

18

⑧

4/11/91

Neil Scott run logger

NOTE: GEOMATIC LOG for

Gm-12-I is drawn

on p. 154 of Vol. 2

Depart site 1700 hrs.

~~J Singer, RGC~~

⑨

4/2/91

Tuesday APRIL 2, 1991

WEATHER CONDITIONS

TEMP: 38°F, CLOUDY

WIND: S-SW 6 MPH

FORECAST: TO 50°

possible showers

PERSONNEL ON-SITE

AL TAY

BOB DEVINE JR

} DELTA

NEIL BENOWITZ → GSA

JUDY SINGER → YEC, INC

4/2/91 Jingen

4/2/91 Jingen

0650 Larive @ Bldg. Staging area to steam clean. Mail goes for coffee badge for day. Proceed for drill crew. to location 12

0840 Al to concrete valve box @ 6m-13-I. Bob stem clay.

Al Tay & Bob Devise in utility truck. I discuss w/ them the work plan for today "Steam & Beam"

0910 Go to call J. Barnes (report hole progress)

Mike Pellegrino will not be on-site today. Scott B. is @ a funeral today for 2nd cousin.

1000 Return to decon area. Drillers loading up sand (Moire) 18" & augers onto flat bed

0730 Nail Benovity on site. substituting for Scott. grad. 0745 Move flat bed & utility truck to decon -

" Call Chris later; go to Xerox

4/2/91 Jingles

4/2/91 Jingles

1030 Neil & Judy follow drill crew to location 12. 1135 Rig motor turned on

Crew goes for water tank fill - up of runway, augers (reaming hole) for Gm-12-I

1110 Return to location preparatory to 4" diameter well construction

1120 Neil setting up OVM on table nearby 1305 Go to Bitchpage - Plainview P.O. To

Weather is better, mail materials to YEL, Temp: 48° F go up vehicle, return to site

Wind: W 13MPH SKY: PARTLY SUNNY 1330 to 50' by w/ 8" diameter

1130 Drillers are setting up 1350 to 65' diameter 1400 to 70' diameter 1410 to 75' diameter

14) Jurgens 4/2/91

Neil goes to office (GM)

Neil has periodically

checked borehole with

CNM. No response

for Volatile organics.

1415 Drillers lower

derrick & reposition

Neil

1420 Add 2 more 8" d

Auger flights

1500 Drilled to 97.0' hg

1530 Depart site

~~Jurgens, RFG~~

15)

Jurgens 4/3/91

WEDNESDAY April 3, 1991

WEATHER:

TEMP: 40°F sunny

WIND:

FORECAST: to 50s, 60sF

PERSONNEL ON SITE

AL TAY } DELTA

BOB DENNE }

SCOTT GLASH → GM

JUDY SINGER → YES Doc

| | | | |
|-----------------------|---|--------------------------|------------------------|
| 11 | Jungo 4/3/91 | Jungo 4/3/91 | (15) |
| | Neil goes to office (GM) | WEDNESDAY | April 3, 1991 |
| | Neil has periodically checked borehole with CNM. No response for Volatile organics. | WEATHER: | TEMP: 40°F sunny |
| | | WIND: | FORECAST: to 50s, 60sF |
| 1415 | Drillers lower dump truck + reposition rig. | PERSONNEL ON SITE | |
| 1420 | Add 2 more 8" auger flights | AL TAY } BOB DEVINE } | DELTA |
| 1500 | Drilled to 97.0' bg | SCOTT GLASH → GMK | |
| 1530 | Depart site | JUDY SINGER → YESL Ave | |
| Jungo, RPG | | | |

(16)

Jingon 4/3/91

Arrive Bldg 16 0705
 Begin to obtain daily
 bulge data to location
 12 Al. v. Bol preparing
 screen sand ground
 etc. Plan for well is:
 Screen setting 106-116
 Drill to 117'

S.G. advises that Delta
 well not be drilling on
 Friday.

0815 Go to call Chris M.,
 He & John not available;
 left message i Margaret;
 Called Ed Chen, home
 & hotel to stay another

Jingon 4/3/91

(17)

note. Return to "12"
 0908 Miller on breakfast
 break. S.G. leaves
 site.

NOTE: Ed Chen said ACES
 Ken Libwin sent 4
 large coolers to YEL Inc.
 for future groundwater
 sampling. Coolers
 will contain all bottles
 for soil & water sampling

Ed has plenty of the
 small coolers which
 are just right for shipping
 the soil samples

| | 4/3/91 | Jelinger | 4/3/91 | Jelinger | (19) |
|------|--------|------------------------|--------|---------------------------|-----------------------------|
| (18) | 0915 | Drillers | | | |
| | | resume work building | 0955 | + 10' riser | |
| | | w/ large bailer | | + 10' " | |
| | 0925 | setting screen | 1000 | + 10' " | |
| | 0930 | + 10' riser | | | |
| | 0935 | " | | | NOTE: Earlier Scott G. |
| | 0940 | + 10' → trouble | | | said o/m has shown |
| | | threading on, replaced | | | no responses from |
| | | this length of pipe | | | last Wed, Thurs, Fri, & |
| | | in another one | | | Mon of this week |
| | 0945 | + 10' riser | | | |
| | 0950 | " | 1002 | Bob pouring | |
| | | S.G. goes in Delta | | Gravel 1 bucket (4.5 gal) | |
| | | truck to get more | | Pull 1 auger | |
| | | Riser | | Add 1 bucket | |
| | | + 10' riser | | | NOTE: Mike not here today |
| | | + 10' " | | | 1 Bag gravel = 2 bucketfuls |

fuel 1 auger
 2 buckets sand added
 for sand seal
 1015 called Chris on
 car phone. He rec'd
 message re. short
 work week. He'll
 plan to come down
 tomorrow anyway,
 actually leaving today to
 be on site @ 0700. Call
 him again before depart
 1030 Preparing grout
 Scottie's "helper"
 for Al + Bob
 Bob is on tub
 Al on pump
 Scott @ backhoe &
 shoveling

Grouting
 1/2 tub pumped per
 pumping period
 1120 5'5" of auger out
 Spas on well
 GM-12-I
 Screen 116 to 106
 Gravel 116 to 101
 Sand Seal 100 to 96.5
 Bentonite 96.5 to 92.0
 Grout Content 92 to ~3.0
 1145 Bob starting to
 mix 3rd tubful
 of grout

(22)

4/3/91

Jungen

noon go for drinks
for crew; return

1205 105' auger out

GM-12-I

1215 last auger out

1220 Scott leaves for
lunch.

1225 Bob mixing
4th tubful of grout.

1230 to hotel call

Chris not available
Speak w/ Jan B.

Januel may not be

Possible but

Check out of hotel

4/3/91

Jungen

(23)

! onway. Return to
site 1300.

! Drillers cleaning
! up preparing to move
! back to decon area

1355 Al, Bob, Scott

! drive to decon area
! w/ rig, utility truck,
! flat bed w/ augers

! 1400 Bob off-loading
! 8" augers for steam

! cleaning. He will
! also steam clean
! rig.

(25) 4/24/91 Ch. MS-

7:00 ARRIVED AT PLANT AND CHECKED IN AT THE SECURITY BUILDING,

7:20 MET AL TAY AND BOB DEVINE AT THE DECON AREA

7:19 AFTER A FEW WRONG TURNS ARRIVED AT SITE OF BM-12-S

7:40 SCOTT GLASS (GM) DRIVES UP

(22) NOT 4/3/91 Janger
 1405 S. G. Leanes site

1205 1430 Crane truck here to deliver supplies
 (Monitor well construction Diagram for 6m-12-I)

1215 8.156 Vol. II Log Book

1220 1500 Depart Site

1221

1222

1231 Janger

~~F
K
C~~

(26)

WEATHER - SUNNY + WARM

8:20 DRILL RIG IS SETTING

UP ON QM-17-S

ATTENDANCE

SCOTT BLASHN - COM

AL JAY - DELTA - DRILLER

BOB DEVINE JR - DELTA

12 8" ID AUGERS ARE ON

THE SPLIT TRAILER

AND 5 FEET OF

3/4" ID MUD

8:40 AT IS DRILLING

W/ THE 3/4" ID AUGERS

SCOTT SAYS 7 SOIL SAMPLE

WILL BE TAKEN 20-22'

8:50 DRILLERS BRING FUN

COFFEE

9:05 DRILLING RESUMES

9:38 SOIL SAMPLE COLLECTION

FROM 3" SPLIT SPOON

20-22' SG. IN QM-12-S

~~2' RECORDED~~

TAN F TO VE SAND SUB AUGER

W/ MUCH MUD RECORDED (MUD)

AND SOME W/EN NO. 12 IN CORE

(27)

SAMPLE IS DRY

(88)

GM-12-5 (20-22)
HNC = 0.2 ppm

2x 40.0g VOA AND
 2x 80g CLEAR GLASS
 WIDE MOUTH JARS W/
 PLASTIC TOPS IF CLOSED
 ANALYSIS WILL BE
 FULL TCU/TAL
 AL AND BPS ARE PUT IN
 UP THE SAME NUMBERS
 1.07 FIELD JARMS
 TAKEN FROM SOLY SPOON
 USED IN SAMPLING
 3x 40.0g VOA
 1x 1g plastic w/ UNID
 1x 1g " " NOID
 1x 1g " " UNPRESERVED

(89)

3x 1g Amber Glass UNPRESERVED
 DUMPS WILL BE ANALYZED
 FOR FU TCU/TAL +
 HEX CHROME
 THE BLANKS WERE COLLECTED
 BY POURING WATER THAT WAS
 SUPPLIED BY THE LAB OVER
 THE DECONTAMINATED SPOON
~~WATER~~ AND MIXING
 SPATULA AND INTO THE SS.
 MIXING BOWL THAT HAD
 ALSO BEEN DECONTAMINATED
 THEN POURING IT INTO
 THE SAMPLE BOTTLES
 THE SAMPLING RESULTS

(30)

HAD NOT BEEN ALLOWED
 TO FULLY AIR DRY
 AFTER ~~DRYING~~ DRYING
 AND BEFORE SAMPLING
 THERE APPEARED TO BE
 TRACES OF SOAP SUDS
 ON THE SURFACE OF THE
 BLANK WATER IN THE
 S.S. BOWL BEFORE
 IT WAS Poured INTO
 THE BOTTLES. I BROUGHT
 THE SUDS TO SCOTT'S
 ATTENTION AS HE FILLED
 THE VOA VIALS.

(31)

10:30 AL IS BORING IN
 THE 8" ID AUGERS DOWN THROUGH
 THE 3/4" ID AUGER HOLE
~~FOR~~ AND TO THE COMPLETION
 SOME I THINK HE'LL GO
 TO 55 OR 60'
 11:01 BORING TO APPROX 55'
 (55' AUGER PLUS BIT) 10' x 4"
~~SCOTT~~ SEND 40 10 SLOT PVC SCREEN
 (CUT SLOTS, NOT WOUNDS) APPROX 4"
 SEND 40 RISER AIR BEING
 INSTALLED. INTERFERS
 A SEDIMENT TRIP ON THE
 BOTTOM OF THE SCREEN
 (APPROX 4")

(32)

11:25 SCREEN HAS
SCREEN SET AT 55' TO 45'
DRILLERS ARE ADDING
MORE GRAVEL 2+3 (SAND)
FOR FILTER PACK

11:39 GRAVEL UP TO 39.5'
20' of AUGER REMAINING
BARGE FOR LUNCH 11:45 RETURN TO
SECURITY BARGE TO MAKE CALLS

12:45 35.5' TO TOP of ENVIE
SAMP
DRILL CREW RESUMED WORK
7 12 20

(33)

12:50 15 yd of 100%
Bentonite/water slurry
placed on top of
fine sand

1:21 AM 12-5 has been
grouted to within 10' of the
surface. All the auger has
been removed. Security barge
site to make phone calls.

