Blow - OK
Sep - risk - non-valuable equipment

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

PIT REMEDIATION AND CLOSURE REPORT

A0045

Operator: Amoco Production Company **Telephone:** (505) - 326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: Madeleine N. Galt H 1
Well Name

Location: Unit or Qtr/Qtr Sec L Sec 1 T 27N R 10W County San Juan

Pit Type: Separator ___ Dehydrator ___ Other blow

Land Type: BLM ✓, State ___, Fee ___, Other ___

Pit Location: (attach diagram)
Pit dimensions: length 21', width 25', depth 14'
Reference: wellhead ✓, other ___
Footage from reference: 150
Direction from reference: 70 Degrees ___ East ✓ North of ___ West ___ South

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

Date Remediation Started: _____ **Date Completed:** 6/8/94

Remediation Method: (Check all appropriate sections)
Excavation ✓ Approx. cubic yards 272
Landfarmed ✓ Insitu Bioremediation ___
Other _____

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

General Description Of Remedial Action: Excavation

Ground Water Encountered: No ✓ Yes ___ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample location see Attached Documents

Sample depth 14'

Sample date 6/8/94 Sample time 1045

Sample Results

Benzene(ppm) ND

Total BTEX(ppm) 4.808

Field headspace(ppm) 165

TPH 134 ppm

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

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

DATE 6/8/94

SIGNATURE B J Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

results copied to Johnny 6/27/94

CLIENT: Amoco

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT NO: A0045

C.I.C. NO: 3717

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140
PAGE No: 1 of 1

LOCATION: NAME: Madeleine N. Gait H WELL #: 1 PIT: blow
QUAD/UNIT: L SEC: 1 TWP: 27N RNG: 10W BM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NW/4 SW/4 CONTRACTOR: EPC

DATE STARTED:
DATE FINISHED: 6/8/94
ENVIRONMENTAL SPECIALIST: CLG

SOIL REMEDIATION: EXCAVATION APPROX. 21 FT. x 25 FT. x 14 FT. DEEP.
DISPOSAL FACILITY: landfarmed on-site CUBIC YARDAGE: 272
LAND USE: range LEASE: fed. SF-077384

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 150 FEET N70E FROM WELLHEAD
DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

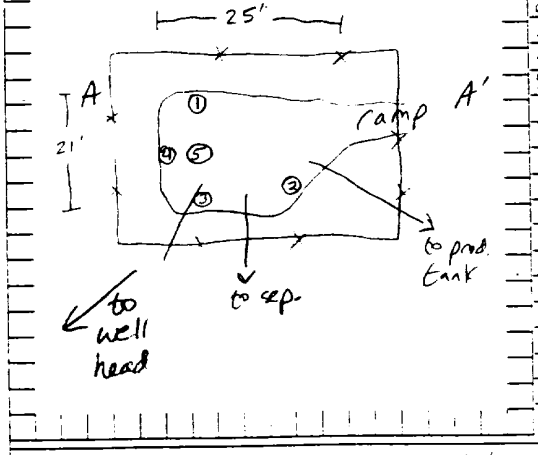
SOIL AND EXCAVATION DESCRIPTION:
light yellow brown sand, slightly cohesive, slightly moist

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE
0 FEET

PIT PERIMETER

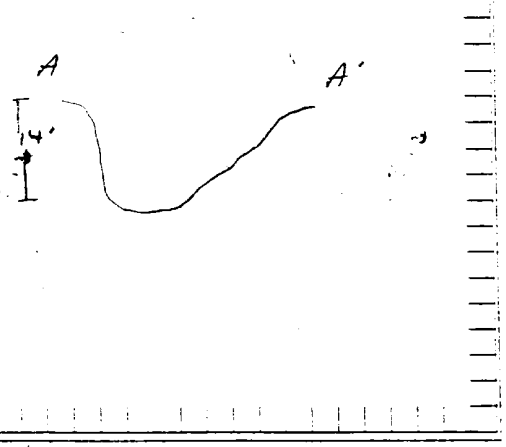


OVM RESULTS

SAMPLE ID		FIELD HEADSPACE PID (ppm)
1	10'	8
2	10'	39
3	12'	16
4	12'	4
5	14'	165

LAB SAMPLES
⑤ @ 14' for TPH (418.1) and BTEX (8020)

