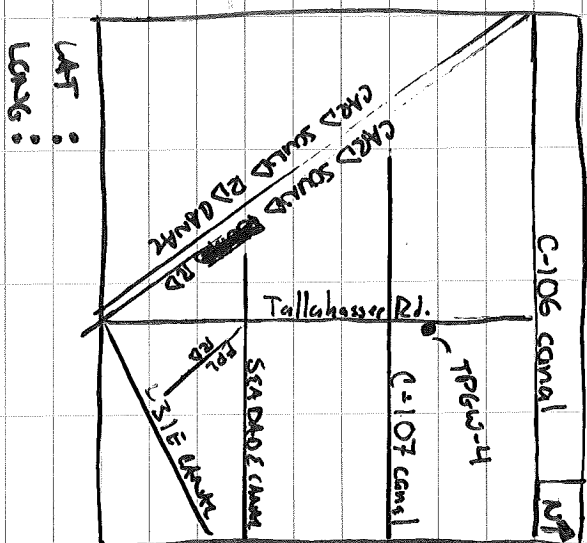
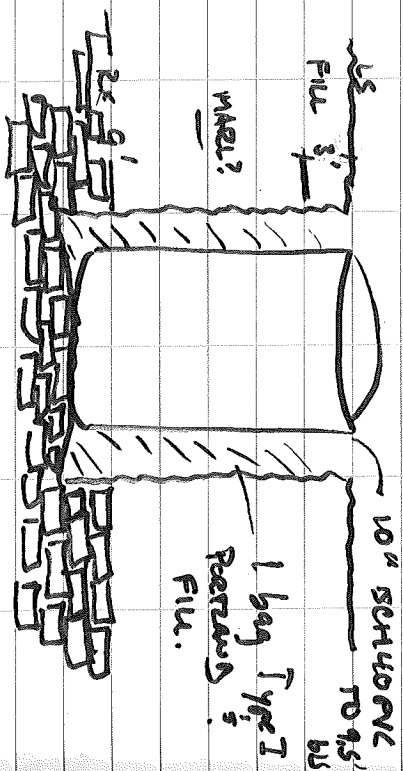


2/23/10

TPGw-4 SITE LOCATION MAP

LAT :
LONG :

16:24 - duplicate 2" well.

H₂O quality 2" well

SC = 4409 us/cr

MS = 2805 us/cr

SAR = 2.34 ppt

Background H₂O quality

Location #1, SC = 1017 us/cr

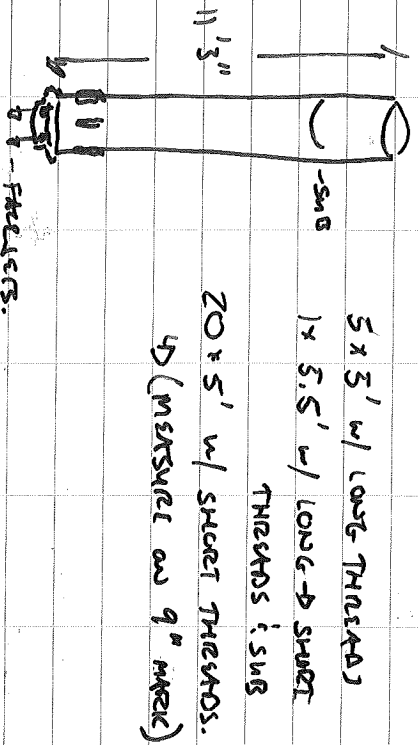
TPGw-4 T

2/24/10 TPGW - 4, CORING

~8:30 - on site, - wait for rain; THUNDER TO PKRS.

8:40 - 3V. OFFLOADING CORING PKRS.

Core Bit = 11'3"



5 x 5' w/ LONG THREADS
1 x 5.5' w/ LONG → SHORT
THREADS: SUB

20 x 5' w/ SHORT THREADS.
4 (MEASURED AND 9" MARK)

4 - FIDELITY.

- TAG FILE ~ 6' BLS.

• DEPTH MP = ~2' ABS.

• BIT ASSEMBLY DOWN TO MARK = 9' BLS.

9:35 - Core BIT TO 9' BLS.

9:39, - clear out to ~10' BLS.