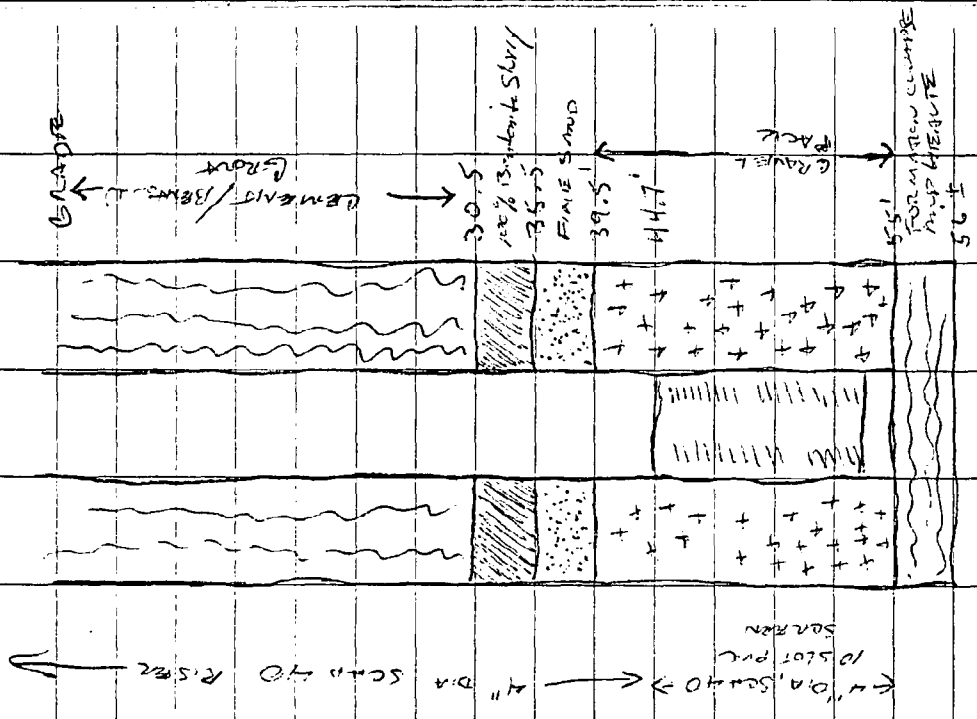
1:27 AM 12-5 has been
grouted to within 3'
surface w/ cement/bentonite
grout.

35

1-10 DRILL RIG
 BREAKING DOWN.
 C14-12-I has been
 grouted to within 3' of
 the surface.
 The grout in C14-12-S
 is filling.

2.16 Scott Lenses out

2.30 AL and Bob are taking
 off ground. Wells will
 be secured w/ lockable
 caps and overboard
 barrels.



34

36

2:35 DROPPING TMS BOOK
OFF AT JAMULEN, ITS
TIME TO KIRKIE PROVE CALCS
AND GO HOME. - Ch. 91

4/18/91

Ch. M.J.

37

ARRIVED AT THE SIDE @ 7:00
SIGNED IN AT SECURITY BLDG
AND MET THE GUYS IN
THE DECON AREA.

7:25 57°F, SUNNY, WIND CALM

SCOTT GLASH - CFM

MIKE PILLGRIND - DECON

BOB DEIVINE JR. - DELTA

SCOTT SAYS AL JAY MAD

MECHANICAL TROUBLE ON

THE WAY OVER (BROKEN SEET)

AND HAD TO RETURN TO

THE YARD SO GET A

38

FIXED. MIKE AND BOB TOOK
 DOWN TO GET WATER
 THE RIG AND DOWN HOUSE
 EQUIPMENT NEEDED TO BE DECONTO
 BECAUSE THEY WERE USED
 AT AN OIL SPILL SITE
 IN GREAT NECK ON
 FRIDAY AND SATURDAY
 (04/05 and 04/06)

8:45 Mike and Bob have been back
 for some time now. They
 are not passing steam
 days off because Al
 has the steam jenny
 with the pick-up and
 hasn't arrived yet

39

10:20 AL TAY ARRIVES
 W/ THE SUPPORT TRUCK
 FORD PICK-UP
 10:50 DRILL CREW IS BEGINNING
 TO STEAM CLEAN. IT'S COMING
 SLOWLY DUE TO TROUBLE W/
 THE STEAM JENNY
 (IT SOUNDS LIKE THE SURVEIL
 KEEPS CUTTING OUT)

11:03 STEAM JENNY FIXED
 BOB IS CLEANING THE
 rig

11:45 - 12:30 lunch

(40)

12:45 - Bob is steaming off
again. Al and Mike are
in the above. The casing of
the GM-12 will so they will
be stuck with 3 rods when
finished

1:20 I leave GM-12 to make
phone calls

1:30 Return to GM-12. Mike
is gone, Scott & Al are there

1:50 DRILL RIG SET UP AT
GM-13D. 47 THIS TIME
ONLY A TEST BORING WILL

(41)

be done. The borehole will
be grouted to the surface
after it is completed.

1:58 Scott has dug 4 ft

2:05 Scott returns w/ sample

2:10 Mike & Bob return w/ samples

2:15 Begin to bore through
concrete at GM-13D

GM-13D

2:24 TOP 10" ARE CONCRETE

(42)

2:28 10" to 2' 10" 3" spoon
 6-8 15-17
 1.5' Recovery. Browns
 F to VC sand, subangular
 much F well rounded gravel
 0.2' layer of VF to F black
 s-6 by sand ~~(F to F)~~
 (sandstone) 1" bottom
 of spoon. MNU = 0.1 ppm
 Sandy zone = 0.8 ppm on MNU
 Bone hard = 0.0 ppm "

2:47 10'-12' 20-50 35-40
 1.8' Recovery
 Top 0.3' ~~is~~ + grey
 crushed concrete w/ broken

(43)

cobbles (by dipnet)
 bottom 1.5' Tan F to C
 sand, subangular w/ much
 F well rounded gravel.
 MNU = 1.6 ppm
 MNU of boulders at 20' = 0.0 ppm

20:22 21-34-10 -
 1' Recovery Tan F to M
 sand, subangular, trace
 sand, Much F well rounded
 grain w/ trace cobbles well
 rounded.
 MNU 1.7 ppm
 MNU in boulders at 30' = 0 ppm

(44)

3:27

MAGNET FOR MAPPING?

30-32 16-26 CH NO

2' RECOVERY

Top F to C sed

sub rounded sand,

+ some VC sand, well rounded

0.5' layer of Tanish

gray silty clay in the

center of the spoon

Trace of lignite. HNU = 0.6ppm

3:38 AT ABOUT 33 to 34' B.C

Cuttings are coming up Black Red

VE to F will round sand w/ trace

M will round sand

HNU of cuttings = 0.0ppm

(45)

3:59

40-42

39-41 SD-7C

2' Recovery 1-eyed

Top 0.5' Orange Brown

F to M will round sand

0.3' to gray UF

well rounded sand of

trace lignite and some

m. in (Muscovite)

Bottom 1.2' interlayered

gray and 1/2 brn

1/2 to M will round

silty sand. HNU = 1.6

4:00 Cuttings at 45' core

dark brown F to C, will round,

silty sand, v. moist,

(46)

~~50~~

4:18 AC IS DOWN TO 50'
 BUT THERE IS 4' of HEADUE
 IN THE HEAD AUGER (HE'S BELOW
 THE WT) HE'LL BOIL THE
 HEADUE AND SAMPLE W/ A
 2" SPOON TOMMORROW. ALL
 SAMPLES TAKEN TODAY
 WERE WITH A 3" SPOON.
 SCOTT IS CLEANING THE
 3" SPOON & TAKE A FIELD
 BLANK.
 THE FIELD BLANK WILL BE
 COLLECTED BY POTKINE
 DROPPED WATER OVER DE-CON
 SAMPLING EQUIPMENT

(47)

AND COLLECTING IT IN A
 DECONTO COMPRESSING
 BOWL (S.S.) THEN POURING
 IT INTO THE SAMPLE BOTTLES
 4:35 TAKE NO TO 42' SAMPLE
 IS GOING TO BE SENT IN FOR
 LAB ANALYSIS (FULL TEL)
 2 X 40 mL AND 2 X 8 OZ WIDE MOUTH
 GRABS w/ plastic tps were
 filled when the spoon
 was opened. The
~~sample~~ field blank has
 been collected & is
 being packed for shipment
 to the lab.

(46) (48)

4:55 left the site

4/9/91 Ok Ms - (49)

Signed in at security Bldg #7.15

Arrived at site of GM-13D

approx 7:32. Dolt was in process. Al was building out the hearth that was left in the original last night.

ATTENDANCE: SOME MS FERTILITY

GM-13-D cont.

7:45 50-52 10-25-35-30

1.0 RECORD

1/4 tanish grey M40E

Site irregular sand, well sorted

1" layer of grey clayey sand in bottom of spoon

(5)

SCOT took an ANU READING
 IN THE AUCER AT 8'136
 WE SAID IT READ 0.0 ppm

9:50 80-82 C-15-25-40
 2' Recovery
 Top 1' Wash
 Bottom 1' Co gray VIF to F
 sand, base M, sub rounded to
 rounded fl. by will sorted.
 Two more (1/2") streaks
 of clayey sand 0.5'
 from bottom of spoon
 ANU = 0.4
 BOREHOLE ANU at 10' = 0.0 ppm
 BOREHOLE ANU at 20' = 1.0 ppm

(50)

SCOT says Al measured
 water in the auger at
 42.5' BC ANU = 0.4 ppm
 ANU of cuttings at 60' = 0.0 ppm

8:17 60-62 27-42 50-47
 1.5' Recovery

UTAH GREY VIF TO F SAND, SUB ROUNDED
 NEW SAND 1/4" LAMINAR
 OF OR GREY (1/8" FE) NEAR
 Top of spoon ANU = 1.6

8:50 70-72 29-60 100/4
 Lt. Orange Tan M to C
 sub to well rounded sand more
 poorly sorted than above
 ANU = 1.2 ppm

(52)

10:31

1.5' recovery, TAN VERTIC SAND
SUBROUTED HNU = 1.2 ppm

SCOTT MEASURED TUBE INSIDE
TUBE NUMBERS WHICH THEY WERE
AT 100' AND GOT NO RESPONSE.

