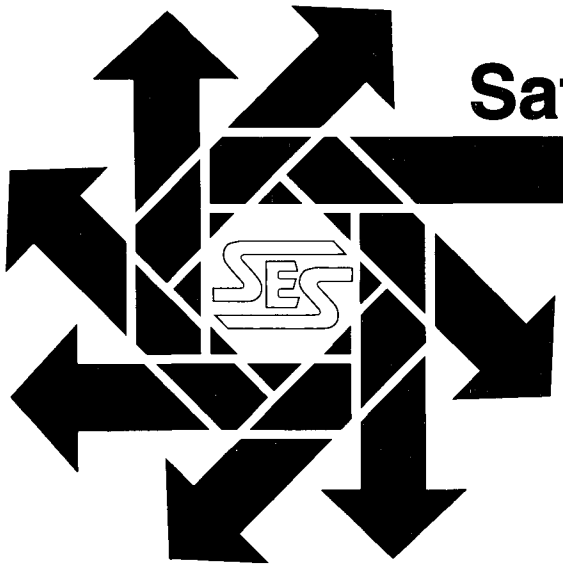
1R - 202

REPORTS

DATE:

4/30/98



Safety & Environmental Solutions, Inc.

Remediation/Cleanup Closure Report

Petroleum Production Management Inc.
Crossroads, New Mexico
State "BD" Pit

703 E. Clinton Suite 103 Hobbs, NM 88240 (505) 397-0510

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

(Revised 3/9/94

PIT REMEDIATION AND CLOSURE REPORT

Operator: PPMI Telephone: 505 675-2478

Address: P.O. Box 957 Crossroads NM

Facility Or: PPMI State DB
Well Name

Location: Unit or Qtr/Qtr Sec SE/4 SE/4 Sec 34 T 13 R 32 County LEA

Pit Type: Separator ___ Dehydrator ___ Other OVER FLOW PIT

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

Pit Location: (Attach diagram)
Pit dimensions: length 115', width 60', depth 4'
Reference: wellhead X, other ___
Footage from reference: 120'
Direction from reference: ~~North~~ 90 Degrees ___ East North X 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

RECEIVED
APR 04 1996
OCD HOBBS OFFICE

RANKING SCORE (TOTAL POINTS)

Date Remediation Started: 3-26-96 **Date Completed:** 3-27-96

Remediation Method: (Check all appropriate sections) Excavation ✓ Approx. cubic yards 1865

Landfarmed ✓ Insitu Bioremediation ___

Other ___

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

General Description Of Remedial Action: SEE ATTACHMENT.

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 PPMI State "BO"

Sample depth 4 1/2'

Sample date 3-26-96 Sample time 3 PM

Sample Results

Benzene(ppm) <0.050

Total BTEX(ppm) <0.050

Field headspace(ppm) ___

TPH 1020 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 3-15-96

SIGNATURE Gary T. Cathron PRINTED NAME AND TITLE GARY T. CATHRON - Superintendent

Safety & Environmental Solutions, Inc.

PIT REMEDIATION AND CLOSURE REPORT

PETROLEUM PRODUCTION MANAGEMENT, INC.
STATE "BD" PIT

Purpose

To purpose of this document is to request closure on an old overflow pit located in Lea County, New Mexico.

Background

This is an old pit that has not been used in several years. It was used as an overflow for produced water.

Action Plan

The heavily affected soil will excavated and placed on the side of the pit. The pit area will be tested both vertical and horizontally. The vertical sample will be done with backhoe and if needed a boring machine will be used. The sample will be tested for BTEX, TPH and Chlorides. The spoils piles will be remediated with any remaining affected soil onsite, and blended to regulatory guidelines established in the **"Unlined Surface Impoundment Closure Guidelines"** *New Mexico Oil Conservation Division* - February, 1993. The excavation will be backfilled and the site restored to original grade. This blending of the residual affected soil will:

1. Aid in the aeration of the residual affected soil.

2. Reduce the TPH to a level unlikely to move downward and contaminate additional soils.

3. Add indigenous microbes to the residual affected soil in order to biodegrade the residual hydrocarbons in a shorter length of time.

505/397-0510 *703 E. Clinton Suite 103* *Hobbs, New Mexico 88240* *Fax 505/393-4388*

The excavation to obtain additional media will be performed with a bulldozer, backhoe, grader or combination thereof, with a minimum of disturbance to the existing location. Safety & Environmental Solutions, Inc. will verify that the extent of contamination by performing THP field tests using the Hanby soil extraction method conducted on soil samples from the area.

Soil samples will be obtained from the bottom and sides of the excavation as the remediation is performed. Once acceptable levels are achieved, the soil will be folded back into the excavation, blending it to assure replacement is within New Mexico Oil Conservation Division guidelines for leaks, spills, and releases. TPH field tests will be conducted on the blended soil. These tests results will verify that the soil is minimally affected (New Mexico Oil Conservation Divisions guidelines for leaks, spills, and release), and the appropriate documents will be filed requesting closure.

Site Safety

There are a number of health and safety concerns associated with the excavation of trenches at these types of sites. Compliance with the following OSHA standards will be required as necessary at the site:

- Trenching and Shoring - 29 CFR 1926.650 - 653
- Hazwoper/Atmospheric Testing - 29 CFR 1910.120
- Respiratory Protection - 29 CFR 1910.134
- Personal Protective Equipment - 29 CFR 1910.132 - 140

Standard Operating Procedures for Closure Of Pits

Standard Operating Procedures (SOP's) were obtained from the **"Unlined Surface Impoundment Closure Guidelines"** *New Mexico Oil Conservation Division* - February, 1993.

Soil Survey

This area is Kimbrough-Lea complex soil. About 50% Kimbrough gravelly loam and 25% Lea loam, and in few areas 40% Kimbrough soils and 40 % Lea soils. It is 20 % to 25% inclusions of Stegall, Arvana, Slaughter, and Sharvana soils. The Kimbrough soil is gently sloping and is nearly level and is in swales between ridges.

The soils in this complex are used as range, wildlife, habitat, and recreational areas. They are also a source of caliche for construction.

Water Survey

Sam Salazar of the State Engineer's Office in Santa Fe, New Mexico stated that the depth to ground water in Section 34 T13N R32E in Lea County, was approximately 145 feet.

