East Abd pit — V, BSK bedrock
West bedrock

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

PIT REMEDIATION AND CLOSURE REPORT

Blow and sep pit approved 12/18/96 but refiled, not C4141 listed

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: Well Name Johnson Gas Com "D" No. 1

Location: Unit or Qtr/Qtr Sec SW/4 NE/4 sec 15 T 30N R 12W County San Juan

Pit Type: Separator___ Dehydrator___ Other EAST Abandoned Pit

Land Type: BLM___, State ___, Fee X, Other COM. AGMT.

Pit Location: (attach diagram) Pit dimensions: length 20', width 15', depth 6'

Reference: wellhead X, other ______

Footage from reference: 235'

Direction from reference: 30 Degrees ___ East North X of X 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)		20
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)		10
	RANKING SCORE (TOTAL POINTS):		30

Date Remediation Started: 6/23/94 **Date Completed:** 6/23/94

Remediation Method: (Check all appropriate sections)
Excavation X Approx. cubic yards 67
Landfarmed X Insitu Bioremediation ___
Other ___

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

General Description Of Remedial Action:
Excavation and Landfarm Remediation at APC Crouch Mesa Facility
Bedrock Bottom, Risk Assessed. gw

Ground Water Encountered: No X 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 4'-6', Center bottom and Sidewall

Sample date 6/23/94 Sample time 1920 & 1940

Sample Results

	CB@6'	North Wall @ 4'
Benzene(ppm)	ND	ND
Total BTEX(ppm)	78.90	28.140
Field headspace(ppm)	536	832
TPH	108	211

Ground Water Sample: Yes N/A ___ (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 ~~7/5/94~~ 5/23/98 gw

SIGNATURE B J Shaw PRINTED NAME AND TITLE Buddy D. Shaw, Environmental Coordinator

C4#1-3

CLIENT: Amoco

ENVIROTECH Inc.

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

PIT NO: ~~C4#1~~ A0077

C.O.C. NO: ~~3774~~ 3776

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140
PAGE No: 1 of 1

LOCATION: NAME: Johnson Gas Com "D" WELL #: No 1 PIT: East Abandoned Pit
QUAD/UNIT: SW/4 NE/4 SEC: 15 TWP: 30N RNG: 12W BM: NMPM CNTY: SJ ST: NM
QTR/FOOTAGE: CONTRACTOR: Envirotech

DATE STARTED: 6/23/94
DATE FINISHED: 6/23/94
ENVIRONMENTAL SPECIALIST: RMG/CP

SOIL REMEDIATION: EXCAVATION APPROX. 20 FT. x 15 FT. x 6 FT. DEEP.
DISPOSAL FACILITY: APR Crouch Mesa Facility CUBIC YARDAGE:
LAND USE: Rural Residential LEASE:

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 235 FEET N30°W FROM WELLHEAD.
DEPTH TO GROUNDWATER: 20'-30' NEAREST WATER SOURCE: UNKNOWN NEAREST SURFACE WATER: 700'-800'
NMOCD RANKING SCORE: 30 NMOCD TPH CLOSURE STD: 100 PPM

SOIL AND EXCAVATION DESCRIPTION: No Visibly Contaminated Areas in pit. Sidewalls moist on bottom 3" of Pit.
excavation completed in bedrock

BEDROCK BOTTOM

NS

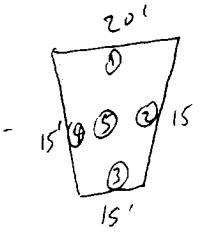
RISK ASSESSED

FIELD 418.1 CALCULATIONS

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

SCALE
0 = FEET

PIT PERIMETER



N ← suspected GW Flow direction

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 4'	832
2 @ 4'	814
3 @ 4'	564
4 @ 4'	515
5 @ 6'	536
	LAB SAMPLES
N Wall @ 4'	BTEX/418.1
CB @ 6'	BTEX/418.1

PIT PROFILE

Uniform Pit Profile

- Poorly lithified Poorly Graded Sandstone. Pale to moderate yellowish brown, dry to moist. Thin Sand lenses Present.

