

MOBILE DRILL LOG # 12

Forestry Suppliers, Inc.

1-800-647-5368

#49354 Level Book

18062
SUPERWATER CK #2

18063
CAMP LOGWAY

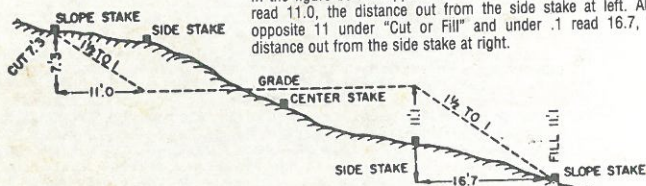
8005

8066

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	Distance out from Side or Shoulder Stake										Cut or Fill
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

4715290001882534

EXP 10/01

TAD 15#

47-04-039148-52C

21872 US HWY 32N

LAUREL HILL FL

32567

Sonitrol - 4631-56, ENTER, off

The paper in this book is made of 50% high grade rag stock with a WATER RESISTING surface sizing.

[illegible]

day to day contact

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18062
SWEETWATER CT #2

18063
CAMP LOURY

18064

18065

18066

Big Lumpy CT

3-27- KC, DP 7AM START

1

1. Juniper Ck / 191 picnic area
pull in first parking pad to L
(Coney ~ 150 ft fr Hwy 191)
Springhill Quad

2 E.F. Coldwater Ck / Camp / Hwy
triangle no good - primitive campsite
on W side of river sk
McKellan Quad

3. Sweetwater Creek, due West American Lake
West side of creek @ ~150' elev
open area on outside of bend
* check bridge capacity

4 Kelly Spring Branch 0.5 mi W of
creek (bridge out) at div rd to
North Elev ~ 130-140
SW 1/4 R 36 T 4N, R 26W
must come in off of 4 at 1 mi
W of border ck crossing. Access is
4WD only when ~~the~~ wet -
prob can't get trailer back when
wet. CANVAS access ck fr water

5 PANTHER CK^N (alt site) E side of
CREEK ~ 100' E of bridge on S side
Blackman Quad

~~6 Pymon CK, Baker Quad/
NE 1/4 sec 13 T4N, R 25W
Access from 189 AT CANNON
TOWN. Trail to south to pymon
ck - deep ruts - may not be
able to get trailer in~~

END DAY 7 PM

6 Baker Quad - PANTHER CK S
NW, NW, SEC 14 - west side of
panther ck - take dirt road to
E at top of hill - road goes
~ 0.1 mile then fades out
on mostly open hillside -
drill at "culdesac"
should be able to pump from
Panther ck at the bridge

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W18062

3
3-28

KC, DP - 730 Street

WEST of "SWEETWATER CREEK" #2

T 5N R 26W S 14 6

AT OUTSIDE of bend in road ~

.3 mi west of the creek crossing.

Elev ~ ~~140~~ 140'

LAT 30° 56' 22.6" EPE 39'

LONG 86° 48' 26.0"

ELEV 140'

0-2.5' push spl 1-2" bn or sand

then orange + bn orange clay sd

2.5-4.5' red, cm + or bn clay

4.5-6.1' as above but or bn

predominant color

6.1-8.5' SAME

8.5-11' SAME

11-13' clay as above, btm 6" med

gray clayey sd

13.5-16' gray clayey sd

16-18.5' ol. gr + black clay

18.5-21' SAME med. ol. gr

21-23.5' SAME - ol. gr - small

laminar of clay gt 2 sd. - clay is v f

gt 2 sd

23.5-26' SAME

26-28.5' SAME

- 28.5-31' AS above w more thin
laminae - alt sand + clay
- 31-33' dk blk bn silty clay
- 33-35' ol. bk silty clay
- 35-37' ol gn + dk olivgy clay
with fine shell, blue green toward
base
- 37-38.5' blue gn clay w ss clasts -
hard minor shell + weathered carbonate
- 38.5-40.5' blue gn + blk/bn clay
w weathered carbonate ^{at base}
- 40.5-42.5' blue gy clay - sl. shelly ²
- 42.5-44.5 shelly clayey sdy clay
- 44.5-46.5 ol. gn sdy/clay - clay sd -
shelly in upper 8"-12"
- 46.5-48.5' med gray sdy clay - brown
#8 last 3"
- 48.5-50.5' med/dk gy clay sd - upper
part soft
- 50.5-52.5' dk gy ~~sd~~ clayey sd
- 52.5-54.5' dk gy clayey sd
- 54.5-56.5' SAME
- 56.5-58.5' gray clayey sd
pilled 7' sludge into hsa
pumped out

58.5-61' 6" recovery - evidently
washed out below HSA

61-63.5' - dk gy clayey sand
END CORING for day
END day 6:30 p

3-29-00 730 start KC, DP

63.5-65.5' SAME - dk gy clay sd
~ 70% recovery

65.5' - 67.75' sl. gy clay sd
SL. shelly at top. lowmost
8" lt to dk sl. clay. - bulged
sp. r.

67.75 - 69' gray clayey sd w/ trace shell
then lowmost 1" clay - dk gy

All in soft + plastic

69-71' top 4" dk gy clay. remainder
in orange + red clayey sand + gl.
sand at btm

~~71~~ sucked in 6' sand into HSA -
pumped out - washed to 73' ∴
71-73' orange sand unconsolidated,
collected pumped sample

900
ICE

WATER
PHONE CALLS

6

73-75.5' pumped spl white
med sand micaceous?

75.5-80' drilled 2.5' - pumped spl
jetted out part end of HSA's

~~80~~ - med grt sd, orange to gray
sl. micaceous

80-81' pumped spl - orange grt
sand, micaceous, orange clay
matrix

81-83' NO SPL recovery - pumped spl
mostly clay some fine sd

83-85' pumped spl - crs-vcrs sd
some gravel, orange clayey matrix
some gray clay blebs recovered.
? "coarse clastics"?

85-87' pumped spl red or. crs
to vcrs sand, some gravel
- pumped spl - collected separate
coarse fraction

87-89.5' as above - poss. sl finer
89.5' TD

END CORING 400pm - thunderstorms
moving in. - neon alternate
drill site for the Pyron Ck
site which is not suitable

END DAY 7:20

3-30-00 7:30 start

start pulling HAs

NAT fill to 70'

Pump 4 bags E2 SEAL to LS

18067

18063
CAMP LOWRY18065
Middle Ct18066
Big Langer Ct

3-30-00 8

W# 18063

CAMP LOWRY
(E. Fork Coldwater Ck)

SEC 21 66A T 5N, R 27W

LAT 30° 56' 00.5" EPE 45°

LON 86° 56' 46.7"

Elev ~ 110' 250 measurements



0-2.5' push spe - organic + dk bn
soil gnd dwn to gl. gy
clayey sand

2.5-5.0' push spe. yellow gy sd
clay sd increasingly red w depth

5.0-6.25' WL spe - red + tan
mottled clay becoming gy bn at base
6.25-8.75' gy bn clay then gl. bn
to lt gy sl clay sd - (90%) pbl
fd.

8.75-11.25 3" lt tan gy sd then
orange clay / clay sd

11.25-13.75' tan gy, red + or clay +
clay sd upper 1'. remainder
med. dk gy clay sd + sdy clay w
minor sand stringers.

13.75-16.25'

18067

18063

18064

8065

8066

Big Spring Ck

Big Spring Ck

16.25-18.75' blue gy clysd
End coring for clay

3-31-00 730 Start

18.75 - 21.25' ol. gn clay

21.25 - 23.75' ol. gn clay w some
black blebs + streaks, sandy
- poss clysd

23.75 - 26.25' ol. gn + yl. gn clysd
+ sand - organic streaks in top

26.25 - 28.75' yl. gn clay

28.75 - 31.25' ol. gn clay w yl. bn
mottling, crumbly

31.25 - 33.75' ol. gn clayey sand

33.75 - 36' ol. gn clysd w
minor organic blebs + orange mott.

