

# ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

REC'D / SAN JUAN

SEP 10 2001

September 7, 2001

XTO Company  
Attn: Tony Sternberger  
6001 US Highway 64  
Farmington, New Mexico 87401

Re: Black Gas Com 1E, on-site landfarm closure

6-29-29W-106

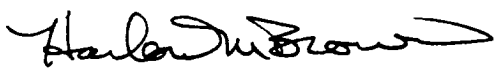
Dear Tony:

Envirotech is pleased to advise you that soil remediation is complete at the referenced location. The site was tilled four times with a 12" disk. Each tilling event resulted in loose soil approximately 6" thick. As each lift was remediated it was moved to a temporary stockpile adjacent to the open excavation on the east edge of the location. Test pits were excavated between tilling events to determine whether contaminants were gone below the surface. Following the July tilling event tests pits were excavated and it appeared that tight soil beneath the loose surface would pass analysis. A soil sample was collected and returned to Envirotech's Laboratory for analysis by USEPA 8015 - TPH and USEPA 8021-BTEX. Results of the analysis are attached and the landfarm should require No Further Action. Soil excavated at the former tank location can be used to backfill the open excavation.

Please note that we have not completed a pit remediation report or onsite closure report for submittal to the NMOCD.

If you have any questions or comments regarding this project please feel free to contact us at 505-632-0615.

Sincerely,  
Envirotech Inc.

  
Harlan M. Brown  
Geologist / Hydrogeologist  
New Mexico Certified Scientist #083

*pit was open for one year*

*OCD authorized backfill without reporting. Unaware as to lack of reporting. High contaminant level. No report being*

TRM ✓

RFM ✓

GLM ✓

WF ✓ 9/20/01

# ENVIROTECH INC.

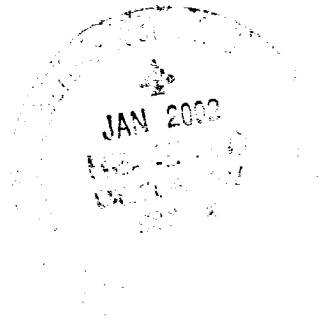
**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW**

REC'D / SAN JUAN

FEB 08 2001

February 6, 2001

Cross Timbers Operating Company  
Attn: Tony Sternberger  
6001 US Highway 64  
Farmington, New Mexico 87401



Re: Spill cleanup; Black Gas Com 1E; Condensate tank upset

Dear Mr. Sternberger:

The following is a summary of on-site activities conducted by Envirotech in regard to a spill cleanup at the Black Gas Com 1E on Sunday, February 4, 2001. The release was reported to be approximately 113 barrels of condensate and water. The soil matrix at the site is a coarse well sorted sand.

- 1) 9:30 A.M call received by Morris D. Young of Envirotech from Mr. Tony Sternberger.
- 2) 10:30 Response crew on-site; High Desert Construction was on-site at 11:30 with a backhoe to excavate preliminary test pits.
- 3) 13:00 PID Heated head-space analysis of soil from a test hole north side of tank
  - a) 10' x 10' excavation
  - b) PID @ 10' below natural grade, north edge 149 ppm
  - c) PID @ 8' below natural grade south edge of excavation 164 ppm
  - d) Condensate stain evident (wet soil appearance) to approximately 8'
- 4) 13:20 PID heated head-space analysis of soil from a test hole south of the tank.
  - a) 6' x 10' excavation
  - b) PID @ 6' below natural grade 545 ppm
  - c) PID @ 9' below natural grade 203 ppm
  - d) PID @ 11' below natural grade 178 ppm
- 5) Discussion with Tony Sternberger in regard to options for mitigation of spill. Ventilation using perforated pipe may be an option. Excavation in the vicinity of the tank to install perforated pipe or open holes to allow ventilation may destabilize the tank because the soil matrix is coarse unconsolidated sand. Because of the likelihood of contamination under the tank, the strong possibility of shallow groundwater at the site, and unstable soil conditions Mr. Sternberger decided to move the tank and excavate contaminated media. Mr. Sternberger ordered a water truck to the site to remove liquids from tank so it could be moved. Mr. Sternberger also authorized use of an excavator to expedite removal of contaminated soil.
- 6) 15:00 Envirotech environmental scientist Harlan Brown left the site. ES would return when the excavator operator is close to completing contaminated material removal.
- 7) 15:15 High Country and Envirotech crews dismantled tank appurtenances including the ladder, landing, and piping to facilitate the tank move. Envirotech's excavator moved contaminated soil pile to allow access with water truck to remove liquids remaining in the tank.