W/SD "NORMAN" FROM DETA BRINGS SAMPLES

11:05

100-102 6-8-25-20
TAN TO TANNISH GREY, VERTIC
F SAND, MINOR LAMINATIONS
(STRAKES) OF SANDY CLAY. ~~SAND~~
TRACE SILT. HNU = 16.8

(53)

11:10 left site of GM-13-D to

make telephone calls

1:37 returned site GM-13-D

11:45

110-112 17-21-21-41

1.8' recovery

Top 0.2' Greyish Tan clay

0.6' TAN VERTIC SAND

TRACE SILT

BOTTOM 0.6' L. CLAY VERTIC

Sand w/ some silt minor

Lamination of orange

sandy clay and black

sandy clay brown

bottom HNU = 3.8

(55)

(54)

| | | | | | |
|------------------------|---|-------------|-------|------|---|
| DRILLS BLOKE FOR LUNCH | 17:00 | | | | 0.3' LT GREY, ORANGE AND |
| AND RESUMED WORK | 12:30 | | | | DIC GREY LAMINATED |
| 120/56 | SCOTT MEASURE GETTING W/ HNU=50 BREATHING SOME HNU=6 | | | | SANDY CLAY |
| 1:00 | 120-122 | 29-31-33-34 | | | 0.6' LT GREY W/ F. BLATIEY |
| | 2' RECOVERY | | | | SAND |
| | LT GRAY W/ SAND W/ SOME SILT AND SOME CLAY | | | | BOTTOM 0.2' BROWN, DARK GRAY |
| | LAMINATIONS OF ORANGE AND BEIGE SANDY CLAY | | | | AND ORANGE LAMINATED |
| | HNU = 3.3 | | | | F SANDY CLAY |
| | | | | | HNU = 4.6 |
| | | | | | 2.50 AL TAY WEARES SITE of CM-13-10 |
| 2:01 | 130-132 | 8-25 | 20-25 | 2:43 | 140-142 |
| | 1.8' Recovery | | | | 23-48-52-55 |
| | TOP 0.2' BEIGE GREY CLAY | | | | 2.0' Recovery |
| | 0.5' LT GRAY CLAY | | | | TOP 1.5' LT GREY CLAY |
| | SAND | | | | BOTTOM 0.5' ORANGE BROWN |
| | SPIDER | | | | F SAND W/ HNU ROUNDER, well sorted, HNU = 2.8 |

(56)

3:45

150-152

14-34-34-4A

2.0' RECOVERY

TOP 0.5' BROWN F

SAND WELL ROUNDED

w/ TOP 1" LAYERS OF

LT GREY CLAY

BOTTOM 1.5' LT GR

YF SAND w/ TRACE CLAY/SILT

AND SOME MICA (MUSCOWITE)

MNU = 18 ppm

4:00 AUGERS TO 160' B6

MNU IN BOREHOLE ~ 0.0 ppm

(57)

4:51

160-162

20' Recovery

LT GRAY YF SAND w/

TRACE SILT & CLAY. A FEW

LAMINATIONS OF ORANGE SANDY

CLAY. 3 THIN LENS (21")

of GREY CLAY MNU = 4.8 ppm

5:00 ~~160~~ AUGERS TO 170'

MNU IN BOREHOLE = 0.0 ppm

5:00 MIKE IS BAILING THE HEAVY

OUT OF THE AUGERS AT 170' B6

(ABOUT 4') HE SAYS THEY

NOT TAKING ANOTHER

SPLIT SPOON SO IM LEAVING - 0 PM

(58)

4/10/91 J. Linger

WEDNESDAY April 10, 1991

TEMP: 68° F sunny few clouds
WIND: WEST 8 MPH
FORECAST: High of 72° F
I arrive 0800 @ Bldg 16
Sign in, outstanding badge

Personnel On Site

Al Tary }
Mike Pellegrino }
Bob Deane, Jr. }

Delta
well-ramp

Scott Glad → 800

Judy Linger → 400, Inc

see p. 69 for 170-172 interval
description

(59)

4/10/91 J. Linger
@ Location 870-13-D

0900 45/45/50/60

180-182 Rec = 2.0'

2" spurt 3:00pm
Wet layered (1-3")

multi-colored SAND

yellow, buff, lt brown,
tan few lt gray to
gray laminae @ 181'

Grain: large in
medium and fine SAND
little to trace very fine

sand; Mod. Compact

No rock frag. few

lt gray clayey fine

sand streak @ 180'

in the lt brown mft sand

| ② | 7/10/91 | Jürgen | 4/10/91 | ② |
|---------------------|----------------------|-----------------------------------|-----------------------------|--------------------------|
| ODOR | FROM HOOPER | | | |
| Noticeable | (Chemical) | | Σ @ 42.5' in GM-B-D | felt test borehole |
| Considerably | from yesterday | Reports 'ambient' | OVM download reports (S.G.) | |
| Scott G. | reports ranging | from 0.6 to 1.4 ppm (at borehole) | No readings from 4/9/91 | |
| 0910 | Bob went for coffee | | Baseline for OVM (ppm) | 0.4 @ distance |
| 0920 | | | | 0.8 @ borehole |
| Rec. = 1.0' | Amu = 5 PPM | | | |
| 170 - 172.5' | 20/55/100 | 100S | Hammering @ 190' | |
| Wet Lt. brown | SAND | | 190' - 192' | 10/29/90/62 |
| medium to fine | trace rock fragments | trace discoloration | Rec = 2.0 Amu = 3.0 | |
| trace discoloration | from stone | sandstone | Most multi-colored | SAND, fine to very fine; |
| | | | little to trace medium | sand; tan, to brown, |

(62)

Junges 4/10/91

orange buff, to gray layers, 1" to 2", few laminae, distorted

of rusty iron-stained f. SD; one 1" zone of brown silty clay @ 191' & this zone appeared almost dry

Shear two med. grain-sized sandstone rock fragments.

1030

Ambient H_2O = 1 PPM

@ borehole also 1 PPM

1035 Sand baking

1045 "

Junges 4/10/91

(63)

1110 Hammering 200'

200-202' 12/20/87/80
Rec = 2.0

$K_{sp} = 5.8$ PPM

Two wet tan SAND, fine; little medium

sand zone top x bottom 6"

Middle zone is gray clay interbedded with fine

sand tan & gray, & orange

some very fine sand

4-6% silt somewhat

Contacted sl. damp to dry

very compact & cohesive

7/10/91 Jorgens
Colors are

tan, buff, orange-red,
white, dk brown, dk
gray & black.

Few clay streaks;
zones of laminae
& beds of sorted sands
interbedded with few
clay laminae

1330 Mike & Bob to

get water for boiling
procedure AL
Joins them S.G.
also goes to call

1355 Crew returns
w/ water tank filled

7/19/91 Jorgens

Ambient Air = 0.6 ppm
Borehole = " "

1145 Drillers break LUNCH

1215 Resume work
Bailing @ 210'

1300 Hammering @ 210'

210-212' 20/50/60/83

Rec = 2.0

Nm = 5 PPM

Moist layered multicolored
SAND, fine & medium;
little coarse sand;

| (66) | 4/10/91 | Jinger | 4/10/91 | Jinger |
|------|--------------|---------------|--|--------|
| 1415 | Bailing | S.G. phone | smears in sand | (67) |
| 1440 | Set rods for | 220' | Parts of sand are compacted & nearly dry, other is looser and wet. | |
| 1500 | | 220 | <div style="border: 1px solid black; padding: 5px; display: inline-block;"> Hmu readings (ppm) 0.8 = ambient air 0.0 = @ borehole </div> | |
| | Rec = 2.0' | Hmu = 4.6 PPM | Color is not as variable, only yellow & tan & so. gray. (the clay silts) | |
| | 220 | 19/29/39/80 | 1510 S.G. off-site | |
| | Rec = 2.0' | Hmu = 4.6 PPM | 1530 " return | |
| | 220 | 19/29/39/80 | 1545 Tr. to make call | |
| | Rec = 2.0' | Hmu = 4.6 PPM | @ Bldg. 16 | |

Variably wet to damp
 yellow & tan SAND,
 fine to very fine.
 Has medium sand
 in part layered in
 1/8 to 1/4" laminae
 few thin clay seams

(69)

Jungkun 4/10/91

rock fragment.

- o call Chris tomorrow
- o Soil gas will use manual air

16:20 Railing borehole

Sunny. Brist wind from West, 10 MPH; gusting to 23 MPH.

- o On deep wells mud will be used to depth 30' above screen zone & then washed out.

1645 S.G. to phone & meet Art

Jungkun 4/10/91

1550 call J. Barner

- o methodology is approved for deep wells John mailed to Jill, she for me.
- o He & Susan will be @ Ground for mtgs on 17th & 18th.
- o Soil gas for 2 wells on 15th. CIC 2:30 - 2:32 45/60/60/85

Rec = 2.0'

Num = 3.0 PPM

Damp tan & brown SAND fine to very fine; trace to gray clay seams; trace sandstone.

(68)

Jonger 9/10/91

sand; fairly well sorted subangular to sub rounded few rusty specks (red-brown)

1735 auguring to 250' Bailing

1745 Bull Conroy arrives w/ mail for gamma logging

1810 Still bailing AC setting up tripod for gamma logger

Jonger 9/10/91

I discuss possibility of swapping inspection days w/ John/Chris; i.e., 4/25/91

1700 set rods for 270'

1730 241.5' 270-272' 75/110/130

240-241 Rec. = 2.0 Hum = 3.2 ppm

Wet: lt brown SAND fine; little v. f. SD

a few lt gray clay streaks 241-242

wet yell/orange SAND, coarse; little f/med

July 7/10/91

July 4/10/91

Complete grouting of hole ~ 2145 Hours
 Clean-up site.
 Arthur follows us as we depart Plant site & facility but 18: ~2200 Hours

1830 to 1930 Run
 Gamma logger up & down borehole GM-13-D
 Partial hi gamma counts
 ~ 33'
 ~ 104'

Tomorrow we will proceed to location GM-10 This is a change of procedure to lack of underground clearance for location 14 & 15

Arthur Moss, Gunnman Rep, is on site w/us for late work.
 2 rights on rig. Start grouting borehole w cement grout as augers are retrieved

~~July 14 & 15~~
~~July 14 & 15~~

July 8 - 4/10/91

0855 S.G. leaves to go to office

Work plan to try is as follows:

- Complete Grant GM-13-D
- Obtain Clean rig + auger
- Gravel fill - up at Pookokona due to

long period of rainy morning yesterday

- Mobilize to GM-10 location for one well, GM-10-I.

- Drill GM-10-I

July 8 4/11/91

THURSDAY 4/11/91

Arrive Bldg 16 0800 Proceed to location 13

TEMP. 43°

WIND 13 MPH WEST

FORECAST 57-62° cont.

gusty wind

Persons on Site

Al Tay } Delta
Mike P. }
Bob D., Jr }

Scott G → GM-10

July 8. → yes, Inc

Crew tapping off front which has settled in GM-13-D

(76) 4/11/91

4/14/91

0930 to staging area

ψ measurements

Al takes Sub

1130

Mike back to

4/14/91

Get their cars @

Pre-Development

location 13.

GM-12-T

M.P. = TOP OF PVC CSG

1000 Al leaves for

Roxborough to fill up

T.D. 122.50

utility trucks with gas

ψ

for rig.