36-38.5' ol. gn + tan clay w tr
shell material

38.5 - 40.75' ol. gn clay w trace
shell

40.75 - 43.25' ~~ol. gn~~ blue gn clay
w minor shell

43.25 - 45.5' ol. gn clay, w shelly
laminar in btm part

top of shell

16
46.5-47.5' ol. gn ^{gnss to dk olive} clay, v shelly
47.5-49' dk olive clay, v stiff -
fr. shell, exp. section due to
fluid pressure. Shorten spec 2"
49-50.5' dense clay - but gw
sampler w 1.5' run - dark
olive clay, sh. shelly,
~ 20% organics in lower part
(wood frag.?) +
50.5-52' dk gy clay
52-54' firm ol. gn clay w
fr shell - becomes sandy clayey
sand in btm
54-56' lt ol. clay sd w Abd shell
56-57.5 same, some dark
granular at ~ 56.5'
57.5-59' lt. olive clayey sand
variably shelly
59-61' lt. ol. gn, clayey sand, varied
to dk gy + bn abundantly shelly
in upper half. less in btm
61-63' lt. ol. clay sd - fr shell?
63-64.5' blue green ~~etc~~ sandy clay
+ clay

end coring for day
return TCH 6:30 pm

4-10-00 JBS, DP
arrive site @ 1pm.
Hole open to 64.5'
SWL - 4'8"

64.5 - 66.5 blue-green
clay. Full sampler.

66.5 - 68.5 blue-green clay.
First 1/2 of sample - very hard
to drill (spinning in place).

68.5 - 70.5 blue-green clay
w/ small layer of shell
material.

70.5 - 72.5 darker blue-green
Sampler full + tight w/ 2' run.
clayey sand w/ some shell
material.

bumped sampler nose
in last run - easier drilling.
72.5 - 74.5 dark blue-green
clayey sand w/ some shell
material.

74.5 - 77.0 dark blue-green
hard sandy clay.

77 - 79.5 same.

79.5-81.5 blue green clay,
very dry, hard.

81.5-83.5 same.

83.5-85.5 light blue-green
clay.

85.5-87.5 pumped sample.

on next run, sampler gets
sand locked.
pull flights, cut cable.

end day at 8:50 pm
rig mileage - 4609

(TD 90.0)

4-11-00 JBS, DP 7:30 start

Remove sampler from sand
locked bit piece.

Hole has artesian flow w/
3 foot of auger stick up.

Hole open to 60'0"

Pump 3 bags of gravel
w/ 1 bag chips on top.

- Still some water flow.
- Add 3 gal. gravel to
hold chips in place. - No Flow

Pump 2 more bags bent. get.

Brings hole to 5'

Top w/ 1 bag bent. chips +
cuttings.

Last run: 87.5 - 90.0'
coarse white sand w/
some blue-green clay.

TD - 70.0

W 18064

Panther Creek - N
ambient site.

OKaloosa CO

T SN R 24W S 30 daa

Lat 30° 54' 39.1 Lon 86° 41' 09.9"
E/W 120

- 0-2.5 orange-red clayey
sand. Push w/ A-W
- 2.5-5.0 brown-grey sand.
push w/ A-W.
- 5.0-7.5 poor recovery ~6 inches
dark organics
- 7.5-10.0 poor recovery.
grey sand.
- 10-12.0 grey clayey sand.
poor recovery. w.11
try more pressure.
- 12.0-14.0 grey clayey sand.
good recovery.
- 14.0-16.5 darker grey.
clayey sand.
- 16.5-19.0 dk grey clayey
sand. Hit water
at last part of int.

w) orange coarse sand.

End day at 7:45pm.

4-12-00

7:30am start

(drop off hooker at Hurricane Lk.)

SWL - 13.5' BLS

2' of sed. in hole → pump.

19.0-21.5 poor recovery.

buff coarse sand.

21.5-24.0 NO sample.

(bump out nose and put new core catcher in for next run.)

24.0-26.5 orange clayey sand. Good recovery.

26.5-28.5 lt. orange to buff clay turning sandy down int. Run into fine sands.

28.5-31.0 pumped int.

buff med-coarse recovery.

31.0-33.0 buff med-coarse sand w/ clay

33.5 - 36.0 buff clayey sand

36.0 - 38.5 buff clayey sand
8' sed. in hole

pump sample to 44.0'

38.5 - 44.0 ↑ pumped sample.
Recovery is buff coarse sand w/ heavy mins + some clay blebs.

44.0 - 46.5 No sample. (?)
try flapper valve next.

46.5 - 49.0 poor recovery.
~ 6" same buff coarse sand w/ heavy mins.

49.0 - 51.5 buff sand w/ some clay blebs. poor recovery.
2' sed. in pipe → pump.

51.5 - 53.5 pumped sample.
Super fine sand w/ heavy mins + some orange clay blebs.

53.5 - 56.0 pumped sample
recovery very coarse w/ heavy mins.

56.0 - 57.0 pumped sample.
coarse sand w/ coarse

heavy mins. + clay blebs.
57.0-58.5 tan-grey clay (buff)
interval (lense) + coarse
clayey sand.

11.0' feet of sed. in
pipe.

pump clear - pump past
bottom.

58.5-59.25 pumped sample.
buff coarse sand.

59.25-61.5 lt. orange
coarse sand w/ clay. +
heavy min.

SAMP - LOCKED!

pull HSA's and fix
broken cable.

Drill back to 61.5.

7' sed. in pipe. → pump clear

61.5-65.5 - pumped sample.

65.5-67.0 sand locked.

Sampler moved ~ 4" one time
and is stuck → cut cable.

End Day at 7:45pm

- lock file
- blocks
- cement (?)
- ~~3~~ staples
- cable (?)
- may need to replace safety hooks / cable clamps.

4-13-00

18

Begin day 7:25 am.
pull HSA's, repair
cable, sampler assembly
sleeve.

Hole open to 35' → pump
3 bags bent. grout.

Hole open to 5' → pour
in 1 bag bent. chips & top
w/ cuttings.

Clean and pack up at
12:30 → ~~Go to next site.~~

. netw JAH

* No Diesel in BAKER.*
(Berryville is closest.)

W[#] 18065

19

4-17-00 KC, DP 7AM start
return BURSF

Middle Ck. Core

SANTA ROSA CO

T 3N, R 26W, sec 1 b

LAT 30° 47' ~~47~~ 47" 9min

LONG 86° 47' ~~47~~ 38" 119

ELEV N 115'

Appx 1/4 mile W of county line
Camp. date 4-19-00

0-2.5' push spl - lt. to dk gy br
sd + clay sd - grad down to yl. br
clayey sd.

2.5-5.0' push spl orange + gray
clay - gray at btm.

5.0-6.25' gray + orange + red
mottled clay

6.25-8.25' mottled clay or above

8.25-10.25' mottled clay or above

last 4" orange clayey sand

10.25-12.25' orange clayey sand
+ sand.

WATER

PRESSURE NO 3 3/8
hp grease

get several pieces 4" pvc
machined to fit top of hsa
(or better yet ~~fit~~ metal to
fit top of hsa + machined to
fit into coupling

12.25 - 13.75' SAND - 1/4 to dk med. last 6"
medium coarse sd.

13.75 - 14.25' SAND. y/l. or med-crs

14.25 - 18.75' red or + pk crs sd

18.75 - 21.25' y/l. or med-crs sd

21.25 - 23.75' y/l. bn of lt bn sd

23.75 - 26.25' SAME

26.25 - 28.75' - WATER TABLE IN
this spl - ~ 3" fr btm.

y/l. bn med-crs sd.

28.75 - 31.25' lt y/l. sd

31.25 - 33.75' SAME

33.75 - 36.25' pumped spl - med-crs
quartz, sand

end drilling - end day 6:30 p.

