

**APPENDIX C**  
**Field Data Sheets and Field Logbook Notes**

# Calibration

HNU #1 - PJ101

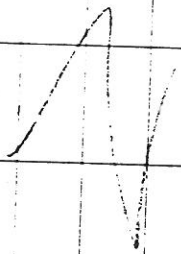
Serial # 801346

isobutylene gas 100ppmv

Calibrated to benzene Reference

54ppm for 10.2 eV probe

Span 6.74



721397.0500

1/8/96

Ken Rice 67156

Arrived on-site (CSST) 08:50

- clear, 32°F, Light wind from NW
- PID NOT working, battery NSW
- does not hold charge

09:00 Met with Capt. Wiliston

09:30 PID back on charger

10:00 Top soil layer started to be removed from the 01-SBZ location

10:30 No VOC odors detectable

Worked on setting up staging area for cleaned soils.

13:30 6114 shd ex-1-96 -  
S65L 150 ppm

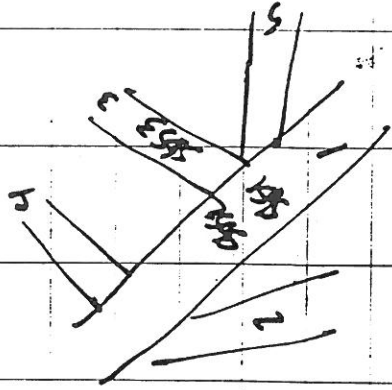
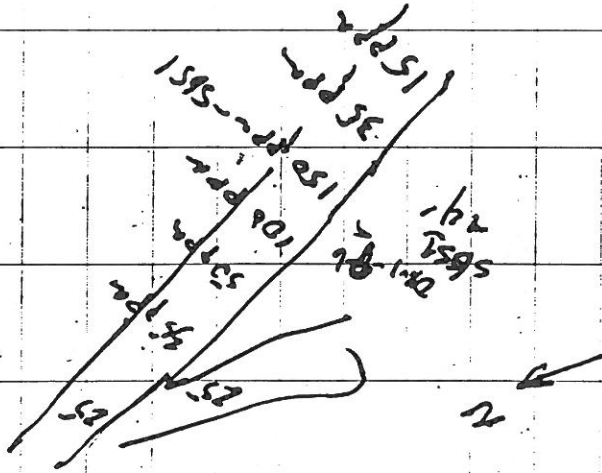
13:45 82-1-96 - S652  
75 ppm (sand?)

14:00 82-1-96 - S653  
200+ ppm

14:30 Break.

15:00 Started on trench A

Most readings within  
trench after excavation indicate  
OAT readings of 25-75 ppm



4

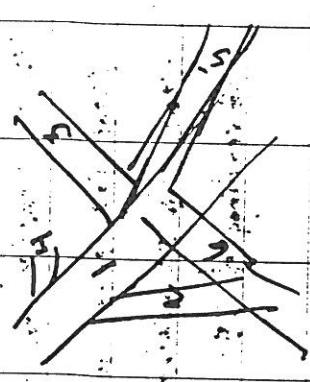
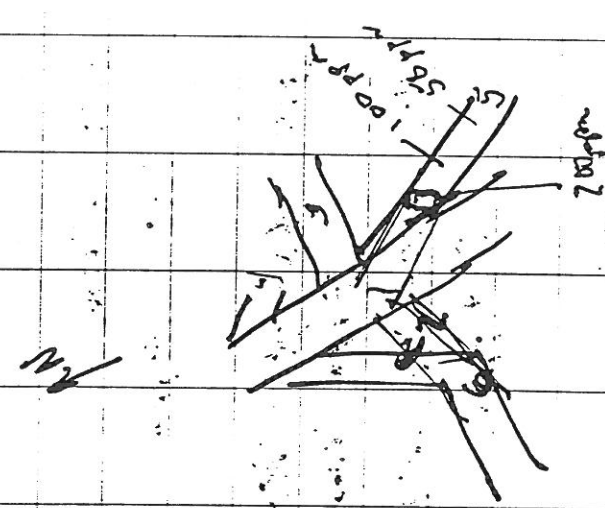
15:05 moved to start trench  
5.