Work performed

On March 20, 1996 pictures were taken of location. Samples were taken from the pit at the points indicated on Figure A-1 at 1:30 P.M. witnessed by Gary Cothran of PPMI. A composite of this sample was sent to Cardinal Laboratories TPH, BTEX, and Chlorides testing. The results of the lab tests show TPH at 1989 ppm and BTEX under .001 ppm with the exception of Orthoxylene whose level was .041 ppm. The chloride level was 520.0 ppm. (See Figure A-3 A, B & C) Also field test was performed using Hanby Field test kit on spoils pile to determine TPH level. (See Figure A-2) The composite sample from the pit was sent to Trace Analysis to the lab for testing of TPH and BTEX. The results of the tests showed TPH of 1,070 ppm and BTEX of < 50 ppm.(See Figure A-5)

On March 26, 1996 SES personnel arrived at Saunders Plant at 7:15 A.M. and met the excavation equipment. Excavation was started at 7:45 A.M. by moving the spoils pile to a clear off area which was used as blending site. The spoil pile was tested with Hanby test kit before being moved, the results were less than 5% TPH.(Figure A-2) The pit wall was tested and found to be below 5% TPH and therefore could be used for blending. Excavation was started on the South side and was pushed to the West to blending area. This process was done through out the pit area and the day, field testing was performed at various levels. First level TPH was 1989 ppm per lab results. (Figure A-3-A) The second level was 850 ppm TPH at a depth of 3' with the field test kit. The third level was 500 ppm TPH at a depth of 4' with the field test kit. (Figure A-4)

On March 27, 1996 ,blending was continued most of the morning. At 11:00 A.M. the dozer was released and the maintainer stayed to finish the job. Appx.2500 cubic yards of dirt was used to complete the process. A final composite sample was taken from the sides and bottom and sent to the lab. Field results were TPH 650 ppm (Photos C-D) and lab results were 1070 ppm.(Figure A-5)

On April 9, 1996 a hand auger was used to extract a sample from the middle of the pit site at a depth of 5'. This sample was sent to Trace Analysis for testing. The results of the **8015 TPH Diesel Range Test** was 505 ppm.

6701 Aberdeen Avenue
Lubbock, Texas 79424
806•794•1296
FAX 806•794•1298

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
Attention: Pat Cleer
P. O. Box 1613
Hobbs, NM 88241

April 19, 1996
Receiving Date: 04/10/96
Sample Type: Soil
Project No: Pit
Project Location: Lea County

Extraction Date: 04/15/96
Analysis Date: 04/15/96
Sampling Date: 04/08/96
Sample Condition: Intact & Coo
Sample Received by: SH
Project Name: "BD"

TA#	FIELD CODE	TPH Diesel Range (mg/kg)
T50800	Center of Pit Bottom 5'	505
QC	Quality Control	247
RPD		20
% Extraction Accuracy		111
% Instrument Accuracy		97

METHODS: EPA 8015 Modified.
DIESEL SPIKE: 100 mg/kg.
DIESEL QC: 250 mg/L TRPHC.

4-19-96

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

DATE

Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87503

WELL API NO.

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: State BB

1. Type of Well: OIL WELL [ ] GAS WELL [ ] OTHER overflow Pit

2. Name of Operator: Petroleum Production Management Inc.

8. Well No.

3. Address of Operator: P.O. Box 957 Crossroads NM.

9. Pool name or Wildcat

4. Well Location

Unit Letter _____ : _____ Feet From The _____ Line and _____ Feet From The _____ Line

Section 34 Township 13 Range 32 NMPM County

10. Elevation (*Show whether DF, RKB, RT, GR, etc.*)

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[X]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[ ]
PULL OR ALTER CASING	[ ]			CASING TEST AND CEMENT JOB	[ ]		
OTHER:	[ ]			OTHER:			[ ]

12. Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 1103.

To check for vertical extent of contamination by use of backhoe and if needed Boring machine, And then implement attached closure plan.

RECEIVED
MAR 15 1996
OCD HOBBS OFFICE

RECEIVED
MAR 1[illegible]
OCD HOBBS OFFICE

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

SIGNATURE Gary T. Cothran TITLE Dist Superintendent DATE 3-15-96

TYPE OR PRINT NAME GARY T. COTHRAN TELEPHONE NO. 675-2476

(This space for State Use)

APPROVED BY [signature] TITLE ENVIR ENGR - NMOCD DATE 3/22/96

CONDITIONS OF APPROVAL, IF ANY: PER "OCD APPROVAL CONDITIONS FOR RCRA EXEMPT UNLINED PIT CLOSURES"

Safety & Environmental Solutions, Inc.

March 15, 1996

Work Plan
Petroleum Production Management Inc
Pit Closure and Remediation
(Sec. 34T-13-R32)
State DB

Purpose

The purpose of this work plan is to present a systematic approach to the excavation, and remediation resulting from an old overflow pit located in Lea County, New Mexico.

Background

This is an old pit that has not been used in several years. It was used as an overflow for produced water.

Action Plan

The heavily affected soil will excavated and placed on the side of the pit. The pit area will be tested both vertical and horizontally. The vertical sample will be done with backhole and if needed a boring machine will be used. The sample will be tested for Btex, TPH and clorides. The spoils piles will be remediated with any remaining affected soil onsite, and blended to 5000 ppm or lower accroding to New Mexico Oil Conservation guidelines for remediation of leaks, spills, and releases. The excavation will be backfilled and the site restored to original grade. This blending of the residual affected soil will:

1. Aid in the aeration of the residual affected soil.
2. Reduce the TPH to a level unlikely to move downward and contaminate additional soils.
3. Add indigenous microbes to the residual affected soil in order to biodegrade the residual hydrocarbons in a shorter length of time.

The excavation to obtain additional media will be performed with a bulldozer, backhoe, grader or combination thereof, with a minimum of disturbance to the existing location. Safety & Environmental Solutions, Inc. will verify that the extent of contamination by performing THP field tests using the Hanby soil extraction method conducted on soil samples from the area.

Soil samples will be obtained from the bottom and sides of the excavation as the remediation is performed. Once acceptable levels are achieved, the soil will be folded back into the excavation, blending it to assure replacement is wihin New Mexico Oil Conservation Division guidelines for leaks, spills, and releases. TPH field tests will be conducted on the blended soil. These tests results will verify that the soil is minimally affected (New Mexico Oil Conservation Divisions guidelines for leaks, spills, and release), and the appropriate documents will be filed requesting closure.

Site Safety

There are a number of health and safety concerns associated with the excavation of trenches at these types of sites. Compliance with the following OSHA standards will be required as necessary at the site:

- Trenching and Shoring - 29 CFR 1926.650 - 653
- Hazwoper/Atmospheric Testing - 29 CFR 1910.120
- Respiratory Protection - 29 CFR 1910.134
- Personal Protective Equipment - 29 CFR 1910.132 - 140

This general type of plan has been verbally approved by the Bureau of Land Management and the Oil Conservation Division in Lea County.

Standard Operating Procedures for Auger Sampling (if necessary)

Standard operating procedures (SOPs) were obtained from the Environmental Protection Agency, 1984, Characterization of Hazardous Waste Sites - A Methods Manual:Vol II. Available sampling methods. EPA/600/4-84-076.

This system consists of an auger bit, a series of drill rods, and a "T" handle. The auger bit is used to bore a hole to the desired sampling depth. Since this soil is expected to be of various types, the samples will be taken directly from the auger itself at the specified depths.

Procedure for Use

1. Clear the area to be sampled of any surface debris.

2. Begin drilling, periodically removing accumulated soils. This prevents accidentally brushing loose material back down the borehole when removing the auger or adding drill rods.
3. After reaching desired depth, slowly and carefully remove the auger, and collect sample from the auger.

4. Place sample in sample container. Check that a Teflon liner is present in the cap if required. Secure the cap tightly.

5. Label the sample container with appropriate sample tag. Complete all chain-of-custody forms and record in the field log book.