48.00 (DTW)

1000 get coffee for

GM-12-S

crew (Bob + Mike)

M.P. = TOP OF PVC CSG

They are steaming

T.D. = 54.20

up, rods + align

ψ

46.52 (DTW)

(78)

Jinger

4/11/91

noon S.G. to lunch

1230 Mobilizing @

staging area to

move to next location

1250 Move to GM-10

location:

rig, flatbed, utility

Delta drill crew

Gott G + Judy S.

minus one off

on Mulberry St inside

Grumman fenced area

1320 Raise rig derrick

Set up sampling

table

Set up OVM

downward

(79)

Jinger

4/11/91

Temp. in the 50's. It is

funny with strong gusty

winds from the WEST

1322 Begin drilling. There

asphalt broken pavement

we are in a fenced parking

lot @ a Grumman Plant

A shallow monitor well

is in place from some

previous investigation

| (80) | 4/11/91 | Junge | 4/11/91 | Junge | 4/11/91 | (81) |
|-------------------------|-----------------|-------------|----------|-----------------------|-------------|------|
| 1335 | | | | | | |
| GM 10-I | 0-0.25 asphalt | 1345 | | | | |
| 0.25 | to 2.25 | Ann Reading | | | | |
| Rec. = 1.7' | 14/22/15/30 | — Backgrd | | 0.6 PPM | | |
| Ann = 0.8 PPM | | — Backhole | | 0.6 PPM | | |
| Dry | | | | | | |
| 1st 1.2' | is 1.0k broken, | 1347 | trimming | 10' | 10/22/23/23 | |
| gray backfill; | AND; | | | | | |
| pebble gravel | C/Vc | 10-12' | | | | |
| in a black silt matrix, | | | | | | |
| very compact | | | | Rec. = 2.0' | 1.7 | |
| @ 2.0' | Change to | | | Ann = 1.0 PPM | | |
| dry pebble gravel, | medium | | | Dry yellow-brown | | |
| to V coarse; | some | | | SAND, medium; | | |
| Cse to med sand; | trace | | | trace rounded quartz | | |
| fine sand; | little | | | fine to coarse gravel | | |
| fine gravel | yellow-tan | | | | | |
| gravel is rounded | | | | | | |

(42)

Jungo 4/11/91

1310

20-22'

16/17/21/23

Rec. = 1.6'

Num = 1.8 PPM

Top 3' SAA (10-12 in dia)

Middle 1.1' dia

dry, tan, loose SAND,

coarse to medium;

some fine to med. gravel;

trace fine sand;

1 cobble, rounded,

pt. zone.

(43)

Jungo 4/11/91

1425

New readings

Background 0.8 PPM

Borehole 0.8 PPM

1430

30-32'

14/19/28/39

Rec. = 1.6'

Num = 0.0 PPM

Damp, tan & buff,
loose SAND, coarse &
Very coarse to medium;
Some fine to medium

4/11/91

gravel; one cobbly
rounded, go zone

1500

auguring

Hum = 2

Background 0.8 ppm

Breakdown 0.8 ppm

1445 Beyond 0.8 ppm

Breakdown 0.8 ppm

1450

40-42'

13/38/34/34

Rec. = 1.8

Hum = 2.0 ppm

1510 Set Node

Humming @ 50'

1512

50-52' 4/30/38/55

Rec. = 2.0

Hum = 2.6 ppm

Damp, loose, buff

SAND, fine, very.

well sorted

split spoon is fully
saturated zone (V < 50')

Sample description on
next page

4/11/91

gravel; one cobbly
rounded, go zone

1500

auguring

Hum = 2

Background 0.8 ppm

Breakdown 0.8 ppm

1445 Beyond 0.8 ppm

Breakdown 0.8 ppm

1450

40-42'

13/38/34/34

Rec. = 1.8

Hum = 2.0 ppm

1510 Set Node

Humming @ 50'

1512

50-52' 4/30/38/55

Rec. = 2.0

Hum = 2.6 ppm

split spoon is fully

saturated zone (V < 50')

Sample description on
next page

(82)

Stenger

4/11/91

40-42' well de
skipped to top for full
TRC + CR⁶⁷ + CN

50-52 sample
description follows:

50-51 saturated
tan f/m SAND
trace VC sand

51-52 Tan & yellow
brown somewhat
layered zones of SAND
sorted fine to
medium one 1"
layers of c/vc sand

Stenger

(81)

few streaked 1 to 2"
layers silty clay
gray-brown w/ black
(lignitic?) streaks;
few rusty zones

1520 Miller finished
Leave for day

1530 Prepare Field Blank
off Split Spoon
spatula & bowl
used for sampling
used lab supplied
water sieves for
CN where we

| | | | | | | | | |
|----|------|---------|---|---|--|--|--|-------------|
| 88 | Jung | 4/11/91 | <p>see out of lab waste & used store - bought distilled water & run through deionizer split good bowl & spout. only for CN split spout used on 50-52 for field blank lab samples</p> | <p>need to finish geologic description of 10-12 well specimens tomorrow</p> | <p>1610 S.G. leaves site & ship samples</p> | <p>1630 J.S. departs site for phone</p> | <p>1645 ~ 1700 call Chris Magle report progress</p> | <p>Jung</p> |
| | Jung | 4/11/91 | <p>Scott packing up samples for field blank & 48-42' interval soil sample</p> | | | | | <p>Jung</p> |

4/12/91

4/12/91

@ J. RINGOLD
 FRIDAY April 12, 1991
 Arrive Bldg #10 0650
 Weather Conditions
 Temp: sunny 38°F
 WIND: 15 MPH
 Gust 35-45 MPH
 Forecast: High to 50's today

 Obtain daily badge, sign in
 Proceed to location 10
 on Madison Ave. off Mulberry
 off Hugel St.
 0700 Personnel Present
 @ GM-10 - T location
 Al Tay
 Mike Pellegrini } Delta
 Bob Devore, Jr. }
 Scott Glass GM
 Judy Ringer JCC Ave

 0800 Bailing ~ 5' leave
 0810
 REC = 2.0
 Ann = 1.0 ppm

 wet lt. brown SAND,
 Coarse; little Very
 coarse sand & fine
 rounded quartzose gravel;
 trace fine to medium
 sand

 0820 Bugging 60 to 70'
 Mike is drilling now.
 Sand-bailing

(93)

7/12/91

7/21/35/51

0830 Hammering 70' to 72'
 1 Badly 0.4 ppm
 1 Badly 0.4 ppm
 1005

80-82'

Rec. = 1.3

And. = 2.0 ppm

Damp gray and yellow-
 brown SAND, very fine;
 alternating irregularly
 spaced layers;
 little to trace silt; few
 orange
 in
 This sample is smeary

Wet orange-brown, tan, &

lt. gray SAND, medium

AND fine; trace (one) 1/8"

Smeary gray clay.

Grains are subangular

in shape. (10x mag.)

Jungo 4/12/91

1040

Hum (a) barhole

Barge 0.4 PPM

barhole 0.4 PPM

1050 Arginging

1105 Hammering 100-102

1110

100-102 12/27/43/55

Rec = 1.3

Hum = 2.4 PPM

Dry, dark gray CLAY;
trace silt; one 1" fine

Jungo 4/12/91

1030

40-92 1/4/14/23

Rec = 1.2

Hum. 0.8 PPM

Damp to wet, gray, blocky,
tan, orange-brown SAND
fine to very fine in layers
(Returns to pastings)

* 110 to 1150 white ss

Moderately abundant in
well sorted sands
(Mergothey Form.)

(109)

4/15/91 Jinger

Monday April 15, 1991

Arrive Clay 16 Gunman
@ 0745 obtain daily
badge, sign in; proceed
to location 10

Quarries on site

Al Taylor }
Bar Devine Jr. } Dettle

TEMP: 44°

WIND: fog rain, cloudy

FORECAST: THUNDERSTORMS

MID-50's

4/15/91 Jinger (101)

140-142 (6W-10-I)

7/10/25/31 Rec. = 1.0

Alum = 0.4 PPM

Wet

6-8" gray plastic
+ Lt tan

Clay, some

Trace orange SAND fine;

Trace iron stone fragment
(very concentrated)

0815

Augering to 50'

Bailing Sand

0845

Quarry (6W)

Truck arrives

Truck for Geophysical

logging & Scott &
arrives, then goes

(102) 4/15/91 Jinger
 for break fast.
 150-151.5 gm-10-I
 31/70/150
 Lec. = 1.0' 1015
 Hum = 0.4 ppm
 Wet tan orange, buff + light
 grey SAND, medium AND
 [Augering to 155 0920] where clay was
 fine; trace to little coarse; observed & logged.
 sand; trace silt
 few rusty zones, 1/8"
 thick
 (some hard: at stake
 in hole @ 151.5
 according to driller)
 1055 gamma logging
 complete. Nil diparts
 after drill crew
 retrieving auger.
 1100 S.G. leaves
 for phone calls

4/15/91 Jinger

0930 set up gamma
 logger for borehole
 GM-10-I
 Positive response
 on gamma log
 seen @ 100' & 140'

(104)

4/15/91 Digging

RAIN CONTINUES; RAW & COLD

E.O. 12. = 155.0' bg

E.O. H. for geophysics = 153.0' bg

Mike Pellegrino will not be here today.

1135 150' auger removed

1150 155' auger out.

Soft plastic lt. tan, gray clay in bottom of cutter-head of lead auger.

4/15/91 Digging

(105)

noon John Burke (GAM)

chemist & soil gas

person stops by

GM-10 - I location

to discuss soil gas

which will commence

tomorrow @ locations

5 & 6 on SOIL GAS map

Figure # 7 from GAM

work plan for Gummer.

S.G. returns 12:40.

We all confer for few

minutes on soil gas

look the dulleis

have gone back to staging

decon area to stand

4/15/91

J. Singer

4/15/91

J. Singer

4/15/91

J. Singer

1300

1545

8⁰⁰ Augers

Al & Bob

I go to check in Hotel & prepare to leave

staying in Decora area.

make calls to C. Meyer & Fenced area is

J. Barnes & E. Chen locked up by

Reported progress & Grammar but Al

discussing scheduling. has key to get out -

Lucky for us.

Return to Staging area 1600

1400 Crew performing I go to Plumview

Miscellaneous tasks, Post office to mail

steam cleaning. Lots Book boxes

1440 Delta (M. Brown) to Ed Chen @ yel. area.

arrives with supplies 1630 Finished for day

to off-load; i.e., PVC

pipe, barrels, cement

J. Singer

(108) 4/16/91 : Gurney Aerospace RI/AS 4/16/91 Jorgens (109)
 Gungir Volume 3

TUESDAY April 16, 1991
 Arrive Bldg 16 0715
 Sign in, obtain badge,
 proceed to decon area. Fall
 w/ S.G. about day work
 plan. Drillers are filling
 up w/ water.

Drillers have a few more
 augers to clean since the
 pump was malfunctioning
 yesterday.