4-18-00 KC, HM 7:45 start
SWL 28.2' bcs

36.25 - 38.75' v p. recovery - lost in
hsa - pulled in 4' sand.

pumped spl - coarse ~~fine~~ v f
sand w y/l. or clay matrix - also
minor quantity of lt gy clay blebs

and white grain

38.75 - 41.25' ran flap valve in sampler -
almost no recovery - 3' spl in HSA -
pumped spl - sandier above - somewhat
more clay (less water lost) - yl. or
matrix as at 30'

41.25 - 43.75' pumped sample - coarse sd,
some granular, + some clay blebs / ^{some} _{heavy}

~~43.75 - 46.25' pumped spl~~
washed HSA clean - lost circ

43.75 - 46.25' pumped spl - crs sd w
min clay matrix ^{in above} part.
- bottom part is clayey sd w 1/2 yl.

46.25 - 48.75' ^{48.75'}
clay matrix - pumped spl is
lots of uncom. sand + some clay/blebs
- clay blebs clay/sand blebs are
actual lithology

48.75 - 51.25' ^{48.75'} sl. clay sd., slightly clayey
toward base

51.25 - 53.75' lt. yl. clayey sand

53.75 - 56.25' SAME

56.25 - 58.75' clayey sd to sl. clay sd

58.75 pulled sand in - back to pumping

58.75 - 60' NO SM recovered in spl.

atp wash - lost circ - clean porous
sand

18067

McKay

18068

Prairie Ct. S.

18092

New Dist HQ

18066

Biglumpen Ct. Wagon

22

60-65.5' - pumped spl - drilled
to 63.75' SAND, as above
65.5-66' pumped spl - SAND as above
66-71.5' - drilled to 68.5' - pumped
spl sand, as above - white
clay matrix - slight - hole stays
open short time.
71.5'-74.5' - pumped spl - SAND as abv.
74.5-83' pumped spl - SAND as
above

end coring for day

• END day day 6:30 PM

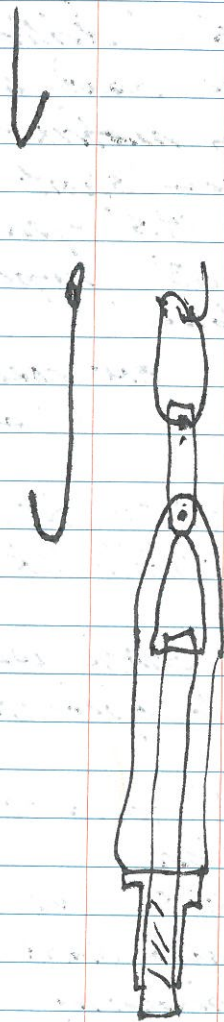
4-19-00 KE, DP - back to
Middle ck. 8 AM start

static WL 29.0' bLS
hole open to 82.75'

drill down to 83' + pump hsa
clear

83-85.5' WL splr - lt gy, clayey
quartz sand - orange clay granules
interdispersed

85.5-87.5' WL splr - sand (packed)
- hook came loose from retrieved
tool - $\therefore$ TD is 87.5'



Rig work to be done

- drillers step
- finish hammer holder
- fix driven side tank step
- air hose from brake sys.
- install air compressor
- grind ORING slot in last ^{w/o} auger
- straighten mast?
- finish standards on Rt. side box
- chairs for Auger rack pins
- tool tray for drl. str
- shield for top seal - gimball
xray
- vert ext.
- pivot pin - for rotation valve
- reflector bars for trailer tailgate
- 1 1/4" hose clamps
- drill out plugs in latch Assy
- make dishing tool for mbl drill
sampler
- straighten rig bumper
- install front bumper marker rods.

pull to SA's, retrieve sampler
 + sample ~ 45% recovery
 clayey sand or above
 81.5' TD

hook collapsed to 28.5'
 pump 2 bags Quick Grout
 to -3.5' - top off w bentonite
 chips (EZ SEAL)

==

4-19-00

W 18066

25

Big Janiper Ck Picnic Area

Hwy 191 2 mi SW of Munson
 site is ~ 150' E of 191

SANTA ROSA CO.

Sec 24 CC T 4N R 27W

LAT 30° 56' 00" S MIN

Lon 86° 54' 09" ANG

Elev ~ 70' 6466'

- 0-2.5' push spl - med bn sd
- 2.5-5.0' push spl - yl. bn sand
- 5.0-6.25' w/c sample dk yl. bn sd
- 6.25-8.75' med or bn sand
- 8.75-11.25' - sand - lt yl.
- 11.25-13.75' white - vlt yl sand
- 13.75-16.25' lt yl. sd 1st 8" then
red bn clayey sd
- 16.25-18.75' - ~~red~~ sand to ~ 17.5' ^{med bn to yl. ft sd}
- grad. chg to grey clay sd / sdly clay
~~17.5' to 18.75' pink + grey orange sand~~
at v. btm
- END coring for day
- END day 600pm

4.20-00 KC, DP 7:30 start

18.75-21.25' orange sl. clayey sd. moist

21.25-23.75' orange coarse clayey sand

23.75-26.25 coarse orange clayey sand + gravel poor ind

26.25-28.75' orange + gray clayey sand + gravel poor ind

28.75-31.25 Hyl. sand ist soft, then gray + orange clayey sand

31.25-33.75' gray sand upper 1/2 then yl. + gy clayey sand

~~33.75~~ - 3' SAND in HSA - pump clear ~~spot~~ install gimball assy, splr sandboxed - cable loop came undone - pulled 10' to SA splr re-seated - made fish tool to retr.

drill back to previous depth

33.75-35' - NO SM - drilled w/o splr - NO material in test

35-37.5' WL splr - SAND w/ gravel ~ 1' recovered - 3' sed sucked into hsa - pumped out

37.5-39.75' WL splr - ~ 1' sand rec. possibly crushed

NOTE
 intervals from 35' ^{higher than}
 on which are
 at top (less clay)
 bottom - due to
 pumping HSA clear

38.75 - 40.5 yl. sand - upper part
 prob. washed - by dk yl clayey sand at
 base

40.5 - 42.5' pumped spl - sand, med,
 dk yl. matrix (pumped out)

42.5 - ~~43~~ drilled to 43.75' w/o
 splr - no sed in HSA -
 drilled like sand

43.75 - 45.25 WL spl ^{1.5'} yellow sand
 sl. clayey - matrix washed out
 of upper portion
 attempt to bail sed from HSA -
 not effective

pumped HSA clear to 46.75'
 46.75 - 48.75 WL spl NOT RECORDED
 3' sd in HSA - pump spl to 51'
 sand as above

51 - ~~56~~ 54.25 sand - F-M, lt gr,
 grey matrix pumped spl.

54.25 - 56' grey sand, w minor
 limonite pebbles

56 - 63' - same as above

63 - 65.75' pumped spl, sand, bn
 clayey matrix

65.75' - 69.5' pumped spl - grey sand
 w clay matrix - taking almost NO
 water. minor limonite granules

END CORING for day - 630 p
 END day 730 p

4-21-00 KC - DP 745A START
 SWC 24.0' BLS

69.5 - 71.5' WL spl - gray sand
 possibly washed - ~ 1' medium

71.5 - 72.5' bn sl. clay sd ~ 1' med.

72.5 - 74.0 - gray bn sl. clay sd

74 - 76.5' gray bn sl. clay sd as above

76.5 - 79' gray clayey sand - sl. clayey
 than above

79 - 81.5' gray bn clayey sand

81.5 - 84 same

84 - 86.5' same

86.5 - 89' gray sl. clayey sand

INCREASING clay w depth

89 - 91.5' gray bn clayey sand as above

91.5 - 94 as above

94 - 96.5' gray clayey sd as above

96.5' TD

Hole collapsed to 23.5' BLS

pumps 2 bags Quik Grown

23.5 - 3' 1 1/2 bags bentonite
 chips to ~ 8" then cuttings

W 18067

Got rig + truck stuck,
truck stuck 3 different
times - getting to location.

Ground is very boggy even
at higher elevation

use sound
LAT LOW

MCCOY POWERLINES

4-24-00 JBS + EH

10:30 start from Tall.

Okaloosa Co

T 6 N R 25 W S 32 cc b

Elev 150'

Lat. ~~30° 58.8' N~~ 86° ~~45' 45" W~~

58' 50" N

45' 28" W

22 min
avg.
EPE 3

0-4' get cuttings from
inside HSAs.

