISCOUS	19"	125 7
Ø5	BLACK	POLY	BUFFER 5L, No Good, 12/20/94	AMBER LIQUID/ CLEAR LIQUID	21"	278 13 Corr. 265 13 *
Ø6	BLACK	POLY	BUFFER 5L, No Good, 12/20/94	CLEAR LIQUID	10"	368 13
Ø7	BLACK	POLY	BUFFER 5L, No Good,	MULTI-PHASE AMBER & CLEAR AMBER LIQUID SOLIDS	21"	413 5
Ø8	BLACK	POLY	FLAMMABLE, DO NOT, T.I.C., WEAK, CONTAINS ISO PROPANOL	IN THE BOTTOM	33"	232 1
Ø9	RED	STEEL	HOBBS, 3/31/91	SAME DESC. AS Ø1	3"	362 1
10	RED	STEEL	CL-30, GEL COMPLEXER	SAME DESC. AS Ø1	7"	464 7
11	RED	STEEL	CL-30, GEL COMPLEXER	CLEAR LIQUID, SOLIDS BOT.	25"	Ignit. 246 10 *
12	BLACK	STEEL	E-DOIS	CLEAR	5"	240 7
13	GRAY	STEEL	AQUA FLOW	Amber liquid, Solids bot	19"	96 7
14	BLACK	POLY	WASTE, NO GOOD, NO GOOD, LIQUID KCL SUBSTITUTE, WASTE	CLEAR LIQUID TOP WHITE SOLIDS BOTTOM	23"	371 7
15	GRAY	STEEL	NINE-40, FLAMMABLE LIQUID, CONTAINS METHANOL, ISO PROPANOL	CLEAR/AMBER LIQUID TOP WHITE SOLIDS BOTTOM	23"	Ignit. *
16	GRAY	STEEL	NINE-40, FLAMMABLE LIQUID, CONTAINS METHANOL, ISO PROPANOL			306 7
17	BLACK	POLY	CLAY MASTER 5, NO GOOD, FLAMMABLE LIQUID, METHANOL	CLEAR LIQUID AMBER SOLIDS (AMBER SOLIDS)	32"	Ignit. *
18	BLACK	POLY	BUFF, NO GOOD, BUFFER 5L, NO GOOD			312 7
19	BLACK	POLY	DONT USE, NOT B-31, B-31, DONT USE, NOT B-31	MULTI-PHASE AMBER & CLEAR CLEAR LIQUID	14"	312 7

quality wins

NUMBER	COLOR	TYPE	MARKINGS	CONTENTS	VOLUME	REMARKS
20	BLACK/GOLD	STEEL		CLEAR LIQUID	12"	4 7
21	RED	STEEL	CL-30	SAME AS #1	12"	
22	RED	STEEL	CL-30	SAME AS #1	23"	
23	RED	STEEL	BAD, CL-30 J-22LP	SAME AS #1 CLEAR LIQUID, WHITE SOLIDS BOTTOM	4"	
24	GRAY	STEEL	NINE-40, FLAMMABLE LIQUID J-22LP	CLEAR LIQUID, SOLIDS (MAGNETIC)	33"	2 7
25	GRAY	STEEL	NINE-40, FLAMMABLE LIQUID	CLEAR LIQUID, WHITE SOLIDS BOTTOM	33"	
26	GRAY	STEEL	NINE-40, 29-93, FLAMMABLE LIQUID, J-22LP	CLEAR LIQUID	33"	207 7
27	BLACK	POLY	DO NOT USE, BAD, 4-28-94, CL-2L, FLAMMABLE LIQUID, CONTAINS METHANOL, BAD		27"	Ignit. 7
28	RED	STEEL	CL-30	GREEN/AMBER/CLEAR LIQUID (MULTI-PHASE)	5"	8
29	BLACK	POLY	BUFFER-5L, NO GOOD			
30	BLACK	STEEL	NINE-40, FLAMMABLE LIQUID	SAME AS 15	20"	
31	GRAY	STEEL	NINE-40,	SAME AS 15	8"	
32	BLACK	POLY	13-31, 5-13-94,			
33	BLACK	POLY	FRAC-FOAM-3, FLAMMABLE LIQUID	CLEAR TO AMBER LIQUID	7"	
34	RED	STEEL	CL-30	SAME DESC AS #1	2.5"	207 7
35	RED	STEEL	CL-30, GEL COMPLEXER	SAME DESC AS #1	2.0"	345 7
36	RED	STEEL	CL-30	SAME DESC AS #1	4"	
37	RED	STEEL	CL-30	SAME DESC AS #1	4.5"	

JIM FARRER, FARM CONSULTANT
APPROX DUTY, GULF PASTURE
10/11 - COMPLETED CHECKLIST

- DURING THE INSPECTION, PRC
INSPECTED THE TANKS (FIELD
WASTE STATION) AND EMPTY
DEWASTATION AREA.
DRAWINGS FOR THE
TANKS ARE NOT AVAILABLE

FACILITY NAME: WESTERN
EPA ID NUMBER: NMD 52377637

**RCRA COMPLIANCE INSPECTION REPORT
GENERATORS CHECKLIST**

NOTE: On multiple part questions, circle those not in compliance.

SIMPLE
9/92,

EPA Identification NO. (262.12)

JIM FR. 1.
IS NOT
AWARE OF
ANY INTEGRITY
TESTING OF THE TANKS.

Does the Generator have an EPA I.D. No.?
A. If yes, what is that number?

Yes No

NMD 52377637

Hazardous Waste Determination (262.11)

1. Does the generator generate hazardous waste(s) listed in Subpart D? (261.30 - 261.33 - List of Hazardous Waste)

Yes No
NO LISTED WASTES

Request
Dimension
of TANKS

a. If yes, list wastes and quantities on attachment (Include EPA Hazardous Waste Number, waste name and description).

2. Does the generator generate solid waste(s) that exhibit hazardous characteristics? (circle those applicable - corrosivity, ignitability, reactivity, EP toxicity) (261.20 - 261.24 - Characteristics of Hazardous Waste)

Yes No
SAFETY KLEEN

a. If yes, list wastes and quantities on attachment (Include EPA Hazardous Waste Number, Waste Name and Description.)

~ 65 gallons per manifest (65.75)
(31.25 lb/m3)

b. Does the generator determine characteristics by testing or by applying knowledge of processes?

SAFETY KLEEN DETERMINES HAZ WASTE NUMBERS. WESTERN HAS NOT SEEN AN WASTE ANALYSIS FROM SAFETY KLEEN.

i. If determined by testing, did the generator use test methods in Part 261, Subpart C (or Equivalent)?

Yes No
HANDLED BY SAFETY KLEEN

ii. If equivalent test were methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes deemed non-hazardous generated by the generator? (i.e. process waste streams, collected matter from air pollution control equipment, water treatment sludge, etc.)

Yes No

a. If yes, did the generator determine non-hazardous characteristics by testing or knowledge of process?

- SAND TRAP
- GENERAL TRASH - WASTE MANAGEMENT
- AQUEOUS PORTION OF TANK 13

TRUCK B: 12' diameter
16 ft deep.

SAND TRAP: 76 ft deep
7 ft diameter

FACILITY NAME: _____

EPA ID NUMBER: _____

when emptied,
MUST CONTAIN
CONTENTS AND
CHIPPED OFFSITE.

SONNY'S VACUUM
TRUCK VACUUM
MATERIAL
IN TO TRUCK
AND HANDS
OFFSITE 4/0

TRUCK TREATMENT

TO C.A.D.

MS OF
TRUCK IS
typically
clean
signed 4/0
oil
=

- i. If determined by testing, did the generator use test methods in Part 261, Subpart C (or Equivalent)?
- ii. If equivalent test methods were used, attach copy of equivalent methods used.

List wastes and quantities deemed non-hazardous or processes from which non-hazardous wastes were produced. (Use narrative explanations sheet)

4. Are any wastes recycled, reused or reclaimed on-site?

If yes, use narrative sheet to describe the type and quantity of the waste and the method used for reclamation.

5. Are any wastes shipped off-site for reclamation?

If yes, use narrative to describe the type and quantity of the waste and its destination. Also give a description of storage prior to shipment.

6. Is the total quantity of hazardous wastes generated?

- a. Less than 100 kg/month?
- b. More than 1000 kg/month?
- c. More than 100 but less than 1000 kg/month?

$$75 \text{ gal} \times \frac{7.5 \text{ lb (wt)}}{\text{gal}} \times \frac{1 \text{ kg}}{2.205 \text{ lb}} = 255 \text{ kg.}$$

Manifest

1. Does the generator ship hazardous waste off-site?

- a. If no, do not fill out Section C and D.
- b. If yes, identify primary off-site facility(s). (Use narrative explanations sheet)

2. Has the generator shipped hazardous waste off-site since November 19, 1980?

3. Is the generator exempted from regulation because of:

Small quantity generator (261.5 - special requirements)

OR

GENERATORS
2

Yes - SAND TRAP (TRUCK)

Yes ___ No ___
NO - ABOVE (DO TEST PH) (TYPICALLY 2 or 3)

NO - General tank

SAND TRAP -> ABOUT 50 42-gallon
BARRIS TWO MONTHS.

Above -> 5,000 gallons/hour
every 2 weeks. (Typically
Yes ___ No ___ clean material)

Yes ___ No

Yes ___ No

Yes ___ No

Yes No

Yes No

SAFETY KLEEN

Yes No

Yes ___ No

REVISION--MAY 1992

FACILITY NAME: _____

EPA ID NUMBER: _____

Produces only non-hazardous solid waste at this time (261.4 - Exclusions)

___ Yes No

4. If the generator is exempted as a small quantity generator are the following requirements met?

N/A

a. The waste is reclaimed under a contractual agreement in which:

i. The type of waste and frequency of shipments specified in the agreement?

___ Yes ___ No

ii. The vehicles used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste?

___ Yes ___ No

b. The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement?

___ Yes ___ No

Required Information (262.21)

5. If not exempted does the generator use manifest?

Yes ___ No

a. If yes, does manifest include the following information (262.21 - Required information)

Yes ___ No

(Circle those not on manifest)

- i. Manifest Document No.
- ii. Generator's Name, Mailing Address, Tele. No.
- iii. Generator EPA I.D. No.
- iv. Transporter(s) Name and EPA I.D. No.
- v. Facility Name, Address and EPA I.D. No.
- vi. DOT description of the waste
- vii. a. Quantity (weight or volume)
b. Containers (type and number)
- viii. Emergency Information (optional) (Special handling instructions, Phone No.)

FACILITY NAME: _____

EPA ID NUMBER: _____

ix. Waste minimization certification

x. Is the following certification on each manifest form? Yes No

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

Uses of the Manifest (263.23)

6. Does the generator retain copies of manifests? Yes No

(Check completed manifests at random. Indicate how many manifests were inspected, how many violations were noted and the type of violation.)

→ 24 MANIFEST INSPECTED
→ SOME LOR ATTACHMENT MISSING (1)

If yes, complete a through e. If questions contain more than one item, circle those not in compliance.

a. i. Did the generator sign and date all manifests inspected? Yes No

ii. Who signed for the generator?
Name: LARRY BROWER
Title: MAINTENANCE SUPERVISOR
I.D. Number: _____

b. i. Did the generator obtain handwritten signature and date of acceptance from initial transporter? Yes No

ii. Who signed for the transporter?
Name: ISAAC FUENTEZ
Title: None
I.D. Number: _____

c. Does the generator retain one copy of manifest signed by generator and transporter? Yes No

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? Yes No

e. If copy of manifest from facility was not returned within 45 days, did the generator file an exception report? (262.42 - Exception reporting) Yes No

FACILITY NAME: _____

EPA ID NUMBER: _____

1. If yes, did it contain the following information:

Legible copy of manifest *N/A* Yes No

AND

Cover letter explaining generators efforts to locate waste. Yes No

f. Does (will) the generator retain copies for 3 years? Yes No

Pre-Transport Requirements

1. Does the generator package waste? Yes No

If no, skip to question 9.
If yes, complete the following questions.

Inspect containers ready for immediate shipment.
If there are no such containers, skip to question 8.

2. Does the generator package waste in accordance with 49 CFR 173, 178, and 179? (DOT requirements) (262.30 - Packaging) *N/A* Yes No

3. Are containers to be shipped leaking, corroding or bulging? *N/A* Yes No

Use narrative explanations sheet to describe containers and condition.

4. Does the generator use DOT labeling requirements in accordance with 49 CFR 172 when containers are offered for shipment? (262.31 - Labeling) *N/A* Yes No

5. Does the generator mark each package in accordance with 49 CFR 172 when containers are offered for shipment? (262.32 - Marking) *N/A* Yes No

6. a. Is each container of 110 gallons or less marked with the following label when containers are offered for shipment? *N/A* Yes No

*SAFETY
KUBEN
PLACARDS
WASTE
SHIPMENTS*

HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address _____

Manifest Document Number _____

b. If other labels exist, list in narrative.

FACILITY NAME: _____

EPA ID NUMBER: _____

7. If there are any vehicles present on site loading or unloading hazardous waste, inspect for presence of placards. Note this instance on narrative explanation sheet. *N/A*

8. Satellite Accumulation (effective June 20, 1985)

a. Does the generator accumulate waste in containers at or near "Satellite" generation points? Yes No

*SAFETY
CLEAN
MACHINES*

If no, skip to question 9.
If yes, complete the following.

b. Are containers in good condition? Yes No

c. Is the waste compatible with the containers? Yes No

d. Is waste transferred from leaking containers or otherwise managed to control leakage? *N/A* Yes No

NO LEAKAGE

e. Are containers closed? Yes No

f. Are containers marked with the words "hazardous waste" or identification of the contents? Yes No

*WESTERN IS
NOT SURE
WHETHER THE
DRUMS ARE
MARKED WITH
WASTE WHEN
SHIPPED OFF*

g. Has waste accumulation exceeded one (1) quart of acutely hazardous waste (261.33 e.) or 55 gallons of other hazardous waste? Yes No

If yes,

i. Has the container holding the excess amount been marked with the date the excess began accumulating? Yes No

ii. Have excess amounts remained in the satellite accumulation area longer than three (3) days? Yes No

9. Accumulation Time (262.34 - Accumulation Time for Small Quantity Generators)

a. Is waste generated > 100 kg/month, but < 1000 kg/month? Yes No

If yes, answer rest of question #9.
If no, skip to question #10.

b. Is hazardous waste shipped offsite within 180 days? Yes No

*SITING
ONCE PER MONTH*

c. Has the quantity of waste accumulated on-site exceeded 6000 kilograms? Yes No

FACILITY NAME: _____

EPA ID NUMBER: _____

- d. Does the generator comply with the requirements of Part 265 Subpart C, Preparedness and Prevention? Yes No
10. Accumulation Time (262.34 - Accumulation Time)
- a. Is the site a permitted/interim status storage facility? Yes No
- If yes, skip to Section E, and complete and attach the TSD checklist and appropriate supplemental checklists. If no, answer rest of question #8.
- b. Is hazardous waste shipped offsite within 90 days? Yes No
- c. Is waste stored in containers or tanks? Yes No
- d. Is the beginning date of accumulation time clearly indicated on each container? N/A Yes No
- e. Is each container or tank marked with the words "Hazardous Waste"? N/A Yes No → NOT WASTE UNTIL SHIPPED OFFSITE
- f. Complete and attach the containers/tanks supplemental checklists as appropriate. N/A
- g. If the generator accumulates waste on-site for less than 90 days, complete RCRA Generators Checklist Supplement. N/A

Recordkeeping and Report

1. Is the generator keeping the following reports for a minimum of three (3) years? (262.40 - Recordkeeping):
- a. Manifests and signed copies from designated facilities? Yes No
- b. Biennial reports (or reports as required by state agencies) N/A Yes No
- c. Exception Reports none → N/A Yes No
- d. Test results, where applicable. Yes No
2. Where are records kept (at facility or elsewhere)?
ON-SITE (FACILITY MANUALS & FILES)

FACILITY NAME: _____

EPA ID NUMBER: _____

3. Who is in charge of keeping the records?

Name: JIM FRAZIER

Title: FACILITY SUPERVISOR

Special Condition

1. Has the generator received from or transported to a foreign source any hazardous waste? (262.50 - International Shipments) *N/A* Yes No

If yes,

a. Has a note been filed with the R.A.? Yes No

b. Is this waste manifested and signed by Foreign Consignee? Yes No

c. If the generator transported wastes out of the country has he received confirmation of delivered shipment? Yes No

d. Has the generator filed an annual report (by March 1 of each year) giving the type, quantity, frequency and destination of all exported hazardous waste? (Per HSWA 1984) Yes No

APPENDIX G
CHAIN-OF-CUSTODY FORMS
(Two Sheets)



PDP Analytical Services

1680 Lake Front Circle, Suite B • The Woodlands, Texas 77380 • Phone (713) 363-2233 • Fax (713) 298-5784

Chain of Custody Record

Client Name / Address: PEC ENVIRONMENTAL MGT. INC. 350 N. ST. PAUL ST., SUITE 2600 DALLAS, TX 75201		Send Report to: MARK BUTLER C/O PEC	
Project Name: BJ/WESTERN COMPANY HOBBBS, NEW MEXICO		Project Number: 754-8765	
Samplers (Signature): <i>[Signature]</i>		Station Location	
Sta. No.	Date	Time	Remarks
01	4/24/95	1250	MS/MSD
02		1325	MS/MSD
03		1355	MS/MSD
04		1400	MS/MSD
05		1500	MS/MSD
06		1555	MS/MSD
07		1610	MS/MSD
08		1630	MS/MSD
09		1640	MS/MSD
10		1700	MS/MSD
11		1710	MS/MSD
Relinquished by (Signature): <i>[Signature]</i>		Date / Time: 4/25/95 1700	Received by (Signature): FEDEx
Relinquished by (Signature): <i>[Signature]</i>		Date / Time:	Received by (Signature):
Relinquished by (Signature):		Date / Time:	Received for Laboratory by (Signature):
Method of Shipment:			

Remarks: **FEDEx ARBILL NO. 3911763122**
COOLERS 1 AND 2 OF 3
 PDP Quote Number:

APPENDIX H
WEIGHT CALCULATIONS
(One Sheet)

TABLE H-1

WEIGHT CALCULATIONS

Management Unit	Dimensions (ft)		Volume Conversion Factor (m ³ /ft ³)	Density of Water at 25°C (kg/m ³)	Specific Gravity of Waste (Attachment C)	Quantity (kg)
	Diameter	Depth				
Sand Trap Tank (Liquid)	7.5	2.0	0.02832	997	0.883	2,203
Sand Trap Tank (Sludge)	7.5	2.2			1.97	5,406
Tank A (Liquid)	12.25	8.0			0.986	26,249
Tank A (Sludge)	12.25	4.0			0.999	13,297
Tank B (Liquid)	12.25	0.25			0.859	714
Tank B (Sludge)	12.25	6.75			0.897	20,148
Tank C (Liquid)	12.25	0.5			0.860	1,431
Tank C (Sludge)	12.25	11.25			0.929	34,779

Notes:

- ft = feet
- ft³ = cubic feet
- kg = kilograms
- m³ = cubic meters
- Quantity (kg) = Volume (ft³) x Volume Conversion Factor (m³/ft³) x Density of Water (kg/m³) x Specific Gravity
- Volume (ft³) = ([3.14159 x Diameter²]/4) x Depth

ATTACHMENT A

MATERIAL SAFETY DATA SHEETS (MSDSs) OF CHEMICAL PRODUCTS HANDLED BY BJ WESTERN

(85 Sheets)



Jo Ann Cobb REM
Manager, Environmental
Tel. 713/363-7528
Fax 713/363-7595

June 28, 1995

Mr Mark Butler
PRC
Suite 2600
350 North St Paul St
Dallas TX 75201

RE: BJ Services Company USA
Hobbs NM District

Dear Mr Butler:

Enclosed are photocopies of MSDSs for chemicals stored at the acid dock on the Hobbs NM facility.

If additional information is required, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Jo Ann Cobb".

Jo Ann Cobb

Enclosures

ah

Material Safety Data Sheet

Product SUPERSET O

Section I

Manufacturer's Name
Control Products, Inc.
57 Katy Frwy, #1260
Houston, TX 77079

Emergency Telephone Number
(713) 556-5212

Date 4/15/90

Section II - Hazardous Ingredients

Hazardous components	CAS #	OSHA PEL	ACGIH TLV	OTHER
Xylene	1330-20-7		100 PPM	
Trimethylbenzenes	2551-13-7		25 PPM	
Oxirane (Ethylene Oxide)	75-21-8		1 PPM	

See Section .07-OCCUPATIONAL CONTROL PROCEDURES. NOT SUBJECT TO REPORTING UNDER SARA SECTION 313 AT THIS CONCENTRATION.

Hazard Rating	Scale:	Product:
	0-Minimal	HEALTH: 2
	1-Slight	FIRE: 2
	2-Moderate	REACTIVITY: 1
	3-Serious	SPECIAL:
	4-Severe	

Section 313 Supplier Notification

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

#	Chemical Name	Percent by Weight
---	---------------	-------------------

Section III - Physical/Chemical Characteristics

Boiling Point: °F N/A Specific Gravity (H₂O=1): 0.92
Vapor Pressure (mmHg): N/A Melting Point:
Vapor Density (Air=1): N/A Evaporation Rate (Butyl Acetate=1):
Solubility in Water: N/A
Appearance and Odor: Straw to dark brown, aromatic odor

Section IV - Fire and Explosion Hazard Data

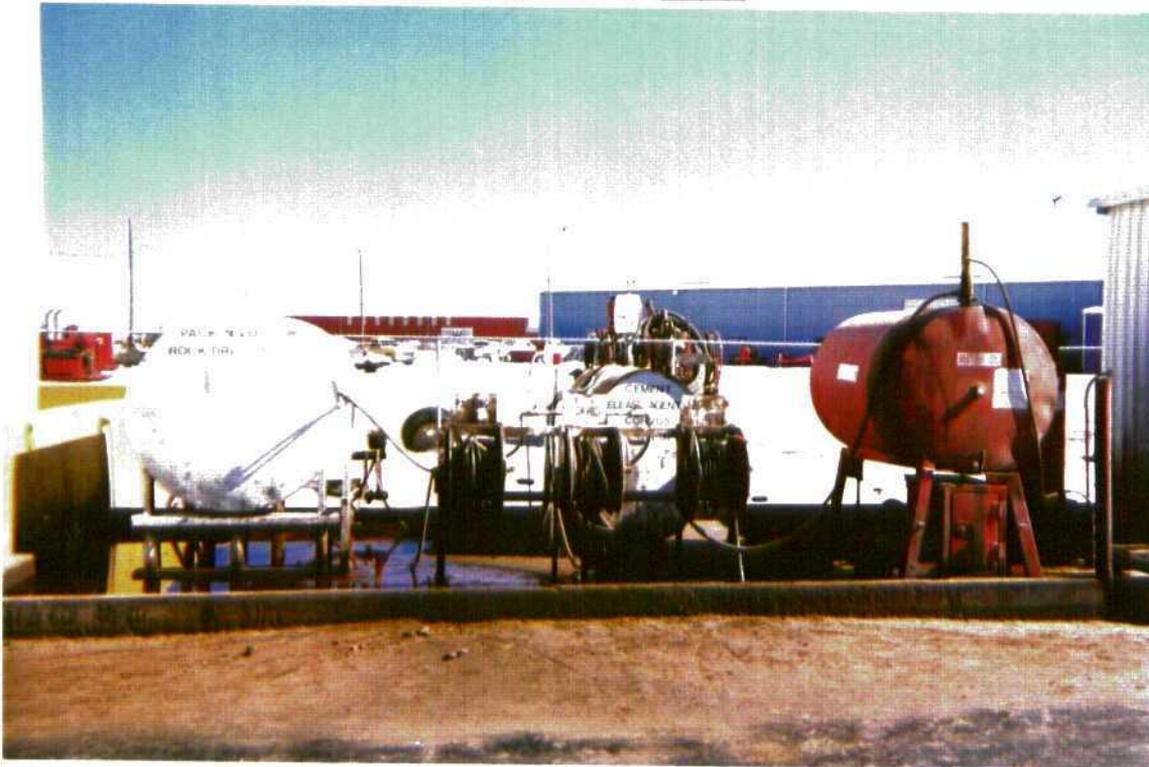
Flash Point: °F 100 Flammable Limits in air, % : Lower: Upper:

PHOTOGRAPH NO. 1



Date: 04/24/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: NW
Picture Description: Used oil storage tank, located on the south side of the truck maintenance shop

PHOTOGRAPH NO. 2



Date: 04/24/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: N
Picture Description: Facility fuel and oil tanks

PHOTOGRAPH NO. 3



Date: 04/24/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: NE
Picture Description: Product drum storage area, located on the west side of the chemical storage warehouse

PHOTOGRAPH NO. 4



Date: 04/24/95 Picture Taken by: Lynette Collins, PRC Direction Facing: SE
Picture Description: Product drum storage, located next to the product loading bay and elevated hydrochloric acid tank



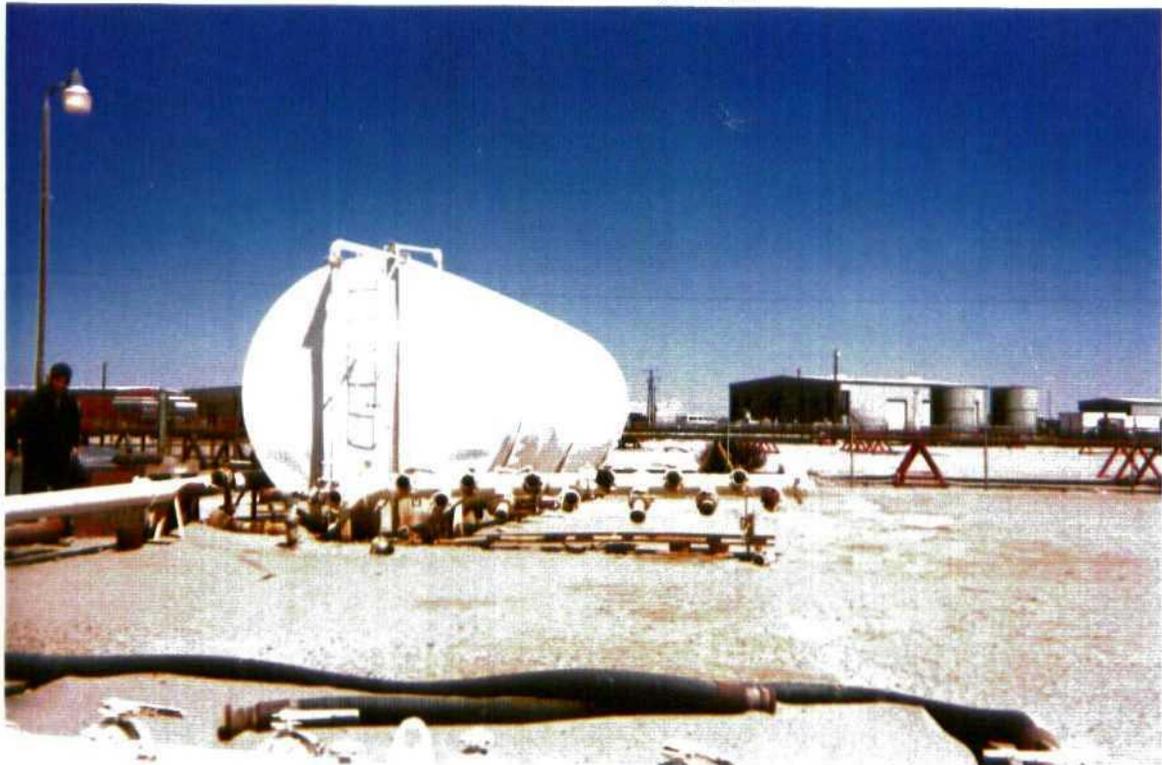
Date: 04/24/95 Picture Taken by: Lynette Collins, PRC Direction Facing: E
Picture Description: Drummed pump washout, located next to the product loading bay



Date: 04/24/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: NW
Picture Description: Product loading bay in foreground, and drummed product and chemical storage in the warehouse background



Date: 04/24/95 Picture Taken by: Lynette Collins, PRC Direction Facing: E
Picture Description: Underground gravity separation Tanks A, B, and C, located east of the Sand Trap Tank



Date: 04/24/95 Picture Taken by: Lynette Collins, PRC Direction Facing: NW
Picture Description: Water tank used during pump testing

PHOTOGRAPH NO. 9



Date: 04/24/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: E
Picture Description: Vertical cement storage silos

PHOTOGRAPH NO. 10



Date: 04/24/95 Picture Taken by: Jeffrey Ayers, PRC Direction Facing: NW
Picture Description: Liquid gel mixing facility



MATERIAL SAFETY DATA SHEET

DATE: 28MAY86

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary blend		TRADE NAME AND SYNONYMS GEL COMPLEXER. water, T.I.C.
CHEMICAL FAMILY metal chelate	FORMULA W.I.N. 100151	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	isopropanol
HAZARD CLASS	Flammable liquid
IDENTIFICATION NUMBER	UN 1993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
isopropanol	80	400ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1) @ 25°C	0.842
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	80%
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	364
SOLUBILITY IN WATER	insoluble		
APPEARANCE AND ODOR	Clear red liquid, acetyl acetone odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 54° F (PMCC)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA Any type CO ₂ , dry chemical or water			
SPECIAL FIRE FIGHTING PROCEDURES None			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

TRADE NAME: W.I.N.100151,GEL COMPLEXER,water,T.I.C.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
Unknown, isopropanol component, 400 ppm

EFFECTS OF OVEREXPOSURE
See attached

Is this material a sensitizer? No report of sensitization during 10 years of com

EMERGENCY AND FIRST AID PROCEDURES

Wash spills from skin with soap and water. If contact with eyes occurs, flush the
thoroughly with plenty of water and consult a physician if irritation persists.

If the product is ingested, consult a physician.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE	CONDITIONS TO AVOID
	STABLE	XXX

INCOMPATIBILITY (Materials to avoid)
May cause rapid corrosion of ferrous metals

HAZARDOUS DECOMPOSITION PRODUCTS
None

HAZARDOUS POLYMERIZATION	MAY OCCUR	CONDITIONS TO AVOID
	WILL NOT OCCUR	XXX

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Collect large spills with sawdust or other absorbent solid. Small spills and re-
sidues may be flushed to the drain with water.

WASTE DISPOSAL METHOD
Pour waste on the ground in a protected dumping area. Bury or burn in accordance
with local ordinances.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES Elbow length	EYE PROTECTION Goggles or face shield
-----------------------------------	--

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
See attached

OTHER PRECAUTIONS
See attached

100174



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 15 Mar 78

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76107		
CHEMICAL NAME AND SYNONYMS Acetic Acid & Acetic Anhydride		TRADE NAME AND SYNONYMS AC-2
CHEMICAL FAMILY Acid	FORMULA 40% acetic acid, 60% acetic anhydride	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Corrosive liquid, N.O.S.
NAME OF HAZARDOUS COMPONENT	Acetic Anhydride *
HAZARD CLASS	Corrosive material
IDENTIFICATION NUMBER	UN1760
D.O.T. LABEL(S) REQUIRED	Corrosive
PRECAUTIONARY LABEL	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
*		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1)	
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR clear, colorless liquid - sharp acrid odor			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 112°F, Tag Open cup; -109°F, Tag Closed Cup	FLAMMABLE LIMITS	Lel % 2.9%	Uel % 10.3%
EXTINGUISHING MEDIA Water spray, dry chemical, and alcohol foam are effective extinguishing agents for acetic anhydride fires.			
SPECIAL FIRE FIGHTING PROCEDURES Addition of water will reduce intensity of flames. If a leak or spill has not ignited, use water spray to disperse the vapor and to protect the personnel trying to stop the leak. Fire fighters should wear self-contained breathing apparatus and full protective clothing.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Water and foam react with chemical, but the heat liberated is not enough to create a hazard. Dry chemical forced below surface can cause foaming and boiling.			

EXXON**MATERIAL SAFETY DATA SHEET**

PAGE 1

CHEMICALSEXXON CHEMICAL AMERICAS P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

08/01/89

NO. 78745C

SECTION I PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME

WCNA WZ 499589 7-8745

CHEMICAL NAME

Not applicable: Blend

CHEMICAL FAMILY

Blend

PRODUCT APPEARANCE

Clear Amber Liquid
Slight Pungent OdorAS-3
CORP 0592EMERGENCY TELEPHONE NUMBERS: EXXON CHEMICAL AMERICAS 713-870-8000
CHEMTREC 800-424-9300**SECTION II HAZARDOUS INGREDIENT INFORMATION**

The composition of this mixture may be proprietary information. In the event of a medical emergency, compositional information will be provided to a physician or nurse. This product is hazardous as defined in 29 CFR 1910.1200, based on the following compositional information:

COMPONENT	OSHA HAZARD
Organic Acid Amine Salt	Eye & Skin Corrosive
Methanol/Water	Combustible
Methanol: via Ingestion and Inhalation	Toxic
Methanol	PEL/TLV

For additional information see Section 3.

SECTION 3 HEALTH INFORMATION & PROTECTION**NATURE OF HAZARD****EYE CONTACT:**

Corrosive. Will cause eye burns and permanent tissue damage.

SKIN CONTACT:

Corrosive; causes permanent skin damage.

Methyl alcohol may be absorbed through the skin which can contribute to damage of the optic nerve resulting in permanent visual changes, loss of vision or total blindness.

May cause skin sensitization, an allergic reaction which becomes evident on reexposure to this material.

INHALATION:

High vapor concentrations are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.

This product contains methyl alcohol. Vapor inhalation and/or skin absorption can cause central nervous system effects and blindness.

INGESTION:

Corrosive to mouth, esophagus and stomach.

The principle hazard of methyl alcohol arises from its ingestion as a substitute for ethyl alcohol. As little as 15 ml (1/2 oz.) of 40% methyl alcohol has caused death.

The most significant systemic effect caused by sublethal doses of methyl alcohol is the damage to the optic nerve which can result in permanent visual changes, loss of vision or total blindness.

FIRST AID**EYE CONTACT:**

Immediately flush eyes with large amounts of water for at least 15 minutes. Get prompt medical attention.

SKIN CONTACT:

Immediately flush with large amounts of water; use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. Get prompt medical attention.

INHALATION:

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION:

DO NOT induce vomiting. If individual is conscious, give milk or water to dilute stomach contents. Keep warm and quiet. Get prompt medical attention. DO NOT attempt to give anything by mouth to an unconscious person.

WORKPLACE EXPOSURE LIMITS**OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:**

A TWA of 200 ppm (260 mg/m³) and a STEL of 250 ppm (310 mg/m³) for Methyl Alcohol (skin).

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:

a TWA of 200 ppm (260 mg/m³), and a STEL of 250 ppm (310 mg/m³) for Methyl Alcohol (skin).

PRECAUTIONS**PERSONAL PROTECTION**

For open systems where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

Where contact may occur, wear long sleeves, chemical resistant gloves, chemical goggles, and a face shield.

Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

All contact should be avoided by persons with known hypersensitivity to AMINES

VENTILATION

The use of mechanical dilution ventilation is recommended whenever this product is used in a confined space, is heated above ambient temperatures, or is agitated.

SECTION 4 FIRE & EXPLOSION HAZARD

FLASHPOINT: 103 Deg F. **METHOD:** Seta CC

FLAMMABLE LIMITS: LEL: 6.7 UEL: 36.0

IGNITION TEMPERATURE: NOTE: Not available

GENERAL HAZARD

Combustible Liquid, can form combustible mixtures at temperatures at or above the flashpoint.

Toxic gases will form upon combustion.

"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR

Activator, W.I.N. # 499737



MATERIAL SAFETY DATA SHEET

Emergency Telephone
(614) 431-6800

ACME RESIN CORPORATION

BORDEN PACKAGING and INDUSTRIAL PRODUCTS DOMESTIC AND INTERNATIONAL DIVISION OF BORDEN, INC.
10330 W. ROOSEVELT ROAD, WESTCHESTER, ILLINOIS 60154-2564

THE OSHA HAZARD COMMUNICATION STANDARD 29 CFR 1910.1200 REQUIRES THAT THE INFORMATION CONTAINED ON THESE SHEETS BE MADE AVAILABLE TO YOUR WORKERS. INSTRUCT YOUR WORKERS TO HANDLE THIS PRODUCT PROPERLY.
FOR INDUSTRIAL USE ONLY

THE WESTERN COMPANY
ATTN: MS BETH PRASEK
8701 NEW TRAILS DRIVE
THE WOODLANDS, TX 77381

NON-EMERGENCY TELEPHONE
(708) 524-3176
ATTN: KENNETH C. PYLES

DESCRIPTION: Activator
PRODUCT TYPE: ISOPROPYL ALCOHOL SOLUTION
APPLICATION: CONSOLIDATION AGENT FOR OIL WELL PROPPANTS

PAGE 1
CUR ISS 04-MAY-92

SIGNAL WORD

WARNING!

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

CHEMICAL HAZARD RATING

HEALTH=2(moderate)
FIRE=3(high)
REACTIVITY=0(least)
CHRONIC=*

29CFR1910.1200 HAZARDOUS INGREDIENTS/REPORTED HEALTH EFFECTS

CAS/REGISTRY NO.	MATERIAL DESCRIPTION	% RANGE
------------------	----------------------	---------

The ingredients listed below have been associated with one or more of the listed immediate and/or delayed(*) health hazards. Risk of damage and effects depends upon duration and level of exposure. BEFORE USING OR HANDLING, READ AND UNDERSTAND THE MSDS.

67-63-0	*ISOPROPANOL NOTE REVISED OSHA PEL	30-50
---------	---------------------------------------	-------

30-50

Suspect reproductive hazard. May cause reproductive disorders based on animal data.
May cause liver damage based on animal data.
May cause kidney damage based on animal data.
Can cause central nervous system depression. Signs and symptoms may include headache, dizziness, nausea, vomiting, unconsciousness and even asphyxiation.
-- See Footnote C.

ACGIH TLV: 400 PPM (983 MG/M³) TWA; 500 PPM (1230 MG/M³) STEL
OSHA PEL: 400 PPM (980 MG/M³) TWA; 500 PPM (1225 MG/M³) STEL
NIOSH DOCUMENT NUMBER: 76-142

READ NEXT PAGE



MATERIAL SAFETY DATA SHEET

Emergency Telephone
(614) 431-6600

ACME RESIN CORPORATION

BORDEN PACKAGING and INDUSTRIAL PRODUCTS DOMESTIC AND INTERNATIONAL DIVISION OF BORDEN, INC.
10330 W. ROOSEVELT ROAD, WESTCHESTER, ILLINOIS 60154-2564

DESCRIPTION: Activator
PRODUCT TYPE: ISOPROPYL ALCOHOL SOLUTION
APPLICATION: CONSOLIDATION AGENT FOR OIL WELL PROPPANTS

PAGE 2
CUR ISS 04-MAY-92

29CFR1910.1200 HAZARDOUS INGREDIENTS/REPORTED HEALTH EFFECTS	CAS/REGISTRY NO.	MATERIAL DESCRIPTION	% RANGE
	68131-40-8	*ALCOHOLS, C11-15-SECONDARY, ETHOXYLATED	50-70

May cause allergic skin reaction.

-- See Footnote C.

ACGIH TLV: NONE ESTABLISHED

OSHA PEL: NONE ESTABLISHED

Footnote C: As of the date of issuance of this document, this material has not been listed by NTP, IARC or OSHA as a carcinogen.

PHYSICAL DATA

APPEARANCE	CLEAR LIQUID
FLASH POINT	53 F. (T.C.C.)
FREEZING POINT	15 F.
ODOR	ISOPROPYL ALCOHOL ODOR
SPECIFIC GRAVITY	0.907
SOLUBILITY IN WATER	SOLUBLE

IMMEDIATE HEALTH HAZARD DATA

SKIN ABSORPTION: No hazards known to Borden.
 INGESTION: Not expected to be harmful under normal conditions of use.
 INHALATION: Not expected to be harmful under normal conditions of use. However, if allowed to become airborne, may cause irritation of nose, throat and lungs.
 Can cause central nervous system depression.
 SKIN: May cause irritation on prolonged or repeated contact.
 EYES: Causes irritation.

HANDLING PRECAUTIONS

INHALATION: Avoid prolonged or repeated breathing of vapor.
 SKIN: Avoid prolonged or repeated contact with skin.
 EYES: Avoid contact with eyes.
 Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing.
 Wash thoroughly after handling.

READ NEXT PAGE



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 15JUL85

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary Blend		TRADE NAME AND SYNONYMS Gelling Agent, Acigel
CHEMICAL FAMILY Acrylamide Copolymer	FORMULA	W I N 499520

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Not Regulated
NAME OF HAZARDOUS COMPONENT	N/A
HAZARD CLASS	N/A
IDENTIFICATION NUMBER	N/A
D.O.T. LABEL(S) REQUIRED	N/A
PRECAUTIONARY LABEL	Attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
paraffin oil		
<i>CAS: 8012-95-1</i>		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	212°F	SPECIFIC GRAVITY (H ₂ O=1) @ 60°F	1.08
VAPOR PRESSURE (mm Hg.)	No Data	PERCENT VOLATILE BYweight % @ 75°F	44
VAPOR DENSITY (AIR=1)	No Data	EVAPORATION RATE (_____ =1)	-----
SOLUBILITY IN WATER	Polymer Soluble in Water at pH < 7		
APPEARANCE AND ODOR	Milky white liquid, Sweet odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) None, flames out @ 52°C (125°F) PMCC	FLAMMABLE LIMITS		
EXTINGUISHING MEDIA carbon dioxide, dry chemical, alcohol foam			
SPECIAL FIRE FIGHTING PROCEDURES none			
UNUSUAL FIRE AND EXPLOSION HAZARDS none			

8.99

TRADE NAME: W.I.N. 499520, Gelling Agent, acid, Acigel

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	None established for the product
EFFECTS OF OVEREXPOSURE	May cause irritation with prolonged contact
EMERGENCY AND FIRST AID PROCEDURES	
Eyes: Flush with water for 15 minutes. Call a physician.	
Skin: Wash thoroughly with soap and water.	
Ingestion: Do not induce vomiting. Give water. Call a physician.	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID none
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS oxides of nitrogen			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Contain with absorbent material.	
WASTE DISPOSAL METHOD	
No special method. Consult local, state, and federal regulations for appropriate disposal methods. This product is not regulated under RCRA.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) None normally required.		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General) X	OTHER
PROTECTIVE GLOVES	synthetic	EYE PROTECTION chemical goggles
OTHER PROTECTIVE EQUIPMENT		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING none	
OTHER PRECAUTIONS Do not take internally. Avoid eye and prolonged skin contact.	



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 10/1/85

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary	TRADE NAME AND SYNONYMS Gelling Agent, Acid, Acigel IT	
CHEMICAL FAMILY	FORMULA	W.I.N. 499518

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable Liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	Methanol
HAZARD CLASS	Flammable Liquid
IDENTIFICATION NUMBER	UN 1993
D.O.T. LABEL(S) REQUIRED	Flammable.
PRECAUTIONARY LABEL	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Methanol		200ppm
Acetic Acid		10ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	147	SPECIFIC GRAVITY (H ₂ O=1)	0.914
VAPOR PRESSURE (mm Hg.) @ 20°C	96	PERCENT VOLATILE BY VOLUME (%)	37
VAPOR DENSITY (AIR=1)	1.11	EVAPORATION RATE (_____ =1)	3.5
SOLUBILITY IN WATER	soluble		
APPEARANCE AND ODOR	Amber Liquid; Alcohol odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	56°F ASTM D3828	FLAMMABLE LIMITS	Lel	Uel
			N/A	N/A
EXTINGUISHING MEDIA	CO ₂ , dry powder or foam			
SPECIAL FIRE FIGHTING PROCEDURES	Self-contained breathing apparatus required			
UNUSUAL FIRE AND EXPLOSION HAZARDS	None known			

TRADE NAME: Gelling Agent, Acid. Aciael LT W.I.N. 499518

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	Not established
EFFECTS OF OVEREXPOSURE	See attached
EMERGENCY AND FIRST AID PROCEDURES	See attached

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)		Strong oxidizers	
HAZARDOUS DECOMPOSITION PRODUCTS		Oxides of Nitrogen	
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Absorb on sand, dirt or suitable absorbant.
WASTE DISPOSAL METHOD	Dispose of in an appropriate waste disposal site in accordance with applicable waste management regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type)			
Use self-contained breathing apparatus in enclosed areas.			
VENTILATION	LOCAL EXHAUST	SPECIAL	
	Equivalent to outdoors		
MECHANICAL (General)		OTHER	
PROTECTIVE GLOVES		EYE PROTECTION	
Synthetic		Chemical goggles	
OTHER PROTECTIVE EQUIPMENT			

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Flammable liquid, avoid heat, sparks or open flames. Avoid contact with vapor or liquid.
OTHER PRECAUTIONS	Do not cut empty drums.

