



CONOCOPHILLIPS

MCA Battery 1 Trunkline Leak (10-19-04)

ENVIRONMENTAL SITE INVESTIGATION

PERFORMED BY:

BBC INTERNATIONAL, INC.
WORLD-WIDE ENVIRONMENTAL SPECIALISTS
1324 W. MARLAND BLVD.
P. O. BOX 805
HOBBS, NEW MEXICO 88240
(505)397-6388 • FAX (505)397-0397
EMAIL: bbc@bbcinternational.com
WEBSITE: www.bbcinternational.com

November 4, 2004

PREPARED FOR:

MR. KEN ANDERSEN
CONOCOPHILLIPS
P.O. BOX 180
MALJAMAR, NEW MEXICO 88264-0180

*Conoco Phillips - 217817
facility - FPAC 0605529397
incident - n PAC 0605529572*

*application - p PAC 0605529769
inspect - e PAC 0605529522*



PHONE (505) 397-6388 • FAX (505) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805
E-MAIL: bbc@bbcinternational.com

December 2, 2004

Paul Sheeley
NM Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88240

**RE: ConocoPhillips – MCA Battery 1 Trunkline Leak (10-19-04)
Unit Letter E, Section 29, Township 17 South, Range 32 East**

Dear Mr. Sheeley:

BBC International, Inc. respectfully submits this site investigation report for the MCA Battery 1 Trunkline Leak on behalf of ConocoPhillips.

This site is an area that was investigated due to a trunkline leak that occurred on October 19, 2004. Approximately 90 barrels of produced water was released with 80 barrels of water recovered.

The investigation and sampling was conducted on October 27, 2004. The data indicates that the area of greatest contamination is in the upper portion of the leak area. Since the depth to groundwater is approximately 90 feet and there is a hard layer at approximately 25 feet below ground surface, it is recommended that three feet of topsoil be removed and disposed of, and a one foot thick clay or 40 mil poly liner be installed. The excavated area would be backfilled with clean topsoil, re-seeded with appropriate BLM seed, and closed.

I look forward to your review of this report and the agreement to our recommendation. If you have any questions, please do not hesitate to contact me at (505)397-6388, by email at kswinney@bbcinternational.com, or at the address above.

Sincerely,

BBC International, Inc.

Ken Swinney, CEI, CRS
Director of Operations

KS:jg

encl.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

January 6, 2005

Ken Anderson
Conoco Phillips
29 Vacuum Complex Rd.
Lovington, NM 88260

Re: Work Plan Approval
MCA unit battery #1
Dated: 12-02-04
UL-E, Sec 29-T17S-R32E

The remediation closure referenced above and submitted to the New Mexico Oil Conservation Division (OCD) for ConocoPhillips by BBC is hereby approved according to the information provided. ConocoPhillips must delineate the horizontal perimeter and submit a sketch or draft of the liner and dimensions accordingly.

Please be advised that OCD approval of this plan does not relieve ConocoPhillips of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve ConocoPhillips of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please write or call: (505) 393-6161, ext. 113, or e-mail: psheeley@state.nm.us

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Sheeley".

Paul Sheeley-Environmental Engineer

Cc: Roger Anderson - Environmental Bureau Chief
Chris Williams - District I Supervisor
William Olson - OCD Hydrologist
Larry Johnson - Environmental Engineer
Ken Swinny - BBC

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company ConocoPhillips Company	Contact Kenneth N. Andersen
Address 4001 Penbrook, Odessa, TX 79762	Telephone No. 505.676.2371.5569
Facility Name MCA Unit Btry # 1	Facility Type Oil and Gas

Surface Owner BLM	Mineral Owner BLM	Lease No LC - 029410A
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LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	29	17S	32E	1395	North	1295	West	Lea Co., NM

Latitude **32.81186N** Longitude **103.79115W**

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 90 bbl (0 oil, 90 water)	Volume Recovered (0 oil, 80 water)
Source of Release MCA Btry # 1 4" fiberglass produced water transference trunk line ~ 400 yrds NNE of MCA # 369.	Date and Hour of Occurrence 10/19/04 @ 1330hrs	Date and Hour of Discovery 10/19/04 @ 1400hrs
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Silvia Dickey	
By Whom? Ken Andersen	Date and Hour 10/20/04 @ 1100hrs	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The spill was caused by the dresser sleeve bolts corroding allowing the sleeve to come apart and start leaking. The sleeve was removed and a collar and flange where installed.