9:45 START CORE RUN #1

DEPTH (FT)	MIN: SEC	NOTES:
10' - 11'	17 : 20	27' OF 48"
11' - 12'	0 : 15	56% recovery
12' - 13'	2 : 26	WC = 0'
13' - 14'	8 : 30	RUG = 27"

10:24 END CORE #1

Core #1 - START @ 9'8" BLS. (-)

- 10.5' BLS @ 8 : 22	CT
- 11.5' BLS @ 1 : 1	CT
- 12' BLS @ 1 : 1	CT
- 13.5' BLS @ 2 : 14	CT

NOTE: @ 10' BLS @ 1:58 ET. - (Duller, inc rotation speed)

9:52 - STOP - NOT SMOOGE WATER IN PORE

10:03 - resume CORING

~10'8" - pre hydraulic 11/4" @ 12:30 ET

10:11" - STOP TO ~12'2" THEN START

~12'4" STOP TO ~13' THEN START

~13'7" - FIREMAN, ~13'8" - STOP TO ~15'11"

10:24 END CORE #1 @ ~14'3" BLS.

2/24/10 TRG-W-4, CORNING

- NOTE: NE. OBSERV. POINTED W. ~ 2" WHEN DELIVER
 PICKED UP CORRE STRIKE.

10:46 START CORRE RUN # 2

DEPTH (FT)	MIN : SEC	NOTES
14'-15'	1 : 15	37 " OF 60"
15'-16'	5 : 13	62 % RECOVERY
16'-17'	10 : 38	WE = 4"
17'-18'	3 : 57	RUN = 33'
18'-19'	2 : 57	

11:11 END COR. #2

14.5' HSE	0 : 18	ET
15.5' HSE	1 : 33	ET
16.5' HSE	5 : 27	ET
17.5' HSE	1 : 56	ET
18.5' HSE	2 : 16	ET.

• CORRE OBSERVED TUBE AND COR IS STRIKE
 11:11 - TD COR #2 @ 19' 3" BLS.

FPL YSISSC OK CHECK

SPD 1000 us/cm, probe 997 us/cm

DISTURBED WATER @ 3 us/cm

11:26 START CORRE RUN # 3

DEPTH (FT)	MIN : SEC	NOTES
19-20	1 : 19	55 " OF 60"
20-21	9 : 29	92 % RECOVERY
21-22	2 : 49	WE = 33"
22-23	5 : 14	RUN = 22"
23-24	0 : 53	

11:47 END COR #3

20.5' HSE	4 : 16	ET
21.5' HSE	0 : 31	ET
22.5' HSE	4 : 58	ET
23.5' HSE	0 : 38	ET

~ 23' 8" - DEEP.

11:47 TD COR #3 @ 24' 3" BLS

21:51 - START COR #4

DEPTH	MIN : SEC	NOTES
24-25'	2 : 24	54 " OF 60"
25'-26'	5 : 54	90 % RECOVERY
26'-27'	0 : 41	WE = 42"
27'-28'	0 : 34	RUN = 12"
28'-29'	9 : 28	

12:24 END COR #4

2/24/10 TPGW-4 CORING

12:24 @ 29' BIS, TD, CR#4

12:32 START CURZ. RUN #5

DEPTH	MIN: SEC	NOTES
29-30	10 : 55	52' OF GO
30-31	4 : 46	87% RECOVERY
31-32	0 : 42	WE = 37"
32-33	1 : 46	DUG = 15"
33-34	15 : 42	→ Resume on 2/25/10

6:36 (last) END CR#5.

13:05 PAUSE/STOP @ -33'6" BIS,

LIGHTHOUSE & THUNDER.

CT 9:12

13:30 MIKE (B.V.) ATUS 11 & Day

OFF TO TPGW-12

14:20 @ TPGW-12.

• TALK w/ STACY F. (FR).

• B.V. will run 2" log Fly

• Fun will test ~ 100 yds

• Discharge into temp.

14:50 TPGW-12 BACKGOUND W.A.

SC = 38900 w/cm

15:10 - START RA.

15:18 DISCHARGE WATER

↳ 39000 w/cm

- RIGHT NOW 30' OF 8" AIRLIFT ON

15:26 DSE. WATER OUT, SC = 38660 w/cm

15:43 - B.V. CULD NOT REMOVE

OBSERVATION @ BOTTOM OF

3" → removing 3" from

BOREHOLE...