PIT PROFILE



TRAVEL NOTES: CALLOUT: 6/8/94 ONSITE: 6/8/94

ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	5 @ 14'	Date Sampled:	06-08-94
Laboratory Number:	7562	Date Received:	06-08-94
Sample Matrix:	Soil	Date Analyzed:	06-13-94
Preservative:	Cool	Date Reported:	06-15-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	134	25.0

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Madeleine N. Galt H1 Blow Pit -- A0045

Tom Hann
Analyst

David D Young
Review

ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	5 @ 14'	Date Reported:	06-13-94
Laboratory Number:	7562	Date Sampled:	06-08-94
Sample Matrix:	Soil	Date Received:	06-08-94
Preservative:	Cool	Date Extracted:	06-09-94
Condition:	Cool & Intact	Date Analyzed:	06-11-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	13.3
Toluene	388	33.3
Ethylbenzene	ND	13.3
p,m-Xylene	2820	13.3
o-Xylene	1600	13

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Madeline N. Galt H1 Blow Pit A0045.

Analyst

Review

District I
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P.O. Drawer DD, Artesia, NM 88211
trict III
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State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

PIT REMEDIATION AND CLOSURE REPORT

A0045

Operator: Amoco Production Company **Telephone:** (505) - 326-9200

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: Well Name Madeleine N. Galt #1

Location: Unit or Qtr/Qtr Sec L Sec 1 T 27N R 10W County San Juan

Pit Type: Separator ✓ Dehydrator ___ Other ___

Land Type: BLM ✓, State ___, Fee ___, Other ___

Pit Location: (Attach diagram)
Pit dimensions: length 17', width 22', depth 18'
Reference: wellhead ✓, other ___
Footage from reference: 120
Direction from reference: 10 Degrees ✓ East ___ North of ___ West ___ South ✓

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

Date Remediation Started: _____ **Date Completed:** 6/8/94

Remediation Method: (Check all appropriate sections)
Excavation ✓ Approx. cubic yards 249
Landfarmed ✓ Insitu Bioremediation ___
Other _____

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

General Description Of Remedial Action:
Excavation. RISK ASSESSED. NS

Ground Water Encountered: No ✓ Yes ___ Depth _____

Final Pit: Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)
Sample location see Attached Documents
Sample depth ③ @ 16', ⑤ @ 18'
Sample date 6/8/94 Sample time 940, 1015
Sample Results
Benzene(ppm) 0.76
Total BTEX(ppm) 253.16 } ③@16'
Field headspace(ppm) ③@16' = 1433; ⑤@18' = 1220
TPH ⑤@18' = 5,200 ppm

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

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

DATE ~~6/8/94~~ 5/25/98

SIGNATURE B J Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

results copied to Johnny 6/27/94

CLIENT: Amoco

ENVIROTECH Inc.

5796 US HWY. 64, FARMINGTON, NM 87401
(505) 632-0615

PIT NO: A0045
CO.C. NO: 3717

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92145
PAGE No: 1 of 1

LOCATION: NAME: Madeleine N. Galt H WELL #: 1 PIT: sep.
QUAD/UNIT: L SEC: 1 TWP: 27N RNG: 10W BM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NW/4 SW/4 CONTRACTOR: EPC

DATE STARTED: 6/8/94
DATE FINISHED: 6/8/94
ENVIRONMENTAL SPECIALIST: CLG

SOIL REMEDIATION: EXCAVATION APPROX. 17 FT. x 22 FT. x 18 FT. DEEP.
DISPOSAL FACILITY: landfarmed on-site (fed.) CUBIC YARDAGE: 249
LAND USE: range LEASE: SF-077384

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 120 FEET S10E FROM WELLHEAD.
DEPTH TO GROUNDWATER: >100 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:
excavation can't continue to north, east, or west due to equipment (sep. and automation)
dark gray sand, moist, cohesive, odor