100181

Trade Name ADOFOAM (BF-1) Formula No. _____

Synonyms An aqueous mixture of alcohol ether sulfates and alkyl sulfonates and alcohol. Chemical Family Organic

SECTION 2 - HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%
Isopropanol	5.
Methanol	3.

SECTION 3 - PHYSICAL PROPERTIES

Boiling Point, 760 MM HG	Melting Point
Specific Gravity (H ₂ O=1) 1.02	Vapor Pressure
Vapor Density (Air=1)	Solubility in H ₂ O, % By Wt. Completely
% Volatiles By Vol.	Evaporation Rate (Butyl Acetate=1)
Appearance and Odor Clear liquid with an alcohol odor	

SECTION 4 - FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point (Test Method) 103°F. TCC			
Flammable Limits in Air, % By Vol.	Lower	Upper	
Extinguishing Media Water, foam, CO ₂ , or dry chemicals			
Special Fire Fighting Procedures Wear air supplied breathing apparatus in confined area			
Unusual Fire and Explosion Hazard May evolve fumes of SO ₂ and NO ₂ .			

SECTION 5 - HEALTH HAZARD DATA

Threshold Limit Value None for product. Isopropanol - skin: 400ppm
Effects of Overexposure May cause eye, skin and mucosal irritation. May be absorbed through the skin.
EMERGENCY AND FIRST AID PROCEDURES
Eyes Flush with water for at least 15 minutes. Call a physician.
Skin Wash thoroughly with soap and water.
Ingestion Induce vomiting, call a physician.
Inhalation Remove to fresh air.

Product ADOFOAM (BF-1)
MILWAUKEE, WISCONSIN
2901 BUTTERFIELD ROAD, OAK BROS, ILLINOIS 60521

SECTION 6 - REACTIVITY DATA

Stability: Stable Unstable Conditions to Avoid

Materials to Avoid None

Hazardous Decomposition Products fumes of SO₂ and NO₂

Hazardous Polymerization: Will Not Occur May Occur Conditions to Avoid

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to Take in Case Material is Released or Spilled Wash with large amounts of water.

Waste Disposal Method No special method

SECTION 8 - SPECIAL PROTECTION INFORMATION

Type of Respiratory Protection Required None

Ventilation: Local Exhaust ; Mechanical (General) ; Special (Specify) Other (Specify)

Protective Gloves Rubber Eye Protection Safety goggles

Other Protective Equipment Impervious apron

SECTION 9 - SPECIAL PRECAUTIONS

Handling and Storage Precaution Keep away from sparks, heat or flames. Use in well ventilated area.

Other Precautions Do not take internally. Avoid eye or skin contact. Do not breathe vapor or mist.

Prepared By

[Handwritten Signature]

Title Corporate Toxicologist

Date 4/6/76

100098

Trade Name Nalco Adomall Formula No. _____

Synonyms Aqueous Fracturing Additive

_____ Chemical Family Organic

SECTION 2 - HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%
Alkyl (C ₈ -C ₁₈)*bis(2-hydroxyethyl) benzyl ammonium chloride	23.6
N-polyethylene polyamine (18-mole) N-oleylamine hydrochloride	2.7
Isopropanol	
* as in fatty acids of coconut oil	

SECTION 3 - PHYSICAL PROPERTIES

Boiling Point, 760 MM HG	Melting Point
Specific Gravity (H ₂ O=1)	approx -40°F
0.93 @ 60°F.	Vapor Pressure
Vapor Density (Air=1)	91.44 @ 100°F (Reid)
% Volatiles By Vol.	Solubility in H ₂ O, % By Wt.
18.8 @ 75°F	Soluble
Appearance and Odor	Evaporation Rate (Butyl Acetate=1)
Clear yellow liquid - alcohol odor.	

SECTION 4 - FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point (Test Method)			
78°F. (TCC)			
Flammable Limits in Air, % By Vol.	Lower	Upper	
Extinguishing Media	CO ₂ , Alcohol foam, water fog, dry chemical		
Special Fire Fighting Procedures	None		
Unusual Fire and Explosion Hazard	None		

SECTION 5 - HEALTH HAZARD DATA

Threshold Limit Value	None established for the product. Isopropanol (skin) = 400 ppm
Effects of Overexposure	Causes severe skin and eye damage. Harmful or fatal if swallowed.
EMERGENCY AND FIRST AID PROCEDURES	
Eyes	Immediately flush with water for at least 15 minutes. Call a physician.
Skin	Immediately flush with water for at least 15 minutes.
Ingestion	Do not induce vomiting, drink large quantities of fluid, call a physician.
Inhalation	Remove to fresh air. Treat symptoms. Immediately!

Product Nalco Adomall
 WESTERN COMPANY OF NORTH AMERICA
 2901 BUTLERFIELD ROAD, OAK BROS., ILLINOIS 60521

SECTION 6 - REACTIVITY DATA

Stability: Stable Unstable Conditions to Avoid _____

Materials to Avoid Strong oxidizers

Hazardous Decomposition Products CO, CO₂, NOx

Hazardous Polymerization: Will Not Occur May Occur Conditions to Avoid _____

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to Take in Case Material is Released or Spilled Contain on absorbent material.

Waste Disposal Method Complete incineration.

SECTION 8 - SPECIAL PROTECTION INFORMATION

Type of Respiratory Protection Required NIOSH approved respirator if TLV is exceeded.

Ventilation: Local Exhaust ; Mechanical (General) ; Special (Specify) _____ Other (Specify) _____

Protective Gloves Rubber Eye Protection Goggles or face shield

Other Protective Equipment Rubber apron

SECTION 9 - SPECIAL PRECAUTIONS

Handling and Storage Precaution Do not get in eyes, on skin or on clothing.

Do not take internally. Avoid prolonged inhalation of vapors.

Other Precautions Do not use, pour, spill or store near heat or open flame.

Use with adequate ventilation.

Prepared By _____ Title Corporate Toxicologist Date 6-16-80

100 098



NALCO® ADOMALL®

AQUEOUS FRACTURING ADDITIVE

ACTIVE INGREDIENTS:

Alkyl (C ₈ -C ₁₈) [*] bis (2-hydroxyethyl) benzyl ammonium chloride	23.6%
N-polyethylene polyamine (18-mole) N-oleylamine hydrochloride	2.7%
Isopropanol	30.0%
INERT INGREDIENTS:	43.7%
Total	100.0%

^{*}As in fatty acids of coconut oil.
(C₈ = 1%, C₁₀ = 57%, C₁₂ = 20%, C₁₄ = 11%,
C₁₆ = 2%, C₁₈ = 9%)

EPA Registration No. 10349-1

DIRECTIONS:

For control of bacteria in fracturing fluids: add 0.1 to 1.0 gallons Adomall per 1000 gallons of fracturing fluid (100-1000 ppm). Assistance of individual site problems obtainable from your Nalco Representative. Refer to Adomite Bulletin #50 for additional information on Adomall.

For surface tension reduction and emulsion prevention use 1 to 2 gallons Adomall per 1000 gallons of fracturing fluid or acid (1000-2000 ppm).

Adomall may be added and premixed prior to the fracturing operation or may be added directly from the drum by means of a proportioning pump to the blender during the operation.

NOTE: Adomall is intended for use in aqueous oil or gas well stimulation treatments only. Do not use in potable water supplies or domestic operations. Do not contaminate water by cleaning container. Do not reuse this container. Destroy when empty.

DANGER:

KEEP OUT OF THE REACH OF CHILDREN. CAUSES SEVERE SKIN AND EYE DAMAGE. HARMFUL OR FATAL IF SWALLOWED. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield and rubber gloves when handling. Do not use, pour, spill or store near heat or open flame. Avoid contamination of food.

FIRST AID: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes call a physician. Remove and wash contaminated clothes before reuse. If swallowed, do not induce vomiting, drink large quantities of fluid and call a physician immediately.

NALCO CHEMICAL COMPANY

P. O. BOX 87 • SUGAR LAND, TEXAS 77478

EPA Est. No. 1706-TX-1
NET CONTENTS 55 GALLONS

100280

WESTERN COMPANY OF NORTH AMERICA
MSDS SHEET - 100280

12/16/92

PAGE 1

SECTION I

100280

ANTI-FOAM AGENT;

Western Company of North America

001070; 954916

1-800-732-9876

(713) 629-2600

515 POST OAK BLVD., SUITE 1200

HOUSTON

STATE ...TX ZIP ...:77027

06/03/91

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

AF-11L

CAS	OSHA PEL	ACGIH TLV	OTHER	%
-----	-------------	--------------	-------	---

INFORMATION

SECTION 313 CHEMICALS

CAS	OSHA PEL	ACGIH TLV	OTHER	%
111-76-2	25 PPM	25PPM	DFG MAK 20 PPM	*

SECTION 313 SUPPLIER NOTIFICATION

THE DATA LISTED ABOVE WITH PERCENTAGES ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND RIGHT-TO-KNOW ACT AND 40 CFR 372.

SECTION III - CHEMICAL CHARACTERISTICS

BOILING POINT	MELTING POINT	FREEZING POINT	SPECIFIC GRAVITY (H ₂ O = 1)
168.4-170.2		-74.8	0.911
PERCENT VOLATILE by VOLUME	THEORETICAL VOC CONTENT (percent of WEIGHT)	WEIGHT PER GALLON	
50%	55.5	7.6 lbs.	
pH: Conc:			
VAPOR PRESSURE (mm of Hg)	VAPOR DENSITY (Air = 1)	DENSITY	EVAPORATION RATE Basis (BUTYL ACET)=1
.6 mm. @ 20 C degrees	4.07	.9012	Rate .06
SOLUBILITY IN WATER DISPERSIBLE	REACTIVITY IN WATER Stable.		
APPEARANCE AND ODOR: Pale yellow liquid, ether-like odor.			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	METHOD	FLAMMABLE LIMITS IN AIR (%)	AUTOIGNITION TEMPERATURE
141 F	PMCC	UPPER = 221. LOWER = 2.2 2	N/D
NFPA CODES:	HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 1 OTHER: -		
HMS CODES:	HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 1 PROTECTION: H		
EXTINGUISHER MEDIA: Carbon dioxide, dry chemical or water-fog; alcohol foam should be used for large fires. Use a water spray to cool fire-exposed metal containers.			



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 19 SEP 84

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS De-emulsifier, Aqua Flow	
CHEMICAL FAMILY resin	FORMULA	W.I.N.100146

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.s.s.
NAME OF HAZARDOUS COMPONENT	Isopropanol
HAZARD CLASS	Flammable liquid
IDENTIFICATION NUMBER	UN 1993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Heavy aromatic petroleum solvent, mostly alkbenzenes except toluene and naphthalenes B.P. 350-750°F	7-15	200ppm
Methylisobutylcarbinol (skin)	2	25ppm
Isopropanol	75	400ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	84.4°C	SPECIFIC GRAVITY (H ₂ O=1) @ 21.1°C	0.848
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (AIR=1)	
SOLUBILITY IN WATER	Dispersible		
APPEARANCE AND ODOR	Dark liquid - alcoholic odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 11.6°C (PMCC)	FLAMMABLE LIMITS	Let	Uet
EXTINGUISHING MEDIA Water, foam, dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES Wear self-contained breathing apparatus			
UNUSUAL FIRE AND EXPLOSION HAZARDS Produces toxic fumes when burned			

TRADE NAME: W.I.N. 100146, Aqua flow, DE-EMULSIFIER

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE Not available	
EFFECTS OF OVEREXPOSURE Liquid is irritating to the eyes. May be harmful if swallowed or absorbed through the skin.	
EMERGENCY AND FIRST AID PROCEDURES Eyes: flush with water for 15 min. and get medical attention. Skin: wash skin thoroughly with soap and water. Launder clothing before re-use. Internal: drink large volumes of water, induce vomiting, call a physician.	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID Keep away from heat and open flames.
	STABLE	XXX	
INCOMPATIBILITY (Materials to avoid) Avoid contact with strong oxidizing agents			
HAZARDOUS DECOMPOSITION PRODUCTS None			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	XXX	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Extinguish all sources of ignition. Soak up on sand and dispose of in an approved industrial landfill.	
WASTE DISPOSAL METHOD Incinerate in an incinerator equipped with an afterburner and scrubber or bury in an approved industrial landfill.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) None required in normal use		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES rubber	EYE PROTECTION Face shield or goggles	
OTHER PROTECTIVE EQUIPMENT rubber boots and apron		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Avoid contact with eyes, skin and clothing. Avoid breathing vapors, store away from heat, sparks and open flames.	
OTHER PRECAUTIONS Do not transfer to improperly marked containers. Keep container closed when not in use.	

499509

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: April 28, 1992

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. 1-800-732-9876
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Proprietary	TRADE NAME AND SYNONYMS Aquaseal L
CHEMICAL FAMILY nonionic surfactant	FORMULA W.I.N. 499509

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME Combustible liquid, n.o.s.	(RC /)
NAME OF HAZARDOUS COMPONENT straight run Middle Distillate	
HAZARD CLASS Combustible liquid	
IDENTIFICATION NUMBER NA 1993	
D.O.T. LABEL(S) REQUIRED in 110 gallon containers or larger - 49CFR 173.118	
PRECAUTIONARY LABEL Combustible	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
EGMBE (111-76-2)	10 - 20	25 ppm
straight run Middle Distillate (6471-44-2)	50 - 80	400 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	No Data	SPECIFIC GRAVITY (H ₂ O=1)	1.01
VAPOR PRESSURE (mm Hg)	No Data	PERCENT, VOLATILE BY VOLUME (%)	approx. 18
VAPOR DENSITY (AIR=1)	No Data	EVAPORATION RATE (_____ -1)	No Data
SOLUBILITY IN WATER	Dispersible		

APPEARANCE AND ODOR Blue to amber colored liquid, diesel odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 178°F (PMCC)	FLAMMABLE LIMITS based on EGMBE	1.1	Lel	10.6	Uel
EXTINGUISHING MEDIA water spray, "alcohol" foam, dry chemical or CO ₂					
SPECIAL FIRE FIGHTING PROCEDURES Do not enter fire area without proper protection. Hazardous decomposition products possible.					
Fight fire from a safe distance/protected location. Heat may build pressure and rupture closed containers, spreading the fire and increasing the risk of burns and injuries. Use water to cool fire-exposed containers.					
UNUSUAL FIRE AND EXPLOSION HAZARDS Combustible liquid.					

TRADE NAME: W.I.N. 499509

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Not Established

EFFECTS OF OVEREXPOSURE Ingestion may cause blindness or be fatal. Inhalation can cause CNS depression. Eye and skin irritant.

Eye Contact: Causes moderate to severe irritation. If not removed promptly permanent eye injury may result. Skin Contact:

Intermittent, brief contact may result in mild irritation. Frequent or prolonged contact can cause severe irritation and dermatitis.

Inhalation: Exposure may result in nose and respiratory irritation. Can produce nausea, headache, dizziness. Prolonged exposure may cause weakness and CNS depression. Ingestion: May be fatal or cause blindness.

EMERGENCY AND FIRST AID PROCEDURES In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get

medical attention. In case of contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing and

laundry before reuse. If irritation occurs consult a physician. If inhaled, remove to fresh air. If not breathing, give artificial

respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention. If swallowed, induce vomiting

immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious

person. May be fatal or cause blindness if swallowed. Cannot be made nonpoisonous.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Heat, sparks, open flame
	STABLE	X	

INCOMPATIBILITY (Materials to avoid) strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS CO₂ in a fire

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Stop the flow of chemical. Eliminate all ignition sources. Dike and contain to prevent spreading. Soak up spill with an inert absorbent and place in appropriate containers. Neutralize residue and wash away with water.

WASTE DISPOSAL METHOD Dispose of waste in accordance with local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) Wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits.

VENTILATION Use only in area well ventilated by moving air	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES rubber or neoprene

EYE PROTECTION chemical splash goggles and face shield

OTHER PROTECTIVE EQUIPMENT Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 7 SEP 84

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS alkylarylsulfonic acids in alcohol and H ₂ O	TRADE NAME AND SYNONYMS ANTI-SLUDGE AGENT, AS-2	
CHEMICAL FAMILY acid	FORMULA	W.I.N. 100200

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Corrosive liquid, n.o.s. RQ 1000/454
NAME OF HAZARDOUS COMPONENT	alkylarylsulfonic acid
HAZARD CLASS	corrosive material
IDENTIFICATION NUMBER	UN 1760
D.O.T. LABEL(S) REQUIRED	corrosive liquid
PRECAUTIONARY LABEL	attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
isopropanol (skin)	11	400ppm
isobutanol	6	50ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1) @ 60° F	1.1
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	17
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)(butyl acetate=1)	
SOLUBILITY IN WATER	dispersible	pH	< 1
APPEARANCE AND ODOR	dark color, alcoholic odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 1050 PACC	FLAMMABLE LIMITS	Let	Uet
EXTINGUISHING MEDIA CO ₂ , dry chemical, foam			
SPECIAL FIRE FIGHTING PROCEDURES None			
UNUSUAL FIRE AND EXPLOSION HAZARDS May evolve oxides of sulfur			

TRADE NAME: W.I.N. 100200, ANTI-SLUDGE AGENT, AS-2

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Isobutanol 50 ppm
 None for product Isopropanol (skin) 400 ppm

EFFECTS OF OVEREXPOSURE

May cause eye or skin irritation. Inhalation may cause nausea or vomiting

EMERGENCY AND FIRST AID PROCEDURES

Eyes - flush with water for 15 minutes. Call a physician. Skin-wash thoroughly with soap and water. Ingestion - do not induce vomiting. Give milk or water. Call a physician. Inhalation - remove to fresh air. Treat symptoms.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATIBILITY (Materials to avoid)

Strong bases, oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS

CO₂, oxides of sulfur

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Contain on absorbent material.

WASTE DISPOSAL METHOD

Complete incineration.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

None normally required

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES rubber EYE PROTECTION goggles

OTHER PROTECTIVE EQUIPMENT none

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep container closed. Use with proper ventilation. Keep away from heat, sparks, or flames.

OTHER PRECAUTIONS

Do not take internally. Avoid eye and skin contact. Do not breathe vapors.

100126

Trade Name ASP-539-D Formula No. _____

Synonyms Blend of organophosphates, quaternary ammonium compounds
and ammonium bisulfite Chemical Family Organic

SECTION 2 - HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT	%
Isopropanol	9

SECTION 3 - PHYSICAL PROPERTIES

Boiling Point, 760 MM HG	Melting Point
Specific Gravity (H ₂ O=1) 1.13 @ 60°F	Vapor Pressure
Vapor Density (Air=1)	Solubility in H ₂ O, % By Wt. Soluble
% Volatiles By Vol.	Evaporation Rate (Butyl Acetate=1)
Appearance and Odor Red liquid with a pungent odor. pH 4.8	

SECTION 4 - FLAMMABILITY AND EXPLOSIVE PROPERTIES

Flash Point (Test Method) 79°F (PMCC)	Lower	Upper
Flammable Limits in Air, % By Vol.		
Extinguishing Media Foam, CO ₂ , dry chemical		
Special Fire Fighting Procedures None		
Unusual Fire and Explosion Hazard May evolve toxic NOx and SOx fumes.		

SECTION 5 - HEALTH HAZARD DATA

Threshold Limit Value
None established for the product. Isopropanol (skin) 400 ppm

Effects of Overexposure
May cause eye or skin irritation.

EMERGENCY AND FIRST AID PROCEDURES

Eyes
Flush with water for 15 minutes. Call a physician.

Skin
Flush thoroughly with large amounts of water.

Ingestion
Do not induce vomiting. Give water or milk. Call a physician.

Inhalation
Remove to fresh air. Treat symptoms.

Product ASP-539-D
NALCO CHEMICAL COMPANY
2901 BUTTERFIELD ROAD, OAK BROOK, ILLINOIS 60521

ASP-539-D

Product

SECTION 6 - REACTIVITY DATA

Stability: Stable Unstable Conditions to Avoid

Materials to Avoid Strong oxidizers

Hazardous Decomposition Products SOx and NOx

Hazardous Polymerization: Will Not Occur May Occur Conditions to Avoid

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to Take in Case Material is Released or Spilled Contain with absorbent material.

Waste Disposal Method Complete incineration

SECTION 8 - SPECIAL PROTECTION INFORMATION

Type of Respiratory Protection Required None normally required

Ventilation: Local Exhaust Mechanical (General) Special (Specify)

Protective Gloves Rubber Eye Protection Goggles

Other Protective Equipment None

SECTION 9 - SPECIAL PRECAUTIONS

Handling and Storage Precaution Keep container away from heat, sparks or flames.

Use in properly ventilated area. Keep container closed when not in use.

Other Precautions Do not take internally. Avoid eye and skin contact.

Do not breathe vapors.

Prepared By [Signature] Title of Corporate [Signature] Date of [Signature] 5/2/78

477600



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: June 18, 1990

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (713) 363-7500
ADDRESS (Number, Street, City, State, and ZIP Code) 8701 New Trails Drive, The Woodlands, Texas 77380		
CHEMICAL NAME AND SYNONYMS Proprietary Blend		TRADE NAME AND SYNONYMS Gel Breaker, B-31
CHEMICAL FAMILY Alkanolamines	FORMULA W.I.N. 499650	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	N/A	(RQ /)
NAME OF HAZARDOUS COMPONENT	N/A	
HAZARD CLASS	N/A	
IDENTIFICATION NUMBER	N/A	
D.O.T. LABEL(S) REQUIRED	N/A	
PRECAUTIONARY LABEL	Attached	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Diethanolamine Cas Number 00011-42-2	50	3 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	> 212 F	SPECIFIC GRAVITY (H ₂ O=1)	1.060
VAPOR PRESSURE (mm Hg.)	0.01	PERCENT VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	3.6	EVAPORATION RATE (DUEY =1)	< 0.01
SOLUBILITY IN WATER	95.4%	acetate	
APPEARANCE AND ODOR	Colorless liquid - slight ammoniacal odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	336 F PHCC	FLAMMABLE LIMITS		
EXTINGUISHING MEDIA	Water fog, alcohol foam, CO ₂ , dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES	Wear self-contained, positive pressure breathing apparatus.			
UNUSUAL FIRE AND EXPLOSION HAZARDS				

8.8

TRADE NAME: W.I.N.499650, B-31- Gel Breaker

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	3 ppm
EFFECTS OF OVEREXPOSURE	Eyes - causes irritation or burns. Skin - irritation or burns from prolonged contact. Breathing - excessive inhalation causes nasal irritation. Respiration swallowing - G.I. irritation.
EMERGENCY AND FIRST AID PROCEDURES	Eyes - irrigate with flowing water. Skin - wash in flowing water.
	Ingestion - induce vomiting if large amount. Inhalation - remove to fresh air.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Strong oxidizers, strong acids
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)	May react with halogenated organic solvents.		
HAZARDOUS DECOMPOSITION PRODUCTS	Nitrogen oxides possible.		
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Small - absorb on paper, vermiculite, floor absorbent or other absorbent material, and transfer to hood. Large - eliminate all ignition sources, dike up area, pump to salvage tank.
WASTE DISPOSAL METHOD	Dispose of in accordance with all local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)	Exceeds exposure limits NIOSH/MSMA respirator.	
VENTILATION	LOCAL EXHAUST Maintain below TLV	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES Neoprene or PVC	EYE PROTECTION Chemical Splash Goggles	
OTHER PROTECTIVE EQUIPMENT	Wear impervious clothing and boots	

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Empty containers may be hazardous due to residues (vapor, liquid and/or solid).
OTHER PRECAUTIONS	

dist- 5-3-91

499654

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: November 30, 1990

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101	
CHEMICAL NAME AND SYNONYMS Liquid Buffer	TRADE NAME AND SYNONYMS Buffer 5L
CHEMICAL FAMILY Inorganic Basic Salt	FORMULA W.I.N. 499654

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	(RQ /)
NAME OF HAZARDOUS COMPONENT Liquid potassium carbonate	
HAZARD CLASS Alkaline, moderately toxic and irritating	
IDENTIFICATION NUMBER C.A.S. 548-08-7	
D.O.T. LABEL(S) REQUIRED	
PRECAUTIONARY LABEL	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Liquid - potassium carbonate	35	Not established

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	241	SPECIFIC GRAVITY (H ₂ O=1)	1.39 @ 20°C
VAPOR PRESSURE (mm Hg.)	< 15	PERCENT. VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (_____*)	
SOLUBILITY IN WATER	Complete		

APPEARANCE AND ODOR Clear, water-white solution, no distinct odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) Non-combustible	FLAMMABLE LIMITS N/A	LeI	Uel
EXTINGUISHING MEDIA Water, dry chemical or carbon dioxide			
SPECIAL FIRE FIGHTING PROCEDURES Avoid inhalation, skin, eye contact. Use a pressure demand, self-contained breathing apparatus if large concentrations are present.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None known.			

TRADE NAME: W.I.N. 499654

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE

EMERGENCY AND FIRST AID PROCEDURES Inhalation - Dust, mist or spray may cause damage to lungs. Skin - May cause first, second, or third degree burns. Eyes - Causes conjunctivitis and corneal destruction.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

No

CONDITIONS TO AVOID None known

STABLE

Yes

INCOMPATIBILITY (Materials to avoid) Contact with acids will release CO₂.

HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide at temperatures > 900°C

HAZARDOUS
POLYMERIZATION

MAY OCCUR

No

CONDITIONS TO AVOID None known

WILL NOT OCCUR

Yes

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Avoid contact of irritating mists or liquid with skin, eyes and respiratory system. Spills must be stopped and cleaned up immediately with a vacuum truck.

WASTE DISPOSAL METHOD: Large amounts will have a negative impact on water systems. Dispose in accordance with local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION

LOCAL EXHAUST Yes

SPECIAL N/A

MECHANICAL (General) N/A

OTHER N/A

PROTECTIVE GLOVES Rubber gloves

EYE PROTECTION Chemical goggles

OTHER PROTECTIVE EQUIPMENT Full cover clothing, eyewash and safety shower

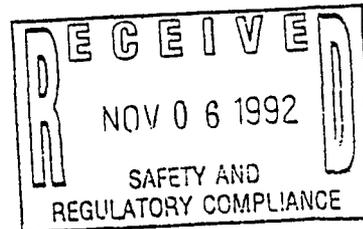
SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Do not store with incompatible substances. Liquid must not be stored below its freezing point.

OTHER PRECAUTIONS None

499750

R-6 (01/86)



INTEROFFICE CORRESPONDENCE

TO: Mike Moseley AT: Houston - Safety & Reg. Compliance
 FROM: Barry T. Hlidek AT: The Woodlands - CTD
 APPROVAL: [Signature] DATE: 6 Nov '92
 RE: Safety Information Update

This is to inform you of revisions, additions, deletions or replacement of products or chemicals and the relevant safety data.

Western Trade Name: Buffer 7L W.I.N.: 499750

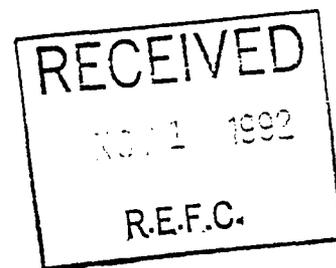
Chemical Name (if not trade named):

Addition Revision Replacement Deletion to product line
 Western Product Western System
 Cementing Stimulation

DOT Proper Shipping Name & I.D. Number (SPM-04-02): Buffer 7L, Not Regulated
 DOT Hazardous Material Class: None
 DOT Hazardous Material Label: Not Regulated

Chemical Storage Class (SPM-04-01): II.1

EPA Hazardous Waste Classification: None
 Reportable Quantity: None
 Material Safety Data Sheet:
 Attached Not Available
 On File at Research



cc: Legal Services
Product Specification File (original)

Attachments: MSDS
Label
Precautionary Statement

Note: If deletion, attach copy of page(s) to be deleted, write deleted across the page(s) attached.

Confidential Proprietary Information
The Western Company of North America

499 750

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: November 3, 1992

SECTION I

SUPPLIER'S NAME The Western Company		EMERGENCY TELEPHONE NO. 1-800-732-9876	
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027			
CHEMICAL NAME AND SYNONYMS Proprietary Blend		TRADE NAME AND SYNONYMS Buffer 7L	
CHEMICAL FAMILY		FORMULA	W.I.N. 499750

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME Buffer 7L, Not Regulated	(RQ /)
NAME OF HAZARDOUS COMPONENT N/A	
HAZARD CLASS N/A	
IDENTIFICATION NUMBER N/A	
D.O.T. LABEL(S) REQUIRED Not Required	
PRECAUTIONARY LABEL N/A	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Sodium Diacetate (CAS #126-96-5)		Not Established

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	ND	SPECIFIC GRAVITY (H ₂ O=1)	1.12
VAPOR PRESSURE (mm Hg)	ND	PERCENT, VOLATILE BY VOLUME (%)	ND
VAPOR DENSITY (AIR=1)	ND	EVAPORATION RATE (_____ =1)	ND
SOLUBILITY IN WATER	ND	pH	4.9 - 5.2

APPEARANCE AND ODOR Clear, colorless solution with a vinegar odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) None	FLAMMABLE LIMITS	N/A	Lel	N/A	Uel
EXTINGUISHING MEDIA Not Flammable					
SPECIAL FIRE FIGHTING PROCEDURES Use media suitable for surrounding fire .					
UNUSUAL FIRE AND EXPLOSION HAZARDS None known.					

TRADE NAME: W.I.N. 499750

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE ND			
EFFECTS OF OVEREXPOSURE ACUTE: Irritating to eyes, skin and throat. CHRONIC: None known.			
EMERGENCY AND FIRST AID PROCEDURES EYES: Flush with water for 15 minutes. Consult a physician immediately. SKIN: Wash affected area with soap and water. Contact a physician if irritation persists. INGESTION: DO NOT induce vomiting. Drink several glasses of milk and use antacids to reduce acidity. Contact physician. INHALATION: Remove to fresh air. If breathing has stopped administer artificial respiration, oxygen or CPR, if needed. Contact a physician.			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizing agents and strong alkali.			
HAZARDOUS DECOMPOSITION PRODUCTS Upon decomposition: produces oxides of carbon.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Confine spill or leak. Prevent material from entering storm sewers or open waterway. Use absorbent to dry spill.			
WASTE DISPOSAL METHOD Dispose in accordance to local, state and federal regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) NIOSH approved organic vapor/acid gas respirator			
VENTILATION	LOCAL EXHAUST	X	SPECIAL
	MECHANICAL (General)	X	OTHER
PROTECTIVE GLOVES Rubber or neoprene gloves			
EYE PROTECTION Chemical splash goggles			
OTHER PROTECTIVE EQUIPMENT Rubber or neoprene apron			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING			
OTHER PRECAUTIONS Avoid contact with skin, eyes and clothing.			

R-6 (01/86)

499630
RECEIVED
NOV 28 1994

INTEROFFICE CORRESPONDENCE

WESTERN COMPANY
SOURCES CONSULTING

TO: Mike Moseley AT: Houston - Safety & Reg. Compliance
 FROM: Marek Pakulski AT: The Woodlands - CTD
 APPROVAL: B. Paul DATE: 3/24/94
 RE: Safety Information Update

This is to inform you of revisions, additions, deletions or replacement of products or chemicals and the relevant safety data.

Western Trade Name: CL-2L W.I.N.: 499630

Chemical Name (if not trade named): Boric Acid Anhydride in Methanol

Addition ___ Revision X Replacement ___ Deletion ___ to product line
 Western Product X Western System ___
 Cementing ___ Stimulation X

DOT Proper Shipping Name & I.D. Number (SPM-04-02): Flammable Liquid, Poisonous, n.o.s.,
 (Methyl Alcohol) UN 1992
 DOT Hazardous Material Class: Flammable Material, Class 3
 DOT Hazardous Material Label: Flammable Liquid
 SARA Title III Category: Crosslinker
 Chemical Storage Class (SPM-04-01): II.1
 Chemical First Aid Guide Class (SPM-04-04):

Eyes * Lungs B Skin G Mouth O

EPA Hazardous Waste Classification: Ignitable waste D001
 Reportable Quantity: 5800 lbs.

Material Safety Data Sheet:
 Attached X Not Available ___
 On File at Research X

cc: Product Specification File (original)
 Angela Hardy
 James Box

Attachments: MSDS
 Label
 Precautionary Statement

Note: If deletion, attach copy of page(s) to be deleted, write deleted across the page(s) attached.

Confidential Proprietary Information
 The Western Company of North America

D.L.N. 499630



The Western Company of North America
Phone: 713-363-7500
8701 New Trails Drive
The Woodlands, Texas 77381
MATERIAL SAFETY DATA SHEET

SECTION I GENERAL INFORMATION

PRODUCT NAME: CL-2L CONTAINER: 55 gal. drum
CHEMICAL NAME: Borate Solution
CHEMICAL FORMULA: Alcohol-boron blend
SUPPLIER: The Western Company of North America
ADDRESS: 8701 New Trails Drive The Woodlands, Texas 77381
FOR INFORMATION ON HEALTH HAZARDS CALL: 713-363-7500
INFORMATION EFFECTIVE AS OF: 28 JULY 89

SECTION II TOXICITY HAZARD DATA

PRINCIPAL HAZARDOUS COMPONENT(S)		TLV (UNITS)
1. Methanol		
CAS RN: 67561	80-85	Air: 200 ppm
NIOSH #: PC 1400000		(skin)

TOXICITY DATA: THR: A skin, eye irr. A hmn inh IRR. A hmn eye irr. HIGH hmn oral; HIGH ipr, ivn; MOD ihl, orl, skn; LOW skn, orl, ihl, ipr, scu.

2. Boric Acid		
CAS RN: 10043353	15-20	Orl-hmnLDLo: 214mg/kg
NIOSH #: ED4550000		

TOXICITY DATA: THR: An exper TER, GIT. MUT data. HIGH scu, unk, orl. MOD orl inf, skn chd, scu, ivn, orl, mus.

SECTION III PHYSICAL DATA

FREEZING POINT (F):	unk
BOILING POINT (F):	unk
VAPOR PRESSURE (mmHg):	unk
VAPOR DENSITY (AIR=1):	unk
SOLUBILITY IN WATER:	Infinite
SPECIFIC GRAVITY (H2O=1):	0.875 - 0.89
PERCENT VOLATILE BY VOLUME:	unk
EVAPORATION RATE:	unk
APPEARANCE AND ODOR:	Clear, alcohol odor

499630

SECTION IV FIRE AND EXPLOSION HAZARD

FLASH POINT: <100F
EXTINGUISHING MEDIA: Alcohol foam, CO2, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Wear SCBA and complete personal protective equip.
UNUSUAL FIRE/EXPLOSION HAZARDS: Mod, when exposed to heat flame, or powerful oxidizer.
Can react violently with acetic anhydride, (aniline + nitrobenzene).

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not available for blend. See Section II for hazards of principle components.

EFFECTS OF OVEREXPOSURE: Not known. See Section II for hazards of principle components.

EMERGENCY AND FIRST AID PROCEDURES: For eye contact, rinse thoroughly for 15 minutes with water. Contact physician if irritation persists. Wash with soap and water for skin contact. Contaminated clothing may be washed and reused. For ingestion, contact poison control center for proper procedures for borax (sodium borate decahydrate), and/or boric acid and methanol ingestion.

SECTION VI REACTIVITY DATA

STABILITY: Stable
CONDITIONS TO AVOID: Material is saturated with borates. Addition of brines, etc. may result in precipitation of borate compounds.
INCOMPATIBILITY:
HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition it emits toxic fumes.
HAZARDOUS POLYMERIZATION: Does not occur.

SECTION VII SPILL AND LEAK PROCEDURES

In case of spill, eliminate ignition sources, contain immediately with absorbent, sweep up and place in sealable disposal containers. Do not allow entry into waterways or sewers. Dispose through hazardous waste handler according to local, state, and federal regulations.

The Western Company of North America
Phone: 713-363-7500
8701 New Trails Drive
The Woodlands, Texas 77381
MATERIAL SAFETY DATA SHEET



499630

SECTION I GENERAL INFORMATION

PRODUCT NAME: CL-2L . 125 CONTAINER: 55 gal. drum
CHEMICAL NAME: Borate Solution
CHEMICAL FORMULA: Alcohol-boron blend
SUPPLIER: The Western Company of North America
ADDRESS: 8701 New Trails Drive The Woodlands, Texas 77381
FOR INFORMATION ON HEALTH HAZARDS CALL: 713-363-7500
INFORMATION EFFECTIVE AS OF: 28 JULY 89

SECTION II TOXICITY HAZARD DATA

PRINCIPAL HAZARDOUS COMPONENT(S)	%	TLV (UNITS)
1. Methanol		
CAS RN: 67561	80-85	Air: 200 ppm
NIOSH #: PC 1400000		(skin)
TOXICITY DATA: THR: A skin, eye irr. A hmn inh IRR. A hmn eye irr. HIGH hmn oral; HIGH ipr, ivn; MOD ihl, orl, skn; LOW skn, orl, ihl, ipr, scu.		
2. Boric Acid		
CAS RN: 10043353	15-20	Orl-hmnLDLo: 214mg/kg
NIOSH #: ED4550000		
TOXICITY DATA: THR: An exper TER, GIT. MUT data. HIGH scu, unk, orl. MOD orl inf, skn chd, scu, ivn, orl, mus.		

SECTION III PHYSICAL DATA

FREEZING POINT (F):	unk
BOILING POINT (F):	unk
VAPOR PRESSURE (mmHg):	unk
VAPOR DENSITY (AIR=1):	unk
SOLUBILITY IN WATER:	Infinite
SPECIFIC GRAVITY (H2O=1):	0.875 - 0.89
PERCENT VOLATILE BY VOLUME:	unk
EVAPORATION RATE:	unk
APPEARANCE AND ODOR:	Clear, alcohol odor

Material Safety Data Sheet

from Genium's Reference Collection
 Genium Publishing Corporation
 1145 Catalyn Street
 Schenectady, NY 12303-1836 USA
 (518) 377-8855



GENIUM PUBLISHING CORP.

No. 1A

AMMONIUM HYDROXIDE
 (28-30%)

(Revision A)

Issued: April 1980

Revised: November 1988



Genium

HMIS

H 2 R 1

F 1 I 3

R 0 S 3

PPG* K 1

*See sect. 8

SECTION 1. MATERIAL IDENTIFICATION

Material Name: AMMONIUM HYDROXIDE (28-30%)

Description (Origin/Uses): Used in bleaching, fabric printing, as a detergent, and in manufacturing ammonium salts and aniline dyes.

Other Designations: Ammonium Solution; Ammonium Hydroxide; Strong Ammonia Water; Spirit of Hartshorn; NH₄OH; Aqueous NH₄OH; CAS No. 1336-21-6

Manufacturers: Contact your supplier or distributor. Consult the latest edition of the *Chemicalweek Buyers' Guide* (Genium ref. 73) for a list of suppliers.

SECTION 2. INGREDIENTS AND HAZARDS

Anhydrous Ammonia,* CAS No. 7664-41-7

%

28-30

EXPOSURE LIMITS

OSHA PEL

STEL: 35 ppm, 27 mg/m³

Water, CAS No. 7732-18-5

70-72

ACGIH TLVs, 1988-89**

TLV-TWA: 25 ppm, 18 mg/m³

TLV-STEL: 35 ppm, 27 mg/m³

*See Genium Industrial MSDS 1.

**Set to protect against irritation to the eyes and respiratory tract.

***See NIOSH, RTECS (BQ9625000), for additional data with references to irritative and mutagenic effects.

Toxicity Data***

Human, Oral, LD₅₀: 43 mg/kg

Human, Inhalation, LC₅₀: 5000 ppm

Human, Inhalation, TC₅₀: 408 ppm

SECTION 3. PHYSICAL DATA

Boiling Point: Ca 82°F (28°C)

Melting Point: Ca -98°F (-72°C)

Vapor Density (Air = 1): 0.6 (as NH₃)

pH: >13 (Very Basic)

% Volatile by Volume: 28 to 30

Molecular Weight: 35 Grams/Mole (NH₄OH)

Solubility in Water (%): Complete

Specific Gravity (H₂O = 1): 0.9

Appearance and Odor: A clear, colorless liquid; strong, pungent, suffocating, characteristic ammonia odor (like dried urine). The odor is detectable at 5 ppm, irritating at 25 to 50 ppm, and provides a warning of hazardous concentration in the air.

Comments: The temperature at which the solution is saturated with the dissolved ammonia is approximately 80 to 85°F (27 to 29°C) at standard pressure (1 atmosphere). Above these temperatures the excess ammonia gas will bubble out of solution.

SECTION 4. FIRE AND EXPLOSION DATA

Flash Point and Method

Not Applicable

Autoignition Temperature

1204°F (651°C) (as NH₃)

LEL: 15% v/v (as NH₃)

UEL: 28% v/v (as NH₃)

Extinguishing Media: Ammonium hydroxide solutions are not likely to burn. Although the ammonia gas can burn, it is hard to ignite. Use extinguishing agents that will put out the surrounding fire. Use a cold water spray to cool fire-exposed containers and to control, disperse, or knock down the ammonia vapor. Unusual Fire or Explosion Hazards: When ammonium hydroxide solutions are heated, they evolve substantial quantities of NH₃ vapor. This ammonia gas is dangerously irritating. Special Fire-fighting Procedures: Wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in the pressure-demand or positive-pressure mode. Fire fighters must also wear a complete set of protective clothing designed to prevent any contact with ammonia gas.

SECTION 5. REACTIVITY DATA

Stability/Polymerizations: Ammonium hydroxide is stable in closed containers during routine work operations. Hazardous polymerization cannot occur. Chemical Incompatibilities: Avoid hazardous reactions brought about by accidental exposure of ammonium hydroxide solutions and ammonia gas to copper, tin, zinc, aluminum, galvanized surfaces, acrolein, iodine, dimethyl sulfate, fluorine, gold, aqua regia, propylene oxide, β-propiolactone, silver nitrate, silver oxide, silver permanganate, and strong mineral acids such as hydrofluoric acid, hydrochloric acid, nitric acid, and oleum (a mixture of sulfuric acid [H₂SO₄] and its anhydride [SO₃]). Conditions to Avoid: Avoid direct contact with incompatible chemicals. Always establish compatibility between ammonium hydroxide solutions and other materials by testing small quantities of materials to replicate the expected conditions of bulk operations. Do not heat ammonium hydroxide solutions.

Hazardous Products of Decomposition: Ammonia gas (NH₃) will be given off from ammonium hydroxide solutions if they are heated or if sodium hydroxide (NaOH) is added to them. Comments: Ammonia gas is likely to be present in work areas where ammonium hydroxide solutions are used. If gases that react violently with ammonia are also found there, establish appropriate engineering controls to minimize any potential hazard associated with mixing them.

SECTION 6. HEALTH HAZARD INFORMATION

Carcinogenicity: Ammonium hydroxide is not listed as a carcinogen by the NTP, IARC, or OSHA.