OVA reading in trench

9 ~ 150-200 ppm. 2-3' depth  
about where liner is located.  
one bucket OVA reading reached  
500 ppm.

|       |                |
|-------|----------------|
| 15:20 | Trench 1 ~ 30' |
| "     | " ~ 10'        |
| "     | " ~ 6'         |
| "     | " ~ 6'         |
| "     | " ~ 2'         |

15:25 Started Trench 6



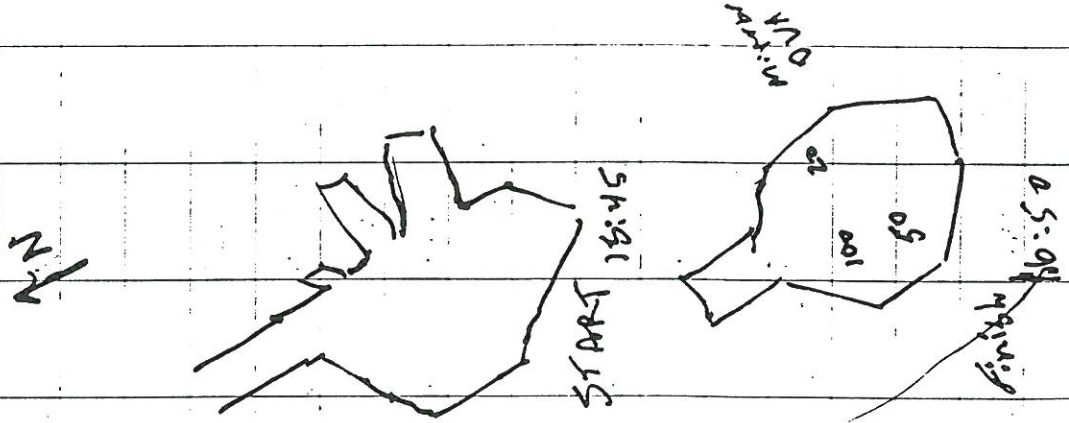
15:45 Excavation Shown  
on preceding page

high O/A Reading 350 ppm  
trg: 50 ppm  
Low: 10 ppm

16:05 Started Excavation on  
East Side

16:50 Finish Excavation.  
Mirror the O/A  
Readings.

18:00 left site  
Ken Poir



Calibration

HND #1 - RE 101

Serial # 801341

isobutylene 100 ppm

Calibrated to 54 ppm

Span 6.75

RZ



1/9/96

07:45 Arrived on-site  
clear, 35°F WSW

09:30 Conference call with  
AFCEG  
Capt. Williams at 0-1  
excavating

10:00 Arrived at 0-1  
PID Screening level  
set figure opposite per

10:30 Continuing excavation.

2

11:30 Continuing Excavation  
See fig. opposite page

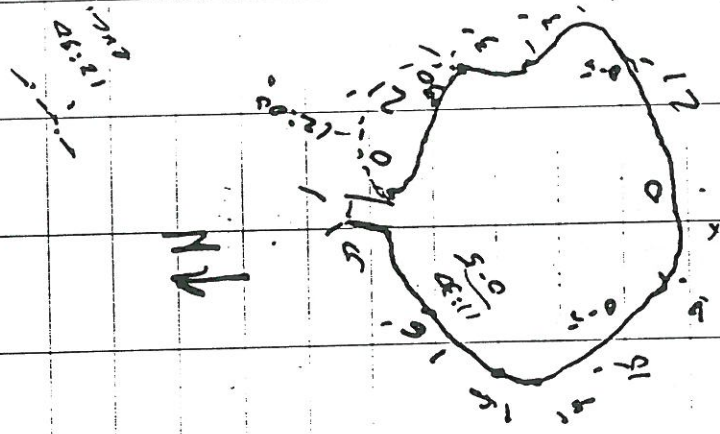
12:05 Continuing Excav.

12:20 STOPPED EXCAV.  
see fig next page

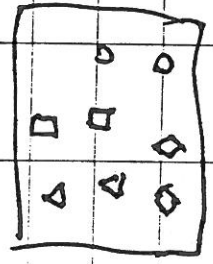
12:30 Lunch

13:30 Grating around  
excavation

15:00 Grating finished  
Took composite sample



15:15 Gathered Composite Sample

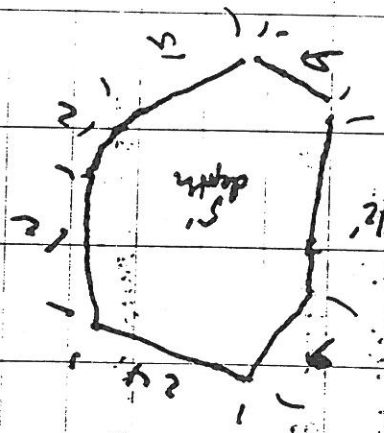


- - 1/4
- - 2/4
- Δ - 3/4
- ◇ - 4/4

16:00 Closed area  
 16:15 Staked and Flagged perimeter

17:00 Prepared Samples for Shipment

↑ N





4

Analysis for  
OX-1-96-553  
and OX-1-96-554 for

VOC (8260A) and  
Chromium (6016)