Page Two  
Spill Report  
Black Gas Com Well #1

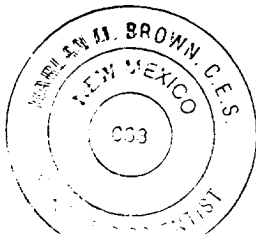
- 8) High Country's backhoe shuttled soil to an on-site landfarm.
- 9) 15:30 Envirotech's excavator was used to move the tank out of secondary containment and commenced excavation of contaminated soil.
- 10) 16:30 Harlan M. Brown returned to the site to conduct heated head-space analysis on bottom of excavation. Heated head-space results as follows:
  - a) PID NW corner @ 8' = 274 ppm
  - b) PID NE corner @ 9' = 69 ppm
  - c) PID ~~E~~ @ 10.5' = 150 ppm
  - d) PID SE corner @ 10' = 51 ppm
  - e) PID SW corner @ 8' = 194 ppm
  - f) 17:20 p.m. 5 point composite soil sample collected from same sample points as PID samples for BTEX analysis.
- 11) 17:45 The site was secured using fencing materials provided by Cross Timbers.
- 12) Monday, February 5, 2001, verbal results from Envirotech Lab on BTEX 8021 analysis. Benzene is non-detect, Total BTEX is .079 ppm. Base of excavation is cleared for backfill.
- 13) Stockpiled material was moved to the landfarm area and the dressed up on Monday, February 5, 2001.
- 14) Envirotech is to schedule a sampling event for March 5, 2001 to check BTEX and TPH values of on-site landfarm. Sample will be collected for analysis only if heated head-space analysis indicates volatiles are in a range that merit laboratory analysis.
- 15) The on-site pit will remain fenced pending remediation of the landfarm for backfill material.
- 16) Envirotech is to schedule tilling events at the site every two weeks to evaluate remediation of the condensate contamination.

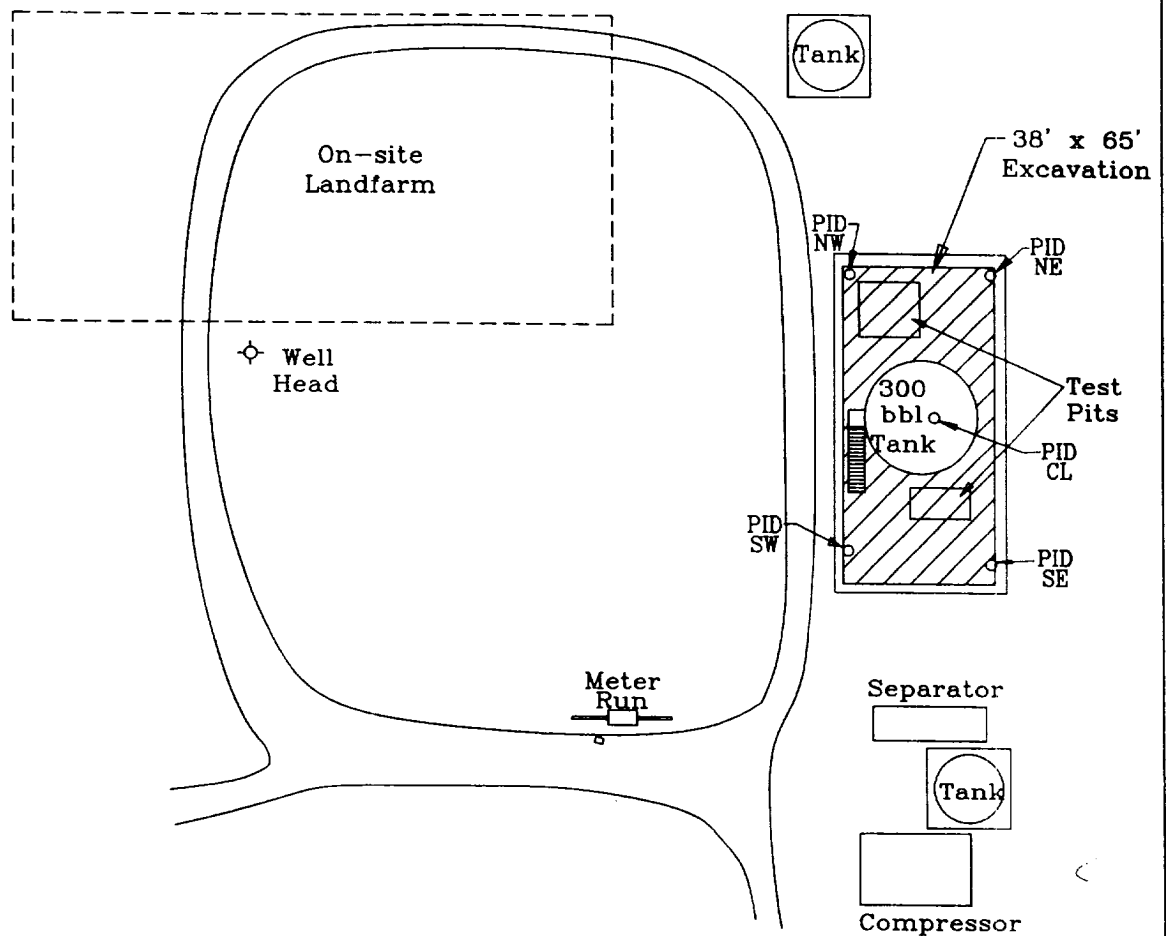
If you have questions or comments regarding this project please feel free to contact us at 505-632-0615.

