

18265 18266 18257

LEVEL BOOK

#101596

MBL. Drill

Log 15

W18265 - MAWATEE
Springs Proj.

3-02 / 8-1-02



BEN MEADOWS COMPANY

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When
the
Outdoors
is Your
Office™

MBL. Drill Log # 15

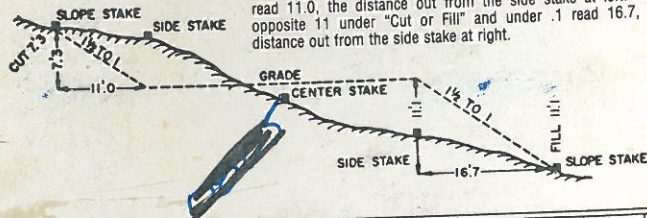
WSSP
Hickory C4
WSS
Hickory S2
WSSP
Hickory S4
WSSP
Hickory S3
SSP

BEV. @ ATLANTIC DRILLING 1-800-569-83

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

Dave Paul 933-4059

f2581 Harmon Hm. 850-536-9720
Wrk. 450-644-6700
3624
2720
(Diane Growbs)

~~Leamy Craft~~
~~927-2628~~

~~927-2629~~

~~Leamy Craft~~

~~570-0242~~

~~570-0242~~

~~Leamy Craft~~

~~DAVE call ph 4102~~
~~933-4059~~

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

Tom Biebowicki (Ambient)
245-8515

352-493 9408

MSSP Hickory CH
MSSP Hickory S2
MSSP Hickory S4
MSSP Hickory S3
MSSP Hickory C6
C3A

D

150

Cut or Fill

0
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40

CONTENTS

[illegible]

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Latino 352 His cousin SANDY

Jessy SERRANO H. 352-463-8773
New 7/25/02 352-542-9310

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18265
TRAPP Pond int.

18266
Middlebrooks

18257
SWU 12

W 18257

SOUTH WALTON UTILITIES

Well site 12 CONTINUED

3-13-02 KC, EH 8AM START

check well 8 site

then to drill site - start

surge + pump on surficial
well

55 ~~55~~ - 56.5' SWL 15' b/s SSP

dk gy clay on above

56.5 - 58.5' ol. gn clay sd ~~ss~~ sl shelly

58.5 - 60.5' ol. gn clay sd sl shly

60.5 - 62 SSP

62 - 63.5' same w/ ^{as much} shell,

clayer at btm

63.5 - 65.5' same

65.5 - 67.0 - ol. gn clay sd
v. H shell

67 - 68.5' SSP - ol. gn sdy clay,
w shell dry

68.5 - 70.5' same - somewhat
plastic

70.5 - 72' dry clay, sdy sl shelly

72 - 73.5' SSP - lost spec in hole
bailed sample

all the way
dry
sample is
keeping hole
bailed dry

18265.
TRAPP Pond int.

18266
Middlebrooks

TEE Springs
CON

73.5 - 75.5 - ol. gn clay sd
dry, micaceous

75.5 - 77 ssp

77 - 78.5' same

END CORING

Rig has 981

END day 800pm

3-14-02 KC, EH, 7AM START
SWL 12.5' bbs

change over to NQWC, mix
mud, clean threads etc
pour 1/2 bag bentonite chips
in btm after picking up
auger 1.5'

78.5 - 80' ol. gn clay

80 - 85 old clay stiff

85 - 90 sh. gn clay as above

w int sandier zone below
~92' - 87'

90 - 95 as above - pick up
carbonate below ~92. have
shell, gravel etc at 93.

ol. gn limy clay 93 - 95

MSSP
Hickory CH

MSSP
Hickory S2

MSSP
Hickory S4

MSSP
Hickory S3

MSSP
Hickory C6 C3A

18265
TRAPP Pond int.

18266
Middlebrooks

TEE Springs
Kan

95-100 1/2 ft. gn clay, sl. shelly
calcareous

100-105 - 1/2 ft. gn clay, calcareous
dry

END CORING for day
2 1/2 hours 985

3-21-02 KC, ED MARKS 7 AM
start

ARR. site surge + pump
surficial well, resume coring.

105-110 1/2 ft. of gn calcareous
clayey sand? - becomes
darker of gn w depth
per more shell frag.

110-115 med-dk bl. gn clayey
sand calcareous - inter.
large shell frag. grades
downward to dk bl. hard clay
w little shell

115-120 SAME

120-125 SAME

125-130 SAME

130-135 SAME EXC 131.5-132.5
clayey sand

MISSP
Hickory C4

MISSP
Hickory S2

MISSP
Hickory S4

MISSP
Hickory S3

MISSP
Hickory C6

C3A

Torn Dumbon Ring Power

562-1622

A 1450

mc

rep. 1500 b/c

rep. 1500 b/c

rep. diff seal

horn butter

thin signal

hiteam ind

heate blower

prc tok

prc deck eng

unig tigs

DOT INS -

18265
TRAPP Pond int.

18266
Middlebrooks

TEE Springs
Lon

4

135-140 SAME

140-145' SAME

end coring for clay

to Ace Rdw. - prc gager +
brusher end dry 800pm
12.5 hr wk

3-22-02 7:45A. start

SWL 21.5' b/c

145-150 sl. gn clay + clys.

thin (1-2") ls lenses or cobbles
at 148-149

150-155 drilled much faster than
above. fair rubbery feel
thin drill stem

sl. gn clayey sand calcareous
151-15.05 ls.

155-160 - top 6" or above

remainder lb-med grey ls.

poor to med ind moldic porosity

160-165 ls as above

165-170 ls as above

170-175 " " "

175-180 predominantly sl. gn clay
limestone (?) lost 6"

from office
little brack
shelly tuber

190-195' v. poor
recovery clayey
sand (?)

