3R - 252

REPORTS

DATE:

Oct. 4-31, 1995

TIERRA ENVIRONMENTAL COMPANY Inc.

" Because we do not inherit the earth from our parents...
We borrow it from our children.."

VOLUNTARY CLEAN-UP OF CRUDE OIL TRANSFER FACILITY
APACHE STATION SITE

SE 1/4 - SEC 33 - T 25 N - R 6 W
RIO ARRIBA COUNTY, NEW MEXICO

October 4 - October 31, 1995

P.O. DRAWER 15250
FARMINGTON, NEW MEXICO 87401-5250
(505) 334-8894
Fax (505) 334-9024

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1.0

SUMMARY OF ACTIVITY

TIERRA
ENVIRONMENTAL
COMPANY Inc.
P.O. DRAWER 15250
FARMINGTON, NM 87401

VOLUNTARY CLEAN-UP OF CRUDE OIL TRANSFER FACILITY
APACHE STATION SITE
October 4-October 31, 1995

1.0 SUMMARY OF ACTIVITY

The Apache Station Crude Oil Transfer point is located at section 33, T-25N, R-6W, SE 1/4, approximately 9.5 miles east of Lybrook in Rio Arriba County New Mexico. The property is currently owned by Gary Williams Energy, but will be taken over by Giant Industries after the clean-up by Gary Energy. This is part of a purchase agreement between the two companies. The site consists of a bermed area housing a 10,000 barrel crude oil tank. To the south of the tank is an overflow berm area that according to information provided by Gary Williams Energy had previously contained three (3) five-hundred-twenty (520) barrel tanks, a Lact Unit and a transfer point. The tank itself was to be cleaned. Included in the project was the removal of any contaminated soils at the tank area, Lact Unit and transfer point as well as the backfill and compaction of any excavated areas.

A stock well was observed off location but in close proximity to the Lact Unit.
This was an area of concern and water samples were collected and analyzed by On-Site Technologies for BTEX and general water quality. Elevated levels of ph and sulfate as well as TDS exceeding New Mexico Water Quality Standards disqualified the well as a domestic water source. The BTEX analysis indicated no contamination present that would exceed New Mexico Water Quality Standards. (See enclosed analysis).

On October 4, 1995, Tierra Environmental Company Inc., represented by Phillip C. Nobis and Todd D. Nobis, Red Top Tanks, Safety Alliance and On-site Technologies deployed to the Apache Station Site. Red Top Tank and Safety Alliance were contracted by Tierra to clean the

inside of the 10,000 barrel tank. On-site was contracted by Tierra to drill test holes around the bermed area of the tank with a hollow stem auger to check for any migrating contamination from the bermed area. The tank and surrounding area has been utilized for crude oil storage and transfer for several years. The exact age of the tank itself is not known but is estimated to be over 25 years old.

On the same date, a site assessment was conducted pursuant to section 7d-IV-A-2a OCD Environmental Regulation. The site received a total ranking of 10, as the depth to ground water was 50-99 feet, over 1000 feet from a water source/over 200 feet from a private domestic water source over a 1000 feet from a surface water body. This allowed residual TPH levels in the 1000 ppm range.

A 400 bbl Frac Tank was taken to the site to store the tank bottom waste until results from a TCLP could be obtained. A TCLP sample was taken on October 4, 1995 and turned over to On-Site Tech for analysis. A TCLP sample of the soils was also taken that day and turned over to On-Site Tech. Four test holes were bored outside the bermed area of the tank. (See site diagram BH-1 thru BH-4)

Red top began the clean-out of the tank using water to break-up any solid substances in the tank. The used water and substance was then transferred to the on-scene frac tank where it remained unit results from the TCLP were obtained. On October 9, 1995, verbal permission from OCD was obtained and the contents of the frac tank were transported to Tierra's landfarm and placed into another 400 bbl frac tank. (TCLP results enclosed)

On October 10, 1995, initial excavation preparation was started at the tank. The decision was made to excavate around the tank in sections in order not to de-stabilize the tank. On October 11, 1995 three test holes were dug with a trackhoe around the tank in an effort to determine how deep any contamination may have migrated into the soil. The first test hole was done at the NE portion of the tank by the man way. The hole was constructed down approximately 8 feet and a grab sample was taken. The second hole was constructed at the SE portion of the tank. It was

also approximately 7-8 feet and a grab sample was obtained there as well as the W portion of the tank. Again a hole approximately 7-8 feet was constructed to obtain that test. These samples were then transported to On-Site Tech. for TPH analysis. After digging the test holes, excavation was started on the NE portion of the tank. Obvious contamination was observed to a depth of 12 feet. Excavation was stopped at a depth of 14 1/2 feet. A headspace test showed 0007 ppm. The pit was approximately 20 feet long and three closure grab samples were then taken from three different areas in the pit. These samples were also taken to On-Site Tech. for TPH analysis. All contaminated soils excavated were stored in a bermed area until approval was granted from OCD to transport them to Tierra's landfarm. Approval was granted on October 12, 1995.

On October 12, 1995 TPH results from the test holes were obtained and were as follows: NE- 525 ppm, SE- 1025 ppm and W- 1024 ppm. TPH results from the closure samples on the first tank pit (Tank Pit #1) were also obtained and were as follows: #1- 29 ppm, #2- <25 ppm and #3- <25 ppm. Backfill was started on Tank Pit #1 and excavation was started on the Lact Unit area.

The Lact Unit excavation was done in two parts with Lact Pit #1 and Lact Pit #2. Lact Pit #1 consisted of a hole approximately 20 feet long and sloping to a depth of approximately 8 feet. Lact Pit #1 is the south side of the unit close to the old stock water well. TPH results from Lact unit Pit #1 were as follows: #1-370 ppm, #2-60 ppm, #3- 490 ppm.

Backfill of Tank pit #1 was completed and excavation was started on Tank Pit #2. Excavation on Tank pit #2 was also completed this day and TPH closure grab samples were taken. The pit was approximately 9 feet deep and 25 feet around the NE portion of the tank. A headspace reading of 0007 ppm was obtained with the PID. These samples were also taken to On-Site Tech for analysis.

Excavation was then started on the north side of Lact Pit #1 (Lact Pit #2). While excavating at Lact Pit #2, a dark gray, odorous, moist substance was encountered as well as a broken concrete slab that was saturated with contamination.

On October 17, 1995, while excavating at Lact Pit #2, a large sealed cylinder with three small pipes coming out of the top was uncovered. The cylinder appeared to have contained crude oil but was not attached to any piping. It is suspected that a prior lact unit was disassembled in place and the new one placed on top. A large six-inch line was also encountered approximately 4 feet from the surface. It had two flanged ends that were open and appeared to have also been leaking product. Lact Pit #2 was dug down to approximately 15 feet. Headspace tests showed a reading of 14 ppm on the east wall and 329 ppm on the south wall. Three closure grab samples were then taken from Lact Pit #2, the results of these were as follows: #1- 162 ppm, #2- 677 ppm, #3- <25 ppm.

Results from Tank pit #2 were obtained and were as follows: #1- 155 ppm, #2- 184 ppm, #3- 115 ppm. Parts of the walls on Tank pit #2 had fallen in and were cleaned out. Tank Pit #2 was then backfilled and Tank pit #3 was started. On October 20, 1995, Tank pit #3 was completed and TPH closure samples were taken. Tank pit #3 measured approximately 12 feet deep and 30 feet long. Heavy dark gray, moist, obvious contamination was observed starting on the tank and migrating out approximately 7 feet and down to approximately 10 feet. Excavation was completed and a headspace test was taken at a depth of 12 feet, the results were 009 ppm. Two grab samples were then taken and transported to On-Site Tech. for TPH analysis.

Several test holes were dug with a backhoe in the tank overflow berm area to the south of the 10,000 barrel tank. They showed some obvious contamination in the berm itself. It appeared that the contamination that was in the bermed area had been removed and made into part of the existing berm. On October 23, 1995, Denny Foust from OCD arrived on scene to look at the site. He advised that his recommendation was that if the tank were to remain in place, that the

overflow berm should be left and not excavated. This recommendation was followed.

Backfill on the lact unit was started on Oct. 23, 1995. Also on that date, excavation began on the transfer station. Heavy contamination was observed 12 to 14 feet down. The main valve appeared to have been leaking product for quite some time.

On October 24, 1995, the TPH results on tank pit #3 were as follows: #1- 290 ppm, #2- 139 ppm. Excavation continued on the Transfer station. At a depth of 17 feet a Headspace reading of 268 ppm was obtained from the transfer station. Some surface contamination was observed to the east of the transfer pit and that was excavated off the surface at a depth of 2 to 3 feet. A Grab sample was taken from that area, the results were 980 ppm.

Excavation then began on Tank pit #4 and Tank pit #5, completing the excavation around the tank. Both pits were very small and extended approximately 4 feet from the tank and approximately 4 1/2 feet deep. Grab closure samples were then taken, the TPH levels were as follows: Tank pit #4- 61 ppm, Tank pit #5- 201 ppm.

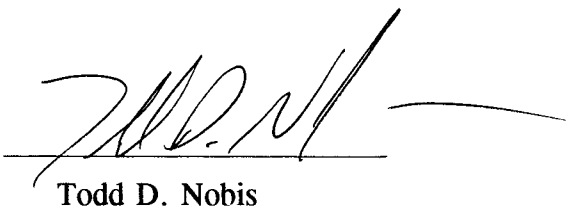
Backfill was then started on the remainder of the tank area. Consultation was done with OCD and Gary Williams Energy regarding the depth and Practicality of excavating past the 17 foot level in the transfer station. A decision was reached to dig a test hole within the confines of the excavation until either the contamination stopped or until an impermeable layer was encountered. At a level of 24 feet, a heavy, compacted clay type material was encountered and the contamination appeared to stop at the clay type material. With the point source eliminated, the backfill was started. The backfill was done in two to three foot lifts with heavy compaction at each lift. Just prior to the backfill, four composite closure samples were taken from the transfer station pit, they were taken along each wall of the pit as well as a sample taken from the bottom of the 24 foot hole. The results of these were as follows: #1-1202 ppm, #2-721 ppm, #3-630 ppm, #4-345 ppm and the pit bottom (24' test hole) 714 ppm.

Through out this project several photographs of the different excavations were taken. Also on scene as a representative of giant was Sarah Kelly from Philip Environmental. She remained on scene from October 10, 1995 to October 16, 1995 and was in phone communication with Tierra as the project progressed. Tierra was informed by Philip Environmental that there would be no consulting between the two, that they were just observers representing Giant to insure that the closure was done to Giant's satisfaction.

The final area clean-up and backfill compaction was completed on November 1, 1995. Closure samples from the Transfer point are as follows: #1- 1202 ppm, #2- 721 ppm, #3- 630 ppm, #4- 345 ppm and sample from the 24 foot pit bottom 714 ppm. All contaminated soils from the excavation were disposed of at the Tierra Environmental Company Inc.'s landfarm on Crouch Mesa. All headspace tests done in the field were completed with a 580-B OVM PID.

Approximately 2,700 cubic yards of contaminated soil was removed from the site, following excavation to the Tierra Environmental Company Inc. OCD permitted landfarm facility located at 420 County Road 3100, San Juan County, New Mexico. The material is located in Cell 10 on the facility, where it shall be remediated. It is the practice of Tierra Environmental Company, Inc. to segregate each individual remediation project upon the landfarm. When remediation of each project is complete and verified by laboratory analysis, permission will be sought based on the results of the laboratory analysis from the New Mexico Oil Conservation Division by Tierra to recycle the soil for use in other oil and gas related cleanup projects as clean backfill. Approximately 2,200 cubic yards of backfill was used at Apache Station. All of that material was generated at the Tierra Landfarm. 14,00 cubic yards of the backfill, was recycled soil. Appropriate documentation concerning laboratory analysis of the recycled soil, it's, origin and OCD authority to recycle are contained in the accompanying enclosures. The remaining 800 cubic yards of fill used at Apache Station were obtained from a stock pile of virgin backfill located at the Tierra Landfarm.

The site clean-up was successful in removing the majority of hydrocarbon contaminates in excess of the New Mexico Oil Conservation Division Regulatory limit ie: 1000 ppm range with the exception of the transfer point. That particular area had the point source eliminated, heavy compaction of fresh backfill and with the clay material encountered at 24 feet. Any remaining contamination is encapsulated and will not cause any future threat in the area.

BY: 

Todd D. Nobis

Environmental Specialist

Tierra Environmental Co. Inc.

2.0

CLOSURE REQUEST TO OCD

TIERRA
ENVIRONMENTAL CORPORATION

TIERRA
ENVIRONMENTAL
COMPANY Inc.
P.O. DRAWER 15250
FARMINGTON, NM 87401

November 14, 1995

William Olsen
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: REQUEST FOR CLOSURE, APACHE STATION, Section 33, T-25N, R-6W, SE 1/4, approximately 9.5 miles east of Lybrook, Rio Arriba Count, New Mexico, operated by GARY WILLIAMS ENERGY: TEC Project # 95042

Dear Mr. Olsen:

Enclosed herewith please find the complete report on voluntary cleanup activities conducted at Apache Station by Tierra Environmental Company, Inc. on behalf of Gary Williams Energy.

The activity was conducted as part of a sale of property agreement between Gary Williams Energy and Giant Refining.

As stated in the report, a site assessment was conducted of the location using the OCD recommended ranking system. The site received an over all rating of 10, thereby allowing residual TPH levels in the 1,000 ppm range.

Philip Environmental, representing Giant conducted limited monitoring of Tierra activity at the site. Two area's of concern were expressed by Philip that were made known to Tierra.

1. What appeared to be a stock water well is located near the site. Philip expressed a desire to have the water in the well analyzed for possible contamination. No information was readily available about the well. It does not belong to Gary Williams Energy. The well appeared at some point in time to have been a wind powered device. However further examination found that it had at some point been converted to electric. All of the electrical wiring had been disconnected. In order to sample the well, the piping had to be removed. Approximately 150' of 2' PVC was removed from the well bore. Static water level appeared to be about 125.' Water samples were collected using approved OCD methods by Mike Lane of On-Site Technologies and transported by him to their laboratory in Farmington, New Mexico for analysis of general water quality and BTEX. General Water Quality analysis disqualified the well

as a domestic water source. The PH was 10.11 mg/l, Sulfate 812mg/l and TDS 1,678 mg/l. Although protectable pursuant to New Mexico Water Quality Control Commission Standards in it's present state the well does not qualify as a domestic water source.

BTEX analysis of the water were as follows;

Benzene	0.3 ug/l
Toluene	1.0 ug/l
Ethylbenzene	3.2 ug/l
m,p-Xylene	<0.2 ug/l
o-Xylene	<0.2 ug/l

The analysis is well below existing New Mexico Water Quality Control Commission Standards. Therefore there is no reason to believe the minute levels of BTEX are in any way related to the adjacent Apache Station facilities belonging to Gary Williams Energy. The well contains a submersible pump. Greasy hand prints were clearly visible on the PVC pipe pulled from the well. It is our opinion that what ever small amount of contamination may be present in the well bore was as a result of unsanitary practices employed by workmen during, repair and or installation of the pump.

2. Tierra hauled approximately 2,200 cubic yards of backfill to Apache Station from our OCD permitted landfarm facility in San Juan County, New Mexico. Of the 2,200 cubic yards of soil taken to the site, approximately 1,400 cubic yards was recycled soil, approved by OCD to be used as backfill at oil and gas projects. The highest TPH level contained in the soil was 29 ppm, well within the parameters required in our OCD landfarm permit with respect to remediaiton levels, which are presently 100 ppm TPH. Appropriate documentation is contained with in the accompanying report.

One area of concern was noted by Tierra. At the transfer station loading point, a considerable amount of contaminated soil was removed to a level of approximately 17'. The excavation was becoming unstable. Therefore the decision was made to excavate a test hole at the bottom of the full excavation in order to determine the vertical extent of migration. A test hole was dug to a level of 24' wherein a layer of clay / shale was encountered. TPH samples indicated the contamination was at 714 ppm at the 24' level. After consulting with yourself and D.Foust OCD Aztec, I made the decision to discontinue excavation and backfill, thereby encapsulating any remaining contamination. The point source had been eliminated and therefore any remaining contamination should pose no further threat. Final closure samples of the excavation were all below 1,000 ppm TPH with the exception of a bottom composite which was slightly elevated at 1,202 ppm, TPH.

Based on the accompanying report, I would request that the site cleanup activities be considered by OCD to be complete and final closure be approved.

Please call me if you have any questions or require additional information.

Thank you for your professional assistance and cooperation in this matter.

Sincerely,

Phillip C. Nobis
President

xc: Chris Hawley, GWE
D. Foust Aztec OCD
Final Report

3.0 P E R M I T S

Submit 5 copies to Appropriate District Office

DISTRICT I
P.O.Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-117 A
Revised 4-1-91

PERMIT NO._____

TANK CLEANING, SEDIMENT OIL REMOVAL, TRANSPORTATION OF MISCELLANEOUS HYDROCARBONS AND DISPOSAL PERMIT

80202

Operator or Owner Gary Williams Energy Address 370 17th Suite 5300, Denver Colorado

Lease or Facility Name Apache Station Rio Riba County N.M. Location Sec. 33, T-25N, R-6N SE1/4
U.L. - Sec. - Twp. - Rge.

OPERATION TO BE PERFORMED:

☐ Tank Cleaning ☐ Sediment Oil Removal ☒ Transportation of Miscellaneous Hydrocarbons

Operator or Owner Representative authorizing work Phillip C. Nobis - Tierra Environmental Co. Inc.

Date Work to be Performed October 4, 1995

TANK CLEANING DATA Tank Number_____ Volume_____

Tank Type_____ Volume Below Load Line_____

SEDIMENT OIL OR MISCELLANEOUS HYDROCARBON DATA

Sediment Oil from: ☐ Pit ☐ Cellar ☒ Other Transportation facility cleaning

MISCELLANEOUS OIL

Tank Bottoms From: ☐ Pipeline Station ☐ Crude Terminal ☐ Refinery ☐ Other*

Catchings From: ☐ Gasoline Plant ☐ Gathering Lines ☐ Salt Water Disposal System ☐ Other*

Pipeline Break Oil or Spill ☐

*Other (Explain)_____

VOLUME AND DESTINATION: Estimated Volume 200 Bbls. Field test volume of good oil _____ Bbls.
(Not required prior to Division approval)

Destination (Name and Location of treating plant or other facility) Tierra Environmental Landfarm 420 CR 3100 Aztec, N.M. 87410

DESTRUCTION OF SEDIMENT OIL BY: ☐ Burning ☐ Pit Disposal ☐ Use on Roads or firewalls ☒ Other

(Explain) Landfarming

Location of Destruction Tierra Environmental Lanfarm

Justification of Destruction No recoverable oil

CERTIFICATION: (APPLICATION MAY BE MADE BY EITHER OF THE FOLLOWING)

I hereby certify that the infomation above is true and complete to the best of my knowledge and belief.