Locations # 16 & 19 are under
 consideration as next
 drilling locations

WEATHER
 TEMP: 58°F, sunny
 WIND: WEST 12 MPH
 FORECAST: low 70's

Personnel on site:
 Al T. + Bob D. → Delta
 Scott G. → Gm July 5 - 7 yee

Sell gas crew should be
 on site ~ 8 AM
 0745 S.G. went to meet J.
 Selva to review site
 locations for 16 & 17. No
 back meeting him. He has
 checked on arrival

| | | | | | |
|-------|---------|---------------------------------|-----|---------------------------|-------|
| (110) | 4/10/91 | Driller | | 4/10/91 | (111) |
| | | of soil gas team | Not | Soil gas crew not | |
| | | here yet. | | on site yet. | |
| | 0920 | Prepare to mobilize | | Mentioned to S.G. that | |
| | | downed augers, etc. | | it would be a good idea | |
| | | back to location # 10 for | | to get a round of water | |
| | | rearing. | | level measurements | |
| | 0950 | Drillers setting up | | even though wells are | |
| | | all wells steel brook- | | undeveloped. | |
| | | out plug to bottom of lead | | After April, seasonal | |
| | | auger. Start drilling | | water levels may decline. | |
| | | Plan is to set screen 10' / 20' | | | |
| | 1015 | S.G. to phone | | 1040 Drilling to 60' | |
| | | | | 1050 " to 70' | |
| | 1030 | Drilling to 40' by | | | |
| | | Gm-10-I with 8" | | Sunny + warm, | |
| | | augers | | at least | |

4/16/91 Jinger

1100 Add augers to drill to 90' by.

NOTE: Drilling proceeding approximately 5' per 5 min.

1110 setting up augers to drill to 160' by. They place two flights per connection.

1115 stop in. Drillers leave to pick up supplies @ staging area

1130 go to make calls; see S.G. Enroute; I think 115-125 is a better interval

4/16/91 Jinger
GMC-10-T

Drum Results Reading
(FEET) 0.8 (PPM)

10 0.8 1.0

20 1.8

30 0

40 2.0

50 2.6

60 1.0

70 1.0

80 2.0

90 0.8

100 2.4

110 1.0

120 3.6

130 1.6

140 0.4

150 0.4

| (118) | 4/16/91 | Jungw | 4/16/91 | Jungw (115) |
|------------------------|--------------------------|---------------------------|----------------------------------|----------------------------|
| for screen but | 110 - 120 | litter approx drilling | method for deep wells, | which I need. |
| is 075 clay limit | as 10' thick from 100' | 1215 | return to site | 1230 to 1250 |
| may be 2' as much | High & low values @ 120 | (Al x Bud) having lunch. | Sub goes off-site w/ pickup | S.G. is somewhere off-site |
| @ 3.6 ppm. | Called J. Barnes | Reported progress on | NOTE: NO COOKS AT *10 location | today. However, driving |
| 10-7 & possibility | of moving to location | around on System Bay Rd & | Stewart Ave. the Hooker(?) rd or | is STONB |
| On or 19? will try to | verify & confirm i J.B | 1250 | Al resumes drilling | |
| tomorrow before noon. | called Ed Cheng; not in; | 1315 | S.G. returns | |
| verify & confirm i J.B | tomorrow before noon. | | | |
| tomorrow before noon. | | | | |
| verify & confirm i J.B | | | | |
| tomorrow before noon. | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | | | |
|-------|---------|-------------------------|--|--|
| (116) | 4/16/91 | Judge | | |
| | 1340 | Slow ADVANCE; | | |
| | | going through clay | | |
| | | 100 through 104' | | |
| | | (20 min.) | | |
| | | Scott G. says soil gas | | |
| | | crew has been here | | |
| | | since 0830. He | | |
| | | couldn't find them. He | | |
| | | was looking for them | | |
| | | @ location 13. They're | | |
| | | by buildings @ location | | |
| | | 14 or 56 5x6 | | |
| | | 1410 to 110' | | |
| | | nearly 1 hr | | |
| | | 1420 to 112'-113' | | |
| | | Rig running @ 2200 | | |
| | | RPM & Temp 200 | | |

| | | | |
|--|---------|------------------------|-------|
| | 4/16/91 | Judge | (117) |
| | | | |
| | | in transmission - stop | |
| | | rig to cool it down. | |
| | | 1445 Drive over to | |
| | | Plant 4 where Soil | |
| | | Gas Analysis is | |
| | | underway. Laren | |
| | | & John Burke are | |
| | | working on drilling | |
| | | holes with a portable | |
| | | drill, then using a | |
| | | slam bar or slide | |
| | | hammer to drive a | |
| | | solid rod into the | |
| | | ground to a depth of | |
| | | ~ 3' by. | |

4/16/91

Jerges

They are currently collecting air samples through a ~~flex~~ Teflon tubing from the hole to determine the optimum time to extract the sample with the highest concentration. This survey has determined that 3 min is the optimum time. Their first 2 (6" & 3/4") holes produced no hits on GC. The third hole produced ^{to determine} response ^{to optimum pump time}. The fourth hole is being used as a standard soil gas

4/16/91

Jerges

extraction sampling point. Apparently 3 min of pumping by the small diaphragm pumps will be used hereafter as the optimum pumping time. They tested from one to five minutes to ascertain the optimum pumping time.

1525 Scott G. Comes by to report that drillers got down to 120' & have called it a day. He left.

(120)

4/16/91

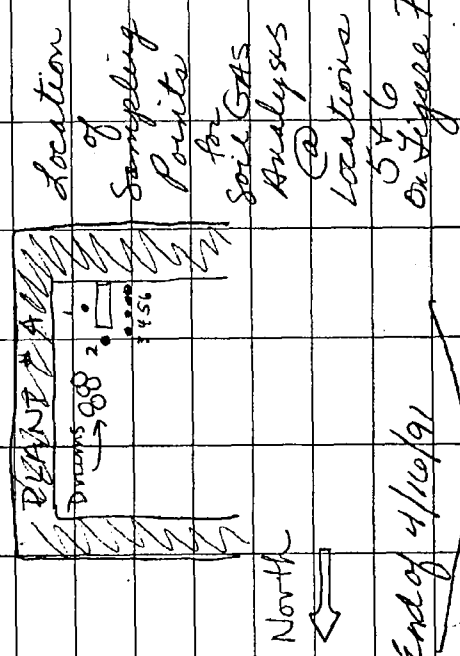
Junger

When moving from one hole to next location, a field blank of sorts is done whereby the ~~type~~ tubing is with-
drawn from hole & the air is extracted from tubing & run through GC, gas chromatograph.
A syringe is used to withdraw air from a T stainless steel fitting in the Teflon tubing.
Points are separated by about 10'. See sketch, p. 121

4/16/91

Point # 1 No response
" 2 No response
" 3 Peaks
" 4 "
" 5 "
" 6 seven drilling holes attempted; none successful

AIR RAILROAD TRACKS



End of 4/16/91

~~Depart 1730~~ Junger

(121)

GMU-10-I
GEOLOGIC LOG *

Deliver

4/17/91

WEDNESDAY April 17, 1991

Arrive Greenwood Bldg. 16

0650; sign in, obtain daily
badge proceed to location 10.

WEATHER CONDITIONS

TEMP: 56°F. MOD. RAIN

WIND: SOUTH, 5 MPH

FORECAST: OCCASIONAL RAIN,

MEANIER LATER IN DAY.

HIGH TEMP to 75°F

PERSONNEL ON SITE

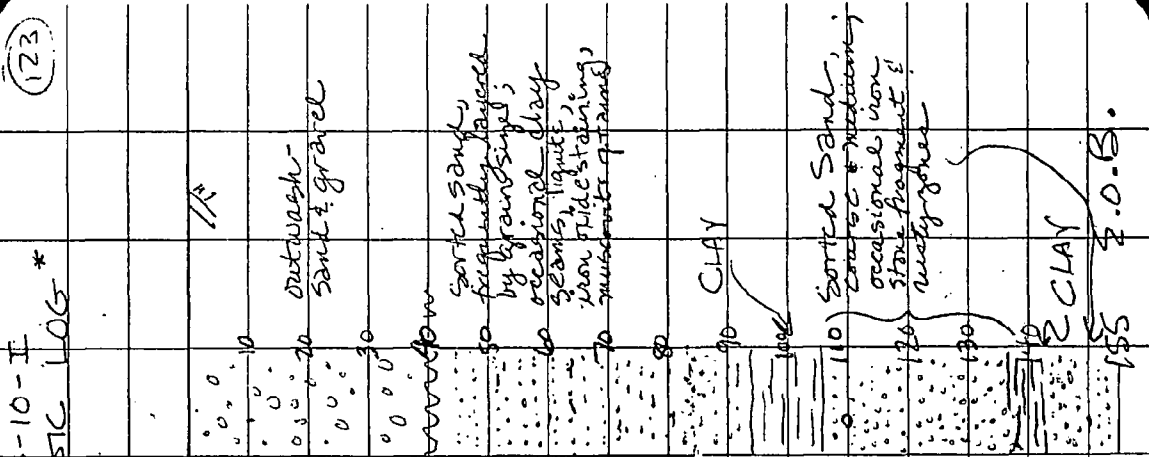
AL TAY

BOB BEVINE, JR.

SCOTT GLASH → GMU

JUDY SINGER → GEC, INC.

DELTA



* Generalized
GEOLOGIC LOG
BASED ON Detailed
Information in this
Log Book.

| | | |
|-------|--|---|
| (12A) | 4/17/91 | J. Singer |
| 0715 | Alt Port area | preparing to knock out plug (stainless steel) by greasing borehole with water & dropping heavy bailer down hole to drop plug & plate out bottom of 8" lead auger. The augers have been raised a foot. |
| 0745 | | There was only 1" of sand in borehole prior to knocking out plug. |
| (52) | 4/17/91 | J. Singer |
| 0800 | Setting well screen 10' 40 schedule, .010" slot, with a 4" long PVC Cap (screw-top) on bottom of screen. Place screen lengths to ground surface. | |
| 0900 | AL has lifted augers 2-3 ft & is pouring gravel pack, #2 & #3 Moire gravel gravel pack. AL is measuring well construction depth as he proceeds. | 8 bags (8 bucketfuls) of gravel used. |

(126)

4/17/91

Judy

NOTE: Previously, the odor in ambient air was strongly chemical (Horka?) around Stewart Ave. + Bldg 16, even in car while driving. Now, odor is noticeable @ location. It is not from building. We do have O/M set up, ^{down} ~~up~~ wind of rig.

0920 AL has poured 2 buckets pulling out 105' auger. ^{right} Bob has been off-site getting breakfast.

(127)

4/17/91

Judy

~~Attley~~ Removing 105' auger flight
NOTE: Al uses the A rods inside the string of auger to hold down the well while he pulls up the auger.