18265
TRAPP Road int.

18266
Middlebrooks

TEE Springs
Kan

180-185 ls in above - thin
clay lens at ~183.5 - darker
below

185-190 - harder ls. from taking
small quantity of water
hard macromorphic ls, some
shell, some gty pbl in upper
and lowermost parts

190-200' sand F-C sl. shelly
some gty pbl. - most spec
lost in hole - ran spec in
on pos latch sys - latched
in - drilled 6" w hard
dr pump - no fluid - plugged
bbl.

net crs sdw clay matrix
also pulled in ~5' into
drill rod

netw tch 6:20 pm

MISSP
Victory CH

MISSP
Victory S2

MISSP
Victory S4

MISSP
Victory S3

SSP
Victory C6

C3A

3-26-02 KC, CB, LB 7AM start
to WARREN CO

SWC surficial 10.5' b2S

SWC int 23.5' b2S

191' open hole - per 5' - wash
out NR - pump + surge
surficial well -
thunder storm / heavy rain
- go to town - lunch - return
3:00 pm - mix mud, wash
hole

200-205' sand + clay - worked out
no recovery

205-210' sand to ~208 then
blk + dk sl. gy clay

210-215 - 2 ft clay on above
then change to dk gy clay - sl. shaly

215 - ~218 - or above

~218 hard ls. - rubbly recovery

220-225 - same

225-230 same

TD 230'

End day 8:45 pm

Quick pull 2 bags - 55 gal / 3" hole
80' x 2.66 = 212 / 26 = 2 bags

18265
TRAPP Pond int.

18266
Middlebrooks

TEE Springs
Lon

3-27-02 KC, CB, LD 7 AM start
SWC 47.7' bls

pull all NO, run 230' 1 1/4"
tremmie line pump 1 bag
quick growth - pulled tremmie
apart while pulling out -
run 2nd tremmie, pump 6
addl. bags 200' burst
140 - SWC ~ 12'
cuttings + natural fill to
land surface

END 9559 / 1003 hr
move rig + trailer out to
site B

End day 8 pm

3-28-02 KC, CB, LB 8 am start
rebuild pacer pump.
pump + surge well B
KC to well 12 w rig - air lift
+ surge well 12

MSP
Hickory CH
MSP
Hickory S2
MSP
Hickory S4
MSP
Hickory S3
MSP
Hickory C6
C3A

18265
TRAPP Pond int.

18266
Middlebrooks

TEE Springs
LON

8

Final well depth 30.7' TOC
stickup 2.5'
20.3' depth (LSD)
SWL 12.7' BLS

MSDP
Hickory C4

MSDP
Hickory S2

MSDP
Hickory S4

MSDP
Hickory C6

C3A

Formation picks

Undif Ambt 0-83
Chattahoochee 83-111
MARIANNE(?) 111-TD

18265
TRAPP Pond int.

18266
Middlebrooks

TEE Springs
/LON

4-1-02

DP + LB to Bonifay
w CME for shakedown

4-2-02 KC to join them
7:30 start, 8 pm END

select drill site, set up rig
LEE goes over salient points,
set up mud tub, load water
etc

W# 18266

Middlebrook
Quarry

SEC T R

LAT LON

ELEV

CO: Washington

0-3.5' poor recovery - fill
then or clayey sand
3.5-8' also poor recovery - or
clayey sand - sandy zones
washed out

MSSP
Hickory CH

MSSP
Hickory S2

MSSP
Hickory S4

MSSP
Hickory S3

MSSP
Hickory C6

C3A

18265
TRAPP Pond int.

Magnolia
ell depth,
width

MANATEE Springs
LAT/LON

- 8-13' or clayey sand & sdy clay
~ 80% recovery - slow
pump down - fast harden
- 13-18' or clay sd grading into
orange, cm + maroon clay
- 18-23 v lt bl. gy/gy sdy clay
~ 3' recovered - prob at btm
- 23-28' ~ 3.5' rec - lt gr + or
sdy clay
- 28-33 - poor recovery - clay on
above
- 33-38 - clay - lt gr, gy br, or
some sandy zones ~ 2'
recovered
- 38-43 lt gy + blue gy sdy clay
last 4" darker, w organic
lenses + peat frag. bottom
most is gray/black
- 43-48' clay + sd. v poor recovery
- 48-53 tan + lt yl. br blocky
clay then clayey sand - last
1 ft. v f sand
- 53-58' wht, tan + yl. v fine
sand
- 58- plugged/burned bit
- spec wouldn't retrieve -
pulled spec drl. string

18265
TRAPP Pond int.

Magnolia
ell depth
height

MANATEE Springs
LAT/LON

- bit burned - smoke bit
up. in ~~S.D.A.~~ D.N. -
58-63' NO RECOVERY - VF SAND
washed out
63-68' SAND, VF UNCON.
68-73' SAND, VF, UNCON - ~
50% RECOVERY
73-

6:30pm to farm

MISSP
History C4

MISSP
History S2

MISSP
History S4

MISSP
History S3

MISSP
History C6

C3A

12

4/16/02

- Picked up permit @ NWFWMD
- worked on CME @ Middlebrooks.
ran in 15' 4" casing, cored 5'.
7:30am (leave TLH 11:00am)
to 9pm to motel.

4/17/02

7:30am start

drove to Wausau. trailer not ready,
so back to middlebrooks on CME.
cored to 118'

repaired leaky elbow on may no
★ casing followed hole BRING
MORE

met Frank @ Chipley w/ HSA's
took HSA's trailer to Ambient
Site. ran out of Diesel fuel
in Dually. D'oh!

8pm to motel

4/18/02

8:30am start

make sure generator's starts & runs
elec. pump.