Owner Gary Williams Energy

By [signature] Tierra Env. Co.

Title Environmental Consultant

Date 10/11/95

Transporter Sunco

Address_____

Signature_____

Title_____ Date_____

OIL CONSERVATION DIVISION

Approved By_____ Title_____ Date_____

A COPY OF THIS FORM MUST BE ON LOCATION DURING TANK CLEANING, REMOVAL OF SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS, AND MUST BE PRESENTED WITH TANK BOTTOMS, SEDIMENT OIL OR MISCELLANEOUS HYDROCARBONS AT THE TREATING PLANT TO WHICH IT IS DELIVERED.

DISTRIBUTION BY OCD	
	Santa Fe
	File
	Operator
	Transporter (2)

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE	XXXXXXXXXXXXXXXXXXXXXX
1. RCRA Exempt: ☐ Non-Exempt: ■ Verbal Approval Received: Yes ☐ No ☐ By: **DENNY FOUST** (Submitting this form for oilfield exempt waste is optional) **DATE:**	4. Generator Gary Williams Energy
2. Destination **Tierra Environmental Co., Inc. Crouch Mesa Landfarm**	5. Name of Originating Site Apache Station
3. Address of Facility Operator **420 CR. 3100 AZTEC, NM 87410**	6. Name of Transporter Fesco
7. Originating Location of Material (Street Address or ULSTR) Section 33, T-25 N, R-6 W, SE 1/4 Rio Riba	8. State New Mexico

9. Check One

- ☐ A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certificate of waste from the Generator: one certificate per job.
- ☐ B. All requests for approval to accept non-oilfield exempt wastes will be accompanied by a certification of waste status from the Generator and the New Mexico Environmental Dept or other appropriate government agency; two certificates per job.
- ☒ XXX C. All requests for approval to accept non-exempt wastes must be accomanied by necessary chemical analyses to prove the material is non-hazardous and the Generator's certification of origin. No waste classified as hazardous by listing or testing will be approved.

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

Projected Date(s) for transportation: 10/12/95

BRIEF DESCRIPTION OF THE MATERIAL:

Soil Contaminated with crude oil removed from around 10,000 bbl tank and bermed area. Site is being cleaned up because of a sale from Gary Energy to Giant Refining Facility is a transportation terminal.

Estimated Volume 2,000 yd^3 Known Volume (to be entered by the operator at end of haul): _____ yd^3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE _____ TITLE President DATE 10/11/95

TYPE OR PRINT NAME Phillip C. Nobis TELEPHONE NO. (505) 334-8894

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

TIERRA ENVIRONMENTAL COMPANY Inc.

CORPORATE and LANDFARM OFFICES

P.O. Drawer 15250
Farmington, NM 87401

****

420 CR. 3100
Aztec, NM 87410
(505) 334-8894
Fax (505) 334-9024

CERTIFICATE OF WASTE STATUS
EXEMPT OILFIELD WASTE

Originating Site: (Include Name, Section, Township, Range, 1/4, etc.)

Apache Station, Section 33, T-25 N, R-6 N, SE 1/4
Rio Riba County

This material originated in:

☒ The State of New Mexico

☐ The State of _____. Letter from Regulatory Agency having jurisdiction therefore is attached.

Location is on: ☐ BLM, FOREST ☐ TRIBAL ☐ OTHER FEDERAL LANDS

Description of Material: Soil Contaminated with crude oil from numerous spills over several years. Site is being cleaned up because of a sale of the facility from Gary Williams Energy to Giant Refining. Material has been exempted by analysis TCLP attached hereto.

Destination: Tierra Environmental Company Inc.
Crouch Mesa Landfarm Facility
SE 1/4, Section 2, Township 29 North, Range 12 W
NMPM
San Juan County, New Mexico

I Chris Hawley

Representative for Gary Williams Energy

do hereby certify that the waste described above is material that is exempted from regulation by the Resource Conservation and Recovery Act (RCRA) and is considered non-hazardous oilfield waste. I further certify that to the best of my knowledge, no other material has been commingled with the exempt waste that would otherwise cause the waste to be classified as "Hazardous" by RCRA or any other Federal, State or Local law, regulation or ordinance.

Signature _____

Title ENVIRONMENTAL MGR Date 10-11-95

Address GARY-WILLIAMS ENERGY CORP.
370 17th Street, Suite 5300
DENVER, CO 80202

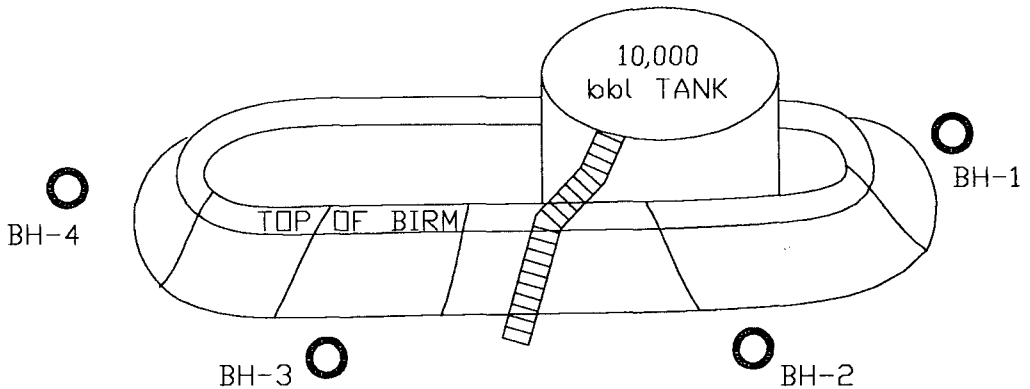
4.0

S I T E D I A G R A M

1-4

APACHE STATION
Lying in the
SE 1/4 SECTION 33,
T25N R6W, N.M.P.M.,
RIO ARRIBA CO.
NEW MEXICO

SITE DIAGRAM



SEE SHEET 2 OF 4
FOR LACT UNIT
DETAIL

SEE SHEET 4 OF 4
FOR TANK AREA DETAIL

STOCK WELL

SEE SHEET SHEET 3 OF 4
FOR TRANSFER POINT
DETAIL

BY
TIERRA
Environmental Company, Inc.
P. O. DRAWER 15250
Farmington, New Mexico 87401

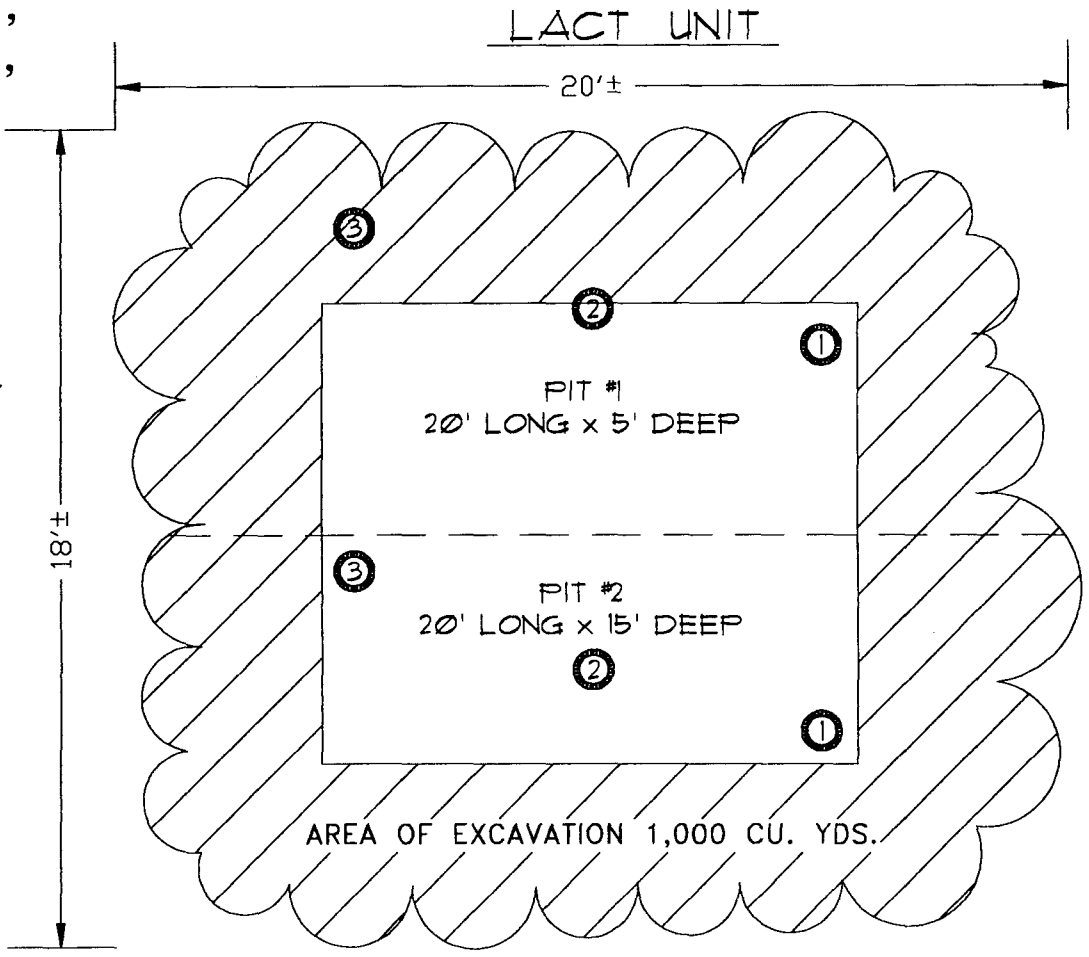
FILE: 5568 DATE: 11-10-95 SCALE: NONE

APACHE STATION
Lying in the
SE 1/4 SECTION 33,
T25N R6W, N.M.P.M.,
RIO ARRIBA CO.
NEW MEXICO

STOCK WELL

PIT #1 READINGS
① = 370 PPM
② = 60 PPM
③ = 490 PPM

PIT #2 READINGS
HEAD SPACE: 0014 PPM
TD 329 PPM
① = 162 PPM
② = 677 PMM
③ = <25 PPM



BY
TIERRA
Environmental Company, Inc.
P. O. DRAWER 15250
Farmington, New Mexico 87401

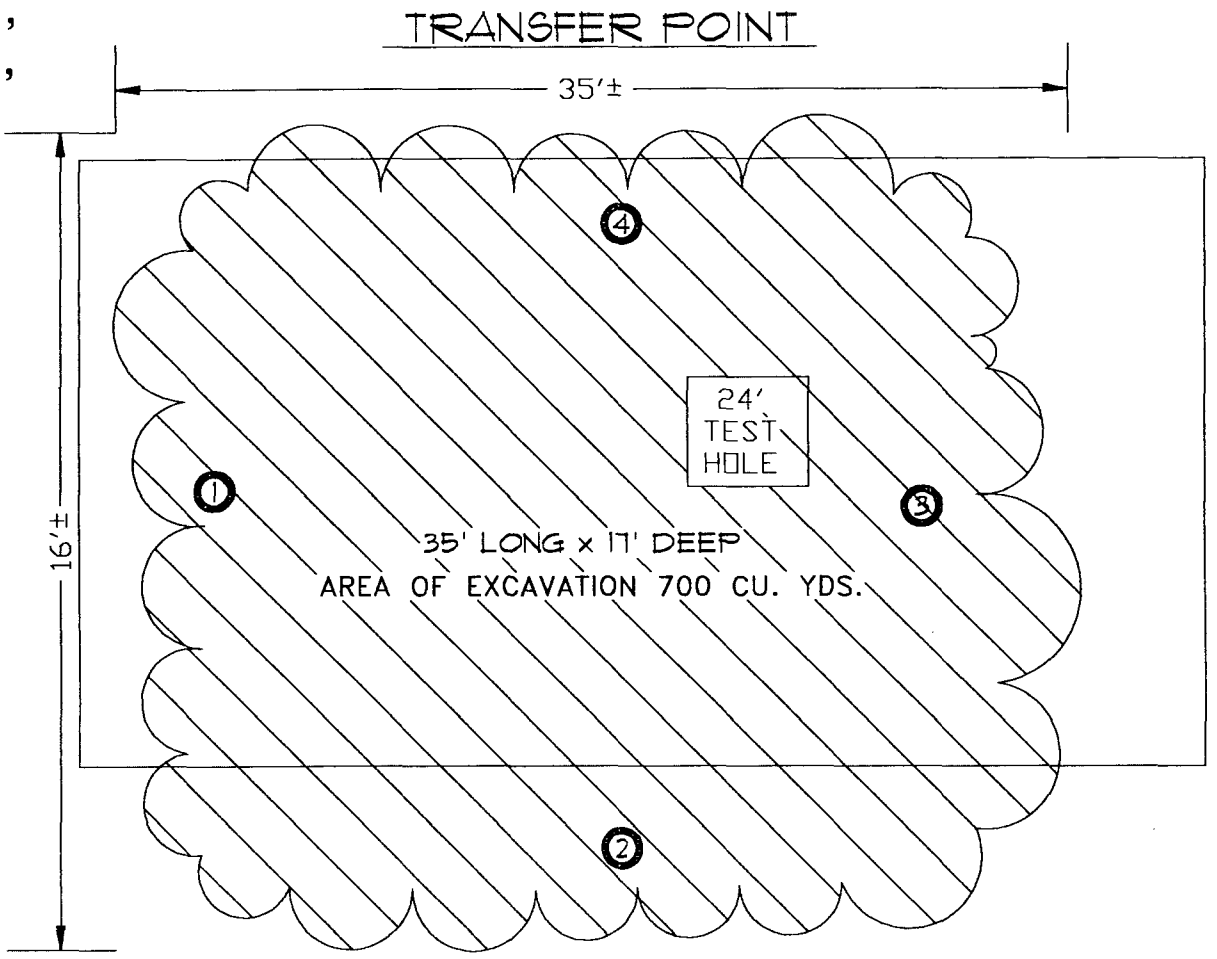
FILE: 5568A DATE: 11-10-95 SCALE: NONE

APACHE STATION
Lying in the
SE 1/4 SECTION 33,
T25N R6W, N.M.P.M.,
RIO ARRIBA CO.
NEW MEXICO

STOCK WELL

HEAD SPACE: 268 PPM

① = 1,202 PPM
② = 721 PMM
③ = 630 PPM
④ = 345 PPM
TEST HOLE = 714 PPM

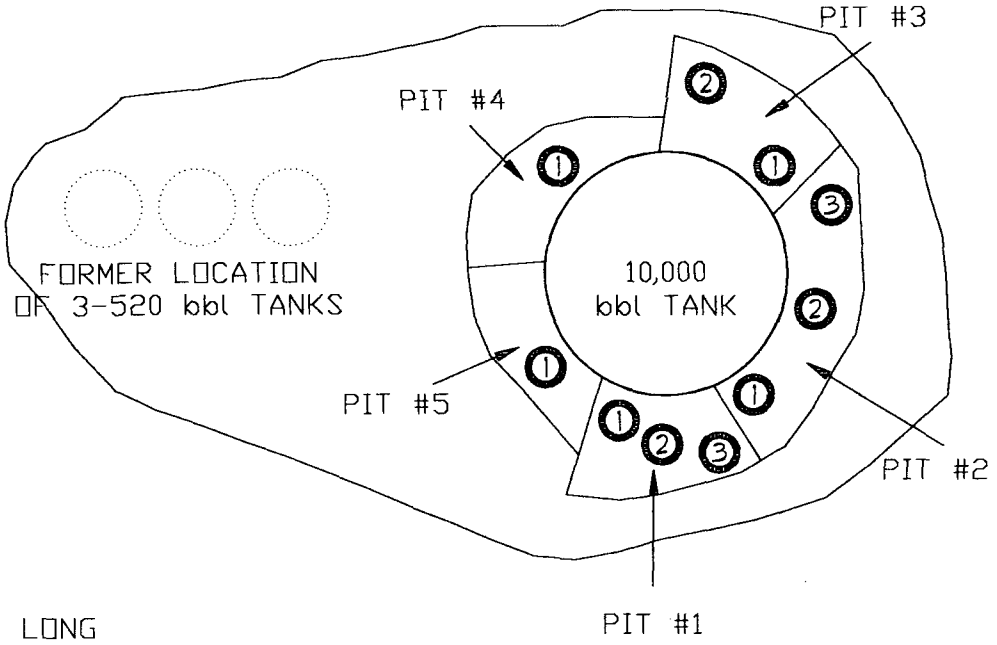


BY
TIERRA
Environmental Company, Inc.
P. O. DRAWER 15250
Farmington, New Mexico 87401

FILE: 5568B DATE: 11-10-95 SCALE: NONE

APACHE STATION
Lying in the
SE 1/4 SECTION 33,
T25N R6W, N.M.P.M.,
RIO ARRIBA CO.
NEW MEXICO

STOREAGE TANK AREA



PIT #1
14.5' DEEP x 20' LONG
HEAD SPACE 007 PPM

① = 29 PPM
② = <25 PMM
③ = <25 PPM

PIT #2
9' DEEP x 25' LONG
HEAD SPACE 007 PPM

① = 155 PPM
② = 184 PMM
③ = 115 PPM

PIT #3
12' DEEP x 30' LONG
HEAD SPACE 0009 PPM

① = 290 PPM
② = 139 PMM

PIT #4
4.5' DEEP

① = 61 PPM

PIT #5
4.5' DEEP

① = 201 PPM

AREA OF EXCAVATION
APPROX. 1,000 CU. YDS.

BY
TIERRA
Environmental Company, Inc.
P. O. DRAWER 15250
Farmington, New Mexico 87401

FILE: 5568C DATE: 11-10-95 SCALE: NONE

5.0

L A B R E P O R T S & C H A I N O F C U S T O D Y

1-9

CORE LABORATORIES

CORE LABORATORIES
A N A L Y T I C A L R E P O R T

Job Number: 952893
Prepared For:

ONSITE TECHNOLOGIES LIMITED
DAVE COX
657 W. MAPLE
FARMINGTON, NM 87401

Date: 10/10/95

Signature

10/10/95
Date:

Name: Charles Sassine

CORE LABORATORIES
1733 NORTH PADRE ISLAND DRIVE
CORPUS CHRISTI, TX 78408

Title: Laboratory Supervisor

CORE LABORATORIES

LABORATORY TESTS RESULTS
10/10/95

JOB NUMBER: 952893 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.....: T1E1001
DATE SAMPLED.....: 10/02/95
TIME SAMPLED.....: 08:45
WORK DESCRIPTION...: APACHE STATION BLOOMFIELD REFINERY CO.