6. Perform field test or alternatively refrigerate and transport to laboratory.

7. Decontaminate equipment after use and between samples.

Standard Operating Procedures for Excavation Sampling

1. Collect undisturbed sample from the side of the excavation at the desired depth.

2. Follow steps 4-7 in the preceding instructions.

Standard Operating Procedures for Closure Of Pits

Standard Operating Procedures (SOP's) were obtained from the New Mexico Oil Conservation Division **"Guidelines for Unlined Surface Impoundment Closure"** *New Mexico Oil Conservation Division* - Febuary, 1993.

OCD APPROVAL CONDITIONS
FOR
RCRA EXEMPT
UNLINED PIT CLOSURES

1. The following closure actions will be performed in accordance with OCD's February 1993 "SURFACE IMPOUNDMENT CLOSURE GUIDELINES":

   a. Vertical and horizontal extent of contamination will be determined either prior to, during or upon completion of remedial actions.

   b. Contaminated soils will be remediated to the OCD's recommended levels or a risk assessment will be provided which shows that an alternate cleanup level is protective of surface water, ground water, human health and the environment.

   c. Final soil contaminant concentrations will be determined upon completion of remedial actions.

   d. Soil samples for verification of completion of remedial actions will be sampled and analyzed for benzene, toluene, ethylbenzene, xylene **and** total petroleum hydrocarbons.

2. All wastes removed from a specific site will be disposed of at an OCD approved facility.

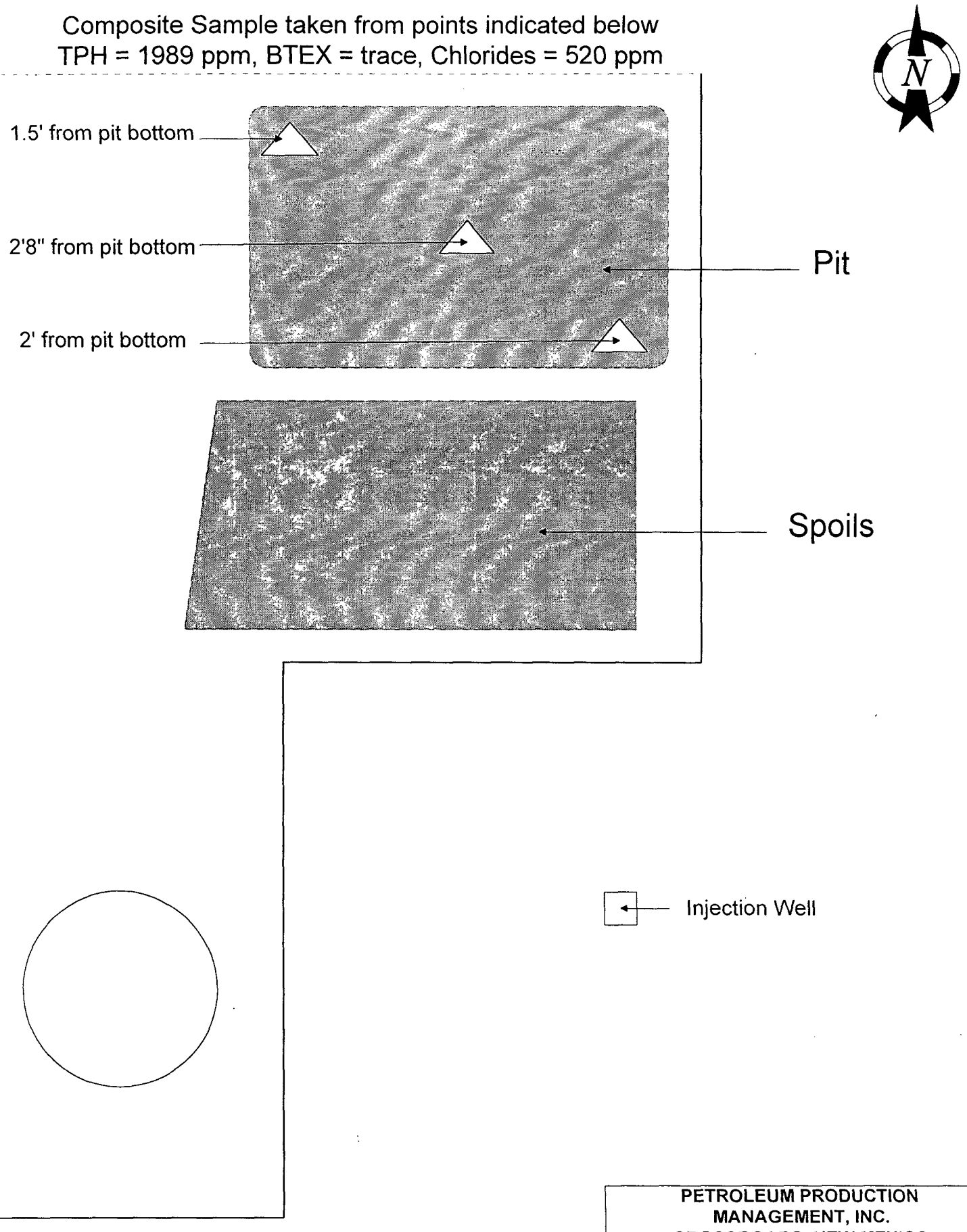
3. The OCD Santa Fe Office's Environmental Bureau Chief and the OCD Hobbs District Office will be notified within 24 hours of the discovery of ground water contamination related to a pit closure.

4. Upon completion of all closure activities, a completed OCD "Pit Remediation and Closure Report" form containing the results of all pit closure and soil remediation activities will be submitted to the OCD for approval. The report will include the concentrations and application rates of any materials or additives used to enhance bioremediation of the contaminants and the final concentrations of any soils landfarmed onsite or the final disposition of soils removed from the site . To simplify the approval process, the OCD requests that the final pit closure reports be submitted only upon completion of all closure activities including onsite remediation or landfarming of contaminated soils.

5. All original documents will be submitted to the OCD Hobbs Office for approval with copies provided to the OCD Santa Fe Office.

6. OCD approval does not relieve you of liability should closure activities determine that contamination exists which is beyond the scope of the work plan or if the closure activities fail to adequately remediate contamination related to your activities. In addition, OCD approval does not relieve you of responsibility for compliance with other federal, state or local laws and regulations.