Sincerely,  
Envirotech Inc.



Harlan M Brown  
Geologist / Hydrogeologist  
New Mexico Certified Scientist #083





All angles, directions, and distances determined  
by sighting and pacing from existing site features.  
Accuracy of measurements implied only to the  
degree of accuracy of method.

NO SCALE

<p>Cross Timbers Operating Company Condensate Upset Black Gas Com Well 1E SW 1/4 NE Sec. 29, T29N, R10W San Juan County, NM</p> <p>Project No.: 98031-06</p>	<p>Envirotech Inc.</p> <hr/> <p>Environmental Scientists &amp; Engineers 5796 US Highway 64 Farmington, New Mexico</p>	<p>Site Map</p>	
		Figure 1	Date: 02/01
		DRW: HMB	PRJ MGR: SR

# ENVIROTECH LABS

**PRACTICAL SOLUTIONS FOR A BETTER TOMORROW****EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS**

Client:	Cross Timbers	Project #:	98031-006
Sample ID:	Condensate Upset	Date Reported:	02-05-01
Laboratory Number:	19172	Date Sampled:	02-04-01
Chain of Custody:	8499	Date Received:	02-04-01
Sample Matrix:	Soil	Date Analyzed:	02-05-01
Preservative:	Cool	Date Extracted:	02-05-01
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	22.6	1.7
Ethylbenzene	3.5	1.5
p,m-Xylene	48.1	2.2
o-Xylene	4.8	1.0
Total BTEX	79.0	

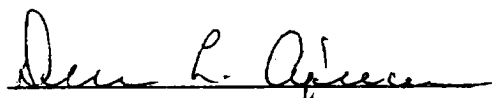
ND - Parameter not detected at the stated detection limit.

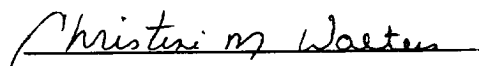
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	100 %
	Bromofluorobenzene	100 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Black Gas Com 1E. 5 pt. Closure.

  
Analyst

  
Review



**EPA METHOD 8015 Modified**  
**Nonhalogenated Volatile Organics**  
**Total Petroleum Hydrocarbons**

Client:	Cross Timbers
Sample ID:	Landfarm
Laboratory Number:	20568
Chain of Custody No:	9492
Sample Matrix:	Soil
Preservative:	Cool
Condition:	Cool and Intact

Project #:	98031-006
Date Reported:	08-09-01
Date Sampled:	08-07-01
Date Received:	08-07-01
Date Extracted:	08-08-01
Date Analyzed:	08-09-01
Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

ND - Parameter not detected at the stated detection limit.

**References:** Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846. USEPA, December 1996.

Comments: **Black Gas Com 1E.**

Analyst

Christini M Walters  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Cross Timbers	Project #:	98031-006
Sample ID:	Landfarm	Date Reported:	08-09-01
Laboratory Number:	20568	Date Sampled:	08-07-01
Chain of Custody:	9492	Date Received:	08-07-01
Sample Matrix:	Soil	Date Analyzed:	08-09-01
Preservative:	Cool	Date Extracted:	08-08-01
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	ND	

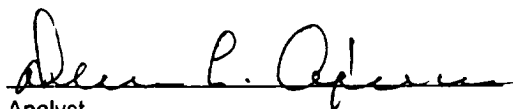
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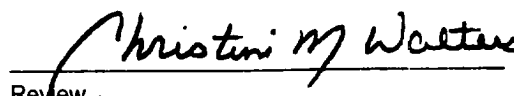
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96 %
	1,4-difluorobenzene	96 %
	Bromochlorobenzene	96 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Black Gas Com 1E.