LABORATORY I.D...: 952893-0001
DATE RECEIVED....: 10/03/95
TIME RECEIVED....: 11:00
REMARKS.....: SAMPLED BY: T.N.

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TCLP Semivolatiles		*5		EPA SW-846 8270	10/09/95	GEF
1,4-Dichlorobenzene	<50	50	ug/L	EPA SW-846 8270		
2,4-Dinitrotoluene	<50	50	ug/L	EPA SW-846 8270		
Hexachlorobenzene	<50	50	ug/L	EPA SW-846 8270		
Hexachlorobutadiene	<50	50	ug/L	EPA SW-846 8270		
Hexachloroethane	<50	50	ug/L	EPA SW-846 8270		
Nitrobenzene	<50	50	ug/L	EPA SW-846 8270		
Pentachlorophenol	<250	250	ug/L	EPA SW-846 8270		
2,4,5-Trichlorophenol	<50	50	ug/L	EPA SW-846 8270		
2,4,6-Trichlorophenol	<50	50	ug/L	EPA SW-846 8270		
Pyridine	<50	50	ug/L	EPA SW-846 8270		
p,m-Cresol	<50	50	ug/L	EPA SW-846 8270		
o-Cresol	<50	50	ug/L	EPA SW-846 8270		
2-Fluorophenol (Surrogate)	42	0	% Recovery	21-83% QC LIMITS		
Phenol-d6 (Surrogate)	36	0	% Recovery	24-94% QC LIMITS		
Nitrobenzene-d5 (Surrogate)	73	0	% Recovery	35-102% QC LIMITS		
2-Fluorobiphenyl (Surrogate)	107	0	% Recovery	43-103% QC LIMITS		
2,4,6-Tribromophenol(Surrogate)	93	0	% Recovery	28-111% QC LIMITS		
Terphenyl-d14 (Surrogate)	90	0	% Recovery	43-117% QC LIMITS		
TCLP Volatiles		*10		EPA SW-846 8260	10/05/95	QP
Benzene	<50	50	ug/L	EPA SW-846 8260		
Carbon tetrachloride	<50	50	ug/L	EPA SW-846 8260		
Chlorobenzene	<50	50	ug/L	EPA SW-846 8260		
Chloroform	<50	50	ug/L	EPA SW-846 8260		
Methyl ethyl ketone	<500	500	ug/L	EPA SW-846 8260		
Trichloroethene	<50	50	ug/L	EPA SW-846 8260		
Vinyl chloride	<40	40	ug/L	EPA SW-846 8260		
1,2-Dichloroethane	<50	50	ug/L	EPA SW-846 8260		
Tetrachloroethene	<50	50	ug/L	EPA SW-846 8260		
1,1-Dichloroethene	<50	50	ug/L	EPA SW-846 8260		
Dibromofluoromethane(Surrogate)	101	0	% Recovery	86-115% QC LIMITS		
Toluene d-8 (Surrogate)	97	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene(Surrogate)	96	0	% Recovery	86-115% QC LIMITS		
Extraction - TCLP Semivolatiles	Completed			EPA SW-846 3520	10/06/95	WEB
Glass Jar Extraction for Metals	Completed			EPA SW-846 1311	10/04/95	DGP
Glass Jar Extraction-Semivolatiles	Completed			EPA SW-846 1311	10/04/95	DGP
Arsenic (As), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/06/95	GCC

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CORE LABORATORIES

LABORATORY TESTS RESULTS
10/10/95

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TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Barium (Ba), extractable TCLP	1.17	0.05	mg/L	EPA SW-846 6010	10/06/95	GCC
Cadmium (Cd), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/06/95	GCC
Chromium (Cr), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/06/95	GCC
Lead (Pb), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/06/95	GCC
Selenium (Se), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/06/95	GCC
Silver (Ag), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/06/95	GCC
Flammability Potential	Neg.		+ or -	ASTM D4982-89	10/06/95	JJP
Cyanide, Reactive	<5	5	mg/kg	EPA SW-846 7.3.3.2	10/04/95	DEH
Corrosivity by pH	6.1	0.1	pH units	30 TAC 335.505 (3)	10/04/95	SEB
Sulfide, Reactive	396	50	mg/kg	EPA SW-846 7.3.4.2	10/05/95	DEH
Mercury (Hg), extractable, TCLP	<0.002	0.002	mg/L	EPA SW-846 7470	10/09/95	JJP
Metals Digest on Extracted Sample	Completed			EPA SW-846 3010	10/05/95	EBS
Zero Headspace Extraction-Volatile	Completed			EPA SW-846 1311	10/04/95	DGP

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10/10/95

JOB NUMBER: 952893 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Corrosivity by pH			DATE/TIME ANALYZED:10/04/95 13:00							QC BATCH NUMBER:990914
REPORTING LIMIT/DF: 0.1	UNITS:pH units		METHOD REFERENCE :EPA SW-846 90408							TECHNICIAN:SEB
STANDARD	LCS 2	386.18.4	6.96			7.00	99			
STANDARD	LCS 3	386.18.4	6.99			7.00	100			
DUPLICATE	MD	952827-1	8.2	8.0	2					
DUPLICATE	MD	952827-11	6.9	6.8	1					
PARAMETER:Cyanide, Reactive			DATE/TIME ANALYZED:10/04/95 08:00							QC BATCH NUMBER:990934
REPORTING LIMIT/DF:	UNITS:mg/kg		METHOD REFERENCE :EPA SW-846 7.3.3.2							TECHNICIAN:DEH
BLANK	MB 100495	Di H2O	<5							
STANDARD	LCS	508.20.3	2.03			1.93	105			
SPIKE	PDS	952826-2	1.01					<5	0.944	107
DUPLICATE	MD	952826-2	<5	<5	0					
PARAMETER:Sulfide, Reactive			DATE/TIME ANALYZED:10/05/95 07:30							QC BATCH NUMBER:990999
REPORTING LIMIT/DF: 50	UNITS:mg/kg		METHOD REFERENCE :EPA SW-846 7.3.4.2							TECHNICIAN:DEH
BLANK	MB 090595	Di H2O	<50							
STANDARD	LCS	508.18.17	301			300	100			
SPIKE	MS	952893-1	736					396	300	113
DUPLICATE	MD	952893-1	396	406	2					
PARAMETER:Flammability Potential			DATE/TIME ANALYZED:10/06/95 16:39							QC BATCH NUMBER:991166
REPORTING LIMIT/DF:	UNITS:+ or -		METHOD REFERENCE :ASTM D4982-89							TECHNICIAN:JJP
DUPLICATE	MD	952793-3	Pos.	Pos.	0					
PARAMETER:Arsenic (As), extractable TCLP			DATE/TIME ANALYZED:10/06/95 11:08							QC BATCH NUMBER:991182
REPORTING LIMIT/DF: 0.05	UNITS:mg/L		METHOD REFERENCE : SW-846 6010A							TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3051	<0.05							
STANDARD	ICV	Q0895	0.97			1.00	97			
STANDARD	CCV	0913C	4.92			5.00	98			
SPIKE	MS	952876-002	0.91					<0.05	1.00	91
DUPLICATE	MD	952894-001	<0.05	<0.05	NC					
PARAMETER:Barium (Ba), extractable TCLP			DATE/TIME ANALYZED:10/06/95 11:08							QC BATCH NUMBER:991183
REPORTING LIMIT/DF: 0.05	UNITS:mg/L		METHOD REFERENCE : SW-846 6010A							TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3051	<0.05							
BLANK	MB	200.7	<0.05							
STANDARD	ICV	70895	1.00			1.00	100			
STANDARD	CCV	0913C	5.01			5.00	100			
SPIKE	MS	952876-002	1.58					0.71	1.00	87
DUPLICATE	MD	952894-001	2.03	2.44	18					

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QUALITY ASSURANCE REPORT
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JOB NUMBER: 952893 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Barium (Ba), extractable TCLP				DATE/TIME ANALYZED:10/06/95 11:08						QC BATCH NUMBER:991183
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
PARAMETER:Cadmium (Cd), extractable TCLP				DATE/TIME ANALYZED:10/06/95 11:08						QC BATCH NUMBER:991184
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3051	<0.05							
BLANK	MB	200.7	<0.05							
STANDARD	ICV	Q0895	1.01			1.00	101			
STANDARD	CCV	0913C	4.99			5.00	100			
SPIKE	MS	952894-001	0.92					<0.05	1.00	92
DUPLICATE	MD	952894-001	<0.05	<0.05	NC					
PARAMETER:Chromium (Cr), extractable TCLP				DATE/TIME ANALYZED:10/06/95 11:08						QC BATCH NUMBER:991185
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3051	<0.05							
BLANK	MB	200.7	<0.05							
STANDARD	ICV	Q0895	1.03			1.00	103			
STANDARD	CCV	0913C	5.03			5.00	101			
SPIKE	MS	952894-001	0.87					<0.05	1.00	87
DUPLICATE	MD	952894-001	<0.05	<0.05	NC					
PARAMETER:Lead (Pb), extractable TCLP				DATE/TIME ANALYZED:10/06/95 11:08						QC BATCH NUMBER:991186
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3051	<0.05							
BLANK	MB	200.7	<0.05							
STANDARD	ICV	Q0895	1.03			1.00	103			
STANDARD	CCV	0913C	5.04			5.00	101			
SPIKE	MS	952894-001	0.86					<0.05	1.00	86
DUPLICATE	MD	952894-001	<0.05	<0.05	NC					
PARAMETER:Selenium (Se), extractable TCLP				DATE/TIME ANALYZED:10/06/95 11:08						QC BATCH NUMBER:991187
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3051	<0.05							
BLANK	MB	200.7	0.05							
STANDARD	ICV	Q0895	1.00			1.00	100			
STANDARD	CCV	0913C	4.93			5.00	99			
SPIKE	MS	952894-001	0.96					<0.05	1.00	96
DUPLICATE	MD	952894-001	<0.05	<0.05	NC					

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ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Silver (Ag), extractable TCLP				DATE/TIME ANALYZED:10/06/95 11:08						QC BATCH NUMBER:991188
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3051	<0.05							
BLANK	MB	200.7	<0.05							
STANDARD	ICV	70895	1.05			1.00	105			
STANDARD	CCV	0913C	5.14			5.00	103			
SPIKE	MS	952894-001	0.94					<0.05	1.00	94
DUPLICATE	MD	952894-001	<0.05	<0.05	NC					
PARAMETER:Mercury (Hg), extractable, TCLP				DATE/TIME ANALYZED:10/09/95 18:08						QC BATCH NUMBER:991472
REPORTING LIMIT/DF: 0.002 UNITS:mg/L				METHOD REFERENCE :EPA SW-846 7470						TECHNICIAN:JJP
BLANK	MB	DI H2O	<0.002							
STANDARD	RS	Bk367 Pg49	0.020			0.020	100			
SPIKE	MS	952893-1	0.049					<0.002	0.050	98
DUPLICATE	MD	952893-1	<0.002	<0.002	NC					

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QUALITY ASSURANCE REPORT
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JOB NUMBER: 952893 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP Volatiles DATE ANALYZED: 10/05/95 TIME ANALYZED: 17:30 METHOD: EPA SW-846 8260 QC NUMBER:991252

BLANKS

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Vinyl chloride	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
1,1-Dichloroethene	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
Methyl ethyl ketone	MB	092795	1	<50	50	ug/L
	MB	092795	1	<50	50	ug/L
	MB	100295	1	<50	50	ug/L
	MB	100295	1	<50	50	ug/L
Chloroform	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
Carbon tetrachloride	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
1,2-Dichloroethane	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
Benzene	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
Trichloroethene	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
Tetrachloroethene	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
Chlorobenzene	MB	092795	1	<5	5	ug/L
	MB	092795	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L
	MB	100295	1	<5	5	ug/L

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QUALITY ASSURANCE REPORT
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TCLP Volatiles DATE ANALYZED: 10/05/95 TIME ANALYZED: 17:30 METHOD: EPA SW-846 8260 QC NUMBER:991252

REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Vinyl chloride	CC	342.92.1	1	107	100	107	5	ug/L
1,1-Dichloroethene	CC	342.92.1	1	122	100	122	5	ug/L
Methyl ethyl ketone	CC	342.92.1	1	113	100	113	50	ug/L
Chloroform	CC	342.92.1	1	107	100	107	5	ug/L
Carbon tetrachloride	CC	342.92.1	1	120	100	120	5	ug/L
1,2-Dichloroethane	CC	342.92.1	1	128	100	128	5	ug/L
Benzene	CC	342.92.1	1	109	100	109	5	ug/L
Trichloroethene	CC	342.92.1	1	111	100	111	5	ug/L
Tetrachloroethene	CC	342.92.1	1	112	100	112	5	ug/L
Chlorobenzene	CC	342.92.1	1	110	100	110	5	ug/L
Dibromofluoromethane(Surrogate)	CC	342.92.1	1	47	50	94	5	ug/L
Toluene d-8 (Surrogate)	CC	342.92.1	1	50	50	100	5	ug/L
4-Bromofluorobenzene(Surrogate)	CC	342.92.1	1	50	50	100	5	ug/L

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TCLP Volatiles DATE ANALYZED: 10/05/95 TIME ANALYZED: 17:30 METHOD: EPA SW-846 8260 QC NUMBER:991252

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Vinyl chloride	MS	952800-1	1	950	0	1000	95	5	ug/L
	MSD	952800-1	1	940	0	1000	94	5	ug/L
1,1-Dichloroethene	MS	952800-1	1	1110	0	1000	111	5	ug/L
	MSD	952800-1	1	1130	0	1000	113	5	ug/L
Methyl ethyl ketone	MS	952800-1	1	1190	0	1000	119	50	ug/L
	MSD	952800-1	1	1200	0	1000	120	50	ug/L
Chloroform	MS	952800-1	1	1050	0	1000	105	5	ug/L
	MSD	952800-1	1	1060	0	1000	106	5	ug/L
Carbon tetrachloride	MS	952800-1	1	1070	0	1000	107	5	ug/L
	MSD	952800-1	1	1090	0	1000	109	5	ug/L
1,2-Dichloroethane	MS	952800-1	1	1250	0	1000	125	5	ug/L
	MSD	952800-1	1	1240	0	1000	124	5	ug/L
Benzene	MS	952800-1	1	970	0	1000	97	5	ug/L
	MSD	952800-1	1	980	0	1000	98	5	ug/L
Trichloroethene	MS	952800-1	1	970	0	1000	97	5	ug/L
	MSD	952800-1	1	970	0	1000	97	5	ug/L
Tetrachloroethene	MS	952800-1	1	970	0	1000	97	5	ug/L
	MSD	952800-1	1	990	0	1000	99	5	ug/L
Chlorobenzene	MS	952800-1	1	990	0	1000	99	5	ug/L
	MSD	952800-1	1	980	0	1000	98	5	ug/L
Dibromofluoromethane(Surrogate	MB	092795-00	1	510	0	500	102	5	ug/L
	MB	092795-00	1	520	0	500	104	5	ug/L
	MB	100295-00	1	510	0	500	102	5	ug/L
	MB	100295-00	1	510	0	500	102	5	ug/L
Toluene d-8 (Surrogate)	MB	092795-00	1	490	0	500	98	5	ug/L
	MB	092795-00	1	490	0	500	98	5	ug/L
	MB	100295-00	1	480	0	500	96	5	ug/L
	MB	100295-00	1	500	0	500	100	5	ug/L
4-Bromofluorobenzene(Surrogate	MB	092795-00	1	500	0	500	100	5	ug/L
	MB	092795-00	1	500	0	500	100	5	ug/L
	MB	100295-00	1	490	0	500	98	5	ug/L
	MB	100295-00	1	480	0	500	96	5	ug/L

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QUALITY ASSURANCE REPORT
10/10/95

JOB NUMBER: 952893 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP SEMIVOLATILES DATE ANALYZED: 10/09/95 TIME ANALYZED: 13:47 METHOD: EPA SW-846 8270 QC NUMBER:991365

BLANKS

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
1,4-Dichlorobenzene	MB	100695	1	<10	10	ug/L
2,4-Dinitrotoluene	MB	100695	1	<10	10	ug/L
Hexachlorobenzene	MB	100695	1	<10	10	ug/L
Hexachlorobutadiene	MB	100695	1	<10	10	ug/L
Hexachloroethane	MB	100695	1	<10	10	ug/L
Nitrobenzene	MB	100695	1	<10	10	ug/L
Pentachlorophenol	MB	100695	1	<50	50	ug/L
2,4,5-Trichlorophenol	MB	100695	1	<10	10	ug/L
2,4,6-Trichlorophenol	MB	100695	1	<10	10	ug/L
Pyridine	MB	100695	1	<10	10	ug/L
Cresols (Total)	MB	100695	1	<30	30	ug/L

1733 NORTH PADRE ISLAND DRIVE
CORPUS CHRISTI, TX 78408
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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10/10/95

JOB NUMBER: 952893 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP SEMIVOLATILES DATE ANALYZED: 10/09/95 TIME ANALYZED: 13:47 METHOD: EPA SW-846 8270 QC NUMBER:991365

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
1,4-Dichlorobenzene	BS	100695-00	1	65	0	250	26	10	ug/L
2,4-Dinitrotoluene	BS	100695-00	1	88	0	250	35	10	ug/L
Hexachlorobenzene	BS	100695-00	1	110	0	250	44	10	ug/L
Hexachlorobutadiene	BS	100695-00	1	76	0	250	30	10	ug/L
Hexachloroethane	BS	100695-00	1	66	0	250	26	10	ug/L
Nitrobenzene	BS	100669-00	1	96	0	250	38	10	ug/L
Pentachlorophenol	BS	100695-00	1	290	0	750	39	50	ug/L
2,4,5-Trichlorophenol	BS	100695-00	1	320	0	750	43	10	ug/L
2,4,6-Trichlorophenol	BS	100695-00	1	120	0	250	48	10	ug/L
Pyridine	BS	100695-00	1	140	0	500	28	10	ug/L
Cresols (Total)	BS	100695-00	1	230	0	750	31	30	ug/L

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QUALITY ASSURANCE FOOTER

Cited Methods are obtained from the following documents :

EPA 600/2-79-020, Methods for the Analysis of Water and Wastes, March 1983.
USEPA SW-846 3rd. Edition, November 1990 and July 1992 Update, Test Methods for Evaluating Solid Waste.
EPA 600/2-78-054, Field and Laboratory Methods Applicable to Overburdens and Minesoils.
Federal Register, July 1, 1992 (40 CFR Part 136).
Standard Methods for the Examination of Water and Wastewater, 18th Ed. APHA, AWWA, WPCF.