17:25 left site  
and cooler for  
pickup by Joe Lambert  
of Chemra

K-Ri

02/21/96

Ken Rice 67156

Arrived on-site (CESA) 9:45

Clear, 90°F, Light wind from the South

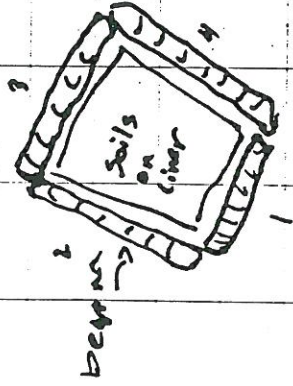
10:30 Arrived on location at SUMU 0-1.

Borrowed PID from Parsons ES field team working at the B-3 Area to measure breathing zone at 0-1

PID indicated NO VOCs within breathing zone.

## Beam Construction Procedures

1. Lay plastic sheeting (10' width) along side of excavated soils within the liner.
2. Remove soils along side 9 and place on top of liner approx. 1' thick.



3. Roll plastic sheeting over placed soils and tuck under.

2.

11:00 Meet with Jim Kerr and Bill of UX B. Bill will be assisting me with the beam construction and fencing around excavation at D-1

12:00 Break for lunch

13:00 Restarted Beam construction  
13:30 completed beam construction

3.

13:39 Started placing stakes  
for construction fencing  
placement.

14:10 Completed construction  
fencing placement.  
approx. 20' short  
on fencing. Paul L.  
to fix for me later.

14:20 Gathered Drum from  
Bldg. 77 and placed  
liner material outside  
of the bermed area  
into drum.

4.

15:00 Talked with Paul  
L. (Person's B-3  
field team) and  
asked him to  
pick up drum and  
Place with other  
FDW generated  
Material from B-3.

15:30 Left site

*PK*

cloudy 80°F

Windy SE 1-20 mph

9/11/96

13:20 Arrival on-site  
and met with

Brian M. and Capt. Will.

14:45 Sampled 0-1 core

SS - Surface Soil

NW - North wall

EW - East wall

CB - Center Bottom

~~SW - South wall - 7/11~~

ES - Excavated Soil

~~BS~~ Buried Soils (bottom)

9/11/96

B-3

Drained Moisture Separator  
~ 5 min.

• Need to configure for  
B-3 to make more  
Permanent.

• Push Button Start  
for Blower System

• Weather Station needs  
upgrading to make  
more permanent. BM  
to look at doing this

1700 left site  
for

4/11/97

Arrived on-site 0-1  
1200 noon to Sample  
for treatability Study

Cut trench along SE wall  
took samples of surface,  
middle and bottom  
along east wall

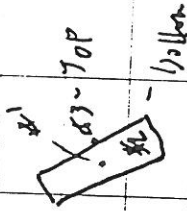
OX-1-97

#3 SSEW Surface Soil

#1 MSEW Middle Soil

#2 BSEW Bottom Soil

Samples labeled





OX-1-97-SEW 1

Sample taken approx. 2'  
below surface

OX-1-97-SEW 2

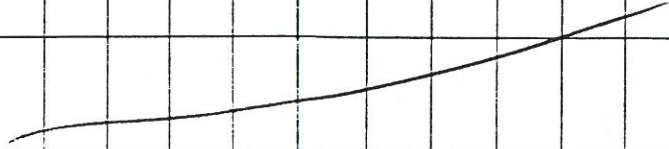
Sample taken approx. 3.5'  
below surface (bottom)