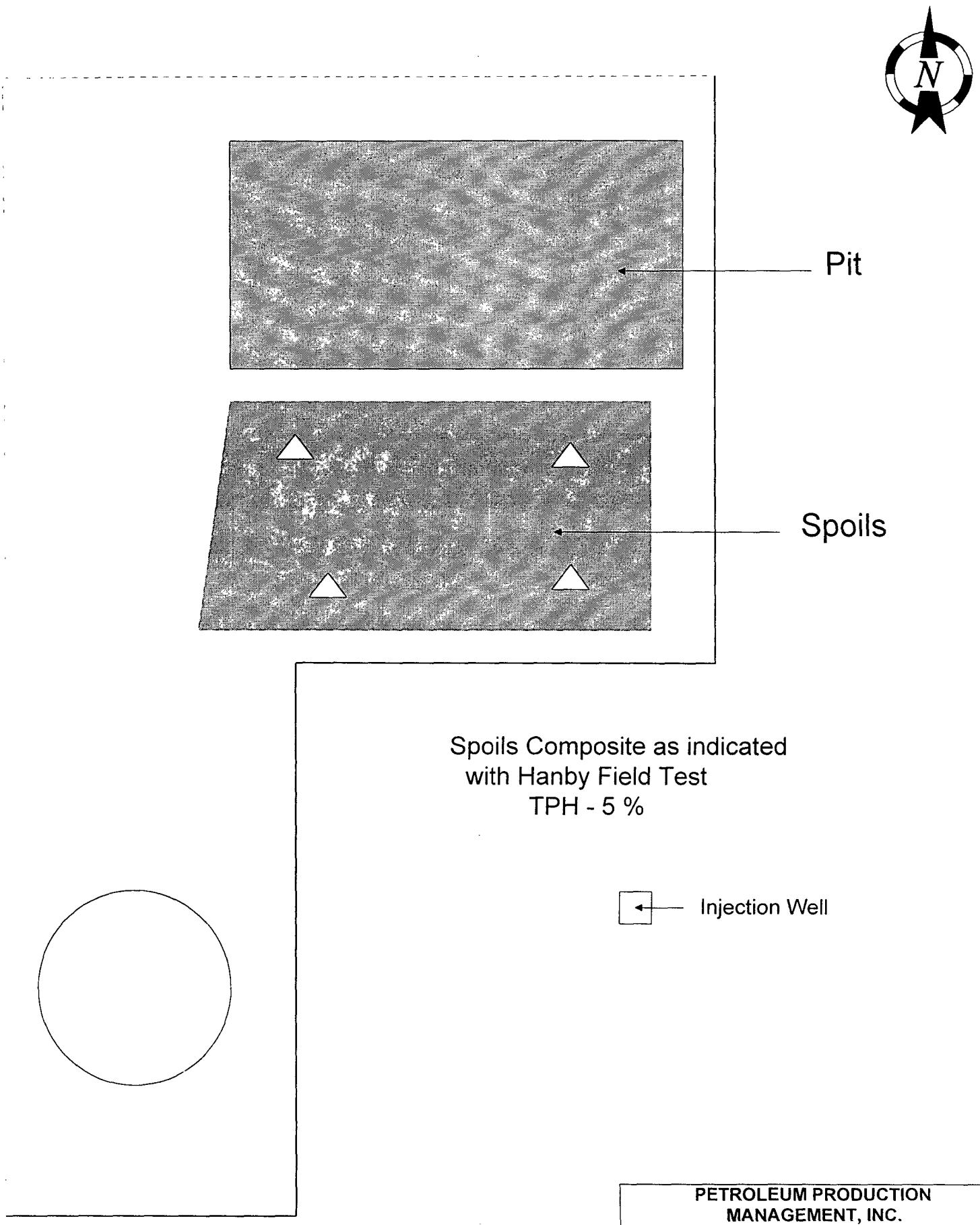
Composite Sample taken from points indicated below
TPH = 1989 ppm, BTEX = trace, Chlorides = 520 ppm



PETROLEUM PRODUCTION
MANAGEMENT, INC.
CROSSROADS, NEW MEXICO

Figure A-1
STATE "BD" PIT SITE VERTICAL EXTENT DETERMINATION

Safety & Environmental Solutions, Inc.



PETROLEUM PRODUCTION
MANAGEMENT, INC.
CROSSROADS, NEW MEXICO

Figure A-2
STATE "BD" PIT SITE SPOILS TEST

Safety & Environmental Solutions, Inc.

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240
PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

TPH/BTEX ANALYSIS REPORT

Company: P.P.M.I.
Address: PO Box 957
City, State: Crossroads, NM 88114
Project Name: PPMI
Location: ST "BD"
Sampled by: PC
Analyzed by: SW
Sample Type: Soil

Date: 03/25/96
Lab #: H2462
Date: 03/21/96
Date: 03/23/96
Sample Condition: intact
Units: mg/kg

Samp #	Field Code	TRPHC	BENZENE	TOLUENE	ETHYL BENZENE	PARA-XYLENE	META-XYLENE	ORTHO-XYLENE
1	State "BD"	1989	<0.001	<0.001	<0.001	<0.001	<0.001	0.041
QC Recovery		85	923.4	918.6	905.5	787.2	874.8	933.3
QC Spike		88.0	884.0	865.0	853.0	858.0	844.0	866.0
Accuracy		96.6%	104.5%	106.2%	106.1	91.7%	103.6%	107.8%
Blank		***	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Methods - GAS CHROMOTOGRAPHY; INFRARED SPECTROSCOPY
- EPA SW-846; 8020, 418.1, 3510, 3540 or 3550

Sharon Williams

Sharon Williams

3/25/96
Date

FIGURE A-3-a

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240
PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

CHEMICAL ANALYSIS OF SOIL

Company : P.P.M.I.
Address : PO Box 957
City/St. : Crossroads, NM 88114
Proj.Name : PPMI
Location : ST. "BD"
Sample type : soil
Sample 1 : State "BD"

Lab #: H2462
Date Received: 01/23/96
Date Analyzed: 03/23/96
Sample Condition: intact
Units: mg/kg

PARAMETER	SAMPLE 1
Chloride	520.0

Sharon Williams

Sharon Williams

3/25/96

Date

FIGURE A-3-b

H2462

ARDINAL LABORATORIES
PHONE: (505) 393-2326 • 101 E. MARLAND • HOBBS, NEW MEXICO 88240

Chain of Custody Record

Project I.D. PPMI
Project Location ST BD"
Sampled By Pat Cleer
Client Name S.E.S. for PPMI
Address P.O. Box 957 Crossroads
Telephone 505-

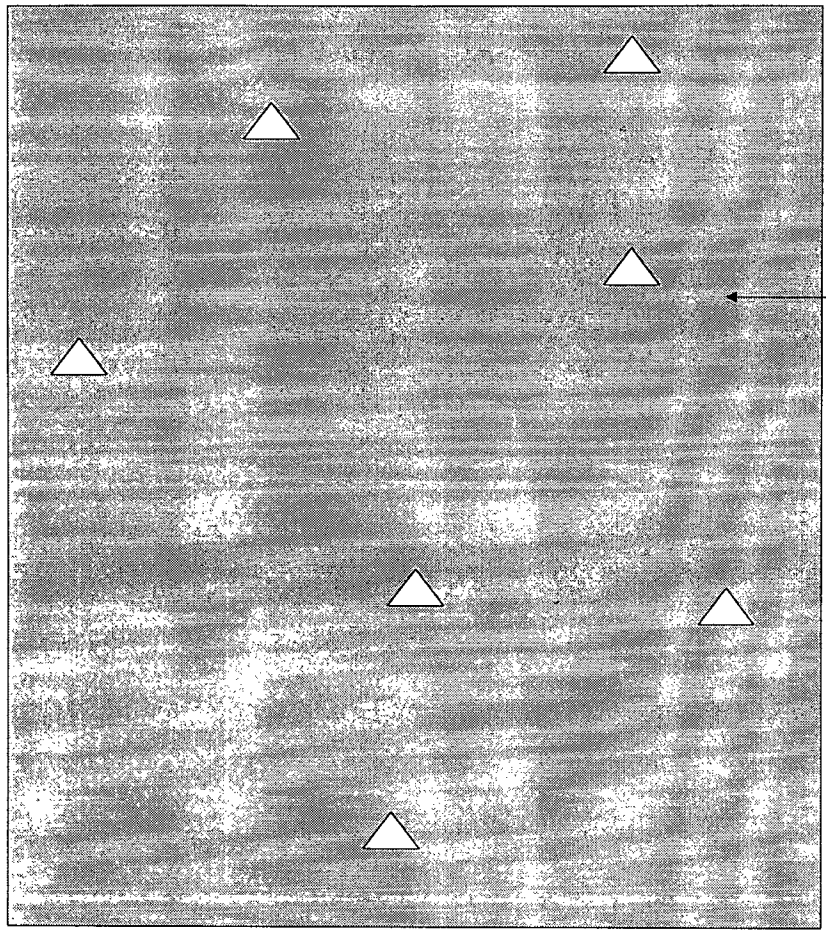
Sample Number	Date	Time	Composite	Grab	Sample Location	Number of Containers	Analysis Required: TPH	BTEX	Cl					Remarks (Type sample, preservation, etc.)
H	3/21	945	X		ST BD"									Bill: PPMI
														S.E.S.: Dept