4-6.5' orange clayey sand.
very saturated. - water
level.

6.5-8' sampler plugged. Only
4" recovery.

end day at 8pm.

4-25-00 begin day at 7:15
JBS + EH

8-10.5' good Recov. orange
clayey sand.

10.5 - 13' ~~sandy clay~~ Grey
clayey sand is banded
w/ orange and red.
good recov.

13-15.5 Grey to buff clayey
sand w/ bands of orange.
good recovery.

15.5-17.5 Grey sandy clay
with interval of orange
clay & red ~~clay~~
some orange mottling
throughout. Last few
inches - very stiff.

17.5-18.0 Grey clay ~~with~~
mottled with orange & red.
very stiff, dry.

18-20' light grey sandy clay
top half of int. mottled w/
orange. Good recov.

20-22.0' light grey sandy clay
with some orange mottling

22.0-23.5 grey sandy clay
darkening in color down
int. and sand is coarser.

23.5-25.5 grey coarse
clayey sand. Good ~~recov.~~

grey sandy clay.
Good recovery. Some bands
of orange. sandy ~~clay~~ clay.

25.5-27.5 grey coarse
clayey sand. Good
recovery.

27.5-29.0 ^{Orange} First .5' same. [↑]
Then brown clay.

29.0-31.0 lt. blue-grey clay
mottled with orange clay &
stringers of sandy clay.

31.0-33.0 lt. grey to lt.
blue grey clay. - plastic -
overfilling sampler.

33.0-34.0 Same. [↑]

34.0-36.0 lt. grey clay mottled
with very dk. grey. last 1.0'
has bands of black - peat? -
some sand. Good Recov.
Some mica

36.0 - 37.5 dk. grey to black
organic - clayey sand. Back
into grey clay at end of int.
< lots of water in sample - punched
through confiner >>

37.5 - 39.0 grey clay mottled w/
dk. grey. good recovery.

39.0 - 41.0 ~~blue~~ - grey clay
w/ ~~orange clay bands~~
dk grey mottling.

41.0 - 43.0 blue-grey clay
w/ orange clay banding.

43.0 - 44.0 same but
with bands of (limonite
cemented sand?)

44.0 - 46.0 lt. blue grey clay
mottled w/ orange. some
limonite

46.0 - 48.0 same. some mica.

48.0 - 49.0 lt. blue-grey clay
mottled w/ dk. grey. traces
of mica.

49.0 - 51.0 same. with some
orange.

51.0 - 53.0 same. blue-grey
clay with bands of dry

~~53.0-54.0~~ brick red clay & orange - yellow clay.

53.0-54.0 blue - grey clay w/ some bands of brick red clay.

54.0-56.0 Same. Some mica.

56-57.5 Sampler bowed & stuck - cable breaks at retrieval loop.

Pull all but 15' to find top of retrieval assy. - Loop is okay, hook just came off.

pull bit out of hole to get sampler loose. Will not budge.

Try to put back in hole to pull loose w/ hoist. Does not work. Assy. keeps disconnecting.

End day at 7:15.
(leave site at 7:15.)

18094
Polar Spring Site

18068
Parthena Ck. S.

18092
New Durr Hk

18093
Dohrn's Fairground

4-26-00

7:15 start. Drive to
Baker to refuel.

Get sampler at by
putting assbylocking auger
in vice and pulling out
rod with wrench. (drove
A-W rod through sampler)

57.5 - 59.0 same.

59.0 - 60.5 blue grey clay w/
mottled dk. grey. Expands
to fill sampler.

60.5 - 62.5 Same except
getting into coarse sandy
clay at end of run. Looks
like some phosphate (raining)

62.5 - 64.0 Run is coarse sandy
clay.

64 - 66.0 Same.

66 - 67.0 Same.

67 - 69.0

Loss rotation, feed, etc.
Rig is in gear, P.T.O. is

Mary Ester near Ft. Walton.
850-581-5815

Model # Sperry Vickers
2520 VQ Flex plate
double pump

part No. 21A14-11CC20
Assy No 42864-3

engaged. → hydraulic pump?
end day at 8:00 pm.

4-27-00 JBS & EH
8:00 am start.

Get to site and take apart
hydraulic pump from P.T.O.
- shaft is stripped of teeth.

3:15 pm Packed up / LOCKED
RIG, DROP TRAILER @ DIV. OF FORESTRY
IN MUNKSON. DEPARTED FOR TALLAHASSEE

APRX. 5:30 pm Arrived @ T.M.H.
JBS' child has been ~~admitted~~.
EH - TRAVELED TO OFFICE.

5:45 pm Arrived @ OFFICE UNLOADED
BOXES OF CORE. CALLED KEN C.
7:00 pm END TIME.

4-28 KL, DP trip to install hydro
pump - max rig. left test 3pm
retu 11:30pm

5-1-00 KL, DH 7AM start - to Fes
pu 2943, #0 TH weld + connic / sizer
thru to Munton

chg oil + filter on rig 407 hr
collect oil sample

set rig back up on hole - pull
sampler - ~ 2' recovery
however depth doesn't give -
auger is drilled down flush w
grd which should net 69.5 or
74.5' depth. spec would be

71' if recovery is representative
sampler went in when per drill
string

~ 69.5 - ~ 70.5 dk bn clayey sd - plastic
or clayey slab base

70.5 - 72.25 - orange + grey clayey sd

72.25 - 74.25 - NO SM

74.25 - 76.25' bn + red bn sl. clay sd
- ~ 2' sucked in

End coring for day @ 530

End day 6:30 pm

5-2-00 KZ, P.H. 8 AM START
Soggy!!

SWL 10.25' b/s

WASH ~ 7' sud from hsa.

76.25 - 78.75' - drilled w/d spl
sya - no sud in hsa - pu
1.25' - WASH SPL - note
using bentonite in recirc
sya. native clay washed
out - lt yl. sand as washed
re assy. spl sya

78.75 - 80.75' we spl no recovery
pumped spl - lt yl. bn matrix
saw minor gtz + ironstone granules
80.75 - 82.25' - drilled w/d spl
no sud in hsa - will pump
spl at 82.25

82.25 - 83.75' pumped spl (NO REC
w/ we splr) coarse gtz sd,
w grey + red clay matrix - not
enough to hold in place, minor
granules of gtz + rock?

83.75 - 88.75' pumped spl - as above
88.75' TD

38
hole fills naturally to - 37'
pump 4 bags quick grout
37'-15

bail grout down 1' -
pour 1 bag bentonite
chips to 15

End day 630 p

5-3.00

W 18068

39

5-3-00 BA start

PANTHER CREEK-S

S 14 CAA T 4N R 25W

LAT $30^{\circ}51'13''$ 44 min avg

Lon $86^{\circ}43'19''$

Elev 110

Skellosa Co

8

0-2.5' push spl - gray +

yl. br sand

2.5-4.5' push spl - lt yl. sd

grd to or + red clayey sd

4.5-6.0' yl. + red mottled clay sd

6-8.5' top as above, lower 2'

gray + red mottled clay

8.5-10.5' SAME

10.5-13' top 8" mottled clay then

yl. or + brk red crs sand

13-15' yl. br clay then red or clayey sd

15-17.5' red + yellow sl. ch sd

in some limonite cemented seams

17.5-19.5' red sl. ch sd upper ~ 1',

lt yl. br sl ch sd below

19.5-21.5' lt yl. br sl. ch sd + granules

21.5-23' - 2 1/2' recovered - upper

sand as above, then cream, yl.,

purple + reddish ch sd - most beds

18094
POTOMAC SPRING SLO
18068
PANTHER CK S.

18092
NEW DIST HQ

18093
WADSWORTH FAIRGROUND

show downward dragged deformation

23-25 yellow + lavender sl. chy sd

25-27' lt. yl. + orange clayey sd (sl)

27-29' lt + dk yl. or sl. chy sd.

first ~~was~~ wet sediment

29-31 yellow sand w gray clay /

chy sd blebs etc - ~ 50% REC

31-33 upper 1/2 yl. sd as above

remainder in gray + red sl chy sd

33-35.5' yl. sd in upper part

thru gray + red clayey sd.