TRAVEL NOTES: CALLOUT: 6/23/94 ONSITE: 6/23/94

Well Name:	Johnson GC D #1
Well Site location:	Unit G, Sec. 15, T30N, R12W
Pit Type:	East Abandoned Pit
Producing Formation:	Basin Dakota
Pit Category:	Vulnerable
Horizonal Distance to Surface Water:	< 1000 ft.
Vicinity Groundwater Depth:	< 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered competent sandstone at 6 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 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. Field headspace readings (OVM/PID) on Basin Dakota type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
Frost, Jack B 1E	1100	0.011	5.889
Berger A1	482	0.084	0.681
Mudge Com B 1E	684	0.017	16.438
L.C. Kelly #5	1235	0.643	13.908

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Basin Dakota type pits.

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of a impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). AMOCO therefore request pit closure approval on this location.

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	North Wall @ 4'	Date Sampled:	06-23-94
Laboratory Number:	7662	Date Received:	06-23-94
Sample Matrix:	Soil	Date Analyzed:	06-26-94
Preservative:	Cool	Date Reported:	06-30-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	211	30.0

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: Johnson GC D-1 East Abandoned Pit C4141-3

Robert J Young
Analyst

Review

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	North Wall @ 4'	Date Reported:	07-01-94
Laboratory Number:	7662	Date Sampled:	06-23-94
Sample Matrix:	Soil	Date Received:	06-23-94
Preservative:	Cool	Date Extracted:	06-26-94
Condition:	Cool & Intact	Date Analyzed:	06-28-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	13.4
Toluene	2730	13.4
Ethylbenzene	960	13.4
p,m-Xylene	19500	434.2
o-Xylene	4950	13

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Bromofluorobenzene	104 %

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: Johnson GC D-1 East Abandoned Pit C4141-3

Robert M Young
Analyst

Review

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	92140
Sample ID:	CB @ 6'	Date Sampled:	06-23-94
Laboratory Number:	7661	Date Received:	06-23-94
Sample Matrix:	Soil	Date Analyzed:	06-26-94
Preservative:	Cool	Date Reported:	06-30-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	108	30.0

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: Johnson GC D-1 East Abandoned Pit C4141-3

Analyst

Review

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	CB @ 6'	Date Reported:	07-01-94
Laboratory Number:	7661	Date Sampled:	06-23-94
Sample Matrix:	Soil	Date Received:	06-23-94
Preservative:	Cool	Date Extracted:	06-26-94
Condition:	Cool & Intact	Date Analyzed:	06-28-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	13.4
Toluene	8500	13.4
Ethylbenzene	3390	13.4
p,m-Xylene	51700	435.1
o-Xylene	14500	13

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Bromofluorobenzene	104 %

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: Johnson GC D-1 East Abandoned Pit C4141-3

Analyst

Review

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Amoco 92140	Johnson GC D-1 (East Mandarel Pit)	C4141-3 A0073
Sampler: (Signature)	Chain of Custody Tape No.	
Robert M Young		

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX	418.1					Remarks
CB@6'	6/23/94	1920	7661	SOIL	1	✓	✓					
North Wall @ 4'	6/23/94	1940	7662	SOIL	1	✓	✓					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Robert M Young	6/23/94	2030	Robert M Young	6/23/94	2030
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

san juan repro Form 578-81

C414

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

PIT REMEDIATION AND CLOSURE REPORT

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

Address: 200 Amoco Court, Farmington, New Mexico 87401

Facility Or: Well Name JOHNSON GAS COM 'D' #1

Location: Unit or Qtr/Qtr Sec G Sec 15 T 30 N R 12 W County SAN JUAN

Pit Type: Separator ___ Dehydrator ___ Other W. ABANDONED

Land Type: BLM ___, State ___, Fee X, Other COM. AGMT.