Released by: (Signature) Pat Cleer — Date 3/21 Time 1940 — Received by: (Signature) Kay Read
Released by: (Signature) — Date/Time — Received by: (Signature)

Remarks:

Shipped/Delivered

FIGURE A-3-c



Excavation
80' X 135'
approx. 4' deep
1600 cu yd

Injection Well

PETROLEUM PRODUCTION
MANAGEMENT, INC.
CROSSROADS, NEW MEXICO

Figure A-4
STATE "BD" PIT SITE BOTTOM
VERIFICATION

Safety & Environmental Solutions, Inc.

TRACE ANALYSIS, INC.
6701 Aberdeen Avenue Lubbock, Texas 79424 806•794•1296 FAX 806•794•1298

April 1, 1996
Receiving Date: 03/29/96
Sample Type: Soil
Project No: 001
Project Location: State "BD"

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTION, INC.
Attention: Pat Cleer
P. O. Box 1613
Hobbs, NM 88241

Prep Date: 03/29/96
Analysis Date: 03/29/96
Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: SH
Project Name: PPMI Pit

TA#	Field Code	TRPHC (ug/kg)	BENZENE (ug/kg)	TOLUENE (ug/kg)	ETHYL-BENZENE (ug/kg)	M,P,O XYLENE (ug/kg)	TOTAL BTEX (ug/kg)
T50274	PPMI Pit 001	1,070,000	<50	<50	<50	<50	<50
QC	Quality Control	101,000	97	97	95	191	
Reporting Limit		10,000	50	50	50	50	
RPD		0	5	5	5	5	
% Extraction Accuracy		108	91	93	93	93	
% Instrument Accuracy		101	98	98	96	96	

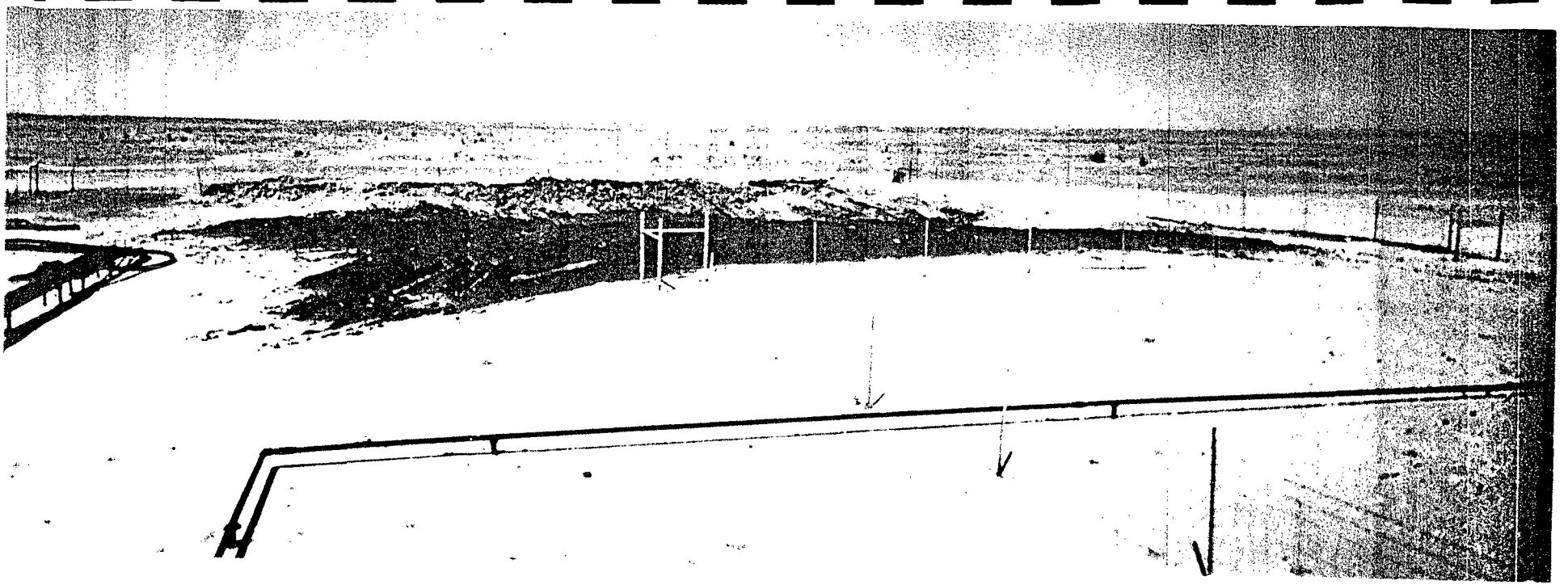
METHODS: EPA SW 846-8020, 5030, 3550 HIGH LEVEL; EPA 418.1.
BTEX SPIKE: 2,500 ug/kg BTEX. BTEX QC: 100 ug/L BTEX.
TRPHC SPIKE: 250,000 ug/kg TRPHC.
TRPHC QC: 100,000 ug/L TRPHC.