35.5-38' gray + br clayey sd

38-40.5' gray + red clayey sd

40.5-43' red br sand + gray + red
clayey sd

43-45.5' red br sl chy sd grad to
yl. or

45.5-48' yl. or sl. chy sd

48-50.5' yl. sl. chy sd + red + gray
clayey sd.

50.5-53' ft to med yl. clayey sand

53-55.5' orange sd + gray red +
org clayey sd

55.5-58' same

58-60.5' softer sd + chy sd

60.5-63' yl. sd at top thru
mostly gray clayey sd below

63 - 65.5 y.l. or clayey sand - COARSEST at
btm

65.5 - 68' y.l. sl. clay sands
- sucked 6' sd into hsa
set up to pump

END DAY 6:pm

5-4-80 8 AM START

10' sd in hsa

68 - 71.75' WASHED SPL F.M.
gty sd w/ limonite fragments (ss)
soft cream clay matrix. - SCREEN
sand also saved

71.75 - 73' WL SPL y.l. clayey sand

73 - 75.5' WL SPL y.l. + lt br clay sd

75.5 - 78' SAME - incr clay in lower
half.

78 - 80.5' gray + y.l. clayey sand

80.5 - 83' gray clay sd w/ orange
laminae

83 - 85' Pink clayey sand - gray clay
lent 4-6"

85 - 87' sand, lt y.l. br, v sl. clayey
- 2' sd sucked in - pumped out

87 - 89.5' WL SPL - sand + sl.
clay sd

89.5 - 90 washed sample - SAND
 90 - 93' ~~washed~~ WL sample w 1 ft
 recovered sl. clayey sand
 93 - 96.5' washed sand w laminite
 - yl. clay matrix washed out.
96.5' TD

Pull tssas - hole fills naturally
 to WT - 28.5' b/s.

pump 3 bags quick grout to
 - 2'

pour 1 bag bentonite chips to LS

comple 5-4-00

Retn LHM 11:30 p

0-28.5 Mill
28.5- TD. TORR

W 18092

43

6-27-00 KC, JBS -
to NWFWD HQ -

Attempt pull stuck pump from
int. monitor - 4"

- 3 attp to fish got hose +
cable - nothing else on top
to catch - pump pushed to
btm of well - Dist decision
to ABANDON.

6-28 KMC - M

back to dist start replacement
intermediate sq. monitor

W# 18092

Co: Gadsden

5666 T 1N R 2W

LAT 30°31'07"

Lon 84°27'49"

Elev 205'

0 - 2.5' push spl gray + bn sd

2.5-4.0' push spl. refusal - same

~~2.5~~ 4.0-6.25' w/c spl or + reg ch sd

6.25-8.25 w/c spl same

8.25-9.5' SSP red + y/l. cm ch sd

18094
Polar Spring School
13110
Polar Spring School
18092
New Dist HQ

18092
New Dist HQ

18093
Katharine Fairground

9.5-10.8" red clay sd
 10.8"-12.8" full spec light
 red clay sd as above
 12.8"-14.5' red & yellow clay sd
~~14.5-16.25' ssp~~ reddish & yellowish
 ss clay sd
 14.5-16.25' ssp or clay sd
 16.25-18.3' H. cream & r clay sd
 18.3-20.3' same
 20.3-21.5
 21.5-24 ssp - no recovery
 24 y.l. sd n 21' in btm of fork
 - 15 run ssp w core catcher
 24-26.0' ssp w core catcher
 hook corner off of spec loop
 - End Day -

6-29-00

8 AM START

26-28.5 poor recovery. Bump
 SAMPLER NOSE OUT FOR NEXT
 RUN. (ORANGE CLAYEY SAND)
 28.5-31.0 orange, muddy brown &
 cream clay, - bottom part with
 mottled & cont. organics
 31-33' ssp Sand.

33.0 - 35.0 Cream clay w/ muddy
brown - orange mottling.
poor Recovery - 6".

~~35.0 - 37.0~~

35.0 - 37.0 Orange - cream dry
clay w/ dk. orange mottling
Full recovery.

37.0 - 38.5 ssp. lt bn, beige
clay. light, sticky

38.5 - 40.5 sticky clay as above

40.5 - 42.5 Same as above
but w/ more sand (fine) content.

42.5 - 44.5 tan - orange sandy
mottled w/ organics.

44.5 - 46.5 SSP. Same w/
bottom few inches carbonates

46.5 - 48.5 buff / beige sandy
dry (clay) - carbonate mud.
Some rocky material.

→ Hit clear water at top of
46.5 Run.

48.5 - 50.5 buff clay w/ hard
carbonate stringers / clasts

End coring for day

End day 4:30 p.

Airline filter

UNION

3/4 - 3/4 x 1/2 bush - 1/2 c/s npl - CLS - 1/2" x 1" npl
 1/2" x 1" npl - sum ft. - 1/2" x 1" npl - 1/2" ball valve
 1/2 x 3/8 bush

18092

46

6-30-00 KC, JBS, M Gabrieli
 8 AM start

SWL 40.3 b/s w 50.5' of hole

50.5 - 52' SSP. - tight plastic clay
 - some hard zones

52 - 54' greenish br hard blocky clay

54 - 56' lt bl. gny clay -

hard at top ~ 6" rest softer
 plastic

56 - 58' same. SSP.

58 - 60' Creamy - white sandy mud
 with some shell pieces.

60 - 61' same. very hard

61 - 63.5 SpSp. Same creamy-white
 sandy mud.

63.5 - 65.5 Chalky white, muddy
 sandstone(?) sps.

65.5 - 67.5 same. softer.

67.5 - 68.5 Sp Spn. Same.

68.5 - 70.5 same

70.5 - 72.5 SAME

72.5 - 74.5 SSP - SAME

74.5 - 76.5 lt gny calcareous? ss or drs

76.5 - 78.5 lt cream ls/ss hard

78.5 - ~ 78.75' hard ls. refusal

18094
 Porcupine Spring School
 18110
 Parthenon Archfield

18093
 N. D. Holmes Fairground

change ~~to~~ to NQWL setup

78.75 - 79.5' hard ls + clayey ls.

79.5 - 82' mixed hd + soft ls.

82 - 84.5 same.

END DRILLING. CLEAN UP.

End day 5:00 pm

7-5-00 KC, JBS, MG

KC A B A. start

load up filter sand, well casing
etc then to dist' hq

S.W.L. 41.5' b.l.s. w take
to 84.5'

84.5 - 89.5' lt. grey sandy clay
calcareous(?) mud. Hard to
remove from sampler.

89.5 - 90.0 dk. grey sandy clay.

90.0 - 92.5 dk, lt grey sandy
clay.

92.5 - 95.0 lt. grey hard sandstone.
Full recov.

95 - ~~96~~ 97.5' lt grey ss - soft calcareous
clay matrix thin lenses
of hard rock

18092

48

97.5 - 100 ft of. qv 56 - rest is
above

100 - 102.5' ft gey mobilized ss.