Summary of Risks: Ammonium hydroxide is very irritating and corrosive to all body tissue. Accidental ingestion of ammonium hydroxide solutions damages the gastrointestinal tract. Permanent blindness can result from accidentally splashing these solutions into the eyes. Excessive inhalation of ammonia vapor causes severe irritation to the respiratory system, coughing, difficulty in breathing, severe lung congestion, and possibly fatal pulmonary edema (lungs filled with fluid). Tolerance to higher concentrations may develop. **Medical Conditions Aggravated by Long-Term Exposure:** None reported. **Target Organs:** Skin, eyes, and respiratory system. **Primary Entry:** Inhalation, skin or eye contact. **Acute Effects:** Severe irritation of all exposed tissue (eyes, skin, and respiratory system). Swelling and sloughing of the lining of the air passages may occur; opening them may require emergency measures. First- and second-degree burns may also occur. **Chronic Effects:** Asthma and chronic hyperactivity of air passages may occur after massive exposure. **FIRST AID: Eyes.** Immediately flush eyes, including under the eyelids, gently but thoroughly with flooding amounts of running water for at least 15 minutes. Speed and thoroughness in rinsing the eyes is vital to preventing permanent eye injury. **Skin.** Immediately rinse the area with flooding amounts of water while removing grossly contaminated clothing and shoes, then wash with soap and water. **Inhalation.** Remove the exposed person to fresh air, restore and/or support his or her breathing as needed. Qualified medical personnel should administer oxygen as required. **Ingestion** (applicable only to accidental ingestion of ammonium hydroxide solutions; not applicable to ammonia gas). Never give anything by mouth to someone who is unconscious or convulsing. If the exposed person is responsive, promptly give him or her plenty of water, dilute vinegar, or citrus juice to drink, followed by milk. Do not induce vomiting. Get medical help (in plant, paramedic, community) for all exposures. Seek prompt medical assistance for further treatment, observation, and support after first aid. **Note to physician:** Immediate hospitalization and observation for 72 hours to detect delayed pulmonary edema is advised in cases of severe exposure.

SECTION 7. SPILL, LEAK, AND DISPOSAL PROCEDURES

Spill/Leak: Preplan emergency response to spills or leaks of ammonium hydroxide solutions. Evacuate all nonessential personnel, notify safety personnel, eliminate all sources of ignition, and provide adequate ventilation. Cleanup personnel need protection against skin and eye contact with the liquid as well as inhalation of its vapor (see sect. 8). Contain large spills and absorb waste with sand, earth, or vermiculite. Neutralize the spilled ammonium hydroxide with dilute hydrochloric acid (HCl) or dilute sulfuric acid (H₂SO₄). The neutralized ammonium hydroxide solutions must be extensively diluted with water before discharge. Prevent runoff from directly entering streams, surface waters, waterways, watersheds, and sewers. **Waste Disposal:** Consider reclamation, recycling, or destruction rather than disposal in a landfill. Suitable scrap ammonium hydroxide recovered from spills or leaks may be useful in neutralizing acidic wastes. Monitor effluents for pH, ammonia, and salt content because these properties can be subject to specific regulations. Follow Federal, state, and local regulations.

OSHA Designations

Listed as an Air Contaminant (29 CFR 1910.1000 Subpart Z, for NH₃)

EF Designations (40 CFR 302.4)

Classified as a Hazardous Substance, Reportable Quantity: 1000 lbs (454 kg), per the Clean Water Act (CWA), §311 (b) (4). If this waste ammonium hydroxide satisfies the characteristic of corrosivity detailed in 40 CFR 261.22, it is assigned the RCRA hazardous waste number D002.

SECTION 8. SPECIAL PROTECTION INFORMATION

Goggles: Always wear protective eyeglasses or chemical safety goggles. Where splashing of ammonium hydroxide solutions is possible, wear a full face shield. Follow OSHA eye- and face-protection regulations (29 CFR 1910.133). **Respirator:** Wear a NIOSH-approved respirator per Genium reference 88 for the maximum-use concentrations and/or the exposure limits cited in section 2 as applied to ammonia gas. Follow OSHA respirator regulations (29 CFR 1910.134). For emergency or nonroutine operations (spills or cleaning reactor vessels and storage tanks), wear an SCBA. **Warning:** Air-purifying respirators will not protect workers in oxygen-deficient atmospheres. **Other:** Wear impervious rubber gloves, boots, aprons, and gauntlets, etc., to prevent excessive or prolonged skin contact. **Ventilation:** Install and operate general and local exhaust-ventilation systems powerful enough to maintain airborne concentrations of ammonia gas below the OSHA PEL standard cited in section 2. **Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work areas. A large amount of clean water must be available for emergency response to accidental ammonium hydroxide spills. **Contaminated Equipment:** Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. Do not wear contact lenses in any work area. Remove contaminated clothing and launder it before wearing it again; clean this material from your shoes and equipment. **Comments:** Practice good personal hygiene; always wash thoroughly after using this material. Keep it off your clothing and equipment. Avoid transferring it from your hands to your mouth while eating, drinking, or smoking. Do not eat, drink, or smoke in any work area.

SECTION 9. SPECIAL PRECAUTIONS AND COMMENTS

Storage/Segregation: Store ammonium hydroxide solutions in insulated, closed containers in a cool, dry, well-ventilated area separate from incompatible chemicals (see sect. 5) and direct sunlight. **Special Handling/Storage:** Protect containers from physical damage and handle them carefully. Use caution when opening sealed containers to relieve pressure. Drain empty containers well and flush them with water before discarding them. **Engineering Controls:** Follow established safety procedures during transfers of ammonium hydroxide solutions. The ammonia vapor produced by an ammonium hydroxide spill can be a serious hazard at temperatures above 50°F. Monitor the amount of ammonia gas present in pipelines, storage tanks, reactor vessels, etc., with appropriate equipment, especially before entering or inspecting these areas. **Comments:** Train personnel who work with ammonium hydroxide solutions in their safe use and in proper emergency response. Maintain accurate medical records of employee exposure to ammonia gas from ammonium hydroxide solutions. Severe exposure requires a medical exam to assess any damage and to make recommendations concerning possible future restrictions on job assignments.

Transportation Data (49 CFR 172.101-2)

Shipping Name: Ammonium Hydroxide*

Hazard Class: Corrosive Material

ID No. NA2672

DOT Label: Corrosive

IMO Hazard Class: 8

IMO Label: Corrosive

Limited to solutions containing at least 12% and not more than 44% ammonia.

References: 1, 26, 38, 84, 86-94, 100, 116, 117.

Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Graham Publishing Corp. extends no warranty, makes no representations and assumes no responsibility

Prepared by PJ Igoe, BS

Industrial Hygiene Review: DJ Wilson, CIH



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

RECEIVED

JAN 23 1989

R.E.F.C.

DATE: 17JUL86

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS GEL COMPLEXER, water, CL-9	
CHEMICAL FAMILY metal chelate	FORMULA W.I.N. 100150	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	isopropanol
HAZARD CLASS	Flammable liquid
IDENTIFICATION NUMBER	Un 1993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Unit)
isopropanol	80	400ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1) @ 25°C	0.857
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	80%
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	Solubule		
APPEARANCE AND ODOR	Clear amber, isopropyl alcohol odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 54 F (PMCC)	FLAMMABLE LIMITS % by volume (IPA)	Let 2%	Uet 12%
EXTINGUISHING MEDIA any type CO ₂ , dry chemical or water			
SPECIAL FIRE FIGHTING PROCEDURES none			
UNUSUAL FIRE AND EXPLOSION HAZARDS none			

4.13

TRADE NAME: W.I.N. 100150, GEL COMPLEXER, water, CL-9

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

See attached

EFFECTS OF OVEREXPOSURE

IPA damages eye tissue and may cause skin irritation upon prolonged or repeated skin contact. Prolonged or repeated breathing of IPA causes eye, nose and throat

EMERGENCY AND FIRST AID PROCEDURES

Irritation, depression of the nervous system and narcosis. Wash skin thoroughly with soap and water. Flush eyes with water for at least 15 minutes. Call a physician. If vapors are inhaled, move to fresh air and call a physician.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

XXX

Hydrolyzed slowly by water

COMPATIBILITY (Materials to avoid)

May cause rapid corrosion of ferrous metals.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS
POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

XXX

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Collect large spills with sawdust or other absorbent solid. Small spills and residues may be flushed to the drain with water.

WASTE DISPOSAL METHOD

Pour waste on the ground in a protected dumping area, bury or burn in accordance with local ordinances.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION

LOCAL EXHAUST

SPECIAL

MECHANICAL (General)

OTHER

PROTECTIVE GLOVES

Elbow length rubber gloves

EYE PROTECTION

Goggles or face shield

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

See attached sheet.

OTHER PRECAUTIONS

499626



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 29 JAN1991

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS PROPRIETARY		TRADE NAME AND SYNONYMS CL-17 499626
CHEMICAL FAMILY ALUMINUM SOLUTION	FORMULA PROPRIETARY	W.I.N. 100000

SECTION II TOXICITY HAZARD DATA

PRINCIPAL HAZARDOUS COMPONENT(S)		TLV (UNITS)
1. Methanol		
CAS RN: 67561	30-50	Air: 200 ppm
NIOSH #: PC 1400000		(skin)

TOXICITY DATA: THR: A skin, eye irr. A hmn inh IRR. A hmn eye irr. HIGH hmn oral; HIGH ipr, ivn; MOD ihl, orl skn; LOW skn, orl, ihl, ipr, scu.

SECTION III PHYSICAL DATA

FREEZING POINT (F):	Not known
BOILING POINT (F):	Not known
pH:	4.6
VAPOR PRESSURE (mmHg):	Not known (contains methanol)
VAPOR DENSITY (AIR=1):	Not known
SOLUBILITY IN WATER:	Infinite
SPECIFIC GRAVITY (H2O=1):	1.045
EVAPORATION RATE:	Not known
APPEARANCE AND ODOR:	Milky white solution, alcohol odor.

SECTION IV FIRE AND EXPLOSION HAZARD

FLASH POINT:	< 100F
EXTINGUISHING MEDIA:	Alcohol foam, CO2, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear SCBA and complete personal protective equipment.
UNUSUAL FIRE/EXPLOSION HAZARDS:	Mod, when exposed to heat, flame, or powerful oxidizer.

499626

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not available for blend. See Section II for hazards of principle hazardous components.

EFFECTS OF OVEREXPOSURE: Not known. See Section II for hazards of principle hazardous components.

EMERGENCY AND FIRST AID PROCEDURES: For eye contact, rinse thoroughly with water for 15 minutes. Contact physician if irritation persists. Wash with soap and water for skin contact. Contaminated clothing may be washed thoroughly and reused. For ingestion, contact poison control center for proper procedures for methanol ingestion.

SECTION VI REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Material is saturated with aluminum compounds. Addition of brines, etc. may result in precipitation of aluminum salts.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition it emits toxic fumes.

HAZARDOUS POLYMERIZATION: Does not occur.

SECTION VII SPILL AND LEAK PROCEDURES

In case of spill, eliminate ignition sources, contain immediately with absorbant, sweep up and place in sealable disposal containers. Do not allow entry into waterways or sewers. Dispose through hazardous waste handler according to local, state, and federal regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Niosh approved respirator
VENTILATION: Local exhaust
PROTECTIVE GLOVES: Rubber or plastic
EYE PROTECTION: Chemical goggles or face shield
OTHER PROTECTIVE EQUIPMENT: Full body-covering clothing;
eyewash stations.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store away from heat and/or open flame.

OTHER PRECAUTIONS: DOT NAME: FLAMMABLE LIQUID, N.O.S.
LABEL REQUIRED: UN 1993

499710

R-8 (01/86)

INTEROFFICE CORRESPONDENCE

TO: Mike Moseley AT: Houston - Safety & Reg. Compliance
 FROM: Barry T. Hlidek AT: The Woodlands - CTD
 APPROVAL: [Signature] DATE: 6 Nov '92
 RE: Safety Information Update

This is to inform you of revisions, additions, deletions or replacement of products or chemicals and the relevant safety data.

Western Trade Name: CL-22

W.I.N.: 499710

Chemical Name (if not trade named):

Addition Revision Replacement Deletion to product line
 Western Product Western System
 Cementing Stimulation

DOT Proper Shipping Name & I.D. Number (SPM-04-02): CL-22, Not Regulated
 DOT Hazardous Material Class: N/A
 DOT Hazardous Material Label: Not Required

Chemical Storage Class (SPM-04-01): II.1

EPA Hazardous Waste Classification: Not Listed
 Reportable Quantity: Not Listed

Material Safety Data Sheet:
 Attached Not Available
 On File at Research

cc: Legal Services
 Product Specification File (original)

Attachments: MSDS
 Label
 Precautionary Statement

Note: If deletion, attach copy of page(s) to be deleted, write deleted across the page(s) attached.

Confidential Proprietary Information
 The Western Company of North America

TO: HOUSTON HUMAN RESOURCES

NOV-19-'92 THU 14:46

ID:WCNA WPS R&E

TEL NO: 713-363-7598

#871 P02

499710



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

Date: 3 Nov. 1992

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. 1-800-732-6876
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS CL-22
CHEMICAL FAMILY	FORMULA W.I.N. 499710

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME CL-22, Not Regulated	(RQ /)
NAME OF HAZARDOUS COMPONENT N/A	
HAZARD CLASS N/A	
IDENTIFICATION NUMBER N/A	
D.O.T. LABEL(S) REQUIRED Not Required	
PRECAUTIONARY LABEL Attached	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	> 212	SPECIFIC GRAVITY (K ₂ O=1)	1.08
VAPOR PRESSURE (mm Hg)	ND	PERCENT. VOLATILE BY VOLUME (%)	ND
VAPOR DENSITY (AIR=1)	ND	EVAPORATION RATE (_____ =1)	ND
SOLUBILITY IN WATER	Soluble		

APPEARANCE AND ODOR Colorless to light brown liquid with slight acid odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) None	FLAMMABLE LIMITS	ND	LeL	ND	UeL
EXTINGUISHING MEDIA Not a flammable or combustible material.					
SPECIAL FIRE FIGHTING PROCEDURES Use extinguishing media appropriate for surrounding conditions.					
UNUSUAL FIRE AND EXPLOSION HAZARDS					



499710

TRADE NAME: W.I.N. 499710

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE ND			
EFFECTS OF OVEREXPOSURE Skin irritation develops slowly after contact. Eye irritation develops immediately upon contact.			
Vapors may be irritating to the respiratory tract without proper ventilation.			
EMERGENCY AND FIRST AID PROCEDURES EYES: Flush with water for 15 minutes, call physician. SKIN: Flush with soap and water for 15 minutes. See physician if symptoms develop and persist. INGESTION: If swallowed, induce vomiting, seek medical attention. INHALATION: Remove victim to fresh air. Seek medical attention. Begin artificial respiration if needed, or oxygen if breathing is labored.			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong acids, alkaline materials and oxidizing materials			
HAZARDOUS DECOMPOSITION PRODUCTS From Fire: smoke, carbon dioxide, carbon monoxide, possible oxides of sodium			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Small Spills: Pick up with absorbent media. Store as hazardous waste. Large Spills: Contain with dikes, pick up with vacuum truck. Handle as hazardous waste.			
WASTE DISPOSAL METHOD EPA approved, hazardous waste disposal site. Follow applicable local, state and federal regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) Not normally needed with proper use and storage.			
VENTILATION	LOCAL EXHAUST	X	SPECIAL
	MECHANICAL (General)	X	OTHER
PROTECTIVE GLOVES Chemical resistant gauntlet type gloves.			
EYE PROTECTION Chemical goggles or full face shield.			
OTHER PROTECTIVE EQUIPMENT Boots, aprons, drench showers, eye wash			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store away from acids, alkaline materials, and oxidizers or materials bearing a yellow D.O.T. label.			
OTHER PRECAUTIONS Clean up leaks immediately to prevent soil or water contamination.			

499644

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: February 3, 1992

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. (817) 731-5433
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS CL-30
CHEMICAL FAMILY Crosslink Additive	FORMULA Proprietary Blend W.J.N. 499644

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME Combustible Liquid, N.O.S.	(RQ /)
NAME OF HAZARDOUS COMPONENT Hydrocarbon Distillate	
HAZARD CLASS Combustible Liquid	
IDENTIFICATION NUMBER NA 1993	
D.O.T. LABEL(S) REQUIRED In 110 gallon containers or larger - 49CFR 173.118	
PRECAUTIONARY LABEL Combustible	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Hydrocarbon Distillate	45	200 ppm
Complex Hydrocarbon Solvent	4	200 ppm
Methyl Alcohol	2	200 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F)		SPECIFIC GRAVITY (H ₂ O=1)	1.16
VAPOR PRESSURE (mm Hg)	N/D	PERCENT. VOLATILE BY VOLUME (%)	48
VAPOR DENSITY (AIR=1)	1	EVAPORATION RATE (_____·1)	N/D
SOLUBILITY IN WATER	Soluble		

APPEARANCE AND ODOR Tan color/ hydrocarbon odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 146°F (PMCC)	FLAMMABLE LIMITS N/D	Lel	Uel
EXTINGUISHING MEDIA Water spray, foam, dry chemical or carbon dioxide.			
SPECIAL FIRE FIGHTING PROCEDURES Self-contained breathing apparatus. Cool exposed containers with water. Avoid breathing vapors or fumes.			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

Keep heat, sparks and flame away. Produces toxic combustion products. Vapor is heavier than air and may travel considerable distance to source of ignition.

TRADE NAME: W.I.N. 499644

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE			
EFFECTS OF OVEREXPOSURE			
See Attachment.			
EMERGENCY AND FIRST AID PROCEDURES			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID Keep away from heat, sparks & open flame.
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Avoid contact with strong oxidizing agents.			
HAZARDOUS DECOMPOSITION PRODUCTS Carbon monoxide, oxides of nitrogen.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED			
Remove all ignition sources. Recover free liquid. Add absorbent (sand, earth, sawdust) to spill area. Advise authorities if product has entered or may enter sewers, water courses or extensive land area.			
WASTE DISPOSAL METHOD			
Incinerate free liquid. Bury contaminated absorbent in industrial landfill in accordance with local, state and federal regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) Normally not needed. Use supplied air respirator in closed areas.			
VENTILATION	LOCAL EXHAUST As needed to prevent exceeding recommended exposure limit.	SPECIAL	
	MECHANICAL (General)	OTHER	
PROTECTIVE GLOVES Chemical resistant gloves			
EYE PROTECTION Splash goggles.			
OTHER PROTECTIVE EQUIPMENT Chemical boots and apron as appropriate during use.			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING			
Keep away from strong oxidizing agents. Avoid contact with eyes, skin or clothing. Keep away from heat, sparks and open flame. never use cutting torch on or near container (even empty)- explosion may result. Do not reuse empty container. Launder clothes before reuse. Avoid breathing vapors or aerosols.			
OTHER PRECAUTIONS			

499808

SERIAL SAFETY DATA SHEET - 499808
PRODUCT NAME: CLAY MASTER 5C

11/09/94

PAGE 1

SECTION I

UNION NUMBER: 499808
E.C.N. NUMBER.....: 499808
SYNONYMS:
MANUFACTURER:
VENDOR: THE WESTERN COMPANY OF NORTH AMERICA
EMERGENCY PHONE ..: 1-800-732-9876
TOLL FREE CALLS: (713) 629-2600
ADDRESS: 515 POST OAK BLVD., SUITE 1200
CITY: HOUSTON STATE TX: ZIP 77027:
PREPARED BY ..: RESEARCH AND ENGINEERING
DATE PREPARED: 11/9/94

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

PRODUCT NAME: CLAY MASTER 5C

HAZARDOUS INGREDIENT NAME	CAS	OSHA PEL	ACGIH TLV	OTHER	%
NONE					

SECTION 313 CHEMICALS

HAZARDOUS INGREDIENT NAME	CAS	OSHA PEL	ACGIH TLV	OTHER	%
NONE					

SECTION 313 SUPPLIER NOTIFICATION

CHEMICALS LISTED ABOVE WITH PERCENTAGES ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372.

SECTION III - CHEMICAL CHARACTERISTICS

BOILING POINT	MELTING POINT	FREEZING POINT	SPECIFIC GRAVITY (H2O = 1)
ND	<0F	<0F	1.144
PERCENT VOLATILE by VOLUME	THEORETICAL VOC CONTENT (percent of WEIGHT)		WEIGHT PER GALLON
ND	ND		9.53
pH: Conc:			
VAPOR PRESSURE (mm of Hg)	VAPOR DENSITY (Air = 1)	DENSITY	EVAPORATION RATE Basis ()=1 Rate
ND	ND	ND	ND
SOLUBILITY IN WATER SOLUBLE	REACTIVITY IN WATER NONE		
APPEARANCE AND ODOR:	CLEAR AMBER LIQUID		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	METHOD	FLAMMABLE LIMITS IN AIR (%)	AUTOIGNITION TEMPERATURE
>200F	PMCC	UPPER = ND LOWER = ND	
NFPA CODES:	HEALTH	1	
	FLAMMABILITY	1	
	REACTIVITY	0	
	OTHER		
HMIS CODES:	HEALTH		
	FLAMMABILITY		
	REACTIVITY		
	PROTECTION		

EXTINGUISHER MEDIA: Dry chemical, CO₂, water spray or regular foam.

SPECIAL FIRE FIGHTING PROCEDURES: Move container from fire area if it can be done without risk. Apply cool water to sides of containers that are exposed to flames until well after fire is out.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Stay away from ends of containers.

499702

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: January 20, 1992

SECTION I

SUPPLIER'S NAME The Western Company		EMERGENCY TELEPHONE NO. (817) 731-5433	
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027			
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS Clay Treat 2C	
CHEMICAL FAMILY Quaternary Ammonium Chloride		FORMULA Proprietary	W.I.N. 499702

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME Clay Treat 2C	(RQ /)
NAME OF HAZARDOUS COMPONENT N/A	
HAZARD CLASS	N/A
IDENTIFICATION NUMBER	N/A
D.O.T. LABEL(S) REQUIRED	N/A
PRECAUTIONARY LABEL	N/A

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
N/A	0	N/A

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	> 200	SPECIFIC GRAVITY (H ₂ O=1)	1.0153
VAPOR PRESSURE (mm Hg)	ND	PERCENT. VOLATILE BY VOLUME (%)	ND
VAPOR DENSITY (AIR=1)	ND	EVAPORATION RATE (_____ -1)	
SOLUBILITY IN WATER	Soluble		

APPEARANCE AND ODOR Clear Liquid

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) > 200 PMCC	FLAMMABLE LIMITS N/A	N/A	LeI	N/A	UeI
EXTINGUISHING MEDIA Carbon Dioxide, water spray					
SPECIAL FIRE FIGHTING PROCEDURES Use self contained breathing apparatus when entering smoke or fumes.					
UNUSUAL FIRE AND EXPLOSION HAZARDS N/A					

TRADE NAME: W.I.N. 499702

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE			
EFFECTS OVEREXPOSURE Inhalation: Prolonged inhalation may cause dizziness and irritation of the throat. Skin: prolonged contact: cause dryness and irritation.			
EMERGENCY AND FIRST AID PROCEDURES Inhalation: Remove to fresh air, use oxygen if breathing becomes difficult. Skin: Wash contaminated areas with large amounts of clean water and soap. If conditions persist seek medical attention.			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID N/A
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizers			
HAZARDOUS DECOMPOSITION PRODUCTS Oxides of carbon, nitrogen and chlorine			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID None Known
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Contain spill, vacuum up, absorb or scrape up contaminated soil and place in containers for later disposal.			
WASTE DISPOSAL METHOD Contact an EPA or State approved disposal facility.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) Organic vapor			
VENTILATION	LOCAL EXHAUST	Recommended	SPECIAL Use self contained breathing apparatus when entering tanks.
	MECHANICAL (General)	Recommended	
PROTECTIVE GLOVES Neoprene			
EYE PROTECTION Goggles			
OTHER PROTECTIVE EQUIPMENT Coveralls, splash aprons			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Avoid contact with skin, if spilled on clothing wash off immediately.			
OTHER PRECAUTIONS Clean up spills promptly.			



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 8 July 78

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS EE-100
CHEMICAL FAMILY	FORMULA	Proprietary blend

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	
HAZARD CLASS	Flammable liquid
IDENTIFICATION NUMBER	UN 1993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
This product contains minor portions of organic solvents which are flammable by Department of Labor definitions.		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1)	
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 85°F (PMCC)	FLAMMABLE LIMITS	Let	Uel
EXTINGUISHING MEDIA CO ₂ , foam, dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE

EMERGENCY AND FIRST AID PROCEDURES

Skin: wash with soap and water.

Eyes: flush with water for 15 minutes.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

INCOMPATIBILITY (Materials to avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS
POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

WASTE DISPOSAL METHOD

Any method for disposal of chemical wastes subject to local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION

LOCAL EXHAUST

SPECIAL

MECHANICAL (General)

OTHER

PROTECTIVE GLOVES

Plastic coated or rubber

EYE PROTECTION

Face shield or goggles.

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

OTHER PRECAUTIONS

499687

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: March 11, 1992

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. (817) 731-5433
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Alkylpolyether Sulfate	TRADE NAME AND SYNONYMS E-18
CHEMICAL FAMILY Surfactant	FORMULA Blend W.I.N. 499687

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable Liquid, n.o.s.	(RQ 25,000 lbs)
NAME OF HAZARDOUS COMPONENT	Methanol	
HAZARD CLASS	Flammable Liquid	
IDENTIFICATION NUMBER	UN 1993	
D.O.T. LABEL(S) REQUIRED	Flammable Liquid	
PRECAUTIONARY LABEL	Flammable	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Methanol	15	200 ppm
Alkylpolyether Sulfates	10-30	Not Established

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	186	SPECIFIC GRAVITY (H ₂ O=1)	1.03
VAPOR PRESSURE (mm Hg)	Not Available	PERCENT. VOLATILE BY VOLUME (%)	Not Available
VAPOR DENSITY (AIR=1)	Not Available	EVAPORATION RATE (_____ -1)	Not Available
SOLUBILITY IN WATER	Soluble		
APPEARANCE AND ODOR	Amber color, alcohol odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	86°F SFCC	FLAMMABLE LIMITS	6.7 Lel	36.0 Uel
EXTINGUISHING MEDIA	Foam, dry chemical, CO ₂ , and water spray			
SPECIAL FIRE FIGHTING PROCEDURES	Use a self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode. Flammable. Cool fire-exposed containers using water spray.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	Flammable liquid, vapors of which can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back.			

TRADE NAME: W.I.N. 499687

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE 200 ppm (methanol)			
EFFECTS OF OVEREXPOSURE Inhalation: Prolonged exposure may cause mild irritation of mucous membranes, headache and tiredness. At elevated concentrations, symptoms may include nausea, shortness of breath, and a sense of drunkenness. In extreme cases, visual disturbances and ocular damage may occur. Skin and Eye Contact: Repeated and prolonged contact may cause dermatitis, drying or cracking of the skin due to defatting solvent properties. Contact with eyes will cause moderate irritation. Ingestion: May be harmful if swallowed. May cause gastrointestinal disturbances. Ingestion of methanol may result in a feeling of intoxication and can cause visual disturbances and, in extreme cases, ocular damage.			
EMERGENCY AND FIRST AID PROCEDURES Wash skin thoroughly with soap and water. Launder clothing before reuse. If in eyes, irrigate with flowing water immediately and continuously for fifteen minutes. Consult a physician. If inhaled, remove to fresh air and administer oxygen if necessary. If ingested, induce vomiting. Consult a physician if symptoms persist or exposure was severe. Never give anything by mouth to an unconscious person.			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID Open flames
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizer			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID None known
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Small spill - Absorb on paper, cloth or other material. Large spill - Dike to prevent entering any sewer or waterway. Transfer liquid to a holding container. Cover residue with dirt or suitable chemical adsorbent. Use personal protective equipment as necessary.			
WASTE DISPOSAL METHOD Place chemical residues and contaminated adsorbent materials into a suitable waste container and take to an approved hazardous waste disposal site. Dispose of all residue in accordance with applicable waste management regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) NIOSH approved/supplied air respirators when concentrations exceed the exposure limits specified.			
VENTILATION	LOCAL EXHAUST To maintain concentrations below recommended limits	SPECIAL	
	MECHANICAL (General) To maintain concentrations below nuisance limits	OTHER	
PROTECTIVE GLOVES Chemical resistant			
EYE PROTECTION Chemical goggles			
OTHER PROTECTIVE EQUIPMENT Chemical apron			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Ground containers and lines during transfer to eliminate static electricity.			
OTHER PRECAUTIONS Do not drink, eat or smoke in storage area.			

499687

ATTACHMENT TO AND CONTINUATION OF



MATERIAL SAFETY DATA SHEET

Date: March 11, 1992

SECTION I

SUPPLIER'S NAME The Western Company

EMERGENCY TELEPHONE NO. (817) 731-5433

ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027

CHEMICAL NAME AND SYNONYMS Alkylpolyether Sulfate

TRADE NAME AND SYNONYMS E-18

CHEMICAL FAMILY Surfactant

FORMULA Blend

W.I.N. 499687

SECTION IXA - SPECIAL PRECAUTIONS

Flammable liquid. Avoid heat, sparks and open flames. Avoid breathing of vapors and contact with eyes, skin or clothing. Keep container closed when not in use. Hazardous product residue may remain in emptied container. Do not reuse empty containers without commercial cleaning or reconditioning.

This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372 as follows:

CHEMICAL	CAS NUMBER	WEIGHT PERCENT
Methanol	000067-56-1	15.0%

499687



MATERIAL SAFETY DATA SHEET

Date: March 11, 1992

SECTION I

SUPPLIER'S NAME The Western Company

EMERGENCY TELEPHONE NO. (817) 731-5433

ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027

CHEMICAL NAME AND SYNONYMS Alkylpolyether Sulfate

TRADE NAME AND SYNONYMS E-18

CHEMICAL FAMILY Surfactant

FORMULA Blend

W.I.N. 499687

SECTION X - LABEL COPY

FOR INDUSTRIAL USE ONLY

FLAMMABLE LIQUID

FIRST AID:

FOR EYES:

In case of contact, immediately flush copiously with water for 15-20 minutes.

FOR SKIN:

In case of contact, wash with soap and water. Remove contaminated clothing and wash skin with soap and water. Launder clothing before reuse.

FOR INGESTION:

If swallowed, if victim is conscious, give 2 glasses of water and induce vomiting. Call a physician.

FOR INHALATION:

If breathed in, remove to fresh air. Give oxygen if breathing is labored. Call a physician.

FOR HANDLING:

Employees must wear neoprene gloves and safety goggles.

ATTENTION!!

After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. Do not cut, puncture, or weld on or near this container. Refer to MSDS and SPM-04-04 for other safety requirements.



WIN 499687

E-18

SURFACTANT

Flash Point: 86°F (30°C)
Net Content: 470 lb (213 kg)
55 gal (208 L)

Manufactured for:

THE WESTERN COMPANY OF NORTH AMERICA

515 Post Oak Blvd., Houston, Texas 77027

Emergency Telephone: 817-731-5100, 817-731-5433

DIRECTIONS:

For Proper Use, Refer to Service

Bulletin No.(s): 90.0 WG, 410.0WG

FOR INDUSTRIAL USE ONLY

CAUTION!

AVOID HEAT, SPARKS AND OPEN FLAMES. AVOID BREATHING OF VAPORS AND CONTACT WITH EYES, SKIN OR CLOTHING. KEEP CONTAINER CLOSED WHEN NOT IN USE.

HANDLING: Employees MUST WEAR chemical goggles, rubber apron, rubber gloves and OSHA regulated respirator protection.

FIRE:

Use water spray, foam, dry chemical or carbon dioxide to extinguish fire. Full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus required for fire fighting personnel. May produce toxic gases in fire.

SPILL OR LEAK ACTION:

Use required protective equipment. Contain and absorb spill with an inert material. Scoop up and remove. Get approval prior to shipping absorbed material to a landfill.

CONTAINER DISPOSITION:

Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Dispose in environmentally safe manner.

FIRST AID:

FOR EYES: Immediately flush with plenty of water for at least 15 minutes, lifting upper and lower lids occasionally.

FOR SKIN:

May cause skin irritation. Wash exposed area with soap and water. Remove contaminated clothing, and launder before reuse.

FOR INGESTION:

If conscious, immediately give two to four glasses of water and induce vomiting by touching finger to back of throat. Call physician. Give hot coffee or tea.

FOR INHALATION:

May cause respiratory irritation. Remove to fresh air. IF NOT BREATHING, give artificial respiration. If breathing is difficult, give oxygen. Keep person warm and quiet. Seek prompt medical attention.

Refer to MSDS for Safety Requirements.

Batch no.

Flammable Liquid, n.o.s.
(CONTAINS METHANOL)

UN 1993

DOT LABEL: FLAMMABLE LIQUID



FLAMMABLE LIQUID

3

499687

499778

R-6 (01/86)

INTEROFFICE CORRESPONDENCE

TO: Mike Moseley AT: Houston - Safety & Reg. Compliance
 FROM: Barry Hlidek AT: The Woodlands - CTD
 APPROVAL: [Signature] DATE: 10/12/93
 RE: Safety Information Update

This is to inform you of revisions, additions, deletions or replacement of products or chemicals and the relevant safety data.

Western Trade Name: Flo-Back 20 W.I.N.: 499778

Chemical Name (if not trade named):

Addition Revision Replacement Deletion to product line
 Western Product Western System
 Cementing Stimulation

DOT Proper Shipping Name & I.D. Number (SPM-04-02): Not Regulated
 DOT Hazardous Material Class: N/A
 DOT Hazardous Material Label: N/A

Chemical Storage Class (SPM-04-01):
 Chemical First Aid Guide Class (SPM-04-04):
 Eyes Lungs Skin Mouth

EPA Hazardous Waste Classification: Non Hazardous

Reportable Quantity:
 Material Safety Data Sheet:
 Attached Not Available
 On File at Research

~~499778~~

cc: Legal Services
Product Specification File (original)

Attachments: MSDS
Label

Note: If deletion, attach copy of page(s) to be deleted, write deleted across the page(s) attached.

Confidential Proprietary Information
 The Western Company of North America

499778



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

Date: 20 Sept. 1993

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. 1-800-732-9876
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS Flo-Back 20
CHEMICAL FAMILY Nonionic Surfactant	FORMULA W.I.N. 499778

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME Flo-Back 20 Not Regulated
NAME OF HAZARDOUS COMPONENT N/A
HAZARD CLASS Non Hazardous
IDENTIFICATION NUMBER N/A
D.O.T. LABEL(S) REQUIRED Not Required
PRECAUTIONARY LABEL

SECTION II - HAZARDOUS INGREDIENTS

% TLV (Units)

Non Hazardous		

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	193	SPECIFIC GRAVITY (H ₂ O=1)	1.005
VAPOR PRESSURE (psia) @ 108°F	0.8	PERCENT. VOLATILE BY VOLUME (%)	65%
VAPOR DENSITY (AIR=1)	2.693	EVAPORATION RATE (_____ -1)	ND
SOLUBILITY IN WATER	miscible	pH	3.0

APPEARANCE AND ODOR colorless solution, slight alcohol odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 130°F	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA As for surrounding fire conditions.			
SPECIAL FIRE FIGHTING PROCEDURES Use water spray to cool fire exposed surfaces and to disperse vapors.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

Surfactant - Flammable

499778

TRADE NAME: W.I.N. Flo-Back 20, 499778

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE ND			
EFFECTS OF OVEREXPOSURE May cause irritation to eyes, mucus membranes and upper respiratory tract.			
EMERGENCY AND FIRST AID PROCEDURES GENERAL: Immediately flush with copious amounts of water. Remove contaminated clothing and wash before re-use. SKIN: Wash affected area with abundant amounts of cool soapy water. EYES: Irrigate thoroughly with water. LUNGS: Remove victim to fresh air. INGESTION: Consult physician.			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizing agents			
HAZARDOUS DECOMPOSITION PRODUCTS CO ₂			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Absorb with an inert material such as sand, soil or vermiculite.			
WASTE DISPOSAL METHOD Sweep up and dispose of in accordance with federal, state and local regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) None			
VENTILATION General good ventilation	LOCAL EXHAUST		SPECIAL
	MECHANICAL (General)	X	OTHER
PROTECTIVE GLOVES Chemical resistant rubber			
EYE PROTECTION Chemical goggles			
OTHER PROTECTIVE EQUIPMENT Use good handling procedures			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store in cool, dry place. Store in tightly sealed drums.			
OTHER PRECAUTIONS Avoid contact with food items.			



MATERIAL SAFETY DATA SHEET

ORIGINAL

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
 A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

WCNA FR-30

PAGE: 1
 DATE PREPARED: JUL 8, 1991
 MSDS NO.: 78779000

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: WCNA FR-30

499693

CHEMICAL NAME:
 Not applicable: Blend

CHEMICAL FAMILY:
 Polymer Emulsion

PRODUCT DESCRIPTION:
 Clear to Opaque Emulsion
 Bland Odor

EMERGENCY TELEPHONE NUMBERS: EXXON CHEMICAL AMERICAS 713-870-6000
 CHEMTREC 800-424-9300

SECTION 2 HAZARDOUS INGREDIENT INFORMATION

The composition of this mixture may be proprietary information. In the event of a medical emergency, compositional information will be provided to a physician or nurse. This product is hazardous as defined in 29 CFR 1910.1200, based on the following compositional information:

COMPONENT	OSHA HAZARD
Aryl Polyether, Polyacrylamide	Eye & Skin Irritant Vapors Irritant to Eyes and Respiratory Tract Systemic Toxicity via In- gestion, Inhalation Animal Teratogen PEL/TLV
Ethylene Glycol	
Ethylene Glycol	
Ethylene Glycol, Ammonium Chloride	

For additional information see Section 3.

SECTION 3 HEALTH INFORMATION & PROTECTION

NATURE OF HAZARD

- EYE CONTACT:**
 Irritating, and will injure eye tissue if not removed promptly.
- SKIN CONTACT:**
 Low order of toxicity.
 Irritating.
 Frequent or prolonged contact may irritate and cause dermatitis.
- INHALATION:**
 Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.
- INGESTION:**
 Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.

49969E

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

WCNA FR-30

PAGE: 2
DATE PREPARED: JUL 8, 1991
MSDS NO.: 78779000

FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water for at least 15 minutes. Get prompt medical attention.

SKIN CONTACT:

Flush with large amounts of water; use soap if available. Remove grossly contaminated clothing, including shoes, and launder before reuse. If irritation persists, seek medical attention.

INHALATION:

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION:

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

WORKPLACE EXPOSURE LIMITS

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:

A ceiling value of 50 ppm (125 mg/m³) for Ethylene Glycol.
A TWA of 10 mg/m³ and a STEL of 20 mg/m³ for Ammonium Chloride fume.

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES:

a ceiling value of 50 ppm (127 mg/m³) for Ethylene Glycol vapor,
a TWA of 10 mg/m³ and a STEL of 20 mg/m³ for Ammonium Chloride, fume.

EXXON RECOMMENDS THE FOLLOWING OCCUPATIONAL EXPOSURE LIMITS:

200 ppm total hydrocarbon for LOPS (Low odor Paraffin Solvents).

PRECAUTIONS

PERSONAL PROTECTION:

For open systems where contact is likely, wear long sleeves, chemical resistant gloves, and chemical goggles. Where contact may occur, wear long sleeves and safety glasses with side shields. Where concentrations in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH/MSHA approved respirators may be necessary to prevent overexposure by inhalation.

VENTILATION:

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be stored and handled in a lab hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations.

CHRONIC EFFECTS:

This product contains ethylene glycol (EG). Repeated high dose exposure to ethylene glycol by ingestion has caused kidney damage, brain damage, degeneration of the liver, and changes in blood chemistry and circulating blood cells in laboratory animals. Repeated overexposure to ethylene glycol has the potential to cause similar toxic effects in humans.

Ethylene glycol has been shown to cause developmental and reproductive



MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

499693

WCNA FR-30

PAGE: 5
DATE PREPARED: JUL 8, 1991
MSDS NO.: 78778000

SARA TITLE III:

Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:

Immediate health, Delayed Health.

This product contains the following Section 313 Reportable Ingredients:

COMPONENT	CAS NO.	MAXIMUM %
Ethylene Glycol	107-21-1	5.0

SECTION 8 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

SPECIFIC GRAVITY:

1.04 at 60

Density: 8.7 lbs/gal at 60

SOLUBILITY IN WATER, WT. % AT °F:

Dispersible

SP. GRAV. OF VAPOR, at 1 atm (Air=1):

1.29

EVAPORATION RATE, n-Bu Acetate=1:

1.4 Calculated

VAPOR PRESSURE, mmHg at °F:

52 at 100 Calculated

VISCOSITY OF LIQUID, CST AT °F:

480 at 81 Brookfield

FREEZING/MELTING POINT, °F:

-31 Pour Point

BOILING POINT, °F:

221 Calculated IBP

SECTION 9 REACTIVITY DATA

STABILITY:

Stable

CONDITIONS TO AVOID INSTABILITY:

None

HAZARDOUS POLYMERIZATION:

Will not occur

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY:

Strong Oxidizing Agents

HAZARDOUS DECOMPOSITION PRODUCTS:

None

SECTION 10 STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD:

Unknown, use proper grounding procedure



MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 1272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

499693

WCNA FR-30

PAGE: 6
DATE PREPARED: JUL 8, 1991
MSDS NO.: 78779000

STORAGE TEMPERATURE, °F:
Ambient
STORAGE/TRANSPORT PRESSURE, mmHg:
Atmospheric

LOADING/UNLOADING TEMPERATURE, °F:
Ambient
VISC. AT LOADING/UNLOADING TEMP., cST:
Not available

REVISION SUMMARY:

Since JUNE 30, 1991 this MSDS has been revised in Section(s):
1, 2, 3, 7, 8

REFERENCE NUMBER:
HDHA-A-11290

DATE PREPARED:
July 8, 1991

SUPERSEDES ISSUE DATE:
June 30, 1991

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR TECHNICAL SALES REPRESENTATIVE
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 713-870-6885

THIS INFORMATION RELATES TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. SUCH INFORMATION IS TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE AND RELIABLE AS OF THE DATE COMPILED. HOWEVER, NO REPRESENTATION, WARRANTY OR GUARANTEE IS MADE AS TO ITS ACCURACY, RELIABILITY OR COMPLETENESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE. WE DO NOT ACCEPT LIABILITY FOR ANY LOSS OR DAMAGE THAT MAY OCCUR FROM THE USE OF THIS INFORMATION NOR DO WE OFFER WARRANTY AGAINST PATENT INFRINGEMENT.

100362

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

WFS



MATERIAL SAFETY DATA SHEET

MAY 10 1991

Human Resources

Date: May 8, 1991

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. 1-800-424-9300
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS Foamer, Frac Foam 1
CHEMICAL FAMILY Amphoteric Surfactant	FORMULA W.I.N. 100362

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Combustible Liquid	(PG 41,000 lbs)
NAME OF HAZARDOUS COMPONENT	Methanol, CAS # [67-56-1]	
HAZARD CLASS	Combustible Liquid	
IDENTIFICATION NUMBER	NA 1993	
D.O.T. LABEL(S) REQUIRED	If material in containers 110 gallons or larger	
PRECAUTIONARY LABEL	Attached	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Methanol	12.5	200 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	174	SPECIFIC GRAVITY (H ₂ O=1) at 60°F	1.03
VAPOR PRESSURE (mm Hg)	141	PERCENT, VOLATILE BY VOLUME (%)	70
VAPOR DENSITY (AIR=1)	3.38	EVAPORATION RATE (n-Bu Acetate=1)	1.8
SOLUBILITY IN WATER	Soluble	VISCOSITY at 100 (Cannon-Fenske)	10

APPEARANCE AND ODOR Transparent yellow liquid with a slight sweet odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	116 (Seta CC)	FLAMMABLE LIMITS	6.7 Lel	36.0 Uel
EXTINGUISHING MEDIA	Carbon dioxide, dry chemical, foam, water spray			
SPECIAL FIRE FIGHTING PROCEDURES	Water spray may be used to cool fire-exposed metal containers to prevent reignition from hot surfaces. Do not breathe smoke or hot fumes.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	None known.			