MISSP
Victory C4MISSP
Victory S2MISSP
Victory S4MISSP
Victory S3MISSP
Victory C6

C3A

2" suc hoses 10', 20'
washer fluid

Asst 1 1/4" plumb stop
nipples

lightning safety - 50' mail

300 psi stop for CME

2 1 1/4" +

2 6" NPL

1 1 1/4" bush x 1/4 pipe

1 1 1/4" EL

2 2" 1 1/4" NPL

2 1 1/4" NPL 4"

2 1/2" x 1/2" suc hose w king npl
2 1/2" x 20' suc hose w king npl

18265
TRAPP Pond int.

Magnolia
cell depth,
FIELD

MANATEE Springs
LAT/LON

13

4/18/02 8:30am start

W# 18265

Trapp Pond Intermediate

Sec 31cc T 2N R 12W

LAT 30°31'32.0"

LOX 85°29'07.4"

OLEV: 154'

TD: 145'

Co: BAY

ELCAM TO FOXHUNT 7.75 mi

Foxhunt to site

total fr Hwy 77 11.6 mi

clear site, set up rig,
hook up submersible pump
- pump fr. Floridan well
run in 4 1/4" tru spin HSA's
to 60' bbs

set up main sys +
descender

run in 57.5' NQ

End day 7:00 pm

MBC 2" x 10' sue hose w/c npl > de
MBC 2" x 20' " " " " " " SAR

3" x 2" bush

2" NPL LLS

2" in QC

discharge pump

centrifugal pump CME/wtr trk

- rose transfer water fr.
tank to tub (2"?)

- hoses for centrifugal pump

2" SW 20'

2" 344 50'

2" foot valve

2) 2" ball valve

85 2" QC male w F horn

25 2" Qc fm w F flood

(2) LOCKING FUEL CAPS FOR CNG

2 WATER TRUCK

4x4 WOOD! 2x8'

Hickory
Well depth

Magnolia
well depth

MANATEE Springs
Lat/Lon

14

8:00am 4/12/02

60-65' - sand, pink w/lt
poor rec.

very soft clay for 1st 1-1.5'

65-70' sand, wht, pow. rec

20-75 or + CRM mottled sdy clay
+ clay sd

25-30' first foot or sdy clay or
above then dk gy sdy silty
micaceous clay

80-85 dk gy' silty clay w
sand (?) & lignite - much of
which washed out

85-90 same

90 - 95 Shaly clayey sand
then ~1' carbonate core
sand + carbonate - last foot
clayier than remainder

95-100 clayey sand + calc. white
then hard rubble rock -

~50% recovery. prob blocked i.t.
lost bdm half.

100-105 hard rubble ls at top
soft stuff mostly lost in middle
last foot 1' or 94 sdy clayey
ls

MISSP
Hickory CH

MSSP 18477
Hickory 52

MSSP
Victory 54

SSP
Kroy C 6

03A

105-110 Agn sdy ls gds to py
then cream calcareous
remains in lt qz. bnd ls poken
clips - sdy laminar
110-115 lt qz clay ls + calcareous
then clayey sd?

end coring for day
ARRIVE @ warehouse @ 6:15pm

4-23-02 KC, DP 7:30 AM start
load junk gravel + ezy seal
hookupuger trailer - to
Middlebrooks site per reamer
+ packs to make addl. REAMER
drop off sawhorses
then to Trapp pond site

STATIC WL 66.8' b/s
hole open to 60m

115-120 2 runs - cream sdy
ls (ws) last 1 ft. lt. olive
w clay inx.

120-125 mostly lt blue qz clayey
sand - breakouts w 1-2 cm
poken clips, last foot more
massive + calcareous

call Tom Pratt -
they agree 131-136
is best shift.

Hickory
Well depth

Magnolia
Well depth,
weight

MANATEE Springs
Lat/Lon

125-130 poken chips 125-126 thru clay, 16
sand botm $\frac{1}{2}$ in hard ss w clay
blebs/stainers

130-135 hard rock ls/dble - lost
circulation 132.5 - ~~133~~ 134

- first significant permeability

135-140 gray porous ls then bk
to ol. gn silty sandy clay(?)
~ 2.5-3' recovered

end coring

end day 7:00 pm

4-24-02 KCDP 7:45 AM start

SWL 94.5' bLS

SWL Floridan well 103.2' bLS

screening chosen

#1 136.5 - 136.5 94.5' bLS SWL

#2 100-110 67' bLS SWL

140-145' CORE gray gn silt clay

sl. sand rock in botm -

poor recovery - mostly washed

145' TD

Run HWAS to 74' (get them
seated in clayey ss)

pull NQWL

MSSP
Hickory C4

MSSP
Hickory S2

MSSP
Hickory S4

MSSP
Hickory S3

MSSP
Hickory C6

C3A

GPS
NWJ slips
NWJ² sub
4x4 pt
2 NWJx10'
5' NW rod (sit in)
100' incline - home depot
camera

ream (4") to 122'
end day 7:00 pm

4-25-02 KC, EM 7:30 start
to Lower, sand, tremmie pipe
then to Tripp Pond

ream 122-145, pull drill rod
+ reamer run in 137' well
assy (S' son 131.5-136.5)
pump clear water down well
to displace mud + cuttings

worked in 4 bags sifter sand to
bk fill btm of hole + for filter
pack. should get 5-8 ft/bag
w 4" hole - however could
not get tape pack ~113'
due to centralizers
Clean up, pull amb. pump + disassemb
end day 7:30 pm

4-29-02 KC, EH - load up
KC to home depot, etc
then to site

4-29-02

SWL 99.5' bws

18

could only get weighted tape
to go as far as 99'

set up Air lift in 1 1/4" tremmie
getting some coarse cuttings
? some ? - only small
quantity not continuing stream.