Pit Location: (Attach diagram)
Pit dimensions: length 20, width 18, depth 7
Reference: wellhead X, other ___
Footage from reference: 235
Direction from reference: 35 Degrees ___ East North X of X 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)	20
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)	20
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)	10
	RANKING SCORE (TOTAL POINTS):	50

Date Remediation Started: _____ **Date Completed:** 6-23-94

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 90

Landfarmed X Insitu Bioremediation ___

Other _____

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite ___ Offsite X CROUCH MESA

General Description Of Remedial Action:

Excavation, BEDROCK BOTTOM, RISK ASSESSED. NS

Ground Water Encountered: No X 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 7'

Sample date 6-23-94 Sample time _____

Sample Results

Benzene(ppm) 37.6

Total BTEX(ppm) 180.9

Field headspace(ppm) 692

TPH 14,100

Ground Water Sample: Yes ___ No X (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 ~~7/14/94~~ 5/23/98 NS

SIGNATURE BJ Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

CB @ 7': TPH= 287, B= 0.06, BTEX= 1.3 PPM

E. WALL @ 7': TPH= 14,100, B= 37.6, BTEX= 180.9 PPM

C4181-2

CLIENT: Amoco

ENVIROTECH Inc.

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

PIT NO: A007

C.O.C. NO: 3775

FIELD REPORT: CLOSURE VERIFICATION

JOB No: 92140
PAGE No: 1 of 1

LOCATION: NAME: Johnson Gas Com "D" WELL #: No 1 PIT: West Abandoned Pit
QUAD/UNIT: SW/4 NE/4 SEC: 15 TWP: 30N RNG: 12W BM: NMPM CNTY: SJ STATE: NM
QTR/FOOTAGE: — CONTRACTOR: ENVIROTECH

DATE STARTED: 6/23/94
DATE FINISHED: 6/23/94
ENVIRONMENTAL SPECIALIST: Rmg/CP

SOIL REMEDIATION: EXCAVATION APPROX. 18' FT. x 20' FT. x 7' FT. DEEP.
DISPOSAL FACILITY: APC Crouch Mesa Facility CUBIC YARDAGE: —
LAND USE: Rural Residential LEASE: —

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 235 FEET N35°W FROM WELLHEAD.
DEPTH TO GROUNDWATER: 20'-30' NEAREST WATER SOURCE: Unknown NEAREST SURFACE WATER: 700'-800'
NMOCD RANKING SCORE: _____ NMOCD TPH CLOSURE STD: 100 PPM

SOIL AND EXCAVATION DESCRIPTION:

Sidewalls from 3' to 7' are leaching either Free product or water at a slow enough to keep sidewalls looking moist.

BEDROCK BOTTOM

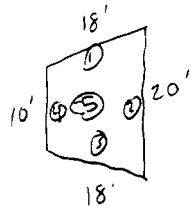
GW RISK ASSESSED

FIELD 418.1 CALCULATIONS

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

SCALE
0 FEET

PIT PERIMETER



Surface Flow

Suspected Groundwater Flow

OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 4'	746
2 @ 7'	692
3 @ 5'	648
4 @ 6'	602
5 @ 7'	198
LAB SAMPLES	

PIT PROFILE

Uniform Profile.

-Poorly lithified Poorly Graded Sandstone. Pale to Moderate Yellowish brown, wet to Sat'd, mild Hydrocarbon odor. Thin Sand lenses Present.