TRADE NAME: W.I.N. 100362, Foamer, Frac Foam 1

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE None established for product.

EFFECTS OF OVEREXPOSURE Eyes: Irritation, itching, excessive tearing, swelling, pain. Skin Contact: Irritation, redness, dry skin. Sensitized skin may show dermatitis. Inhalation: Nausea, dizziness, pneumonia if aspirated. If Swallowed: Nausea, vomiting, other symptoms of methanol poisoning.

EMERGENCY AND FIRST AID PROCEDURES Eyes: Flush eyes with clear water immediately for 15 minutes and see an eye doctor. Skin: Wash skin with soap and water. Remove and launder clothing before wearing. If skin irritation persists, see a physician. If inhaled: Remove to fresh air and give artificial respiration if needed. If ingested: Give milk or water to dilute. Induce vomiting. Get emergency medical treatment for methanol ingestion.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Sources of ignition
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)		Caustic, oxidizers such as chromates or chlorine.	
HAZARDOUS DECOMPOSITION PRODUCTS		Smoke, fumes, carbon monoxide, carbon dioxide, oxides of nitrogen.	
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Contain spill and soak up waste. Flush area with water.

WASTE DISPOSAL METHOD Chemical incineration or land disposal according to federal, state, and local statutes.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) None required in normal use.

VENTILATION	LOCAL EXHAUST Recommended	SPECIAL Entering tanks or cleaning spills: Air supply recommended.
	MECHANICAL (General)	

PROTECTIVE GLOVES Neoprene or latex rubber

EYE PROTECTION Chemical safety goggles

OTHER PROTECTIVE EQUIPMENT Eye bath stations or water supply; showers.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Spills that drain into waterways will generate foam and probably kill fish. This should be avoided. Keep containers closed. Keep away from sparks and excessive heat. Avoid contact.

OTHER PRECAUTIONS Know and be able to use first aid and fire fighting procedures.

499669

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

WPS



MATERIAL SAFETY DATA SHEET

MAY 10 1991

Human Resources

Date: May 8, 1991

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. 1-800-424-9300
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Mixture	TRADE NAME AND SYNONYMS Frac Foam 2
CHEMICAL FAMILY Surfactants	FORMULA W.I.N. 499669

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Combustible Liquid n.o.s.	(RQ 41,000 lbs)
NAME OF HAZARDOUS COMPONENT	Methanol, CAS # [67-56-1] ✓	
HAZARD CLASS	Combustible Liquid	
IDENTIFICATION NUMBER	NA 1993	
D.O.T. LABEL(S) REQUIRED	If material in containers 110 gallons or larger	
PRECAUTIONARY LABEL	Attached	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Methanol	12	200 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	180	SPECIFIC GRAVITY (H ₂ O=1)	1.026
VAPOR PRESSURE (mm Hg)	96	PERCENT. VOLATILE BY VOLUME (%)	67-69
VAPOR DENSITY (AIR=1)	> 1.1	pH	8.0-9.0
SOLUBILITY IN WATER	Soluble at 25%	VISCOSITY, BROOKFIELD @ 21°C (70°F)	30-38 cps
APPEARANCE AND ODOR	Light yellow color; alcoholic odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	109°F (TCC)	FLAMMABLE LIMITS	6.7 Lel	36 Uel
EXTINGUISHING MEDIA	Dry chemical or waterfog or CO ₂ or foam or sand.			
SPECIAL FIRE FIGHTING PROCEDURES	Firefighters must be equipped to prevent breathing of vapors or products of combustion.			
	Wear an approved self-contained breathing apparatus and protective clothing.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	Vapors may ignite explosively.			

TRADE NAME: W.I.N. 499669

SECTION V - HEALTH HAZARD DATA		
THRESHOLD LIMIT VALUE 200 ppm TLV based on methanol		
EFFECTS OF OVEREXPOSURE Eyes: Irritation, burning, itching and pain. Skin: Irritation, redness, sensitized skin may show signs of dermatitis. Inhalation: Nausea, dizziness, pneumonia if aspirated. If swallowed: Nausea, vomiting, light headedness, and other symptoms of methanol poisoning.		
EMERGENCY AND FIRST AID PROCEDURES Eyes: Immediately flush with large quantities of water for 15 minutes and call physician. Skin: Flush with large amounts of water for 15 minutes. Launder clothing before reweaving. Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration. If swallowed: Drink water to dilute. Induce vomiting. Get emergency medical treatment for ingestion of methanol.		
SECTION VI - REACTIVITY DATA		
STABILITY	UNSTABLE	CONDITIONS TO AVOID Open flames and ignition sources
	X	
	STABLE	
INCOMPATIBILITY (Materials to avoid) Strong oxidizers such as hydrogen peroxide bromine, chromic acid		
HAZARDOUS DECOMPOSITION PRODUCTS Carbon dioxide and probably carbon monoxide and sulfur oxides		
HAZARDOUS POLYMERIZATION	MAY OCCUR	CONDITIONS TO AVOID N/A
	X	
	WILL NOT OCCUR	
SECTION VII - SPILL OR LEAK PROCEDURES		
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Eliminate source of ignition. Absorb with an inert material such as sand, soil or vermiculite; sweep up and dispose of in accordance with federal, state and local regulations.		
WASTE DISPOSAL METHOD Disposal by incineration under controlled conditions or in chemical landfill. Dispose of in accordance with all applicable federal, state and local regulations.		
SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) In closed areas, use NIOSH approved organic vapor respirator.		
VENTILATION	LOCAL EXHAUST X	SPECIAL Entering tanks or cleaning up spills, air supply recommended.
	MECHANICAL (General) Adequate to maintain TLV	OTHER
PROTECTIVE GLOVES Rubber or plastic, solvent resistant		
EYE PROTECTION Chemical safety goggles		
OTHER PROTECTIVE EQUIPMENT Neoprene protective type apron, eyewash station, showers		
SECTION IX - SPECIAL PRECAUTIONS		
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store between 30°F and 120°F. Clean up any spills promptly. Protect exposed skin.		
OTHER PRECAUTIONS Do not ingest.		



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 26 SEP 84

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary blend		TRADE NAME AND SYNONYMS SURFACTANT, FS-2
CHEMICAL FAMILY Surfactant	FORMULA W.I.N. 100167	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	methanol
HAZARD CLASS	Flammable liquid
IDENTIFICATION NUMBER	UN 1993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
methanol: Rat oral LD ₅₀ 12.88 g/kg, LC ₅₀ 64,000 ppm 4 hours	30-35	300ppm
isopropanol	0-3	400ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	150°F	SPECIFIC GRAVITY (H ₂ O=1) @ 60°F	0.960
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	35-40%
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ #1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR Clear to amber, alcoholic odor			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 62°F PMCC	FLAMMABLE LIMITS	LeI	UeI
EXTINGUISHING MEDIA CO ₂ , dry chemicals, alcohol type foams			
SPECIAL FIRE FIGHTING PROCEDURES Dilution of burning liquid with 22 to 25 volumes of water will effect extinguish- ment. Wear self-contained breathing apparatus.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Combustion products may contain hydrofluoric acid and must not be breathed.			

TRADE NAME: W.I.N. 100167, SURFACTANT, FS-2

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	
400 ppm (skin) - ACCIH (1975)	
EFFECTS OF OVEREXPOSURE	
None expected except for giddiness. Low toxicity. Approximately lethal dose = 17,000 mg/kg (rats).	
EMERGENCY AND FIRST AID PROCEDURES	
Skin: Wash with soap and water. Eyes: Flush with water for at least 15 min and call a physician. Inhalation: Move to fresh air. Ingestion: Induce vomiting and call a physician.	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID Excessive heat, sparks and open flames.
	STABLE	XXXX	
INCOMPATIBILITY (Materials to avoid)			
Anhydride, isocyanate, monomer, and organometallic contamination.			
HAZARDOUS DECOMPOSITION PRODUCTS			
Carbon monoxide, carbon dioxide, hydrofluoric acid.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	XXX	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Eliminate all sources of ignition. Flush small spills to the sewer with water. Large spills should be collected for disposal.	
WASTE DISPOSAL METHOD	
Dispose of in a sanitary landfill according to local, state and federal regulations	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type)		
Air supplied masks in closed area.		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES	Rubber	EYE PROTECTION goggles
OTHER PROTECTIVE EQUIPMENT		
Eye bath and safety shower		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Keep away from heat, sparks and open flames. Keep container closed	
OTHER PRECAUTIONS	
Use with adequate ventilation. Do not take internally.	

100137

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: January 28, 1992

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. (817) 731-5433
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS De-Emulsifier, I-5
CHEMICAL FAMILY	FORMULA W.I.N. 100137

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME Flammable Liquid, Corrosive, N.O.S.	(RQ /1780 gallons)
NAME OF HAZARDOUS COMPONENT Methanol, Dehydroabietylamine	
HAZARD CLASS Flammable Liquid, Corrosive	
IDENTIFICATION NUMBER UN 2924	
D.O.T. LABEL(S) REQUIRED Flammable Liquid, Corrosive	
PRECAUTIONARY LABEL	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Methanol (Skin) 67-56-1	< 35	200 ppm
Dehydroabietylamine	< 15	None established

SECTION III - PHYSICAL DATA

BOILING POINT (°F)		SPECIFIC GRAVITY (H ₂ O=1)	0.958
VAPOR PRESSURE (mm Hg) Estimated	< 5	PERCENT, VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)	> 1	EVAPORATION RATE (_____ -1)	
SOLUBILITY IN WATER	Dispersible	pH: 5% of product	12.7 - 13.7
APPEARANCE AND ODOR Amber to brown liquid with alcoholic odor			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA Foam dry chemical, CO ₂ , water fog or spray			
SPECIAL FIRE FIGHTING PROCEDURES Do not enter a fire area without proper protective equipment, including NIOSH/MSHA approved, self-contained breathing apparatus. Cool exposed containers with water spray.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Material is flammable. Vapors are heavier than air and may travel along ground to ignition source and flash back. Never use welding or cutting torch on or near drums, even when empty. Explosion may result.			

TRADE NAME: W.I.N. 100137

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECT: = OVEREXPOSURE Inhalation: Material is corrosive. Inhalation of vapor may cause severe irritation of respiratory system. Eye

Contact: Eye contact may cause corneal damage resulting in permanently impaired vision. Skin Contact: Material is absorbed through skin and may cause systemic poisoning. Ingestion: May be harmful if ingested. See Attachment IXA.

EMERGENCY AND FIRST AID PROCEDURES Eye Contact: Flush eyes immediately with large amounts of water for at least 15 minutes.

Call a physician if irritation persists. Inhalation: Remove immediately to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration, and call a physician. Skin Contact: Immediately wash skin with large amounts of water while removing contaminated clothing and shoes. Contact a physician. Discard clothing and shoes. Ingestion: DO NOT induce vomiting. If conscious, drink large amounts of water and contact a physician.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Oxidizers, heat sparks or open flame
	STABLE	X	

INCOMPATIBILITY (Materials to avoid) Oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS Carbon Monoxide

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED See Section IX

WASTE DISPOSAL METHOD See Section IX

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) As needed. If excursions above recommended level occur, half face organic vapor cartridge with dust/mist prefilter.

VENTILATION	LOCAL EXHAUST		SPECIAL
	MECHANICAL (General)	X	OTHER

PROTECTIVE GLOVES Chemical resistant gloves

EYE PROTECTION Goggles

OTHER PROTECTIVE EQUIPMENT

499617

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: July 25, 1991

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. (817) 731-5433
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS I-8A
CHEMICAL FAMILY	FORMULA W.I.N. 499617

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Corrosive Liquid, n.o.s.	(RQ 200 lbs)	Thiourea
NAME OF HAZARDOUS COMPONENT	Hydrochloric Acid		
HAZARD CLASS	Corrosive		
IDENTIFICATION NUMBER	UN 1760		
D.O.T. LABEL(S) REQUIRED	Corrosive		
PRECAUTIONARY LABEL			

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Thiourea	62-56-6 1-5	None
Formaldehyde	50-00-0 < 1	1 ppm*
Orthotoluidine	< 1	2 ppm (skin)
Substituted Triazine	40-50	None
Hydrochloric Acid	> 15	C-5 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	> 212°F	SPECIFIC GRAVITY (H ₂ O=1)	1.06-1.08
VAPOR PRESSURE (mm Hg)		PERCENT. VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ -1)	
SOLUBILITY IN WATER	Complete		

APPEARANCE AND ODOR Aromatic odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	None	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA	Carbon dioxide, water, foam or dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES	Wear positive pressure self-contained breathing apparatus and full protective clothing.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	None			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

EFFECTS OF OVEREXPOSURE Inhalation: Inhalation of mist can cause injury (burns) to the respiratory tract. Ingestion: Toxic. Can cause shock and loss of consciousness. May be fatal if swallowed. Eyes: Contact with eyes can cause burns and eye damage. Skin: Contact with skin can cause burns. May cause allergic skin reaction/dermatitis. Chronic: Contains O-Toluidine - may cause cyanosis, abnormal blood forming system function with anemia or red blood cell destruction. CARCINOGENICITY: Formaldehyde: Listed by the International Agency for Research of Cancer as a probable carcinogen to humans on the basis of animal evidence, but human data is inadequate (IARC Group 2B). Listed by the National Toxicology Program as reasonably anticipated to be carcinogenic. Listed by ACGIH as an A2 Industrial Substance Suspect of Carcinogenic Potential for Man. O-Toluidine: Listed by the International Agency for Research on Cancer (IARC Group 2A) as a probable carcinogen to humans on the basis of at least limited human data. Listed by the National Toxicology Program as reasonably anticipated to be carcinogenic. Listed by the ACGIH as an Industrial Substance of Carcinogenic Potential for Man. Thiourea: Listed by the International Agency for Research on Cancer (IARC Group 2B). Listed by the National Toxicology Program (NTP) as an anticipated human carcinogen.

EMERGENCY AND FIRST AID PROCEDURES Eyes: Immediately flush eyes in a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. GET MEDICAL ATTENTION. Skin: Immediately remove contaminated clothing and shoes. Flush skin thoroughly with water for at least 15 minutes. Rinse clothing. If irritation persists, GET MEDICAL ATTENTION. Ingestion: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION. (Medical personnel - use cautious lavage to avoid aspiration.) Inhalation: Remove to fresh air and remove contaminated clothing. If breathing is difficult, administer oxygen. If respiration stops, give mouth to mouth resuscitation. GET MEDICAL ATTENTION.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Keep from freezing.
	STABLE	X	

INCOMPATIBILITY (Materials to avoid) Alkalies, strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID None known.
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Wear protective clothing. Dike to contain spill. Absorb or otherwise collect spill and place in suitable drum for disposal.

WASTE DISPOSAL METHOD Either incinerate or put in a landfill with approval of regulatory agency.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION	LOCAL EXHAUST	X	SPECIAL
	MECHANICAL (General)		OTHER

PROTECTIVE GLOVES Neoprene or polyvinyl gloves and appropriate protective clothing

EYE PROTECTION Chemical goggles or face shield

OTHER PROTECTIVE EQUIPMENT NIOSH approved respirator where TLV/PEL may be exceeded. Eye wash station should be in close proximity.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Protect from freezing. Do not get in eyes, on skin or clothing. Material is toxic.

Use with adequate ventilation. Avoid breathing vapors.

OTHER PRECAUTIONS Wash thoroughly after handling. For industrial use only.

499 618



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 17FEB86

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Acetylenic alcohols, amine quats, methanol		TRADE NAME AND SYNONYMS INHIBITOR, acid, I-10D
CHEMICAL FAMILY amines and acetylenic alcohols	FORMULA	W.I.N. 499618

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	flammable liquid, corrosive, n.o.s.
NAME OF HAZARDOUS COMPONENT	methanol, acetylenic alcohols, organic amines
HAZARD CLASS	Flammable Liquid, Corrosive
IDENTIFICATION NUMBER	UN2924
D.O.T. LABEL(S) REQUIRED	Flammable liquid and corrosive
PRECAUTIONARY LABEL	Attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
methanol	65	ppm 200
propargyl alcohol		1
formamide		20
heavy aromatic naptha - 100 ppm; ethyl octynol - 1 ppm; isopropanol		400

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	192	SPECIFIC GRAVITY (H ₂ O=1) (@ 25°C)	0.800
VAPOR PRESSURE (mm Hg.) (MeOH @ 21.2°C)	100	PERCENT. VOLATILE BY VOLUME (%)	80
VAPOR DENSITY (AIR=1)	1.20	EVAPORATION RATE (n-DECYLAC = 1)	2.07
SOLUBILITY IN WATER	dispersible		
APPEARANCE AND ODOR	dark brown liquid, pine odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 52°F PMCC, ASTM D93-73	FLAMMABLE LIMITS	Lim	Uem
EXTINGUISHING MEDIA CO ₂ , alcohol foam, dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES Use water spray to cool fire-exposed surfaces and to protect personnel.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Respiratory protection required. Full body protection needed if fumes, mist or liquid may be contacted.			

TRADE NAME: W.I.N. 499618 INHIBITOR, acid, I-10D

499618

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE ethyl octynol - 1 ppm - propargyl alcohol, formamide, methanol, naphtha, isopropanol (1,20,200,100,400 ppm)

EFFECTS OF OVEREXPOSURE
 anesthesia, nausea, headache, dizziness, blindness, convulsions, death - may be fatal if
 eye contact - permanent blindness -
 inhaled/absorbed via skin - severe irritant to skin - chronic: liver, lung, kidney

EMERGENCY AND FIRST AID PROCEDURES
 flush skin and eyes with water for 15 min and remove to fresh air - call a doctor;
 artificial respiration: if swallowed, induce vomiting if victim is conscious -
 100-200 ml usually fatal; no known antidote - treat symptoms

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID conditions - open flames, sparks, heat
	STABLE	X	

INCOMPATIBILITY (Materials to avoid)
 strong oxidizers, mineral acids, olefins, esters, alkylene oxides, cyanohydrides
 HAZARDOUS DECOMPOSITION PRODUCTS Does not decompose unless burned, but vapors are very toxic.
 Decomposes, when burned, into HCl acid and toxic smoke and fumes

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 eliminate ignition sources; keep public away - vapors can be fatal; avoid contact
 and evacuate occupants from downwind areas; prevent from entering sewers, water sources, low
 areas - advise authorities of contact with sewer, water, soil, vegetation
 WASTE DISPOSAL METHOD DANGER!
 contain liquid with sand/earth; recover by pumping or with suitable absorbent -
 consult expert on disposal

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
 Use NIOSH/MSHA approved self-contained or respirator with amine cartridges.

VENTILATION	LOCAL EXHAUST greater than 60 fpm hood/face velocity	SPECIAL explosion proof
	MECHANICAL (General) equal to outdoors	OTHER N/A

PROTECTIVE GLOVES rubber EYE PROTECTION splash goggles

OTHER PROTECTIVE EQUIPMENT chemical-resistant suit and boots

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 close container when not in use - containers hazardous when empty - observe all

precautions given in this sheet - wear protective equipment

OTHER PRECAUTIONS
 keep away from heat, sparks, flames - contains acetylenic alcohols, no known
 antidote - permanent blindness

RECEIVED
APR 07 1995

R-6 (01/86)

INTEROFFICE CORRESPONDENCE

RESEARCH AND
FACILITIES CONSTRUCTION

TO: Jim Johnson AT: Houston - Safety & Reg. Compliance
FROM: Marek Pakulski AT: The Woodlands - CTD
APPROVAL: B. Hall DATE: 3/24/95
RE: Safety Information Update

This is to inform you of revisions, additions, deletions or replacement of products or chemicals and the relevant safety data.

Western Trade Name: CL-31

W.I.N.: 499647

Chemical Name (if not trade named): Crosslinker, boron compound

Addition Revision Replacement Deletion to product line
Western Product Western System
Cementing Stimulation

DOT Proper Shipping Name & I.D. Number (SPM-04-02): Not regulated
DOT Hazardous Material Class: Not regulated
DOT Hazardous Material Label: Not regulated

Chemical Storage Class (SPM-04-01): II.1

EPA Hazardous Waste Classification: Ignitable waste
Reportable Quantity: N/A
Material Safety Data Sheet: Attached Date: March 21, 1995
On File at Research

cc: REFC (Angela Hardy)
Product Specification File (original)
Fort Worth Warehouse (James Box)

Attachments: MSDS
Label
Precautionary Statement

Note: If deletion, attach copy of page(s) to be deleted, write deleted across the page(s) attached.

Confidential Proprietary Information
The Western Company of North America

MATERIAL SAFETY DATA SHEET

MSDS NUMBER : 499647
 PRODUCT NAME: CL-31

MSDS ID CODE : N/D
 PART NUMBER(S) : N/D

Section I General Information

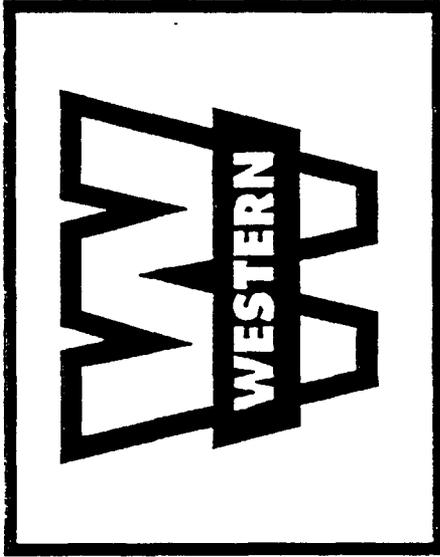
PRODUCT NAME: CL-31
 SYNONYMS: CROSSLINKER, AQUEOUS
 ADDRESS: 515 POST OAK BLVD., SUITE 1200
 CITY: HOUSTON STATE ...:TX ZIP ...:77027
 EMERGENCY PHONE ...: I-800-732-9876
 OTHER CALLS: (713) 629-2600
 VENDOR: THE WESTERN COMPANY OF NORTH AMERICA
 MSDS PREPARED BY ..
 DATE PREPARED: 09/08/93

Section II Hazardous Ingredients/Identity Information

INGREDIENT NAME CAS NUMBER	PERCENTAGE	EXPOSURE LIMITS
PARAFFINIC HYDROCARBONS 64742-46-7	66-76	OSHA PEL : NOT EST ACGIH TLV: NOT EST OTHER : N/D

Section III Physical/Chemical Characteristics

BOILING POINT 430-550 °F.	MELTING POINT N/A	FREEZING POINT <0 °F.
EVAPORATION RATE BASIS (N/D)=1 RATE: N/D	VAPOR DENSITY (AIR=1) 6.2	SPECIFIC GRAVITY (WATER=1) 0.91
PERCENT VOLATILE BY VOLUME N/D	THEORETICAL VOC CONTENT PERCENT BY WEIGHT N/D	WEIGHT PER GALLON N/D
pH INFORMATION pH VALUE: N/D CONCENTRATION: N/D	PHYSICAL STATE STATE: N/D	VAPOR PRESSURE VALUE: 0.4 MM Hg



WIN 499647

CL-31

DELAYED BORATE CROSSLINKER

Flash Point: >200°F (>95°C)

Net Content: 470 pounds (213 kg)
55 gallons (208 L)

Manufactured for:

THE WESTERN COMPANY OF NORTH AMERICA

515 Post Oak Blvd., Houston, Texas 77027

Emergency Telephone: 1-800-732-9876

Batch no.

D.O.T. SHIPPING NAME:

NOT REGULATED (CONTAINS PARAFFINIC HYDROCARBONS)

DOT LABEL: NOT REQUIRED

DIRECTIONS:

For Proper Use, Refer to Service Bulletin No.(s): 366.5 and 373.5 WG
FOR INDUSTRIAL USE ONLY

CAUTION!

EYE AND SKIN IRRITANT. INHALATION OF VAPORS MAY BE IRRITATING. AVOID CONTACT WITH STRONG OXIDIZERS. DO NOT GET IN EYES, ON SKIN OR CLOTHING. AVOID BREATHING VAPORS. USE WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY.

DO NOT ALLOW MOISTURE INTO THE PRODUCT MIX THOROUGHLY BEFORE USE

HANDLING: Employees MUST WEAR chemical goggles, rubber apron, and rubber or neoprene gloves

FIRE:

Use water spray, foam, dry chemical or carbon dioxide to extinguish fire. Full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus required for fire fighting personnel. May produce toxic gases in fire.

SPILL OR LEAK ACTION:

Use required protective equipment. Contain and absorb spill with an inert material. Scoop up and remove. Get approval prior to shipping absorbed material to a landfill.

CONTAINER DISPOSITION:

If container retains product residues, all label precautions must be observed. Store container with closures in place. Offer empty container for reconditioning or disposal. Ensure reconditioner or recycler is aware of the properties of the contents.

FIRST AID:

FOR EYES: Immediately flush with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

FOR SKIN:

Flush with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Consult a physician if chemical causes burns or irritation.

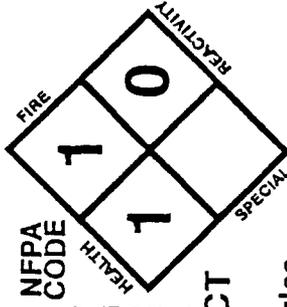
FOR INHALATION:

Remove to fresh air. IF NOT BREATHING, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek prompt medical attention.

FOR INGESTION:

DO NOT induce vomiting. Immediately give two glasses of water. Seek prompt medical attention.

Refer to MSDS for Safety Requirements.



499 655



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration
MATERIAL SAFETY DATA SHEET

DATE: August 17, 1990

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS I-22
CHEMICAL FAMILY Surfactant Blend	FORMULA Proprietary	W.I.N. 499655

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid (n.o.s.)	(RQ /)
NAME OF HAZARDOUS COMPONENT	Methanol	
HAZARD CLASS	Flammable liquid	
IDENTIFICATION NUMBER	UN 1993	
D.O.T. LABEL(S) REQUIRED	Flammable	
PRECAUTIONARY LABEL	Flammable	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Methanol (67561)	15-25	200 ppm
Heavy Aromatic Naptha (64742945)	3-6	100 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	ND	SPECIFIC GRAVITY (H ₂ O=1)	0.94
VAPOR PRESSURE (mm Hg.)	ND	PERCENT VOLATILE BY VOLUME (%)	25
VAPOR DENSITY (AIR=1)	ND	EVAPORATION RATE (_____ =1)	ND
SOLUBILITY IN WATER	Dispersible		
APPEARANCE AND ODOR	Dark liquid with methanol/alkyl amine odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 62°F (PMCC)	FLAMMABLE LIMITS	Lel 0.7	Uel 20.0
EXTINGUISHING MEDIA Foam, dry chemical, CO ₂ , water spray.			
SPECIAL FIRE FIGHTING PROCEDURES Water spray may be used to cool fire exposed metal containers to prevent re-ignition from hot surfaces. Do not breathe smoke or hot fumes.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None known			

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	
EFFECTS OF OVEREXPOSURE Eyes - irritation, burning, itching and pain. Skin contact - irritation, redness.	
Inhalation - may cause nausea, vomiting. Ingestion - nausea, vomiting, light headedness.	
EMERGENCY AND FIRST AID PROCEDURES Eyes - flush copiously with water immediately for 15-20 min. Get medical treatment.	
Skin contact - wash with soap and water. Remove clothing and launder before reuse.	
Inhalation - remove from exposure. Control delirium, avoid respiratory delirium.	
Ingestion - drink water to dilute. Induce vomiting. Get emergency medical treatment for ingestion of methanol.	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID Open flames
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizers, mineral acids.			
HAZARDOUS DECOMPOSITION PRODUCTS Oxides of carbon and nitrogen.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID N/A
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Stop the flow of liquid, eliminate sources of ignition. Dike or prevent spreading of liquid. Vacuum up. Absorb or scrape up contaminated soil and place into container for later disposal.	
WASTE DISPOSAL METHOD. Dispose waste by incineration under controlled conditions or put in chemical landfill.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) In closed areas, use NIOSH approved organic vapor respirator.		
VENTILATION	LOCAL EXHAUST Recommended	SPECIAL
	MECHANICAL (General) With explosion proof circuits	OTHER
PROTECTIVE GLOVES Neoprene	EYE PROTECTION Safety goggles	
OTHER PROTECTIVE EQUIPMENT Eye wash stations, ample water supply, showers, protective clothing.		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store in cool, dry area. Ground containers and lines during transfer to eliminate static electricity.	
OTHER PRECAUTIONS Do not ingest.	

100193



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 26 SEP 84

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary blend		TRADE NAME AND SYNONYMS SURFACTANT, LT-5
CHEMICAL FAMILY Surfactant	FORMULA	W.I.N. 100193

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	Isopropanol
HAZARD CLASS	Flammable liquid
IDENTIFICATION NUMBER	INI 993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	Attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Isopropanol	16-18	400 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	163	SPECIFIC GRAVITY (H ₂ O=1)	0.996
VAPOR PRESSURE (mm Hg.)	IPA & H ₂ O 2	PERCENT VOLATILE BY VOLUME (L) WT. (%)	46.50
VAPOR DENSITY (AIR=1)	IPA & H ₂ O 2	EVAPORATION RATE (=1)	
SOLUBILITY IN WATER	soluble		
APPEARANCE AND ODOR	light yellow to white clear liquid; mild alcoholic odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 79°F (PMCC)	FLAMMABLE LIMITS	LeI	Uel
		Not determined	
EXTINGUISHING MEDIA Water spray, dry chemical carb on dioxide, alcohol foam			
SPECIAL FIRE FIGHTING PROCEDURES Dilute rapidly with large quantities of water.			
UNUSUAL FIRE AND EXPLOSION HAZARDS No unusual hazards.			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

Not determined

EFFECTS OF OVEREXPOSURE

Liquid is irritating to eyes. May be harmful if swallowed or absorbed through skin.

EMERGENCY AND FIRST AID PROCEDURES

Flush eyes for 15 min. and get medical attention. Wash skin thoroughly with soap and water and get medical attention if irritation or redness develops. Launder clothes before reuse. If ingested, vomiting may be induced.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

Keep away from heat, sparks, and open flames.

STABLE

X

INCOMPATIBILITY (Materials to avoid)

Acidic conditions, quaternary ammonium compounds.

HAZARDOUS DECOMPOSITION PRODUCTS

None

HAZARDOUS POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

Keep away from heat, sparks, and open

WILL NOT OCCUR

X

flames.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Extinguish all sources of ignition. Wash down with water or soak up on sand and dispose of in an approved industrial waste landfill. Do not wash down with water where runoff will contaminate important water sources.

WASTE DISPOSAL METHOD

Incinerate in an incinerator equipped with an afterburner and scrubber or bury in an approved industrial landfill.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

None required in normal use.

VENTILATION

LOCAL EXHAUST

SPECIAL

If used at high temperatures

MECHANICAL (General)

OTHER

Satisfactory

PROTECTIVE GLOVES

Rubber

EYE PROTECTION

Face shield or goggles

OTHER PROTECTIVE EQUIPMENT

Rubber boots and apron, if possibility of contact during use exists.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Store away from heat, sparks, and open flames. Do not use at extremely low or high pH for best product quality.

OTHER PRECAUTIONS

Do not transfer to improperly marked containers. Keep container closed when not in use.



Western Petroleum Services

W.I.N. 100193

LT-5

SPECIAL WETTING AGENT

DE-EMULSIFIER

Flash Point: 79°F PHCC
Net Content: 457 lb(208 kg)
55 gal(208 L) @ 77°F

DIRECTIONS:

For Proper Use, Refer to Service Bulletin No.(s) 547.0MG

SPECIFIC USAGE:

Use at the rate of 1 to 5 gallons per 1000 gallons of hydrochloric acid, fresh water or brine.

NOTE: LT-5 is anionic.

When Handling This Product Employees MUST WEAR:

Chemical goggles, plastic apron and rubber gloves

FOR INDUSTRIAL USE ONLY

DANGER!

FLAMMABLE LIQUID! Do not use near heat, sparks or open flame.
MAY CAUSE IRRITATION OF THE SKIN AND EYES. Avoid contact with eyes
Avoid prolonged or repeated contact with skin. Avoid prolonged inhalation of vapors.

ATTENTION! After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. Do not cut, puncture or weld on or near this container.

Refer to MSDS and SPM-04-04 for Safety Requirements.

The Western Company of North America

Batch no.

P.O. BOX 186 • FORT WORTH, TEXAS 76101



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 14JUN85

SECTION I

Supplier's Name The Western Company of North America	EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101	
CHEMICAL NAME AND SYNONYMS Proprietary blend	TRADE NAME AND SYNONYMS SUSPENDING AGENT, LT-21
CHEMICAL FAMILY ethoxylated fatty compounds	FORMULA W.I.N.100138

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	methanol
HAZARD CLASS	Flammable liquid
IDENTIFICATION NUMBER	UN 1993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
methanol <i>W/54</i>	20	200ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	162°F	SPECIFIC GRAVITY (H ₂ O=1) @ 60°F	1.06
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	30
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	soluble		
APPEARANCE AND ODOR	Clear amber liquid; odor of varnish		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 54 F (PMCC)	FLAMMABLE LIMITS	Let	Uel
EXTINGUISHING MEDIA Dry chemical, carbon dioxide, alcohol foam			
SPECIAL FIRE FIGHTING PROCEDURES Addition of water will reduce the intensity of the flame.			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

TRADE NAME: W.I.N.100138,SUSPENDING AGENT, LT-21

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
200 ppm for methanol

EFFECTS OF OVEREXPOSURE
Swallowing the liquid causes inebriation, headache, nausea, and vomiting leading to severe illness, blindness or perhaps death.

EMERGENCY AND FIRST AID PROCEDURES

Skin: flush with plenty of water. Eyes: flush with water and get medical attention
Inhalation: remove to fresh air and give artificial respiration. If breathing has stopped, call a physician. If swallowed, induce vomiting at once. Then give 2 tablespoons of baking soda in a glass of water. Call a physician.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Sparks, heat and fires.
	STABLE	XXX	

INCOMPATIBILITY (Materials to avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	XXX	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Eliminate all sources of ignition. Flush spilled material with large volumes of water. Dike large spills and dump to salvage tank.

WASTE DISPOSAL METHOD
Incinerator.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) Self-contained breathing apparatus		
VENTILATION	LOCAL EXHAUST Preferred	SPECIAL
	MECHANICAL (General) Acceptable	OTHER
PROTECTIVE GLOVES Impervious gloves	EYE PROTECTION Chemical safety goggles or face shield	
OTHER PROTECTIVE EQUIPMENT Impervious apron and boots; eye bath and safety shower		

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
May be fatal or cause blindness if swallowed. Keep away from heat, sparks and fires. Do not leave container open.
OTHER PRECAUTIONS



DIRECTIONS:

For Proper Use, Refer to Service Bulletin No.(s) 85.0, 721.0

SPECIFIC USAGE: Use at a concentration of 1 to 10 gallons per 1000 gallons of acid.

When Handling This Product Employees MUST WEAR: Chemical safety goggles or face shield, impervious gloves, impervious boots and apron.

FOR INDUSTRIAL USE ONLY WARNING

MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED.

Keep away from heat, sparks and open flames.

FIRST AID: Swallowing the liquid causes inebriation, headache, nausea and vomiting, leading to severe illness, blindness or even death. Skin: flush with plenty of water. Eyes: flush with water and get medical attention. Inhalation: remove to fresh air and give artificial respiration. If breathing has stopped call a physician. If swallowed, induce vomiting at once. Then give 2 tablespoons of baking soda in a glass of water. Call a physician.

SPILL OR LEAK: Eliminate all sources of ignition. Flush spilled material with large volumes of water. Dike large spills and dump to salvage tank. Incinerate.

FIRE FIGHTING: Self-contained breathing apparatus and protective clothing. Dry chemical, carbon dioxide, alcohol foam.

Refer to MSDS and SPM-04-04 for Safety Requirements.

W.I.N. 100138

LT-21

SILT SUSPENDING AGENT

Flash Point: 54°F(12°C) PMCC

Net Content: 466 lb(212 kg)

54 gal(204 L) @ 77°F

Manufactured for:

The Western Company of North America

P.O. BOX 186 • FORT WORTH, TEXAS 76101

Emergency Telephone: (817) 731-5100
(817) 731-5433

batch no.

*****D.O.T. PROPER SHIPPING NAME: Flammable liquid, n.o.s., contains methanol (UN1993)*****

100144

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

✓

Date: 12/2/92

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. 1-800-732-9876
ADDRESS (Number, Street, City, State and ZIP Code) 515 Post Oak Blvd., Houston, Texas 77027	
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS LT-25
CHEMICAL FAMILY Surfactant	FORMULA N/A W.I.N. 100144

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME Combustible liquid, n.o.s.	(RQ N/A /)
NAME OF HAZARDOUS COMPONENT Isopropanol	
HAZARD CLASS Combustible liquid	
IDENTIFICATION NUMBER NA 1993 PGIII	
D.O.T. LABEL(S) REQUIRED None	
PRECAUTIONARY LABEL Attached	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Isopropanol [67-63-07]	5 - 15	400 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	182	SPECIFIC GRAVITY (H ₂ O=1)	1.01
VAPOR PRESSURE (mm Hg)	No data	PERCENT. VOLATILE BY VOLUME (%)	77 - 78
VAPOR DENSITY (AIR=1)	No data	EVAPORATION RATE (_____ =1)	N/A
SOLUBILITY IN WATER at 25°C	Soluble		

APPEARANCE AND ODOR Amber liquid, alcoholic odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

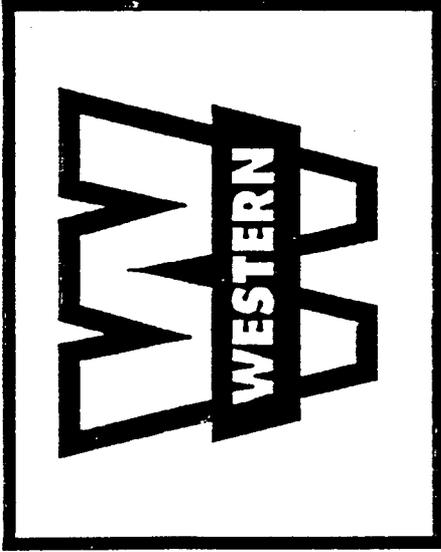
FLASH POINT (Method used) 98°F PMCC	FLAMMABLE LIMITS	N/A	LeI	N/A	Uel
EXTINGUISHING MEDIA Dry chemical or water spray or water fog or CO ₂ , or Foam or Sand/Earth.					
SPECIAL FIRE FIGHTING PROCEDURES Fire fighters must be equipped to prevent breathing of vapors or products of combustion. Wear an approved self-contained breathing apparatus and protective clothing.					
UNUSUAL FIRE AND EXPLOSION HAZARDS None					

Surfactant - Flammable

100144

TRADE NAME: W.I.N. 100144

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE Isopropyl alcohol, 400 ppm, 980 mg/m ³ /OSHA/ACGIH - STEL 500 ppm 1225 mg/m ³ /OSHA/ACGIH			
EFFECTS OF OVEREXPOSURE Irritation of eyes, nose, throat, headache, nausea and dizziness. The liquid can defat the skin, producing a dermatitis characterized by drying and fissuring.			
EMERGENCY AND FIRST AID PROCEDURES EYES: Immediately flush with large quantities of water for at least 15 minutes and call a physician. SKIN: Flush with large amounts of water for 15 minutes. INHALATION: Remove to fresh air and if victim is not breathing, give artificial respiration. Call a physician. IF SWALLOWED: Contact a physician immediately.			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizers such as hydrogen, peroxide bromine and chromic acid			
HAZARDOUS DECOMPOSITION PRODUCTS carbon monoxide, carbon dioxide, oxides of sulfur			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Absorb with an inert material such as sand, soil or vermiculite; sweep up and dispose of in accordance with federal, state and local regulations.			
WASTE DISPOSAL METHOD Dispose of in accordance with all applicable federal, state and local regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) NIOSH/MSHA certified respirator - with organic cartridge.			
VENTILATION	LOCAL EXHAUST		SPECIAL
	MECHANICAL (General)	X	OTHER
PROTECTIVE GLOVES Rubber or plastic, solvent resistant			
EYE PROTECTION Chemical safety goggles			
OTHER PROTECTIVE EQUIPMENT Neoprene protective type apron			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store between 30°F and 100°F. Keep container closed, do not store near a source of ignition.			
OTHER PRECAUTIONS Use NIOSH/MSHA certified respirator with organic vapor cartridge if vapor concentration exceeds permissible exposure limit.			



WIN 100144

LT-25

ACID
RETARDER

Flash Point: 98°F (37°C)
Net Content: 451 pounds (204.5 kg)
53.5 gallons (202.5 L)

D.O.T. SHIPPING NAME:
**Combustible Liquid, n.o.s.
(CONTAINS ISOPROPANOL)**

DOT LABEL: NOT REQUIRED
NA 1993

DIRECTIONS:

For Proper Use, Refer to Service Bulletin No.(s): 170.0WG, 537.0WG
FOR INDUSTRIAL USE ONLY

CAUTION!

COMBUSTIBLE. MAY CAUSE IRRITATION TO SKIN AND EYES. DO NOT USE, STORE SPILL OR POUR NEAR HEAT, SPARKS OR OPEN FLAME. AVOID PROLONGED OR REPEATED BREATHING OF VAPORS. USE WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY.

HANDLING: Employees MUST WEAR chemical goggles, rubber apron, and rubber gloves

FIRE:

Use water spray, foam, dry chemical or carbon dioxide to extinguish fire. Full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus required for fire fighting personnel. May produce toxic gases in fire.

SPILL OR LEAK ACTION:

Use required protective equipment. Contain and absorb spill with an inert material. Scoop up and remove. Get approval prior to shipping absorbed material to a landfill.

CONTAINER DISPOSITION:

If container retains product residues, all label precautions must be observed. Store container with closures in place. Offer empty container for reconditioning or disposal. Ensure reconditioner or recycler is aware of the properties of the contents.

FIRST AID:

FOR EYES: Immediately flush with plenty of water for at least 15 minutes and get medical attention.

FOR SKIN:

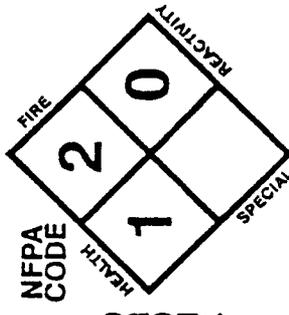
Flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician if chemical causes burns or irritation.

FOR INHALATION:

Remove to fresh air. IF NOT BREATHING, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek prompt medical attention.

FOR INGESTION:

Seek prompt medical attention.
Refer to MSDS for Safety Requirements.



Manufactured for:

THE WESTERN COMPANY OF NORTH AMERICA

515 Post Oak Blvd., Houston, Texas 77027

Emergency Telephone: 1-800-732-9876

Batch no.