15:55 - 1st run 7:12 UFTINER

16:05 - STOP - BACKLOG.

16:16 - Resume ATC @ 26'-30" BIS.

16:20 - DISCH. H₂O Qual, SC = 40150 w/cm

16:48 - Done w/ ATC @ 35' w/ 40' 3"

on STRUNG.

- Stacy F. on site.

17:00 - end.

2/25/10 TRCU-4, CORAL

07:30 @ RAMMADIAN, J-in meeting

- STACY F. (FR)

08:10 @ TRCU-4 SITE

08:20 @ B.V. Drillers on site.

- MIKE (Devereux) + 1 helper.

8:23 - RESUME CORAL Run #5

8:36 TD CR#5 @ 34'3" BLS - sound 1/2 cor
B.V. Conditional, bubble Fall out of CR.

9:07 START CORAL Run #6

DEPTH (FT)	MIN: SEC	NOTES
34-35	0 : 37	66" OF 72"
35-36	0 : 29	92% Recovery
36-37	1 : 43	we = 60"
37-38	0 : 46	Run = 6"
38-39	0 : 54	
39-40	8 : 27	

8:27 END CR #6

34.5' BLS @ ± ET

35.5' BLS @ ±6 ET

36.5' BLS @ 0 : 57 ET

37.5' BLS @ 0 : 31 ET

38.5' BLS @ 0 : 26 ET

39.5' BLS @ 8 : 27 ET

~39'2" - FIRMER.

• D.V. MIXED w/ TIGER SAND.

• HARD ~39'5" - Driller picking up bit!

BACK DOWN.

8:27 TD CR #6 @ ~39'6" BLS.

9:34 START CORAL Run #7

DEPTH (FT)	MIN: SEC	NOTES
40-41	0 : 31	17" OF 60"
41-42	0 : -	28% Rec
42-43	0 : 5	we = 17"
43-44	0 : 6	
44-45	0 : 7	

9:36 END CR #7

~40'2" DEEP

9:36 - TD CR #7 @ 45' BLS.

Conditional Bould.

- ADD TIGER SAND

2/25/10

TRW-4, CORING.

9:53 START CR #8

DEPTH	MIN	SEC	NOTES
45-46	1	:02	0 "cf 60"
46-47	0	:56	0 % recovery
47-48	0	:50	we = 0"
48-49	2	:31	Recovery = 0"
49-50	0	:52	

9:59 END CR #8

- NO RECOVERY CR #8.

- COND. BOREHOLE.

- mixing after mud.

10:16:30 START core RUN #9

DEPTH (FT)	MIN	SEC	NOTES
50-51	05	:33	63 "cf 60"
51-52	01	:11	105 % recovery
52-53	00	:45	we = 51 "
53-54	06	:11	Recovery = 12 "
54-55	06	:20	

10:37 END CR #9

50.5' BUS @ 2:53 ET

51.5' BUS @ 00:46 ET

52.5' BUS @ 00:08 ET

53.5' BUS @ 4:47 ET

54.5' BUS @ 5:11 ET

~52'2" to 52'11" DROP.

- 53' - FIRMER. - PEN RATE SLOWED

10:28 - mixing more dry mud.

~53'2" better pen rate, but still firm

10:35 - B.V. Driller inc rotation speed & 54'2" Ws

↳ Pen rate increased.

10:37 - TD CR #9 @ ~54'10" BUS.

10:49 START core RUN #10

DEPTH (FT)	MIN	SEC	NOTES
55-56	2	:47	64 "cf 60"
56-57	0	:48	107 % recovery
57-58	1	:37	we = 59 "
58-59	1	:09	Recovery = 5 "
59-60	3	:27	

10:55 END CR #10

57.5' BUS @ 00:42 ET.

58.5' BUS @ 00:24 ET

59.5' BUS @ 01:06 ET

10:59 - TD CR #10 @ 60' BUS.