Quality control acceptance criteria are method dependent.
All data reported on sample "as received" unless noted.
Sample IDs with a "-00" at the end indicate a blank spike or blank spike duplicate associated with the numbered sample.
NC = Not Calculated due to value at or below detection limit.
NOTE: Data in QA report may differ from final results due to digestion and/or dilution of sample into analytical range.
The "TIME ANALYZED" in the QA report refers to the start time of the analytical batch which may not reflect the actual time of each analysis. The "DATE ANALYZED" is the actual date of analysis.
The data in this report are within the limits of uncertainty specified in the referenced method unless otherwise indicated.

SUBCONTRACTED LABORATORY LOCATIONS

For analyses performed by a subcontract laboratory, an "*" and the designated laboratory code is indicated in the "TECHN" column of the laboratory test results report.

Core Laboratories :

Anaheim	*AN	Lake Charles	*LC
Aurora	*AU	Long Beach	*LB
Casper	*CA	Other Laboratories	*XX
Houston	*HP		

QUALITY ASSURANCE REPORT CODES

BLANKS*	REFERENCE STANDARDS	SPIKES AND DUPLICATES
MB = Method Blank	RS = Reference Standard	MS = Matrix Spike, BS = Blank Spike
RB = Reagent Blank	CC = Continuing Calib.	SS = Surrogate Spike, MD = Matrix Dup.
SB = Storage Blank	LCS = Laboratory Control Std.	PDS= Post Digested Spike
ICB = Initial Calib. Blank	ICV = Initial Calib. Verification	MSD= Matrix Spike Duplicate
CCB = Continuing Calib. Blank	CCV = Cont. Calib. Verification	PDD= Post Digested Duplicate

*In the event that several different method blanks are analyzed, the blank type will be designated by the preparation method, i.e., ZHE, TCLP, 3010, 3050, etc.

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CHAIN OF CUSTODY RECORD

3519

ON SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 10/2/95

Page 1 of 1

Purchase Order No.: 3518 | Job No. TIE1001

SEND INVOICE TO
Name: ACCOUNTS PAYABLE
Company: ON SITE TECH | Dept.
Address: P.O. BOX 2606
City, State, Zip: FARMINGTON, NM 87499

REPORT RESULTS TO
Name: DAVID COX | Title
Company: ON SITE TECHNOLOGIES
Mailing Address: 657 W. MAPLE
City, State, Zip: FARMINGTON, NM 87401
Telephone No. 505 325 5667 | Telefax No. 505 325-6256

Sampling Location:

Sampler: T. NOBIS

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	TCLP VOLS	TCLP SEMI-VOLS	TCLP METALS	CORROSIVITY	REACTIVITY	IGNITABILITY				LAB ID
						ANALYSIS REQUESTED									
APACHE STATION BLOOMFIELD REFINERY COMPANY	10/2/95	0845	SOIL	4°C	2	✓	✓	✓	✓	✓	✓				8451-3518

Relinquished by:	Date/Time 10/2/95 1700	Received by: DINA FLORES	Date/Time 10/3/95 1100
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date 10/2/95
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

3518

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.
657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: [illegible]

Purchase Order No.:	Job No.	REPORT RESULTS TO	Name [illegible] / Title
SEND INVOICE TO	Name		Company [illegible]
	Company / Dept.		Mailing Address
	Address		City, State, Zip
	City, State, Zip		Telephone No. / Telefax No.

Sampling Location:

Sampler:

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: [illegible]	[illegible]	[illegible]								LAB ID
[illegible]	[illegible]	[illegible]	[illegible]	—	[illegible]	✓	✓	✓								
[illegible]																

Relinquished by: [illegible]	Date/Time [illegible]	Received by: [illegible]	Date/Time [illegible]
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: [illegible] Date
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

CORE LABORATORIES

CORE LABORATORIES
A N A L Y T I C A L R E P O R T

Job Number: 952967
Prepared For:

ONSITE TECHNOLOGIES LIMITED
DAVE COX
657 W. MAPLE
FARMINGTON, NM 87401

Date: 10/18/95

Signature Judy Orr

Date: 10/24/95

Name: Judy Orr

Title: QA/QC Coordinator

CORE LABORATORIES
1733 NORTH PADRE ISLAND DRIVE
CORPUS CHRISTI, TX 78408

CORE LABORATORIES

LABORATORY TESTS RESULTS
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.....: 4-1247
DATE SAMPLED.....: 10/04/95
TIME SAMPLED.....: 13:00
WORK DESCRIPTION...: TANK BOTTOM SLUDGE 8482-3523

LABORATORY I.D...: 952967-0001
DATE RECEIVED....: 10/09/95
TIME RECEIVED....: 10:30
REMARKS.....: SAMPLED BY: D.N.

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TCLP Semivolatiles		*5		EPA SW-846 8270	10/18/95	GEF
1,4-Dichlorobenzene	<50	50	ug/L	EPA SW-846 8270		
2,4-Dinitrotoluene	<50	50	ug/L	EPA SW-846 8270		
Hexachlorobenzene	<50	50	ug/L	EPA SW-846 8270		
Hexachlorobutadiene	<50	50	ug/L	EPA SW-846 8270		
Hexachloroethane	<50	50	ug/L	EPA SW-846 8270		
Nitrobenzene	<50	50	ug/L	EPA SW-846 8270		
Pentachlorophenol	<250	250	ug/L	EPA SW-846 8270		
2,4,5-Trichlorophenol	<50	50	ug/L	EPA SW-846 8270		
2,4,6-Trichlorophenol	<50	50	ug/L	EPA SW-846 8270		
Pyridine	<50	50	ug/L	EPA SW-846 8270		
p,m-Cresol	89	50	ug/L	EPA SW-846 8270		
o-Cresol	94	50	ug/L	EPA SW-846 8270		
2-Fluorophenol (Surrogate)	60	0	% Recovery	21-83% QC LIMITS		
Phenol-d6 (Surrogate)	81	0	% Recovery	24-94% QC LIMITS		
Nitrobenzene-d5 (Surrogate)	75	0	% Recovery	35-102% QC LIMITS		
2-Fluorobiphenyl (Surrogate)	99	0	% Recovery	43-103% QC LIMITS		
2,4,6-Tribromophenol(Surrogate)	79	0	% Recovery	28-111% QC LIMITS		
Terphenyl-d14 (Surrogate)	84	0	% Recovery	43-117% QC LIMITS		
TCLP Volatiles		*100		EPA SW-846 8260	10/17/95	QP
Benzene	4600	500	ug/L	EPA SW-846 8260		
Carbon tetrachloride	<500	500	ug/L	EPA SW-846 8260		
Chlorobenzene	<500	500	ug/L	EPA SW-846 8260		
Chloroform	<500	500	ug/L	EPA SW-846 8260		
Methyl ethyl ketone	<5000	5000	ug/L	EPA SW-846 8260		
Trichloroethene	<500	500	ug/L	EPA SW-846 8260		
Vinyl chloride	<400	400	ug/L	EPA SW-846 8260		
1,2-Dichloroethane	<500	500	ug/L	EPA SW-846 8260		
Tetrachloroethene	1600	500	ug/L	EPA SW-846 8260		
1,1-Dichloroethene	<500	500	ug/L	EPA SW-846 8260		
Dibromofluoromethane(Surrogate)	105	0	% Recovery	86-115% QC LIMITS		
Toluene d-8 (Surrogate)	100	0	% Recovery	88-110% QC LIMITS		
4-Bromofluorobenzene(Surrogate)	96	0	% Recovery	86-115% QC LIMITS		
Extraction - TCLP Semivolatiles	Completed			EPA SW-846 3520	10/14/95	WEB
Glass Jar Extraction for Metals	Completed			EPA SW-846 1311	10/11/95	DGP
Glass Jar Extraction-Semivolatiles	Completed			EPA SW-846 1311	10/11/95	DGP
Arsenic (As), extractable TCLP	0.16	0.05	mg/L	EPA SW-846 6010	10/17/95	GCC

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LABORATORY TESTS RESULTS
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.....: 4-1247
DATE SAMPLED.....: 10/04/95
TIME SAMPLED.....: 13:00
WORK DESCRIPTION...: TANK BOTTOM SLUDGE 8482-3523

LABORATORY I.D...: 952967-0001
DATE RECEIVED....: 10/09/95
TIME RECEIVED....: 10:30
REMARKS.....: SAMPLED BY: D.N.

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Barium (Ba), extractable TCLP	2.42	0.05	mg/L	EPA SW-846 6010	10/17/95	GCC
Cadmium (Cd), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/17/95	GCC
Chromium (Cr), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/17/95	GCC
Lead (Pb), extractable TCLP	0.10	0.05	mg/L	EPA SW-846 6010	10/17/95	GCC
Selenium (Se), extractable TCLP	0.13	0.05	mg/L	EPA SW-846 6010	10/17/95	GCC
Silver (Ag), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	10/17/95	GCC
Flash Point, closed cup	79		Deg. Farenheit	ASTM D-93	10/16/95	EBS
Cyanide, Reactive	<5	5	mg/kg	EPA SW-846 7.3.3.2	10/11/95	DEH
Corrosivity by pH	6.9	0.1	pH units	EPA SW-846 9045 C	10/17/95	SEB
Sulfide, Reactive	739	50	mg/kg	EPA SW-846 7.3.4.2	10/11/95	DEH
Mercury (Hg), extractable, TCLP	<0.002	0.002	mg/L	EPA SW-846 7470	10/13/95	EBS
Metals Digest on Extracted Sample	Completed			EPA SW-846 3010	10/16/95	JGR
Zero Headspace Extraction-Volatile	Completed			EPA SW-846 1311	10/11/95	DGP

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Sulfide, Reactive				DATE/TIME ANALYZED:10/11/95 06:30						QC BATCH NUMBER:991684
REPORTING LIMIT/DF: 50	UNITS:mg/kg			METHOD REFERENCE :EPA SW-846 7.3.4.2						TECHNICIAN:DEH
BLANK	MB 101195	Di H2O	<50							
STANDARD	LCS	508.18.17	289			300	96			
SPIKE	MS	952965-1	269					<50	300	90
DUPLICATE	MD	952965-1	<50	<50	NC					
PARAMETER:Cyanide, Reactive				DATE/TIME ANALYZED:10/11/95 06:30						QC BATCH NUMBER:991699
REPORTING LIMIT/DF:	UNITS:mg/kg			METHOD REFERENCE :EPA SW-846 7.3.3.2						TECHNICIAN:DEH
BLANK	MB 101195	Di H2O	<5							
STANDARD	LCS	508.24.7	1.97			1.93	102			
SPIKE	PDS	952965-1	1.63					<5	1.88	87
DUPLICATE	MD	952965-1	<5	<5	0					
PARAMETER:Mercury (Hg), extractable, TCLP				DATE/TIME ANALYZED:10/13/95 08:00						QC BATCH NUMBER:992048
REPORTING LIMIT/DF: 0.002	UNITS:mg/L			METHOD REFERENCE :EPA SW-846 7470						TECHNICIAN:EBS
BLANK	MB	DiH2O	<0.002							
STANDARD	RS	367.49	0.018			0.020	90			
SPIKE	MS	952967-1	0.053					<0.002	0.050	106
DUPLICATE	MD	952967-1	<0.002	<0.002	NC					
PARAMETER:Flash Point, closed cup				DATE/TIME ANALYZED:10/16/95 16:00						QC BATCH NUMBER:992256
REPORTING LIMIT/DF:	UNITS:Deg. Farenheit			METHOD REFERENCE :ASTM D-93						TECHNICIAN:EBS
STANDARD	RS	p-Xylene	80			81	99			
DUPLICATE	MD	952909-1	75	76	1					
PARAMETER:Corrosivity by pH				DATE/TIME ANALYZED:10/17/95 13:00						QC BATCH NUMBER:992271
REPORTING LIMIT/DF: 0.1	UNITS:pH units			METHOD REFERENCE :EPA SW-846 9040B						TECHNICIAN:SEB
STANDARD	LCS 4	386.20.32	7.04			7.00	101			
DUPLICATE	MD	952965-1	7.8	7.9	1					
PARAMETER:Arsenic (As), extractable TCLP				DATE/TIME ANALYZED:10/17/95 12:57						QC BATCH NUMBER:992294
REPORTING LIMIT/DF: 0.05	UNITS:mg/L			METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3005	<0.05							
STANDARD	ICV	Q0895	1.00			1.00	100			
STANDARD	CCV	1013C	5.05			5.00	101			
SPIKE	MS	953024-001	0.83					<0.05	1.00	83
DUPLICATE	MD	953024-001	<0.05	<0.05	NC					
PARAMETER:Barium (Ba), extractable TCLP				DATE/TIME ANALYZED:10/17/95 12:57						QC BATCH NUMBER:992295
REPORTING LIMIT/DF: 0.05	UNITS:mg/L			METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							

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QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Barium (Ba), extractable TCLP				DATE/TIME ANALYZED:10/17/95 12:57						QC BATCH NUMBER:992295
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3005	<0.05							
STANDARD	ICV	70895	1.00			1.00	100			
STANDARD	CCV	1013C	5.02			5.00	100			
SPIKE	BS	952948-000	0.95					<0.05	1.00	95
DUPLICATE	MD	952991-001	0.12	0.13	0.01					
PARAMETER:Cadmium (Cd), extractable TCLP				DATE/TIME ANALYZED:10/17/95 12:57						QC BATCH NUMBER:992296
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3005	<0.05							
STANDARD	ICV	Q0895	1.03			1.00	103			
STANDARD	CCV	1013C	5.07			5.00	101			
SPIKE	MS	953024-001	0.91					<0.05	1.00	91
DUPLICATE	MD	953024-001	<0.05	<0.05	NC					
PARAMETER:Chromium (Cr), extractable TCLP				DATE/TIME ANALYZED:10/17/95 12:57						QC BATCH NUMBER:992297
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3005	<0.05							
STANDARD	ICV	Q0895	1.04			1.00	104			
STANDARD	CCV	1013C	5.08			5.00	102			
SPIKE	BS	952948-000	0.90					<0.05	1.00	90
DUPLICATE	MD	952991-001	<0.05	<0.05	NC					
PARAMETER:Lead (Pb), extractable TCLP				DATE/TIME ANALYZED:10/17/95 12:57						QC BATCH NUMBER:992298
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3005	<0.05							
STANDARD	ICV	Q0895	1.06			1.00	106			
STANDARD	CCV	1013C	5.05			5.00	101			
SPIKE	MS	952948-000	0.90					<0.05	1.00	90
DUPLICATE	MD	952991-001	<0.05	<0.05	NC					
PARAMETER:Selenium (Se), extractable TCLP				DATE/TIME ANALYZED:10/17/95 12:57						QC BATCH NUMBER:992299
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE : SW-846 6010A						TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3005	<0.05							
STANDARD	ICV	Q0895	1.01			1.00	101			
STANDARD	CCV	1013C	5.00			5.00	100			
SPIKE	MS	953024-001	0.81					<0.05	1.00	81
DUPLICATE	MD	953024-001	<0.05	<0.05	NC					

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CORPUS CHRISTI, TX 78408
(512) 289-2673

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QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Silver (Ag), extractable TCLP			DATE/TIME ANALYZED:10/17/95 12:57							QC BATCH NUMBER:992300
REPORTING LIMIT/DF: 0.05 UNITS:mg/L			METHOD REFERENCE : SW-846 6010A							TECHNICIAN:GCC
BLANK	MB	3010	<0.05							
BLANK	MB	3005	<0.05							
STANDARD	ICV	70895	0.95			1.00	95			
STANDARD	CCV	1013C	4.74			5.00	95			
SPIKE	BS	952948-001	0.86					<0.05	1.00	86
DUPLICATE	MD	952977-001	<0.05	<0.05	NC					

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(512) 289-2673

CORE LABORATORIES

QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP Volatiles DATE ANALYZED: 10/17/95 TIME ANALYZED: 16:44 METHOD: EPA SW-846 8260 QC NUMBER:992279

BLANKS

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Vinyl chloride	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
1,1-Dichloroethene	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
Methyl ethyl ketone	MB	100995	1	<50	50	ug/L
	MB	100995	1	<50	50	ug/L
Chloroform	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
Carbon tetrachloride	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
1,2-Dichloroethane	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
Benzene	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
Trichloroethene	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
Tetrachloroethene	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L
Chlorobenzene	MB	100995	1	<5	5	ug/L
	MB	100995	1	<5	5	ug/L

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP Volatiles DATE ANALYZED: 10/17/95 TIME ANALYZED: 16:44 METHOD: EPA SW-846 8260 QC NUMBER:992279

REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Vinyl chloride	CC	342.94.1	1	103	100	103	5	ug/L
1,1-Dichloroethene	CC	342.94.1	1	124	100	124	5	ug/L
Methyl ethyl ketone	CC	342.94.1	1	112	100	112	50	ug/L
Chloroform	CC	342.94.1	1	110	100	110	5	ug/L
Carbon tetrachloride	CC	342.94.1	1	122	100	122	5	ug/L
1,2-Dichloroethane	CC	342.94.1	1	129	100	129	5	ug/L
Benzene	CC	342.94.1	1	110	100	110	5	ug/L
Trichloroethene	CC	342.94.1	1	114	100	114	5	ug/L
Tetrachloroethene	CC	342.94.1	1	119	100	119	5	ug/L
Chlorobenzene	CC	342.94.1	1	114	100	114	5	ug/L
Dibromofluoromethane(Surrogate)	CC	342.94.1	1	47	50	94	5	ug/L
Toluene d-8 (Surrogate)	CC	342.94.1	1	51	50	102	5	ug/L
4-Bromofluorobenzene(Surrogate)	CC	342.94.1	1	52	50	104	5	ug/L

1733 NORTH PADRE ISLAND DRIVE
CORPUS CHRISTI, TX 78408
(512) 289-2673

CORE LABORATORIES

QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP Volatiles DATE ANALYZED: 10/17/95 TIME ANALYZED: 16:44 METHOD: EPA SW-846 8260 QC NUMBER:992279