100144

499684

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: February 28, 1991

SECTION I

SUPPLIER'S NAME The Western Company		EMERGENCY TELEPHONE NO. (817) 731-5100	
ADDRESS (Number, Street, City, State and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101			
CHEMICAL NAME AND SYNONYMS Blend		TRADE NAME AND SYNONYMS LT-32	
CHEMICAL FAMILY Nonionic Surfactant		FORMULA Proprietary Blend	W.I.N. 499684

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid	(RQ /)
NAME OF HAZARDOUS COMPONENT	Isopropanol	
HAZARD CLASS	Flammable liquid	
IDENTIFICATION NUMBER	UN 1993	
D.O.T. LABEL(S) REQUIRED	Flammable liquid	
PRECAUTIONARY LABEL	Flammable liquid	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Isopropyl Alcohol	67-63-0	
Oxyalkylated Alcohol		

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	157	SPECIFIC GRAVITY (H ₂ O=1)	0.9
VAPOR PRESSURE (mm Hg)		PERCENT. VOLATILE BY VOLUME (%)	N/A
DENSITY (lbs/gal) 60°F	7.5	EVAPORATION RATE (_____ -1)	N/A
SOLUBILITY IN WATER	emulsifiable, slightly soluble		

APPEARANCE AND ODOR Clear, colorless liquid; strong

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	155°F (68°C) Seta CC	FLAMMABLE LIMITS Not available	Let	Uel
EXTINGUISHING MEDIA	Use water spray, alcohol foam, dry chemical or carbon dioxide.			
SPECIAL FIRE FIGHTING PROCEDURES	Use water spray to cool fire exposed surfaces and water spray to disperse the vapors. Full protective clothing and full piece positive pressure self-contained breathing apparatus for fire fighters.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	Flammable liquid can release vapors that form flammable mixtures at temperatures at or above the flashpoint. Toxic gases will form upon combustion.			

M
L
G
G
G
G
G
G

M

TRADE NAME: W.I.N. 499684, LT-32

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE			
EFFECTS OF OVEREXPOSURE Eye Contact: Causes noticeable pain, moderate irritation, and transient cornea injury. Skin Contact: Causes slight irritation; readily absorbs through skin in toxic amounts. Inhalation: Causes respiratory tract irritation, liver & kidney damage, and central nervous system effects. Ingestion: May cause headache, dizziness, nausea, vomiting, liver and kidney injury.			
EMERGENCY AND FIRST AID PROCEDURES Eyes: Immediately flush with large amounts of water for at least 15 minutes. Get prompt medical attention. Skin: Flush with large amounts of water. Use soap if available. Remove grossly contaminated clothing and launder before reuse. Inhalation: Immediately remove affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek medical attention. Ingestion: If conscious, give 1 or 2 glasses of water to drink and induce vomiting by sticking finger down throat. Take immediately to hospital. If vomiting cannot be induced, take immediately to hospital.			
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID Heat or flame
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Avoid chlorine, flourine, and other strong base oxidizing agents.			
HAZARDOUS DECOMPOSITION PRODUCTS Acrid smoke and irritating fumes when heated to decomposition. Products of combustion include carbon monoxide and carbon dioxide.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Eliminate sources of ignition. Prevent additional discharge of material. Prevent liquid from entering sewers, water courses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof pump or hand pump) or with a suitable absorbent.			
WASTE DISPOSAL METHOD Consult an expert on disposal of recovered materials and ensure conformity to local disposal regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) NIOSH/OSHA approved respirators may be necessary to prevent overexposure by inhalation.			
VENTILATION	LOCAL EXHAUST		SPECIAL
	MECHANICAL (General) Recommended		OTHER
PROTECTIVE GLOVES Chemical resistant gloves			
EYE PROTECTION Chemical goggles			
OTHER PROTECTIVE EQUIPMENT Eyewash fountains and safety showers should be easily accessible.			
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING			
OTHER PRECAUTIONS Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, or expose containers to flame or other sources of ignition.			

499684

ATTACHMENT TO AND CONTINUATION OF



MATERIAL SAFETY DATA SHEET

Date: February 28, 1991

SECTION I

SUPPLIER'S NAME The Western Company	EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101	
CHEMICAL NAME AND SYNONYMS Blend	TRADE NAME AND SYNONYMS LT-32
CHEMICAL FAMILY Nonionic Surfactant	FORMULA Proprietary Blend W.I.N. 499684

SECTION X - LABEL COPY

FOR INDUSTRIAL USE ONLY

FIRST AID:

- FOR EYES: In case of contact, immediately flush eyes with large amounts of water for at least 15 minutes. Get prompt medical attention.
- FOR SKIN: In case of contact, flush with large amounts of water; use soap if available. Remove grossly contaminated clothing and launder before reuse.
- FOR INGESTION: If swallowed and conscious, give 1 or 2 glasses of water to drink and induce vomiting by sticking finger down throat. Seek medical attention. Do not attempt to induce vomiting or give anything by mouth to an unconscious person.
- FOR INHALATION: If breathed in, immediately remove affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek medical attention.
- FOR HANDLING: Employees must wear long sleeves, chemical resistant gloves, and chemical goggles.

ATTENTION!! After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. Do not cut, puncture, or weld on or near this container. Refer to MSDS and SPM-04-04 for other safety requirements.

MATERIAL SAFETY DATA SHEET

CORPORATE RESEARCH & DEVELOPMENT

SCHENECTADY, N. Y.



No. 354

METHYL ALCOHOL

Revision A

Date November 1977

SECTION I. MATERIAL IDENTIFICATION			
MATERIAL NAME: METHYL ALCOHOL OTHER DESIGNATION: Methanol, Wood alcohol, GE Material D5B51, ASTM D1152, CH ₃ OH, CAS# 000 067 561 MANUFACTURER: Available from many suppliers.			
SECTION II. INGREDIENTS AND HAZARDS		*	HAZARD DATA
Methyl Alcohol		ca 100	TLV 200 ppm*(Skin) or 260 mg/m ³
*Current OSHA TLV; ACGIH (1977) TLV adds (skin) notation which indicates a potential contribution to overall exposure via absorption through the skin. NIOSH has recommended a 10-hr TWA of 200 ppm with a ceiling of 800 ppm (15 minute sample).			Human, oral LDLo 340.mg/kg
SECTION III. PHYSICAL DATA			
Boiling point at 1 atm, deg C --- 64.5 Vapor density (Air=1) --- 1.1 Vapor pressure @ 21.2°C, mm Hg - 100 Water solubility --- Totally miscible		Specific gravity (20°/4°C) --- 0.791 Volatiles, % --- ca 100 Evaporation rate (CCl ₄ =1) --- 1 Molecular weight --- 32.04	
Appearance & Odor: A clear, colorless liquid with a characteristic alcohol odor which is detectable at 50 to 100 ppm and above in air.			
SECTION IV. FIRE AND EXPLOSION DATA			LOWER
Flash Point and Method	Autoignition Temp.	Flammability Limits in Air	UPPER
52°F (11 C) (closed cup)	867°F (465°C)	% by Volume	6 36.5
Extinguishing media: CO ₂ , dry chemical, alcohol foam, and water mist or fog. Methyl alcohol fires are Class B fires, use a blanketing effect to smother fire. It is a moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks or flames and can react vigorously with oxidizing agents. Firefighters should use self-contained breathing apparatus with full facepiece and full protective clothing where this material is involved in a fire in an enclosed place.			
SECTION V. REACTIVITY DATA			
Methyl alcohol is a flammable material, but it is stable under normal storage and use conditions. It does not undergo hazardous polymerization. Avoid contact with strong oxidizing agents such as nitrates, perchlorates or sulfuric acid. Oxidation products in air include oxides of carbon and nitrogen.			

6.58

SECTION VI. HEALTH HAZARD INFORMATION	TLV 200 ppm (Skin) or 260 mg/m ³
---------------------------------------	---

Methanol is a poisonous, narcotic chemical that may exert its effects through inhalation, skin absorption or ingestion. Body elimination of methanol is slow, and the toxic effects can be compounded by repeated excessive exposures over several days. Toxic effects are exerted upon the nervous system, especially the optic nerve. Ingestion can produce blindness. Symptoms of overexposure include dizziness, blurring of vision, nausea, cardiac depression, muscular incoordination and narcosis. Solvent action can dry the skin and cause dermatitis.

FIRST AID:

Inhalation: Remove victim to fresh air and prevent further exposure for 7 days. Obtain medical assistance if victim is not fully normal within 10 minutes.

Skin Contact: Wash affected area with soap and water; apply skin lotions.

Eye Contact: Irrigate with running water for 15 minutes. Get medical help.

Ingestion: Drink 3 glasses milk, water or 4% sodium bicarbonate. Obtain immediate medical aid for gastric lavage. (NIOSH recommends inducing vomiting if victim is conscious).

SECTION VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

Notify safety personnel. Remove all sources of ignition; provide adequate ventilation. Absorb on vermiculite, paper or other absorbent. Burn in an approved incinerator or open pit away from buildings and people. Dispose of large quantities of waste via a licensed waste solvent disposal company, or reclaim via filtration and distillation procedures. It can be incinerated. Spills in sensitive areas may be diluted and flushed to ground with a water spray. Do not flush to sewer. Follow Federal, State and local regulations.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Provide adequate ventilation to meet TLV requirements. Exhaust ventilation with 100 lfm minimum should be used where vapor exposure is likely. Prevent skin contact by wearing rubber gloves. Protective aprons, boots and face shields should be used where splashing may occur. Use safety glasses in other areas of use. Remove methanol contaminated clothing promptly. Eye wash stations and safety showers should be available in areas of use. Exhaust fans should be explosion proof. No smoking in areas of use. Respirator protection for emergency: Use air-supplied or self-contained respirators above TLV. A full facepiece is required above 2000 ppm.

SECTION IX. SPECIAL PRECAUTIONS AND COMMENTS

Prevent skin contact! Do not breathe vapors! This material is poisonous when introduced into the body metabolism. Do not ingest! Store in a well-ventilated, fire proof area. Ground and electrically interconnect containers for transfer. Use spark-proof tools. Keep away from heat and ignition sources. No smoking in areas of storage or use. NIOSH recommends preplacement medical exams for industrially exposed workers, periodic medical surveillance, and prompt eye examinations for eye contact with methanol or for any overexposure.

APPROVALS: MIS, CRD *J. M. Nielsen*

Industrial Hygiene and Safety *DeW*

MEDICAL REVIEW:

Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, General Electric Company extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

100472



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: September, 1984

SECTION I

Supplier's Name		EMERGENCY TELEPHONE NO.
The Western Company of North America		(817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS	
Proprietary blend	De-emulsifier, Nine-40	
CHEMICAL FAMILY	FORMULA	W.I.N. 100472
Surfactant		

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable Liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	Methanol
HAZARD CLASS	Flammable Liquid
IDENTIFICATION NUMBER	UN1993
D.O.T. LABEL(S) REQUIRED	Flammable Liquid
PRECAUTIONARY LABEL	Attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Xylene	2	100ppm
Methanol		200ppm
Isopropanol		400ppm
Heavy Aromatic Naphtha		100ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	162	SPECIFIC GRAVITY (H ₂ O=1)	0.881
VAPOR PRESSURE (mm Hg.)	200	PERCENT. VOLATILE BY VOLUME (%)	62
VAPOR DENSITY (AIR=1) @ 100°F	>5	EVAPORATION RATE (n-Butyl Acetate=1)	2.03
SOLUBILITY IN WATER	Dispersible		
APPEARANCE AND ODOOR	light yellow liquid, hydrocarbon odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	52°F Seta CC-ASTM	FLAMMABLE LIMITS	Lel 0.3	Uel 36.0
EXTINGUISHING MEDIA	Dry chemical, foam, water spray or water fog			
SPECIAL FIRE FIGHTING PROCEDURES	Use water spray to cool fire exposed surfaces and to protect personnel.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	Respiratory protection required for fire-fighting personnel.			

TRADE NAME: W.I.N. 100472, De-emulsifier, Nine-40

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

Isopropanol, Methanol, Xylene, heavy aromatic naphtha (400, 200, 100, 100 ppm)

EFFECTS OF OVEREXPOSURE

Acute: Liquid is irritating to skin and eyes

Chronic: Prolonged or repeated skin contact may cause dermatitis

EMERGENCY AND FIRST AID PROCEDURES

Remove to fresh air. If not breathing, apply artificial respiration and call

a physician. Immediately flush eyes with plenty of water for at least

15 minutes. Call a physician. If skin contact occurs, wash with soap and water.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

None

STABLE

X

INCOMPATIBILITY (Materials to avoid)

strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS

burning will emit smoke, fumes, CO and CO₂

HAZARDOUS POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Keep public away. Eliminate source of ignition. Shut off source, if possible to do so safely. Prevent liquid from entering sewers, watercourses, or low areas. Advise authorities if material has entered a watercourse, or sewer or has contaminated soil or vegetation.

WASTE DISPOSAL METHOD

Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. Consult an expert on disposal of recovered material.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) Use NIOSH/MSHA approved respiratory protection such as air-supplied mask if used in confined spaces or other poorly ventilated areas.

VENTILATION

LOCAL EXHAUST Provide >60 fpm hood or face velocity for confined spaces.

SPECIAL Explosion-proof ventilation equipment.

MECHANICAL (General) To provide ventilation equal to outdoors.

OTHER Not Applicable

PROTECTIVE GLOVES

Chemical resistant gloves

EYE PROTECTION

Chemical splash goggles

OTHER PROTECTIVE EQUIPMENT

Usually not needed.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep container closed when not in use. Containers used for this material may be hazardous when emptied. Observe all hazard precautions outlined in this sheet. Emptied containers retain product residues (vapor, liquid, etc.).

OTHER PRECAUTIONS

Keep away from heat, sparks and open flames.

WESTERN PETROLEUM SERVICES

M. I. N. 100472

NINE-40

De-emulsifier

FLASH POINT: 52°F(11°C) SETAFLASH

DANGER!

EXTREMELY FLAMMABLE
MAY CAUSE FLASH FIRE
MAY CAUSE EYE BURNS
CAUSES SKIN IRRITATION ON PROLONGED CONTACT
MAY BE A SKIN SENSITIZER

MANUFACTURED FOR:

THE WESTERN COMPANY OF NORTH AMERICA

P. O. BOX 186

FORT WORTH, TEXAS 76101

BATCH NO

MADE IN U.S.A.

PRECAUTIONS:

KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME. DO NOT GET IN EYES. WEAR CHEMICAL SAFETY GOGGLES. AVOID CONTACT WITH SKIN OR CLOTHING. AVOID BREATHING VAPORS. USE WITH VENTILATION EQUAL TO UNOCCUPIED OUTDOORS IN MODERATE BREEZE. KEEP CONTAINER CLOSED. WASH THOROUGHLY AFTER HANDLING.

FIRST AID:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN. WASH SKIN WITH SOAP AND WATER.

*** D. O. T. PROPER SHIPPING NAME***

FLAMMABLE N. O. S.

FIRE FIGHTING:

USE WATER-SUPPLY TO COOL FIRE EXPOSED SURFACES AND PROTECT PERSONNEL. EXTINGUISH WITH DRY CHEMICAL OR ALCOHOL-TYPE FOAM. WATER-SUPPLY MAY BE INEFFECTIVE AS AN EXTINGUISHING AGENT.

USE INSTRUCTIONS:

FOR PROPER USE, REFER TO SERVICE BULLETIN NUMBER 552.0 110

SPECIFIC USAGE

0.5-10.0 GAL/1000 GAL HCL, HCL/7IF BLENDS, AND HCL/ACETIC ACID BLENDS.

SPILL CONTROL:

KEEP PUBLIC AWAY. ELIMINATE SOURCES OF IGNITION. WARN OCCUPANTS OF DORMING AREAS OF FIRE AND EXPLOSION HAZARD. SHUT OFF SOURCE IF POSSIBLE TO DO SO SAFELY. PREVENT LIQUID FROM ENTERING SEWER, INTERCOMFES, OR LOW AREAS. ADVISE AUTHORITIES IF MATERIAL HAS ENTERED A WATERCOURSE OR SEWER OR HAS CONTAMINATED SOIL OR VEGETATION. CONTAIN SPILLED LIQUID WITH SAND OR EARTH, AND DILUTE WITH WATER. RECOVER BY PUMPING OR WITH SUITABLE ABSORBENT. CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND ENSURE COMPLIANCE WITH LOCAL DISPOSAL REGULATIONS.

WARNING: EMPTY CONTAINER HAZARDOUS

OBSERVE ALL PRECAUTIONARY MEASURES ON THIS LABEL. CONTAINER MAY BE HAZARDOUS WHEN EMPTY. STORE EMPTY CONTAINERS AWAY FROM HEAT AND FLAME WITH DRAIN PLUGS CLOSED. DO NOT CUT OR WELD. ENSURE COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS IN DISPOSING OF THIS CONTAINER. RESIDUAL CONTENTS, OR RINSING, TRIPLE RINSE CONTAINER AND OFFER FOR RECYCLING, RECONDITIONING, OR DISPOSAL IN AN APPROVED MANNER. ENSURE RECYCLING, RECYCLERS, OR DISPOSAL ARE AWARE OF HAZARDS ASSOCIATED WITH CONTENTS.



NET CONTENTS: 55 U. S. GALLONS 208.2 LITERS

499688

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration



MATERIAL SAFETY DATA SHEET

Date: March 6, 1991

JAN 25 1992

R.E.F.C.

SECTION I

SUPPLIER'S NAME The Western Company		EMERGENCY TELEPHONE NO. (817) 731-5100	
ADDRESS (Number, Street, City, State and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101			
CHEMICAL NAME AND SYNONYMS Trisodium Nitroacetate, Water Solution		TRADE NAME AND SYNONYMS Liquid NTA	
CHEMICAL FAMILY Sodium Salt of Organic Acid		FORMULA NTA Na,	W.I.N. 499688

SECTION IA - HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Trisodium Nitroacetate	(RQ /)
NAME OF HAZARDOUS COMPONENT	None	
HAZARD CLASS	Corrosive Liquid	
IDENTIFICATION NUMBER	CAS #5064-31-3	
D.O.T. LABEL(S) REQUIRED	None	
PRECAUTIONARY LABEL	Corrosive Liquid	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
None		

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	N/A	SPECIFIC GRAVITY (H ₂ O=1)	1.3
VAPOR PRESSURE (mm Hg)	Water	PERCENT. VOLATILE BY VOLUME (%) (WATER)	60%
VAPOR DENSITY (AIR=1)	Water	EVAPORATION RATE (_____ -1) (same as water)	
SOLUBILITY IN WATER	Miscible		
APPEARANCE AND ODOR	Pale yellow liquid with slight ammonia odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	N/A	Let	Let
EXTINGUISHING MEDIA	N/A				
SPECIAL FIRE FIGHTING PROCEDURES	If product is present in fire and threat of decomposition exists, wear self-contained breathing apparatus with full face piece.				
UNUSUAL FIRE AND EXPLOSION HAZARDS	Readily generates hydrogen gas in contact with aluminum. May slowly generate hydrogen gas in contact with zinc.				

TRADE NAME: W.I.N. 499688

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE	None		
EFFECTS OF OVEREXPOSURE	Eyes: Tearing, stinging, redness. Skin: Stinging, redness, some swelling possible. Coughing, soreness in respiratory tract, chest tightness, difficulty breathing.		
EMERGENCY AND FIRST AID PROCEDURES	See page (4) of (4).		
SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID N/A
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)	Aluminum, zinc, corrosive to metals.		
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID N/A
	WILL NOT OCCUR	X	
SECTION VII - SPILL OR LEAK PROCEDURES			
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Evacuate area of nonessential personnel. Ventilate area. Use protective equipment and respiratory protection. Contain liquid spills using a barrier of inert material such as sand or by diking the area.			
Absorb spilled liquids using an inert material. Scoop or shovel absorbed material or spilled solids into containers. Avoid creating a dust during transfer of solids. Prevent spilled product or contaminated wash water from entering drinking water supplies or streams.			
WASTE DISPOSAL METHOD This product is not a federal hazardous waste according to U.S. EPA Regulation 40 CFR 261. Dispose of waste product in accordance with local and state regulations.			
SECTION VIII - SPECIAL PROTECTION INFORMATION			
RESPIRATORY PROTECTION (Specify type) If a mist is present, use an organic vapor respirator with a prefilter for mist.			
VENTILATION	Typical	LOCAL EXHAUST	SPECIAL None
		MECHANICAL (General) Typical	OTHER None
PROTECTIVE GLOVES	Rubber gloves		
EYE PROTECTION	Goggles and faceshield		
OTHER PROTECTIVE EQUIPMENT	Slicker suit and rubber boots		
SECTION IX - SPECIAL PRECAUTIONS			
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store in cool, dry, and well ventilated area. Do not enter storage area unless storage area is well ventilated. Use only stainless steel, polyethylene, or plastic lined containers for handling and storage.			
OTHER PRECAUTIONS Wear protective clothing, gloves, goggles, and faceshield when mixing with water and acid as considerable heat is generated. Add NTA solution to other fluids slowly.			

ATTACHMENT TO AND CONTINUATION OF

MATERIAL SAFETY DATA SHEET



Date: March 6, 1991

SECTION I

MANUFACTURER'S NAME The Western Company

EMERGENCY TELEPHONE NO. (817) 731-5100

ADDRESS (Number, Street, City, State and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101

CHEMICAL NAME AND SYNONYMS Trisodium Nitroacetate.
Water Solution

TRADE NAME AND SYNONYMS Liquid NTA

CHEMICAL FAMILY Sodium Salt of Organic Acid

FORMULA NTA Na₃

W.I.N. 499688

SECTION IXA - SPECIAL PRECAUTIONS

WORK/HYGIENIC PRACTICES:

Wash thoroughly after handling. Wash contaminated clothes before reuse. Launder work clothes separately from family clothes. Check protective clothing, particularly impervious gloves, for leaks before use.

HANDLING AND STORAGE PRECAUTIONS:

Store in cool, dry, and well ventilated area. Keep containers closed. Do not enter storage area unless area is adequately ventilated. Use only stainless steel, polyethylene, or plastic lined containers for handling and storage.



**ATTACHMENT TO AND CONTINUATION OF
MATERIAL SAFETY DATA SHEET**

Date: March 6, 1991

SECTION I

SUPPLIER'S NAME The Western Company		EMERGENCY TELEPHONE NO. (817) 731-5100	
ADDRESS (Number, Street, City, State and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101			
CHEMICAL NAME AND SYNONYMS	Trisodium Nitriacetate, Water Solution	TRADE NAME AND SYNONYMS	Liquid NTA
CHEMICAL FAMILY	Sodium Salt of Organic Acid	FORMULA	NTA Na ₃ W.I.N. 499688

SECTION X - LABEL COPY

PRODUCT CAS NUMBER: 3064-31-3
 GENERAL PRODUCT USE: Chelating Agent

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>PERCENT PRESENT (W/W)</u>
Water		- 60
Trisodium Nitriacetate	5064-31-3	40
Sodium Hydroxide	1310-73-2	- 1

APPEARANCE AND ODOR:	Pale yellow liquid with slight ammonia odor
BOILING POINT:	About same as water
MELTING POINT:	N/A
VAPOR PRESSURE:	About same as water
VAPOR DENSITY:	About same as water
WATER SOLUBILITY:	Miscible
OCTANOL/WATER PARTITION COEFFICIENT:	N.D.
SPECIFIC GRAVITY:	1.3
% VOLATILE BY WEIGHT:	About 60% as water
EVAPORATION RATE:	About same as water
PH OF 1% SOLUTION:	10.5 - 11.2

FIRST AID:

FOR EYES: In case of contact, flush thoroughly with water for at least 15 minutes while holding eyelids open. Contact a physician immediately.

FOR SKIN: In case of contact, immediately remove contaminated clothing and flush area thoroughly with water. Contact a physician if irritation develops.

FOR INGESTION: If swallowed, if patient is conscious give several glasses of water and contact a physician. Do not induce vomiting. Do not give an unconscious person anything by mouth.

FOR INHALATION: If breathed in, remove from contaminated atmosphere. If breathing has stopped, give artificial respiration and oxygen if needed. Contact a physician.

FOR HANDLING: Employees must wear rubber gloves, goggles, and faceshield as well as rubber boots and slicker suit while mixing solutions.

ATTENTION!! After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. Do not cut, puncture, or weld on or near this container. Refer to MSDS and SPM-04-04 for other safety requirements.

10012-9



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

RECEIVED
MAY 13 1988
R.E.F.C.

MATERIAL SAFETY DATA SHEET

DATE: 10MAR88

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS blend		TRADE NAME AND SYNONYMS SCALE INHIBITOR, P-9
CHEMICAL FAMILY phosphate ester	FORMULA W.I.N. 100129	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s. (RQ33000/15000)
NAME OF HAZARDOUS COMPONENT	methanol
HAZARD CLASS	Flammable material
IDENTIFICATION NUMBER	UN1993
D.O.T. LABEL(S) REQUIRED	Flammable liquid
PRECAUTIONARY LABEL	See Page 4

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
ethylene glycol 107-21-1	75	
methanol 67-56-1 ✓	75	200 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1) @ 60°F	1.09
VAPOR PRESSURE (mm Hg.) @ 100°F	101	PERCENT VOLATILE BY VOLUME (%) @ 75°F	11
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	dispersible	pH neat	4.4
APPEARANCE AND ODOR	clear colorless liquid, sweet odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	98°F(TCC)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA	Dry chemical, alcohol foam, CO ₂ , or other suitable for class B fires.			
SPECIAL FIRE FIGHTING PROCEDURES	Use water to cool containers exposed to fire.			
UNUSUAL FIRE AND EXPLOSION HAZARDS	May evolve nitrogen oxides if burning			

RECEIVED

TRADE NAME: W.I.N. 100129, SCALE INHIBITOR, P-9

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
50 ppm for ethylene glycol, 200 ppm for methanol, see section IXA

EFFECTS OF OVEREXPOSURE May cause irritation with prolonged skin or eye contact. May cause blindness if ingested. Can cause depression of central nervous system, nausea, dizziness, vomiting if ingested.

EMERGENCY AND FIRST AID PROCEDURES Prolonged inhalation of vapor may cause nausea, vomiting, dizziness or unconsciousness see Section X, Page 4

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATIBILITY (Materials to avoid) strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS oxides of carbon and nitrogen if burning

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Dike to prevent large spills from further movement and reclaim into salvage drums or tank truck for disposal. Absorb residue and small spills on clay, soil or commercial absorbant.

WASTE DISPOSAL METHOD
If this product becomes a waste it is hazardous waste and must be solidified before disposal in a land fill. It can be incenerated in accordance with local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
not normally required due to low toxicity and volatility

VENTILATION	LOCAL EXHAUST	recommend	SPECIAL
	MECHANICAL (General)		OTHER

PROTECTIVE GLOVES impermeable EYE PROTECTION chemical goggles

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

OTHER PRECAUTIONS

100129

RECEIVED

MAY 13 1988

R.E.F.C.



Attachment to and continuation of

MATERIAL SAFETY DATA SHEET

DATE: 10MAR88

SECTION I

Supplier's Name		EMERGENCY TELEPHONE NO.
The Western Company of North America		(817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS	blend	TRADE NAME AND SYNONYMS SCALE INHIBITOR, P-9
CHEMICAL FAMILY	phosphate ester	FORMULA W.I.N. 100129

SECTION IXA - - SPECIAL PRECAUTIONS

Toxicology Information:

ACUTE TOXICITY STUDIES: Acute toxicity studies have been conducted on this product along with acute toxicity studies on the hazardous ingredients in Section 2. The results are shown below.

ACUTE ORAL TOXICITY (ALBINO RATS):
Ethylene glycol LD_{50} = 6,000 - 8,000 mg/kg

ACUTE DERMAL TOXICITY (ALBINO RABBITS):
Ethylene glycol (estimated) LD_{50} = 1,000 - 3,000 mg/kg

ACUTE INHALATION TOXICITY (ALBINO RATS):
Ethylene glycol = Saturated vapor atmosphere no deaths (8-hour exposure)

PRIMARY SKIN IRRITATION TEST (ALBINO RABBITS):
SKIN IRRITATION INDEX DRAIZE RATING:
0.5/8.0 Ethylene glycol

PRIMARY EYE IRRITATION TEST (ALBINO RABBITS):
EYE IRRITATION INDEX DRAIZE RATING:
0-15/110.0 Ethylene glycol

CHRONIC TOXICITY RESULTS: A 2-year feeding study in rats with 1 - 2% ethylene glycol, produced liver and kidney injury.

RECEIVED



Attachment to and continuation of

MATERIAL SAFETY DATA SHEET

DATE: 10MAR88

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS blend	TRADE NAME AND SYNONYMS SCALE INHIBITOR, P-9	
CHEMICAL FAMILY phosphate ester	FORMULA	W.I.N. 100129

SECTION X - LABEL COPY

FOR INDUSTRIAL USE ONLY **WARNING!**

Flammable. Contains methanol. May cause blindness if swallowed. May cause irritation to skin and eyes. Do not use, store, spill or pour near heat, sparks or open flames. Keep container closed when not in use. Use with adequate ventilation. Do not take internally. Avoid prolonged or repeated breathing of vapor. Avoid contact with skin, eyes and clothing.

FIRST AID:

- FOR EYES: In case of contact, flush with water for 15 minutes. Call a physician.
- FOR SKIN: In case of contact, wash thoroughly with soap & water. Call a physician.
- FOR INGESTION: If swallowed, induce vomiting. Give water. Call a physician.

HANDLING: Employees must wear impermeable gloves and chemical goggles.

ATTENTION! After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. Do not cut, puncture or weld on or near this container. Refer to MSDS and SPM-04-04 for other safety requirements.

083 (9/82) R-6 (03/84)

INTER-OFFICE CORRESPONDENCE

To Bob Slaughter

At FW - Accident Prevention

From Robert W. Anderson RWA

At FW - Research & Development Center

Date 1JUL84

RE: Safety Information Update

This is to inform you of revisions, additions, deletions or replacement of products or chemicals and the relevant safety data.

Western Trade Name: Paratrol L

Chemical Name (if not trade named): Resin solution W.I.N.: 100463

Addition Revision Replacement Deletion to product line

Western Product Western System

Cementing Stimulation Used for Warehouse Blending Only

DOT Proper Shipping Name & I.D. Number (SPM-04-02): Combustible liquid, n.o.s. NA1993

DOT Hazardous Material Class: Combustible material

Label: Combustible

Chemical Storage Class (SPM-04-01): II.1

Chemical First Aid Guide Class (SPM-04-04):

Eyes Lungs Skin Mouth

EPA Hazardous Waste Classification: Ignitable waste, D001

Material Safety Data Sheet: Attached Not Available

On File at Research

Replace all information on WZ-100463 with the attached.

cc: Product Specification File (original)
Legal Services

Attachments: MSDS
Label
Precautionary Statement



Western Petroleum Services

W.I.N. 100463

PARATROLL

Paraffin Inhibitor

batch #012345

Flash Point: 114° F (46° C) SFCC

Net Contents: 414 lb (187.8 kg)

55 gal (208.2 liter) @ 60° F

Manufactured for

The Western Company of North America

P.O. BOX 186 • FORT WORTH, TEXAS 76101

batch no.

DIRECTIONS:

For Proper Use, Refer to Service Bulletin No.(s)

SPECIFIC USAGE: Use at the rate of 5-10 gal per 1000 gallon of water frac.

**FOR INDUSTRIAL USE ONLY
CAUTION!**

AVOID contact with eyes, skin and clothing. WASH thoroughly after handling. KEEP container closed.

AVOID breathing vapor. Use with adequate ventilation at elevated temperatures, this product may burn.

Fire Fighting: Use foam, dry chemical or CO₂.

FIRST AID:

For eyes:

For skin:

For ingestion:

Handling:

ATTENTION:

In case of contact, wash eyes with plenty of water for at least 15 minutes. Call physician. In case of contact, flush skin with water. Wash clothing before reuse.

If swallowed, do not induce vomiting. Get immediate medical attention. Administer activated carbon and perform gastric lavage, if indicated.

Employees must wear synthetic gloves and chemical goggles.

After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. Do not cut, puncture or weld on or near this container.

Refer to MSDS and SPM-04-04 for Safety Requirements.



Attachment to MSDS

TRADE NAME: W.I.N. 100463, Paraffin Control, Paratrol L

Effects of overexposure

Inhalation: Vapor is a respiratory and mucous membrane irritant and may cause severe systemic injury. High concentrations cause nausea, headaches, dizziness, vertigo, narcosis and possible CNS depression. In extreme cases unconsciousness and pulmonary edema may result. Prolonged or repeated exposure of high vapor concentrations may cause kidney and liver damage.

Skin and eye contact: A primary skin irritant. On repeated or prolonged skin contact, may cause dermatitis owing to dehydrating and defatting properties. May be readily absorbed through the skin. Contact with eyes causes severe irritation and may lead to persistent corneal opacity.

Ingestion: May cause severe gastrointestinal distress. Aspiration into lungs may cause pulmonary edema and chemical pneumonitis.

Emergency and First Aid Procedures

For Skin: Wash skin with soap and water. If rash or irritation develops, seek first aid.

For Eyes: Flush eyes with plenty of water for 15 minutes. Consult a physician.

For Inhalation: Remove to fresh air. Administer oxygen if necessary. Get medical attention if symptoms persist or exposure was severe.

For Ingestion: Do not induce vomiting. Get medical attention immediately. Administer activated carbon and perform gastric lavage if indicated.



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: July 1, 1984

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS Proprietary blend	TRADE NAME AND SYNONYMS Paraffin Control, Paratrol L	
CHEMICAL FAMILY resin solution	FORMULA W.I.N. 100463	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Combustible liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	Contains light aromatic naphtha
HAZARD CLASS	Combustible material
IDENTIFICATION NUMBER	NA 1993
D.O.T. LABEL(S) REQUIRED	Combustible material
PRECAUTIONARY LABEL	Attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
light aromatic naphtha		25 ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H ₂ O=1) @ 60°F	0.90
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	65
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____=1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	114°F SFCC	FLAMMABLE LIMITS	Let	Uet
EXTINGUISHING MEDIA	CO ₂ or dry chemical			
SPECIAL FIRE FIGHTING PROCEDURES				
UNUSUAL FIRE AND EXPLOSION HAZARDS				

TRADE NAME: W.I.N. 100463, Paraffin Control, Paratrol L

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	not established
EFFECTS OF OVEREXPOSURE	See Attachment
EMERGENCY AND FIRST AID PROCEDURES	See Attachment

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Dike to prevent entering any waterway. Cover with sand, dirt of suitable chemical adsorbent.	
WASTE DISPOSAL METHOD	
After material is adsorbed pick up sand, dirt or chemical adsorbent and take to an approved hazardous waste disposal site. Dispose of residue in accordance with applicable waste management regulations.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) When exposure exceeds TLV, the use of a chemical respirator with organic cartridge is recommended.		
VENTILATION	LOCAL EXHAUST Recommended	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES synthetic	EYE PROTECTION chemical goggles	
OTHER PROTECTIVE EQUIPMENT		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Avoid contact with skin and eyes. Avoid breathing vapor or spray mist. Keep container tightly closed when not in use.	
OTHER PRECAUTIONS	

110

100222

R-6 (01/86)

OCT 28 1993

INTEROFFICE CORRESPONDENCE

WPS HUMAN RESOURCES

TO: Mike Moseley AT: Houston - Safety & Reg. Compliance
 FROM: Marek Pakulski AT: The Woodlands - CTD
 APPROVAL: [Signature] DATE: 10/25/93
 RE: Safety Information Update

This is to inform you of revisions, additions, deletions or replacement of products or chemicals and the relevant safety data.

Western Trade Name: Parasol D W.I.N.: 100222

Chemical Name (if not trade named):

Addition Revision Replacement Deletion to product line
 Western Product Western System
 Cementing Stimulation

DOT Proper Shipping Name & I.D. Number (SPM-04-02): Flammable liquid, n.o.s.
 DOT Hazardous Material Class: Flammable material UN1993
 DOT Hazardous Material Label: Flammable liquid

Chemical Storage Class (SPM-04-01): II.1
 Chemical First Aid Guide Class (SPM-04-04):
 Eyes Lungs Skin Mouth

EPA Hazardous Waste Classification: Ignitable Waste, D001
 Reportable Quantity: N/A

Material Safety Data Sheet:
 Attached Not Available
 On File at Research

cc: Legal Services
 Product Specification File (original)

Attachments: MSDS
 Label
 Precautionary Statement

Note: - If deletion, attach copy of page(s) to be deleted, write deleted across the page(s) attached.

Confidential Proprietary Information
 The Western Company of North America

100222

MATERIAL SAFETY DATA SHEET - 100222
TRADE NAME: Parasol D

10/11/93

PAGE 1

SECTION I

MSDS NUMBER: 100222
 PART NUMBER:
 MSDS CODE:
 MSDS OTHER CODE ...:
 SYNONYMS: Paraffin Control Surfactant

MANUFACTURER: The Western Company
 DIVISION:
 MFG PART NUMBER ...:
 VENDOR: THE WESTERN COMPANY OF NORTH AMERICA
 EMERGENCY PHONE ...: 1-800-732-9876
 OTHER CALLS: (713) 629-2600
 ADDRESS: 515 POST OAK BLVD., SUITE 1200
 CITY: HOUSTON STATE : TX ZIP : 77027
 MSDS PREPARED BY ..: Research and Engineering
 DATE PREPARED: 10/11/93

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

TRADE NAME: Parasol D

INGREDIENT NAME	CAS	OSHA PEL	ACGIH TLV	OTHER	%
Heavy aromatic naphtha	64742-94-5		100 ppm		80-90
Isopropanol	67-63-0		400 ppm		3-5

Sara Title III (Superfund Amendments & Reauthorization Act of 1986) - Sections 302, 311, 312 and 313:

Section 302 - Extremely Hazardous Substances (40CFR355): This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

Sections 311 and 312 - Material Safety Data Sheet Requirements (40CFR370): Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

Fire Hazard

Under Section 311, submittal of MSDS's or a list of product names to the local emergency planning commission, state emergency response commission and local fire department is required after October 17, 1989 for all hazardous substances.

Section 313 - List of Toxic Chemicals (40CFR372): This product contains the following ingredients, (with CAS# and % range) which appears on the List of Toxic Chemicals.

Signature

100222

SECTION III - CHEMICAL CHARACTERISTICS

BOILING POINT	MELTING POINT	FREEZING POINT	SPECIFIC GRAVITY (H2O = 1)
380°F	< -50°F	< -50°F	0.8568
PERCENT VOLATILE by VOLUME	THEORETICAL VOC CONTENT (percent of WEIGHT)		NET WEIGHT PER GALLON
80 - 90	90		7.15 lbs.
pH: Conc:			
VAPOR PRESSURE (mm of Hg)	VAPOR DENSITY (Air = 1)	DENSITY	EVAPORATION RATE Basis ()=1 Rate
N/A	5		N/A
SOLUBILITY IN WATER dispersible	REACTIVITY IN WATER None		
APPEARANCE AND ODOR: Liquid, light yellow, aromatic odor.			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	METHOD	FLAMMABLE LIMITS IN AIR (%)	AUTOIGNITION TEMPERATURE
64°F	PMCC	UPPER = N/A LOWER = 1.0	N/A
NFPA CODES: HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 0 OTHER:			
HMIS CODES: HEALTH: FLAMMABILITY: REACTIVITY: PROTECTION:			

EXTINGUISHER MEDIA: NFPA Class B extinguishers (CO₂ or foam) for Class III B liquid fires.

SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be ineffective on fire but can protect fire fighters and cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves and rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep container tightly closed. Isolate from oxidizers, heat and open flame. Closed containers may explode if exposed to extreme heat. Applying to hot surfaces requires special precautions. Empty container very hazardous! Continue all label precautions!



WIN 100222

PARASOL D PARAFFIN CONTROL SURFACTANT

Flash Point: 64°F (18°C)
Net Content: 393 lb (178.3 kg)
55 gal (208 L)

Manufactured for:

THE WESTERN COMPANY OF NORTH AMERICA

515 Post Oak Blvd., Houston, Texas 77027

Emergency Telephone: 1-800-732-9876

R-363 (02/82)

DIRECTIONS:

For Proper Use, Refer to Service Bulletin No.(s): 698.0 WG

FOR INDUSTRIAL USE ONLY WARNING!

FLAMMABLE! AVOID HEAT, SPARKS AND OPEN FLAMES. CORROSIVE TO EYES AND SKIN. INHALATION IS NAUSEOUS AND CAN CAUSE ASPHYXIATION. HARMFUL OR FATAL IF SWALLOWED. KEEP CONTAINER CLOSED WHEN NOT IN USE.

HANDLING: Employees MUST WEAR chemical goggles, rubber apron, rubber gloves and OSHA regulated respiratory protection.

FIRE: Use water spray, foam, dry chemical or carbon dioxide to extinguish fire. Full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus required for fire fighting personnel. May produce toxic gases in fire.

SPILL OR LEAK ACTION: Stop spill at source. Dike area and contain. Pump soiled liquid and put contaminated soil in DOT approved containers for disposal. Label immediately. Clean up remainder with absorbent materials.

CONTAINER DISPOSITION: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Dispose in environmentally safe manner.

FIRST AID: Immediately flush with plenty of water for at least 15 minutes and get medical attention.

FOR EYES: Wash exposed area with soap and plenty of water. Remove contaminated clothing, and launder before reuse.

FOR SKIN: Wash exposed area with soap and plenty of water. Remove contaminated clothing, and launder before reuse.

FOR INGESTION: If swallowed, CALL A PHYSICIAN IMMEDIATELY!
FOR INHALATION: After high vapor exposure, remove to fresh air. If breathing is difficult give oxygen. If breathing has stopped give artificial respiration. Seek prompt medical attention.

Refer to MSDS for Safety Requirements.

Flammable Liquid, n.o.s.
(CONTAINS AROMATIC NAPHTHA, ISOPROPANOL)

UN 1993

DOT LABEL: FLAMMABLE LIQUID



Batch no.



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: May 20, 1982

SECTION I

Supplier's Name The Western Company of North America	EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101	
CHEMICAL NAME AND SYNONYMS ethylenediaminetetraacetic acid sodium salt	TRADE NAME AND SYNONYMS SC-100
CHEMICAL FAMILY amino polycarboxylic acid	FORMULA 38%-40% Na ₄ EDTA

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	corrosive liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	ethylenediaminetetraacetic acid sodium salt
HAZARD CLASS	corrosive material
IDENTIFICATION NUMBER	UN1760
D.O.T. LABEL(S) REQUIRED	Corrosive
PRECAUTIONARY LABEL	see Section IX

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
none		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	100°C	SPECIFIC GRAVITY (H ₂ O=1)	1.25
VAPOR PRESSURE (mm Hg.)	—	PERCENT, VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (———— =1)	
SOLUBILITY IN WATER	miscible		
APPEARANCE AND ODOR	clear, light yellow liquid		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	none	FLAMMABLE LIMITS	LeI	UeI
EXTINGUISHING MEDIA	N/A			
SPECIAL FIRE FIGHTING PROCEDURES	N/A			
UNUSUAL FIRE AND EXPLOSION HAZARDS	N/A			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

LD₅₀: 700 mg/kg body weight (on 100% Na, EDTA basis)

EFFECTS OF OVEREXPOSURE

local dermal irritation will occur if not thoroughly flushed with plain water

EMERGENCY AND FIRST AID PROCEDURES

Dermal: flush with plenty of water

Eyes: flush with plenty of water

Ingestion: let drink plenty of acidified water (citric acid) and vomit

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE		none

INCOMPATIBILITY (Materials to avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		none

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

flush away with plenty of water

WASTE DISPOSAL METHOD

Can be disposed in normal liquid disposal systems after neutralization.

EPA Hazardous Waste Classification: D002 Corrosivity (C)

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

VENTILATION	LOCAL EXHAUST	not necessary	SPECIAL
	MECHANICAL (General)	not necessary	OTHER

PROTECTIVE GLOVES: if necessary | EYE PROTECTION: safety glasses

OTHER PROTECTIVE EQUIPMENT: none

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

no special handling and storage precautions

OTHER PRECAUTIONS

precautionary labeling: none

Activator W.I.N.# 499738, 499739

RECEIVED
 JAN 25 1992
 R.E.F.C.