Air lift pump at ~ 9 PM
until t. storm runs off
End day 6:15

4-30-02 KC, EH START 8 AM

WELL PACK

94.5' NORTH SIDE OF CASING & SOUTH
SIDE AS WELL - bridged ? or filled
washed tremmie to ~ 102
still annulus still sediment
filled.

tremmie 1/2 bag quick get
before tremmie plugged - washed
tape in to 87' run 1" tremmie
in - pump 6 bags quick get
- filling auger then pulling them

Hickory
well depth

Magnolia
well depth

MANATEE Springs
LAT/LON

MISSP
Hickory C4

MISSP
Hickory S2

MISSP
Hickory S4

MISSP
Hickory S3

SSP
Hickory C6

C3A

grout to ~ 38';

19

pump 2 bags portland cement /
5% bentonite

take side trip to Middlebrook
site - pu "MAHR/NWJ" sub
for CRAIG

END day 700 pm

5-1-02 FC, EH 8 AM start
to Townsend Bldg Sup.
pu portland cement

Found top of cement at 29'
pump 8 bags portland/5%
bentonite to surface

set protective casing

well depth 136.6'

* hole depth 138' 11"

sern int 131.3 - 136.3'

* stickup 28" 2.3'

* static WL

~~21~~ 98'

Retn TLL 7:30 pm

5-2-02 10 AM EH, SP (John Phillips)

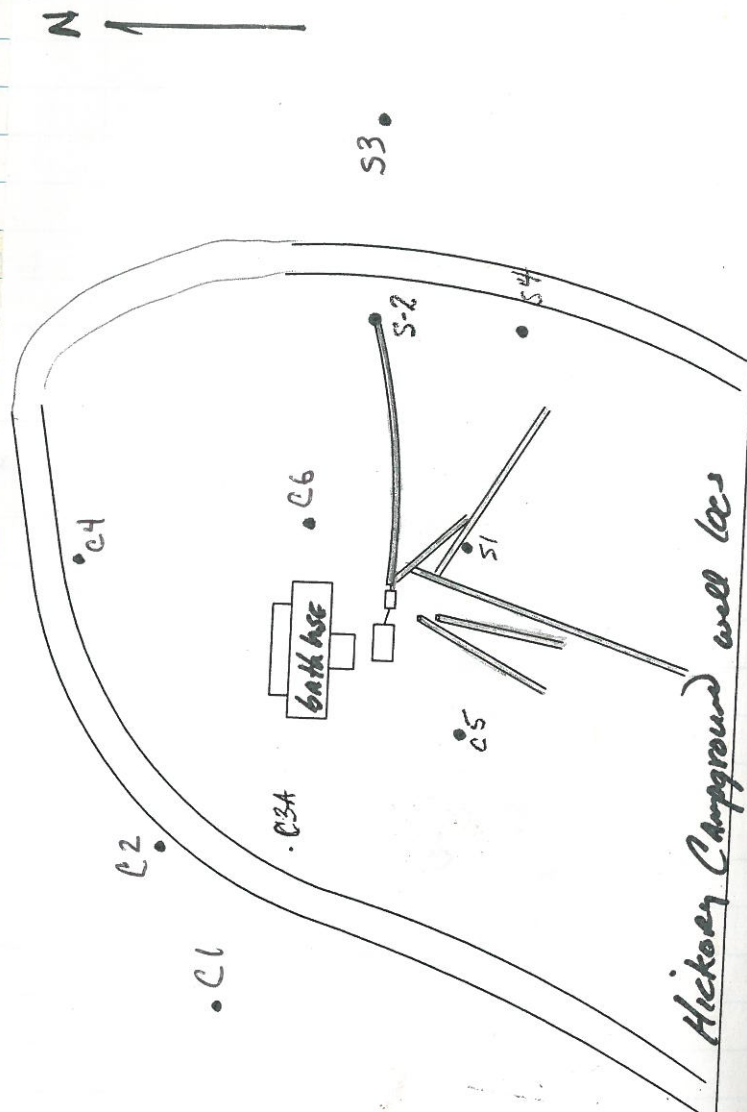
To TAPP POND

5/2/02 CONT.

AIR LIFT THUR. TRIMMIE
WASHED EQUIP. PICKED UP
AUGER TRAILER, AIR LIFT
FROM BOTTOM OF WELL
TRIPED OUT - CAP WELL & LOCKED
W/ PAD LOCK. Tpm DEPARTED
FOR TLH.
10pm ARRIVED @ WAREHOUSE.

20

MSSP
Hickory C4
155P
Hickory S2
MSSP 18477
Hickory S4
Hickory S3
SSP
Hickory C6
C3A



Hickory
well depth

Magnolia
well depth

MANATEE Springs
LAT/LON

S-2 Mark Hooks
5-7-02 John Phillips, KC
7AM start, loading plan to
MN. Spgs st. pk
meet MARK HOOKS - set up
rig

21

Hickory Campground S-2
53566 T 11S R 13E
LAT 29° 29' 16" 56 min
LON 82° 58' 31" Aug
Elev 14
CO Levy

0-2.5' - push spl ~ 1.5'
recovered top part excavated
by archeology. last 6"
in ls.

2.5 - ~ 3.5' ls.

Auger picked off line -
cant straighten it up.

chg over to NQ well -
set ~ 3.5' 8" pvc as
surface casing

3.5-4.4' lt. gl. ls. soft

4.4-9.4' ls. soft to mod ind.
lt cm. - ~ 3' recovered

MISSP
Hickory C4

MISSP
Hickory

MISSP
Hickory S2

MISSP
Hickory S4

MISSP
Hickory S3

MISSP
Hickory C6

MISSP
Hickory C3A

Hickory
Well depth

Magnolia
Well depth,
USGP

MANATEE Springs
LAT/LON

5-2

some soft & rubbly stuff 10' to 12'
9.4 - 14.4' ls, mostly v soft

some hard zones ~ 3'

meanly, lost circulation
14.4 - 19.4' ls y.l. or, poor to
mod ind, microfossiliferous
~ 2' meanly

19.4 - 24.4' ~ 3' meanly 1/4 cm
ls, + carbonate sand, med.

v soft, water level at 14.4' 6/15

24.4 - 29.4 1/4 cm ls, poor to mod ind
fossiliferous ~ 35' rec.

