Sep – risk bedrock
Tank Drain – risk Bedrock

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

Denied 11/24/96 due to landfarm

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 DAWSON FEDERAL #1

Location: Unit or Qtr/Qtr Sec D Sec 26 T 27N R 8W County SAN JUAN

Pit Type: Separator ___ Dehydrator ___ Other PRODUCTION TANK

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

Pit Location: (Attach diagram)
Pit dimensions: length 9', width 12', depth 4'
Reference: wellhead X, other ___
Footage from reference: 115'
Direction from reference: 4 Degrees X East North ___ of ___ West South X

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)	10
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):	10

Date Remediation Started: _____ **Date Completed:** 11/14/94

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 6

Landfarmed X Insitu Bioremediation ___

Other _____

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

General Description Of Remedial Action: _____

Excavation. Bedrock Bottom. Risk Assessed.

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 2'

Sample date 11/14/94 Sample time 1230

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 708

TPH 18,900 ppm

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 11/14/94

SIGNATURE B J Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

RESULTS TO DOB MCCOY 11-21-94 ASD

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: B0161 C.O.C. NO:

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: DAWSON FEDERAL WELL #: 1 PIT: PROD.
QUAD/UNIT: D SEC: 26 TWP: 27N RNG: 5W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NW¼ NW¼ CONTRACTOR: P. VELASQUEZ

DATE STARTED: 11/14/94
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 9 FT. x 12 FT. x 4 FT. DEEP. CUBIC YARDAGE: 6
DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMED
LAND USE: RANGE LEASE: SF-078480 FORMATION: MV/DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 115 FT. S4E FROM WELLHEAD.
DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 0 NMOCD TPH CLOSURE STD: 1000 PPM

CHECK ONE:
___ PIT ABANDONED
✓ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

MOD. YELL BROWN TO DK. GRAY SANDSTONE, SOFT NEAR GROUND SURFACE, VERY DENSE @ EXCAVATION BOTTOM.

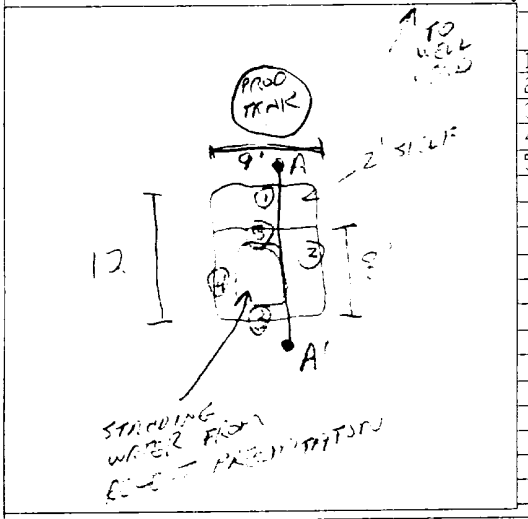
RISK ASSESSED

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1230	④@2'	TPH-1279	5	20	10:1	472	18,880

SCALE
0 FT

PIT PERIMETER



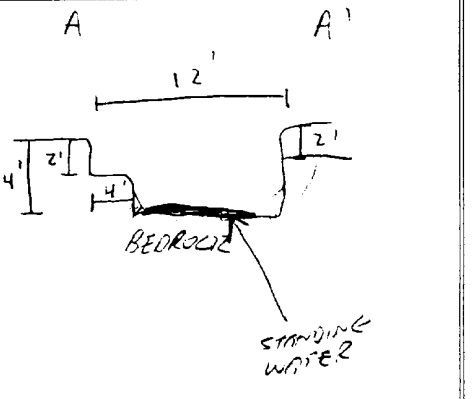
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1@2'	465
2@2'	271
3@2'	395
4@2'	708
5@4'	389

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE



TRAVEL NOTES: CALLOUT: 11/11/94 ONSITE: 11/14/94

Well Name:	**Dawson Federal #1**
Well Site location:	Unit D, Sec. 26, T27N, R8W
Pit Type:	Production Tank pit
Producing Formation:	Basin Dakota / Mesa Verde
Pit Category:	Vulnerable
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 50 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 4 feet below grade.