Describe Area Affected and Cleanup Action Taken.*

30 ftX55ft of dry sandy grass pasture with no cows present. The site will be sampled and a clean up action will be submitted for approval at a later date.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature:

Printed Name: **Kenneth N Andersen**

Approved by District Supervisor:

Title: **SHEaR Specialist**

Approval Date:

Expiration Date:

E-mail Address: **ken.n.andersen@conocophillips.com**

Conditions of Approval:

Attached

Date: **10/20/04**

Phone: **505.676.2371.5569**

- Attach Additional Sheets If Necessary

ConocoPhillips

MCA Battery 1 Trunkline Leak

10-19-04

1.0 INTRODUCTION

The subject site is located south of Maljamar, New Mexico in ~~Unit Letter E, of Section 29, Township 17 South, and Range 32 East.~~ The site consists of undeveloped rangeland and petroleum production facilities. On ~~October 19, 2004,~~ a 4" fiberglass trunkline leaked approximately 90 bbls of water with approximately ~~80 bbls of water being recovered.~~

2.0 SITE CHARACTERIZATION

The leak area measures approximately ~~61 feet by 49 feet~~ with a smaller area that measures approximately ~~19 feet by 24 feet.~~ A sketch of the leak area including the sample points can be reviewed in Appendix II of this report. The surface soil is red sand. There is no water source within 1,000 feet of the site. There is no surface water within 1,000 feet of the site. Based on data from the ground water monitoring well located at the Maljamar Plant, depth to ground water is approximately 90 feet.

3.0 SITE INVESTIGATION ACTIVITIES

On October 27, 2004, BBC personnel conducted an inspection of the site. A soil boring was drilled near the center of the leak area using BBC's tractor mount drilling rig, to a total depth of 25 feet. Seven samples were taken from the soil boring; one each at one foot, three feet, five feet, ten feet, fifteen feet, twenty feet, and twenty-five feet. The samples were taken to Cardinal Laboratories for chloride analysis. Laboratory analysis for SB1 @ 1' is 9997 ppm chloride, 3' is 11,676 ppm chloride, 5' is 8477 ppm chloride, 10' is 9197 ppm chloride, 15' is 7598 ppm chloride, 20' is 5358 ppm chloride, and 25' is 3519 ppm chloride. The laboratory report for the analysis is located in Appendix I of this report. The soil boring location can be viewed on the site diagram in Appendix II of this report. Site photographs can be viewed in Appendix III.

Two near surface samples were taken; one from the north end of the leak area and one from the south end of the leak area. The samples were taken at a depth of one foot and were taken to Cardinal Laboratories for chloride analysis. Laboratory analysis for Sample Point 1-1' is 2799 ppm chloride. Laboratory analysis for Sample Point 2-1' is 3199 ppm chloride. Laboratory analytical results for this sampling event can be reviewed in Appendix I of this report. The location of the sample points can be viewed on the site diagram in Appendix II of this report.

4.0 CONCLUSION AND RECOMMENDATION

The laboratory data for this site indicates a reduction in chloride concentrations from three feet to twenty-five feet. At three feet the chloride concentration is 11,676 ppm and at twenty-five feet the chloride concentration is 3519 ppm, this reduction is significant. Taking into consideration that the depth to groundwater is greater than 75 feet, and the subsurface lithology at the site consists of caliche and sandstone layers, the evidence indicates that migration of chlorides to groundwater is unlikely. Therefore, it is recommended that approximately 3 feet of topsoil, be removed and disposed of. This soil would be transported to an OCD approved landfarm or disposal site. A one foot thick compacted clay or 40 mil poly liner would then be installed. The excavated area would be backfilled with clean topsoil and reseeded with the appropriate BLM seed mix and the site would be closed.