OX-1-97-SEW 3

Sample taken from  
Surface

4:30 Left Site

← R

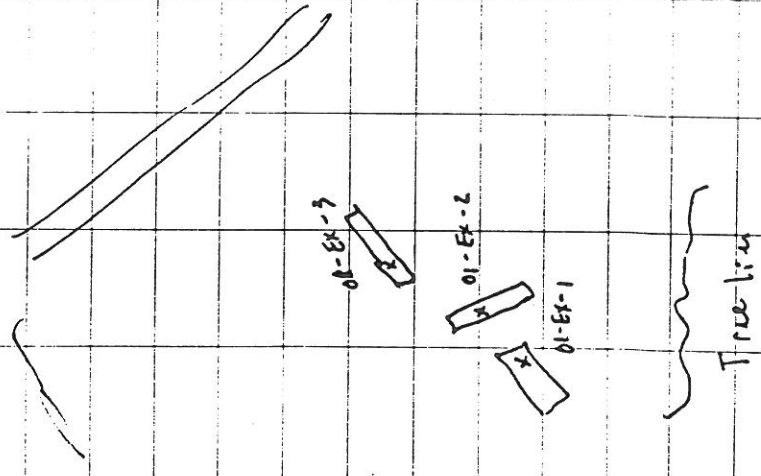


5/09/97 Raining, ~ 85°F

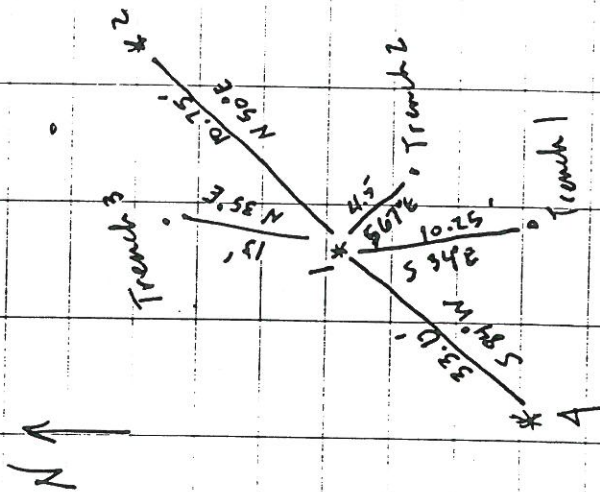
0800 Arrived on site met  
with Scott Peterson and  
Kyle Cuskey.

0830 CSSA personnel  
excavated 3 trenches  
for the proposed location  
of the field pilot  
Scale Electrode test unit

0825 Sampled for total  
Cadmium, Chromium and  
Pb in Excavation 1  
(01-EX-1)



\* Survey Point



12:30 Sampled in trench 2  
for parameters  
~~near Ox~~  
Previous trench  
Sample (Ox-1-Ex2)

12:45 Sampled trench 3  
(O1-EX-3)

Measurements for location of  
trenches were made  
from surveyed points  
on d.l.

17:30 left site  
Ran R

7/8/97

Temp. 95°C

Clear and sunny

08:00 Arrived on-site met with B. Murphy, Kyle Cuskey

08:30 Started preparation for sampling area ~~for initial baseline~~

11:30 Met with Lynntech, Inc. Dr. Tom Rogers, Jeff Dillon

14:15 Sampled well borings for site baseline characterization on Chromium, Cadmium and PCB

A10

OK

A20

OK

OK

A10

OK

OK

A - Anode well

C - Cathode well

| oxidation pond                        | date  | well designation | sample interval depths | sampled            |
|---------------------------------------|-------|------------------|------------------------|--------------------|
| ↓<br>OX1-97-SSA3(0-1)<br>surface soil | 14:40 |                  | A3                     | OX1-97-85 A3 (0-1) |
|                                       | 14:42 |                  |                        | OX1-97-SSA3 (1-2)  |
|                                       | 14:45 |                  |                        | OX1-97-SSA3 (2-3)  |
|                                       | 14:55 |                  |                        | OX1-97-SSA2 (0-1)  |
|                                       | 14:57 | A2               |                        | OX1-97-SSA2 (1-2)  |
|                                       | 15:00 |                  |                        | OX1-97-SSA2 (2-3)  |
|                                       | 15:10 |                  |                        | OX1-97-SSA1 (0-1)  |
|                                       | 15:13 | A1               |                        | OX1-97-SSA1 (1-2)  |
|                                       | 15:15 |                  |                        | OX1-97-SSA1 (2-3)  |
|                                       | 15:20 |                  |                        | OX1-97-SSC2 (0-1)  |
|                                       | 15:23 | C2               |                        | OX1-97-SSC2 (1-2)  |
|                                       | 15:25 |                  |                        | OX1-97-SSC2 (2-3)  |

15:30 OX1-97-SSC1 (0-1)

C1

15:33 OX1-97-SSC1 (1-2)

15:35 OX1-97-SSC1 (2-3)

15:40 OX1-97-SSAG (0-1)