29.4 - 34.4' ls as above then somewhat
better ind. full recovery

34.4' TD

pushed NQ

END day 6:00 pm

5-8-02 KC, JP 8AM start
SWL 14' 9"

reamed hole to 4", cutting in
hole to 24' set up airlift

assy well in hole 15' wsg
10' sec - set top of sec
at - w4.

pour 3 bags filter sand

MSGP

Hickory C4

MSGP

Hickory S1

SSP

Hickory S4

MSGP

Hickory S3

SSP

Hickory C6

SSP

Hickory C6

SSP

bring
4" x/for 6" pvc
10' NWT

5-2

+ pump + surge.

pour $\frac{3}{4}$ bag granular bentonite
for seal. hydrating in lfgs.

~ 11.5 - 14.5'

pump $\frac{1}{2}$ bag quickcrete to ~1.5'

move rig to next site

mix $1\frac{1}{2}$ bag quickcrete for pad

23

Hickory
Well depth

MANATEE Springs
Well depth,
US 1st

MANATEE Springs
LAT/LON

MSSP
Hickory C4

MSSP
Hickory S1

MSSP
Hickory C6

MSSP
Hickory S4

MSSP
Hickory S3

MSSP
Hickory C6

23A

S-4

5.8-02 Hickory S-4

24

SEC 35 NENE T 11 S R 13 E

LAT 29° 29.261'

LONG 82° 58.515'

Elev

CO LEVY

move rig. during setup shoreline
has sagged. brk fthg. → to
town per parts - no do know.
(John meanwhile in pupis +
singing S-2)

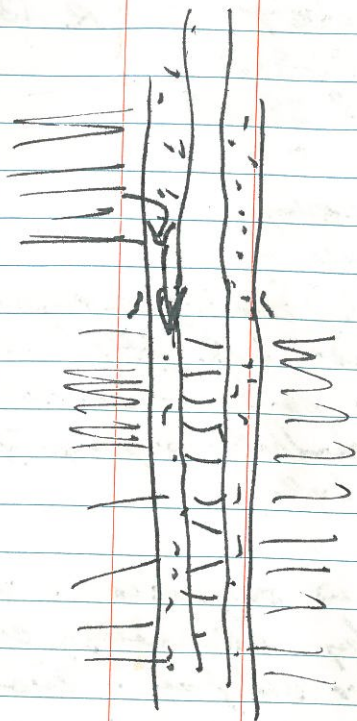
0-2' sd w organics (soil)
disturbed by Archaeology chert
2-3 ls - iron surface - washed out
cutting kerf into edge

3-4.75' ls. rubble some iron
stain fr clay sd

4.75-9.75' ls, vlt gy granular,
poor ind.

9.75-14.25 ls as above only ~
2' measured

14.25-19.25' ls hard at first
thin soft zone - not measured
back into soft ls (only ~ 1.5'
measured)



5-4

end caring for day

end day 7:45 p.

25

5-9-02 8 am start

SWL 14' 11"

ream tube, air lift open tube

SET 25.5 well array

w sen at 15-25'

pour 3.5 bags 20-30 sand

- deep w pump + surge and
surge block by hand

filter sand to 11.5' b/s

pump 1/2 bag quick gravel to
1.5'

mix 1.5 bags quick

quick creek for surface
pad

set manhole cover

seal + lock well caps

retu TLH 10:15 pm

MSSP
Hickory C4

MSSP
Hickory S1

SSP
Hickory C5

SSP
Hickory

MSSP
Hickory S3

SSP
Hickory C6

C3A

S-3

hyd hose 1/4 x 20'

300 psi hose

3/8" EI 1" nipple

1/2" EL 2"

3/4" EL 2"

bring 6" PVC
10' NWJ

S-3

5-13-02 KC EH,

8AM START

Hickory Campground

S-3

MH, HH + some (bump)

S T R

LAT

CON

ELEV

CO

0-2.5' push spec - disturbed,
fill

2.5-5.0' sand, fill

5-9.5' sand, pass cavity,

15 in btm of recovered section

All of this so soft cant
feel resistance

9.5-14' ~ 8" gl. or clay sd recovered

pass cavity, fill - pass cavity

14-19 v soft at top then rfb

grayish orange sandy clay w 15 at
base

19-24 - drilled w rock shoe -

NO RECOVERY

24-29 pushed spec w EXT

shoe top 1.5' soft.

26

MSSP
Hickory C4

MSSP
Hickory S1

SSP
Hickory C5

SSP
Hickory

MSSP
Hickory S3

SSP
Hickory C6

C3A

5-3

no rob, no fluid. ~ 2.5' 27
bn clay w ls frag recovered,
~ 8' sed pulled into pipe
- washed out NQ - collected
washed sample

29-~~31~~' ~~32~~ ~ 32 rubble ls
w bn clay - washed spec -
+ small coralspec -

still have ~ 1' rock in bbl.
3 dailed addl rock out - drove
remainder thru

32-34.5' ls. ~ 1.5' recovered

34.5' TD

END day 6:30 pm

5-14-02 KC. EH 7AM START

SWL 12.5' bLS

pull the NQWL

return to SET ~ 6' 6" PVC
on surface CSG

pull NQWL

return upper 18' to 4"

SET 25' well arry w
wash down valve

pour wash thru valve

S-3

to wash native seeds which 28
settled. wash in 2 bags 20-30
sand for filter pack to 11'
wash in bentonite chips to
9.5' then

Hickory
well depth

Magnolia
well depth,
HICK

MANATEE Springs
LAT/LON

MSSP
Hickory C4

MSSP
Hickory S1

SSP
Hickory OS

SSP
Hickory OS

SSP
Hickory C1

SSP
Hickory C1

SSP
Hickory C1

MSSP
Hickory C6

SSP
Hickory C6

C-6

25.5' NW TP

C-6

5-14-02

Hickory C B-6

S 3566 T 115 R 13E

LAT 29° 29.279'