102.5 - 105.0' same

105' TD

where to place well sen

- have hard fractured ls
at 78.5 - ~ 81'

then clay/calc cemented ss

& ss - clayey to approx 92.5'

then NF ss seems to have
less matrix to TD

WRONG!!

water prob primarily from
78.5 - 81' (?)

and v minor flow in
remainder of hole

JENN + Mabry pull NQWL

KC to lower pvc tubing
+ stringer for airline

Airlift ~ 1/2 hr w 100' of
2" eductor in turn

18094
Polar Spring School18110
Parker, Archfield18093
N. Holmes, Palmyra

18092

49

set well w sen at 78-83'

< 1.5 gpm

- pull well away - Atty wash
out filter sand - rock
bridges at 81'

- run NQWL into top of rk
end day 5:30 pm

7-7-00 KC, MG + VBS

BAM start

- wash NQ down to 105'
pull NQ - run in 105'
well away

3' TP

25' SEN

77' CSQ to 45'

filter pack - still doesn't produce
any more

- pull 105' Assy

reinstall 86' Assy (sen 78-83')

in filter pack

- end day 4:30 p

105
20
77

18094
Polar Spring School
Pawnee Archfield18093
McDouglas Fairgrounds

Cap. Htch 575-8628

~~Hollyhock Ranch 575-0067~~

VIN: 16C8K39FBVF514385

Temp TAG #

#156.68

10' 5' 2.5'

2" CS 10.95/8.10/5.95

2" SCN 19.00/13.20/10.35

4" CS 29.00/18.50/13.50

4" SCN 46.00/29.50/21.00

18092

50

7-10-00 KC, JBS, MG - 8 AM start
- Vent MABry to site - cont.
development on filter pack

KC to Hattery on carbon filter
pump w. capman ~ 1/2 ton
at ~ 1.5 gpm

filter pack to 72' bLS
secondary filter pack to 69

pump 8 bags portland/5%
bentonite - tremmie thru
HSAS

END DAY 5:30 p

7-11-00 KC, JBS, MG 8A. start
top of grout at 31.7' bLS

SWL 48.5' bLS

pump 4 bags portland/5% bentonite
top of grout set at 4' bLS

set protective casing and pad

Grout old well - 6.5 bags portland/
5% bentonite - cut off casing flush
w pad

18094
FORAC Spring School
Carbon Airfield

18093
McDermott's Fairground

18092

51

7-13-00 KC 8A. Start VBS ~ 9
run 1 1/4" Eductor pipe - wlk on
Airlift pumps/deep of well -

pumps ~ 1900 to start - decr. w
time

deep fill 12 N. 16th to Syc

7-14 cont. airlift well - still cloudy
only makes ~ 3/8 gpm

NEED FINAL well depth
stickup height

30° 31' 02" 84° 27' 49"

SWL (T.O.C.) 50.9'

total depth 87.7' (incl stickup)

85.4 - 1000 stickup

2.3 stickup

UNIQUE ID TAG AAD 9001

18094
Polar Spring School18110
Parker, Antfield18093
Mathews Fairground

D-TD AMBF

W18093

52

Old Holmes County Fairgrounds

T 4N R. 14W S 05

Lat. $30^{\circ} 47.141' N$ (accuracy within
Lon. $85^{\circ} 39.868' W$ 300')

7-24-00 JBS / D.P.

10 am start. Arrive at site
at 12 noon. Meet w/ Harold
Smith to okay exact location

0 - 2.5 push core. Black organic
top soil first foot. Then brownish orange
sandy clay.

2.5 - 5.0 Brownish orange sandy
clay. Push Core.

5.0 - 7.0 Wire line sample is
split spoon. Good recovery.

7.0 - 8.5 Brownish orange dry
sandy clay.

8.5 - 10.5 Orange clay - dry
w/ small sand lenses.

10.5 - 12.5 Split Spoon. Orange
clay. w/ strings of dk. Red-
orange.

18094
Poplar Spring School
13110
Pawnee, Michigan

18093
Old Holmes Fairgrounds

12.5 - 14.5 Same.

14.5 - 16.5 Hard, crumbly brown-orange + red-orange + buff clay. Last 6" is purple-red in color.

16.5 - 18.0 Split spoon.

18.0 - 20.0 dry, hard purple-red clay mottled w/ some dk. orange.

20.0 - 22.0 Same.

22.0 - 23.5 Split spoon. Banded orange, red, purple clay.

23.5 - 25.5 purple-red colored hard + dry clay. w/ some mottled dk. orange.

25.5 - 27.0 Same

27.0 - 29.0 Same

29.0 - 31.0 Same. S. Spn.

31.0 - 33.0 Hit a wet zone. pink-red clay w/ coarse quartz sand.

33.0 - 34.0 Same. Very wet but no true water.

34.0 - 36.0 Coarse Clayey
sand. pink-red to
purple-red. wet.

36.0 - 38 same w/ large
white to buff quartz sand
grains. + small quartz pebbles.
Flakes of mica.

38.0 - 40.0 Coarse clayey sand
w/ some clay lenses at bottom.
red-pink in color.

40.0 - 42.5 Coarse clayey sand.
w/ dk. purple + orange mottling
overall sample color is orangesh
pink.

42.5 - 44.0 lt. purple to light
orange coarse clayey sand.

44.0 - 46.5 Higher clay content
greyish purple w/ orange beds

46.5 - 49.0 purple-grey clay
with beds of coarse gr. sand.

46.5 - 49.0 pinkish orange
coarse clayey sand. w/ some
lenses of clay.

Rain. End day 7:15 pm.

7/25/00

JBS / DP

7:30am start.

Gas up. Arrive at site 8:15.

- STATIC WATER LEVEL - 21.0'

49.0 - 51.5 Very coarse clayey sand. w/ small quartz pebbles pinkish orange.

51.5 - 54.0 Coarse clayey sand. alternating lenses of orange + pinkish purple.

54.0 - 56.5 Split Spoon.
Same stuff.

56.5 - 59.0 Coarse Orange clayey sand. ~~car~~ Small Qtz pebbles. - Alternating lenses of pinkish purple clay. ~ 50% recovery.

59.0 - 61.5 pinkish orange - loose coarse clayey sand. (alternating lenses of pinkish-purple clay)

61.5 - 64.0 orange coarse clayey sand. (alternating lenses of clay.)

64.0 - 67.5 Recovery is very coarse quartz sand and small qtz pebbles. Hole filling in. -> pump again to clear.

67.5 - 69.0 Alternating bands
of orange and pinkish
red coarse sandy clay. ^{point} clear
69.0 - 71.5 Split Spoon sample
same material as above.

71.5 T.D.

pulled augers to 60.0.
Install well assembly.

3' tail pipe.

5' screen

50' casing

TD at 57' screen 49-59'

pull augers - pour sand.

sand (30-65) to 44'.
Fine sand (play) to 42.5'

End day at 6:30 pm.

7-26-00 JBS/DP

8:00 am start.

STATIC W.L. ~ 12'

Filter pack at 44', Fine to 42.5

prepare to develop well.

Method - Air Compressor, Pump.

pull augers. - Hole staying open. pull to bit piece.

→ Hole open to ~40.5

Prepare to grout (bent grout.)

- pull bit piece. Hole collapses to 28.0

Bent grout to 10'

Neat cement to surface.

install 6"x6"x5 prot. csg.

create 2.5 x 2.5 pad.

Casing stick up = 2.25'

prot csg. stick up = 32"

Well Depth = 59.25'

W.L. = 17.25' ± Toe

18093

58

End day 7:15pm

7-27-00 JBS / DP
8:00am start.

Develop well.
pumping ~ 1 gpm.

clean up, organize boxes.

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PO Box Spring School
18110
Payto: Ashfield

D.F. = Dale Frierson

~~0-2.5'~~
0-12' Citronelle
12-TO Ambf

W 18094

59

7-31-00 KC, DF 7AM start

- to FGS - redo Dale's travel - then
to where loading, WMD for print
to Poplar Spg School meet w/
Principal re site. District guy doesn't
show - finally get set up ~ 300pt

Poplar Springs School
Holmes County

SEC 6 da T 6N R 13W

LAT 30° 57' 16" 22 min avg

LONG 85° 34' 28" EPE 3'

ELEV 215

9 am loc - Across st. to North ^{EAST}
school bldg.

0-2.5' push spz - plugged.