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

1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 4 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a greater depth below the 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.

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 requests pit closure approval on this location.

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	
Sample ID:	4 @ 2'	Date Analyzed:	11-14-94
Project Location:	Dawson Federal # 1	Date Reported:	11-14-94
Laboratory Number:	TPH-1279	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**18,900**	**200**

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	3720	3680	1.08

*Administrative Acceptance limits set at 30%.

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

Comments: Production Tank Pit - B0161

Wilson Vela
Analyst

R. E. O'Neill
Review

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:	**********		
Client:	Amoco	Project #:	
Sample ID:	4 @ 2'	Date Analyzed:	11-14-94
Project Location:	Dawson Federal # 1	Date Reported:	11-14-94
Laboratory Number:	TPH-1279	Sample Matrix:	Soil

Sample Weight:	5.00	grams
Volume Freon:	20.00	mL
Dilution Factor:	10	(unitless)
TPH Reading:	472	mg/kg

TPH Result:	18880.0	mg/kg
Reported TPH Result:	18900	mg/kg
Actual Detection Limit:	200.0	mg/kg
Reported Detection Limit:	200	mg/kg

QA/QC:	Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.
	3720	3680	1.08

Comments: **********Max Characters**********

Comments: Production Tank Pit - B0161

80161

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: DAWSON FEDERAL #1

Location: Unit or Qtr/Qtr Sec D Sec 26 T 27 N R 8 W County SAN JUAN

Pit Type: Separator X Dehydrator ___ Other ___

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

Pit Location: (Attach diagram)
Pit dimensions: length 15', width 25', depth 5'
Reference: wellhead X, other ___
Footage from reference: 80'
Direction from reference: 65 Degrees ___ East North ___ of X West South X

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)	10
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):	10

80161

Date Remediation Started: _____ **Date Completed:** 11/14/94

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 40

Landfarmed X Insitu Bioremediation ___

Other _____

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

General Description Of Remedial Action: _____

Excavation BEDROCK BOTTOM. BSX ASSESSED.

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 2'

Sample date 11/14/94 Sample time 1155

Sample Results

Benzene(ppm) _____

Total BTEX(ppm) _____

Field headspace(ppm) 384

TPH 15,840 ppm

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 11/14/94

SIGNATURE B J Shaw

PRINTED NAME AND TITLE Buddy D. Shaw Environmental Coordinator

RESULT TO BOB MCCOY 11-21-94 PLS

CLIENT: AMOCO	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: B0161 C.O.C. NO:

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1

LOCATION: NAME: DAWSON FEDERAL WELL #: 1 PIT: SEP

QUAD/UNIT: D SEC: 26 TWP: 27N RNG: 8W PM: NM CNTY: SJ ST: NM

QTR/FOOTAGE: NW/4 NW/4 CONTRACTOR: P. VELASQUEZ

DATE STARTED: 11/14/94

DATE FINISHED:

ENVIRONMENTAL SPECIALIST: NV

EXCAVATION APPROX. 15 FT. x 25 FT. x 5 FT. DEEP. CUBIC YARDAGE: 40

DISPOSAL FACILITY: ON-SITE REMEDIATION METHOD: LANDFARMED

LAND USE: RANGE LEASE: SF-078490 FORMATION: MV/DK

FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 80 FT. S65W FROM WELLHEAD.

DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'

NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM

CHECK ONE:

___ PIT ABANDONED

✓ STEEL TANK INSTALLED

SOIL AND EXCAVATION DESCRIPTION:

MOD RED BROWN TO DK. GRAY SANDSTONE, SOFT NEAR GROUND SURFACE, VERY DENSE @ EXCAVATION BOTTOM.