A6

15:43 OX1-97-SSAG (1-2)

15:45 OX1-97-SSAG (2-3)

15:55 OX1-97-SSAS (0-1)

A5

15:58 OX1-97-SSAS (1-2)

16:00 OX1-97-SSAS (2-3)

A4

16:05 OX1-97-SSA4 (0-1)

16:08 OX1-97-SSA4 (1-2)

16:10 OX1-97-SSA4 (2-3)

16:15 OX1-97-SSA4(0-4)

Duplicate of

OX1-97-SSA4(1-2)

16:20 OX1-97-SSC2(0-4)

Duplicate of

OX1-97-SSC2(1-2)

16:15 OX1-97-SSA6 MS

OX1-97-SSA6 MSD

16:30 OX1-97-SSA1 MS

OX1-97-SSA1 MSD

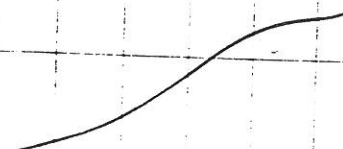
17:00 Sample Equipment

EBI

Samples were packed  
and prepared for  
shipment by Federal  
express.

18:45 left site

R-Ri





11/6/97

07:30 Arrived onsite  
to sample system for  
initial system performance  
for PCE. Met with Tom R.

09:00 Sampled

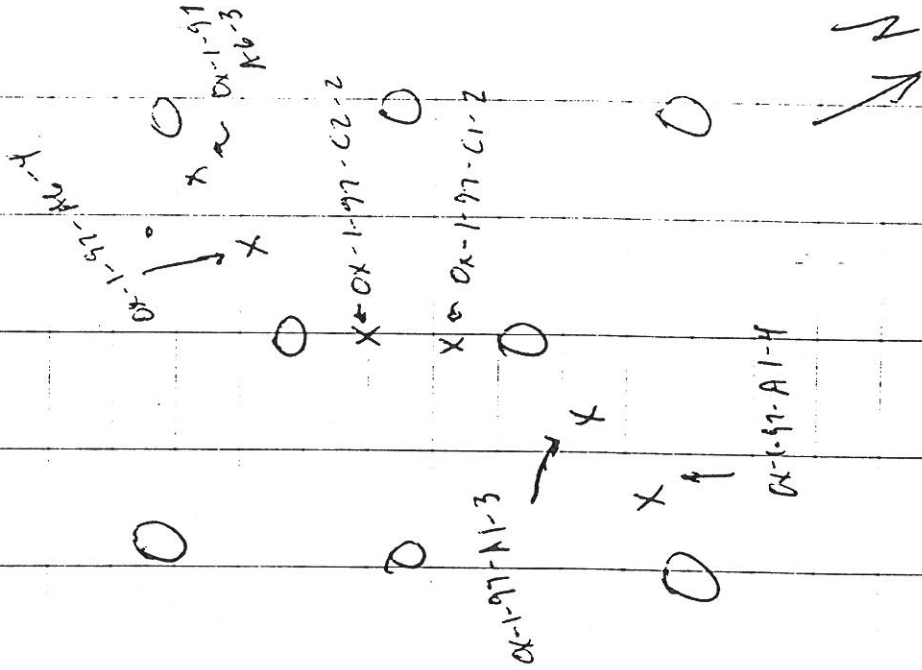
OX-1-97-C1-2 (0-2)

for PCE analysis

see opposite page for

map

09:10 OX-1-97-C2-2 (0-2)



Had difficulty in  
sampling with 1 in tube  
because of rocks

09:15 OX-1-97-A6-3(0-2)

09:30 OX-1-97-A6-4(0-4)

09:35 OX-1-97-A1-3(0-2)