Permian Basin Asset

Record of Accidental Discharge of Crude Oil, Water or Hazardous Substances

Lease: MCA Unit Btry # 1		Lease # LC - 029410A (API, RRC, State, or Federal)		Field: Maljamar	
Discovered By: Kevin McNabb			Date and Time Discovered: 10/19/04 @ 1400hrs		
Date and Time Discharge Began: 10/19/04 @ 1330hrs			Date and Time Discharge Ended: 10/19/04 @ 1415hrs		
Discharge Site: Unit Letter E Sec. 29 Blk/TWP 17S Survey/Range 32E County/State Lea Co., NM					
Latitude 32.81186N Longitude 103.79115W					
Highway Map Location: Go S from the Maljamar fire station on CR 126 3.3 miles, turn W on dirt road & go 2.7 miles, then N 100ft to leak.					
Location Of Discharge: 400 yards NNE of MCA # 369				<input type="checkbox"/> Flowline ----- Feet to Nearest Wellhead Number <input type="checkbox"/> Injection Line Feet to Nearest Wellhead Number	
Specific Source of Discharge: MCA Btry # 1 4 inch fiberglass produced water transfer trunk line.					
Describe Cause of Discharge : Dresser sleeve bolts corroded and gave up.					
Actions taken to Prevent Reoccurrence: Replaced dresser sleeve with collar and flange.					
Describe Nature and Extent of Area Affected: 30ftX55ft of dry sandy grass pasture with no cows present.					
Weather Conditions: Clear Calm Warm					
Clean-Up Action Taken: Picked up 80 Bbls of produced water.					
Remediation Action Taken: Will remediat on site.					
Specific Source of Discharge <input checked="" type="checkbox"/> Flowline <input type="checkbox"/> Tank Piping <input type="checkbox"/> Vessel Piping <input type="checkbox"/> Line Check Valve <input type="checkbox"/> Wellhead Connections <input type="checkbox"/> Tank			Possible Reasons For Failure <input checked="" type="checkbox"/> Corrosion <input type="checkbox"/> External <input type="checkbox"/> Internal <input type="checkbox"/> Fatigue <input type="checkbox"/> Age		
<input type="checkbox"/> Pump <input type="checkbox"/> Vessel <input type="checkbox"/> Chemical Storage Container <input type="checkbox"/> Chemical Injection Equipment <input type="checkbox"/> Casing/Tubing Communication <input type="checkbox"/> Other:			<input type="checkbox"/> Human Error <input type="checkbox"/> Pressure <input type="checkbox"/> Instrumentation <input type="checkbox"/> Mechanical <input type="checkbox"/> Weather		
Cost of Cleanup/Repair: \$3,000.00					
Pipe Size = 4 inches					
<input type="checkbox"/> Steel <input checked="" type="checkbox"/> Fiberglass <input type="checkbox"/> Plastic <input type="checkbox"/> Transite		<input checked="" type="checkbox"/> Buried <input type="checkbox"/> Surface <input checked="" type="checkbox"/> Bare		<input type="checkbox"/> Coated <input type="checkbox"/> Internal <input type="checkbox"/> External <input type="checkbox"/> Cement Lined	
				<input type="checkbox"/> Plastic Lined <input checked="" type="checkbox"/> Fiberglass <input type="checkbox"/> Was Line Chemically Treated <input type="checkbox"/> Other	
Names and Volumes of Substances Spilled			Remedial Action Picked Up		
0 BBL Oil 90 BBL Produced Water			0 BBL Oil 80 BBL Produced Water		Contained in Dike? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Gallons Chemical Spilled			Gallons Chemical		MFG/Chemical Name:
Gas Volume Released (MCF)			<input type="checkbox"/> Gas Leak	<input type="checkbox"/> Blowdown	<input type="checkbox"/> Upset
Other -- Explain:					
Federal, State, and Local Agencies Notified:				Job Number	
Agency	Person Notified	Date and Time Notified	Method Used		Person Notifying
NMOCD	Silvia Dickey	10/20/04 @ 1100hrs	<input checked="" type="checkbox"/> Phone	<input type="checkbox"/> Fax	Ken Andersen
BLM	Paul Evans	@	<input type="checkbox"/> Phone	<input type="checkbox"/> Fax	
BLM	Jim Amos	10/20/04 @ 1210hrs	<input checked="" type="checkbox"/> Phone	<input type="checkbox"/> Fax	Ken Andersen
Landowner/Tenant: BLM				Telephone No. 505.393.3612	
I Hereby Certify That The Above Information Is True To The Best Of My Knowledge.					
Name and Title: Kevin McNabb, MSO					
Date: 10/20/04					