RISK ASSESSED

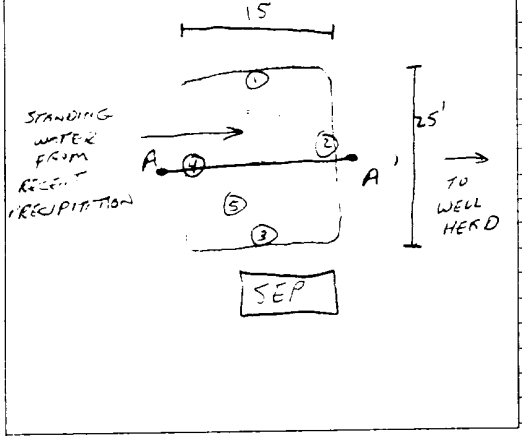
FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm
1155	③ @ 2'	TPH-1278	5	20	10:1	396	15,840

SCALE

0 FT

PIT PERIMETER



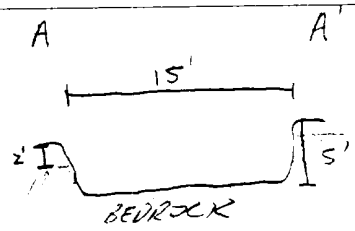
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 @ 2'	6.2
2 @ 3'	254.2
3 @ 2'	384
4 @ 2'	12.0
5 @ 5'	400

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME

PIT PROFILE



TRAVEL NOTES: CALLOUT: 11/11/94 ONSITE: 11/14/94

Well Name:	**Dawson Federal #1**
Well Site location:	Unit D, Sec. 26, T27N, R8W
Pit Type:	Separator pit
Producing Formation:	Basin Dakota / Mesa Verde
Pit Category:	Vulnerable
Horizonal Distance to Surface Water:	> 1000 ft.
Vicinity Groundwater Depth:	> 50 ft.

RISK ASSESSMENT

Pit remediation activities were terminated when trackhoe encountered sandstone bedrock at 5 feet below grade.

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

1. Past production fluids were contained locally by a relatively shallow sandstone bedrock located 4 feet below grade. Groundwater levels located on or close to the well pad are estimated to be at a greater depth below the 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.

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 requests pit closure approval on this location.

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

FIELD MODIFIED EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Amoco	Project #:	
Sample ID:	3 @ 2'	Date Analyzed:	11-14-94
Project Location:	Dawson Federal # 1	Date Reported:	11-14-94
Laboratory Number:	TPH-1278	Sample Matrix:	Soil

Parameter	Result, mg/kg	Detection Limit, mg/kg
Total Recoverable Petroleum Hydrocarbons	**15,800**	**200**

ND = Not Detectable at stated detection limits.

QA/QC:	QA/QC Sample TPH mg/kg	Duplicate TPH mg/kg	% *Diff.
	3720	3680	1.08

*Administrative Acceptance limits set at 30%.

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

Comments: Separator Pit - B0161

Nelson Velez
Analyst

R. E. O'Neill
Review

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

Field TPH-Worksheet

Max Characters:	**********		
Client:	Amoco	Project #:	
Sample ID:	3 @ 2'	Date Analyzed:	11-14-94
Project Location:	Dawson Federal # 1	Date Reported:	11-14-94
Laboratory Number:	TPH-1278	Sample Matrix:	Soil

Sample Weight:	5.00	grams
Volume Freon:	20.00	mL
Dilution Factor:	10	(unitless)
TPH Reading:	396	mg/kg

TPH Result:	15840.0	mg/kg
Reported TPH Result:	15800	mg/kg
Actual Detection Limit:	200.0	mg/kg
Reported Detection Limit:	200	mg/kg

QA/QC:

Original TPH mg/kg	Duplicate TPH mg/kg	% Diff.
3720	3680	1.08

Comments: **********Max Characters**********

Comments: Separator Pit - B0161

CLIENT: AMOCO

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

LOCATION NO: B016 \
C.O.C. NO: 5416

FIELD REPORT: LANDFARM/COMPOST PILE CLOSURE VERIFICATION

LOCATION: NAME: DAWSON FEDERAL WELL #: 1 PITS: SEP, PROD.
QUAD/UNIT: D SEC: 36 TWP: 27N RNG: 8W PM: NM CNTY: SJ ST: NM
QTR/FOOTAGE: NW/4 NW/4 CONTRACTOR: P & S

DATE STARTED: 9/29/97
DATE FINISHED:
ENVIRONMENTAL SPECIALIST: NV

SOIL REMEDIATION:
REMEDIATION SYSTEM: LANDFARM
LAND USE: RANGE
APPROX. CUBIC YARDAGE: 46
LIFT DEPTH (ft): 6"

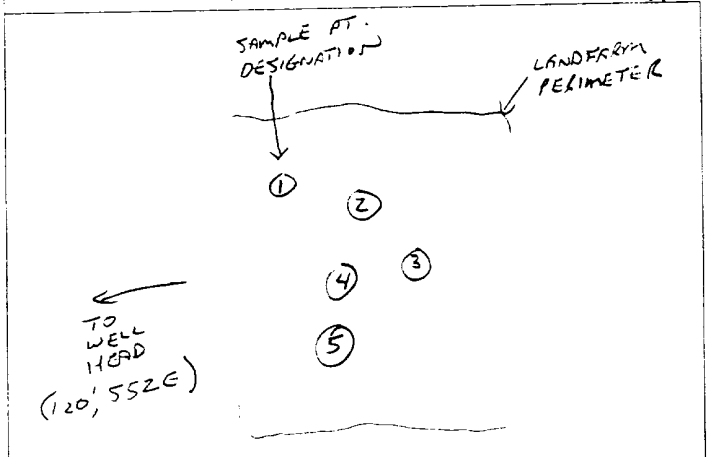
FIELD NOTES & REMARKS:
DEPTH TO GROUNDWATER: <100' NEAREST WATER SOURCE: >1000' NEAREST SURFACE WATER: >1000'
NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM

SOIL MOSTLY DK. YELL. BROWN W/SOME MED. GRAY SAND, NON COHESIVE, SLIGHTLY MOIST, FIRM, NO APPARENT HC ODOR OBSERVED W/IN ANY OF THE SAMPLE PTS., 5 PT. COMPOSITE COLLECTED FOR LAB ANALYSIS.

FIELD 418.1 CALCULATIONS

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

SKETCH/SAMPLE LOCATIONS



OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)
LF-1	12.2

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME	RESULTS
LF-1	TPH (8015)	1010	196

SCALE
0 FT

TRAVEL NOTES: CALLOUT: NA ONSITE: 9/29/97

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / AMOCO	Project #:	04034-10
Sample ID:	LF - 1	Date Reported:	10-09-97
Laboratory Number:	C225	Date Sampled:	09-29-97
Chain of Custody No:	5416	Date Received:	10-07-97
Sample Matrix:	Soil	Date Extracted:	10-07-97
Preservative:	Cool	Date Analyzed:	10-08-97
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**196**	**0.1**
Total Petroleum Hydrocarbons	**196**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Comments: **Dawson Federal #1 Landfarm.**
5 pt. composite.

Christine M Walters
Analyst

Stacy W Sendler
Review

5796 U.S. Highway 64-3014 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSIS/PARAMETERS
BLAGG / AMOCO	LANDFARM DAWSON FEDERAL #1	

Sampler: (Signature)	Chain of Custody Tape No.
Nelson Velez	04034-10

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH (8015)						Remarks
												PRESERV. - COOL
LF-1	9/29/97	1010	C225	SOIL	1	✓						5 PT. COMPOSITE
				Sample received cool & intact								

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Nelson Velez	10/7/97	1307	Robert P. Ojeman	10-7-97	1307
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