LOV 82° 58.517'

elev

CO Levy

29

0-2.5' push spe - sand
2.5-4.25' push spe - sand
then ls. - ~ 1.5'
run no setups

4.25-5' limestone - rubble,
cavity fill w br clay sd.
5-10' ls, cm, 16yl. some gl.
or staining

10-15 ls, variably rubble -
best circulation below 12-8'
15-20' cream & iron stained ls.
~ 3' moved

20-22.5' ls. some iron staining

22.5-25' same

25-30 same

30-35' same

35' TP

Hickory
well depth

Magnolia
well depth,
height

MANATEE Springs
LAT/LOV

MSSP
Hickory C 4

MSSP
Hickory S 1

MSSP
Hickory Q 5

MSSP
Hickory C 1

MSSP
Hickory

MSSP
Hickory Q 6

Q 3A

ATL. DR Orlando

Western rubber

2 JWB swivel

longear pvc cutter
2"

6 br plate
springs

Hickory
Well depth

Magnolia
Well depth,
HICK

MANATEE Springs
LAT/LON

C-6

20 6' 16" ³⁰ surface casing
near to 18'
have 26' open hole -
inst 25' well casing - won't
go - infill.

bail/compact cuttings to ~
28'

SET 25' well only w sen
to 15-25' 25.5' TD

WASH in 1.5 bags fuller
SAND.

- pump + surge filter pack

OR
pull, drive flange loose
to tighten spindle/flange bolts

End day 7:15 PM

5-15-02 KC, EA 7AM START
MEET JESSEE SERRANO 7:30

SWL 15.8' BLS

surge + airlift - top off
filter sand to 12' 6LS
add wash in bentonite chips
to 10.25' 6LS (CAN SEE
ANNULUS)

MISSP
Hickory C4

MISSP
Hickory S1

SSP
Hickory C5

SSP
Hickory C1

SSP
Hickory C2

MISSP
Hickory C3A

C-4

C-4

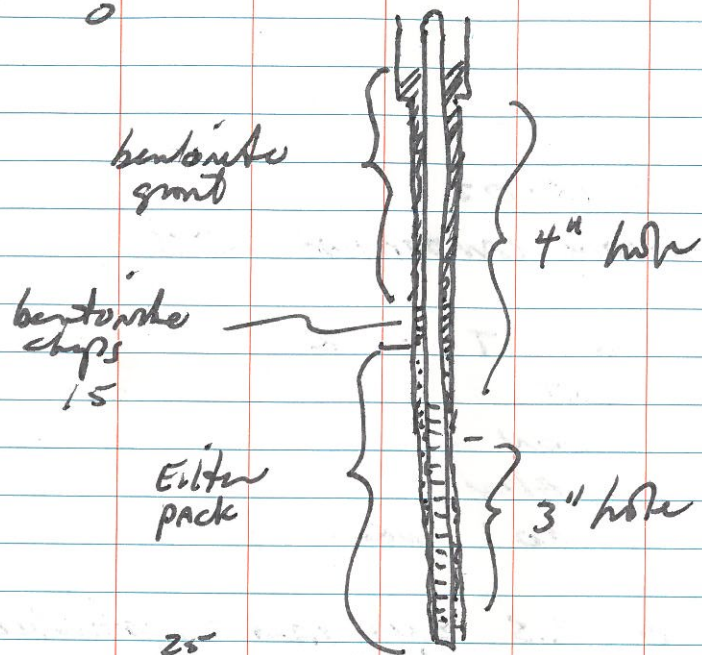
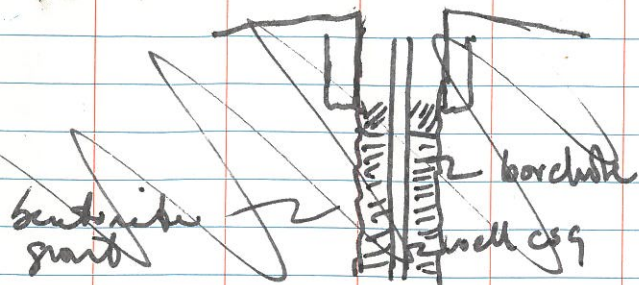
31

5-15-02
Hickory campground C-4

S T R
LAT 29°29.291'
CON 82°58.513
Elev
CO: LEVY

0 - 2.5' grey sand - disturbed
2.5 - 5.0' wht/blk sand.
5 - 6.25' sand or stone
6.25 - 7.25' or br clay sand

6⁴⁵ PM END DAY FOR EE, BQ
KC - TRAVELED BACK TO TLH.



0-4

32

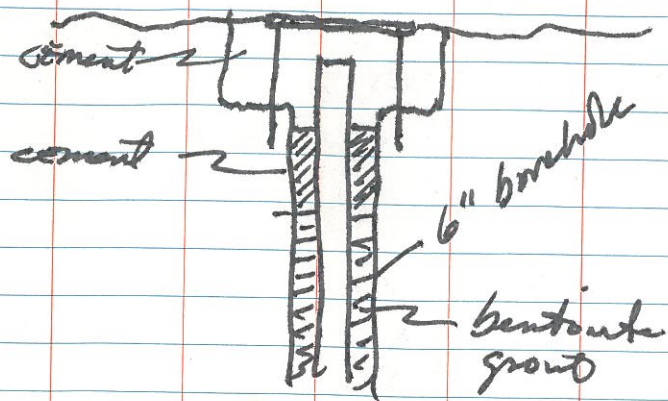
34.75' TD
 SWL 15.25' bws
 install 25.5' well casing

Hickory
 well depth

Magnolia
 well depth

MANATEE Springs
 LAT/LON

MESP
 Magnolia M1
 MESP
 Hickory S1
 SPS
 Hickory C5
 SPS
 Hickory C1
 SPS
 Hickory C2
 MESP
 Hickory C3A