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Vinyl chloride	MS	952965-1	1	930	0	1000	93	5	ug/L
	MSD	952965-1	1	950	0	1000	95	5	ug/L
1,1-Dichloroethene	MS	952965-1	1	1110	0	1000	111	5	ug/L
	MSD	952965-1	1	1160	0	1000	116	5	ug/L
Methyl ethyl ketone	MS	952965-1	1	1100	0	1000	110	50	ug/L
	MSD	952965-1	1	1070	0	1000	107	50	ug/L
Chloroform	MS	952965-1	1	1040	0	1000	104	5	ug/L
	MSD	952965-1	1	1080	0	1000	108	5	ug/L
Carbon tetrachloride	MS	952965-1	1	1110	0	1000	111	5	ug/L
	MSD	952965-1	1	1120	0	1000	112	5	ug/L
1,2-Dichloroethane	MS	952965-1	1	1280	0	1000	128	5	ug/L
	MSD	952965-1	1	1270	0	1000	127	5	ug/L
Benzene	MS	952965-1	1	970	0	1000	97	5	ug/L
	MSD	952965-1	1	1000	0	1000	100	5	ug/L
Trichloroethene	MS	952965-1	1	990	0	1000	99	5	ug/L
	MSD	952965-1	1	1000	0	1000	100	5	ug/L
Tetrachloroethene	MS	952965-1	1	950	0	1000	95	5	ug/L
	MSD	952965-1	1	980	0	1000	98	5	ug/L
Chlorobenzene	MS	952965-1	1	940	0	1000	94	5	ug/L
	MSD	952965-1	1	960	0	1000	96	5	ug/L
Dibromofluoromethane(Surrogate	MB	100995-00	1	510	0	500	102	5	ug/L
	MB	100995-00	1	520	0	500	104	5	ug/L
Toluene d-8 (Surrogate)	MB	100995-00	1	500	0	500	100	5	ug/L
	MB	100995-00	1	500	0	500	100	5	ug/L
4-Bromofluorobenzene(Surrogate	MB	100995-00	1	480	0	500	96	5	ug/L
	MB	100995-00	1	470	0	500	94	5	ug/L

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP SEMIVOLATILES DATE ANALYZED: 10/18/95 TIME ANALYZED: 10:23 METHOD: EPA SW-846 8270 QC NUMBER:992293

BLANKS

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
1,4-Dichlorobenzene	MB	101495	1	<10	10	ug/L
2,4-Dinitrotoluene	MB	101495	1	<10	10	ug/L
Hexachlorobenzene	MB	101495	1	<10	10	ug/L
Hexachlorobutadiene	MB	101495	1	<10	10	ug/L
Hexachloroethane	MB	101495	1	<10	10	ug/L
Nitrobenzene	MB	101495	1	<10	10	ug/L
Pentachlorophenol	MB	101495	1	<50	50	ug/L
2,4,5-Trichlorophenol	MB	101495	1	<10	10	ug/L
2,4,6-Trichlorophenol	MB	101495	1	<10	10	ug/L
Pyridine	MB	101495	1	<10	10	ug/L
Cresols (Total)	MB	101495	1	<30	30	ug/L

1733 NORTH PADRE ISLAND DRIVE
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CORE LAB

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QUALITY ASSURANCE REPORT
10/18/95

JOB NUMBER: 952967 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

TCLP SEMIVOLATILES DATE ANALYZED: 10/18/95 TIME ANALYZED: 10:23 METHOD: EPA SW-846 8270 QC NUMBER:992293

MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
1,4-Dichlorobenzene	BS	101495-00	1	180	0	250	72	10	ug/L
2,4-Dinitrotoluene	BS	101495-00	1	150	0	250	60	10	ug/L
Hexachlorobenzene	BS	101495-00	1	220	0	250	88	10	ug/L
Hexachlorobutadiene	BS	101495-00	1	180	0	250	72	10	ug/L
Hexachloroethane	BS	101495-00	1	170	0	250	68	10	ug/L
Nitrobenzene	BS	101495-00	1	180	0	250	72	10	ug/L
Pentachlorophenol	BS	101495-00	1	470	0	750	63	50	ug/L
2,4,5-Trichlorophenol	BS	101495-00	1	540	0	750	72	10	ug/L
2,4,6-Trichlorophenol	BS	101495-00	1	200	0	250	80	10	ug/L
Pyridine	BS	101495-00	1	190	0	500	38	10	ug/L
Cresols (Total)	BS	101495-00	1	520	0	750	69	30	ug/L

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QUALITY ASSURANCE FOOTER

Cited Methods are obtained from the following documents :

EPA 600/2-79-020, Methods for the Analysis of Water and Wastes, March 1983.
USEPA SW-846 3rd. Edition, November 1990 and July 1992 Update, Test Methods for Evaluating Solid Waste.
EPA 600/2-78-054, Field and Laboratory Methods Applicable to Overburdens and Minesoils.
Federal Register, July 1, 1992 (40 CFR Part 136).
Standard Methods for the Examination of Water and Wastewater, 18th Ed. APHA, AWWA, WPCF.

Quality control acceptance criteria are method dependent.
All data reported on sample "as received" unless noted.
Sample IDs with a "-00" at the end indicate a blank spike or blank spike duplicate associated with the numbered sample.
NC = Not Calculated due to value at or below detection limit.
NOTE: Data in QA report may differ from final results due to digestion and/or dilution of sample into analytical range.
The "TIME ANALYZED" in the QA report refers to the start time of the analytical batch which may not reflect the actual time of each analysis. The "DATE ANALYZED" is the actual date of analysis.
The data in this report are within the limits of uncertainty specified in the referenced method unless otherwise indicated.

SUBCONTRACTED LABORATORY LOCATIONS

For analyses performed by a subcontract laboratory, an "*" and the designated laboratory code is indicated in the "TECHN" column of the laboratory test results report.

Core Laboratories :

Anaheim	*AN	Lake Charles	*LC
Aurora	*AU	Long Beach	*LB
Casper	*CA	Other Laboratories	*XX
Houston	*HP		

QUALITY ASSURANCE REPORT CODES

BLANKS*	REFERENCE STANDARDS	SPIKES AND DUPLICATES
MB = Method Blank	RS = Reference Standard	MS = Matrix Spike, BS = Blank Spike
RB = Reagent Blank	CC = Continuing Calib.	SS = Surrogate Spike, MD = Matrix Dup.
SB = Storage Blank	LCS = Laboratory Control Std.	PDS= Post Digested Spike
ICB = Initial Calib. Blank	ICV = Initial Calib. Verification	MSD= Matrix Spike Duplicate
CCB = Continuing Calib. Blank	CCV = Cont. Calib. Verification	PDD= Post Digested Duplicate

*In the event that several different method blanks are analyzed, the blank type will be designated by the preparation method, i.e., ZHE, TCLP, 3010, 3050, etc.

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CHAIN OF CUSTODY RECORD

3524

ON SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 10/5/95

Page 1 of 1

Purchase Order No.: 3523 | Job No. 4-1247

SEND INVOICE TO
Name: ACCOUNTS PAYABLE
Company: ON SITE | Dept.
Address: P.O. BOX 2606
City, State, Zip: FARMINGTON, NM 87499

REPORT RESULTS TO
Name: DAVID COX | Title
Company: ON SITE TECH
Mailing Address: 657 W. MAPLE
City, State, Zip: FARMINGTON, NM 87401
Telephone No.: 505 325 5667 | Telefax No: 505-325-6256

Sampling Location: APACHE JUNCTION

Sampler: PN

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	TCLP VOLS	TCLP SEMI-VOLS	TCLP METAL	REACTIVITY	CORROSIVITY	IGNITABILITY				LAB ID
						ANALYSIS REQUESTED									
TANK BOTTOM SLUDGE	10/4/95	1300	SLUDGE	—	1	✓	✓	✓	✓	✓	✓				8482-3523

*RUSH ANALYSES

Relinquished by: Jack	Date/Time 10/6/95 1700	Received by: Dana Flores	Date/Time 10/9/95 1030
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: Jack (Client Signature Must Accompany Request) Date 10/6/95

Rush ✓ | 24-48 Hours | 10 Working Days

Special Instructions: PLEASE FAX RESULTS ASAP

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

CHAIN OF CUSTODY RECORD

3523

ON SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: _____ Page 1 of 2

Purchase Order No.:	Job No. 4-1247		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location:		Number of Containers	ANALYSIS REQUESTED
Sampler:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	T.C.L.P. (1)									LAB ID
					1	✓									

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8470*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH1 @ 5'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	9:45
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8470-3522	*Apache Junction* ***BH1 @ 5'***	68 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 10/6/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8471*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH1 @ 10'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	10:10
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8471-3522	*Apache Junction* ***BH1 @ 10'***	65 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack
Date: 10/6/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8472*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH1 @ 15'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	10:30
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8472-3522	*Apache Junction* ***BH1 @ 15'***	*<25 mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Da 4
Date: 10/5/95

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TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8473*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH2 @ 5'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	11:05
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8473-3522	*Apache Junction* ***BH2 @ 5'***	51 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 10/6/95

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TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8474*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH2 @ 10'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	11:25
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8474-3522	*Apache Junction* ***BH2 @ 10'***	*<25 mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack
Date: 10/6/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8475*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH2 @ 15'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	12:30
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8475-3522	*Apache Junction* ***BH2 @ 15'***	92 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:

Date: 10/6/95

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TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8476*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH3 @ 5'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	13:15
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	*Sample Identification*	*Total Petroleum Hydrocarbons*
8476-3522	*Apache Junction* ***BH3 @ 5'***	15,980 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:

Date: 10/6/95

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8477*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH3 @ 10'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	13:30
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8477-3522	*Apache Junction* ***BH3 @ 10'***	340 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:

Date: 10/6/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8478*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH3 @ 15'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	13:55
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8478-3522	*Apache Junction* ***BH3 @ 15'***	1,469 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jay

Date: 10/6/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8479*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH4 @ 5'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	14:15
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8479-3522	*Apache Junction* ***BH4 @ 5'***	2,200 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:

Date: 10/6/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8480*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH4 @ 10'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	14:30
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8480-3522	*Apache Junction* ***BH4 @ 10'***	97 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack

Date: 10/6/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	6-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3522*
Address:	*P.O. Box 15250*	*Sample No.*	*8481*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Junction***				
Project Location:	***BH4 @ 15'***				
Sampled by:	TN	Date:	4-Oct-95	Time:	14:50
Analyzed by:	BV	Date:	5-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8481-3522	*Apache Junction* ***BH4 @ 15'***	495 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack

Date: 10/6/95

CHAIN OF CUSTODY RECORD

3522

ON SITE TECHNOLOGIES, LTD.

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LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: _____ Page _____ of 2

Purchase Order No.:	Job No.		
SEND INVOICE TO: Name			
Company	Dept.		
Address			
City, State, Zip			
REPORT RESULTS TO: Name		Title	
Company			
Mailing Address			
City, State, Zip			
Telephone No.		Telefax No.	
Sampling Location:			
Sampler:			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED	LAB ID

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	12-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3549*
Address:	*P.O. Box 15250*	*Sample No.*	*8675*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***NE Corner Tank 8'***				
Sampled by:	TN	Date:	11-Oct-95	Time:	10:05
Analyzed by:	HR	Date:	12-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8675-3549	*Apache Station* ***NE Corner Tank 8'***	525 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:

Date: 10/12/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	12-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3549*
Address:	*P.O. Box 15250*	*Sample No.*	*8676*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***W Corner Tank 7'***				
Sampled by:	TN	Date:	11-Oct-95	Time:	10:45
Analyzed by:	HR	Date:	12-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8676-3549	*Apache Station* ***W Corner Tank 7'***	1,245 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack

Date: 10/12/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	12-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3549*
Address:	*P.O. Box 15250*	*Sample No.*	*8677*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***E Corner Tank 8'***				
Sampled by:	TN	Date:	11-Oct-95	Time:	10:30
Analyzed by:	HR	Date:	12-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8677-3549	*Apache Station* ***E Corner Tank 8'***	1,524 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Dale

Date: 10/12/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	12-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3549*
Address:	*P.O. Box 15250*	*Sample No.*	*8678*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Closure SE Hole #1***				
Sampled by:	TN	Date:	11-Oct-95	Time:	15:30
Analyzed by:	HR	Date:	12-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8678-3549	*Apache Station* ***Closure SE Hole #1***	29 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Dan G
Date: 10/12/95

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	12-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3549*
Address:	*P.O. Box 15250*	*Sample No.*	*8679*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Closure SE Hole #2***				
Sampled by:	TN	Date:	11-Oct-95	Time:	15:35
Analyzed by:	HR	Date:	12-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8679-3549	*Apache Station* ***Closure SE Hole #2***	*<25 mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 10/12/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	12-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3549*
Address:	*P.O. Box 15250*	*Sample No.*	*8680*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Closure SE Hole #3***				
Sampled by:	TN	Date:	11-Oct-95	Time:	15:40
Analyzed by:	HR	Date:	12-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8680-3549	*Apache Station* ***Closure SE Hole #3***	*<25 mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 10/12/95

FAX 5?4/-7027

CHAIN OF COUSTODY RECORD

3549

ON SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: ____________ Page ______ of ______

Purchase Order No.:	Job No.
SEND INVOICE TO — Name	J. J. Nobis
Company	Tierra / Conv Energy / Dept.
Address	[illegible]
City, State, Zip	Farmington N.M. [illegible]7401
REPORT RESULTS TO — Name	Same
Title	
Company	
Mailing Address	
City, State, Zip	
Telephone No.	
Telefax No.	
Sampling Location:	Apache Station
Sampler:	Judd Nobis

ANALYSIS REQUESTED: TPH 418.1 — RUSH!!

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	TPH 418.1								LAB ID
NE Corner Tank 8'	[illegible]	[illegible]				✓								
W Corner Tank 7'	[illegible]	[illegible]				✓								
? Corner Tank 8'	[illegible]	[illegible]				✓								
Closure SE Hole #1	[illegible]	3[illegible]				✓								
" " #2	"	3[illegible]				✓								
" " #3	"	3[illegible]				✓								

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: [signature] Date ______
(Client Signature Must Accompany Request)

Rush | 24-48 Hours | 10 Working Days | Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	17-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3574*
Address:	*909 W. Apache*	*Sample No.*	*8740*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***#1 Tank Pit 2***				
Sampled by:	TN	Date:	16-Oct-95	Time:	11:45
Analyzed by:	HR	Date:	17-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8740-3574	*Apache Station* ***#1 Tank Pit 2***	155 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Da G
Date: 10/17/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	17-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3574*
Address:	*909 W. Apache*	*Sample No.*	*8741*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***#2 Tank Pit 2***				
Sampled by:	TN	Date:	16-Oct-95	Time:	11:50
Analyzed by:	HR	Date:	17-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8741-3574	*Apache Station* ***#2 Tank Pit 2***	184 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack
Date: 10/17/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	17-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3574*
Address:	*909 W. Apache*	*Sample No.*	*8742*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***#3 Tank Pit 2***				
Sampled by:	TN	Date:	16-Oct-95	Time:	13:10
Analyzed by:	HR	Date:	17-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8742-3574	*Apache Station* ***#3 Tank Pit 2***	115 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 10/17/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	17-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3574*
Address:	*909 W. Apache*	*Sample No.*	*8743*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Lact Unit #1 Pit #1***				
Sampled by:	TN	Date:	16-Oct-95	Time:	11:25
Analyzed by:	HR	Date:	17-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8743-3574	*Apache Station* ***Lact Unit #1 Pit #1***	370 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jag
Date: 10/17/95

OFF: (505) 325-8786

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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	17-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3574*
Address:	*909 W. Apache*	*Sample No.*	*8744*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Lact Unit #2 Pit #1***				
Sampled by:	TN	Date:	16-Oct-95	Time:	11:30
Analyzed by:	HR	Date:	17-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8744-3574	*Apache Station* ***Lact Unit #2 Pit #1***	60 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: DAK
Date: 10/17/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	17-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3574*
Address:	*909 W. Apache*	*Sample No.*	*8745*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Lact Unit #3 Pit #1***				
Sampled by:	TN	Date:	16-Oct-95	Time:	11:35
Analyzed by:	HR	Date:	17-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8745-3574	*Apache Station* ***Lact Unit #3 Pit #1***	490 *mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Da G

Date: 10/17/95

CHAIN OF CUSTODY RECORD

3574

ON SITE TECHNOLOGIES, LTD.

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LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 10/16/95

Page _____ of _____

Purchase Order No.:	Job No.		
SEND INVOICE TO: Name	Phil Nobis	REPORT RESULTS TO: Name	Title
Company	Tierra / Bloomfield Ref. Dept.	Company	
Address	PO Box 1525	Mailing Address	
City, State, Zip	Farmington, N.M. 87401	City, State, Zip	
		Telephone No.	Telefax No.

Sampling Location: Apache Station

Sampler: Todd Nobis

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	TPH 418	LAB ID
#1 TANK Pit 2	10/16	11:45A			1	✓	67-16 - 3571
#2 TANK Pit 2	10/16	11:50A			1		67-11
#3 TANK Pit 2	10/16	13:10A			1		67-12
EAST UNIT #1 Pit #1	10/16	11:25A			1		67-13
EAST UNIT #2 Pit #1	10/16	11:30A			1		67-14
EAST UNIT #3 Pit #1	10/16	11:35A			1		67-15

ANALYSIS REQUESTED

Relinquished by: Todd Nobis	Date/Time 10/16 2:00pm	Received by:	Date/Time 10/16/95 1600
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date 10/16
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	19-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3584*
Address:	*909 W. Apache*	*Sample No.*	*8781*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Lact Pit 2 #1***				
Sampled by:	TN	Date:	18-Oct-95	Time:	9:20
Analyzed by:	HR	Date:	19-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	*Sample Identification*	*Total Petroleum Hydrocarbons*
8781-3584	*Apache Station* ***Lact Pit 2 #1***	162 *mg/kg*

Quality Assurance Report

Laboratory Identification	*Analyzed Value*	*Acceptable Range*	*Units of Measure*
Laboratory Fortified Blank Soil - QCBS1	29	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	931	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: DaG
Date: 10/19/95

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	19-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3584*
Address:	*909 W. Apache*	*Sample No.*	*8782*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Lact Pit 2 #2***				
Sampled by:	TN	Date:	18-Oct-95	Time:	9:22
Analyzed by:	HR	Date:	19-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8782-3584	*Apache Station* ***Lact Pit 2 #2***	*677 mg/kg*

Quality Assurance Report

Laboratory Identification	***Analyzed Value***	***Acceptable Range***	***Units of Measure***
Laboratory Fortified Blank Soil - QCBS1	29	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	931	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack
Date: 10/19/95

OFF: (505) 325-8786

ON SITE
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LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	19-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3584*
Address:	*909 W. Apache*	*Sample No.*	*8783*
City, State:	*Farmington, NM 87401*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Lact Pit 2 #3***				
Sampled by:	TN	Date:	18-Oct-95	Time:	9:25
Analyzed by:	HR	Date:	19-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8783-3584	*Apache Station* ***Lact Pit 2 #3***	*<25 mg/kg*

Quality Assurance Report

Laboratory Identification	***Analyzed Value***	***Acceptable Range***	***Units of Measure***
Laboratory Fortified Blank Soil - QCBS1	29	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	931	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack

Date: 10/19/95

P. O. BOX 2606 • FARMINGTON, NM 87499

ON SITE TECHNOLOGIES, LTD.