Director, Dr. Blair Leftwich
Director, Dr. Bruce McDonell

4-1-96
Date

FIGURE A-5

A



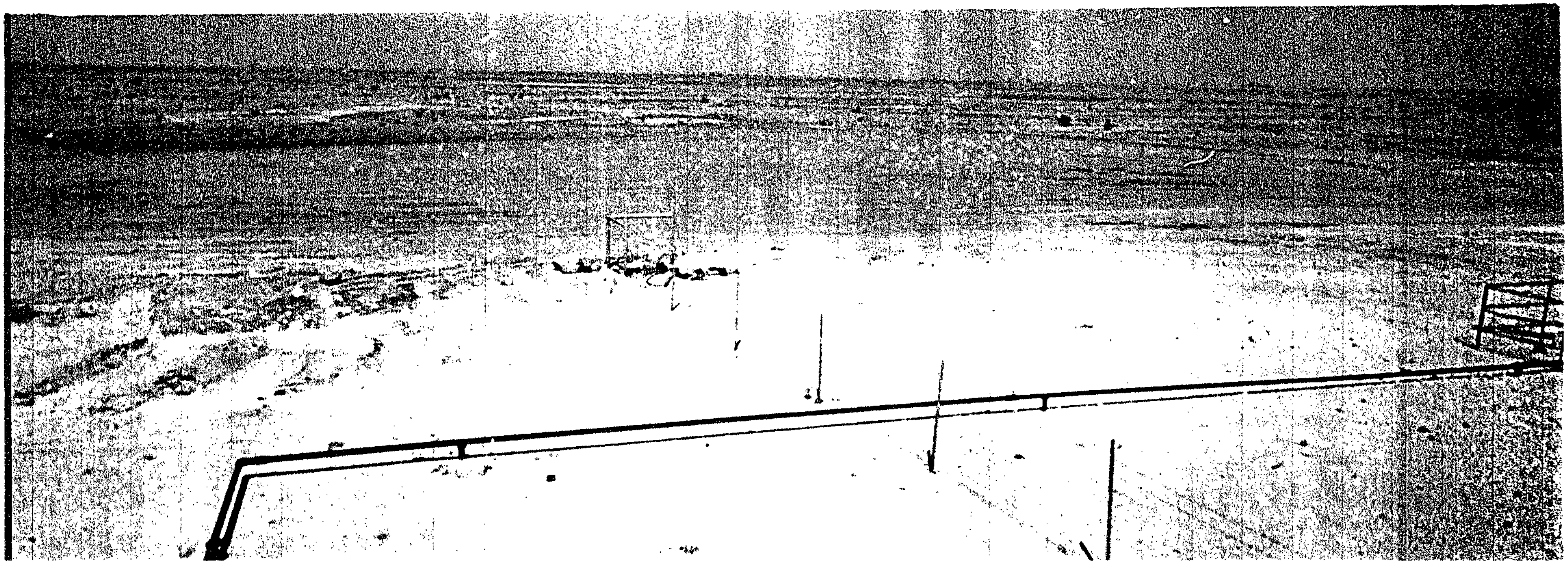
A—LOOKING NORTH FROM TANK SPOIL PILE ON SOUTH SIDE OF PIT

B

B—LOOKING EAST FROM THE WEST SIDE OF PIT, SPOIL PILE TO THE RIGHT

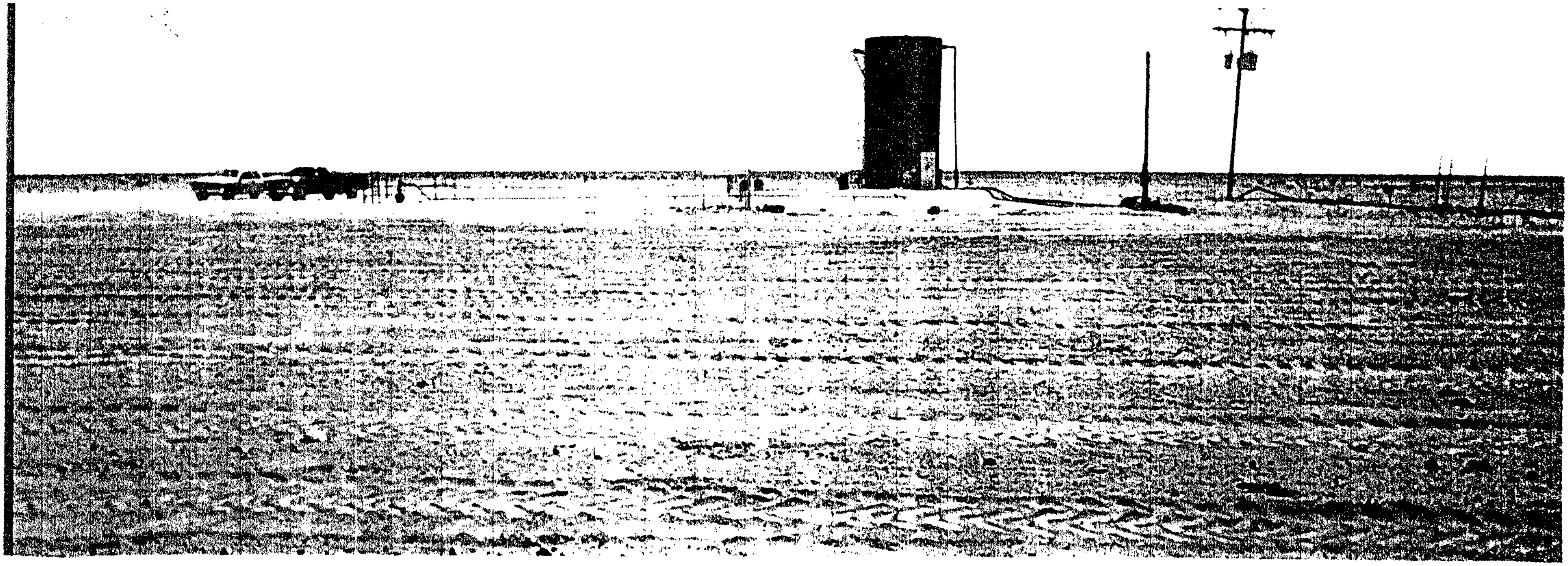
C

COMPLETED

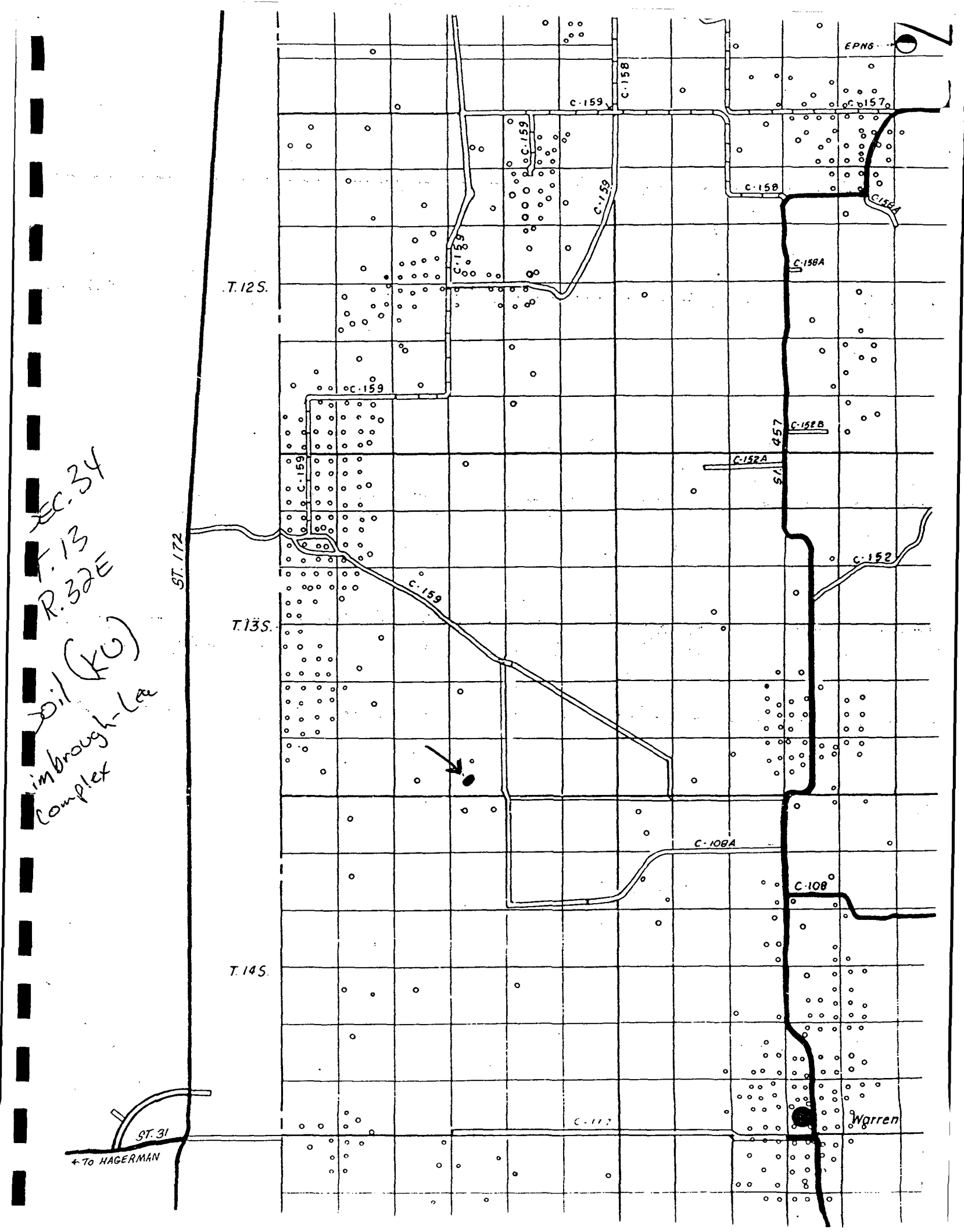


A---LOOKING NORTH FROM TANK SPOIL PILE ON SOUTH SIDE OF PIT

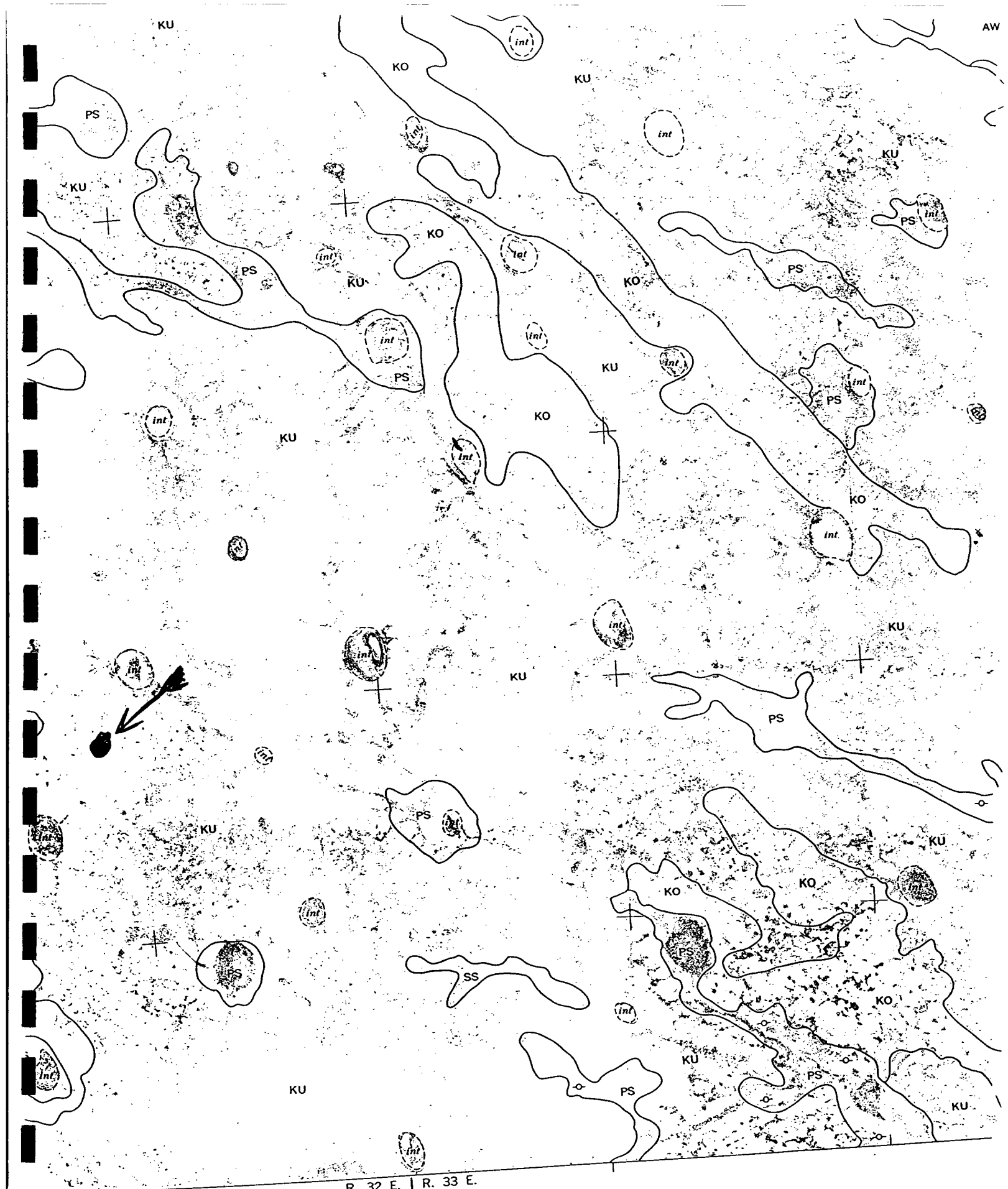
D



B---LOOKING EAST FROM THE WEST SIDE OF PIT, SPOIL PILE TO THE RIGHT

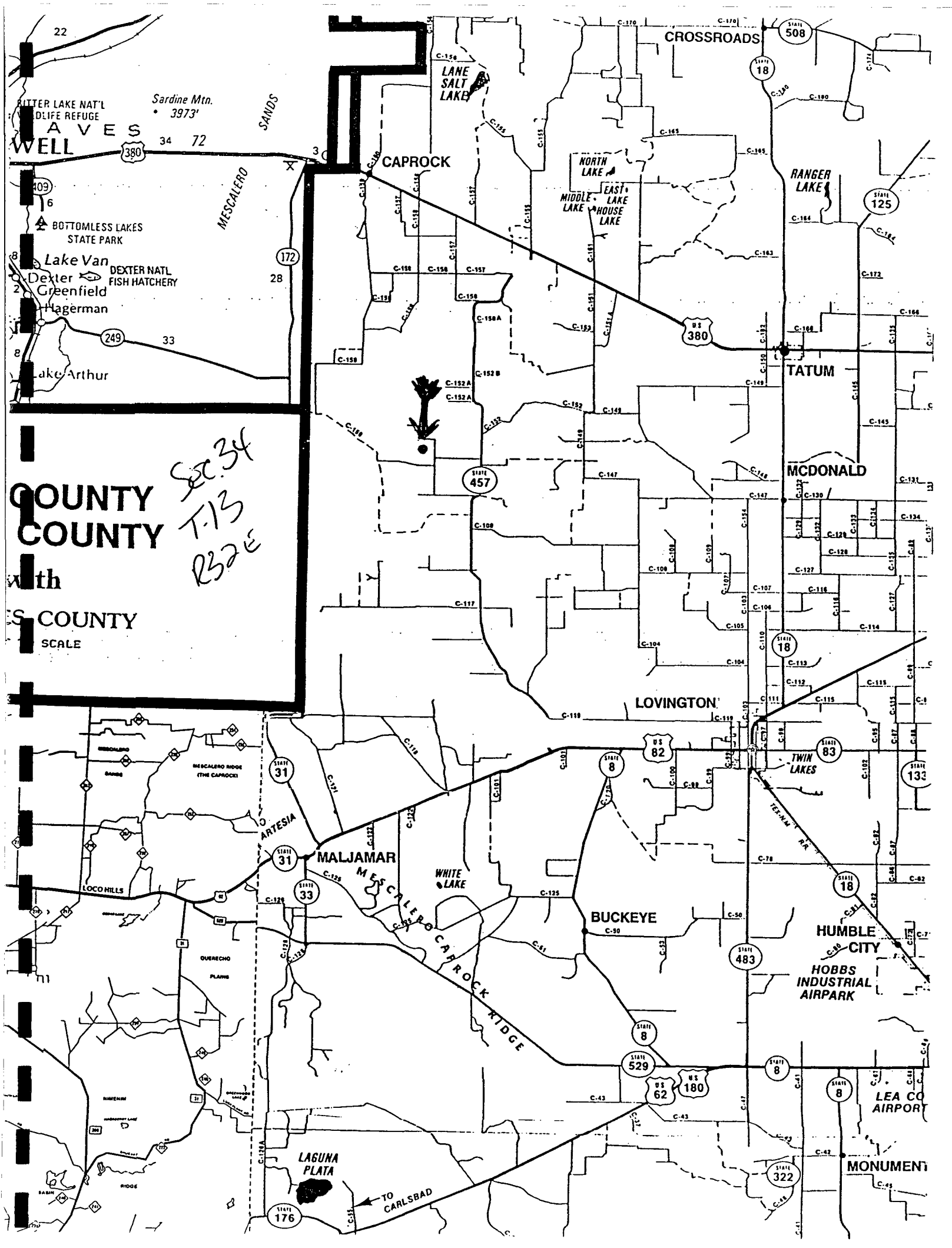


Sec. 34
T. 13
R. 32E
Oil (KU)
imbrough-Lea
complex



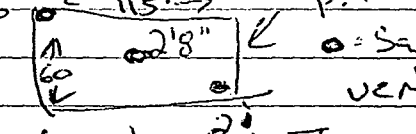
Sec. 34 T13, R32E

P.P.M.I


CROSSROADS
LANE SALT LAKE
CAPROCK
NORTH LAKE
MIDDLE LAKE
EAST LAKE
HOUSE LAKE
RANGER LAKE
TATUM
MCDONALD
LOVINGTON
TWIN LAKES
MALJAMAR
ARTESIA
WHITE LAKE
MESCALERO CAPROCK RIDGE
BUCKEYE
HUMBLE CITY
HOBBS INDUSTRIAL AIRPARK
LEA CO AIRPORT
MONUMENT
LAGUNA PLATA
TO CARLSBAD
LOCO HILLS