Material Safety Data Sheet

Product **Superset W™** *(santrol)*

Section I

Manufacturer's Name
Santrol Products, Inc.
 11757 Katy Frwy, #1260
 Houston, TX 77079

Emergency Telephone Number
 (713) 558-5212

Date 3/5/90

Section II - Hazardous Ingredients

Hazardous components	CAS #	OSHA PEL	ACGIH TLV	OTHER
Methanol	67-56-1	200 PPM	200 PPM	
Poly(oxethylene)nonylphenol ether	9016-45-9	none	none	

Hazard Rating	Scale:	Product:
	0-Minimal	HEALTH: 1
	1-Slight	FIRE: 3
	2-Moderate	REACTIVITY: 0
	3-Serious	SPECIAL: NONE
	4-Severe	

Section 313 Supplier Notification

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1988 and of 40 CFR 372:

CAS#	Chemical Name	Percent by Weight
67-56-1	Methanol	<60

California "Safe Drinking Water and Toxic Enforcement Act of 1986"

This product may contain trace amounts (less than 10 ppm) of Ethylene Oxide (CAS # 75-21-8), and trace amounts (up to 125 ppm) of 1,4-Dioxane (CAS # 123-91-1).

Section III - Physical/Chemical Characteristics

Boiling Point: 148°F	Specific Gravity (H ₂ O=1): 0.910
Vapor Pressure (mmHg): 97 at 20°C	Melting Point: unknown
Vapor Density (Air=1): 1.1	Evaporation Rate (Butyl Acetate=1): >1
Solubility in Water: Complete	
Appearance and Odor: Colorless liquid, odor of methanol	

✓

Material Safety Data Sheet

SUPERSET W

Page 2

Section IV - Fire and Explosion Hazard Data

Flash Point: 58°F (TCC) Flammable Limits in air, % : Lower: 7(est.) Upper: 36

Extinguishing Media: Use water spray, alcohol foam, CO₂ or Dry Chemical. Do not use direct water stream.

Special Fire Fighting Procedures:

Fire Fighters should wear self contained breathing apparatus. Use water spray to cool nearby containers and structures exposed to fire.

Unusual Fire and Explosion Hazards: Extinguish all nearby sources of ignition. This product may burn with a flame which is invisible in daylight.

Section V - Reactivity Data

Stability: Stable Polymerization will not occur.

Conditions to avoid: Heat, sparks and open flames.

Materials to avoid: Strong Oxidizers, aluminum, zinc. Any metal that displaces hydrogen; certain plastics and rubber.

Hazardous decomposition products: May liberate carbon monoxide, carbon dioxide, formaldehyde, and unidentified compounds in black smoke.

Section VI - Health Hazard Data

Primary Routes of exposure: Swallowing, skin or eye contact, inhalation.

Signs and symptoms of exposure:

Inhalation: Prolonged or repeated exposure or breathing very high concentrations may cause headaches, nausea, vomiting, dizziness and visual disturbances.

Eye contact: Vapors may irritate the eyes. Liquid and mists may severely irritate or damage the eyes.

Skin contact: Contact with skin may cause severe irritation. Prolonged contact may cause dermatitis.

Swallowed: Swallowing large quantities causes headaches, nausea, vomiting, blindness, damage to pancreas and perhaps death.

Chronic effects of exposure: Prolonged or repeated exposure may result in CNS damage, blindness, damage to pancreas and perhaps death.

Medical conditions generally aggravated by exposure: None known.

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention.

Eye contact: Immediately flush eyes with running water for at least 15 minutes. Get immediate medical attention.

Skin contact: Immediately wash skin with lots of soap and water. Remove contaminated clothing and shoes and wash before reuse. Get Medical attention if irritation persists after washing.

Swallowed: If conscious, immediately induce vomiting by giving 2 glasses of warm water and sticking finger down the throat. Get immediate medical attention. After patient has vomited, give milk, water or solution of sodium bicarbonate (1tsp/qt). Do not give anything to an unconscious or convulsing person.

Product Name: TECHN-STM 4603

411024

Section: 01 PRODUCT IDENTIFICATION

UNICHEM INTERNATIONAL INC.	Emergency Telephone	505-393-7751
P.O. BOX 1499	Previous Version Date	7/19/93
707 N. LEECH	Date Prepared	9/21/93
HOBBS, NM 88241-1499	Version: 0000003	

Product Name: TECHN-STM 4603

Trade Name: Iron Control Activator

Chemical Description:
Proprietary blend of inorganic additives.

Section: 02 HAZARDOUS INGREDIENTS

<u>Component Name</u>	<u>CAS#</u>	<u>% Range</u>
copper sulfate	07758-99-3	< 30%

Section: 03 PHYSICAL DATA

Freezing Point: - 40 Deg.F.
Specific Gravity(H₂O-1) : 1.180 Solubility in water: Complete
Appearance and Odor: Clear, blue liquid; no odor.

Section: 04 FIRE AND EXPLOSION HAZARD DATA

Flash Point (Test Method): WILL NOT FLASH

Extinguishing Media

This material is non-combustible. If this material is involved in a fire, use an extinguishing agent appropriate to surrounding materials. Water spray may be used to cool containers of this material exposed to a fire. Fire extinguishing materials should be collected for determination of proper disposal.

Special Fire Fighting Procedures

Fire fighters should wear self-contained breathing apparatus with a full facepiece operated in the pressure-demand or positive-pressure mode.

Unusual Fire and Explosion Hazards

None

Section: 05 HEALTH HAZARD DATA

Effects of Overexposure

Eye Contact: may cause irritation.

Section: 05 HEALTH HAZARD DATA

CONTINUED

Skin Contact: may cause irritation.

Inhalation: not expected to pose a hazard. Mists may cause irritation of upper respiratory tract and mucous membranes.

Ingestion: may cause nausea, vomiting, diarrhea and gastrointestinal pain.

Chronic Effects: can cause blood damage.

Target Organs: eyes, skin, blood.

Emergency and First Aid Procedures

SKIN

Wash with soap and water. Remove contaminated clothing and launder contaminated clothing before reuse. Get medical attention if redness or irritation develops.

EYES

Flush eyes immediately with large amounts of water for at least 15 minutes. Lift lower and upper lids occasionally. Get medical attention.

INHALATION

Call a physician immediately. Give victim a glass of water. Do NOT induce vomiting unless instructed by a physician or poison control center. Never give anything by mouth to an unconscious person.

INGESTION

Remove victim to fresh air. Give artificial respiration if not breathing. If breathing is difficult, administer oxygen. Keep person warm, quiet and get medical attention.

Section: 06 REACTIVITY DATA

Stable (Y=Yes/N=No): Y

Stability -- Conditions to Avoid

None known.

Incompatibility (Materials to Avoid)

Strong reducing agents, strong oxidizing agents, magnesium.

Hazardous Decomposition Products

Oxides of sulfur.

Hazardous Polymerization May Occur (Y=Yes/N=No): N

Hazardous Polymerization -- Conditions to Avoid

None

Section: 07 SPILL OR LEAK PROCEDURES

Steps to be Taken if Material is Released or Spilled

Persons not wearing suitable personal protective equipment

Product Name: TECHNISTIM 4800 411025

Section: 01 PRODUCT IDENTIFICATION

UNICHEM INTERNATIONAL INC.	Emergency Telephone	505-393-7751
P.O. BOX 1499	Previous Version Date	9/01/93
707 N. LEECH	Date Prepared	9/21/93
HOBBS, NM 88241-1499	Version: 0000002	

Product Name: TECHNISTIM 4800

Trade Name: Iron Control

Chemical Description:
Proprietary blend of organic additives.

Section: 02 HAZARDOUS INGREDIENTS

<u>Component Name</u>	<u>CAS#</u>	<u>% Range</u>
proprietary organic acid		< 60%
acetic acid, glacial	00064-19-7	< 10%

Section: 03 PHYSICAL DATA

Specific Gravity(H₂O=1) : 1.032 Solubility in water: Complete
Appearance and Odor: Clear, yellow liquid; pungent odor.

Section: 04 FIRE AND EXPLOSION HAZARD DATA

Flash Point (Test Method): 110 Deg.F TCC

Extinguishing Media

CO₂, dry chemical, water spray or fog, or foam. Use water to keep containers cool. Isolate "fuel" supply from fire. Contain fire fighting liquids for proper disposal.

Special Fire Fighting Procedures

Do not enter confined fire space without proper personal protective equipment including NIOSH approved self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode. Do not inject a solid stream of water or foam into hot, burning pools; this may cause splattering and increase fire intensity. Evacuate personnel to a safe area. Keep unnecessary people away.

Unusual Fire and Explosion Hazards

This material is combustible and under certain conditions may release vapors that pose a severe fire hazard. These vapors may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant

Product Name: TECHNI-STIM 4800

Section: 04 FIRE AND EXPLOSION HAZARD DATA CONTINUED

from material handling print. Containers may explode from internal pressure if confined to a fire. Keep unnecessary people away.

Section: 05 HEALTH HAZARD DATA

Effects of Overexposure

Eye Contact: brief contact of the vapors are severely irritating. Brief contact with the liquid or mists will severely damage the eyes and prolonged contact will cause eye injury which may be followed by blindness.

Skin Contact: vapors, liquid and mists are extremely corrosive. Vapors will severely irritate the skin and liquid and mists will severely burn the skin. Prolonged liquid contact will burn or destroy surrounding tissue and death may accompany burns which extend over large portions of the body. May be absorbed through the skin which is toxic.

Inhalation: vapors and mists are extremely corrosive to the nose, throat and mucous membranes. Bronchitis, pulmonary edema and chemical pneumonia may occur. Irritation, coughing, weakness, chest pain and difficulty in breathing may occur with brief exposure while prolonged exposure may result in more severe irritation and tissue damage. May cause olfactory paralysis. Breathing high concentrations may result in convulsions or death.

Ingestion: vapors, mists, and liquid are extremely corrosive to the mouth and throat. Swallowing the liquid burns the tissues, causes severe abdominal pain, nausea, vomiting and collapse. Swallowing large quantities can cause death.

Chronic Effects of Exposure: may cause erosion of the teeth, lesions on the skin, bronchial irritation, coughing and pneumonia.

Medical Conditions Generally Aggravated by Exposure: persons with preexisting skin disorders, eye problems or respiratory problems may be more susceptible to the effects of this product.

Emergency and First Aid Procedures

SKIN

Wash with soap and water. Remove contaminated clothing and launder contaminated clothing before reuse. Get medical attention if redness or irritation develops.

EYES

Flush eyes immediately with large amounts of water for at least 15 minutes. Lift lower and upper lids occasionally. Get medical attention.

Section IV Control Procedures

A. Occupational

Protective Equipment (Type)

Eyes CHEMICAL GOGGLES

Skin IMPERVIOUS CLOTHING AND GLOVES

Inhalation IF VENTILATION IS INADEQUATE, USE ORGANIC VAPOR RESPIRATOR APPROVED BY MESA-NIOSH.

Ventilation (Type Required) GENERAL AREA (EXHAUST VENTILATION IS USED IN CONFINED AREAS.)

Precautionary Label (may be attached) SEE SECTION VI

Permissible Concentrations: Air N/A Biological N/A

Monitoring Procedures: Air N/A Biological N/A

First Aid

Eyes IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES. GET PROMPT MEDICAL ATTENTION.

Skin WASH WITH SOAP AND WATER. GET MEDICAL ATTENTION IF IRRITATION OCCURS.

Ingestion INDUCE VOMITING; GET PROMPT MEDICAL ATTENTION.

Respiration Remove to uncontaminated area; give artificial respiration if needed; get medical attention.

B. Environmental

Product is a Pollutant (as compared to)

Product is Bioaccumulable YES Water YES

Product is Bioaccumulable YES Air YES

Waste Disposal Method CONTROLLED INCINERATION UNLESS DIRECTED OTHERWISE BY APPLICABLE ORDINANCES.

C. Recommended Fire Extinguishing Agents and Special Procedures

DRY CHEMICAL (B-C), CARBON DIOXIDE, WATER FOG, FOAM

D. Unusual Fire and Explosive Hazards

NONE

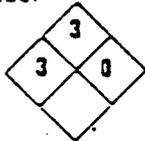
E. Procedures in Case of Breakage or Leakage SHUT OFF ALL SOURCES OF IGNITION.

WATER SPRAY MAY BE USED TO DISPERSE VAPORS. CONTAIN ON AN ABSORBENT MATERIAL.

F. Requirements for Transportation, Handling and Storage

STORE IN A FLAMMABLES STORAGE AREA AWAY FROM ALL SOURCES OF IGNITION.

G. NFPA Symbol



Section V U. S. Government and Other Regulatory Agency Controls

A. Marketing and use Regulated by (Specific Regulation)

FDA N/A USDA N/A EPA N/A Other State: DOT FLAMMABLE

B. State or Local Regulations Affecting the use of this Material (Restriction on Amount, Release or Disposal, etc. or Water, Etc.) N/A

Section VI Comments

! DANGER! POISON. CONTAINS METHANOL. VAPOR HARMFUL. MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH THE SKIN. MAY CAUSE EYE AND SKIN BURNS. CANNOT BE MADE NON-POISONOUS. Avoid breathing vapor. Do not get in eyes, on skin or clothing. Use with adequate ventilation. Keep away from heat, sparks and open flame. Wash thoroughly after handling. **FOR EYES:** In case of contact, immediately flush with plenty of water for at least 15 minutes. Get prompt medical attention. **FOR SKIN:** In case of contact, wash exposed skin thoroughly with soap and water. If swallowed, induce vomiting and get prompt medical attention. **HANDLING INSTRUCTIONS:** Wear chemical goggles, impervious clothing and gloves. Contaminated clothing, including shoes should be removed immediately and thoroughly cleaned and dried before reuse.

Information Supplied By: Paul D. Halley

Signature

Director Environmental Health Services

Date

May 31, 1977

N/A - Data not available.

SECTION I

MSDS NUMBER: 100388
PART NUMBER:
SYNONYMS: DE-EMULSIFIER-212
MANUFACTURER: The Western Company of North America
VENDOR: 000070
EMERGENCY PHONE ...: 1-800-732-9876
OTHER CALLS: (713) 629-2600
ADDRESS: 515 POST OAK BLVD., SUITE 1200
CITY: HOUSTON STATE ...:TX ZIP ...:77027
MSDS PREPARED BY ..:
DATE PREPARED: 02/03/92

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

TRADE NAME: Wellaid 212

INGREDIENT NAME	CAS	OSHA PEL	ACGIH TLV	OTHER	%
ISOPROPYL ALCOHOL	67-63-0	400 PPM	400 PPM	500 PPM	
QUATERNARY AMMONIUM SALT*		N/E	N/E	--	
WATER	7732-18-5	N/E	N/E	--	

***** ADDITIONAL INFORMATION *****

* Trade Secret

SECTION III - CHEMICAL CHARACTERISTICS

BOILING POINT	MELTING POINT	FREEZING POINT	SPECIFIC GRAVITY (H2O = 1)
183 F (84 °C.)	N/A	20 °F. (Pour Pt.)	0.99

PERCENT VOLATILE by VOLUME	THEORETICAL VOC CONTENT (percent of WEIGHT)	WEIGHT PER GALLON
No data	No data	No data

pH: 3.3
Conc: NEAT

VAPOR PRESSURE (mm of Hg)	VAPOR DENSITY (Air = 1)	DENSITY	EVAPORATION RATE Basis (NO DATA)=1 Rate
No data	No data	No data	

SOLUBILITY IN WATER TOTALLY SOLUBLE	REACTIVITY IN WATER No data
--	--------------------------------

APPEARANCE AND ODOR:
Yellow liquid. No data regarding odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	METHOD	FLAMMABLE LIMITS IN AIR (%)	AUTOIGNITION TEMPERATURE
85 °F. (29 °C.)	ASTM D-3278	UPPER = N/D LOWER = NO DATA	NO DATA

NFPA CODES: HEALTH: 3
FLAMMABILITY: 3
REACTIVITY: 1
OTHER: -

HMIS CODES: HEALTH: 3
FLAMMABILITY: 3
REACTIVITY: 1
PROTECTION: J

EXTINGUISHER MEDIA: Agents approved for Class B hazards (eg., dry chemical, carbon dioxide, halogenated agents, foam, steam) or water fog.

SPECIAL FIRE FIGHTING PROCEDURES:
Keep away from ignition sources (eg., heat, sparks, and open flames). Use with adequate ventilation. Keep container closed. If foam is used, alcohol foam is recommended.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Flammable liquid. Vapor may explode if ignited in a closed area.

SECTION V - REACTIVITY DATA

IS THIS CHEMICAL STABLE UNDER NORMAL CONDITIONS OF HANDLING/STORAGE (Y/N)? N

CONDITIONS TO AVOID (REGARDING STABILITY):
Avoid mixing with bases; may evolve heat and cause splattering.

INCOMPATIBILITY (MATERIALS TO AVOID):
Avoid chlorine, fluorine, and other strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS:
No data.



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

RECEIVED

JAN 23 1989

R.E.F.C.

DATE: November 10, 1983

SECTION I

Supplier's Name The Western Company of North America	EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101	
CHEMICAL NAME AND SYNONYMS Proprietary Blend	TRADE NAME AND SYNONYMS WK-1
CHEMICAL FAMILY Surfactant	FORMULA W.I.N. 100197

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid, n.o.s.	RQ 5000/2270
NAME OF HAZARDOUS COMPONENT	methanol	
HAZARD CLASS	Flammable liquid	
IDENTIFICATION NUMBER	UN1993	
D.O.T. LABEL(S) REQUIRED	Flammable liquid	
PRECAUTIONARY LABEL	Attached	

SECTION II - HAZARDOUS INGREDIENTS

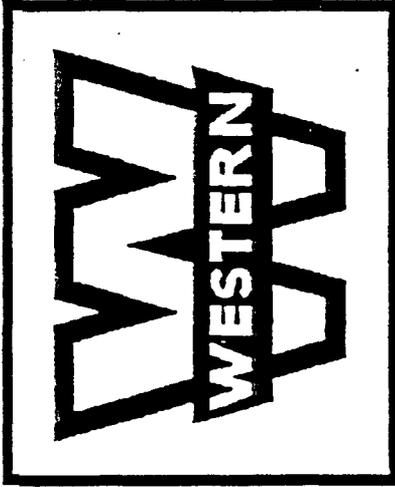
	%	TLV (Units)
Isopropanol	1	400ppm
Methylisobutyl carbinal	1	250ppm
Methanol: rat, Oral LD ₅₀ 12.88 ga/kg; rat, LC ₅₀ 64,000 ppm 4 hrs	32-40	200ppm

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	147°F	SPECIFIC GRAVITY (H ₂ O=1)	0.945-0.955@73°F
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	soluble		
APPEARANCE AND ODOR	Cloudy, straw-colored liquid - ether odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 74°F (PMCC)	FLAMMABLE LIMITS	LeL	UeL
EXTINGUISHING MEDIA Carbon dioxide, dry chemical, alcohol foam, water			
SPECIAL FIRE FIGHTING PROCEDURES Wear self-contained breathing apparatus. Dilute rapidly with large quantities of water.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Produces toxic fumes when burned.			



Western Petroleum Services

WIN 100197

WK-1

Surfactant

Flash Point: 94 ° F (34 ° C) PMCC
Net Contents: 428 pounds (194 kg)
54 gallons (204 liters) @ 73 ° F (23 ° C)

For Proper Use, Refer to Service Bulletin No.: 570.0 WG

SPECIFIC USAGE: Normal usage is recommended at 10 gallons per 1000 gallons of fluid. Lesser concentrations have been used with satisfactory results in some areas for less severe problems.

When Handling This Product, Employees **MUST WEAR:** Rubber gloves, boots and aprons, face shields or goggles, and air masks in confined areas.

FOR INDUSTRIAL USE ONLY

WARNING! **CORROSIVE FLAMMABLE LIQUID**

Eye irritant. Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Keep container closed. Have protective emergency equipment on hand.

SPILL OR LEAK: Extinguish all sources of ignition. Wash down with water or soak up on sand, and dispose in approved industrial landfill. Do not wash down with water where run off will contaminate important water sources. **Disposal:** Industrial landfill or incineration.

FIRST AID: Flush from skin or induce vomiting if swallowed. For eyes, wash with water for at least 15 minutes.

FIRE FIGHTING: CO₂ dry chemical, alcohol foam, water. Wear self-contained breathing apparatus. Dilute rapidly with large quantities of water. Produces toxic fumes when burned.

Refer to MSDS and SPM-04-04 for Safety Requirements.

THE WESTERN COMPANY OF NORTH AMERICA

515 Post Oak Blvd., Houston, Texas 77027

Emergency Telephone: 817-731-5433

Manufactured for:

499659



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: August 27, 1990

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS N/A Blend	TRADE NAME AND SYNONYMS WSA-2	
CHEMICAL FAMILY Organic Solvent	FORMULA Proprietary Blend	W.I.N.499659

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Flammable liquid	(RQ /)
NAME OF HAZARDOUS COMPONENT	None	
HAZARD CLASS	Flammable liquid	
IDENTIFICATION NUMBER	UN 1219	
D.O.T. LABEL(S) REQUIRED	Flammable liquid	
PRECAUTIONARY LABEL	Flammable liquid	

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Isopropyl Alcohol		67-63-0
Glycol Ethers		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	179°	SPECIFIC GRAVITY (H ₂ O=1)	0.9
VAPOR PRESSURE (mm Hg.)		PERCENT VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR=1)	2.6	EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	Soluble		
APPEARANCE AND ODOR	Clear, colorless liquid with strong odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) 145 F Seta cc	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA Use water spray, alcohol foam, drv chemical or carbon dioxide			
SPECIAL FIRE FIGHTING PROCEDURES Use water spray to cool fire exposed surfaces and water spray to disperse the vapors. Full protective clothing and full face piece positive pressure self-contained breathing apparatus for fire fighters.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Flammable liquid can release vapors that form flammable mixtures at temperatures at or above the flash point. Toxic gases will form upon combustion			

TRADE NAME: W.I.N. 499659 WSA-2

SECTION V - HEALTH HAZARD DATA			
THRESHOLD LIMIT VALUE			
EFFECTS OF OVEREXPOSURE Eyes - causes noticeable pain, moderate irritation & transient cornea injury. Skin - causes slight irritation. Can be readily absorbed through skin in moderate amounts. Inhalation - causes respiratory tract irritation, liver & kidney damage and central nervous system effects such as headache, weakness, slurred speech, and blurred vision. Ingestion - causes headache, dizziness, nausea, vomiting, gastrointestinal distress, liver & kidney injury.			
EMERGENCY AND FIRST AID PROCEDURES			
Eyes - immediately flush eyes with large amounts of water for at least 15 min.			
Skin - Flush with large amounts of water, use soap if available. Remove grossly contaminated clothing, including shoes & launder before reuse. Inhalation - immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Ingestion - if conscious, give water to drink & induce vomiting by sticking finger down throat. Take immediately to hospital or physician.			
STABILITY	UNSTABLE		CONDITIONS TO AVOID Heat or flame
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong base oxidizing agents			
HAZARDOUS DECOMPOSITION PRODUCTS Acrid smoke and irritating fumes when heated to decomposition. Products of combustion include carbon monoxide and carbon dioxide.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Eliminate source of ignition. Prevent additional discharge of material. Implement clean up procedures. Vapors/dust can be harmful/fatal. Prevent liquid from entering sewers, water courses or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (explosion proof or hand pump or suitable absorbent).	
WASTE DISPOSAL METHOD	
Consult expert on disposal of recovered material and ensure conformity to local disposal regulations.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) NIOSH/MSHA		
VENTILATION	LOCAL EXHAUST OK	SPECIAL
	MECHANICAL (General) or when heated or agitated Recommended in confined spaces	
PROTECTIVE GLOVES Chemical resistance gloves	EYE PROTECTION Chemical goggles	
OTHER PROTECTIVE EQUIPMENT Eyewash fountains and safety showers should be easily accessible		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
OTHER PRECAUTIONS	

100128

RECEIVED

MAY 13 1988

R.E.F.C.



U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

MATERIAL SAFETY DATA SHEET

DATE: 10MAR88

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS blend	TRADE NAME AND SYNONYMS SCALE INHIBITOR, P-7	
CHEMICAL FAMILY acrylate polymer	FORMULA	W.I.N. 100128

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	not regulated
NAME OF HAZARDOUS COMPONENT	N/A
HAZARD CLASS	N/A
IDENTIFICATION NUMBER	N/A
D.O.T. LABEL(S) REQUIRED	N/A
PRECAUTIONARY LABEL	see page 3

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	N/A	SPECIFIC GRAVITY (H ₂ O=1) @ 60°F	1.180
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT. VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	>1	EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER	soluble		
APPEARANCE AND ODOR	light amber liquid		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	greater than 200°F TCC	FLAMMABLE LIMITS	N/A		
EXTINGUISHING MEDIA	Foam, dry chemical, CO ₂ , water fog or spray				
SPECIAL FIRE FIGHTING PROCEDURES	Do not enter fire area without proper protective equipment including NIOSH approved self-contained breathing apparatus. Cool exposed container with water spray.				
UNUSUAL FIRE AND EXPLOSION HAZARDS	Material may burn if exposed to sufficient heat.				

RECEIVED

TRADE NAME: W.I.N. 100128, SCALE INHIBITOR, P-7

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	N/A
EFFECTS OF OVEREXPOSURE Inhalation of concentrated vapors may cause dizziness, headaches or unconsciousness. Ingestion may cause irritation, nausea or death. Eye contact may cause severe irritation, redness, tearing or blurred vision.	
EMERGENCY AND FIRST AID PROCEDURES	See Section IXA

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID N/A
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizers			
HAZARDOUS DECOMPOSITION PRODUCTS carbon monoxide, oxides or nitrogen and sulfur			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID N/A
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED. Eliminate ignition sources. Shut off leak if it can be done safely. Dike and pump large spills into salvage containers. Soak up residue and small spills with absorbant clay, sand or dirt.	
WASTE DISPOSAL METHOD	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) NIOSH approved vapor canister		
VENTILATION	LOCAL EXHAUST recommended	SPECIAL
	MECHANICAL (General) IT necessary	OTHER
PROTECTIVE GLOVES	chemically resistant	EYE PROTECTION chemical goggles or face shield
OTHER PROTECTIVE EQUIPMENT chemically resistant boots and apron		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Do not store near heat, sparks or open flame. Do not store with strong oxidizers. Store in well ventilated area.	
OTHER PRECAUTIONS Use proper protective equipment and clothing. Reseal container when not in use. Do not add foreign material to container.	



Attachment to and continuation of
MATERIAL SAFETY DATA SHEET

DATE: August 27, 1990

SECTION I

Supplier's Name		EMERGENCY TELEPHONE NO.
The Western Company of North America		(817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS N/A Blend	TRADE NAME AND SYNONYMS WSA-2	
CHEMICAL FAMILY Organic solvent	FORMULA Proprietary blend	W.I.N. 499659

SECTION X - LABEL COPY

FOR INDUSTRIAL USE ONLY

FIRST AID:

FOR EYES: In case of contact, immediately flush eyes with large amounts of water for at least 15 min. Get prompt medical attention.

FOR SKIN: In case of contact, flush with large amounts of water. Use soap if available. Remove contaminated clothing including shoes and launder before reuse.

FOR INGESTION: If swallowed, and conscious, give water to drink and induce vomiting by sticking finger down throat. Take immediately to hospital. Do not induce vomiting or give anything by mouth if unconscious.

FOR INHALATION: If breathed in, immediately remove victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest.

HANDLING: Employees must wear long sleeves, chemical resistant gloves and chemical goggles.

ATTENTION! After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. Do not cut, puncture or weld on or near this container.

Refer to MSDS and SPM-04-04 for other safety requirements.



WIN 499659

WSA-2

MUTUAL SOLVENT

Flash Point: 145° F (63° C) TCC
Net Contents: 412 lb (187 kg)
55 gal (208 L) @ 25° C

Manufactured for:

The Western Company of North America

P.O. BOX 186 • FORT WORTH, TEXAS 76101

Emergency Telephone: (817) 731-5100 (817) 731-5433

Batch no

499

****D.O.T. PROPER SHIPPING NAME; FLAMMABLE LIQUID (UN 1219)****

DIRECTIONS:

For Proper Use, Refer to Service Bulletin No.(s): 560.5W & 560.5G

SPECIFIC USAGE:

For oil well stimulation, WSA-2 can be mixed 5% by volume with diesel oil as an afterflush or 5% by volume with acid or ammonium chloride. When treating gas wells, WSA-2 is added at 5% by volume to the acid or ammonium chloride overflush.

FOR INDUSTRIAL USE ONLY

WARNING!

FLAMMABLE LIQUID, DO NOT STORE NEAR HEAT, SPARKS OR OPEN FLAME. AVOID SKIN OR EYE CONTACT. KEEP CONTAINER CLOSED.

**FIRST AID:
FOR EYES:**

in case of contact, flush with plenty of clean water for at least 15 minutes. Call a physician.

FOR SKIN:

in case of contact, wash with soap and water. Remove and launder contaminated clothing before reuse. If irritation persists call a physician.

FOR INGESTION:

If swallowed, give milk or water to dilute. Induce vomiting. Get emergency medical treatment for methanol ingestion.

FOR INHALATION:

If breathed in, remove to fresh air. Give artificial respiration if needed.

HANDLING:

Employees must wear chemical resistant gloves and chemical safety goggles.

ATTENTION:

After this container has been emptied, it may contain flammable and toxic liquid or vapor; observe all warnings and precautions listed for this product. DO NOT cut, puncture or weld on or near this container.

Refer to MSDS and SPM-04-04 for Safety Requirements.

FLAMMABLE





MATERIAL SAFETY DATA SHEET

DATE: FEB. 1985

SECTION I

Supplier's Name The Western Company of North America		EMERGENCY TELEPHONE NO. (817) 731-5100
ADDRESS (Number, Street, City, State, and ZIP Code) P. O. Box 186, Ft. Worth, TX 76101		
CHEMICAL NAME AND SYNONYMS 50% solution of citric acid	TRADE NAME AND SYNONYMS Citric Acid, Liquid (XR-2L)	
CHEMICAL FAMILY citric acid	FORMULA W.I.N. 100091	

SECTION IA HAZARDOUS MATERIAL CLASSIFICATION

D.O.T. PROPER SHIPPING NAME	Corrosive Liquid, n.o.s.
NAME OF HAZARDOUS COMPONENT	Citric Acid
HAZARD CLASS	Corrosive Liquid, n.o.s.
IDENTIFICATION NUMBER	UN1760
D.O.T. LABEL(S) REQUIRED	Corrosive Label must be applied
PRECAUTIONARY LABEL	Attached

SECTION II - HAZARDOUS INGREDIENTS

	%	TLV (Units)
Citric Acid	50	

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	not established	SPECIFIC GRAVITY (H ₂ O=1)	1.2
VAPOR PRESSURE (mm Hg.)	not established	PERCENT VOLATILE BY VOLUME (%)	not established
VAPOR DENSITY (AIR=1)	not established	EVAPORATION RATE (_____ =1)	not established
SOLUBILITY IN WATER	1.25		

APPEARANCE AND ODOR Clear, colorless to faintly yellow-green liquid, essentially no odor

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	LeI	Uel
EXTINGUISHING MEDIA	N/A			
SPECIAL FIRE FIGHTING PROCEDURES	N/A			
UNUSUAL FIRE AND EXPLOSION HAZARDS				

TRADE NAME: W.I.N.100091, ACID, citric, 50% solution, XR-2L

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

No TLV established

EFFECTS OF OVEREXPOSURE

May be mild eye and skin irritant

EMERGENCY AND FIRST AID PROCEDURES

Flush skin contact with water and flush eye contact immediately with plenty of water. Seek medical care for eyes.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

N/A

INCOMPATIBILITY (Materials to avoid)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Do not attempt to recover.

WASTE DISPOSAL METHOD

Flush with water to drains.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

None

VENTILATION

LOCAL EXHAUST

None

SPECIAL

MECHANICAL (General)

None

OTHER

PROTECTIVE GLOVES

Standard work gloves

EYE PROTECTION

Safety glasses

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

None normally required.

OTHER PRECAUTIONS

None

MATERIAL SAFETY DATA SHEET

IRONROL(TM)

411039

2 : NFPA HEALTH
 2 : NFPA FLAMMABILITY
 0 : NFPA REACTIVITY
 SPECIFIC HAZARD

SECTION I - IDENTIFICATION

COMPANY NAME..... FRAC TECH DIVISION, PLAINSMAN TECHNOLOGY, INC.
 P.O. BOX 557
 MARLOW, OK 73055
 (405)658-6608
 EMERGENCY PHONE NUMBER... (800)653-8253
 EFFECTIVE DATE..... June 7, 1994
 REVISED DATE..... June 14, 1994
 CHEMICAL NAME..... IRON REDUCING AGENT
 TRADE NAME..... IRONROL(TM)
 CHEMICAL FAMILY..... Mercaptan

SECTION II - COMPONENTS

HAZARDOUS COMPONENTS	HAZARDOUS %	PEL/TLV	CAS #
Thioglycol	N/A	50 ppm TWA Mfg. Recommendations	60-24-2

SECTION III - PHYSICAL DATA

BOILING POINT(F)..... 154° - 161° C 760 MM HG
 FREEZING POINT (F)..... N/A
 VOLATILITY/VOL(%)..... N/A
 MELTING POINT..... Unknown
 VAPOR PRESSURE (mm Hg)... 0.76 millibars @ 20° C
 VAPOR DENSITY (Air=1).... N/A
 SOLUBILITY IN H2O..... Miscible
 APPEARANCE/ODOR..... Colorless liquid with sulfide odor.
 SPECIFIC GRAVITY (H2O=1). 1.12
 EVAPORATION RATE..... N/A
 PH..... 6 - 8
 DENSITY..... N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT..... 70.5°C
 LOWER FLAME LIMIT..... 2.3%
 HIGHER FLAME LIMIT..... 18%
 EXTINGUISH MEDIA..... Water fog, alcohol foam, CO₂, or dry chemical.
 FOR FIRE..... Firefighters should be equipped with self-contained
 breathing apparatus and turn out gear.
 UNUSUAL FIRE HAZARD..... When heated to decomposition, toxic sulfur dioxide is
 emitted.

MATERIAL SAFETY DATA SHEET

IRONTRONL(TM)

SECTION V - HEALTH HAZARD DATA

ROUTES OF ENTRY	INHALATION? Yes	EYES? Yes	SKIN? Yes	INGESTION? Yes
-----------------	--------------------	--------------	--------------	-------------------

HEALTH HAZARDS Rabbit-Dermal LD50 - 150 MG/KG-Highly Toxic
Rabbit-Eye Irritation (unrinsed)-Severely irritating
Rat-Inhalation Safety Screen-Deaths after 30 Minute
Exposure. 8h. vapor Rat-Oral LD50 - 330 MG/KG Very
Toxic
Rabbit-Primary Skin Irritation-Corrosive

CARCINOGENICITY	NTP? Not listed	IARC MONOGRAPHS? Not listed	OSHA REGULATED No
-----------------	--------------------	--------------------------------	----------------------

THRESHOLD LIMIT VALUE.... Not established for this product.
SYMPTOMS.....
OVER EXPOSURE EFFECTS.... ACUTE: Contact with the eyes and skin may result in
severe irritation. Burns and permanent injury may
result. Skin contact may result in dermatitis and
defatting. Overexposure to Thioglycol by ingestion,
inhalation or skin absorption may result in
irritation, nausea, muscular weakness, tremors,
unconsciousness, respiratory paralysis and death.
Thioglycol is toxic by ingestion and highly toxic by
the dermal route.
CHRONIC: Animal studies indicate that chronic
overexposure to thioglycol may result in adverse
nervous system, blood and cardiovascular effects.

FIRST AID PROCEDURES..... SKIN: Wash affected areas with water while removing
contaminated clothing. Get immediate medical
attention. Launder contaminated clothing before
reuse.
EYES: Immediately wash eyes with running water for 15
minutes. Get immediate medical attention.
INGESTION: If swallowed, DO NOT INDUCE VOMITING.
Dilute with water or milk and get immediate medical
attention. Never give fluids or induce vomiting if
the victim is unconscious or having convulsions.
INHALATION: Move to fresh air. Aid in breathing, if
necessary, and get immediate medical attention. NOTES
TO PHYSICIANS: Not applicable.
AGGRAVATED MEDICAL CONDITIONS: No data is available
which addresses medical conditions that are generally
recognized as being aggravated by exposure to this
product. Please refer to Section V (Health Hazards)
for effects observed in animals.
SPECIAL PRECAUTIONS: Not applicable.

SECTION VI - REACTIVITY DATA

CHEMICAL STABILITY..... Stable
CONDITIONS TO AVOID..... Strong alkali.
INCOMPATIBLE MATERIALS... Strong Alkali
DECOMPOSITION PRODUCTS... No data Available.
HAZARDOUS POLYMERIZATION. Does not occur.

MATERIAL SAFETY DATA SHEET

IRONROL(TM)

POLYMERIZATION AVOID..... N/A

SECTION VII - SPILL OR LEAK PROCEDURE

FOR SPILL Spills should be contained, solidified and placed in suitable containers for disposal in a RCRA licensed facility. This material is RCRA hazardous due to its properties.

WASTE DISPOSAL METHOD.... Incinerate or bury in a RCRA licensed facility. Do not discharge into waterways or sewer systems without proper authority. Empty containers with less than 1 inch of residue may be landfilled at a licensed facility. Recommend crushing or other means to prevent unauthorized reuse. Other containers must be disposed of in a RCRA licensed facility.

HANDLING AND STORAGE..... Store materials to avoid sources of ignition and excessive heat.

PRECAUTIONARY MEASURES... Consult other sections of this MSDS for information on reactivity and flammability.

SECTION VIII - SPECIAL PROTECTION

RESPIRATORY PROTECTION... If vapors or mists are generated, wear a NIOSH/MSHA approved organic vapor/mist respirator.

VENTILATION..... Use local exhaust to control vapors/mists.

PROTECTIVE GLOVES..... Neoprene

EYE PROTECTION..... Chemical splash goggles, also wear a face shield if splashing hazard exists.

OTHER PROTECTIVE EQUIPMENT..... Gloves, coveralls, apron, and boots are necessary to prevent contact. Eyewash fountains and safety showers must be easily accessible. Shower after handling.

SECTION IX - SPECIAL PRECAUTIONS

HAZARD CLASS..... Poison

DOT SHIPPING NAME..... Trioglycol
UN-2966

REPORTABLE QUANTITY (RQ). N/A

UN NUMBER..... UN-2966

NA #..... N/A

PACKAGING SIZE..... 55 gallon drum

MATERIAL SAFETY DATA SHEET

IRONTRON (TM)

Superfund Title III (Superfund Amendments & Reauthorization Act of 1986) - Sections 302, 311, 312 and 313:

Section 302 - Extremely Hazardous Substances (40CFR355). This product does not contain ingredients listed in Appendix A and B as an Extremely Hazardous Substance.

Sections 311 & 312 - Material Safety Data Sheet Requirements (40CFR370): Our hazard evaluation has found this product to be hazardous. The product should be reported under the following EPA hazard categories:

- Immediate (acute) health hazard
- Delayed (chronic) health hazard
- Fire hazard
- Sudden release of pressure hazard
- Reactive hazard

Under Section 311, submittal of MSDS's or a list of product names to the local emergency planning commission, state emergency response commission & local fire department is required after October 17, 1989 for all hazardous substances.

Section 313 - List of Toxic Chemicals (40CFR372): This product contains the following ingredients, (with CAS# and % range) which appear on the List of Toxic Chemicals: None.

DISCLAIMER OF LIABILITY

Frac Tech warrants only title to the goods sold. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE GOODS SOLD, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF UTILITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. Frac Tech does not warrant: 1) that the goods sold or the use made thereof by the buyer will not infringe any intellectual property rights, including but not limited to, patents of any third party, and 2) that use of goods sold will not damage any subterranean formation which comes into contact with goods.

IT CATALYST (TM)

411040

2 NFPA HEALTH
 0 NFPA FLAMMABILITY
 1 NFPA REACTIVITY
 oxy-SPECIFIC HAZARD
 acid

SECTION I - IDENTIFICATION

COMPANY NAME..... FRAC TECH DIVISION, PLAINSMAN TECHNOLOGY, INC.
 P.O. BOX 357
 MARLOW, OK 73055
 (405)658-6608
 EMERGENCY PHONE NUMBER... (800)633-8253
 EFFECTIVE DATE..... March 11, 1994
 REVISED DATE..... N/A
 CHEMICAL NAME..... N/A
 TRADE NAME..... IT CATALYST (TM)
 CHEMICAL FAMILY..... Salt Solution

SECTION II - COMPONENTS

HAZARDOUS COMPONENTS	HAZARDOUS %	PEL/TLV	CAS #
Cupric Chloride	10-30%	PEL=1 mg/m ³ (CU) TLV-1 mg/m ³ (CU)	7447-39-4
Sodium Chloride	N/A	NE	N/A

SECTION III - PHYSICAL DATA

BILING Point (F)..... N/A
 REEZING POINT (F)..... -17°F
 OLATILITY/VOL (%)..... 68%
 ELTING POINT..... N/A
 APOR PRESSURE (mm Hg)... N/A
 APOR DENSITY (Air=1).... N/A
 OLUBILITY IN H2O..... Complete
 PPEARANCE/ODOR..... Green transparent liquid, slight hydrochloric odor.
 PECIFIC GRAVITY (H2O=1). 1.25
 VAPORATION RATE..... N/A
 H..... 2-4
 ENSITY..... 10.4 lbs/gal

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

LASH POINT..... N/A
 OWER FLAME LIMIT..... N/A
 IGHER FLAME LIMIT..... N/A
 XTINGUISH MEDIA..... Any suitable means to extinguish surrounding fire.
 OR FIRE..... Use special breathing equipment and protective clothing appropriate to the surrounding fire.

IT CATALYST (TM)

UNUSUAL FIRE HAZARD..... Not considered to be an explosion hazard. Reactions with incompatible materials may pose an explosion hazard.

SECTION V - HEALTH HAZARD DATA

ROUTES OF ENTRY	INHALATION? Yes	EYES? Yes	SKIN? Yes	INGESTION? Yes
HEALTH HAZARDS				
CARCINOGENICITY	NTP? No	IARC MONOGRAPHS? No	OSHA REGULATED No	

THRESHOLD LIMIT VALUE.... N/A

SYMPTOMS.....

OVER EXPOSURE EFFECTS.... Ingestion: May cause burning pain in the mouth, esophagus and stomach. Hemorrhagic gastritis, nausea, vomiting, abdominal pain, metallic taste and diarrhea may occur. If vomiting does not occur immediately systemic copper poisoning may occur. Symptoms may include capillary damage, headache, cold sweat, weak pulse, kidney and liver damage, central nervous excitation followed by depression, jaundice, convulsions, paralysis and coma. Death may occur from shock or renal failure. Inhalation: May cause irritation of the upper respiratory tract; symptoms may include coughing, sore throat, and shortness of breath. May also cause symptoms similar to the common cold, including chills and stuffiness of the head. Skin: May cause irritation, redness, and pain. Eyes: May cause irritation, redness, pain discoloration and damage. Chronic Exposure: Prolonged or repeated skin exposure may cause dermatitis. Prolonged or repeated exposure to dusts of copper salts may cause discoloration of the skin or hair, ulceration and perforation of the nasal septum, runny nose, metallic taste, and atrophic changes and irritation of the mucous membranes.