EM-10-I

well specifications

Screen 120' to 110'
#2 gravel 120' to 104'
Sand Seal 104' to 100'
Bentonite slurry 100' to 95'
Cement Grout 95' to

4/17/91

1030 call J. Barnes
Leave note for where boots
of Soil Gas Team on 4/18/91

Called Ed Chen - call
Jerry tonight

1045 proceed to Plant 4
to see Soil Gas Team.
Rain has let up. Team
has drilled two more
points to south side
of fenced area (see p. 130)

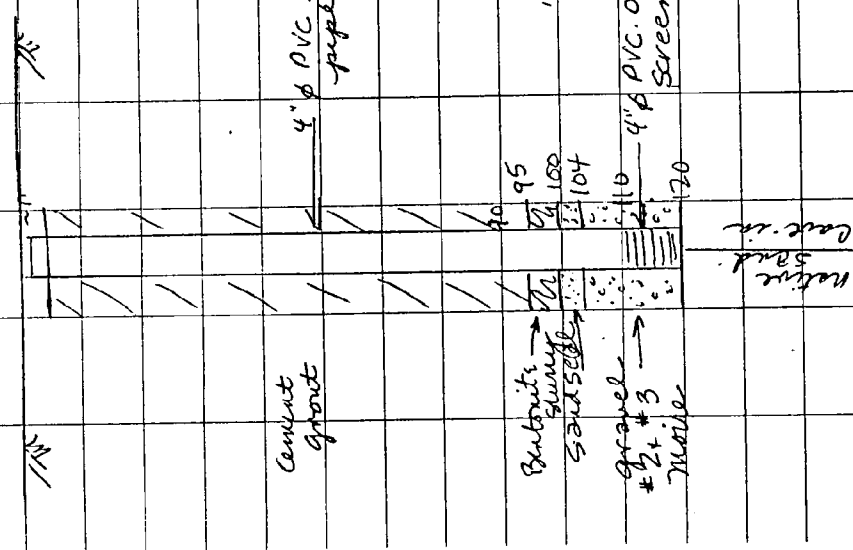
NOTE

On sketch on p. 121
points should be lettered
not numbered as follows:

4/17/91
Ginger

GML - 10 - I

WELL CONSTRUCTION DIAGRAM

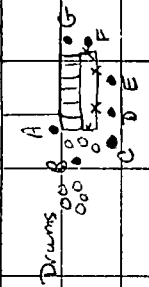


150 Total Depth

Jungo

4/17/91

PLANT 4



LOCATIONS 5 & 6
from FIGURE 7

• = point locations
for soil gas
survey

SG 5 & 6

Jungo

4/17/91

Point "F" registered a hit
identified as trichloroethene
Point "G" came up clean.

HANGER

Points "E", "D", & "C"
registered unidentified
gases. Points "B" & "A"
found nothing. Point "C"
was used to determine
time/pumping for optimum
pumping time.

Each morning, they (Soil
Gas Team) calibrated the
GC for the following
5 compounds:

HANGER

4/17/91 Jagers

Can't find them. Drillers are moving flat bed to staging area for decommissioning & rig

[NOTE] DEC Emergency

Will wait @ staging area office of Gummerson. Look like a tank pull. (1400 hrs.)

4/17/91 Jagers

- 1. trichloroethene
- 2. tetrachloroethene
- 3. vinyl chloride
- 4. cis-dichloroethene
- 5. trans-dichloroethene

They may re-calibrate during the day for changes that may occur in GC due to temperature, weather, etc.

Noon return to location 10

Drillers are pumping grout; cleaning up site; covering sand pile with tarp.

1300 Drillers go for water fill-up @ hydrant. I am looking for soil gas team @ location 1a-2

* need to study gamma log from 10-I but Scott says made it available. i.e., log is not complete, i.e., thickness of clay units

1500 To trailer to look up LOG Books. Signing off. Jagers

(134)

April 23, 1991

J. Barnes arrives at GM-14I.
Personal on-site

S. Gladh - G/M

A. Taylor } Debra
Bob Devine }

Weather - Clear, windy
T = 60°F

GM-14I

Augers down 130' B6

11:45 am J. Barnes returns on to

SG-3

SG Resampled: J. Burke } G/M.
D. M. Ross }

(135)

4/23/91

SG-3

15 pints - Special aerosol shield
north of Building 2
at 10-15' intervals.

I advised J. Burke to use
clay to plug soil gas probe holes.

Gas collection time: 3 minutes.

Sample collected via syringe - (500ul)
Photovue 10550 GC used.

Constant flow pump at 1 l/min
tested using teflon bags.

7:15 Break for lunch.

4/23/91

12:45 Return from lunch-

HNJ -> sample 130-132 20:2 ppm
120-122' sample -> 13.2 ppm.

12:54 S. Glash leaves site to call office.
Caugen down -> 139' 6"

12:57 DuBois spot sand hauling.
There appear to be approximately 3-4 feet of reserve.

1:10 DuBois done sand hauling. Start assembling rinds for collection of split -> spoon sample (140-142)

4/23/91

1:20 DuBois start sampling
140-142' interval.

140-142'

Rec 2"

3441 Dec brown (top 3") orange (3.6")
and grey fine sand.

Medspace

1:45 J. Barnes arrives back at 56-3.

TCE and PCE concentrations (L hits) range 0.1-8 ppm.
Shut in water storage area (140-142) water

4/23/91

Sign on door of shed says "Case files - Can't find PCBs"

1/8" Dia Teflon tubing is being used. It is not being changed or discarded between samples. If a hit is obtained in the GC, an equipment blank is collected. If clean, then J. Burke goes on to the next sample.

Since the forecast is for rain, soil gas work must probably be done. I again advised Wh Burke from the next day on - they will be used to seal holes.

4/23/91

Att my suggestion for bags the holes will be sealed by

1 - backfill dirt from drilling hole.

2 - Stuff 3-4 or more disposed gloves down hole w/rocks on top to keep them compressed in hole.

This suggestion is not ideal but should be OK for 1 day.

The tubing/pink eyes down 2-3' below grade when sample is collected.

Also S. Barnes arrives back at 6:11 - 14 I. S. G. (ish) digging hole (Garcia)

(140)

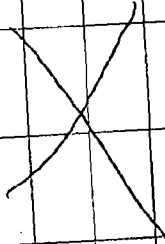
4/23/91

2:54 Gammie Logging completed

Headspace on 150-152 sample
19 ppm.

From Gammie Log, there appears
to be a clay lens from 115-119'
below grade.

J. Barnes leaves site at 3¹⁵.



(141)

4/24/91

John Barnes arrives on-site at
7:05, and at 6M-14I at 7:20am.
Work has not yet started.

7:45 Crew starts breaking equipment
at rig.

8¹⁵ Area out of hole.

9:00 Arrive back at De-con area.
Drillers take breakfast break.

9:20 John Burke (6M) arrives
in De-con area.

9:25 Driller (Al & Bob) start
de-canning (steam) equipment.

4/24/91

John Burke purchased "Seal Duct" a product of Seifco. A small sample of this was placed in a vial for 290 minutes. A 30 second sample of air in vial injected into GC. (9:40am)

9:45 Arrive at SG-10 location. Previously two soil gas samples were collected in this area and "hits" were obtained. A third sample is to be collected today.

9:55 GC chromatogram for the sealant was clear.

4/24/91

10:15 SG10C sample collected. From drive by it appears that soil beneath parking lot at sample location is damp.

10:25 ~ 10 ppm of PCE detected in SG10C sample.

11:00 J. Barnes calls office.

11:15 J. Barnes arrives at SG-2. The fourth sample will be collected today. A water sample prevented this sample from being collected previously.

11:35 - Soil under concrete base moist. No sample will be collected here today.

4/24/91

11:45 - 12:30 Lunch

12:30 Drillers preparing to
ream G&K-14I hole w/ 8" ID
auger. IT is starting to
rain

12:40 Drillers start reaming borehole

9 12:45 Augers down 10' BG. Thunder
is heard in the distance.

12:50 Augers down 20' BG.

12:58 Augers down 30' BG

1:06 Augers down 40' BG

4/24/91

1:13 Augers down 50' BG.

1:20 Augers down 60' BG.

1:27 Augers down 70' BG.

1:30 S.G. Glush returns from phone
conference. Screen zone
selected = 100-110' BG

I want to call Carole to further
discuss this. Reasons for
interval selection

1- 60-70' below grade -
comfortable to other localities

2- highest headspace
readings.

1:55 Augers down 150' - with auger for
dip. J. Barnes leaves site. Ben

(140)

4/25/91

CR MS

Arrive at site 8:00

upon arrival at the clean area I went down to pick up the book I met Scott

Colin He was accompanied by the soil gas survey team John Burke - Chemist
Don Monson - Geologist

When I arrived at the site of CM-14 I saw 11 top and Bob Devine were working on the site. They were in the process of setting the

(147)

arrived early

8:50 100' - 101' screen zone
110' - 95' gravel pack
45 - 50' fine sand

1:15 drills to be off-line
Scott says that the screen proposed for CM-15 has a lot of tubular and that Colson wants to

move it. I would be moved north and Scott said "probably" I'd be at the back of the hole. CM-15 is not under

by the end of the day
the ring may be set up
on CM 16 or 17 road

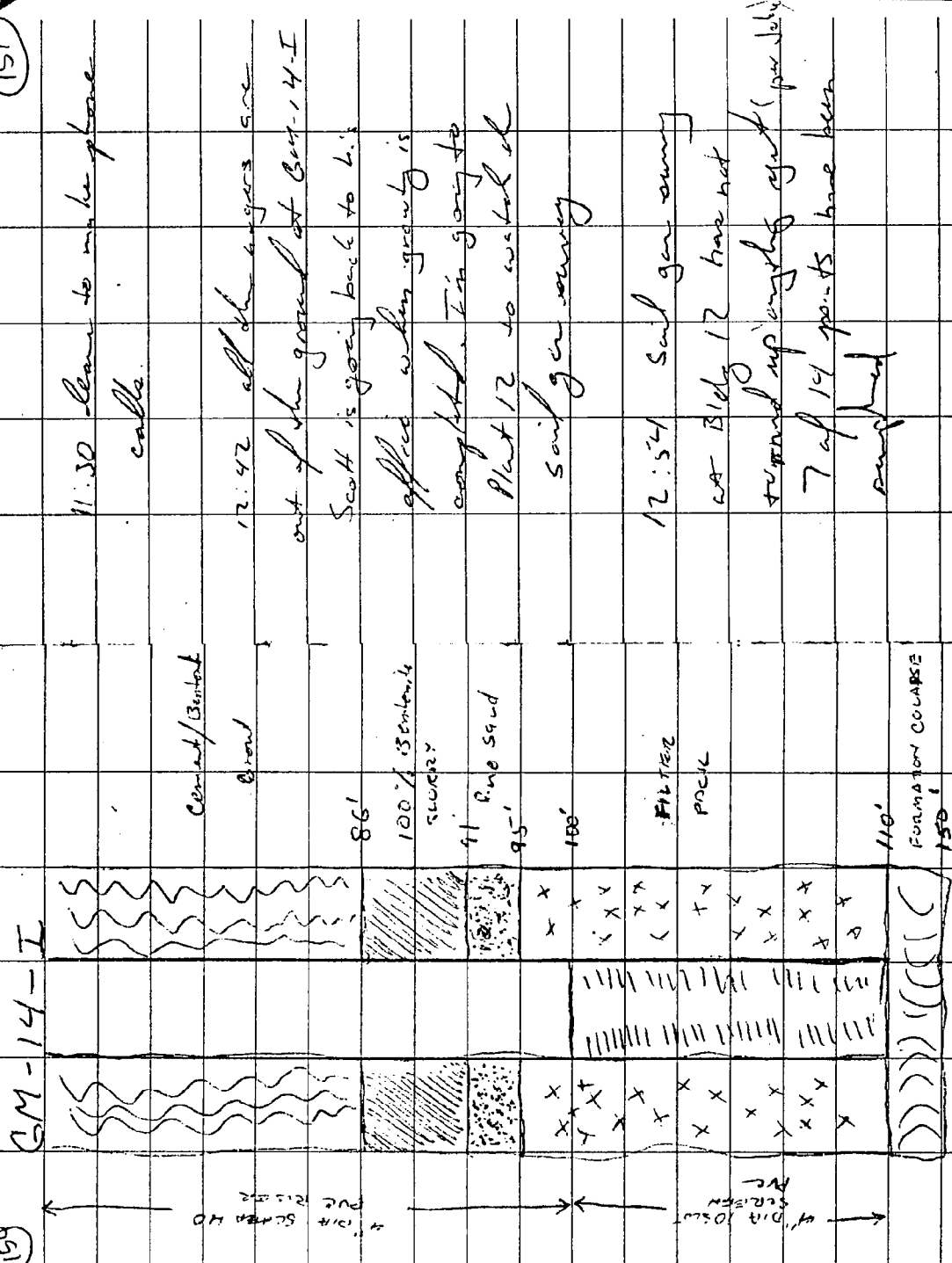
12:10 South and I went
around plot 12 where
John and Don were
yelling really so clear
would gas sampling
They had one bag a
series of supply points
on the pavement so the
South and East of the
Blaby that is N of the
driveway. The points
could be a kind of
roughly about 15
feet off the edge

of the building



10:35 John sampled point A
after 3 minutes of spraying
w/ one air pump (John had A
sample the right
10:47 The GC run of the
first sample "A" is complete
nothing was detected