MESCALERO RIDGE (THE CAPROCK)
QUERECHO PLAINS
TEX-NM RR
RITTER LAKE NAT'L WILDLIFE REFUGE
Sardine Mtn. • 3973'
SANDS
MESCALERO
BOTTOMLESS LAKES STATE PARK
Lake Van
Dexter
Greenfield
Hagerman
Lake Arthur
DEXTER NATL FISH HATCHERY
WELL
AVES
COUNTY
COUNTY
COUNTY
SCALE
Sec 34
T-13
R32E
US 380
US 82
US 180
US 62
STATE 18
STATE 125
STATE 457
STATE 31
STATE 33
STATE 83
STATE 8
STATE 483
STATE 529
STATE 322
STATE 176
STATE 508
STATE 172
STATE 249
STATE 409

3-20-96 PPMI "BO" Pit

1:15 pm Arrived @ Location
Took pictures before testing,
one from west looking east
" " north " south
" " upon tank looking North
THERE ARE places in pit that
seems to be wet.
1:30 pm Backhoe and Company man
Arrived, Had backhoe clear off
loose soil in 3 areas, then dug
down to get soil Samples.

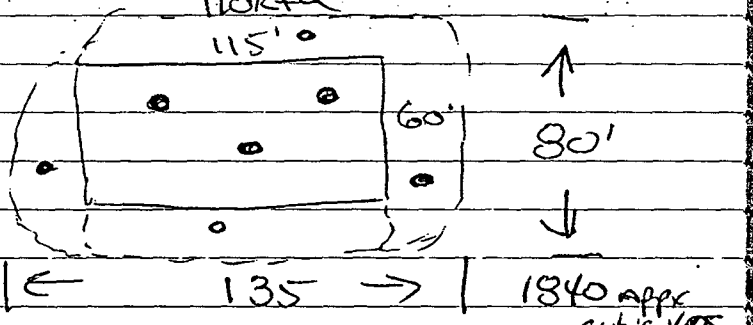


• = Sample spots for vertical extent. These depths were below pit bottom

3:30 pm gather soil sample from bottom of test holes, Put Samples in Container with Ice. Took to Lab.