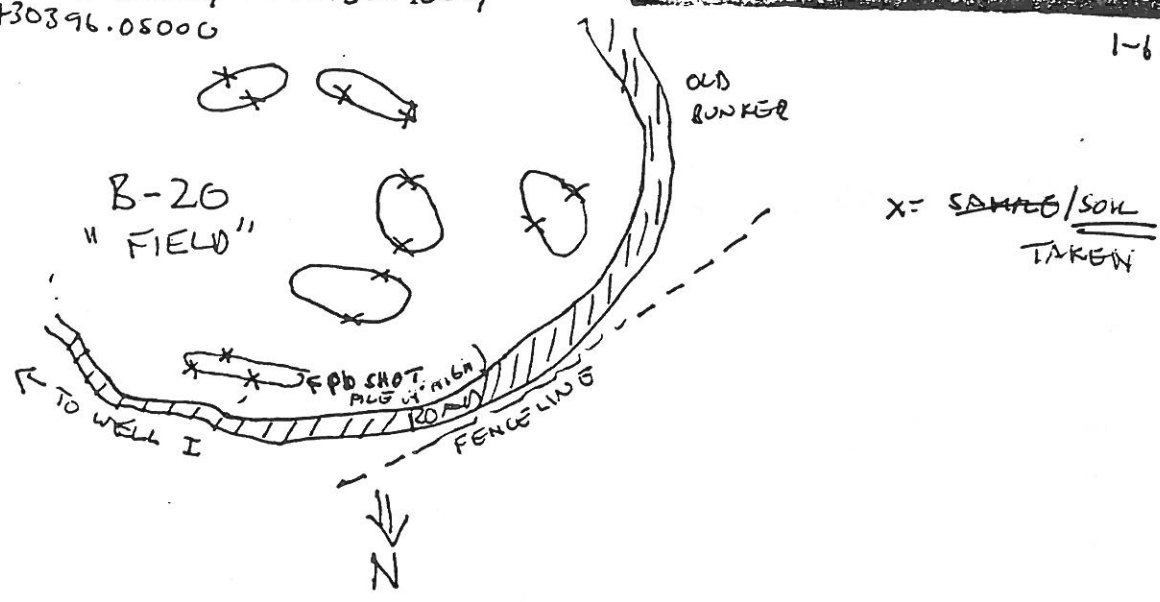
09:40 OX-1-97-A1-4(0-2)

09:45 Sampled effluent  
from Cathode well  
Cl for PCE

OX-1-97-C1-effluent

1500 left side

Yours



- 16:25 CONTAINER #2 - MOUND SOIL COLLECTED, FROM OPEN AREAS AND VEGETATED ZONES.
  - 16:56 WELL 6 263.18' BTOC - NOTE RENTED HAZCO E-LINE BARELY FIT - NUMEROUS BLOCKAGES ON WAY DOWN. WL READING, HOWEVER, CONSISTANT.
  - 17:18 WELL 1 153.21' BTOC
  - 17:30 MEET BRIAN AT WELL 9. UNABLE TO GET CLEAR READING ON E-LINE. REELED OUT (300') BOTTOM 40' HIT POSSIBLY 260' VISUALLY 40' OF E-LINE WET. TEST E-LINE WITH CONTAINERIZED WATER, RECEIVED GOOD SOLID READING USED THAT SETTING
  - 18:00 NO READING +300' BTOC, PUMP AT WELL 9 IS RUNNING TOM TIARINO AND
  - 18:19 WELL 9 393.5' BTOC - BRIAN MURPHY, PUMPING WEL
  - 18:25 WELL 11 291.55' BTOC - NON-PUMPING, WATER DRAWING INTO SUMP DUE TO SATURATED GROUND
- CSSA 600' E-LINE USED FOR WELLS 9 & 11
- BRIAN MURPHY AND TOM TIARINO E-LINE WELL 11 - LOST END OF E-LINE NOTE WELL 11 HAS SEVERAL OBSTRUCTIONS, POTENTIAL HANGUPS FOR E-LINE.
- 17:05 AFTER GETTING WEL FOR SAMPLES DEPART CSSA.

9800

08:00 ARRIVE CSSA

- COVER FOR DRUMS, BOLLARD FOR NITROGEN CYLINDERS, HOORUP AT 16.
- WL FOR PHONE CALL FROM KEN RICE

- 24 SAMPLES / 18 QA/QC

UPPER MID LOWER  
OBS - 1.5-3.0

(7130) Cr, Cd, PCE

ANODE - CATHODE, CONTAMINANT PROFILE  
IDW - CAN SAMPLE OR THEY (LYNTECH) CAN.  
NOTHING OUTSIDE THE SITE.

1-405-732-9803

DISCUSSION WITH  
KEN RICE  
OVER PHONE.  
SAMPLING PLAN  
FAXED TO  
CSSA

09:30 LYNTECH ARRIVES

TRENCHING DISCUSSION

AGREE WITH TOM SUGGESTION 1 LENGTHWISE / ONE DIAGONAL  
TWO LENGTH REDUNDANT BETTER RES. WITH DIAGONAL  
GREATEST DISTANCE TOO TO DISTURB AFFECTS.