Ken needs Fick/Bay, cooler
Brew - Pony tank

C-4

33

5.16.02 Tom EH, BQ START DAY
745 JESSIE ARRIVES

1.5 bags Quick GROUT FOR
THE THREE WELLS

Grouted all 3 wells
cemented in well covers
packed equipment & put in yard
staked well sites with caution tape
Departed manatee springs for
Tally @ 9:00 pm
ARRIVED BACK IN TLH 11:30 pm

Hickory
Well depth

Magnolia
Well depth

MANATEE Springs
LAT/LON

MSP
Magnolia M1

MSP
Hickory S1

MSP
Hickory C5

MSP
Hickory C1

MSP
Hickory C2

MSP
Hickory C3A

S-1

S-1

34

S-21 KC 7AM start - load out
dept. 44 8AM, arr Mn. Spgs
10:15. Meet Jenna, put rig +
trailer

MANATEE Springs State Park
Hickory S-1

S T R

LAT 29° 29.274'

LONG 82° 58.531'

Elev

CO Levy

0-2.5' push spl - plugged
off on rock frag. disturbed
by Archaeology
2.5-4' push spl H tan
ls frag at top - this zone
wet, smelly - drainfield effluent?

4-6.5' black sand overlying dk
or bn sand, last 10-12"
is ls. SSP sample

Change over to NQWL

6.5-10' NQWL spl - or bn sand
w ls fragments. much

Hickory
Well depth
5-1

Magnolia
Well depth
5-1

MANATEE Springs
LAT/LON

35

Sample washed out

10-15 pushed bbl in EST side
shw plugged off. N 1.5' in

15-20 upper 2.5' soft + hard green
not recovered, lower 1/2 is

white porous ls, poor mod ind

20- much of porosity iron stained

20-22.5' 1/4 in + 1/4 or 1/2 in. very

ind - 1/4 or 1/2 in (soft) to
mod.

22.5-25' ls. mod ind granular
fossiliferous

25-30 ls better ind + recovery

30-35' ls

35' TD

SET 6' of 6" surface csg
pulled NQWL, reamed
hole to 17.5' - pulled NWT
hole filled to 15'

- prob vent to run Auger

cleaning site/trailer etc
END day 6:30 pm

MSDP
Magnolia MID

SSP
Magnolia M6

MSDP
Hickory C5

SSP
Hickory C1

SSP
Hickory C2

SSP
Hickory C3A

gastorade
hack saw blades
~~pot saw~~
long shank ☐ screw
driver

Hickory
well depth

Magnolia
well depth,
Hickory

MANATEE Springs
LAT/LON

S-1

36

5-22-02 KC, JESSE, TANN
start.

drill in 27.5' 3/4 hsa -

w tapered wood plug.

pulled up 6" + relieved
thru 2" pvc

Installed ~ 25' well aug
washed in 6 bags 20-30 sd
to 12.5'

pumped + surged well w/
surge block + vacuum piping
wash in 3/4 bag bentonite
chips 12.5-10'

* NOTE: have intermittent sewage
effluent flow from 1.5' bws

pump 1 bag quick grout 10'-
~ -2'

Til 6pm?

MSDP
Magnolia MID
Magnolia M6

MSDP
Hickory C5

MSDP
Hickory C1

MSDP
Hickory C2
Hickory C3A

Hickory
well depth

Magnolia
well depth,
Hickory

MANATEE Springs
LAT/LON

C-5

37

5-22-02

Hickory - C5

see T R

LAT

LOW

Elev

CO Levy

0-2.5' push spc - disturbed
by archaeological check - Hy. sd
2.5-4.0' push spc same
4-6' push spc - refusal
at 6.0'

change over to NWL

KC leave site 6:30 to
return to TLH

MEET EH 8⁴⁵ PM EH CONT. TO
CHAMPLAIN

11pm Arrived @ Holiday Springs
END DAY

Hickory
Well depth

Magnolia
Well depth,
height

MANATEE Springs
LAT/LON

C-5

5-23-02 EM

38

7:00am START w/ JESSE

SHOULD BE @ 6' ONLY HAVE 3'

WASHOUT DRILLED TO 10'

ROCK ONLY CAPTURED ABOUT 6'

10-15 SANDY YELLOW CLAY

15-20 SAME POOR RECOVERY

20-25 SAME " " BUT MIXED w/ RCL

25 THIN LAYER OF ROCK

25-27 PLUGGED OFF LIME STONE

27-29 " " " " BOTTOM SOFT

CLAYISH/LIME STONE

29-30 LIME STONE

30-35 " "

5'7" WATER MEASURE AFTER PORTLAND
REACHED TO 25' OPEN HOZE LUNCH RUN

15'10" WATER LEVEL

AUGERED TO 27'

SET WELL @ 25'

SCREEN 15'-25'

CASING 0 - 15' GORE

FILTER/NATURAL WELL PACK

7.5' SO DARK, SURED BUT DIDN'T

BENEFIT ABOVE. FILTER PACK

9:15pm DEPARTED AFTER PACKING UP

EQUIP. FOR TLH.

9:30 CHECKED OUT OF RM - CALLED EARLY
FOR BILL ONLY ONE DAY

MSSP
Hickory C5

MSSP
Magnolia M1D

MSSP
Magnolia M6

MSSP
Magnolia M7

MSSP
Hickory C1

MSSP
Hickory C2

MSSP
Hickory C3A

Well 12.5 - 22.5

Hickory
Well depth
C-1

C-1

Magnolia
Well depth
LAT/LON

MANATEE Springs
LAT/LON

39

5.23.02 CONT.
12 MIDNIGHT ARRIVED @ TLH

5/28/02

EH, BQ

4pm Dept. TLH FOR MEVY Co.
7¹⁵pm Checked in GUNFORD, FL.
Housing Inn.