Appendix I



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
 BBC INTERNATIONAL, INC.
 ATTN: CLIFF BRUNSON
 P.O. BOX 805
 HOBBS, NM 88241
 FAX TO: (505) 397-0397

Receiving Date: 10/28/04
 Reporting Date: 10/28/04
 Project Owner: CONOCO PHILLIPS
 Project Name: MCA BATTERY 1 4" TRUNKLINE
 Project Location: MALJAMAR, NM

Analysis Date: 10/28/04
 Sampling Date: 10/27/04
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: BC
 Analyzed By: AH

LAB NUMBER	SAMPLE ID	CF (mg/Kg)
H9291-1	SB1 @ 1'	9997
H9291-2	SB1 @ 3'	11676
H9291-3	SB1 @ 5'	8477
H9291-4	SB1 @ 10'	9197
H9291-5	SB1 @ 15'	7598
H9291-6	SB1 @ 20'	5358
H9291-7	SB1 @ 25'	3519
H9291-8	SAMPLE PT. 1-1'	2799
H9291-9	SAMPLE PT. 2-1'	3199
Quality Control		1060
True Value QC		1000
% Recovery		106
Relative Percent Difference		6.0
METHOD: Standard Methods		4500-CFB

Amy Hill
 Chemist

10/28/04
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H9291

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES, INC.
 2111 Beechwood, Abilene, TX 79603 101 East Mariland, Hobbs, NM 88240
 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

Company Name: RBC International, Inc.
Project Manager: Cliff Bourne
Address: 1144 W. Merland
City: Hobbs **State:** N.M. **Zip:** 88240
Phone #: (505) 397-6388 **Fax #:** (505) 397-0397
Project #: — **Project Owner:** Conoco Phillips
Project Name: MCA Ruffery 1 4" Tank line
Project Location: Mojave, N.M.
Sampler Name: Ken Swinney

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	MATRIX			PRESERV.			SAMPLING		
		GROUNDWATER	WASTEWATER	SLUDGE	ACID/BASE	ICE/COOL	OTHER:	DATE	TIME	OTHER:
1	SBI@1'	✓	✓	✓	✓	✓	✓	10-17-04	10:00	
2	SBI@3'	✓	✓	✓	✓	✓	✓	10-17-04	10:05	
3	SBI@5'	✓	✓	✓	✓	✓	✓	10-17-04	10:10	
4	SBI@10'	✓	✓	✓	✓	✓	✓	10-17-04	10:31	
5	SBI@15'	✓	✓	✓	✓	✓	✓	10-17-04	11:30	
6	SBI@20'	✓	✓	✓	✓	✓	✓	10-17-04	13:11	
7	SBI@25'	✓	✓	✓	✓	✓	✓	10-17-04	14:34	
8	Sample pt 1-1'	✓	✓	✓	✓	✓	✓	10-17-04	10:51	
9	Sample pt 2-1'	✓	✓	✓	✓	✓	✓	10-17-04	11:02	

Chloride

Terms and Conditions: Samples will be charged on all requests more than 30 days past due at the rate of 2.5% per annum from the original date of billing, and all costs of collection, including attorney's fees.

PLEASE NOTE: Liability and alert's notices remain for any claim arising whether based in contract or tort, and be limited to the amount paid by the client for the services. All claims including those for negligence and any other cause whatsoever shall be limited without limitation, business interruption, loss of data, or loss of profits, incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of any services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Sampler Relinquished: Ken Swinney **Date:** 10-17-04
Time: 5:00 pm
Relinquished By: Roger [Signature] **Date:** 10-28-04
Time: 7:50
Received By: [Signature] **Date:** 10-28-04
Time: 7:50
Received By: Buyer [Signature] **Date:** 10-28-04
Time: 7:50
Checked By: [Signature] **Date:** 10-28-04
Time: 7:50

Sample Condition: Cool Intact No Yes

Phone Result: Yes No **Add'l Phone #:** _____
Fax Result: Yes No **Add'l Fax #:** _____