2/25/10 TRENCH

Depth	MIN	SEC	NOTES
11:26	START CR #11		
60'-61'	2	: 24	GS "OF 60"
61-62	5	: 17	108% Recovery
62-63	1	: 30	WE = 60"
63-64	1	: 17	RE = 5"
64-65	1	: 57	
11:39	END CR #11		

Depth (ft)	MIN	SEC	NOTES
11:51	START CR #12		
65-66	2	: 46	32" GO
66-67	1	: 03	53% Recovery
67-68	0	: 45	87% OF 60"
68-69	0	: 12	RE = 6"
69-70	1	: 17	
11:58	END CR #12		

Depth	MIN	SEC	NOTES
12:09	START CR #13		
70-71	1	: 29	24" OF 60"
71-72	1	: 56	35% Recovery
72-73	0	: 15	13" WE
73-74	:	: 22	RE = 8"
74-75	:	: 32	
12:15	END		

12:25 - Lunch - DBV, JLA - Catch up...
 13:05 - Mixing Materials

Depth (ft)	MIN	SEC	NOTES
13:11	START CORE RUN #14		
75-76	00	: 36	12" "OF 60"
76-77	00	: 12	20% Recovery
77-78	00	: 21	
78-79	01	: 22	WE = 0'
79-80	41	: 41	RE = 4"
13:18	END CR #14		
	SAND = 8"		

~ 78'4" FILLING TO ~ 78'6" THEN
 DROP TO ~ 79'2" THEN

SCAVENGE PEN. - FILLING TO TD.
 13:18 TD CR #14 ~ 79'10' BIS

2/25/10 TPGU-4, CORING

• MIXING TIGER MUD.

DEPTH	START	END	TIME	NOTES
13:28	START	CORE RUN #15		
80-81	MIN : 48			0 " OF 60"
81-82	00 : 27			0 % RECOVERY
82-83	00 : 30			W.C. : 0
83-84	00 : 44			RUBS : 0
84-85	00 : 47			SAND : 0
13:32	END	C.R. #15		
13:32	TD	C.R. #15 @ 85' BLS.		
- DOTE - SOME RUBBER FLUSHED OUT 4/				
PATTIE OUT TO GROUND. COULD NOT RECOVER ETC IT MIXED W/ EXISTING CEMENT				
13:41	START	CORE RUN #16		
85-86	MIN : 21			48 " OF 60"
86-87	0 : 16			80 % RECOVERY
87-88	0 : 18			W.C. : 0
88-89	0 : 15			RUBS : 4'
89-90	0 : 20			SAND : 4 1/4"
13:42:30	END	C.R. #16		

13:40-MIX UP TIGER MUD

13:42-TD CR #16 @ 90' BLS

13:51-MIXING TRG MUD.

DEPTH	START	END	TIME	NOTES
13:57	START	CORE RUN #17		
90-91	00 : 17			63 " OF 60"
91-92	00 : 7			105 % RECOVERY
92-93	00 : 8			W.C. : 0
93-94	00 : 10			RUBS : 0"
94-95	00 : 12			SAND = 63"
13:58	END	C.R. #17		
13:58	TD	CR #17 @ 95' BLS		
FIX T.MUD				
4:11:30	START	CORE RUN #18		
95-96	6 : 23			30 " OF 60"
96-97	0 : 8			50 % RECOVERY
97-98	0 : 10			W.C. : 0"
98-99	0 : 10			RUBS : 0"
99-100	0 : 12			SAND = 30"
4:13	END	C.R. #18		

4:13-TD CR #18 @ 100' BLS.

- B.V. LOST CORE ON 1ST REARMY

- Capbed some core under E.B.
put back in the hole.

2/25/10 TPGW-4 CORING

14:34 START CORRE RUN # 19

DEPTH (FT)	MIN	SEC	NOTES
100-101	0	11	68' of 60"
101-102	0	5	113 % Recovery
102-103	0	5	WE = 0"
103-104	0	4	RUG = 0"
104-105	0	9	SAND = 68"
14:34:50 END COR #19			

~14:35 TO CR #19 105' b/s.

15:12 - Cars Packed up - OFF SITE

16:10 @ TPGW-3

- DROP OFF CORES w/ USGS.

16:47 - BACK TO LAND USE BLDG.

TPGW-3

UG SHOWN (BURIED FILL)

SC: 53500 us/cm (can uses TESTING)

14:50 61370 us/cm

(PROBE)

17:30 BACK