\*12:00 RAIN, LIGHTNING BREAK FOR LUNCH

RAIN LIGHTNING CONTINUE, AGREE W LYNTECH. SAMPLE TOMORROW  
DUE TO CONDITIONS, FILL OF TRENCH WITH WATER AND SLOPE  
DISCUSS WITH BRIAN.

GO TO TAKE WATER LEVELS AND COLLECT 8-20 SOIL SAMPLES.

15:35 RADIO CONV. WITH BRIAN M. SAYS LYNTECH WANTS TO  
TEMPORARILY RESCHEDULE SAMPLING FOR FRIDAY. AGREE  
BASED ON WATER, TRENCH FILL AND RAIN FORECAST.  
SAID COULD MAKE IT BACK OUT FRIDAY.

15:45 WELL I 271.72' BTUC

16:05 COLLECT SOIL FOR TREATABILITY STUDY FROM (SEE SKETCH)  
3 SHOT PILES. COLLECTED FROM 3 CONCENTRATED AREAS  
WITH VISIBLE SURFACE EXPRESSION IN CONTAINER #1

NO RECORDS

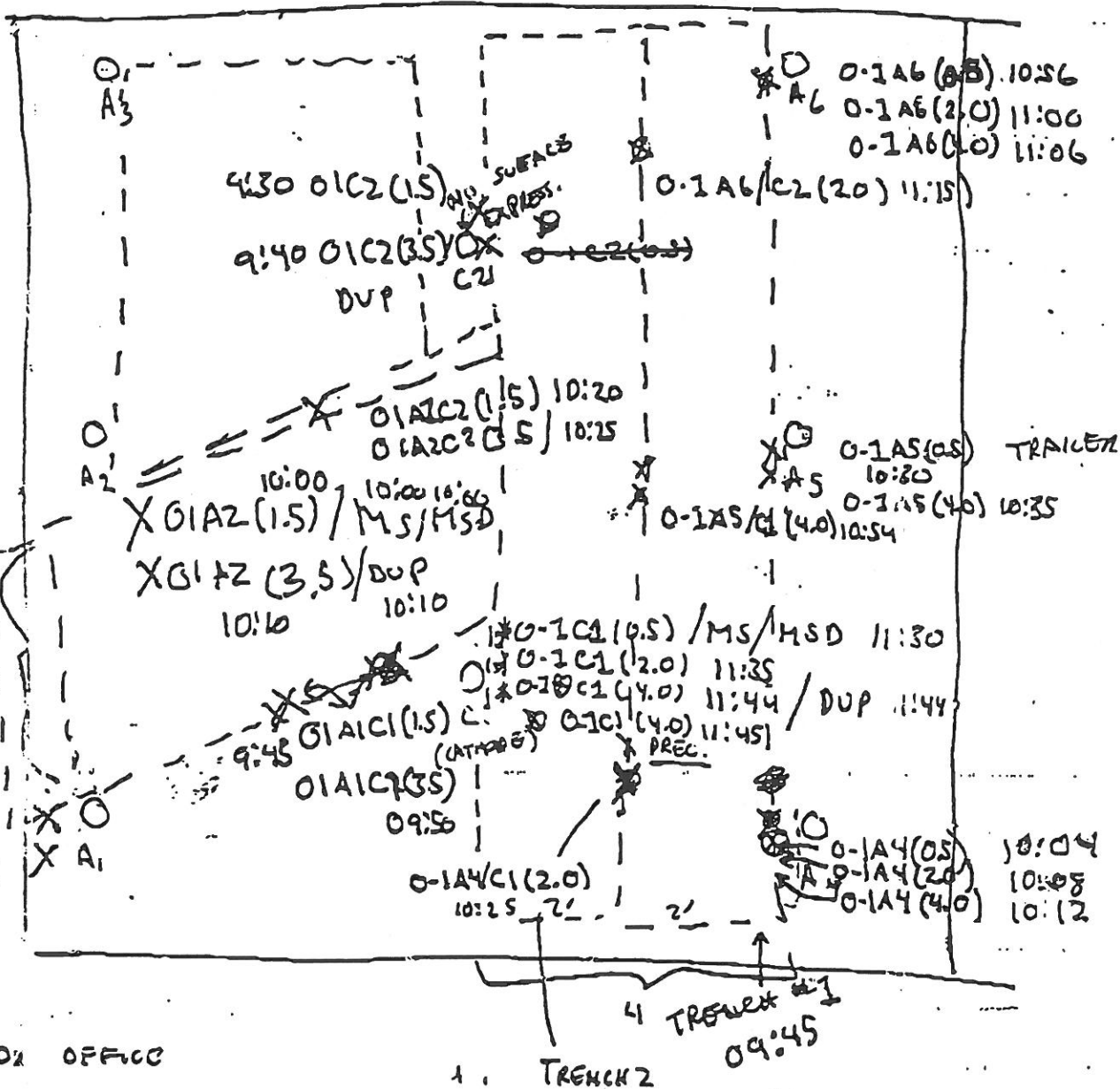
0-2 A-4 ( )

BLACK-

WORK PERFORMED

WATER CHARGE.