TRAVEL NOTES: CALLOUT: _____ ONSITE: _____

Well Name:	**Johnson GC D #1**
Well Site location:	Unit G, Sec. 15, T30N, R12W
Pit Type:	West Abandoned Pit
Producing Formation:	Basin Dakota
Pit Category:	Vulnerable
Horizonal Distance to Surface Water:	< 1000 ft.
Vicinity Groundwater Depth:	< 100 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered competent sandstone at 7 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 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. Field headspace readings (OVM/PID) on Basin Dakota type locations do not reflect direct correlation to total BTEX per USEPA Method 8020 concentrations. Listed below are several typical AMOCO Basin Dakota pit soil analyses comparing headspace to Benzene and total BTEX results.

LOCATION	HEADSPACE (ppm)	BENZENE (ppm)	TOTAL BTEX (ppm)
Frost, Jack B 1E	1100	0.011	5.889
Berger A1	482	0.084	0.681
Mudge Com B 1E	684	0.017	16.438
L.C. Kelly #5	1235	0.643	13.908

The comparisons listed above demonstrates that headspace testing is not an accurate measurement to Benzene or total BTEX concentrations when above standards for Basin Dakota type pits.

Based upon the information given, we conclude that the subsurface lateral impact from the earthen pit is very limited and that the sandstone bottom creates enough of a impermeable barrier as to subdue impact to groundwater below it (please refer to AMOCO's report "Post Excavation Pit Closure Investigation Summary, July, 1995", with cover letter dated November 30, 1995). 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:	CB @ 7'	Date Sampled:	06-23-94
Laboratory Number:	7666	Date Received:	06-23-94
Sample Matrix:	Soil	Date Analyzed:	06-26-94
Preservative:	Cool	Date Reported:	06-30-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	287	30.0

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: Johnson GC D-1 West Abandoned Pit C4141-2

Analyst

Review

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	CB @ 7'	Date Reported:	07-05-94
Laboratory Number:	7666	Date Sampled:	06-23-94
Sample Matrix:	Soil	Date Received:	06-23-94
Preservative:	Cool	Date Extracted:	06-26-94
Condition:	Cool & Intact	Date Analyzed:	06-30-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	63	26.8
Toluene	276	20.1
Ethylbenzene	68	13.4
p,m-Xylene	690	20.1
o-Xylene	281	13.4

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Bromofluorobenzene	103 %

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: Johnson Gas Com "D" #1 West Abandoned Pit C4141-2

Analyst

Review

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:	E. Wall @ 7'	Date Sampled:	06-23-94
Laboratory Number:	7665	Date Received:	06-23-94
Sample Matrix:	Soil	Date Analyzed:	06-26-94
Preservative:	Cool	Date Reported:	06-30-94
Condition:	Cool and Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	14100	30.0

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: Johnson GC D-1 West Abandoned Pit C4141-2

Analyst

Review

ENVIROTECH LABS

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 8020
AROMATIC VOLATILE ORGANICS

Client:	Amoco	Project #:	92140
Sample ID:	E. WALL @ 7'	Date Reported:	07-05-94
Laboratory Number:	7665	Date Sampled:	06-23-94
Sample Matrix:	Soil	Date Received:	06-23-94
Preservative:	Cool	Date Extracted:	06-26-94
Condition:	Cool & Intact	Date Analyzed:	06-30-94
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	37600	26.8
Toluene	52100	20.1
Ethylbenzene	10800	13.4
p,m-Xylene	50000	20.1
o-Xylene	30400	13.4

SURROGATE RECOVERIES:

Parameter	Percent Recovery
Bromofluorobenzene	142 %

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: Johnson Gas Com "D" #1 West Abandoned Pit C4141-1
Excessive surrogate recovery due to coelution.

Analyst

Review

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
Amoco 92140	Johnson GC D-1 West Abandoned Pit	C414I=2 A0072

Sampler: (Signature)	Chain of Custody Tape No.
Robert M Young	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	B12X	418.1					Remarks
E. Wall @ 7'	6/23/94	1905	7665	SOIL	1	✓	✓					
CB @ 7'	6/23/94	1900	7666	SOIL	1	✓	✓					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Robert M Young	6/23/94	2010	Robert M Young	6/23/94	2010
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