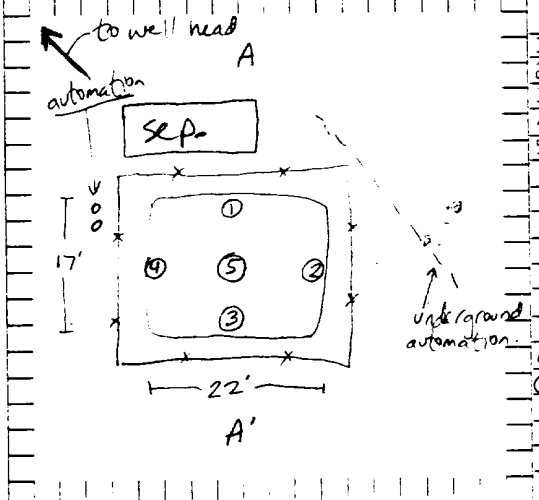
RISK ASSESSED RV

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE
0 FEET

PIT PERIMETER

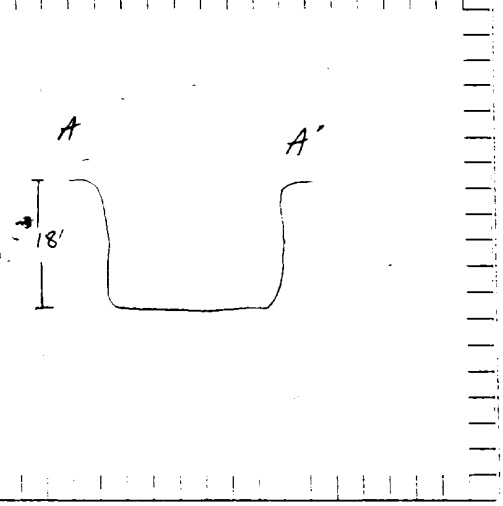


OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 16'	1190
2 16'	1085
3 16'	1433
4 16'	1280
5 18'	1220

LAB SAMPLES
⑤ @ 18' for TPH (418.1)
③ @ 16' for BTEX (8020)

PIT PROFILE



TRAVEL NOTES: CALLOUT: 6/8/94 ONSITE: 6/8/94

Well Name:	**Galt, M.N. H #1**
Well Site location:	Unit L, Sec. 1, T27N, R10W
Pit Type:	Separator Pit
Producing Formation:	Basin Dakota
Pit Category:	Non Vulnerable
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 100 ft.

RISK ASSESSMENT (non-vulnerable area)

Pit remediation activities were terminated when trackhoe reach practical extent at 18 feet below grade.

No past or future threat to surface water or groundwater is likely based on the following considerations:

1. Groundwater levels located on or close to the well pad are estimated to be at a much greater depth below presumed shallow sandstone bedrock.

2. Topographic information does not indicate off site lateral fluid migration near the earthen pit.

3. Daily discharge into the earthen pit has been terminated (pit abandoned). Prior discharge into the pit is believed to be under 5 barrels per day.

4. Well site located within the **non-vulnerable area** and is approximately 0.4 miles east of the nearest vulnerable area boundary (Armenta Canyon Wash).

   (Refer to Huerfanito Peak Quadrangle, New Mexico - San Juan County, 7.5 Minute Series (Topographic), Provisional edition, 1985, (vulnerable area boundary developed by Mr. William C. Olson, Hydrogeologist, Environmental Bureau, New Mexico Oil Conservation Division).

Based upon the information given, we conclude that the subsurface vertical and lateral impact from the earthen pit is very limited and poses very little, if any, threat to groundwater. AMOCO therefore request pit closure approval on this location.

ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	5 @ 18'	Date Sampled:	06-08-94
Laboratory Number:	7561	Date Received:	06-08-94
Sample Matrix:	Soil	Date Analyzed:	06-13-94
Preservative:	Cool	Date Reported:	06-15-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	5200	25.0

ND = Parameter not detected at the stated detection limit.
N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Madeleine N. Galt H1 Sep Pit -- A0045

Analyst

Review

ENVIROTECH LABS

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PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	3 @ 16'	Date Reported:	06-13-94
Laboratory Number:	7560	Date Sampled:	06-08-94
Sample Matrix:	Soil	Date Received:	06-08-94
Preservative:	Cool	Date Extracted:	06-09-94
Condition:	Cool & Intact	Date Analyzed:	06-11-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	760	13.3
Toluene	90200	33.2
Ethylbenzene	8200	13.3
p,m-Xylene	28900	13.3
o-Xylene	125100	13

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Madeline N. Galt H1 Sep Pit A0045.