10:55 Return to CM 14-7
Grounding is in progress
91-80' 100% butanol sealed



11:30 leave to make phone calls

12:42 all the layers are out of the ground at GM-14-I

Scott is going back to L.I. office when gravity is completed. I'm going to Plot 12 so watch the

sail gun survey

12:54 Sail gun survey

at 12:12 time not

turned up anything right (per logs)
7 of 14 points have been completed

Cement/Bentonite

Brown

86'

100% Bentonite slurry

41' Fine sand

95'

100'

FILTER

PACK

110'

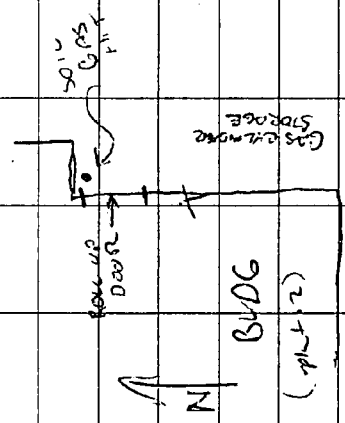
FORMATION COURSE

150'

4" DIA SCREEN HO
PVC RISER

4" DIA 1050
SCREEN
PVC

3:57 On the last
 soil gas sample one
 point indicated on
 the CC plot.
 TCE at ≈ 0.3 ppm



4:15 John says everything is
 done except running standards
 so I'm leaving to make
 phone calls.

4:34 left site.

(154)

4/26/91 Ching-

ARRIVED at site @ 7:30

Scott Glesch - GM

AL TAY - OSHA

BOB DUMIR JR - OSHA

When I arrived Scott and

the drillers were in the

Decon area. Scott doesn't

think any drilling will take

place today because the

drillers would like to

service the rig and finish

up some detailing

(155)

work on well completion
(putting in curb boxes etc.)

There is a problem with the

location of GM-15 where

it was originally proposed

there are a great deal

of dry wells and

buried utilities. Scott

would like to move it

about 250 yards to

the east, away from

the disposal area.

This is consistent with

the objective of installing

GM-15 as an upgraded

~~well~~ well. Scott and

(156)

I visited John Selva's office where there is a map that shows all the buried utilities and dry wells etc. Scott picked a spot to the east and we checked out. While we were over at the ~~new~~ proposed new location Scott asked me if I concurred with the move. I said I'd like to maintain an option to change the objective for the well and part of the downgradient of

(157)

the recharge basin/drywell field. I told him I'd call in to the office and try to get an answer today. 4:00 called central office. GRUMAN Dredging Quedy No. 123 Civil. Gorman Belding Quedy No. 127. John B wasn't in so Scott and I returned.

(158)

to John Selman's office
 and requested copies
 of the two above maps.
 Having copies of the maps
 will facilitate discussing
 the problem over the
 phone. There are
 maps similar to the
 two I obtained that
 cover the rest of the
 Common Property ~~area~~
 Copies of these maps shall
 be obtained as soon
 as possible.

P. 30 Moved to the
 March 12 sail you

(159)

study area Don Manson
 and John Burke were
 already there. The
 area being investigated
 today is SW of some
 storage sheds (SG-B)

[Signature]

End of Volume 3
 Gummman RI/FS
 FIELD LOGBOOK
 4/26/91

Grumman Aerospace
 RI/FS
 Volume 4
 Field Log Book
 April 26, 1991

| | | |
|-------|---------------------|----------------|
| N ↑ | 4/26/91 | ① |
| SUBP | SC80 SC81 SC82 SC83 | SC85 SC86 SC87 |
| SC84 | SC88 SC89 SC90 SC91 | |
| SC92 | SC93 SC94 SC95 SC96 | |
| SC97 | SC98 SC99 SC100 | |
| SC101 | SC102 SC103 SC104 | |
| SC105 | SC106 SC107 SC108 | |
| SC109 | SC110 SC111 SC112 | |
| SC113 | SC114 SC115 SC116 | |
| SC117 | SC118 SC119 SC120 | |
| SC121 | SC122 SC123 SC124 | |
| SC125 | SC126 SC127 SC128 | |
| SC129 | SC130 SC131 SC132 | |
| SC133 | SC134 SC135 SC136 | |
| SC137 | SC138 SC139 SC140 | |
| SC141 | SC142 SC143 SC144 | |
| SC145 | SC146 SC147 SC148 | |
| SC149 | SC150 SC151 SC152 | |
| SC153 | SC154 SC155 SC156 | |
| SC157 | SC158 SC159 SC160 | |
| SC161 | SC162 SC163 SC164 | |
| SC165 | SC166 SC167 SC168 | |
| SC169 | SC170 SC171 SC172 | |
| SC173 | SC174 SC175 SC176 | |
| SC177 | SC178 SC179 SC180 | |
| SC181 | SC182 SC183 SC184 | |
| SC185 | SC186 SC187 SC188 | |
| SC189 | SC190 SC191 SC192 | |
| SC193 | SC194 SC195 SC196 | |
| SC197 | SC198 SC199 SC200 | |

(2)

head just been passed
 in few days ago
 We also noted about
 if we were looking for
 Chemin de ronde looking
 see the way spout. We
 should be looking in
 the gravelly area to
 the ~~East~~ East of SE
 of S.B. John Munson
 said that yesterday one
 of the workers told
 them that "stuff" was found
 "it" in that area
 John cannot assure if it
 covers the ground area
 or an area between the

(3)

loady block and sh.
 N.E. portion of quadrant 12.
 John got a small hit on
 SG-8A but he says it showed
 as the blank lot. There
 was a large hit on SG-8B
 however, John ran the standards
 again and says the hit
 is an unknown
 At approx 1:30 the soil gas
 survey was finished at
 SG-8 and everything was
 packed up. There were
 no "real" hits at any
 of the sample points

(4)

J. G. sh work site make
planned, get lunch etc.

2:00 Return to site move
to SG-11 which in by
the photog. sh. i. die
tank at Plant 14 (15)

concentration of SC-11-C
photo and video taken
high pressure → SG-11A

(5)

2:30 John has taken a
sample from SG-11A and
~~got~~ the GC stored
a bit but because the
GC was in the room the
oven temp rose and the
R.T.'s have drifted. John
feels the kit is PCE but
his ~~eye~~ has to run some
QA-QC sample to recalibrate
the GC

2:41 John has quant. Ld sh
kit at 1 ppm PCE.
3:08

SG-11B = 2300 PCE

(6)

1/29/91

Stenger

(7)

3:30 SB-11 C = 0.6 cm per

3:16 Duplicate sample from Monday April 29, 1991

SC 11-C = 0.6 cm per

Jackson is ^{very} ^{thin} ⁱⁿ ^{S-1-C}

Sample ^{from} ^{SC-11-C}

Bill G. has ^{all} ^{the} ^{cores}

1:30

WEATHER CONDITIONS:

PARTLY SUNNY, MANY

CLOUDS, BRIEF

SPRINKLE @ 0735

TEMP: 58°F

WIND: WEST 6-8 MPH

J. SINGER arrives

Grumman Sldg 16 @ 0735

Meet John Buske & Don Munson

from GOM in parking lot.

They are discussing

progress of work w/ me.

Go to Sldg 16 to obtain

4/29/91 Hanger

and plan to hunt for
 S.G. Delta drill crew.
 0830 Arrive @ Drill
 Site, GM-16-I
 Personnel On Site
 Delta } Al Ray
 Sub Devine
 GRM → Scott G
 1st Ave. → Judy S
 0.5' to 2.5' 7/17/40/30
 Rec. = 2.0'
 8" = concrete Kmc = 0.2 PPM
 Damp dark gray & tan
 gravel, fine to medium
 some to little sand f/m
 & silt; trace asphalt
 pieces

4/29/91 Hanger

daily badge & sign in.
 Drive to trailer to
 get field book
 Johnson (GM)
 Johnson x Don, Come
 by to tell me that John
 Selva says it seems
 to be OK to drill @
 SB 12. John Burke is
 not satisfied w/ this
 & would prefer to have
 an updated map, 1987.
 Need return to GM
 & ck this out with Carlo.
 Meanwhile, Burke is
 not sure where drill
 crew is. I have
 reviewed field notes

| (10) | 4/27/71 | 4/27/71 | 4/27/71 | 4/27/71 | 4/27/71 | (11) |
|--------------------------------|----------|-------------|-------------|--|--|-------------|
| 10-12' | Interval | Rec. = 2.0' | Amu = 0.3 | Damp gray-brown gravel, fine and fine sand and little silt (? small clumps) | Backlogd Amu = 0.2 | 12/13/71/17 |
| 0930 | 30-32 | Rec. = 2.0' | Amu = 0.2 | Dry Tan GRAVEL, very coarse to fine; | some v. coarse to medium sand | 2.0 |
| 0940 | 20-22' | 10/14/2025 | Rec. = 1.4' | Amu = 0.2 | Slightly Damp Tan v. Lt. Brown SAND, coarse to very coarse; some very coarse to medium GRAVEL, loose | 2.0 |
| 0950 | 40-42 | 8/17/32/45 | Rec. = 2.0' | St. damp compact brown SAND, fine; some fine to medium gravel; trace v. coarse sand; | St. damp compact brown SAND, fine; some fine to medium gravel; trace v. coarse sand; | 2.0 |
| NOTE: New cathead rope in use. | | | | | | |

Jungles 7/29/91

Well sorted
 41.5 to 52.0' Yellow Gray SAND
 Gravel m/f Zone @ 40.2' to 50.0' brown SAND coarse; little to some fine gravel; trace med. gravel. 50.4' to 52' Brown +

NOTE: Scott & I discussing white rounded gravel (half hydrant situation). APD Broken Granite & Pyramidal Rock (fender) @ 44.7' to 49' (lab sample 10-12' interval - full TCL based on hour reading)