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LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

3584

Date: [illegible]

Page ____ of ____

SEND INVOICE TO

Purchase Order No.:

Job No.:

Name: [illegible]

Company: [illegible]

Dept.:

Address: [illegible]

City, State, Zip: [illegible]

REPORT RESULTS TO

Name:

Title:

Company:

Mailing Address:

City, State, Zip:

Telephone No.:

Telefax No.:

Sampling Location: [illegible] Station

Sampler: Todd [illegible]

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: [illegible]									LAB ID
Test #3 [illegible]	[illegible]	[illegible]				✓									
[illegible] #1	"	[illegible]				✓									
[illegible] #2	"	[illegible]				✓									
[illegible] #3	"	[illegible]				✓									

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: [illegible] Date [illegible]
(Client Signature Must Accompany Request)

Rush: ✓ | 24-48 Hours | 10 Working Days | Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	27-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3619*
Address:	*P.O. Box 15250*	*Sample No.*	*8939*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Tank #1 Pit #4***				
Sampled by:	PN	Date:	24-Oct-95	Time:	14:20
Analyzed by:	HR	Date:	27-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	*Sample Identification*	*Total Petroleum Hydrocarbons*
8939-3619	*Apache Station* ***Tank #1 Pit #4***	61 *mg/kg*

Quality Assurance Report

Laboratory Identification	*Analyzed Value*	*Acceptable Range*	*Units of Measure*
Laboratory Fortified Blank Soil - QCBS1	39	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	873	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 10/27/95

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	27-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3619*
Address:	*P.O. Box 15250*	*Sample No.*	*8940*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Apache Station***				
Project Location:	***Tank #1 Pit #5 Berm***				
Sampled by:	PN	Date:	24-Oct-95	Time:	14:30
Analyzed by:	HR	Date:	27-Oct-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
8940-3619	*Apache Station* ***Tank #1 Pit #5 Berm***	201 *mg/kg*

Quality Assurance Report

Laboratory Identification	***Analyzed Value***	***Acceptable Range***	***Units of Measure***
Laboratory Fortified Blank Soil - QCBS1	39	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	873	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack
Date: 10/27/95

CHAIN OF CUSTODY RECORD

3619

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LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 10/29/95

Page 1 of 1

Purchase Order No.:	Job No.		
SEND INVOICE TO: Name	Tierra - Ph. I Nobis	REPORT RESULTS TO: Name	Title
Company	Tierra / Bloomfield Rec Dept.	Company	
Address	PO Box 15250	Mailing Address	
City, State, Zip	Farmington N.M. 87401	City, State, Zip	
		Telephone No.	Telefax No.
Sampling Location: Apache Station		Number of Containers	ANALYSIS REQUESTED
Sampler: Todd Nobis			

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	TPH 418.1	LAB ID
Trans. Sta. Pit #1	10/24	1300			1	✓	
Trans. Sta. E. Ditch	10/24	1445			1	✓	
Tank #1 Pit #4	10/24	1429			1	✓	
Tank #1 Pit # 5 Berm	10/24	1534			1	✓	
Overflow Pit #1 Berm	10/24	1504			1	✓	
" " #2 Berm	10/24	1505			1	✓	
" " #3 Berm	10/24	1514			1	✓	

Relinquished by:	Date/Time	Received by:	Date/Time 10/29/95 1:...
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date 10/27/95
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	3-Nov-95
Company:	*Tierra Environmental*	*COC No.:*	*3556*
Address:	*P.O. Box 15250*	*Sample No.*	*9067*
City, State:	*Farmington, NM 87499*	*Job No.*	*95042*

Project Name:	***Apache Station***				
Project Location:	***#1 Transfer Pit (Closure)***				
Sampled by:	TN	Date:	31-Oct-95	Time:	9:30
Analyzed by:	DC	Date:	3-Nov-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	*Sample Identification*	*Total Petroleum Hydrocarbons*
9067-3556	*Apache Station* ***#1 Transfer Pit (Closure)***	1,202 *mg/kg*

Quality Assurance Report

Laboratory Identification	*Analyzed Value*	*Acceptable Range*	*Units of Measure*
Laboratory Fortified Blank Soil - QCBS1	35	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	908	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: DaS
Date: 11/3/95

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	3-Nov-95
Company:	*Tierra Environmental*	*COC No.:*	*3556*
Address:	*P.O. Box 15250*	*Sample No.*	*9068*
City, State:	*Farmington, NM 87499*	*Job No.*	*95042*

Project Name:	***Apache Station***				
Project Location:	***#2 Transfer Pit (Closure)***				
Sampled by:	TN	Date:	31-Oct-95	Time:	9:35
Analyzed by:	DC	Date:	3-Nov-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
9068-3556	*Apache Station* ***#2 Transfer Pit (Closure)***	721 *mg/kg*

Quality Assurance Report

Laboratory Identification	***Analyzed Value***	***Acceptable Range***	***Units of Measure***
Laboratory Fortified Blank Soil - QCBS1	35	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	908	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 11/3/95

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	3-Nov-95
Company:	*Tierra Environmental*	*COC No.:*	*3556*
Address:	*P.O. Box 15250*	*Sample No.*	*9069*
City, State:	*Farmington, NM 87499*	*Job No.*	*95042*

Project Name:	***Apache Station***				
Project Location:	***#3 Transfer Pit (Closure)***				
Sampled by:	TN	Date:	31-Oct-95	Time:	9:45
Analyzed by:	DC	Date:	3-Nov-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
9069-3556	*Apache Station* ***#3 Transfer Pit (Closure)***	630 *mg/kg*

Quality Assurance Report

Laboratory Identification	***Analyzed Value***	***Acceptable Range***	***Units of Measure***
Laboratory Fortified Blank Soil - QCBS1	35	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	908	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: DaG
Date: 11/3/95

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	3-Nov-95
Company:	*Tierra Environmental*	*COC No.:*	*3556*
Address:	*P.O. Box 15250*	*Sample No.*	*9070*
City, State:	*Farmington, NM 87499*	*Job No.*	*95042*

Project Name:	***Apache Station***				
Project Location:	***#4 Transfer Pit (Closure)***				
Sampled by:	TN	Date:	31-Oct-95	Time:	9:50
Analyzed by:	DC	Date:	3-Nov-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
9070-3556	*Apache Station* ***#4 Transfer Pit (Closure)***	345 *mg/kg*

Quality Assurance Report

Laboratory Identification	***Analyzed Value***	***Acceptable Range***	***Units of Measure***
Laboratory Fortified Blank Soil - QCBS1	35	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	908	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Jack
Date: 11/3/95

OFF: (505) 325-8786

ON SITE
TECHNOLOGIES, LTD.

LAB: (505) 325-5667

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Phil Nobis*	Date:	3-Nov-95
Company:	*Tierra Environmental*	*COC No.:*	*3556*
Address:	*P.O. Box 15250*	*Sample No.*	*9071*
City, State:	*Farmington, NM 87499*	*Job No.*	*95042*

Project Name:	***Apache Station***				
Project Location:	***Pit Bottom (Grab) Transfer Point***				
Sampled by:	TN	Date:	31-Oct-95	Time:	9:20
Analyzed by:	DC	Date:	3-Nov-95		
Type of Sample:	*Soil*				

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
9071-3556	*Apache Station* ***Pit Bottom (Grab) Transfer Point***	*714 mg/kg*

Quality Assurance Report

Laboratory Identification	***Analyzed Value***	***Acceptable Range***	***Units of Measure***
Laboratory Fortified Blank Soil - QCBS1	35	22 - 46	*mg/kg*
Laboratory Fortified Spike Soil - QCSS1	908	828 - 1024	*mg/kg*

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by: Dan G
Date: 11/3/95

CHAIN OF CUSTODY RECORD

3556

ON SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: _____ Page 1 of 1

Purchase Order No.:	Job No.		
SEND INVOICE TO: Name		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.

Sampling Location:

Sampler:

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	TPH	LAB ID
					1	X	7167-3556
					1	X	7168
					1	X	7169
					1	X	7170
					1	X	7171

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Authorized by: _____ Date _____
(Client Signature Must Accompany Request)

Rush	24-48 Hours	10 Working Days	Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

6.0

STOCK WELL ANALYSIS

ON SITE TECHNOLOGIES, LTD.

OFF: (505) 325-8786 LAB: (505) 325-5667

AROMATIC VOLATILE ORGANICS

Attn:	*Phil Nobis*	Date:	23-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3596*
Address:	*P.O. Box 15250*	*Sample No.*	*8809*
City, State:	*Farmington, NM 87499*	*Job No.*	*4-1247*

Project Name:	***Apache Station***				
Project Location:	***Stock Water Well***				
Sampled by:	ML	Date:	20-Oct-95	Time:	10:36
Analyzed by:	DC	Date:	20-Oct-95		
Type of Sample:	*Liquid*				

Aromatic Volatile Organics

Component	*Result*	*Units of Measure*	*Detection Limit*	*Units of Measure*
Benzene	0.3	*ug/L*	0.2	*ug/L*
Toluene	1.0	*ug/L*	0.2	*ug/L*
Ethylbenzene	3.2	*ug/L*	0.2	*ug/L*
m,p-Xylene	<0.2	*ug/L*	0.2	*ug/L*
o-Xylene	<0.2	*ug/L*	0.2	*ug/L*
TOTAL	4.5	*ug/L*		

Method - *SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: DAG
Date: 10/23/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

QUALITY ASSURANCE REPORT

for EPA Method 8020

Date Analyzed: 20-Oct-95

Internal QC No.: 0419-STD
Surrogate QC No.: 0420-STD
Reference Standard QC No.: 0355-STD

Method Blank

Analyte	Result	Units of Measure
Average Amount of All Analytes In Blank	<0.2	ppb

Calibration Check

Analyte	Units of Measure	True Value	Analyzed Value	% Diff	Limit
Benzene	ppb	20	21	4	15%
Toluene	ppb	20	21	4	15%
Ethylbenzene	ppb	20	20	2	15%
m,p-Xylene	ppb	40	42	4	15%
o-Xylene	ppb	20	21	4	15%

Matrix Spike

Analyte	1- Percent Recovered	2 - Percent Recovered	Limit	%RSD	Limit
Benzene	86	89	(39-150)	3	20%
Toluene	86	90	(46-148)	2	20%
Ethylbenzene	90	92	(32-160)	1	20%
m,p-Xylene	100	101	(35-145)	1	20%
o-Xylene	82	86	(35-145)	3	20%

Surrogate Recoveries

Laboratory Identification	S1 Percent Recovered	S2 Percent Recovered
Limits	(70-130)	
8809-3596	102	

S1: Flourobenzene

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

API WATER ANALYSIS

Attn:	*Phil Nobis*	Date:	25-Oct-95
Company:	*Tierra Environmental*	*COC No.:*	*3596*
Address:	*P.O. Box 15250*	*Sample ID:*	*8810*
City, State:	*Farmington, NM 87499*	*Job No.:*	*4-1247*

Project Name:	***Apache Station***				
Project Location:	***Stock Water Well***				
Sampled by:	ML	Date:	20-Oct-95	Time:	10:38
Analyzed by:	DC	Date:	25-Oct-95		

API RP-45 Laboratory Analysis

DISSOLVED SOLIDS

CATIONS		
Sodium	*Na*	497 *mg/L*
Calcium	*Ca*	2.2 *mg/L*
Magnesium	*Mg*	0.45 *mg/L*
Potassium	*K*	5.3 *mg/L*

ANIONS		
Chloride	*Cl*	18 *mg/L*
Sulfate	*SO4*	812 *mg/L*
Carbonate	*CO3*	301 *mg/L*
Bicarbonate	*HCO3*	42 *mg/L*
Hyroxide	*OH*	<1 *mg/L*

Total Dissolved Solids		
Calculated, Sum of Cation/Anion		1,678 *mg/L*
Analyzed Value		1,529 *mg/L*

Iron	*Fe (Dissolved)*	0.3 *mg/L*
Sulfide	*H2S*	*NA* *mg/L*

OTHER PROPERTIES

pH	10.11
Specific Gravity 60/60 F	1.0082
Resistivity ohm-meters	4.1494
Total Hardness as CaCO3 mg/L	7

Comments:

**ND:* *Not Detectable - Positive/Negative*

***NA:* *Not Analyzed*

Approved by: DA

Date: 10/25/95

OFF: (505) 325-8786

ON SITE TECHNOLOGIES, LTD.

LAB: (505) 325-5667

QUALITY ASSURANCE REPORT

API RP-45 Water Analysis

Date: 25-Oct-95

Quality Control Sample

Parameter	Laboratory Identification	True Value	Analyzed Value	Units of Measure	% Diff	Limit % Diff
Sodium, Na	0380-QC	3.02	3.01	mg/L	0	10
Calcium, Ca	0380-QC	1.54	1.68	mg/L	9	10
Magnesium, Mg	0380-QC	4.19	4.02	mg/L	-4	10
Potassium, K	0380-QC	2.10	1.99	mg/L	-5	10
Chloride, Cl	0434-QC	46.0	46.5	mg/L	1	10
Sulfate, SO4	0434-QC	299	336	mg/L	12	10*
Alkalinity	0434-QC	265	269	mg/L	2	10
Iron, Fe	0289-QC	2.00	1.98	mg/L	-1	10
Sulfide, SO2	NA	NA	NA	mg/L	NA	10
pH	0434-QC	9.1	9.0		-1	10
Conductivity	0434-QC	1542	1586	uS/cm	3	15

Matrix Spike

Parameter	Laboratory Identification	Analyzed Value	Matrix Spike	Spike Value	Units of Measure	Spike Recovery
Sodium, Na	8894-3603	2.04	1.00	3.05	mg/L	101%
Calcium, Ca	8894-3603	0.84	2.50	3.37	mg/L	101%
Magnesium, Mg	8820-3599	0.89	2.50	3.49	mg/L	104%
Potassium, K	8894-3603	0.14	1.00	1.39	mg/L	125%
Iron, Fe	8810-3596	0.15	0.50	0.62	mg/L	94%

Blank

Parameter	Laboratory Identification	Analyzed Value	Units of Measure
Sodium, Na	Method Blank	<0.2	mg/L
Calcium, Ca	Method Blank	<0.05	mg/L
Magnesium, Mg	Method Blank	<0.05	mg/L
Potassium, K	Method Blank	<0.05	mg/L
Iron, Fe	Method Blank	<0.1	mg/L
Chloride, Cl	Method Blank	<1	mg/L
Sulfate, SO4	Method Blank	<1	mg/L
Sulfide, SO2	Method Blank	NA	mg/L
Conductivity	Method Blank	<3	uS/cm

CHAIN OF CUSTODY RECORD

3596

ON SITE TECHNOLOGIES, LTD.

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 10/20/95

Page 1 of 1

Purchase Order No.:

Job No. 4-1247

SEND INVOICE TO

Name PHIL NORRIS

Company TIERRA ENV.

Dept.

Address

City, State, Zip

REPORT RESULTS TO

Name PHIL NORRIS Title

Company TIERRA

Mailing Address

City, State, Zip

Telephone No. Telefax No.

Sampling Location: APACHE STATION
STOCK WATER WELL

Sampler: MICHAEL K. LANE

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	8020	BTEX	API WATER #1P2	LAB ID
APACHE STK. WELL	10/20	1036	WTR	H_2SO_4	2	✓			8809-3596
	↓	1038	↓	NONE	1		✓		8810-3596
	↓	1045	↓	NONE	2				HOLD
									8811-3596

Relinquished by: [signature] Date/Time 10/20/95 1245 Received by: [signature] Date/Time 10/20/95 1245

Relinquished by: Date/Time Received by: Date/Time

Relinquished by: Date/Time Received by: Date/Time

Method of Shipment:

Authorized by: [signature] Date 10/20/95
(Client Signature Must Accompany Request)
FOR PHIL NORRIS

Rush	24-48 Hours	10 Working Days	Special Instructions:

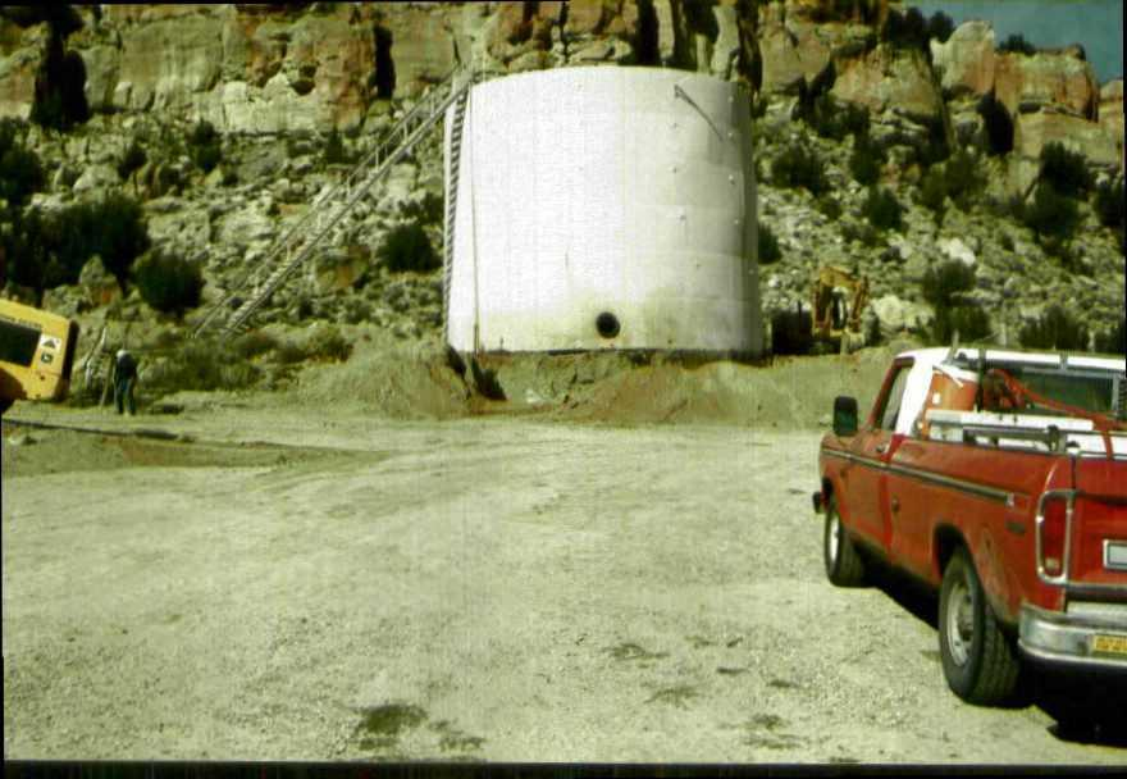
Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