1-8-98



1030 01A1(1.5)  
 1035 01A1(3.5)

C = CATHODE  
 A = ANODE

LYNTECH / TOH PULLING SAMPLES ADJACENT ONE ANOTHER  
 \* 1/2 SOIL, 1/2 PRECIPITATE PRECIPITATE RINGS OUTSIDE OF WELL PACK. PRECIP WELL DEFINED  
 PRECIP, WHITE, 6-7 IN 2" FROM CATHODE

CLEAR AND COLOR-WARM

08:00 ARRIVE AT CSSA, STOP BY BRIAN MURPHY'S, RECEIVE MSD'S (ANALYST) FOR SEDIMENT SAMPLE TO BE TAKEN FOR CSSA.

(MODIFIED) SAMPLE TRENCH, DRUM (ANODUS), DRUMS OF OVEREXCAVATION IF PERFORMED, CSSA SEGMENT.

|                                       |   |   |
|---------------------------------------|---|---|
| SAMPLES TAKEN 18<br>(INCLUDING QA/QC) | / | SAMPLES TO BE COLLECTED 14<br>(INCLUDING QA/QC) |
|---------------------------------------|---|---|

09:30 TOM ROBBERS FROM LYNTECH ARRIVES.

DISCUSSED EFFLUENT BARREL - PARSONS WILL TAKE SAMPLE FOR WASTE CHARAC., LYNTECH ALSO ALREADY SAMPLED. - BARREL LEFT FOR CHARACTERIZATION PROCEDURE TO SITE

CLINTON INITIALLY ASSISTS WITH BACKHOE, DOUG TAKES OVER.

SAMPLE COLLECTION IN ASSOCIATION WITH LYNTECH

10:15 DISCUSS OVEREXCAVATING WELLS WITH DOUG. AS PER DISCUSSION WITH KEV RICE. WILL CHECK W/KEVIN REGARDING BARRELS. LYNTECH CLEANS UP DEPARTS (TOM ROBBERS)

12:00-13:00 LUNCH

DOUG (CSSA) PICKS UP SIX BARRELS FOR WELL OVER EXCAVATION (CAVATE AREA OF WELLS (CATHODE AND ANODE) LOAD IN BARRELS FOR TRANSPORT TO BURNING 87 (HAB MAT) AS PRESCRIBED BY BRAN

14:20 FILL IN PIT (AS DISCUSSED W CSSA) AFTER EXCAVATION SAMPLE DRUMS WHILE DOUG SMOOTHS OUT PIT

- 14:30 DRUM 1 — DRUM # 1 W SHARPER
- 14:35 DRUM 2 " \_\_\_\_\_ "
- 14:38 DRUM 3 " \_\_\_\_\_ "
- 14:46 DRUM 4 " \_\_\_\_\_ "
- 14:42 DRUM 5 " \_\_\_\_\_ "

14:45 DRUM 6 "

14:56 DOUG LEAVES W DRUMS WILL MEET HIM AT  
BUILDING 87 (HAZ MAT. STORAGE)

LOAD DRUMS INTO BUILDING 87, DRUMS LABELED.  
MURPHY PRESENT.

16:00 SAMPLE AQUEOUS EFFLUENT DRUM AT C-1, PH 4.

4 VOAS W HCL / 1 500 ML PLASTIC W HNO<sub>3</sub>.

CHECK B-20 / EXCESS DIRT

16:40 CHECK DRUMS AND LABELS FOR GROUND WATER.

WX RESIST LOCKS FOR MW2, D

FIX CAP FOR WELL 16

~~DRUM SEALING RINGS~~ REMOVE TO BUY 30 GAL POLYPROP DRUMS

DISCUSSED W BRIAN PLACE DRUMS PRIOR TO MONITORING AND

PICK UP FOR STORAGE AFTER EACH EVENT.

18:30 DEPART CSSA