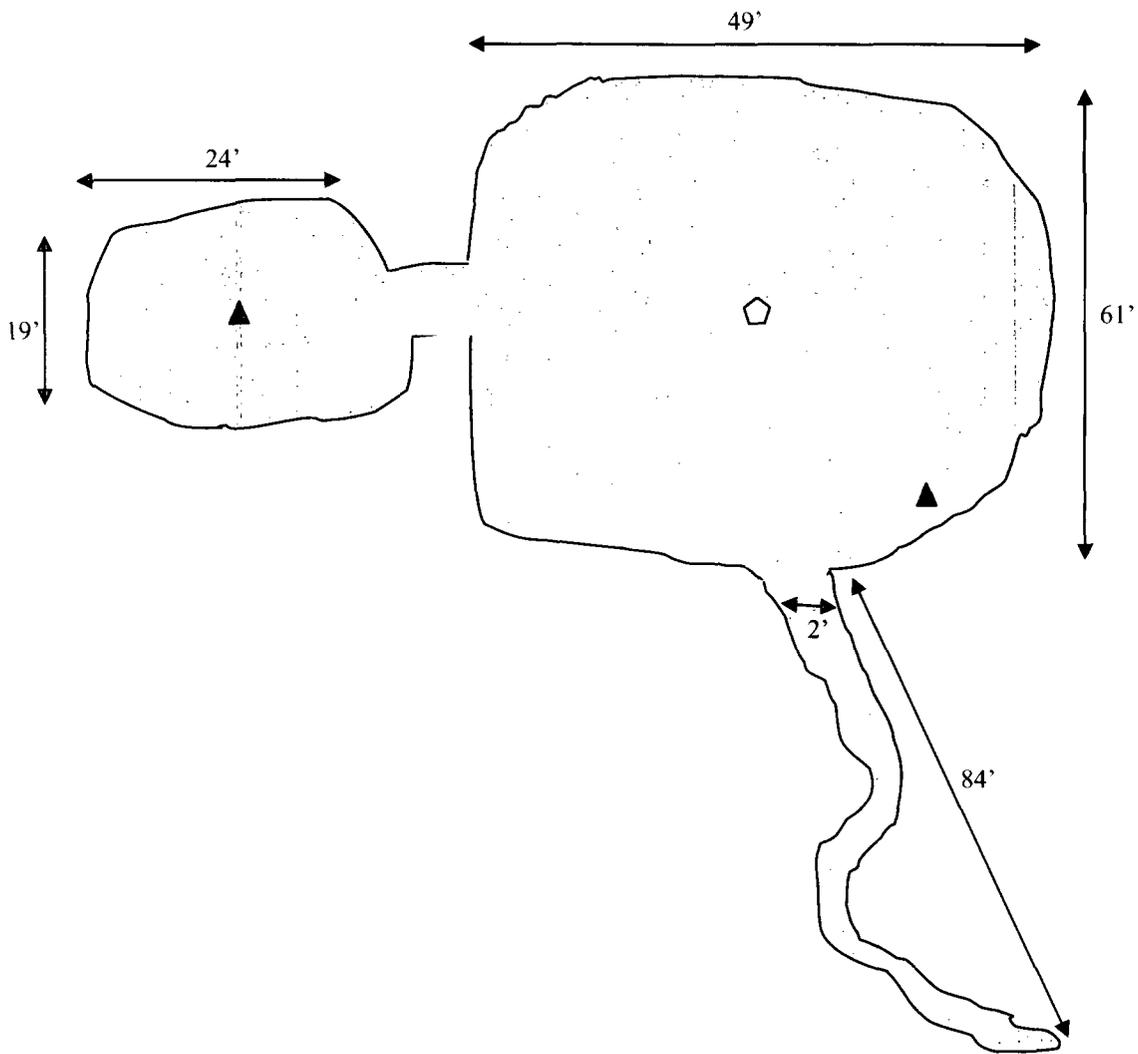
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

Appendix II



CONOCOPHILLIPS EVGSAU WELL MCA BATTERY 1



LEGEND

-  Soil Boring
-  Sample Point
-  Contaminated Area

BBC INTERNATIONAL, INC.