7.0

S I T E P H O T O G R A P H S

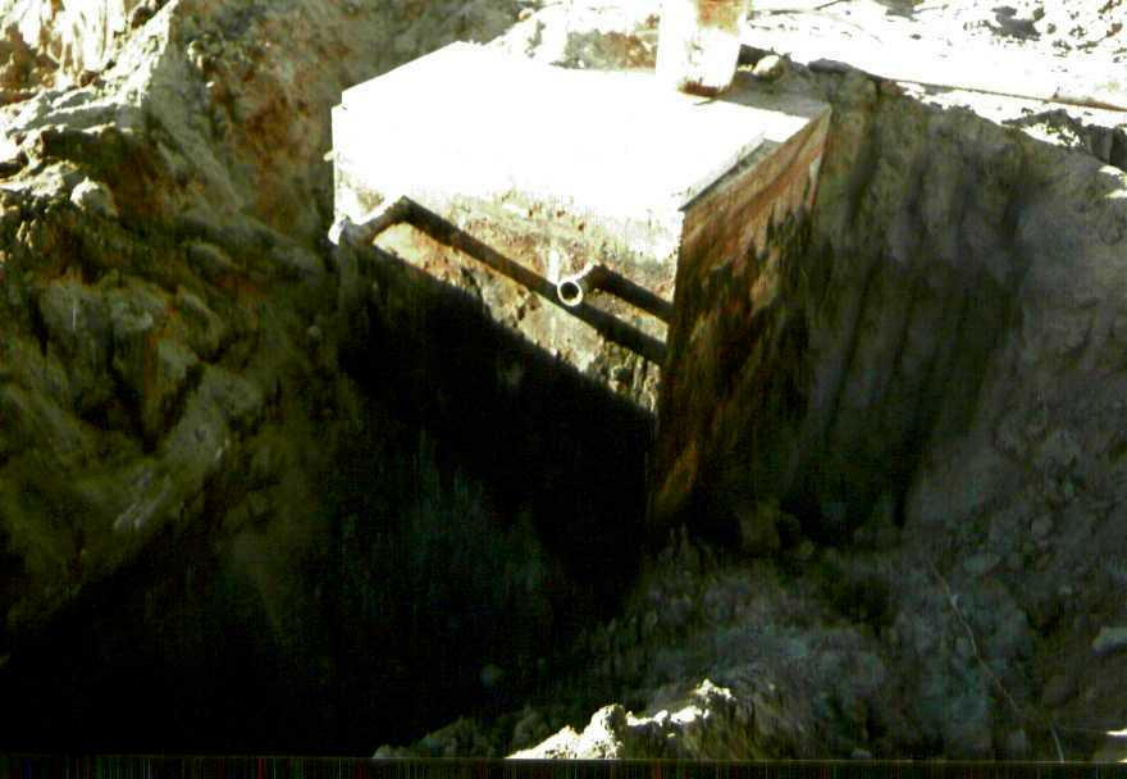
STOREAGE TANK AREA PHOTOGRAPHS


CAT
CAT



LACT UNIT AREA PHOTOGRAPHS


CAUTION CAUTION CAUTION CAUTION CAUTION CAUTION CAUTION CAUTION



TRANSFER STATION AREA PHOTOGRAPHS

8.0

RE-CYCLED SOILS DOCUMENTATION

MEMORANDUM

November 3, 1995

To: Tim Kenny
Giant Refining

From: Phil Nobis
Tierra Environmental Company, Inc.

RE: USE OF RECYCLED SOIL AS BACKFILL, APACHE STATION:

Some of the soil used at Apache Station as backfill was soil recycled at our landfarm facility.

The soil was originally contaminated with J-P-4 Jet fuel as a result of two separate vehicle accidents. Those accidents occurred on April 6 and April 26, 1993 respectively, the first at Manzaneras Mesa at Mile Post 84 Highway 64, Tierra Job # 93016and the second at Antonito, Colorado Highway 17, 16 miles west of town, Tierra Job #93022. They were both single vehicle accidents involving tankers belonging to Steer Tank Lines. J-P-4 was spilled and soil contaminated.

The soil from both accidents was removed to our landfarm on Crouch Mesa in San Juan County, N.M. and stockpiled on plastic until a full TCLP analysis could be completed. The analysis, a copy of which is enclosed was furnished to the New Mexico Oil Conservation Division (OCD) along with a request from Tierra to spread and treat the material. OCD declared the material exempt by characteristic analysis and allowed us to spread and treat the soil. On September 23, 1993 Dr. Dan Hoover, then Tierra Director of Research, requested permission from OCD to recycle the soil from Antonito based on an analysis of soil samples taken by him of the material for BTEX and TPH. Both analysis were non-detect. On November 11, 1993, I requested permission from the OCD to recycle the soil from Manzaneras Mesa based on the analysis of soil samples taken by Dr. Hoover for BTEX and TPH. TPH at that time was 27 ppm and BTEX non-detect. The soil has been stockpiled on the landfarm, segregated from other soils being remediated. Some has been sold as backfill and the remaining 1,400 cubic yards of material were transported to Apache Station as backfill. While the soil was being treated, each job was segregated. No co-mingling of the soil occurred, nor does it occur at any other time on our facility. When OCD gave permission to recycle the soil it was then gathered together in a stockpile also segregated from the rest of the facility.

The soil in question was declared exempt by characteristic analysis prior to spreading and treatment. It was then declared clean following treatment, based on BTEX and TPH analysis, complying with OCD regulations.

The Apache Station site is being closed pursuant to OCD regulations allowing 1000 ppm residual TPH., based on the required site assessment.

Our position is that our recycled soil is clean, backed up by appropriate analysis and OCD authority. Even at some future point should regulations change as they have in the past, the analysis stands. I would also point out that "clean virgin backfill" can in allot of cases be questionable as to it's origin and it requires no analysis what so ever.

I have also enclosed the two letters from OCD authorizing Tierra to recycle the soils from Job # 93016 and 93022. In the letter dated December 1, 1993 it refers to two projects, 93016 and 93005. You received no material from 93005. Just as a point of information, included also are the final analysis for BTEX and TPH. You will note that 93016 as an example refers to Arkansas #6. In those days we used code names for our clients. A practice we have since discontinued. Arkansas #6 is Steer Tanklines.

Please call me if you have any questions or require additional information.

PCN

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

December 1, 1993

CERTIFIED MAIL
RETURN RECEIPT NO. P-111-334-077

Mr. Phillip C. Nobis
Vice President Operations
Tierra Environmental Corporation
909 W. Apache
Farmington, New Mexico 87401

RE: **APPROVAL TO RECYCLE REMEDIATED SOILS**
CROUCH MESA LANDFARM
SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Nobis:

The New Mexico Oil Conservation Division (OCD) has received your request dated November 11, 1993, for authorization to recycle remediated soils from your Crouch Mesa Landfarm located in Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The request and attached analyses is for recycling the remediated soils from the Steer Tanklines accident (Project 93016) and the Rust Tractor pit closure (Project 93005). The laboratory analysis for Project 93016 shows the Total Petroleum Hydrocarbons (TPH) is 27 ppm and the Volatile Aromatic Organics (BTEX) is non- detect. The laboratory analysis for Project 93005 shows the TPH is 260 ppm and the BTEX is non-detect.

Based on the information provided in your request, the OCD hereby approves the removal of the remediated soils from the active portion of the landfarm under the following conditions:

1. The remediated soils from Project 93016 may be used at the landfarm facility for construction of roads, berms, and other dirt work operations or for backfill at environmental clean-up projects at oil and gas exploration and production operations. Any other use of the remediated soils must be reviewed by the OCD Santa Fe Office on a case-by-case basis and receive OCD approval prior to moving the soils.

2. The remediated soils from Project 93005 may only be used at the Crouch Mesa Landfarm Facility for construction of roads, berm and other dirt work operations.

3. Comprehensive records for all remediated soils either moved within the landfarm or removed from the landfarm will be maintained at the facility. The records for all remediated soil will include: 1) the date, volume and final destination of soil moved, 2) the soil history including original place of contamination and exact cell location where the material was remediated, and 3) laboratory analyses of the remediated soils.

Please be advised that this approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters, or the environment actionable under other laws and/or regulations. In addition, the OCD approval does not relieve you of liability for compliance with any other laws and/or regulations.

If you have any questions please do not hesitate to contact me at (505) 827-5884.

Sincerely,

Kathy M. Brown

Kathy M. Brown
Geologist

xc: Denny Foust, OCD Aztec Office

TIERRA
ENVIRONMENTAL CORPORATION

CORPORATE OFFICE
6846 S. Canton, Suite 100
Tulsa, OK 74136
918-496-3200

REGIONAL OFFICE
909 W. Apache
Farmington, NM 87401
505-325-0924

November 11, 1993

Ms. Kathy Brown
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504

RE: PERMISSION TO RECYCLE SOILS, TIERRA PROJECTS 93016 AND 93005

Dear Ms. Brown:

Enclosed herewith are the results of laboratory analysis conducted on composite soil samples on the above referenced projects which are currently at our Crouch Mesa Landfarm.

Project 93016, was JP-4 contaminated soil from Steer Tanklines accident, 4/7/93 M.P. 84 Hwy 64, containing 3194 cubic yards. Final Analysis indicates TPH is 27 ppm, BTEX is non-detect. Tierra would propose to use the remediated soil as roadbase, berm construction at the Crouch Mesa Landfarm or for backfill returning to the excavations resulting from oil and gas cleanups.

Project 93005 is from the Rust Tractor pit closure 4/16/93 containing 3180 cubic yards. Soil was contaminated with motor oil. (prior to OCD rule change re: industrial hydrocarbon contaminated soil acceptance). Final Analysis indicates TPH at 260 ppm, BTEX is non-detect. OCD current rules re: pit closures, allow levels of remediation to exceed 100 ppm in cases where there is no threat to groundwater or other environmental concerns. In this case Tierra would propose to use the soils from Project 93005, for roadbase, or berm construction upon the Crouch Mesa Landfarm facility only. It would not be returned to the Oil and Gas Fields nor used for any other purpose.

Accurate records of final disposition and where the material was used from both projects would be kept at the Tierra Office for OCD inspection.

If you have any questions or require more information please call me. Thank you for your cooperation.

Sincerely,

TIERRA ENVIRONMENTAL CORPORATION

Phillip C. Nobis
Vice President Operations

cc: D. Foust OCD Aztec, N.M.
File 93005
File 93016

ON SITE TECHNOLOGIES, LTD.

TOTAL PETROLEUM HYDROCARBONS

Attn:	*Dan Hoover, Ph.D*	Date:	11/2/93
Company:	*Tierra Environmental Corporation*	*Lab ID:*	*1316*
Address:	*909 W Apache St.*	*Sample No.*	*#0702*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name: ***Tierra Environmental Project No. 93016***
Project Location:
Sampled by: LH Date: 11/2/93 Time: 1100
Analyzed by: TW Date: 11/2/93
Type of Sample: *Soil*

Laboratory Analysis

Laboratory Identification	***Sample Identification***	***Total Petroleum Hydrocarbons***
0702-1316	*Tierra Environmental Project No. 93016* ***Arkansas #6***	29 *ppm wt.*

Tierra Job# 93016

Method - *EPA Method 418.1 Total Petroleum Hydrocarbons*

Approved by:
Date: 11/2/93

ON SITE TECHNOLOGIES, LTD.

PRIORITY POLLUTANTS / AROMATIC VOLATILE ORGANICS

Attn:	*Dan Hoover, Ph.D*	Date:	11/3/93
Company:	*Tierra Environmental Corporation*	*Lab ID:*	*1316*
Address:	*909 W Apache St.*	*Sample ID:*	*#0702*
City, State:	*Farmington, NM 87499*	*Job No.*	*2-1000*

Project Name:	***Tierra Environmental Project No. 93016***				
Project Location:	***Arkansas #6***				
Sampled by:	LH	Date:	11/2/93	Time:	1100
Analyzed by:	DC	Date:	11/3/93		
Sample Matrix:	*Soil*				

Aromatic Volatile Organics

Component	***Measured Concentration ug/L
Benzene	*ND*
Toluene	*ND*
Chlorobenzene	*ND*
Ethylbenzene	*ND*
m,p-Xylene	*ND*
o-Xylene	*ND*
1,3-Dichlorobenzene	*ND*
1,4-Dichlorobenzene	*ND*
1,2-Dichlorobenzene	*ND*
TOTAL	*0 ug/L*

ND - Not Detectable
*** - Method Detection Limit, 2.0 ug/L*

Method *- SW-846 EPA Method 8020 Aromatic Volatile Organics by Gas Chromatography*

Approved by: Jan Cx
Date: 11/3/93

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
GOVERNOR

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

April 28, 1993

Mr. R. Griffer
Onsite Technologies Limited
P.O. Box 2606
Farmington, New Mexico 87499

Subject: Contaminated Soil - Tierra Environmental
(INCIDENT #1423)

Dear Mr. Griffer;

I am in receipt of your April 26, 1993 fax reflecting analysis of the contaminated soil which is stock piled at the TIERRA ENVIRONMENTAL facility and is the result of the cleanup activities from a wreck on US 64 on April 6, 1993.

Based on the analysis presented in your April 26, 1993, fax it appears as through this material is not hazardous waste and therefore does not fall within RCRA jurisdiction.

If there are any questions please contact me at (505) 827-4308.

Sincerely,

Edward L. Horst
Program Manager
Hazardous and Radioactive Materials Bureau

ELH:sl

cc: Garth Graves, Dist. Manager
Roger Anderson, OCD
Glenn Saums, SWQB
file

OCD
Approval to Spread
at Tierra Landfarm
R.M. Brown
5/3/93

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE	XXXXXXXXXXXXXXXXXXXXXXXX
1. RCRA Exempt: ☐ Non-Exempt: ☒ Verbal Approval Received: Yes ☑ No ☐ JCN Roger Anderson 5/3/93	4. Generator Steere Tanklines
2. Destination Tierra Landfarm Crouch Mesa	5. Name of Originating Site M.P. 84 Hwy 64
3. Address of Facility Operator 909 West Apache, Farmington, NM	6. Name of Transporter Doug Foutz/Diamond D
7. Location of Material (Street Address or ULSTR) 420 County Rd. 3100 San Juan County	8. State New Mexico

9. Check 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-oilfield exempt wastes will be accompanied by a certification of waste status from the Generator and the New Mexico Environment Department or other appropriate government agency; two certificates per job.

☐ C. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical anaylses to prove the material is non-hazardous and the Generator's certification of origin. No waste classified as hazardous by listing or testing will be approved.

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

BRIEF DESCRIPTION OF THE MATERIAL:

JP-4 Contaminated soils as a result of a vehicle accident (Tanker roll over)
Lab reports to follow

Estimated Volume 3,000 cy Known Volume (to be entered by the operator at the end of the haul): _____ cy

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Phillip C. Nobis TITLE Vice President DATE 5/3/93

TYPE OR PRINT NAME Phillip C. Nobis TELEPHONE NO. 325-0924

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Western Atlas International
A Litton/Dresser Company

CORE LABORATORIES

LABORATORY TESTS RESULTS
04/21/93

JOB NUMBER: 930934 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.....:
DATE SAMPLED.....: 04/15/93
TIME SAMPLED.....: 15:00
WORK DESCRIPTION...: 0068 5PT COMPOSITE

LABORATORY I.D...: 930934-0001
DATE RECEIVED....: 04/16/93
TIME RECEIVED....: 11:30
REMARKS.....: SAMPLED BY: T.W.

TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TCLP Semivolatiles	N/A	1		EPA SW-846 8270	N/A	N/A
TCLP Volatiles		*10		EPA SW-846 8260	04/21/93	BJH
Benzene	<50	50	ug/L	EPA SW-846 8260		
Carbon Tetrachloride	<50	50	ug/L	EPA SW-846 8260		
Chlorobenzene	<50	50	ug/L	EPA SW-846 8260		
Chloroform	<50	50	ug/L	EPA SW-846 8260		
2-Butanone	<100	100	ug/L	EPA SW-846 8260		
Trichloroethene	<50	50	ug/L	EPA SW-846 8260		
Vinyl chloride	<50	50	ug/L	EPA SW-846 8260		
1,2-Dichloroethane	<50	50	ug/L	EPA SW-846 8260		
Tetrachloroethene	<50	50	ug/L	EPA SW-846 8260		
1,1-Dichloroethene	<50	50	ug/L	EPA SW-846 8260		
Extraction - TCLP Semivolatiles	N/A			EPA SW-846 3520	N/A	N/A
Glass Jar Extraction for Metals	N/A			EPA SW-846 1311	N/A	N/A
Glass Jar Extraction-Semivolatiles	N/A			EPA SW-846 1311	N/A	N/A
Arsenic (As), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Barium (Ba), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Cadmium (Cd), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Chromium (Cr), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Lead (Pb), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Selenium (Se), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Silver (Ag), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Flammability Potential Screening	Negative		+ or -	ASTM D4982-89	04/16/93	RAD
Cyanide, Reactive (CN)	N/A	5	mg/kg	EPA SW-846 7.3.3.2	N/A	N/A
Corrosivity by pH	N/A	0.10	pH units	EPA SW-846 9040	N/A	N/A
Sulfide, Reactive	N/A	10	mg/kg	EPA SW-846 7.3.4.2	N/A	N/A
Mercury (Hg), extractable, TCLP	N/A	0.002	mg/L	EPA SW-846 7470	N/A	N/A

1733 NORTH PADRE ISLAND DRIVE
CORPUS CHRISTI, TX 78408
(512) 289-2673

Western Atlas International

A Litton/Dresser Company

CORE LABORATORIES

LABORATORY TESTS RESULTS
04/21/93

JOB NUMBER: 930934 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.........:
DATE SAMPLED.......: 04/15/93
TIME SAMPLED.......: 15:00
WORK DESCRIPTION...: 006B 5PT COMPOSITE

LABORATORY I.D...: 930934-0001
DATE RECEIVED....: 04/16/93
TIME RECEIVED....: 11:30
REMARKS..........: SAMPLED BY: T.W.

TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TCLP Semivolatiles	N/A	1		EPA SW-846 8270	N/A	N/A
TCLP Volatiles		*10		EPA SW-846 8260	04/21/93	BJH
Benzene	<50	50	ug/L	EPA SW-846 8260		
Carbon Tetrachloride	<50	50	ug/L	EPA SW-846 8260		
Chlorobenzene	<50	50	ug/L	EPA SW-846 8260		
Chloroform	<50	50	ug/L	EPA SW-846 8260		
2-Butanone	<100	100	ug/L	EPA SW-846 8260		
Trichloroethene	<50	50	ug/L	EPA SW-846 8260		
Vinyl chloride	<50	50	ug/L	EPA SW-846 8260		
1,2-Dichloroethane	<50	50	ug/L	EPA SW-846 8260		
Tetrachloroethene	<50	50	ug/L	EPA SW-846 8260		
1,1-Dichloroethene	<50	50	ug/L	EPA SW-846 8260		
Extraction - TCLP Semivolatiles	N/A			EPA SW-846 3520	N/A	N/A
Glass Jar Extraction for Metals	N/A			EPA SW-846 1311	N/A	N/A
Glass Jar Extraction-Semivolatiles	N/A			EPA SW-846 1311	N/A	N/A
Arsenic (As), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Barium (Ba), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Cadmium (Cd), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Chromium (Cr), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Lead (Pb), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Selenium (Se), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Silver (Ag), extractable TCLP	N/A	0.05	mg/L	EPA SW-846 6010	N/A	N/A
Flammability Potential Screening	Negative		+ or -	ASTM D4982-89	04/16/93	RAD
Cyanide, Reactive (CN)	N/A	5	mg/kg	EPA SW-846 7.3.3.2	N/A	N/A
Corrosivity by pH	N/A	0.10	pH units	EPA SW-846 9040	N/A	N/A
Sulfide, Reactive	N/A	10	mg/kg	EPA SW-846 7.3.4.2	N/A	N/A
Mercury (Hg), extractable, TCLP	N/A	0.002	mg/L	EPA SW-846 7470	N/A	N/A

1733 NORTH PADRE ISLAND DRIVE
CORPUS CHRISTI, TX 78408
(512) 289-2673

Western Atlas International
A Litton/Dresser Company

CORE LABORATORIES

LABORATORY TESTS RESULTS
04/21/93

JOB NUMBER: 930934 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.....:
DATE SAMPLED.....: 04/15/93
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WORK DESCRIPTION...: 0068 5PT COMPOSITE

LABORATORY I.D...: 930934-0001
DATE RECEIVED....: 04/16/93
TIME RECEIVED....: 11:30
REMARKS.....: SAMPLED BY: T.W.

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECH
Metals Digest on Extracted Sample	N/A			EPA SW-846 3010	N/A	N/A
Zero Headspace Extraction-Volatile	Completed			EPA SW-846 1311	04/19/93	SEB

1733 NORTH PADRE ISLAND DRIVE
CORPUS CHRISTI, TX 78408
(512) 289-2673

334-6170 Denny

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Bulding
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
GOVERNOR

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

April 6, 1993

Mr. Phil Nobis, Landfarm Operator
Tierra Environmental
Farmington, NM

Dear Mr. Nobis:

SUBJECT: Letter of Authorization

The New Mexico Environment Department hereby authorizes transport and temporary storage of contaminated soil at Tierra Environmental. The Hazardous and Radioactive Materials Bureau allows the shipment of the material to the landfarm providing the following conditions are met:

1. The contaminated soil will be stored in an isolated area on the landfarm.

2. The contaminated soil will be stored on plastic (10 ml liner), and bermed (18 inches).

3. The contaminated soil will be kept slightly moist to keep the soil from blowing.

4. The landfarm facility will run a TCLP analysis for characterization of hazardous waste contaminants.

5. The operator will dispose of the waste as soon as possible in an appropriate manner based on the analytical results.

If you have any questions, please feel free to contact me at (505)827-4358 or Michael Le Scouarnec at (505) 827-4308.

Sincerely,

Benito J. Garcia, Chief
Hazardous and Radioactive Materials Bureau

cc: Roger Anderson, OCD
John Geddie, Office of the Secretary
Edward Horst, RCRA Enforcement

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

October 26, 1993

CERTIFIED MAIL
RETURN RECEIPT NO. P-667-241-140

Mr. Phillip C. Nobis
Tierra Environmental Corporation
909 W. Apache
Farmington, New Mexico 87401

RE: **RECYCLING OF REMEDIATED SOILS**
CROUCH MESA LANDFARM
SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Nobis:

The New Mexico Oil Conservation Division (OCD) has received your request dated September 23, 1993, for authorization to recycle remediated soil from your Crouch Mesa Landfarm located in Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico. The laboratory analysis for the remediated soil (Sample ID 93022) shows that both the Total Petroleum Hydrocarbons (TPH) and the Volatile Aromatic Organics (BTEX) are non detect.

Based on the information provided in your request, the OCD hereby approves the removal of the remediated soils from the landfarm cell under the following conditions:

1. The remediated soils may be used at the landfarm facility for construction of roads, berm, and other dirt work operations or for backfill at environmental clean-up projects at oil and gas exploration and production operations. Any other use of the remediated soils must be reviewed by the OCD Santa Fe Office on a case-by-case basis and receive OCD approval prior to moving the soils.

2. Comprehensive records for all remediated soils either moved within the landfarm or removed from the landfarm will be maintained at the facility. The records for all remediated soil will include: 1) the date, volume and final destination of soil moved, 2) the soil history including original place of contamination and exact cell location where the material was remediated, and 3) laboratory analyses of the remediated soils.

Please be advised that this approval does not relieve you of liability should your operation result in actual pollution of surface waters, ground waters, or the environment actionable under other laws and/or regulations. In addition, the OCD approval does not relieve you of liability for compliance with any other laws and/or regulations.

If you have any questions please do not hesitate to contact me at (505) 827-5884.

Sincerely,

Kathy M. Brown

Kathy M. Brown
Geologist

xc: Denny Foust, OCD Aztec Office

TIERRA
ENVIRONMENTAL CORPORATION

CORPORATE OFFICE
6846 S. Canton, Suite 100
Tulsa, OK 74136
918-496-3200

REGIONAL OFFICE
909 W. Apache
Farmington, NM 87401
505-325-0924

September 23, 1993

Ms. Kathy M. Brown
State of New Mexico Energy,
Minerals & Natural Resources Department
Oil Conversation Division
P. O. Box 2088
Santa Fe, New Mexico 87504

Dear Ms. Brown:

This communication reports the completed remediation of soil (Code 93022) received by the Tierra Environmental Corporation Crouch Mesa Landfarm from Steere Tank Lines on May 20, 1993. The remediation plan was submitted to your office on May 10, 1993 and approved by Roger Anderson on May 17, 1993. (Pursuant to Rule 711 of the Rules and Regulations of the Oil Conservation Division)

Post-remediation laboratory analysis for the Total Petroleum Hydrocarbons (TPH) and Benzene-Toluene-Ethylbenzene-Xylenes (BTEX) in the soil are:

	DATE	BTEX	TPH
Post-remediation	9/9/93	ND	ND

(Attached are copies of the laboratory report)

I am requesting that you accept these latest analyses as meeting the remediation specifications of the OCD with consequent approval for removal of the soil from the landfarm.

Sincerely,

TIERRA ENVIRONMENTAL CORPORATION

Dan Hoover

L. Daniel Hoover, Ph.D
Director of Research

...Laboratories, Inc.

2506 W. Main St
Farmington, New Mexico 87

TOTAL PETROLEUM HYDROCARBONS

EPA Method 418.1

Tierra Environmental

Project ID: Land Farm
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Report Date: 09/10/93
Date Sampled: 09/08/93
Date Received: 09/08/93
Date Extracted: 09/09/93
Date Analyzed: 09/09/93

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
93022	3597	ND	12.4

ND- Analyte not detected at the stated detection limit.

Reference: Method 3550 - Sonication Extraction; Test Methods for Evaluating Solid Waste, SW-846, United States Environmental Protection Agency, September, 1986; Method 418.1 - Petroleum Hydrocarbons, Total Recoverable; Chemical Analysis of Water and Waste, United States Environmental Protection Agency, 1978.

Comments:

Analyst

Review

2506 W. Main Street
Farmington, New Mexico 87401

VOLATILE AROMATIC HYDROCARBONS

Tierra Environmental

Project ID:	Land Farm	Report Date:	09/10/93
Sample ID:	93022	Date Sampled:	09/08/93
Lab ID:	3597	Date Received:	09/08/93
Sample Matrix:	Soil	Date Extracted:	09/09/93
Preservative:	Cool	Date Analyzed:	09/10/93
Condition:	Intact		

Target Analyte	Concentration (ug/kg)	Detection Limit (ug/kg)
Benzene	ND	9.51
Toluene	ND	9.51
Ethylbenzene	ND	9.51
m,p-Xylenes	ND	19.0
o-Xylene	ND	19.0

ND - Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	Percent Recovery	Acceptance Limits
Toluene-d8	98	81 -117%
Bromofluorobenzene	97	74 -121%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst

Review

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☒ Non-Exempt: ☒ Verbal Approval Received: Yes ☐ No ☐	^^XXXXXXXXXXXXXXXXXXXXXXX
2. Destination Tierra Environmental Company, Inc. Crouch Mesa, Farmington, NM	4. Generator Steere Tank Lines
3. Address of Facility Operator 909 West Apache, Farmington, NM 87401	5. Name of Originating Site Antonito, Colorado Conejos County
7. Location of Material (Street Address or ULSTR) Tierra Environmental Company - Landfarm - Farmington	6. Name of Transporter Dawn Trucking Company
	8. State New Mexico

9. Check 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-oilfield exempt wastes will be accompanied by a certification of waste status from the Generator and the New Mexico Environment Department or other appropriate government agency; two certificates per job.

☒ C. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analyses to prove the material is non-hazardous and the Generator's certification of origin. No waste classified as hazardous by listing or testing will be approved.

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

BRIEF DESCRIPTION OF THE MATERIAL: Sandy loam soil matrix, contaminated with approximately 800 gallons of JP-4 Fuel (Aviation). Dawn Trucking Company of Farmington, NM., will be hauling approximately 16+ loads of contaminated soil from the site in Antonito, Conejos County, Colorado to the Tierra Environmental Company landfarm located on Crouch Mesa San Juan County, New Mexico.

RECEIVED
MAY1 8 1993
OIL CON. DIV.
DIST. 3

RECEIVED
MAY11 1993
OIL CON. DIV.
DIST. 3

Estimated Volume 1000 cy Known Volume (to be entered by the operator at the end of the haul): _____ cy

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Ronald M. Castleberry TITLE Environmental Specialist DATE 5/10/93

TYPE OR PRINT NAME Ronald M. Castleberry TELEPHONE NO. 325-0924

This space for State Use

APPROVED BY Denny G. Foust TITLE Geologist DATE 5/11/93

APPROVED BY [illegible] TITLE EB Chief DATE 5/17/93

CONDITIONS OF APPROVAL, IF ANY:

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Bulding
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
COVERNOR

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

April 6, 1993

Mr. Phil Nobis, Landfarm Operator
Tierra Environmental
Farmington, NM

Dear Mr: Nobis:

SUBJECT: Letter of Authorization

The New Mexico Environment Department hereby authorizes transport and temporary storage of contaminated soil at Tierra Environmental. The Hazardous and Radioactive Materials Bureau allows the shipment of the material to the landfarm providing the following conditions are met:

1. The contaminated soil will be stored in an isolated area on the landfarm.

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5. The operator will dispose of the waste as soon as possible in an appropriate manner based on the analytical results.

If you have any questions, please feel free to contact me at (505)827-4358 or Michael Le Scouarnec at (505) 827-4308.

Sincerely,

Benito J. Garcia, Chief
Hazardous and Radioactive Materials Bureau

cc: Roger Anderson, OCD
John Geddie, Office of the Secretary
Edward Horst, RCRA Enforcement

May 10, 1993

Tierra Environmental Corporation
909 West Apache
Farmington, NM 87401

Re: Steere Tank Lines, Antonito Colorado Spill of JP4

Gentlemen,

On April 26, 1993, a Steere Tank Lines truck overturned on Colorado Highway 17, approximately 16 miles west of Antonito Colorado. The accident resulted in approximately 800 gals of JP4 jet fuel being spilled onto a turn-out on the north side of the highway. The fuel was spilled onto Colorado State Highway frontage adjacent to National Forest lands.

On Site Technologies LTD was contracted by Steere trucking to provide clean-up services. Under the supervision of Robert Griffee, the contaminated soil in the turn-out was excavated and temporarily stock piled on a plastic liner at the site. Site Reclamation Services Inc. provided the excavation equipment.

As of the date of this letter, approximately 1,000 yards of contaminated soil is in the stock pile at the site. Site Reclamation Services will organize trucking operations as soon as all State and Federal Agencies approve of the removal and the proposed land farming of the soils.

If additional detail is required or if you need more information, please call.

Sincerely,

Robert R. Griffee
General Manager,
On Site Technologies LTD

STATE OF COLORADO

COLORADO DEPARTMENT OF HEALTH
Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80222-1530
Phone (303) 692-2000

Laboratory Building
4210 E. 11th Avenue
Denver, Colorado 80220-3716
(303) 691-4700

Roy Romer
Governor

Patricia A. Nolan, MD, MPH
Executive Director

May 10, 1993

Mr. Richard Chaney
Tierra Environmental Corporation
909 W. Apache
Farmington, NM 87401

Re: Disposal of Jet Fuel Contaminated Soil from Conejos County, Colorado.

The Colorado Department of Health has received TCLP analytical results from Onsite Technologies. These results are reported to be taken of soil removed due to a jet fuel spill that occurred on April 26, 1993 near Antonito, Colorado. Sample collection by Onsite Technologies was not observed by representatives of the Colorado Department Health.

The analyses provided show that the material is not a characteristic hazardous waste, and it is not a listed hazardous waste. Therefore, based upon the information provided, the material appears to meet the criteria for a non-hazardous solid waste.

If you have any questions, please contact me at (303) 692-3022.

Sincerely,

Janet M. Jones

for Steven H. Gunderson, Director
Emergency Management Unit

SHG:jj

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 1

To Richard Chaney	From S. Gunderson
Co. Tierra Environ.	Co CO Dept of Health
Dept.	Phone # 303-692-3022
Fax # (505) 327-1471	Fax # 303-782-4969

Western Atlas International
A Litton Division Company

CORE LABORATORIES

FINAL REPORT DISTRIBUTION
05/05/93

JOB NUMBER: 930934

COMPANY NAME	COMPANY MAILING ADDRESS	COMPANY CITY	STATE	COMPANY ZIP CODE
ONSITE TECHNOLOGIES LIMITED DAVE COX	657 W. MAPLE	FARMINGTON	NM	87401

Western Atlas International
A Litton Dresser Company

CORE LABORATORIES

LABORATORY TESTS RESULTS
05/05/93

JOB NUMBER: 930934 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.....:
DATE SAMPLED.....: 04/15/93
TIME SAMPLED.....: 15:00
WORK DESCRIPTION...: 0068 5PT COMPOSITE

LABORATORY I.D...: 930934-0001
DATE RECEIVED....: 04/16/93
TIME RECEIVED....: 11:30
REMARKS.....: SAMPLED BY: T.W.

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECH
TCLP Semivolatiles		*1		EPA SW-846 8270	05/03/93	GEF
1,4-Dichlorobenzene	<10	10	ug/L	EPA SW-846 8270		
2,4-Dinitrotoluene	<10	10	ug/L	EPA SW-846 8270		
Hexachlorobenzene	<10	10	ug/L	EPA SW-846 8270		
Hexachlorobutadiene	<10	10	ug/L	EPA SW-846 8270		
Hexachloroethane	<10	10	ug/L	EPA SW-846 8270		
Nitrobenzene	<10	10	ug/L	EPA SW-846 8270		
Pentachlorophenol	<50	50	ug/L	EPA SW-846 8270		
2,4,5-Trichlorophenol	<10	10	ug/L	EPA SW-846 8270		
2,4,6-Trichlorophenol	<10	10	ug/L	EPA SW-846 8270		
Pyridine	<10	10	ug/L	EPA SW-846 8270		
Cresols (Total)	<30	30	ug/L	EPA SW-846 8270		
TCLP Volatiles		*10		EPA SW-846 8260	04/21/93	BJH
Benzene	<50	50	ug/L	EPA SW-846 8260		
Carbon Tetrachloride	<50	50	ug/L	EPA SW-846 8260		
Chlorobenzene	<50	50	ug/L	EPA SW-846 8260		
Chloroform	<50	50	ug/L	EPA SW-846 8260		
2-Butanone	<100	100	ug/L	EPA SW-846 8260		
Trichloroethene	<50	50	ug/L	EPA SW-846 8260		
Vinyl chloride	<50	50	ug/L	EPA SW-846 8260		
1,2-Dichloroethane	<50	50	ug/L	EPA SW-846 8260		
Tetrachloroethene	<50	50	ug/L	EPA SW-846 8260		
1,1-Dichloroethene	<50	50	ug/L	EPA SW-846 8260		
Extraction - TCLP Semivolatiles	Completed			EPA SW-846 3510	04/28/93	DEH
Glass Jar Extraction for Metals	Completed			EPA SW-846 1311	04/22/93	SEB
Glass Jar Extraction-Semivolatiles	Completed			EPA SW-846 1311	04/22/93	SEB
Arsenic (As), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	04/27/93	JEM
Barium (Ba), extractable TCLP	0.58	0.05	mg/L	EPA SW-846 6010	04/27/93	JEM
Cadmium (Cd), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	04/27/93	JEM
Chromium (Cr), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	04/27/93	JEM
Lead (Pb), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	04/27/93	JEM
Selenium (Se), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	04/27/93	JEM

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CORPUS CHRISTI, TX 78408
(512) 289-2673

Western Atlas International

CORE LABORATORIES

LABORATORY TESTS RESULTS
05/05/93

JOB NUMBER: 930934 CUSTOMER: ONSITE TECHNOLOGIES LIMITED ATTN: DAVE COX

CLIENT I.D.....:
DATE SAMPLED.....: 04/15/93
TIME SAMPLED.....: 15:00
WORK DESCRIPTION...: 0068 5PT COMPOSITE

LABORATORY I.D...: 930934-0001
DATE RECEIVED....: 04/16/93
TIME RECEIVED....: 11:30
REMARKS.....: SAMPLED BY: T.W.

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECH
Silver (Ag), extractable TCLP	<0.05	0.05	mg/L	EPA SW-846 6010	04/27/93	JEM
Flammability Potential Screening	Negative		+ or -	ASTM D4982-89	04/16/93	RAD
Cyanide, Reactive (CN)	<5	5	mg/kg	EPA SW-846 7.3.3.2	04/17/93	CH
Corrosivity by pH	6.87	0.10	pH units	EPA SW-846 9040	04/22/93	EBS
Sulfide, Reactive	<10	10	mg/kg	EPA SW-846 7.3.4.2	04/27/93	CH
Mercury (Hg), extractable, TCLP	<0.002	0.002	mg/L	EPA SW-846 7470	04/27/93	JJP
Metals Digest on Extracted Sample	Completed			EPA SW-846 3010	04/23/93	CH
Zero Headspace Extraction-Volatile	Completed			EPA SW-846 1311	04/19/93	SEB

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