FIRST AID PROCEDURES..... Eyes: Immediately, flush with large amounts of water for at least 15 minutes while holding eyelids apart. Washing within one minute is essential to achieve maximum effectiveness. Get immediate medical attention after flushing. Skin: Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before reuse. If irritation should develop, get medical attention. Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician. Ingestion: Never give anything by mouth to an unconscious person. Induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Call a physician immediately. Notes to Physician: None

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-TANKA-07 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.07 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6868 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: SLUDGE Dilution: 1.0 Method Ref.: SW846-8270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6868
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/21/95

COMPOUND	REGULATORY LEVEL (ug/L) ±	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	105	Phenol-d5	375	(10-94)	89
2-Fluorobiphenyl	250	(43-116)	89	2-Fluorophenol	375	(21-100)	80
Terphenyl-d14	250	(33-141)	81	2,4,6-Tribromophenol	375	(10-123)	118

Method Blank ID: 2921S.MBLX1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLX1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000379

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-TANK8-08 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY POP Sample ID: 2921.08 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6872 Date Reported: 05/23/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: LIQUID Dilution: 2.0 Method Ref.: SW846-8270
 Multiplier Factor: 20000.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6872
 Sample Volume: 1 ml Date Extracted: 05/19/95 Analyst: RRP
 Extract Volume: 10.0 ml Date Analyzed: 05/22/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	200000	ND
2,4,5-Trichlorophenol	400000	200000	ND
2,4,6-Trichlorophenol	2000	200000	ND
2,4-Dinitrotoluene	130	200000	ND
2-Methylphenol	200000	200000	ND
4-Methylphenols	200000	200000	ND
Hexachlorobenzene	130	200000	ND
Hexachlorobutadiene	500	200000	ND
Hexachloroethane	3000	200000	ND
Nitrobenzene	2000	200000	ND
Pentachlorophenol	100000	500000	ND
Picridine	5000	200000	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	100000	(35-114)	192.0	Phenol-d5	150000	(10-94)	100.0
2-Fluorobiphenyl	100000	(43-116)	128.0	2-Fluorophenol	150000	(21-100)	93.0
Terphenyl-d14	100000	(33-141)	115.0	2,4,6-Tribromophenol	150000	(10-123)	122.0

Method Blank ID: 2921S.WBLK2 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.FBLK2 TCLP LCS ID: 2921S.TLCS2 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000352

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-TANK8-09 Date Sampled: 04/24/95
 Project Name: 8J/WESTERN COMPANY PDP Sample ID: 2921.09 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6834 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: SLUDGE Dilution: 1.0 Method Ref.: SM846-3270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6834
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/20/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	67	Phenol-d5	375	(10-94)	59
2-Fluorobiphenyl	250	(43-116)	64	2-Fluorophenol	375	(21-100)	53
Terphenyl-d14	250	(33-141)	93	2,4,6-Tribromophenol	375	(10-123)	45

Method Blank ID: 2921S.WBLX1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLX1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000355

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-TANKC-10 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.10 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6873 Date Reported: 05/23/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: LIQUID Dilution: 2.0 Method Ref.: SW846-8270
 Multiplying Factor: 20000.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6873
 Sample Volume: 1 ml Date Extracted: 05/19/95 Analyst: RRP
 Extract Volume: 10.0 ml Date Analyzed: 05/22/95

COMPOUND	REGULATORY LEVEL (ug/L) ±	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	200000	ND
2,4,5-Trichlorophenol	400000	200000	ND
2,4,6-Trichlorophenol	2000	200000	ND
2,4-Dinitrotoluene	130	200000	ND
2-Methylphenol	200000	200000	ND
3+4-Methylphenols	200000	200000	ND
Hexachlorobenzene	130	200000	ND
Hexachlorobutadiene	500	200000	ND
Hexachloroethane	3000	200000	ND
Nitrobenzene	2000	200000	ND
Pentachlorophenol	100000	500000	ND
Pyridine	5000	200000	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	100000	(35-114)	169 D	Phenol-d5	150000	(10-94)	99 D
2-Fluorobiphenyl	100000	(43-116)	129 D	2-Fluorophenol	150000	(21-100)	95 D
Terphenyl-d14	100000	(33-141)	125 D	2,4,6-Tribromophenol	150000	(10-123)	121 D

Method Blank ID: 2921S.WBLK2 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.FBLK2 TCLP LCS ID: 2921S.TLCS2 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000355

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-TANKC-11 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.11 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6835 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: SLUDGE Dilution: 1.0 Method Ref.: SW846-8270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6835
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/20/95

COMPOUND	REGULATORY LEVEL (ug/L) ±	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	72	Phenol-d5	375	(10-94)	60
2-Fluorobiphenyl	250	(43-116)	64	2-Fluorophenol	375	(21-100)	56
Terphenyl-d14	250	(33-141)	88	2,4,6-Tribromophenol	375	(10-123)	39

Method Blank ID: 2921S.MBLX1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLX1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

± Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000391

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-OUTSUMP-01 Date Sampled: 04-24-95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.01 Date Received: 04-26-95
 Project Number: 170R063214LA Report Number: I92101 Date Reported: 05-23-95

TCLP METALS (DATA SHEET)

Sample Matrix: SLUDGE Units: mg/L

ANALYTE	METHOD	DATE EXTRACTED	DATE PREPARED	DATE ANALYZED	QUANTITATION LIMIT	RESULT	ANALYST
Asenic	SW846-6010	05-10-95	05-18-95	05-22-95	1	ND	RB
Barium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	1.01	RB
Cadmium	SW846-6010	05-10-95	05-18-95	05-22-95	0.025	ND	RB
Chromium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB
Lead	SW846-6010	05-10-95	05-18-95	05-22-95	0.25	ND	RB
Mercury	SW846-7470	05-10-95	05-18-95	05-18-95	0.02	ND	CL
Selenium	SW846-6010	05-10-95	05-18-95	05-22-95	0.5	ND	RB
Silver	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB

QUALITY ASSURANCE/QUALITY CONTROL

ICP Method Blank ID: ICPB85 ICP LCS ID: ICPL85 ICP MS ID: 2921.04MS
 CV Method Blank ID: HG885 CVAA LCS ID: HGL85 CVAA MS ID: 2921.04MS
 ICP Extraction Blank ID: 2921.E1F1 ICP LCSD ID: ICPL85D ICP MSD ID: NA
 CLP Filtration Blank ID: 2921.FLT.8LX CVAA LCSD ID: HGL85D CVAA MSD ID: NA

000014

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-SANDTRAP-04 Date Sampled: 04-24-95
 Project Name: SJ/WESTERN COMPANY PDP Sample ID: 2921.04 Date Received: 04-26-95
 Project Number: 170R063214LA Report Number: I92104 Date Reported: 05-23-95

TCLP METALS (DATA SHEET)

Sample Matrix: SLUDGE Units: mg/L

ANALYTE	METHOD	DATE EXTRACTED	DATE PREPARED	DATE ANALYZED	QUANTITATION LIMIT	RESULT	ANALYST
Arsenic	SW846-6010	05-10-95	05-18-95	05-22-95	1	NO	RB
Barium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.580	RB
Cadmium	SW846-6010	05-10-95	05-18-95	05-22-95	0.025	NO	RB
Chromium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	NO	RB
Lead	SW846-6010	05-10-95	05-18-95	05-22-95	0.25	0.30	RB
Mercury	SW846-7470	05-10-95	05-18-95	05-18-95	0.02	NO	CL
Selenium	SW846-6010	05-10-95	05-18-95	05-22-95	0.5	NO	RB
Silver	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.051	RB

QUALITY ASSURANCE/QUALITY CONTROL

ICP Method Blank ID: ICP885 ICP LCS ID: ICPL85 ICP MS ID: 2921.04MS
 CVAA Method Blank ID: HG885 CVAA LCS ID: HGL85 CVAA MS ID: 2921.04MS
 ICP Extraction Blank ID: 2921.E1F1 ICP LCSD ID: ICPL85D ICP MSD ID: NA
 TCLP Filtration Blank ID: 2921.FLT.8LX CVAA LCSD ID: HGL85D CVAA MSD ID: NA

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: 8JWEST-SANDTRAP-04 Date Sampled: 04-24-95
 Project Name: 8J/WESTERN COMPANY POP Sample ID: 2921.04 (Dup) Date Received: 04-26-95
 Project Number: 170R063214LA Report Number: 1921040 Date Reported: 05-23-95

TCLP METALS (DATA SHEET)

Sample Matrix: SLUDGE

Units: ug/L

ANALYTE	METHOD	DATE EXTRACTED	DATE PREPARED	DATE ANALYZED	QUANTITATION LIMIT	RESULT	ANALYST
Arsenic	SW846-6010	05-10-95	05-18-95	05-22-95	1	ND	RB
Barium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.582	RB
Cadmium	SW846-6010	05-10-95	05-18-95	05-22-95	0.025	ND	RB
Chromium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.050	RB
Lead	SW846-6010	05-10-95	05-18-95	05-22-95	0.25	0.29	RB
Mercury	SW846-7470	05-10-95	05-18-95	05-18-95	0.001	ND	CL
Selenium	SW846-6010	05-10-95	05-18-95	05-22-95	0.5	ND	RB
Silver	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB

QUALITY ASSURANCE/QUALITY CONTROL

ICP Method Blank ID: ICP885 ICP LCS ID: ICPL85 ICP MS ID: 2921.04MS
 CVAA Method Blank ID: HG885 CVAA LCS ID: HGL85 CVAA MS ID: 2921.04MS
 ICP Extraction Blank ID: 2921.EIF1 ICP LCSD ID: ICPL85D ICP MSD ID: NA
 ICP Filtration Blank ID: 2921.FLT.BLK CVAA LCSD ID: HGL85D CVAA MSD ID: NA

000016
~~000000~~

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: 8JWEST-SANDTRAP-05 Date Sampled: 04-24-95
 Project Name: 8J/WESTERN COMPANY POP Sample ID: 2921.05 Date Received: 04-26-95
 Project Number: 170R063214LA Report Number: 192105 Date Reported: 05-23-95

TCLP METALS (DATA SHEET)

Sample Matrix: SLUDGE Units: mg/L

ANALYTE	METHOD	DATE EXTRACTED	DATE PREPARED	DATE ANALYZED	QUANTITATION LIMIT	RESULT	ANALYST
Arsenic	SW846-6010	05-10-95	05-18-95	05-22-95	1	ND	RB
Barium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.47	RB
Cadmium	SW846-6010	05-10-95	05-18-95	05-22-95	0.025	ND	RB
Chromium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB
Lead	SW846-6010	05-10-95	05-18-95	05-22-95	0.25	ND	RB
Mercury	SW846-7470	05-10-95	05-18-95	05-18-95	0.02	ND	CL
Selenium	SW846-6010	05-10-95	05-18-95	05-22-95	0.5	ND	RB
Silver	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB

QUALITY ASSURANCE/QUALITY CONTROL

ICP Method Blank ID: ICP885 ICP LCS ID: ICPL85 ICP MS ID: 2921.04MS
 CVAA Method Blank ID: HG885 CVAA LCS ID: HGL85 CVAA MS ID: 2921.04MS
 CLP Extraction Blank ID: 2921.E1F1 ICP LCSD ID: ICPL85D ICP MSD ID: NA
 CLP Filtration Blank ID: 2921.FLT.BLK CVAA LCSD ID: HGL85D CVAA MSD ID: NA

000017

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: 8JWEST-TANKA-07 Date Sampled: 04-24-95
 Project Name: 8J/WESTERN COMPANY POP Sample ID: 2921.07 Date Received: 04-26-95
 Project Number: 170R063214LA Report Number: 192107 Date Reported: 05-23-95

TCLP METALS (DATA SHEET)

Sample Matrix: SLUDGE Units: µg/L

ANALYTE	METHOD	DATE EXTRACTED	DATE PREPARED	DATE ANALYZED	QUANTITATION LIMIT	RESULT	ANALYST
Arsenic	SW846-6010	05-10-95	05-18-95	05-22-95	1	ND	RB
Barium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.671	RB
Cadmium	SW846-6010	05-10-95	05-18-95	05-22-95	0.025	ND	RB
Chromium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB
Lead	SW846-6010	05-10-95	05-18-95	05-22-95	0.25	ND	RB
Mercury	SW846-7470	05-10-95	05-18-95	05-18-95	0.02	ND	CL
Selenium	SW846-6010	05-10-95	05-18-95	05-22-95	0.5	ND	RB
Silver	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB

QUALITY ASSURANCE/QUALITY CONTROL

ICP Method Blank ID: ICP885 ICP LCS ID: ICPL85 ICP MS ID: 2921.04MS
 CVAA Method Blank ID: HG885 CVAA LCS ID: HGL85 CVAA MS ID: 2921.04MS
 ICP Extraction Blank ID: 2921.E1F1 ICP LCSD ID: ICPL85D ICP MSD ID: NA
 ICP Filtration Blank ID: 2921.FLT.BLK CVAA LCSD ID: HGL85D CVAA MSD ID: NA

000018

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: 8JWEST-TANK8-09 Date Sampled: 04-24-95
 Project Name: 8J/WESTERN COMPANY POP Sample ID: 2921.09 Date Received: 04-26-95
 Project Number: 170R063214LA Report Number: I92109 Date Reported: 05-23-95

TCLP METALS (DATA SHEET)

Sample Matrix: SLUDGE Units: mg/L

ANALYTE	METHOD	DATE EXTRACTED	DATE PREPARED	DATE ANALYZED	QUANTITATION LIMIT	RESULT	ANALYST
Arsenic	SW846-6010	05-10-95	05-18-95	05-22-95	1	ND	RB
Barium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.32	RB
Cadmium	SW846-6010	05-10-95	05-18-95	05-22-95	0.025	ND	RB
Chromium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB
Lead	SW846-6010	05-10-95	05-18-95	05-22-95	0.25	ND	RB
Mercury	SW846-7470	05-10-95	05-18-95	05-18-95	0.02	ND	CL
Selenium	SW846-6010	05-10-95	05-18-95	05-22-95	0.5	ND	RB
Silver	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB

QUALITY ASSURANCE/QUALITY CONTROL

ICP Method Blank ID: ICP885 ICP LCS ID: ICPL85 ICP MS ID: 2921.04MS
 AA Method Blank ID: HG885 CVAA LCS ID: HGL85 CVAA MS ID: 2921.04MS
 TCLP Extraction Blank ID: 2921.E1F1 ICP LCSD ID: ICPL85D ICP MSD ID: NA
 TCLP Filtration Blank ID: 2921.FLT.BLX CVAA LCSD ID: HGL85D CVAA MSD ID: NA

000019

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-TANKC-11 Date Sampled: 04-24-95
 Project Name: BJ/WESTERN COMPANY POP Sample ID: 2921.11 Date Received: 04-26-95
 Project Number: 170R063214LA Report Number: I92111 Date Reported: 05-23-95

TCLP METALS (DATA SHEET)

Sample Matrix: SLUDGE Units: mg/L

ANALYTE	METHOD	DATE EXTRACTED	DATE PREPARED	DATE ANALYZED	QUANTITATION LIMIT	RESULT	ANALYST
Arsenic	SW846-6010	05-10-95	05-18-95	05-22-95	1	ND	RB
Barium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	0.33	RB
Cadmium	SW846-6010	05-10-95	05-18-95	05-22-95	0.025	ND	RB
Chromium	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB
Lead	SW846-6010	05-10-95	05-18-95	05-22-95	0.25	ND	RB
Mercury	SW846-7470	05-10-95	05-18-95	05-18-95	0.02	ND	CL
Selenium	SW846-6010	05-10-95	05-18-95	05-22-95	0.5	ND	RB
Silver	SW846-6010	05-10-95	05-18-95	05-22-95	0.05	ND	RB

QUALITY ASSURANCE/QUALITY CONTROL

ICP Method Blank ID: ICP885 ICP LCS ID: ICPL85 ICP MS ID: 2921.04MS
 CVAA Method Blank ID: HG885 CVAA LCS ID: HGL85 CVAA MS ID: 2921.04MS
 TCLP Extraction Blank ID: 2921.E1F1 ICP LCS0 ID: ICPL85D ICP MSD ID: NA
 TCLP Filtration Blank ID: 2921.FLT.8LK CVAA LCS0 ID: HGL85D CVAA MSD ID: NA

GENERAL CHEMISTRY

000104

POP ANALYTICAL SERVICES
 1680 Lake Front Circle, Ste.3; Woodlands TX 77380; Phone (713)363-2233

LABORATORY REPORT

Client: PRC ENVIRONMENTAL
 Project Name: BJ/WESTERN COMPANY
 Project No: 170R063214LA

Date Reported: 05-23-95
 Report No: I921CORR
 Analyst: KW

WET CHEMISTRY PARAMETER: Corrosivity pH

Method Reference: SW-346 9040/9045

UNITS: NA

POP LABORATORY ID	CLIENT ID	MATRIX	DATE SAMPLED	DATE RECEIVED	DATE PREPARED	DATE ANALYZED	QUANT LIMIT	RESULT	SPIKE ADDED OR TRUE VALUE	RELATIVE PERCENT DIFF(20)	PERCENT RECOVERY (75-125)
2921.02	BJWEST-SANDTRAP-02	LIQUID	04-24-95	04-26-95	NA	05-22-95	NA	2.25			
2921.06	BJWEST-TANKA-06	LIQUID	04-24-95	04-26-95	NA	05-22-95	NA	2.26			
2921.07	BJWEST-TANKA-07	SLUDGE	04-24-95	04-26-95	NA	05-22-95	NA	2.90			
2921.14	BJWEST-DRUMOS-14	LIQUID	04-25-95	04-26-95	NA	05-22-95	NA	11.52			

QUALITY ASSURANCE/QUALITY CONTROL

LCS1	LAB CONTROL STD	NA	NA	NA	NA	05-22-95	NA	8.98	9.09		99
LCS2	LAB CONTROL STD	NA	NA	NA	NA	05-22-95	NA	8.99	9.09	0.1	99
2921.02	SAMPLE	NA	NA	NA	NA	05-22-95	NA	2.25			
2921.02D	DUPLICATE	NA	NA	NA	NA	05-22-95	NA	2.44		8.1	

00010.1A

LABORATORY REPORT

Client: PRC ENVIRONMENTAL
 Project Name: BJ/WESTERN COMPANY
 Project No: 170R063214LA

Date Reported: 05-23-95
 Report No: I921IGNA
 Analyst: KW

WET CHEMISTRY PARAMETER: Ignitability

Method Reference: SW-846 1010

UNITS: Degrees F

POP LABORATORY ID	CLIENT ID	MATRIX	DATE SAMPLED	DATE RECEIVED	DATE PREPARED	DATE ANALYZED	QUANT LIMIT	RESULT	SPIKE ADDED OR TRUE VALUE	RELATIVE PERCENT DIFF(20)	PERCENT RECOVERY (75-125)
2921.02	BJWEST-SANDTRAP-02	LIQUID	04-24-95	04-26-95	NA	05-19-95	>200	>200			
2921.06	BJWEST-TANKA-06	LIQUID	04-24-95	04-26-95	NA	05-19-95	>200	>200			
2921.08	BJWEST-TANKB-08	LIQUID	04-24-95	04-26-95	NA	05-19-95	>200	>200			
2921.10	BJWEST-TANKC-10	LIQUID	04-24-95	04-26-95	NA	05-19-95	>200	>200			
2921.12	BJWEST-DRUM02-12	LIQUID	04-25-95	04-26-95	NA	05-19-95	>200	182			
2921.13	BJWEST-DRUM03-13	LIQUID	04-25-95	04-26-95	NA	05-19-95	>200	165			

QUALITY ASSURANCE/QUALITY CONTROL

W	METHOD BLANK	NA	NA	NA	NA	05-19-95	>200	>200			
LCS1	LAB CONTROL STD	NA	NA	NA	NA	05-19-95	>200	84	84		100
LCS2	LAB CONTROL STD	NA	NA	NA	NA	05-19-95	>200	84.1	84	0.1	100
2921.02	SAMPLE	NA	NA	NA	NA	05-19-95	>200	>200			
2921.02D	DUPLICATE	NA	NA	NA	NA	05-19-95	>200	>200			NC

000105

LABORATORY REPORT

Client: PRC ENVIRONMENTAL
 Project Name: 8J/WESTERN COMPANY
 Project No: 170R063214LA

Date Reported: 05-23-95
 Report No: I921IGN8
 Analyst: KW

WET CHEMISTRY PARAMETER: Ignitability

Method Reference: SW-846 1010

UNITS: Degrees F

POP LABORATORY ID	CLIENT ID	MATRIX	DATE SAMPLED	DATE RECEIVED	DATE PREPARED	DATE ANALYZED	QUANT LIMIT	RESULT	SPIKE ADDED OR TRUE VALUE	RELATIVE PERCENT DIFF(20)	PERCENT RECOVERY (75-125)
2921.15	8JWEST-DRUM11-15	LIQUID	04-25-95	04-26-95	NA	05-22-95	>200	180			
2921.16	8JWEST-DRUM15-16	LIQUID	04-25-95	04-26-95	NA	05-22-95	>200	162			
2921.17	8JWEST-DRUM17-17	LIQUID	04-25-95	04-26-95	NA	05-22-95	>200	155			
2921.18	8JWEST-DRUM27-18	LIQUID	04-25-95	04-26-95	NA	05-22-95	>200	<75.0			

QUALITY ASSURANCE/QUALITY CONTROL

PBW	METHOD BLANK	NA	NA	NA	NA	05-22-95	>200	>200			
LCS1	LAB CONTROL STD	NA	NA	NA	NA	05-22-95	>200	85	84		101
LCS2	LAB CONTROL STD	NA	NA	NA	NA	05-22-95	>200	84	84	1.2	100
2922.01	SAMPLE	NA	NA	NA	NA	05-22-95	>200	100			
2922.010	DUPLICATE	NA	NA	NA	NA	05-22-95	>200	98		2.0	

000106

SPECIFIC GRAVITY

000011



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-258-5591
Fax. 214-258-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-1

REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Sludge
ID MARKS : 2921.01
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	1.74
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000012



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-2
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.02
DATE SAMPLED : 26-APR-1995

Sand Trap - 02

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.883
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000013



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-3
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Sludge
ID MARKS : 2921.04
DATE SAMPLED : 26-APR-1995

Sand Trap - 04

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	1.97
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000014



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-4
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.06
DATE SAMPLED : 26-APR-1995

Table A.06

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.986
Analyzed using ASTM 01429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000015



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-5
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Sludge
ID MARKS : 2921.07
DATE SAMPLED : 26-APR-1995

Track A-071

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C /1		0.999
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-6
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.08
DATE SAMPLED : 26-APR-1995

Tank B-09

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.859
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000017



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-7

REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Sludge
ID MARKS : 2921.09
DATE SAMPLED : 26-APR-1995

Tank B-07

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.997
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000015



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-8
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.10
DATE SAMPLED : 26-APR-1995

Tank C-10

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.860
Analyzed using ASTM 01429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000019



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-9
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Sludge
ID MARKS : 2921.11
DATE SAMPLED : 26-APR-1995

Tank C-11

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.929
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000020



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-10

REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.12
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.839
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005A		

000021



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-258-5591
Fax. 214-258-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-11
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.13
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.836
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 4050058		

000022



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-258-5591
Fax. 214-258-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-12

REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.14
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	1.34
Analyzed using ASTM 01429 on 2-MAY-1995 by RJS QC Batch No : 4050058		

000023



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-258-5591
Fax. 214-258-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-13
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.15
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.909
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 405005B		

000024



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-14

REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.16
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.811
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 4050058		

000025



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-15
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.17
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.821
Analyzed using ASTM D1429 on 2-MAY-1995 by RJS QC Batch No : 4050058		

000026



Inchcape Testing Services

Environmental Laboratories

1089 E. Collins Blvd.
Richardson, TX 75081
Tel. 214-238-5591
Fax. 214-238-5592

DATE RECEIVED : 28-APR-1995

REPORT NUMBER : D95-3910-16
REPORT DATE : 2-MAY-1995

SAMPLE SUBMITTED BY : PDP Analytical Services
ADDRESS : 1680 Lake Front Circle
: Woodlands, TX 77380
ATTENTION : Mr. Mark Bourgeois

SAMPLE MATRIX : Liquid
ID MARKS : 2921.18
DATE SAMPLED : 26-APR-1995

MISCELLANEOUS ANALYSES		
TEST REQUESTED	DETECTION LIMIT	RESULTS
Specific Gravity at 25 C	/1	0.847
Analyzed using ASTM 01429 on 2-MAY-1995 by RJS QC Batch No : 4050058		

000027

ATTACHMENT B

**TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) ANALYSIS
OF SLUDGE FROM SAND TRAP TANK, CONDUCTED BY BJ WESTERN**

(Two Sheets)



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TEXAS 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NEW MEXICO 88240

TCLP ANALYSIS REPORT

Company: Western Company of North America Date: 4/21/94
Address: 2708 W. County Rd. Lab # H1600-1
City, State: Hobbs, NM 88240

Project Name: not supplied
Project Location: n/s
Sampled by: JF
Type of Sample: Soil/Sludge

Date: 4/5/94
Sample Condition: GST

Sample ID: Sand Trap

TCLP ORGANICS

<u>PARAMETER</u>	<u>RESULT</u>	<u>UNITS</u>
Benzene	<0.025	mg/L
Carbon Tetrachloride	<0.025	mg/L
Chlorobenzene	<0.025	mg/L
Chloroform	<0.025	mg/L
1,4-Dichlorobenzene	<0.025	mg/L
1,2-Dichloroethane	<0.025	mg/L
1,1-Dichloroethene	<0.025	mg/L
2,4-Dinitrotoluene	<0.020	mg/L
Hexachlorobenzene	<0.020	mg/L
Hexachlorobutadiene	<0.020	mg/L
Hexachloroethane	<0.020	mg/L
Nitrobenzene	<0.020	mg/L
Pentachlorophenol	<0.100	mg/L
Tetrachloroethylene	<0.025	mg/L
Trichloroethylene	<0.025	mg/L
2,4,5-Trichlorophenol	<0.020	mg/L
2,4,6-Trichlorophenol	<0.020	mg/L
Vinyl Chloride	<0.050	mg/L
Cresol (O,M,P)	<0.020	mg/L
Methy Ethyl Ketone	<0.050	mg/L
Pyridine	<0.020	mg/L



TCLP ANALYSIS REPORT

Company: Western Company of North America Date: 4/21/94
Address: 2708 W. County Rd. Lab#: H1600-1
City, State: Hobbs, NM 88240

Project Name: not supplied
Project Location: n/s
Sampled by: JF Date: 4/5/94
Type of Sample: Soil/Sludge Sample Condition: GST

Sample ID: Sand Trap

TCLP INORGANICS (Leachate)

<u>PARAMETER</u>	<u>RESULT</u>	<u>UNITS</u>
Arsenic	0.013	mg/L
Barium	0.45	mg/L
Cadmium	<0.005	mg/L
Chromium	<0.05	mg/L
Lead	<0.1	mg/L
Mercury	<0.0005	mg/L
Selenium	<0.002	mg/L
Silver	0.059	mg/L

HAZARDOUS WASTE CHARACTERIZATION

<u>PARAMETER</u>	<u>RESULT</u>	<u>UNITS</u>
Ignitability (Pensky-Martens Closed Cup)	>140 Degrees	F
Corrosivity, (pH)	6.47	
Reactivity-S	No Reaction (<0.01)	mg/kg
Reactivity-CN	No Reaction (<0.01)	mg/kg

METHODS: TCLP ORGANICS - EPA 8240/8270
METHODS: TCLP INORGANICS (Leachate) - EPA 1311/3005/7000
METHODS: HWC - EPA SW 846

Michael R. Fowler
Michael R. Fowler

4-21-94
Date

ATTACHMENT C
SAFETY-KLEEN SOLVENT RECYCLING MANIFESTS
(Two Sheets)



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

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NMD 052377637		Manifest Document No. 16159		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.							
		3. Generator's Name and Mailing Address WESTERN CO OF N AMER 2708 W COUNTY RD HOBBS NM 88240 Generator's Phone (505) 392-5556						A. State Manifest Document Number 1081115		B. State Generator's ID 99935					
5. Transporter 1 Company Name SAFETY-KLEEN CORP.		6. US EPA ID Number ILD 984908202		C. State Transporter's ID 72078		D. Transporter's Phone 915 563-2305		E. State Transporter's ID		F. Transporter's Phone					
7. Transporter 2 Company Name		8. US EPA ID Number		G. State Facility's ID 72078		H. Facility's Phone 915 563-2305									
9. Designated Facility Name and Site Address SAFETY-KLEEN CORP. 10607 W C R 127 MIDLAND, TX 79711		10. US EPA ID Number TXD 981056690													
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)						12. Containers		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.			
						No.		Type							
a. X WASTE COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGI II (D001) (D006, D008, D018, D035, D039, D040) (ERG#27)						1		DF		4		G		OUTS203H	
b. X RQ WASTE COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGI II (D001) (D006, D008, D018, D035, D039, D040) (ERG#27)						3		DM		60		G		OUTS203H	
c.															
d.															
J. Additional Descriptions for Materials Listed Above I (A) D001 D039 (A) D018, D006, D008, D035, D040 I (B) D001 D039 (B) D018, D006, D008, D035, D040						K. Handling Codes for Wastes Listed Above (A) M125-BULKING (B) M125-BULKING									
15. Special Handling Instructions and Additional Information FOR RECYCLE EMERGENCY RESP#1-708-888-4660 24HR SKDDT# A: 501 B: 585 C: D: 9515 79942686 116159 6-002-02-8028 02															
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.															
Printed/Typed Name LARRY BROWER						Signature <i>Larry Brower</i>			Date 4 11 95						
17. Transporter 1 Acknowledgement of Receipt of Materials															
Printed/Typed Name ISAC FUENTEZ						Signature <i>Isac Fuentez</i>			Date 4 11 95						
18. Transporter 2 Acknowledgement of Receipt of Materials															
Printed/Typed Name						Signature			Date						
19. Discrepancy Indication Space Line 20 - date should read 4-12-95 (JA) 4-13-95															
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.															
Printed/Typed Name Tammy Frederick						Signature <i>Tammy Frederick</i>			Date 4 11 95						



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

Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NM0052377637	Manifest Document No. 16030		2. Page 1 of 1	Information in the shaded areas is not required by Federal law.		
3. Generator's Name and Mailing Address WESTERN CO OF N AMER 2708 W COUNTY RD HOBBS NM 88240					A. State Manifest Document Number 1057486			
4. Generator's Phone (505) 392-5556					B. State Generator's ID 99935			
5. Transporter 1 Company Name SAFETY-KLEEN CORP.			6. US EPA ID Number ILD 984908202		C. State Transporter's ID 72078			
7. Transporter 2 Company Name			8. US EPA ID Number		D. Transporter's Phone 915-563-2305			
9. Designated Facility Name and Site Address SAFETY-KLEEN CORP. 10607 W C R 127 MIDLAND, TX 79711			10. US EPA ID Number TXD 981056690		E. State Facility's ID 72078			
					F. Facility's Phone 915 563-2305			
GENERATOR	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.		
	a.	X WASTE COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGI(III)(D001) (D006, D008, D018, D035, D039, D040) (ERG#27)	1	DF	4	G	OUTS203H	
	b.	X RQ WASTE COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGI(III)(D001) (D006, D008, D018, D035, D039, D040) (ERG#27)	3	DM	57	G	OUTS203H	
	c.							
	d.							
J. Additional Descriptions for Materials Listed Above I(A) D001 D039 (A) D018, D006, D008, D035, D040 I(B) D001 D039 (B) D018, D006, D008, D035, D040					K. Handling Codes for Wastes Listed Above (A) M125-BULKING (B) M125-BULKING			
15. Special Handling Instructions and Additional Information 9511 78832896 416080 6-002-02-8028 02 FOR RECYCLE EMERGENCY RESP#1-708-888-4660 24HR SKDOT# A: 501 B: 585 C: D:								
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.								
Printed/Typed Name Ed D. Young					Signature <i>Ed Young</i>		Date 3/15/95	
TRANSPORTER	17. Transporter 1 Acknowledgement of Receipt of Materials							
	Printed/Typed Name ISAC FUENTER					Signature <i>Isaac Fuenter</i>		Date 3/15/95
	18. Transporter 2 Acknowledgement of Receipt of Materials					Signature		Date
Printed/Typed Name					Signature		Month Day Year	
FACILITY	19. Discrepancy Indication Space							
	20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name Tammy Frederick					Signature <i>Tammy Frederick</i>		Date 3/15/95	

ATTACHMENT D

ANALYTICAL DATA FROM SAMPLES COLLECTED DURING THE INSPECTION

(68 Sheets)

POP ANALYTICAL SERVICES
SAMPLE LOG-IN SHEET

LOGGED BY: KENNIFER CUSHMAN

DATE OF PHYSICAL LOG-IN: 4/25/95

Page 1 of 1

Episode #: 2921
Client ID: PRC ENVIRONMENTAL
Project ID: SJ/WESTERN COMPANY
Project #: 170R063214LA
PO Number:
Courier/No.: PED-22/3911763122

DATE OF COMPUTER LOG-IN: 17-Apr-95
COMPUTER LOG-IN BY: JC
COMPUTER ID: NET

Lab ID	Client ID	Testing Required	No. Cont.	Sample Matrix	Date Sampled	Date Received	Date Due	Remarks
2921.01	SJWEST-OUTSUMP-01	TOTAL TOA TCLP TOA TCLP SVOA TCLP METALS SPECIFIC GRAVITY (SUB TO HDRC)	5	SLUDGE	4/24/95	4/25/95	5/26/95	He
2921.02	SJWEST-SANDTRAP-02	TOTAL TOA TCLP TOA TCLP SVOA IGNITE CORROSIVITY SPECIFIC GRAVITY	12	LIQUID	4/24/95	4/25/95	**MS/MSD	
2921.03	SJWEST-SANDTRAP-03	TOTAL TOA TCLP TOA TCLP SVOA	5	LIQUID	4/24/95	4/26/95		
2921.04	SJWEST-SANDTRAP-04	TOTAL TOA TCLP TOA TCLP SVOA TCLP METALS SPECIFIC GRAVITY	12	SLUDGE	4/24/95	4/26/95	**MS/MSD	
2921.05	SJWEST-SANDTRAP-05	TOTAL TOA TCLP TOA TCLP SVOA TCLP METALS	6	SLUDGE	4/24/95	4/26/95		
2921.06	SJWEST-TANKA-06	TOTAL TOA TCLP TOA TCLP SVOA IGNITE CORROSIVITY SPECIFIC GRAVITY	7	LIQUID	4/24/95	4/26/95		

MS/MSD BY CLIENT'S REQUEST

Weight basis: wet dry

CAUTION!! SAMPLES ARE HAZY!!!

Deliverables: hard CLP-like CLP

SPECIFIC GRAVITY SUBBED TO HDRC

 raw data electronic

APPROVED BY/DATE: *MC* 4/25/95

SEND REPORT TO:

MARK BUTLER

000006

PDP ANALYTICAL SERVICES
SAMPLE LOG-IN SHEET

LOGGED BY: JENNIFER CUSHMAN

DATE OF PHYSICAL LOG-IN: 4/26/95

Page 1 of 1

Episode #: _____

DATE OF COMPUTER LOG-IN: 27-Apr-95

Client ID: _____

COMPUTER LOG-IN BY: JC

Project ID: SAME AS FIRST

COMPUTER ID: NET

Project #: _____

PO Number: _____

Courier/No.: _____

Lab ID	Client ID	Testing Required	No. Cont.	Sample Matrix	Date Sampled	Date Received	Date Due	Remarks
2921.07	BJWEST-TANKA-07	TOTAL VOA TCLP VOA TCLP SVOA TCLP METALS CORROSIVITY SPECIFIC GRAVITY	7	SLUDGE	4/24/95	4/26/95		
2921.08	BJWEST-TANKB-08	TOTAL VOA TCLP VOA TCLP SVOA IGNITE SPECIFIC GRAVITY	6	LIQUID	4/24/95	4/26/95		
2921.09	BJWEST-TANKB-09	TOTAL VOA TCLP VOA TCLP SVOA TCLP METALS SPECIFIC GRAVITY	6	SLUDGE	4/24/95	4/26/95		
2921.10	BJWEST-TANKC-10	TOTAL VOA TCLP VOA TCLP SVOA IGNITE SPECIFIC GRAVITY	6	LIQUID	4/24/95	4/26/95		
2921.11	BJWEST-TANKC-11	TOTAL VOA TCLP VOA TCLP SVOA TCLP METALS SPECIFIC GRAVITY	6	SLUDGE	4/24/95	4/26/95		
2921.12	BJWEST-DRUM02-12	IGNITE SPECIFIC GRAVITY	1	LIQUID	4/25/95	4/26/95		
2921.13	BJWEST-DRUM03-13	SAME AS ABOVE	1	LIQUID	4/25/95	4/26/95		
2921.14	BJWEST-DRUM05-14	CORROSIVITY SPECIFIC GRAVITY	1	LIQUID	4/25/95	4/26/95		
2921.15	BJWEST-DRUM11-15	IGNITE SPECIFIC GRAVITY	1	LIQUID	4/25/95	4/26/95		
2921.16	BJWEST-DRUM15-16	SAME AS ABOVE	1	LIQUID	4/25/95	4/26/95		

Weight basis: wet dry

SAME AS FIRST

Deliverables: none CLP-like COP

raw data electronic

APPROVED BY/DATE: *A/C 4/26/95*

SEND REPORT TO:

000007

POP ANALYTICAL SERVICES
SAMPLE LOG-IN SHEET

LOGGED BY: JENNIFER CUSHMAN

DATE OF PHYSICAL LOG-IN:

Page 1 of 1

Episode #:

DATE OF COMPUTER LOG-IN: 27-Apr-95

Client ID:

COMPUTER LOG-IN BY:

Project ID: SAME AS FIRST

COMPUTER ID:

Project #:

PO Number:

Courier/No.:

Lab ID	Client ID	Testing required	No. Cont.	Sample Matrix	Date Sampled	Date Received	Date Due	Remarks
1921.17	BJWEST-OROM17-17	IGNITE SPECIFIC GRAVITY	1	LIQUID	4/25/95	4/26/95		
1921.18	BJWEST-OROM27-18	SAME AS ABOVE	1	LIQUID	4/25/95	4/26/95		

SAME AS FIRST

Weight basis: wet dry

Deliverables: hard CDP-like CDP

raw data electronic

APPROVED BY/DATE: *JAC 4/26/95*

SEND REPORT TO:

000008

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OUTSUMP-01

Lab Name: PDP ANALYTICAL

Contract: _____

Lab Code: _____

Case No.: PRC

SAS No.: _____

SDG No.: 2921

Matrix: (soil/water) SOIL

Lab Sample ID: 2921_01

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: E3103

Level: (low/med) MED

Date Received: 04/26/95

Moisture: not dec. 0

Date Analyzed: 05/15/95

Column: (pack/cap) CAP

Dilution Factor: 5000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	-----Chloromethane	6200000	U
74-83-9	-----Bromomethane	6200000	U
75-01-4	-----Vinyl Chloride	6200000	U
75-00-3	-----Chloroethane	6200000	U
75-09-2	-----Methylene Chloride	3100000	U
67-64-1	-----Acetone	6200000	U
75-15-0	-----Carbon Disulfide	3100000	U
75-35-4	-----1,1-Dichloroethene	3100000	U
75-34-3	-----1,1-Dichloroethane	3100000	U
540-59-0	-----1,2-Dichloroethene (total)	3100000	U
67-66-3	-----Chloroform	3100000	U
107-06-2	-----1,2-Dichloroethane	3100000	U
78-93-3	-----2-Butanone	6200000	U
71-55-6	-----1,1,1-Trichloroethane	3100000	U
56-23-5	-----Carbon Tetrachloride	3100000	U
108-05-4	-----Vinyl Acetate	6200000	U
75-27-4	-----Bromodichloromethane	3100000	U
78-87-5	-----1,2-Dichloropropane	3100000	U
10061-01-5	-----cis-1,3-Dichloropropene	3100000	U
10061-02-6	-----Trans-1,3-Dichloropropene	3100000	U
79-01-6	-----Trichloroethene	3100000	U
124-48-1	-----Dibromochloromethane	3100000	U
79-00-5	-----1,1,2-Trichloroethane	3100000	U
71-43-2	-----Benzene	3100000	U
10061-01-5	-----cis-1,3-Dichloropropene	3100000	U
10061-02-6	-----trans-1,3-Dichloropropene	3100000	U
75-25-2	-----Bromoform	3100000	U
108-10-1	-----4-Methyl-2-Pentanone	6200000	U
591-78-6	-----2-Hexanone	6200000	U
127-18-4	-----Tetrachloroethene	3100000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	3100000	U
108-88-3	-----Toluene	3700000	U
108-90-7	-----Chlorobenzene	3100000	U
100-41-4	-----Ethylbenzene	13000000	U
100-42-5	-----Styrene	3100000	U
1330-20-7	-----Xylene (total)	98000000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OUTSUMP-01RE

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921 01RE

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3104

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. 0 Date Analyzed: 05/16/95

Column: (pack/cap) CAP Dilution Factor: 5000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO. COMPOUND Q

74-87-3-----	Chloromethane	6200000	U
74-83-9-----	Bromomethane	6200000	U
75-01-4-----	Vinyl Chloride	6200000	U
75-00-3-----	Chloroethane	6200000	U
75-09-2-----	Methylene Chloride	3100000	U
67-64-1-----	Acetone	6200000	U
75-15-0-----	Carbon Disulfide	3100000	U
75-35-4-----	1,1-Dichloroethene	3100000	U
75-34-3-----	1,1-Dichloroethane	3100000	U
540-59-0-----	1,2-Dichloroethene (total)	3100000	U
67-66-3-----	Chloroform	3100000	U
107-06-2-----	1,2-Dichloroethane	3100000	U
78-93-3-----	2-Butanone	6200000	U
71-55-6-----	1,1,1-Trichloroethane	3100000	U
56-23-5-----	Carbon Tetrachloride	3100000	U
108-05-4-----	Vinyl Acetate	6200000	U
75-27-4-----	Bromodichloromethane	3100000	U
78-87-5-----	1,2-Dichloropropane	3100000	U
10061-01-5-----	cis-1,3-Dichloropropene	3100000	U
10061-02-6-----	Trans-1,3-Dichloropropene	3100000	U
79-01-6-----	Trichloroethene	3100000	U
124-48-1-----	Dibromochloromethane	3100000	U
79-00-5-----	1,1,2-Trichloroethane	3100000	U
71-43-2-----	Benzene	3100000	U
10061-01-5-----	cis-1,3-Dichloropropene	3100000	U
10061-02-6-----	trans-1,3-Dichloropropene	3100000	U
75-25-2-----	Bromoform	3100000	U
108-10-1-----	4-Methyl-2-Pentanone	6200000	U
591-78-6-----	2-Hexanone	6200000	U
127-18-4-----	Tetrachloroethene	3100000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	3100000	U
108-88-3-----	Toluene	4400000	U
108-90-7-----	Chlorobenzene	3100000	U
100-41-4-----	Ethylbenzene	13000000	U
100-42-5-----	Styrene	3100000	U
1330-20-7-----	Xylene (total)	100000000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SANDTRAP-02

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921 02

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3082

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. 0 Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	-----Chloromethane	12000	U
74-83-9	-----Bromomethane	12000	U
75-01-4	-----Vinyl Chloride	12000	U
75-00-3	-----Chloroethane	12000	U
75-09-2	-----Methylene Chloride	6200	U
67-64-1	-----Acetone	12000	U
75-15-0	-----Carbon Disulfide	6200	U
75-35-4	-----1,1-Dichloroethene	6200	U
75-34-3	-----1,1-Dichloroethane	6200	U
540-59-0	-----1,2-Dichloroethene (total)	6200	U
67-66-3	-----Chloroform	6200	U
107-06-2	-----1,2-Dichloroethane	6200	U
78-93-3	-----2-Butanone	12000	U
71-55-6	-----1,1,1-Trichloroethane	6200	U
56-23-5	-----Carbon Tetrachloride	6200	U
108-05-4	-----Vinyl Acetate	12000	U
75-27-4	-----Bromodichloromethane	6200	U
78-87-5	-----1,2-Dichloropropane	6200	U
10061-01-5	-----cis-1,3-Dichloropropene	6200	U
10061-02-6	-----Trans-1,3-Dichloropropene	6200	U
79-01-6	-----Trichloroethene	6200	U
124-48-1	-----Dibromochloromethane	6200	U
79-00-5	-----1,1,2-Trichloroethane	6200	U
71-43-2	-----Benzene	6200	U
10061-01-5	-----cis-1,3-Dichloropropene	6200	U
10061-02-6	-----trans-1,3-Dichloropropene	6200	U
75-25-2	-----Bromoform	6200	U
108-10-1	-----4-Methyl-2-Pentanone	12000	U
591-78-6	-----2-Hexanone	12000	U
127-18-4	-----Tetrachloroethene	6200	U
79-34-5	-----1,1,2,2-Tetrachloroethane	6200	U
108-88-3	-----Toluene	19000	U
108-90-7	-----Chlorobenzene	6200	U
100-41-4	-----Ethylbenzene	20000	U
100-42-5	-----Styrene	6200	U
1330-20-7	-----Xylene (total)	150000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SANDTRAP-03

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921_03

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3088

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. 0 Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	Chloromethane	12000	U
74-83-9	Bromomethane	12000	U
75-01-4	Vinyl Chloride	12000	U
75-00-3	Chloroethane	12000	U
75-09-2	Methylene Chloride	6200	U
67-64-1	Acetone	12000	U
75-15-0	Carbon Disulfide	6200	U
75-35-4	1,1-Dichloroethene	6200	U
75-34-3	1,1-Dichloroethane	6200	U
540-59-0	1,2-Dichloroethene (total)	6200	U
67-66-3	Chloroform	6200	U
107-06-2	1,2-Dichloroethane	6200	U
78-93-3	2-Butanone	12000	U
71-55-6	1,1,1-Trichloroethane	6200	U
56-23-5	Carbon Tetrachloride	6200	U
108-05-4	Vinyl Acetate	12000	U
75-27-4	Bromodichloromethane	6200	U
78-87-5	1,2-Dichloropropane	6200	U
10061-01-5	cis-1,3-Dichloropropene	6200	U
10061-02-6	Trans-1,3-Dichloropropene	6200	U
79-01-6	Trichloroethene	6200	U
124-48-1	Dibromochloromethane	6200	U
79-00-5	1,1,2-Trichloroethane	6200	U
71-43-2	Benzene	6200	U
10061-01-5	cis-1,3-Dichloropropene	6200	U
10061-02-6	trans-1,3-Dichloropropene	6200	U
75-25-2	Bromoform	6200	U
108-10-1	4-Methyl-2-Pentanone	12000	U
591-78-6	2-Hexanone	12000	U
127-18-4	Tetrachloroethene	6200	U
79-34-5	1,1,2,2-Tetrachloroethane	6200	U
108-88-3	Toluene	19000	U
108-90-7	Chlorobenzene	6200	U
100-41-4	Ethylbenzene	20000	U
100-42-5	Styrene	6200	U
1330-20-7	Xylene (total)	150000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SANDTRAP-04

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921_04

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3069

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. 0 Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	-----Chloromethane	25000	U
74-83-9	-----Bromomethane	25000	U
75-01-4	-----Vinyl Chloride	25000	U
75-00-3	-----Chloroethane	25000	U
75-09-2	-----Methylene Chloride	12000	U
67-64-1	-----Acetone	25000	U
75-15-0	-----Carbon Disulfide	12000	U
75-35-4	-----1,1-Dichloroethene	12000	U
75-34-3	-----1,1-Dichloroethane	12000	U
540-59-0	-----1,2-Dichloroethene (total)	12000	U
67-66-3	-----Chloroform	12000	U
107-06-2	-----1,2-Dichloroethane	12000	U
78-93-3	-----2-Butanone	25000	U
71-55-6	-----1,1,1-Trichloroethane	12000	U
56-23-5	-----Carbon Tetrachloride	12000	U
108-05-4	-----Vinyl Acetate	25000	U
75-27-4	-----Bromodichloromethane	12000	U
78-87-5	-----1,2-Dichloropropane	12000	U
10061-01-5	-----cis-1,3-Dichloropropene	12000	U
10061-02-6	-----Trans-1,3-Dichloropropene	12000	U
79-01-6	-----Trichloroethene	12000	U
124-48-1	-----Dibromochloromethane	12000	U
79-00-5	-----1,1,2-Trichloroethane	12000	U
71-43-2	-----Benzene	12000	U
10061-01-5	-----cis-1,3-Dichloropropene	12000	U
10061-02-6	-----trans-1,3-Dichloropropene	12000	U
75-25-2	-----Bromoform	12000	U
108-10-1	-----4-Methyl-2-Pentanone	25000	U
591-78-6	-----2-Hexanone	25000	U
127-18-4	-----Tetrachloroethene	12000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	12000	U
108-88-3	-----Toluene	12000	U
108-90-7	-----Chlorobenzene	12000	U
100-41-4	-----Ethylbenzene	37000	U
100-42-5	-----Styrene	12000	U
1330-20-7	-----Xylene (total)	230000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SANDTRAP-05

Lab Name: PDP ANALYTICAL

Contract: _____

Lab Code: _____

Case No.: PRC

SAS No.: _____

SDG No.: 2921

Matrix: (soil/water) SOIL

Lab Sample ID: 2921_05

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: E3089

Level: (low/med) MED

Date Received: 04/26/95

% Moisture: not dec. 0

Date Analyzed: 05/15/95

Column: (pack/cap) CAP

Dilution Factor: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.