~ 50% recovery - bw arg rich clay sd

2.5-3.75' push spz lt or + or clay sd

refusal at 3.75' -

3.75-4.5' - NORM

SSP 4.5-6.5' ssp orange clayey sd

6.5-9.0' - bulged spz - red + cream
clayey sand

9.0-11.5' red/yl. clayey sand

11.5-14 same

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Poplar Springs School

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Paxton, Arkfield

14-16.5' - NOSM

W18094

60

END DAY 6:30 pm

8-1-00 7:45 start

HAVE 16.5' hole but only 14' of
samples - ? - don't know
where we went wrong

SSP 16.5-19' ssp. - red y.l. + or
clayey sand -

19-21.5' or + lt or clayey sand -
sandier than above

21.5-24' or + bn clayey sand above
fracts 1.5' thin red red clay

24-26.5' blk red mottled clay w

SSP grey + black clasts

26.5-29' ssp. red + cream clay

29-31.5' red ^{cream} mottled clay

31.5-34' cream, pink + grey red clay

SSP 34-36.5' ssp pink + grey micaceous
clay

36.5-39' grey + pink clayey sand

39-41.5' same

SSP 41.5-44.25' ssp same ~ 1.5' micaceous

44.25-46.75' grey, pink + purple clayey
sand/sky clay - sd coarser than above

46.75-49.25' ssp - grey + purple clayey sd

44.25

41.5
2.5
44.0

18094

61

49.25 - 51.75' gray + lavender clay sd

51.75 - 54.25' SAME

ssp 54.25 - 56.75' ssp - lavender clayey sand

56.75 - 59.25' lavender + brick red clay sd

59.25 - 61.75' ~~ssp~~ brk red crs clay sd

ssp 61.75 - 64.25' ssp red, gray + tan clay sd

64.25 - 66.75' red, MAROON CREAM +

gray crs clay sd

66.75 - 69.25' clay sand as above

lower 2 11.5' crs clay sand.

first WATER hit here -

STATIC WL 37.25' bLS - HAVE

11' of ^{SEP} ~~sh~~ in the hole

tried bailing - NO GOOD

pumped clear

END sampling today

END day 6:45 pm

8-2-00 7:45 start - to ENVIR Mfg.

pu monitor well CS9, SEN + filter sand
then to site

STATIC WL 30'1" bLS

hole clean to bottom

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69.25 - 71.75' 100 spe /ost.
drilled like crs sand.

bailed small sample

71.75 - 75.5' pumped sample crs sand
+ gravel in red clay matrix

75.5 - 79' TD COARSE med clayey sd
w white + red clay matrix
clayer than above.

79' TD

70' 2" CS9

5' X 010 SEN

3' TP

2.75 bags filter sand + formation
sand to 64.5' BLS (top of SEN
at ~ 69' BLS)

set up compressor w 1 1/4" eductor
+ 1/2" airline 5' above bottom
of eductor

Air lift pump at ~ 2.5-3 gpm
for 2 hrs

Natural fill to 40.5' cuttings
pump 3 bags quick gravel 50-20'

END day 700p.

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63

8-3-00 8 AM start
SWL 30.5' bws

benzinate at 22' pump 1 bag
to 11'
Pump 2 bags preb/and 5% to 15

airlift develop, set manhole
cover and witness pipe

top of casing 0.25' below
top of manhole cover
well TD 76.85'
SCREEN 68.85 - 73.85
SWL 30.6' bTOL

68.85
5
73

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Paxton Ashfield

W 18110

64

9-12-00 CB, DP 7:00

MEET AT WHOUSE AND BEGIN
TRAVEL TO PAXTON. CALL SUSAN
DAVIS TO MEET AT SITE.

PAXTON AIRSTRIP

S da 1 NNNN T SN R 21W
LAT: $30^{\circ}57'46''$ (plotted)
LON: $86^{\circ}18'02''$

ELEV 290'

MEET W/ SUSAN DAVIS &
MAYOR CARNEY @ CITY HALL.
GO TO AIRSTRIP w/ MAYOR & FRANK
FROM H₂O DEPT. CHOOSE LOCATION
GO TO FIRE DEPT & FILL UP w/
WATER. SET UP & GET STARTED
BY 12:30 EST.

0.25 PUSH BEN. F AND

2.5.5 PUSH BEN & CL SAND. 3" REC.
PLUGGED SH.3

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Paxton Airfield

blade bullet?

- ✓ BAGS (0)
- ✓ ELECT TAP (0)
- ✓ centrifugal gas cap
- ✓ tube caps (0)
- ✓ buckets (1)
- ✓ locks (2 short on rig)
- ✓ hoist cable (burred)
- ✓ 2" well cap (0)
- ✓ 2" PVC couplers (0)
- ✓ tape weight (long & skinny)

1811D

65

5-7 esp. REAK CL SAND
7-9.25 "

LEAK STARTED AT TOP OF
FEED ASSEMBLY. LEAK BAD ENOUGH IT
MUST BE FIXED BEFORE WE CAN CONTINUE.
TAKE AWAY TOP OF FEED ASSY. ~ 5:00 PM
WHEN FINISHED w/ THAT. WENT TO COUPLE
OF LOCAL PLACES TO SEE IF WE CAN
GET SEAL. NOT. ORDER SEAL FROM
MUSKIE DRILL. END DAY 6:00 PM

9.13.00 START DAY 7:30 AM
GO TO DEFUNIAL TO SEE IF
CAN LOCATE PARTS. GOT NEW PARTS
AT MURPHY'S IN DEFUNIAL. BACK
TO CAXEN, FAX RECEIPT TO ICEN.
BACK TO RIG. REPAIRED. NO LEAKS

9.25-11.75 RED/YELLOW E SAND GRADING w/ P
RED/YELLOW F CL SAND
D-TIME 4" GR. CLAY

11.75-14.25 SSP GR SANDY CL TO
RED YELLOW F SANDY CL

14.25-15.75 RED F SANDY CL. VERY TIGHT.
BACK UP & CLEAN HOLE.

15.75-16.75 GR/RED F SANDY CL

16.75-17.25 "

19.25-21.75 SSP. AS ABOVE

21.75-24.25 GR/RED CL

24.75-26.75 "

26.75-29.25 SSP. AS ABOVE

29.25-31.75 AS ABOVE

31.75-34.25 GRAY CL SAND. ~~DRY~~
MOIST @ 33'

34.25-36.75 SSP GR CLAYEY SAND.
MOIST

36.75-39.25 GR CL SAND TO 37'

37-39.25 GR F SANDY CL

MOISTURE GUNE @ 37'

39.25-41.5 GR LF CL SAND (DRY)

41.5-43 SSP AS ABOVE

43-45 " HARD DRILLING

45-46 GR/RED LF SANDY CL

PUMP SAMPLE IN HOLE

NOTED

46-48 GR/RED VFCL/SILT SAND

40-49 SSP. AS ABOVE

LOST SAMPLER DOWN HOLE.

RETRIEVE W/ NQ TAP AND

AW ROD. WORKED 1ST TIME.

CLEAN UP SITE

END DAY 6:00 PM

9.14.00

7:30 START

WATER AT 34." THIS IS CONSISTENT
WITH 4' MOIST LENS FROM 33'-37'

49-51.5 49-50.5 TAN F SANDY CL
50.5-57.5 TAN F CLAYEY
SAND

57.5-54 TAN F CL SAND. LAST 6"
GR F CLAYEY SAND

54-55.5 SSP. 6" SAMPLE. TAN F SAND

55.5-58 NO SAMPLE - NO REC.