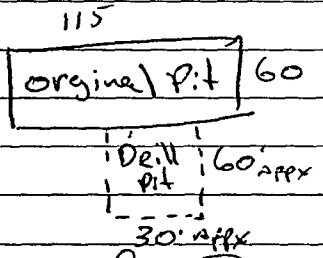
Note: this is a shallow nolined pit used for and overflow. Has not been used in Years per Co. Man.

3-26-86 PPM I "BD"



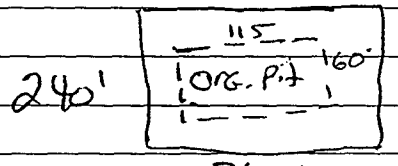
- Composite site for Bottom Hole Sample

---- Actual excavation site
AVG. Depht 4 1/2'



appx 267 cubic yds

AREA used for Project



	3-26-96
7:15/Am	Arrived @ Plant waiting for Globe Const.
7:45/Am	unload @ PPM I ST. "BO", operators Vernon, Tommy.
8:45/Am	TESTED Pit wall less than 5000 PPM
9 Am	Found old drilling Pit worked on it
1:30/PM	Took Pictures of Bottom and side of Pit, Got dirt Sample, tested @ 500 PPM.
2:30/PM	STARTED Hitting tested Blended dirt back into Pit AREA.
4 PM	Headed In.
	3-27-96
7:30/Am	Continue Blending Process
5:45/Am	TESTED Black ugly dirt with water used hanby, it showed TPH 850 PPM
11 Am	Cut Dozer Loose
12:30/Pm.	All most Finished Move Appx. 2500 cu. yds.
1:30/Pm	Took closing pictures FROM SAME AREA AS BEFORE
2:00/Pm	TPH Composite 620 PPM