COMPOUND

Q

74-87-3	-----Chloromethane	12000	U
74-83-9	-----Bromomethane	12000	U
75-01-4	-----Vinyl Chloride	12000	U
75-00-3	-----Chloroethane	12000	U
75-09-2	-----Methylene Chloride	6200	U
67-64-1	-----Acetone	12000	U
75-15-0	-----Carbon Disulfide	6200	U
75-35-4	-----1,1-Dichloroethene	6200	U
75-34-3	-----1,1-Dichloroethane	6200	U
540-59-0	-----1,2-Dichloroethene (total)	6200	U
67-66-3	-----Chloroform	6200	U
107-06-2	-----1,2-Dichloroethane	6200	U
78-93-3	-----2-Butanone	12000	U
71-55-6	-----1,1,1-Trichloroethane	6200	U
56-23-5	-----Carbon Tetrachloride	6200	U
108-05-4	-----Vinyl Acetate	12000	U
75-27-4	-----Bromodichloromethane	6200	U
78-87-5	-----1,2-Dichloropropane	6200	U
10061-01-5	-----cis-1,3-Dichloropropene	6200	U
10061-02-6	-----Trans-1,3-Dichloropropene	6200	U
79-01-6	-----Trichloroethene	6200	U
124-48-1	-----Dibromochloromethane	6200	U
79-00-5	-----1,1,2-Trichloroethane	6200	U
71-43-2	-----Benzene	6200	U
10061-01-5	-----cis-1,3-Dichloropropene	6200	U
10061-02-6	-----trans-1,3-Dichloropropene	6200	U
75-25-2	-----Bromoform	6200	U
108-10-1	-----4-Methyl-2-Pentanone	12000	U
591-78-6	-----2-Hexanone	12000	U
127-18-4	-----Tetrachloroethene	6200	U
79-34-5	-----1,1,2,2-Tetrachloroethane	6200	U
108-88-3	-----Toluene	8700	U
108-90-7	-----Chlorobenzene	6200	U
100-41-4	-----Ethylbenzene	21000	U
100-42-5	-----Styrene	6200	U
1330-20-7	-----Xylene (total)	140000	U

FORM I VOA

00059

1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKA-06

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) WATER Lab Sample ID: 2921_06

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E3093

Level: (low/med) LOW Date Received: 04/26/95

% Moisture: not dec. _____ Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 2500

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	25000	P
74-83-9	Bromomethane	25000	DD
75-01-4	Vinyl Chloride	25000	UU
75-00-3	Chloroethane	25000	UU
75-09-2	Methylene Chloride	12000	UU
67-64-1	Acetone	25000	UU
75-15-0	Carbon Disulfide	12000	UU
75-35-4	1,1-Dichloroethene	12000	UU
75-34-3	1,1-Dichloroethane	12000	UU
540-59-0	1,2-Dichloroethene (total)	12000	UU
67-66-3	Chloroform	12000	UU
107-06-2	1,2-Dichloroethane	12000	DD
78-93-3	2-Butanone	25000	UU
71-55-6	1,1,1-Trichloroethane	12000	UU
56-23-5	Carbon Tetrachloride	12000	UU
108-05-4	Vinyl Acetate	25000	UU
75-27-4	Bromodichloromethane	12000	UU
78-87-5	1,2-Dichloropropane	12000	UU
10061-01-5	cis-1,3-Dichloropropene	12000	UU
10061-02-6	Trans-1,3-Dichloropropene	12000	UU
79-01-6	Trichloroethene	12000	UU
124-48-1	Dibromochloromethane	12000	DD
79-00-5	1,1,2-Trichloroethane	12000	DD
71-43-2	Benzene	12000	DD
10061-01-5	cis-1,3-Dichloropropene	12000	DD
10061-02-6	trans-1,3-Dichloropropene	12000	DD
75-25-2	Bromoform	12000	DD
108-10-1	4-Methyl-2-Pentanone	25000	DD
591-78-6	2-Hexanone	25000	DD
127-18-4	Tetrachloroethene	12000	DD
79-34-5	1,1,2,2-Tetrachloroethane	12000	DD
108-88-3	Toluene	12000	DD
108-90-7	Chlorobenzene	12000	DD
100-41-4	Ethylbenzene	33000	DD
100-42-5	Styrene	12000	DD
1330-20-7	Xylene (total)	350000	DD

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKA-07

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921_07

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3071

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. 0 Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

74-87-3	-----Chloromethane	12000	U
74-83-9	-----Bromomethane	12000	U
75-01-4	-----Vinyl Chloride	12000	U
75-00-3	-----Chloroethane	12000	U
75-09-2	-----Methylene Chloride	6200	U
67-64-1	-----Acetone	12000	U
75-15-0	-----Carbon Disulfide	6200	U
75-35-4	-----1,1-Dichloroethene	6200	U
75-34-3	-----1,1-Dichloroethane	6200	U
540-59-0	-----1,2-Dichloroethene (total)	6200	U
67-66-3	-----Chloroform	6200	U
107-06-2	-----1,2-Dichloroethane	6200	U
78-93-3	-----2-Butanone	12000	U
71-55-6	-----1,1,1-Trichloroethane	6200	U
56-23-5	-----Carbon Tetrachloride	6200	U
108-05-4	-----Vinyl Acetate	12000	U
75-27-4	-----Bromodichloromethane	6200	U
78-87-5	-----1,2-Dichloropropane	6200	U
10061-01-5	-----cis-1,3-Dichloropropene	6200	U
10061-02-6	-----Trans-1,3-Dichloropropene	6200	U
79-01-6	-----Trichloroethene	6200	U
124-48-1	-----Dibromochloromethane	6200	U
79-00-5	-----1,1,2-Trichloroethane	6200	U
71-43-2	-----Benzene	6200	U
10061-01-5	-----cis-1,3-Dichloropropene	6200	U
10061-02-6	-----trans-1,3-Dichloropropene	6200	U
75-25-2	-----Bromoform	6200	U
108-10-1	-----4-Methyl-2-Pentanone	12000	U
591-78-6	-----2-Hexanone	12000	U
127-18-4	-----Tetrachloroethene	6200	U
79-34-5	-----1,1,2,2-Tetrachloroethane	6200	U
108-88-3	-----Toluene	7600	U
108-90-7	-----Chlorobenzene	6200	U
100-41-4	-----Ethylbenzene	17000	U
100-42-5	-----Styrane	6200	U
1330-20-7	-----Xylene (total)	95000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKA-07RE

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921_07RE

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3092

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. 0 Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	Chloromethane	12000	U
74-83-9	Bromomethane	12000	U
75-01-4	Vinyl Chloride	12000	U
75-00-3	Chloroethane	12000	U
75-09-2	Methylene Chloride	6200	U
67-64-1	Acetone	21000	
75-15-0	Carbon Disulfide	6200	U
75-35-4	1,1-Dichloroethene	6200	U
75-34-3	1,1-Dichloroethane	6200	U
540-59-0	1,2-Dichloroethene (total)	6200	U
67-66-3	Chloroform	6200	U
107-06-2	1,2-Dichloroethane	6200	U
78-93-3	2-Butanone	12000	U
71-55-6	1,1,1-Trichloroethane	6200	U
56-23-5	Carbon Tetrachloride	6200	U
108-05-4	Vinyl Acetate	12000	U
75-27-4	Bromodichloromethane	6200	U
78-87-5	1,2-Dichloropropane	6200	U
10061-01-5	cis-1,3-Dichloropropene	6200	U
10061-02-6	Trans-1,3-Dichloropropene	6200	U
79-01-6	Trichloroethene	6200	U
124-48-1	Dibromochloromethane	6200	U
79-00-5	1,1,2-Trichloroethane	6200	U
71-43-2	Benzene	6200	U
10061-01-5	cis-1,3-Dichloropropene	6200	U
10061-02-6	trans-1,3-Dichloropropene	6200	U
75-25-2	Bromoform	6200	U
108-10-1	4-Methyl-2-Pentanone	12000	U
591-78-6	2-Hexanone	12000	U
127-18-4	Tetrachloroethene	6200	U
79-34-5	1,1,2,2-Tetrachloroethane	6200	U
108-88-3	Toluene	8300	
108-90-7	Chlorobenzene	6200	U
100-41-4	Ethylbenzene	17000	
100-42-5	Styrene	6200	U
1330-20-7	Xylene (total)	99000	

000613

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKB-08

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921_08

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3074

Level: (low/med) MED Date Received: 04/25/95

% Moisture: not dec. 0 Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 100

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO. COMPOUND Q

74-87-3-----	Chloromethane	120000	U
74-83-9-----	Bromomethane	120000	U
75-01-4-----	Vinyl Chloride	120000	U
75-00-3-----	Chloroethane	120000	U
75-09-2-----	Methylene Chloride	62000	U
67-64-1-----	Acetone	120000	U
75-15-0-----	Carbon Disulfide	62000	U
75-35-4-----	1,1-Dichloroethene	62000	U
75-34-3-----	1,1-Dichloroethane	62000	U
540-59-0-----	1,2-Dichloroethene (total)	62000	U
67-66-3-----	Chloroform	62000	U
107-06-2-----	1,2-Dichloroethane	62000	U
78-93-3-----	2-Butanone	120000	U
71-55-6-----	1,1,1-Trichloroethane	62000	U
56-23-5-----	Carbon Tetrachloride	62000	U
108-05-4-----	Vinyl Acetate	120000	U
75-27-4-----	Bromodichloromethane	62000	U
78-87-5-----	1,2-Dichloropropane	62000	U
10061-01-5-----	cis-1,3-Dichloropropene	62000	U
10061-02-6-----	Trans-1,3-Dichloropropene	62000	U
79-01-6-----	Trichloroethene	62000	U
124-48-1-----	Dibromochloromethane	62000	U
79-00-5-----	1,1,2-Trichloroethane	62000	U
71-43-2-----	Benzene	62000	U
10061-01-5-----	cis-1,3-Dichloropropene	62000	U
10061-02-6-----	trans-1,3-Dichloropropene	62000	U
75-25-2-----	Bromoform	62000	U
108-10-1-----	4-Methyl-2-Pentanone	120000	U
591-78-6-----	2-Hexanone	120000	U
127-18-4-----	Tetrachloroethene	62000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	62000	U
108-88-3-----	Toluene	62000	U
108-90-7-----	Chlorobenzene	62000	U
100-41-4-----	Ethylbenzene	65000	U
100-42-5-----	Styrene	270000	U
1330-20-7-----	Xylene (total)	310000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKB-09

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921_09

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3094

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. 0 Date Analyzed: 05/15/95

Column: (pack/cap) CAP Dilution Factor: 50

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO. COMPOUND Q

74-87-3	-----Chloromethane	62000	U
74-83-9	-----Bromomethane	62000	U
75-01-4	-----Vinyl Chloride	62000	U
75-00-3	-----Chloroethane	62000	U
75-09-2	-----Methylene Chloride	31000	U
67-64-1	-----Acetone	62000	U
75-15-0	-----Carbon Disulfide	31000	U
75-35-4	-----1,1-Dichloroethene	31000	U
75-34-3	-----1,1-Dichloroethane	31000	U
540-59-0	-----1,2-Dichloroethene (total)	31000	U
67-66-3	-----Chloroform	31000	U
107-06-2	-----1,2-Dichloroethane	31000	U
78-93-3	-----2-Butanone	62000	U
71-55-6	-----1,1,1-Trichloroethane	31000	U
56-23-5	-----Carbon Tetrachloride	31000	U
108-05-4	-----Vinyl Acetate	62000	U
75-27-4	-----Bromodichloromethane	31000	U
78-87-5	-----1,2-Dichloropropane	31000	U
10061-01-5	-----cis-1,3-Dichloropropene	31000	U
10061-02-6	-----Trans-1,3-Dichloropropene	31000	U
79-01-6	-----Trichloroethene	31000	U
124-48-1	-----Dibromochloromethane	31000	U
79-00-5	-----1,1,2-Trichloroethane	31000	U
71-43-2	-----Benzene	31000	U
10061-01-5	-----cis-1,3-Dichloropropene	31000	U
10061-02-6	-----trans-1,3-Dichloropropene	31000	U
75-25-2	-----Bromoform	31000	U
108-10-1	-----4-Methyl-2-Pentanone	62000	U
591-78-6	-----2-Hexanone	62000	U
127-18-4	-----Tetrachloroethene	31000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	31000	U
108-88-3	-----Toluene	63000	U
108-90-7	-----Chlorobenzene	31000	U
100-41-4	-----Ethylbenzene	80000	U
100-42-5	-----Styrene	31000	U
1330-20-7	-----Xylene (total)	380000	U

000627

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKC-10

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) WATER Lab Sample ID: 2921_10

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E3095

Level: (low/med) LOW Date Received: 04/26/95

% Moisture: not dec. _____ Date Analyzed: 05/16/95

Column: (pack/cap) CAP Dilution Factor: 5000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	50000	U
74-83-9	Bromomethane	50000	U
75-01-4	Vinyl Chloride	50000	U
75-00-3	Chloroethane	50000	U
75-09-2	Methylene Chloride	25000	U
67-64-1	Acetone	50000	U
75-15-0	Carbon Disulfide	25000	U
75-35-4	1,1-Dichloroethene	25000	U
75-34-3	1,1-Dichloroethane	25000	U
540-59-0	1,2-Dichloroethene (total)	25000	U
67-66-3	Chloroform	25000	U
107-06-2	1,2-Dichloroethane	25000	U
78-93-3	2-Butanone	50000	U
71-55-6	1,1,1-Trichloroethane	25000	U
56-23-5	Carbon Tetrachloride	25000	U
108-05-4	Vinyl Acetate	50000	U
75-27-4	Bromodichloromethane	25000	U
78-87-5	1,2-Dichloropropane	25000	U
10061-01-5	cis-1,3-Dichloropropene	25000	U
10061-02-6	Trans-1,3-Dichloropropene	25000	U
79-01-6	Trichloroethene	25000	U
124-48-1	Dibromochloromethane	25000	U
79-00-5	1,1,2-Trichloroethane	25000	U
71-43-2	Benzene	25000	U
10061-01-5	cis-1,3-Dichloropropene	25000	U
10061-02-6	trans-1,3-Dichloropropene	25000	U
75-25-2	Bromoform	25000	U
108-10-1	4-Methyl-2-Pentanone	50000	U
591-78-6	2-Hexanone	50000	U
127-18-4	Tetrachloroethene	25000	U
79-34-5	1,1,2,2-Tetrachloroethane	25000	U
108-88-3	Toluene	48000	U
108-90-7	Chlorobenzene	25000	U
100-41-4	Ethylbenzene	25000	U
100-42-5	Styrene	240000	U
1330-20-7	Xylene (total)	63000	U

FORM I VOA

1/87 Rev.

000635

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKC-10RE

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) WATER Lab Sample ID: 2921_10RE

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: E3106

Level: (low/med) LOW Date Received: 04/26/95

% Moisture: not dec. _____ Date Analyzed: 05/16/95

Column: (pack/cap) CAP Dilution Factor: 5000

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	(ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	-----Chloromethane	50000	U
74-83-9	-----Bromomethane	50000	U
75-01-4	-----Vinyl Chloride	50000	U
75-00-3	-----Chloroethane	50000	U
75-09-2	-----Methylene Chloride	25000	U
67-64-1	-----Acetone	50000	U
75-15-0	-----Carbon Disulfide	25000	U
75-35-4	-----1,1-Dichloroethene	25000	U
75-34-3	-----1,1-Dichloroethane	25000	U
540-59-0	-----1,2-Dichloroethene (total)	25000	U
67-66-3	-----Chloroform	25000	U
107-06-2	-----1,2-Dichloroethane	25000	U
78-93-3	-----2-Butanone	50000	U
71-55-6	-----1,1,1-Trichloroethane	25000	U
56-23-5	-----Carbon Tetrachloride	25000	U
108-05-4	-----Vinyl Acetate	50000	U
75-27-4	-----Bromodichloromethane	25000	U
78-87-5	-----1,2-Dichloropropane	25000	U
10061-01-5	-----cis-1,3-Dichloropropene	25000	U
10061-02-6	-----Trans-1,3-Dichloropropene	25000	U
79-01-6	-----Trichloroethene	25000	U
124-48-1	-----Dibromochloromethane	25000	U
79-00-5	-----1,1,2-Trichloroethane	25000	U
71-43-2	-----Benzene	25000	U
10061-01-5	-----cis-1,3-Dichloropropene	25000	U
10061-02-6	-----trans-1,3-Dichloropropene	25000	U
75-25-2	-----Bromoform	25000	U
108-10-1	-----4-Methyl-2-Pentanone	50000	U
591-78-6	-----2-Hexanone	50000	U
127-18-4	-----Tetrachloroethene	25000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	25000	U
108-88-3	-----Toluene	80000	U
108-90-7	-----Chlorobenzene	25000	U
100-41-4	-----Ethylbenzene	25000	U
100-42-5	-----Styrene	25000	U
1330-20-7	-----Xylene (total)	94000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TANKC-11

Lab Name: PDP ANALYTICAL Contract: _____

Lab Code: _____ Case No.: PRC SAS No.: _____ SDG No.: 2921

Matrix: (soil/water) SOIL Lab Sample ID: 2921_11

Sample wt/vol: 4.00 (g/mL) G Lab File ID: E3096

Level: (low/med) MED Date Received: 04/26/95

% Moisture: not dec. _____ Date Analyzed: 05/16/95

Column: (pack/cap) CAP Dilution Factor: 100

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO. COMPOUND Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	-----Chloromethane	120000	U
74-83-9	-----Bromomethane	120000	U
75-01-4	-----Vinyl Chloride	120000	U
75-00-3	-----Chloroethane	120000	U
75-09-2	-----Methylene Chloride	62000	U
67-64-1	-----Acetone	120000	U
75-15-0	-----Carbon Disulfide	62000	U
75-35-4	-----1,1-Dichloroethene	62000	U
75-34-3	-----1,1-Dichloroethane	62000	U
540-59-0	-----1,2-Dichloroethene (total)	62000	U
67-66-3	-----Chloroform	62000	U
107-06-2	-----1,2-Dichloroethane	62000	U
78-93-3	-----2-Butanone	120000	U
71-55-6	-----1,1,1-Trichloroethane	62000	U
56-23-5	-----Carbon Tetrachloride	62000	U
108-05-4	-----Vinyl Acetate	120000	U
75-27-4	-----Bromodichloromethane	62000	U
78-87-5	-----1,2-Dichloropropane	62000	U
10061-01-5	-----cis-1,3-Dichloropropene	62000	U
10061-02-6	-----Trans-1,3-Dichloropropene	62000	U
79-01-6	-----Trichloroethene	62000	U
124-48-1	-----Dibromochloromethane	62000	U
79-00-5	-----1,1,2-Trichloroethane	62000	U
71-43-2	-----Benzene	62000	U
10061-01-5	-----cis-1,3-Dichloropropene	62000	U
10061-02-6	-----trans-1,3-Dichloropropene	62000	U
75-25-2	-----Bromoform	62000	U
108-10-1	-----4-Methyl-2-Pentanone	120000	U
591-78-6	-----2-Hexanone	120000	U
127-18-4	-----Tetrachloroethene	62000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	62000	U
108-88-3	-----Toluene	1100000	U
108-90-7	-----Chlorobenzene	62000	U
100-41-4	-----Ethylbenzene	62000	U
100-42-5	-----Styrene	62000	U
1330-20-7	-----Xylene (total)	230000	U

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-GUTSUMP-01 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.01 Date Received: 04/26/95
 Project No.: 178R06J214LA Report No.: E3175 Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: SLUDGE Dilution: 5.0 Method Ref.: SW846-8240
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/08/95 GC/MS File ID: E3175
 Sample Volume: 5.0 ml Date Analyzed: 05/19/95 Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) ±	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
2-Butanone	200000	50	101
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Vinylchloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	98
Toluene-d8	50	(88-118)	99
Bromofluorobenzene	50	(86-115)	89

Method Blank ID: 2953V.WBLK2 LCS ID: NA MS ID: NA MSD ID: NA DUP ID: NA
 TCLP Blank ID: 2921V.TBLK1 TCLP LCS ID: 2921V.WLCS1 TCLP MS ID: NA TCLP MSD ID: NA TCLP DUP ID: NA

Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000132

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-SANDTRAP-02	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.02	Date Received: 04/26/95
Project No.: 170R063214LA	Report No.: E3176	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: LIQUID	Dilution: 5.0	Method Ref.: SW846-3248
Multiplying Factor: 5.0	Date TCLP Extracted: 05/08/95	GC/MS File ID: E3176
Sample Volume: 5.0 ml	Date Analyzed: 05/19/95	Analyst: LI

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
2-Butanone	200000	50	119
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	5000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Vinylchloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	96
Toluene-d8	50	(86-110)	98
Bromofluorobenzene	50	(86-115)	88

Method Blank ID: 2953V.WBLK2	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.TBLK1	TCLP LCS ID: 2921V.WLCS1	TCLP MS ID: 2921V.02MS	TCLP MSD ID: NA	TCLP DUP ID: NA

* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-SANDTRAP-83	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.83	Date Received: 04/26/95
Project No.: 178R063214LA	Report No.: E3195	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: LIQUID	Dilution: 5.8	Method Ref.: SW846-8248
Multiplying Factor: 5.8	Date TCLP Extracted: 05/08/95	GC/MS File ID: E3195
Sample Volume: 5.8 ml	Date Analyzed: 05/22/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) :	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
Butanone	200000	50	129
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Trichloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	GC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	101
Toluene-d8	50	(88-110)	107
Bromofluorobenzene	50	(86-115)	94

Method Blank ID: 2953V.WBLK2	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.TBLK1	TCLP LCS ID: 2921V.WLCS2	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000143

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-SANDTRAP-84 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.04 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: E3196 Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: SLUDGE Dilution: 5.0 Method Ref.: SW846-8248
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/08/95 GC/MS File ID: E3196
 Sample Volume: 5.0 ml Date Analyzed: 05/22/95 Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) :	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
2-Butanone	200000	50	107
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Vinylchloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	99
Toluene-d8	50	(98-110)	106
Bromofluorobenzene	50	(96-115)	92

Method Blank ID: 2921V.WBLK2 LCS ID: NA MS ID: NA MSD ID: NA DUP ID: NA
 TCLP Blank ID: 2921V.TBLK1 TCLP LCS ID: 2921V.WLCSZ TCLP MS ID: 2921.04MS TCLP MSD ID: NA TCLP DUP ID: NA

* - Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-SANDTRAP-85	Date Sampled: 84/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.85	Date Received: 84/26/95
Project No.: 178R863214LA	Report No.: E3197	Date Reported: 85/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: SLUDGE	Dilution: 5.8	Method Ref.: SW846-9248
Multiplying Factor: 5.3	Date TCLP Extracted: 85/08/95	GC/MS File ID: E3197
Sample Volume: 5.8 ml	Date Analyzed: 85/22/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) :	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
2-Butanone	200000	50	99
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Vinylchloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	GC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	94
Toluene-d8	50	(88-118)	101
Bromofluorobenzene	50	(86-115)	87

Method Blank ID: 2921V.WBLK2	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.TBLK1	TCLP LCS ID: 2921V.WLCS1	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000149

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-TANKA-86	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.86	Date Received: 04/26/95
Project No.: 170R063214LA	Report No.: E3216	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: LIQUID	Dilution: 5.0	Method Ref.: SW846-8248
Multiplying Factor: 5.0	Date TCLP Extracted: 05/08/95	GC/MS File ID: E3216
Sample Volume: 5.0 ml	Date Analyzed: 05/23/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) †	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
Butanone	200000	50	ND
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Trichloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	99
Toluene-d8	50	(88-110)	100
Bromofluorobenzene	50	(86-115)	98

Method Blank ID: 2953V.WBLK3	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.TBLK1	TCLP LCS ID: 2921V.WLCS3	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

† = Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

050152
[Signature]

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-TANKA-87	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.07	Date Received: 04/26/95
Project No.: 170R863214LA	Report No.: E3217	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: SLUDGE	Dilution: 5.0	Method Ref.: SW846-8248
Multiplying Factor: 5.0	Date TCLP Extracted: 05/08/95	GC/MS File ID: E3217
Sample Volume: 5.3 ml	Date Analyzed: 05/23/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) †	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
Butanone	200000	50	185
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Trichloroethene	500	25	ND
Trichloroethene	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	91
Toluene-d8	50	(88-110)	66
Bromofluorobenzene	50	(86-115)	87

Method Blank ID: 2921V.MBLK5	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.TBLK1	TCLP LCS ID: 2921V.WLCS3	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

† Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-TANKB-88	Date Sampled: 84/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.88	Date Received: 84/26/95
Project No.: 178R863214LA	Report No.: 85884	Date Reported: 85/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: LIQUID	Dilution: 5.8	Method Ref.: SW846-8240
Multiplying Factor: 5.8	Date TCLP Extracted: 85/08/95	GC/MS File ID: 85884
Sample Volume: 5.8 ml	Date Analyzed: 85/19/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) :	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
2-Butanone	200000	50	ND
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Vinylchloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	93
Toluene-d8	50	(88-110)	88
Bromofluorobenzene	50	(86-115)	96

Method Blank ID: 2953V.MBLK1	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.FBLK1	TCLP LCS ID: 2921V.WLCS1	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000163

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-TANK8-89	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.89	Date Received: 04/26/95
Project No.: 1708063214LA	Report No.: ES219	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: SLUDGE	Dilution: 5.0	Method Ref.: SW846-8248
Multiplying Factor: 5.0	Date TCLP Extracted: 05/08/95	GC/MS File ID: ES219
Sample Volume: 5.0 ml	Date Analyzed: 05/23/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) †	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
2-Butanone	200000	50	145
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	5000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Vinylchloride	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	93
Toluene-d8	50	(88-110)	94
Bromofluorobenzene	50	(86-115)	96

Method Blank ID: 2921V.WBLK3	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.TBLK1	TCLP LCS ID: 2921V.WLCS3	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

† = Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

PDP ANALYTICAL SERVICES

1688 Lake Front Circle, Ste. B; The Woodlands, TX 77380; Phone (713)363-2233

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-TANKC-10	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.10	Date Received: 04/26/95
Project No.: 170R063214LA	Report No.: B5077	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: LIQUID	Dilution: 1.0	Method Ref.: SW846-8240
Multiplying Factor: 1.0	Date TCLP Extracted: 05/08/95	GC/MS File ID: B5077
Sample Volume: 5.0 ml	Date Analyzed: 05/19/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) †	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	5	ND
1,2-Dichloroethane	500	5	ND
2-Butanone	200000	10	ND
Benzene	500	5	ND
Carbon tetrachloride	500	5	ND
Chlorobenzene	100000	5	ND
Chloroform	6000	5	ND
Tetrachloroethene	700	5	ND
Trichloroethene	500	5	ND
Vinylchloride	200	10	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	97
Toluene-d8	50	(88-118)	87
Bromofluorobenzene	50	(86-115)	98

Method Blank ID: 2920V.WBLK1	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.FBLK1	TCLP LCS ID: 2921V.WLCS1	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000174

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-TANKC-1B	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.10RA	Date Received: 04/26/95
Project No.: 170R063214LA	Report No.: 85082	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: SLUDGE	Dilution: 100000.0	Method Ref.: SW846-3240
Multiplying Factor: 100000.0	Date TCLP Extracted: 05/08/95	GC/MS File ID: 85082
Sample Volume: 5.9 ml	Date Analyzed: 05/19/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) †	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	500000	ND
1,2-Dichloroethane	500	500000	ND
2-Butanone	200000	1000000	ND
Benzene	500	500000	ND
Carbon tetrachloride	500	500000	ND
Chlorobenzene	100000	500000	ND
Chloroform	6000	500000	ND
Tetrachloroethene	700	500000	ND
Trichloroethene	500	500000	ND
Vinylchloride	200	1000000	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	GC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	98
Toluene-d8	50	(88-119)	97
Bromofluorobenzene	50	(86-115)	97

Method Blank ID: 2920V.WBLK1	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: N
TCLP Blank ID: 2921V.FBLK1	TCLP LCS ID: 2921V.WLCS1	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: N

† = Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

000177

LABORATORY REPORT

Client: PRC ENVIRONMENTAL	Client Sample ID: BJWEST-TANKC-11	Date Sampled: 04/24/95
Project Name: BJ/WESTERN COMPANY	PDP Sample ID: 2921.11	Date Received: 04/26/95
Project No.: 170R863214LA	Report No.: E3222	Date Reported: 05/24/95

GC/MS-TCLP VOLATILE ORGANICS (DATA SHEET)

Sample Matrix: SLUDGE	Dilution: 5.0	Method Ref.: SW846-8248
Multiplying Factor: 5.0	Date TCLP Extracted: 05/08/95	GC/MS File ID: E3222
Sample Volume: 5.0 ml	Date Analyzed: 05/23/95	Analyst: LZ

COMPOUND	REGULATORY LEVEL (ug/L) x	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,1-Dichloroethene	700	25	ND
1,2-Dichloroethane	500	25	ND
Butanone	200000	50	242
Benzene	500	25	ND
Carbon tetrachloride	500	25	ND
Chlorobenzene	100000	25	ND
Chloroform	6000	25	ND
Tetrachloroethene	700	25	ND
Trichloroethene	500	25	ND
Trichloroethylene	200	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
1,2-Dichloroethane-d4	50	(76-114)	97
Toluene-d8	50	(88-118)	97
Bromofluorobenzene	50	(86-115)	93

Method Blank ID: 2921V.MBLK3	LCS ID: NA	MS ID: NA	MSD ID: NA	DUP ID: NA
TCLP Blank ID: 2921V.TBLK1	TCLP LCS ID: 2921V.MLCS3	TCLP MS ID: NA	TCLP MSD ID: NA	TCLP DUP ID: NA

* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-OUTSUMP-01 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.01 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6823 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: SLODGE Dilution: 1.0 Method Ref.: SW846-8270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6823
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/19/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	74	Phenol-d5	375	(10-94)	22
2-Fluorobiphenyl	250	(43-116)	64	2-Fluorophenol	375	(21-100)	48
Terphenyl-d14	250	(33-141)	72	2,4,6-Tribromophenol	375	(10-123)	51

Method Blank ID: 2921S.WBLK1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLK1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* = Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-SANDTRAP-02 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.02 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6824 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: LIQUID Dilution: 1.0 Method Ref.: SW846-8270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6824
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/19/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	75	Phenol-d5	375	(10-94)	61
2-Fluorobiphenyl	250	(43-116)	69	2-Fluorophenol	375	(21-100)	62
Terphenyl-d14	250	(33-141)	82	2,4,6-Tribromophenol	375	(10-123)	53

Method Blank ID: 2921S.MBLK1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLK1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* = Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-SANDTRAP-03 Date Sampled: 04/24/95
 Project Name: BJ/WESTERN COMPANY PDP Sample ID: 2921.03 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6825 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: LIQUID Dilution: 1.0 Method Ref.: SW846-8270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6825
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/19/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	78	Phenol-d5	375	(10-94)	57
2-Fluorobiphenyl	250	(43-116)	74	2-Fluorophenol	375	(21-100)	55
Terphenyl-d14	250	(33-141)	89	2,4,6-Tribromophenol	375	(10-123)	52

Method Blank ID: 2921S.MBLK1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLK1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* = Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: 8JWEST-SANDTRAP-04 Date Sampled: 04/24/95
 Project Name: 8J/WESTERN COMPANY POP Sample ID: 2921.04 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6826 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: SLUDGE Dilution: 1.0 Method Ref.: SW846-8270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6826
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/19/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
2,4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
trobenzene-d5	250	(35-114)	79	Phenol-d5	375	(10-94)	58
Fluorobiphenyl	250	(43-116)	76	2-Fluorophenol	375	(21-100)	56
Terphenyl-d14	250	(33-141)	89	2,4,6-Tribromophenol	375	(10-123)	51

Method Blank ID: 2921S.NBLX1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLX1 TCLP LCS ID: 2921S.TLCSI TCLP MS ID: 2921.04MS TCLP MSD ID: NA

Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: BJWEST-SANDTRAP-05 Date Sampled: 04/24/95
 Project Name: 8J/WESTERN COMPANY PDP Sample ID: 2921.05 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6831 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: SLUDGE Dilution: 1.0 Method Ref.: SW846-8270
 Multiplying Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6831
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/19/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	71	Phenol-d5	375	(10-94)	66
2-Fluorobiphenyl	250	(43-116)	69	2-Fluorophenol	375	(21-100)	61
Terphenyl-d14	250	(33-141)	91	2,4,6-Tribromophenol	375	(10-123)	47

Method Blank ID: 2921S.WBLK1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLK1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.

LABORATORY REPORT

Client: PRC ENVIRONMENTAL Client Sample ID: 8JWEST-TANKA-06 Date Sampled: 04/24/95
 Project Name: 8J/WESTERN COMPANY PDP Sample ID: 2921.06 Date Received: 04/26/95
 Project No.: 170R063214LA Report No.: A6832 Date Reported: 05/22/95

GC/MS-TCLP SEMIVOLATILES (DATA SHEET)

Sample Matrix: LIQUID Dilution: 1.0 Method Ref.: SW846-8270
 Multipling Factor: 5.0 Date TCLP Extracted: 05/10/95 GC/MS File ID: A6832
 Sample Volume: 200 ml Date Extracted: 05/12/95 Analyst: RRP
 Extract Volume: 1.0 ml Date Analyzed: 05/19/95

COMPOUND	REGULATORY LEVEL (ug/L) *	QUANTITATION LIMIT (ug/L)	RESULTS (ug/L)
1,4-Dichlorobenzene	7500	50	ND
2,4,5-Trichlorophenol	400000	50	ND
2,4,6-Trichlorophenol	2000	50	ND
2,4-Dinitrotoluene	130	50	ND
2-Methylphenol	200000	50	ND
3+4-Methylphenols	200000	50	ND
Hexachlorobenzene	130	50	ND
Hexachlorobutadiene	500	50	ND
Hexachloroethane	3000	50	ND
Nitrobenzene	2000	50	ND
Pentachlorophenol	100000	125	ND
Pyridine	5000	50	ND

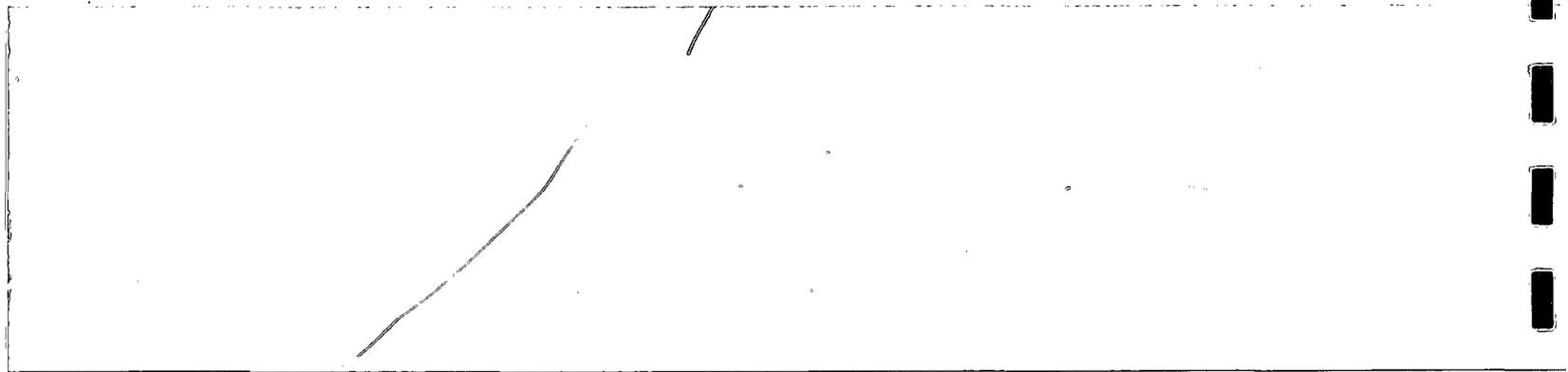
QUALITY ASSURANCE/QUALITY CONTROL

Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery	Surrogate	Spike Added (ug/L)	QC Limits (Recovery)	% Recovery
Nitrobenzene-d5	250	(35-114)	71	Phenol-d5	375	(10-94)	52
2-Fluorobiphenyl	250	(43-116)	68	2-Fluorophenol	375	(21-100)	44
Terphenyl-d14	250	(33-141)	92	2,4,6-Tribromophenol	375	(10-123)	19

Method Blank ID: 2921S.MBLK1 LCS ID: NA MS ID: NA MSD ID: NA

TCLP Blank ID: 2921S.TBLK1 TCLP LCS ID: 2921S.TLCS1 TCLP MS ID: 2921.04MS TCLP MSD ID: NA

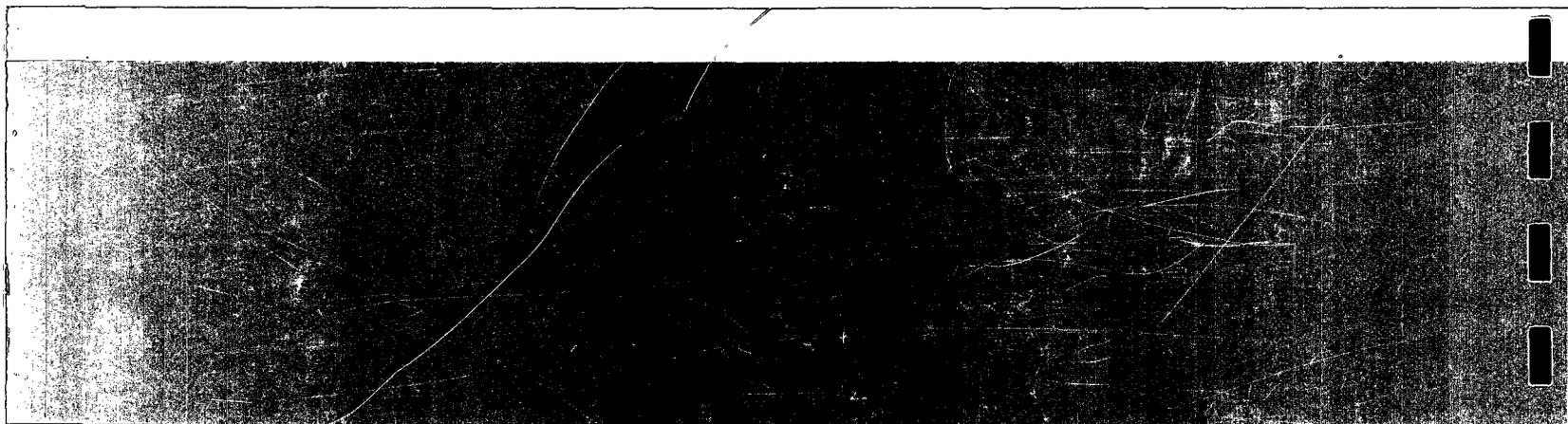
* Regulatory Levels are as stated in 40CFR 261.24 and are provided for information only.



Attest:

Notary Public

My Comm. Expires



11/11/2011

11/11/2011

11/11/2011