58 PUMP CLEAN. FORMATION

TOOK H₂O

58-55 TAN F SAND. PUMP CLEAN

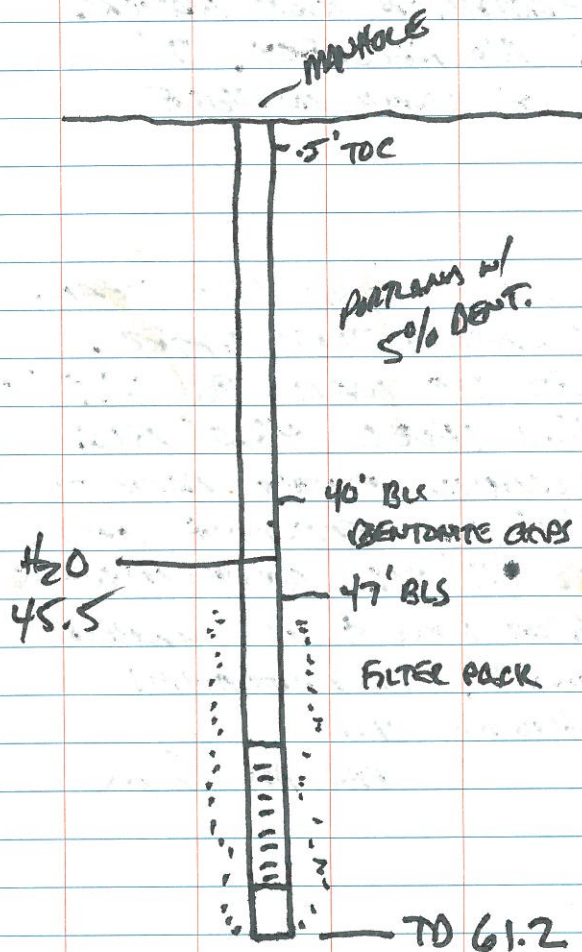
18110

68

FORMATION TOOK WATER.
 SET 61.5. NO RECOVERY. 7'
 OF JUNK IN HOLE

TO

TRY TO PUMP HOLE CLEAN.
 FORMATION TOOK WATER.
 SET 2" WELL TO 61.5' BLS.
 H₂O LEVEL 46.0' BLS.
 FORMATION FILTER PACK TO
 47' BLS. BENTONITE CHIPS
 TO 48' BLS. ~~DRILLING~~
 CRUIT WELL & SET MANHOLE
 COVER. THUNDERSTORMS
 BLOWING IN.
 END MAY 6 PM



18110

69

9-15-00

7:30 START

TD : 61.2' BTOC

H₂O LEVEL: 45.5' BTOC

AIRLIFT WELL TO DEVELOP
~ 1 gpm

RTN TO TLH 2:30 pm

2" x 10' CSG THH II
 2" x 5' CSG THH III
 2" x 2.5' CSG III
 2 x 10 SCN THH I
 DS SCN 010 THH 015 I
 2 x 2.5 SCN
 MANHOLE COVER 8x12 THH THH
 4x4x5' prob. CSG THH I
 6x6x5' prob. CSG II
 2" END CAPS SF 3M
 2 NTMBOX X TRIDOC PIN
 4" x 10' CSG THH III
 4 x 5' CSG THH I
 4 x 2.5' CSG THH III
 4 x 3 SCN 010 THH I 015 III
 4 x 2.5' SCN
 4" END CAPS M-III F III
 2" LOCK CAP THH
 4" LOCK CAP THH

CURVE TABLES

HOW TO USE CURVE TABLES

Table I. contains Tangents and External to a 1° curve. Tan. and Ext. to any other radius may be found nearly enough, by dividing the Tan. or Ext. opposite the given Central Angle by the given degree of curve.

To find Deg. of Curve, having the Central Angle and Tangent: Divide Tan. opposite the given Central Angle by the given Tangent.

To find Deg. of Curve, having the Central Angle and External: Divide Ext. opposite the given Central Angle by the given External.

To find Nat. Tan. and Nat. Ex. Sec. for any angle by Table I.: Tan. or Ext. of twice the given angle divided by the radius of a 1° curve will be the Nat. Tan. or Nat. Ex. Sec.

EXAMPLE

Wanted a Curve with an Ext. of about 12 ft. Angle of Intersection or I. P. = 23° 20' to the R. at Station 542 + 72.

Ext. in Tab. I opposite 23° 20' = 120.87
 $120.87 \div 12 = 10.07$. Say a 10° Curve.

Tan. in Tab. I opp. 23° 20' = 1183.1
 $1183.1 \div 10 = 118.31$.

Correction for A. 23° 20' for a 10° Cur. = 0.16
 $118.31 + 0.16 = 118.47$ = corrected Tangent.

(If corrected Ext. is required find in same way)
 Ang. 23° 20' = $23.33^\circ \div 10 = 2.3333$ = L. C.

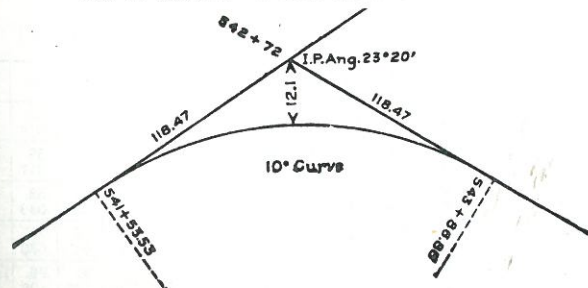
2° 19½' = def. for sta.	542	I. P. = sta.	542 + 72
4° 49½' = " " "	+ 50	Tan. =	1 18.47
7° 19½' = " " "	543	B. C. = sta.	541 + 53.53
9° 49½' = " " "	+ 50	L. C. =	2 33.33
11° 40' = " " "	543 +	E. C. = Sta.	543 + 86.86
	86.86		

$100 - 53.53 = 46.47 \times 3' (\text{def. for 1 ft. of } 10^\circ \text{ Cur.}) = 139.41' =$

2° 19½' = def. for sta. 542.

Def. for 50 ft. = 2° 30' for a 10° Curve.

Def. for 36.86 ft. = 1° 50½' for a 10° Curve.



Kevin 352 347-6929



Blackwater R. J. F

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SENIOR FORESTER
EROSION CONTROL SPECIALIST

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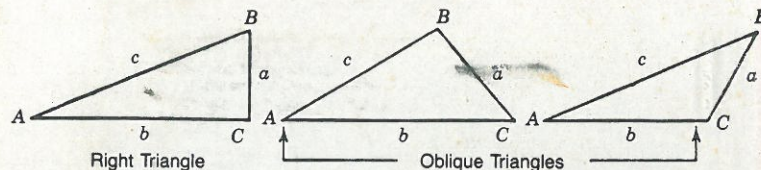
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957 6140



850/957-6140
850/957-6143 FAX
677-6140 SUNCOM
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6153

TRIGONOMETRIC FORMULAE



Solution of Right Triangles

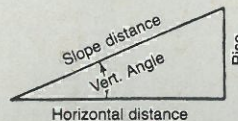
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\csc = \frac{c}{a}$

Given a, b	Required A, B, c	$\tan A = \frac{a}{b} = \cot B$, $c = \sqrt{a^2 + b^2} = a \sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B$, $b = \sqrt{(c+a)(c-a)} = c \sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90^\circ - A$, $b = a \cot A$, $c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90^\circ - A$, $a = b \tan A$, $c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90^\circ - A$, $a = c \sin A$, $b = c \cos A$

Solution of Oblique Triangles

Given A, B, a	Required b, c, C	$b = \frac{a \sin B}{\sin A}$, $C = 180^\circ - (A + B)$, $c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a}$, $C = 180^\circ - (A + B)$, $c = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A + B = 180^\circ - C$, $\tan \frac{1}{2}(A - B) = \frac{(a - b) \tan \frac{1}{2}(A + B)}{a + b}$ $c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a + b + c}{2}$, $\sin \frac{1}{2} A = \sqrt{\frac{(s - b)(s - c)}{bc}}$ $\sin \frac{1}{2} B = \sqrt{\frac{(s - a)(s - c)}{ac}}$, $C = 180^\circ - (A + B)$
a, b, c	Area	$s = \frac{a + b + c}{2}$, $\text{area} = \sqrt{s(s - a)(s - b)(s - c)}$
A, b, c	Area	$\text{area} = \frac{bc \sin A}{2}$
A, B, C, a	Area	$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = $5^\circ 10'$. From Table, Page IX, $\cos 5^\circ 10' = .9959$. Horizontal distance = $319.4 \times .9959 = 318.09$ ft.
Horizontal distance also = Slope distance minus slope distance times (1 - cosine of vertical angle). With the same figures as in the preceding example, the following result is obtained. $\cos 5^\circ 10' = .9959$. $1 - .9959 = .0041$. $319.4 \times .0041 = 1.31$. $319.4 - 1.31 = 318.09$ ft.

When the rise is known, the horizontal distance is approximately: - the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance = $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.