Analyst

Review

3717

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	A0045 ANALYSIS/PARAMETERS
Amoco 92140	Madeleine N. Galt #1	
Sampler: (Signature) Christine Guenther	Chain of Custody Tape No.	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX (8020)	TPH (418.1)					Remarks
③ @ 16'	6/8/94	1015	7560	soil	1	✓						sep. pit
⑤ @ 18'	6/8/94	940	7561	soil	1		✓					sep. pit
⑤ @ 14'	6/8/94	1045	7562	soil	1	✓	✓					blow pit

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Christine Guenther	6/8/94	1325	Robert M Young	6/8/94	1325
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.
5796 U.S. Highway 64-3014
Farmington, New Mexico 87401
(505) 632-0615

CLIENT: Amoco

BLAGG ENGINEERING, INC.
P.O. BOX 87, BLOOMFIELD, NM 87413
(505) 632-1199

LOCATION NO: A0045
C.O.C. NO: ANALYSIS

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: MADELEINE N. GALT H | LEASE: SF-077384
QUAD/UNIT: L SEC: 1 TWP: 27N RNG: 10W BM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NW/SW CONTRACTOR: EPC

DATE STARTED: 5-8-96
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: REO

SOIL REMEDIATION:
REMEDIATION SYSTEM: LANDFARM
APPROX. CUBIC YARDAGE: 521
LAND USE: RANGE

FIELD NOTES & REMARKS:
DEPTH TO GROUNDWATER: >100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 5000 PPM

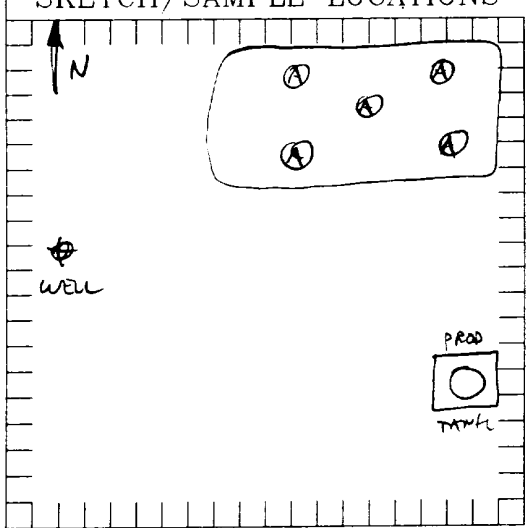
SOIL CONSISTS OF MOIST → DRY SILTY SAND - NO STAIN, NO ODOR.

CLOSE L.F.

FIELD 418.1 CALCULATIONS

SAMPLE I.D.	LAB No:	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm

SKETCH/SAMPLE LOCATIONS



SCALE
0 FT

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
comp. A	0

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
comp. A	8015	1030	ND

TRAVEL NOTES: CALLOUT: ONSITE: 5-8-96 1020

FORM REVISED 4/96

ANAITAS ENVIRONMENTAL LABS

TOTAL VOLATILE PETROLEUM HYDROCARBONS

Gasoline Range Organics

Blagg Engineering, Inc.

Project ID:	MN Galt H1	Report Date:	05/22/96
Sample Matrix:	Soil	Date Sampled:	05/08/96
Preservative:	Cool	Date Received:	05/08/96
Condition:	Intact	Date Extracted:	05/20/96
		Date Analyzed:	05/20/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	3373	ND	18.6

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	% Recovery	Acceptance Limits
Trifluorotoluene	105%	50 - 150%

Reference: Method for the Determination of Gasoline Range Organics, State of Tennessee, Department of Environment and Conservation, Division of Underground Storage Tanks.

Comments:

Analyst

Review

ANALYTAS
ENVIRONMENTAL LABS

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Diesel Range Organics

Blagg Engineering, Inc.

Project ID:	MN Galt H1	Report Date:	05/22/96
Sample Matrix:	Soil	Date Sampled:	05/08/96
Preservative:	Cool	Date Received:	05/08/96
Condition:	Intact	Date Extracted:	05/20/96
		Date Analyzed:	05/21/96

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Comp. A	3373	ND	18.0

ND- Analyte not detected at the stated detection limit.

Quality Control:

Surrogate	% Recovery	Acceptance Limits
o - Terphenyl	101%	50 - 150%

Reference: EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

Comments:

Analyst

Review