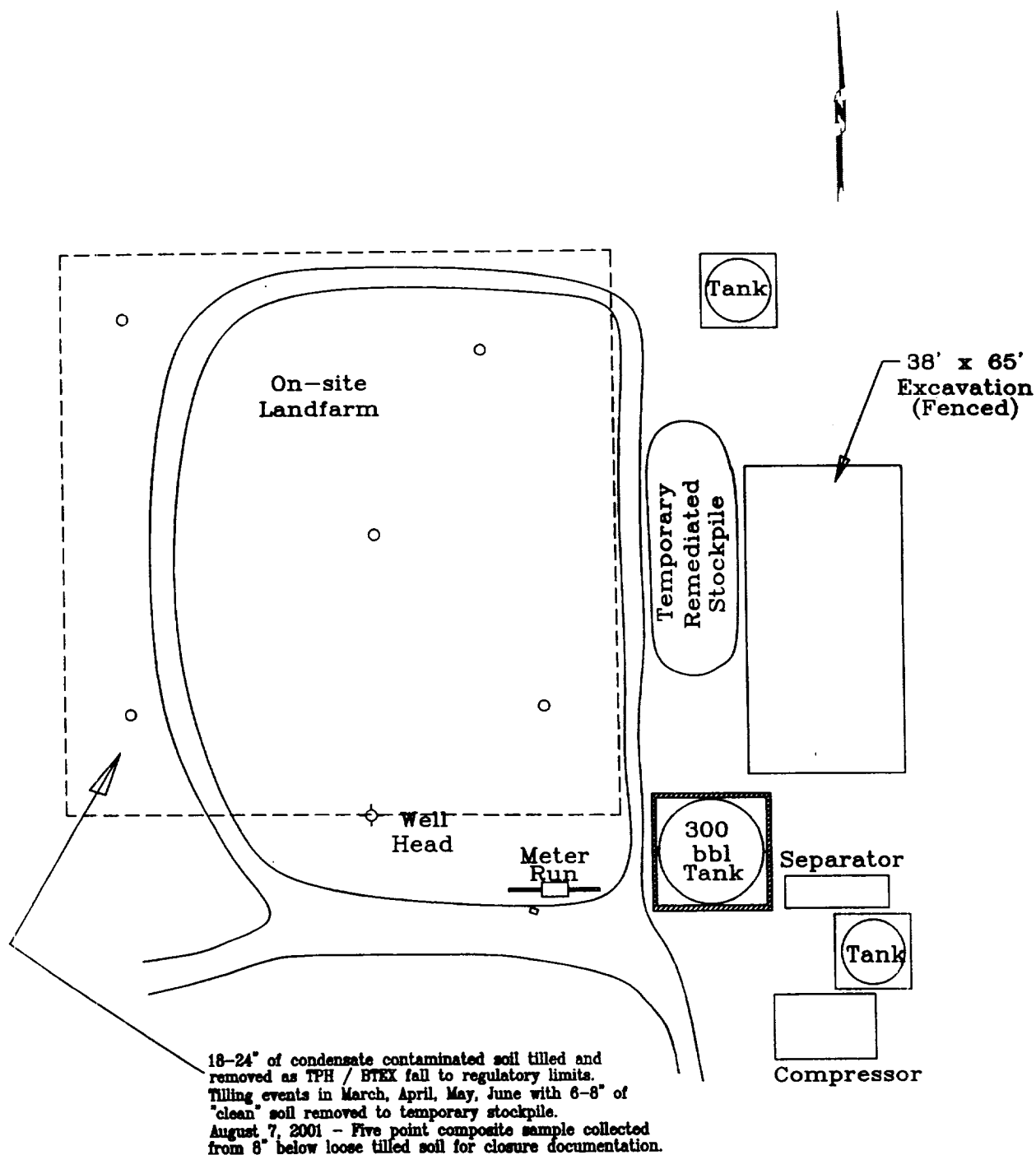
  
Analyst

  
Review



09492

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All angles, directions, and distances determined by sighting and pacing from existing site features. Accuracy of measurements implied only to the degree of accuracy of method.

NO SCALE

Cross Timbers Operating Company Condensate Upset Black Gas Com Well 1E SE NE Sec. 29, T29N, R10W San Juan County, NM Project No.: 98031-06	Envirotech Inc.	Site Map	
	Environmental Scientists & Engineers 5796 US Highway 64 Farmington, New Mexico	Figure 1	Date: 09/01
		DRW: HMB	PRJ MGR: SR