CONOCOPHILLIPS
EAST VACUUM GLORIETTA

Date: 11-8-04

Drawn By: JG

Disk:

Sheet 1 of 1 Sheets

Scale: Not to Scale

File Name

Location Philippines, N.M. Date 12-27-04

Project/Client Conservation/ MCA B. Stoyl-

4" track line

Sample date time Field

- SB1-1' 10:27:24 10:00 7800
- SB1-3' " 10:58 11,000
- SB1-5' " 12:10 12,200
- SB1-10' " 12:21 8600
- SB1-15' " 11:30 5400
- SB1-20' " 13:21 4800
- SB1-25' " 14:34 3000

Site Boring: GPS N 131.81182° W 103.79137°

Sample 1-1' 10:27:24 10:00 7800

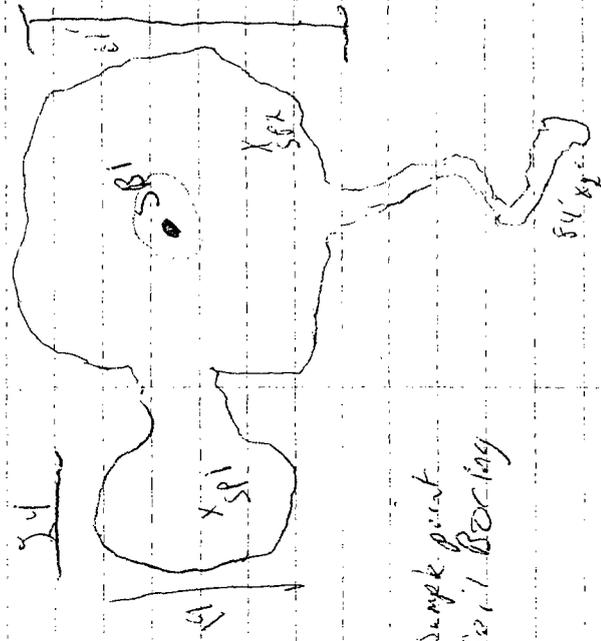
Sample 1-25' 11:30:00 11:28 4120

Location _____ Date _____

Project / Client _____

N ↗

519'



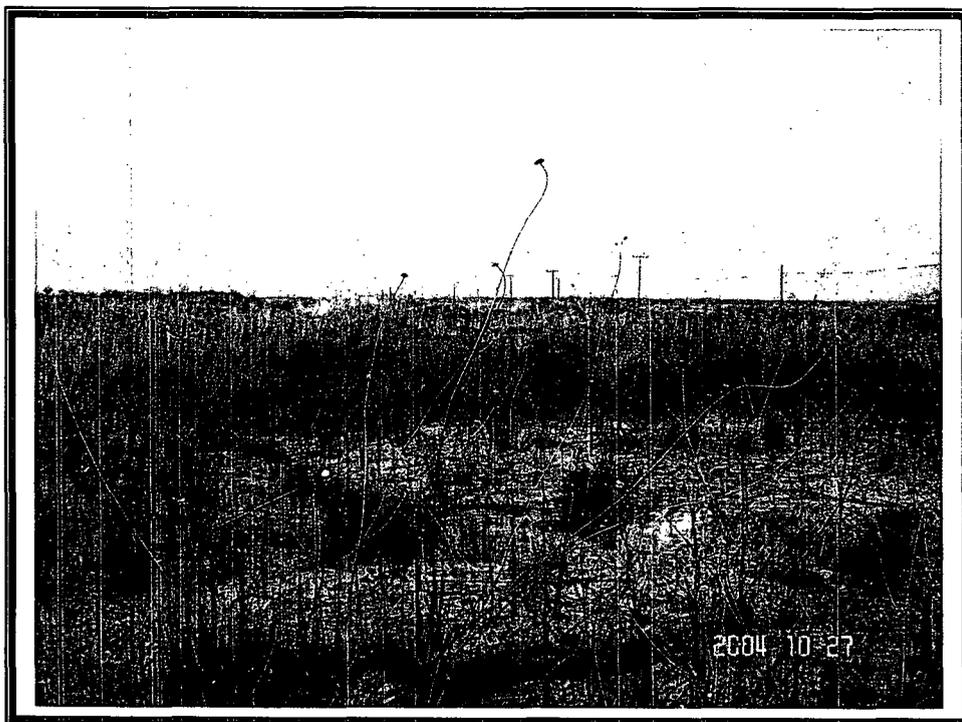
SB = sample point
SB = 100' / Boring

Appendix III

MCA Battery 1 Trunkline Leak



MCA Battery 1 Trunkline Leak



MCA Battery 1 Trunkline Leak