Scott told me he didn't inform me of drill H.D sampling 3" pieces + one macro rock on 4/17. He is vague regarding lab results. 10/10 50-52' 17/40/42/50 + CR + CN (hour reading) Rec = 2.0 10.40 Alum = 0.2 PPM Al x Bot are Sand sailing

| | | | | |
|-------------|-----------------------|---------------------------------------|---------|------|
| (14) Janger | 7/29/91 | Janger | 7/29/91 | (15) |
| 1105 | Setting rods | are not available | | |
| 1110 | John Burke | to show subsurface | | |
| | Came by (Luis) Janger | activities (at least, in | | |
| | SG-1 (6) YES | Phased study) | | |
| | " 2 (3) 0 | instead he will | | |
| | " 3 (15) yes | go back to Plant 02 | | |
| | " 5 - yes | to do Location SG 4 | | |
| | " 7 (14) " | Don Janger has left site | | |
| | " 8 (8) " | since the remaining | | |
| | " 6 - yes | location is a one-man | | |
| | " 10 (3) " | job. | | |
| | " 11 (3) " | 1125 60' - 62' 13/25/30/30 | | |
| | " 9 (14) NO 0 | RUC = 1.0' H ₂ O = 0.4 ppm | | |
| | " 4 (4) yes | Saturated yellow-brown | | |
| | John Burke says | SAND, medium; | | |
| | they will not do | trace fine sand; | | |
| | SG 12 since traps | trace fine gravel; | | |
| | | med sorted muscovite; | | |
| | | gravel | | |

(16) Jojo - 1/29/91

1130 Sand bailing

1150 70'-72' 14/24/25/32

Env-10-I Rec. = 1.0'

Nnu = 0.0

Wet tan; ^{yellow-brown} gray SAND, medium; little fine sand; one 3/4" thick lens of taupe-colored clay.

noon S.G. to go for

lunch for drillers

Al Toy leaves too,

1215 Return to site.

1245 Go to Bldg 16 to

make phone calls

Henry

(17)

1/29/91

John + Chris both @ lunch

Left message. See try to call again in PM!

Called Ed Chen!

Spoke w/ Mark Mecca

Re: gloves. Will work on monthly report

1320

80'-82' 8/14/20/28

Rec. = 2.0'

Nnu = 0.6

Wet, yellow-tan SAND,

very fine; trace fine

sand in layers

few layers of gray to dk

| | | | |
|---------------------------|------------------|--------------|------|
| (13) Henge | 4/29/91 | 4/29/91 | (19) |
| Gray Sand layers, v. to | | GMU - 16 - I | |
| Yucca | | Hand Results | |
| Plan for work progression | | Annual | APM |
| via # 15, 19 locations | | | 0.2 |
| | | | 0.3 |
| | | | 0.2 |
| | | | 0.2 |
| | | | 0.2 |
| 1370 | | | 0.2 |
| 90-92 | 10/20/35/50 | | 0.4 |
| | Rec. 1.7' | | 0.0 |
| | Annual = 1.3 APM | | 0.6 |
| Wt. tan, buff, gray | | | 1.2 |
| SAND, medium | | | 1.6 |
| little fine sand | | | 0.4 |
| well sorted | | | 0.0 |
| | | | 2.0 |
| | | | 1.0 |

| (20) | 4/29/91 | Jengie | (21) |
|-------------------------------------|------------------------|-------------------------|--------------------------|
| 1450 ↓ | | | return to location 16-T |
| 100'-102' | Rec. = 1.0' | Wet, tan | 110-112 |
| buff SAND, medium; little fine sand | Rec. = 1.0' | Wet, tan | Rec. = 2.0 |
| not too disturbed | 102' in layers | Wet, tan | Rec. = 0.4 PPM |
| 1420 to 564 | trichloroethylene tank | Wet, tan, orange-brown | SAND, coarse to fine, |
| by Plant 2 | Nits @ A, B, C | several ironstone | sorted into size grades; |
| ≈ 100 PPM TCE | PLANT 02 | concretion rocks, f/vc. | by non-distinct beds; |
| 10 PPM cis-DCE | Water tank | @ 111.7 to 112.0' | few iron staining |
| PLANT 02 | Water tank | zones | 1530 Drillers leave. |
| PLANT 02 | Water tank | zones on side | 1525 Scott G. leave. |
| PLANT 02 | Water tank | zones on side | |
| PLANT 02 | Water tank | zones on side | |
| PLANT 02 | Water tank | zones on side | |
| PLANT 02 | Water tank | zones on side | |
| PLANT 02 | Water tank | zones on side | |
| PLANT 02 | Water tank | zones on side | |
| PLANT 02 | Water tank | zones on side | |

(24)

Ydogen - 4/29/91

Ydogen

7/29/91

(23)

1530 Go to see Soil

Gas, John Burke,

@ Plant 02

Point A 100 PPM TCE

B "

C "

D = ~ 60 PPM

1600 Depart Site

Call John Burke

4/30/91

4/30/91

4/30/91

(21)

Proceed to location
GM-16-I

Tuesday April 30, 1991

Drillers are

Setting up equipment
to continue drilling.

Weather Conditions (RAIN)
TEMP: 56°F overcast

We are @ 110' by GM-16-I

WIND: E 5 MPH
FORECAST: hi to 65°F,
showers

0730 Start drilling
again @ 120'

Personnel On Site

Al Jay }
Bro Devine Jr. } Delta

Al is welding
a tool, the plus
that held rods.

Yee, Eric -> Judy Singer
GM -> Scott G.

Tola Scott that
driller should not
be close to trench.

Arrive 0655, Bldg 16.

Obtain badge, sign in
0750 Driller is building
hole

4/30/91

4/30/91

4/30/91

0800 Setting rods

0815 Pulling rods

after hammering 120-122'

37/42/58/45

3" split spoon

Interval

In order to push

Rec. = 4"

rocks out of way.

Hammering

1000

140' - 142'

Using 3" split spoon

Rec. = NO

Hammering

Rec. = RECOVERY

130-132

20/40/70/100(3")

No Recovery

Toled S.G. to put out Trip

1015

Blank/adding sampling

It is now pouring

rain.

0920 Augering

130-140

(28) Hanger 11/30/91
 Al. Hanger trouble
 I leave He has
 tried the 2" spoon
 again since 3" of core
 w/ no recovery
 1140
 2" spoon came up
 with slightly disturbed
 sample thought to
 represent interval
 approximately from
 (140 to 145') 40/80/30/150
 2nd Try
 Rec. = 1.8'
 Sme = 2.0 PPM
 Wet light gray SAND,
 fine; trace very fine
 sand; trace medium
 sand; few silt
 lt. gray clay (parting)
 Hammering 150
 @ 11:15 Don Thomson
 arrived from GPM
 gamma logging. He is
 the person who
 assisted John
 Burke in soil gas

11/30/91

(29)

Jugan

4/30/91

Jugan

150-152 21/40/56/85
 Noon sitting up
 for ground log
 Drilling and work
 bailed

Ree = 2.0
 New = 1.0 PPM
 wit very compact
 dominantly gray (light)
 layered SAND, fine
 a medium, trace concn
 sand that is tan colored
 few laminae of black
 dark gray

1715 Start downhole
 gamma logging
 1230 Start up hole
 gamma logging

3 or 4" 1/4" to 1/2" seams
 of clay, lt gray.

NOTE Job was shut down
 on Thursday 7/18/91

4/19/91, Friday due to
 Hydrant mil-up
 More analytical tests
 were done plus a

| | | | |
|------------------------|---------|--------------------------|--------------|
| 32) J. Auger | 4/30/91 | J. Auger | 4/30/91 (33) |
| pressure test | | NOTE: | |
| performed by Gummer | | Gum has written a | |
| together w/ Delta crew | | letter to NYSDOC | |
| to ascertain what | | "Concerning hydrant | |
| hydrants are hooked | | usage for drilling water | |
| up to Gummer's which | | acc. to S.G. | |
| are hooked up to | | | |
| Bethpage-Water Co. | | 1430 finishing up | |
| | | Gummer logging | |
| 1400 Scott Loring | | Problem flushed tube | |
| problems w/ gamma | | copying onto "B" drive | |
| logger has been | | 1445 | |
| it several times | | Drill crew removing | |
| | | augers | |
| Al & Bob go for | | 1450 Scott & departs | |
| coffee & return | | Site. | |
| @ 1415 | | 1455 Don Munson | |
| | | departs w/ geophysical | |

(34)

Jungler 4/30/91

van.

1500 go to make calls

it has rained on & off

all day Temp. is in 60s

1515 → 1545

Talk to Chris Mayer & John Barnes

Return to HoI

Drillers preparing to leave. Have not

reamed hole but have re-traced

small Pauegers.

1615 Depart site

~~Jungler, RPs~~

(35)

Jungler 5/1/91

5/1/91

WEDNESDAY May 1, 1991

WEATHER: GOOD

TEMP: 56°F

WIND: 5-6 MPH S-SW

FORECAST: CHANCE OF

THUNDER SHOWER, 82° high temp.

Arrive. 0705 @ Bldg 16

Sup in: Obtain drilling

badge; Proceed to

location Cm-16-T

North side of Plant 02.

Persons Present

Al Day, Bob Duvre Jr → Delta

Scott Glass → Cim

Judy Singer → yell, sand

(36)

5/1/91

Jinger

5/1/91

Jinger (37)

0715 Drillers

setting up to main c

0830 S.G. & B.H.D.

8" ϕ augers, GM-16-T

leave site separately

concrete over these

0840 S.G. returns

parking lot is quite thick, 0.5' to 0.7' thick

0850 Al has drilled down about 5' \bar{c}

Difficult auger

8" ϕ augers

grinding through concrete ~ 4" thick

0900 S.G. off site to call lab, etc.

0740 Al uses jack hammer to get through concrete

Bob. D returns

hammer to get through concrete

c breakfast.

0800 Al welds on 8" auger

0915 Drilling down 10' \bar{c}

Steel plate on 8" auger

0955 \bar{c} for em-16-T

Screen to be set 135'-145'

150'

acc. to Carlo via Scott G.

NOTE O/M is 10-5w of rig

All doesn't have enough

Auger 5/1/91

8" auger acc. to S.G. 1055 60 to microphone

Screen setting for calls
Shallow well, GM-16-5 Call J.B + C.M. No one
will be 43' to 53' in. Left message all "OK"
~ 45' by in 16-T will try later.
Call G. Burke for S.G.

1015 Al has only 120' of points per location to
8" auger. Brian, other include in monthly
driller on another job report.

has the augers. Al will noon
go to get augers, steam Return to GM-16-I
them tomorrow Am + location Bullers

Complete 8" auguring of zone for day as well
GM-16-I tomorrow 5/2/91 as Scott G Site

Friday, GM-16-5 4 borehole are
will be constructed (5/3/91) secure

(4)

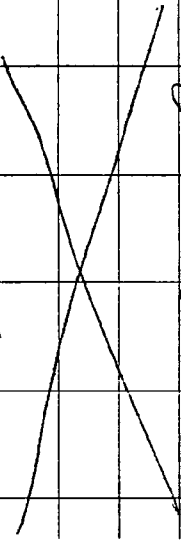
(40) Singer 5/1/91

120' of 8" Ø auguring complete
Check out staging
area. No one there.

To check out, 1 library
for xeroxing field
books.

Return ⁴⁰⁰ book to teacher

Anticipate departure
about 1400 hrs.



Judith A. Singer