5/29/02

7am EH, BQ, JS

7am went to Wal-Mart for
H₂O & Gatorade

CAMP SITE 92 MARKED AS C-1
WATER 12.5' 13' 14' 15' 16' 17' 18' 19' 20' 21' 22' 23' 24' 25' 26' 27' 28' 29' 30' 31' 32' 33' 34' 35' 36' 37' 38' 39' 40' 41' 42' 43' 44' 45' 46' 47' 48' 49' 50' 51' 52' 53' 54' 55' 56' 57' 58' 59' 60' 61' 62' 63' 64' 65' 66' 67' 68' 69' 70' 71' 72' 73' 74' 75' 76' 77' 78' 79' 80' 81' 82' 83' 84' 85' 86' 87' 88' 89' 90' 91' 92' 93' 94' 95' 96' 97' 98' 99' 100' 101' 102' 103' 104' 105' 106' 107' 108' 109' 110' 111' 112' 113' 114' 115' 116' 117' 118' 119' 120' 121' 122' 123' 124' 125' 126' 127' 128' 129' 130' 131' 132' 133' 134' 135' 136' 137' 138' 139' 140' 141' 142' 143' 144' 145' 146' 147' 148' 149' 150' 151' 152' 153' 154' 155' 156' 157' 158' 159' 160' 161' 162' 163' 164' 165' 166' 167' 168' 169' 170' 171' 172' 173' 174' 175' 176' 177' 178' 179' 180' 181' 182' 183' 184' 185' 186' 187' 188' 189' 190' 191' 192' 193' 194' 195' 196' 197' 198' 199' 200' 201' 202' 203' 204' 205' 206' 207' 208' 209' 210' 211' 212' 213' 214' 215' 216' 217' 218' 219' 220' 221' 222' 223' 224' 225' 226' 227' 228' 229' 230' 231' 232' 233' 234' 235' 236' 237' 238' 239' 240' 241' 242' 243' 244' 245' 246' 247' 248' 249' 250' 251' 252' 253' 254' 255' 256' 257' 258' 259' 260' 261' 262' 263' 264' 265' 266' 267' 268' 269' 270' 271' 272' 273' 274' 275' 276' 277' 278' 279' 280' 281' 282' 283' 284' 285' 286' 287' 288' 289' 290' 291' 292' 293' 294' 295' 296' 297' 298' 299' 300' 301' 302' 303' 304' 305' 306' 307' 308' 309' 310' 311' 312' 313' 314' 315' 316' 317' 318' 319' 320' 321' 322' 323' 324' 325' 326' 327' 328' 329' 330' 331' 332' 333' 334' 335' 336' 337' 338' 339' 340' 341' 342' 343' 344' 345' 346' 347' 348' 349' 350' 351' 352' 353' 354' 355' 356' 357' 358' 359' 360' 361' 362' 363' 364' 365' 366' 367' 368' 369' 370' 371' 372' 373' 374' 375' 376' 377' 378' 379' 380' 381' 382' 383' 384' 385' 386' 387' 388' 389' 390' 391' 392' 393' 394' 395' 396' 397' 398' 399' 400' 401' 402' 403' 404' 405' 406' 407' 408' 409' 410' 411' 412' 413' 414' 415' 416' 417' 418' 419' 420' 421' 422' 423' 424' 425' 426' 427' 428' 429' 430' 431' 432' 433' 434' 435' 436' 437' 438' 439' 440' 441' 442' 443' 444' 445' 446' 447' 448' 449' 450' 451' 452' 453' 454' 455' 456' 457' 458' 459' 460' 461' 462' 463' 464' 465' 466' 467' 468' 469' 470' 471' 472' 473' 474' 475' 476' 477' 478' 479' 480' 481' 482' 483' 484' 485' 486' 487' 488' 489' 490' 491' 492' 493' 494' 495' 496' 497' 498' 499' 500' 501' 502' 503' 504' 505' 506' 507' 508' 509' 510' 511' 512' 513' 514' 515' 516' 517' 518' 519' 520' 521' 522' 523' 524' 525' 526' 527' 528' 529' 530' 531' 532' 533' 534' 535' 536' 537' 538' 539' 540' 541' 542' 543' 544' 545' 546' 547' 548' 549' 550' 551' 552' 553' 554' 555' 556' 557' 558' 559' 560' 561' 562' 563' 564' 565' 566' 567' 568' 569' 570' 571' 572' 573' 574' 575' 576' 577' 578' 579' 580' 581' 582' 583' 584' 585' 586' 587' 588' 589' 590' 591' 592' 593' 594' 595' 596' 597' 598' 599' 600' 601' 602' 603' 604' 605' 606' 607' 608' 609' 610' 611' 612' 613' 614' 615' 616' 617' 618' 619' 620' 621' 622' 623' 624' 625' 626' 627' 628' 629' 630' 631' 632' 633' 634' 635' 636' 637' 638' 639' 640' 641' 642' 643' 644' 645' 646' 647' 648' 649' 650' 651' 652' 653' 654' 655' 656' 657' 658' 659' 660' 661' 662' 663' 664' 665' 666' 667' 668' 669' 670' 671' 672' 673' 674' 675' 676' 677' 678' 679' 680' 681' 682' 683' 684' 685' 686' 687' 688' 689' 690' 691' 692' 693' 694' 695' 696' 697' 698' 699' 700' 701' 702' 703' 704' 705' 706' 707' 708' 709' 710' 711' 712' 713' 714' 715' 716' 717' 718' 719' 720' 721' 722' 723' 724' 725' 726' 727' 728' 729' 730' 731' 732' 733' 734' 735' 736' 737' 738' 739' 740' 741' 742' 743' 744' 745' 746' 747' 748' 749' 750' 751' 752' 753' 754' 755' 756' 757' 758' 759' 760' 761' 762' 763' 764' 765' 766' 767' 768' 769' 770' 771' 772' 773' 774' 775' 776' 777' 778' 779' 780' 781' 782' 783' 784' 785' 786' 787' 788' 789' 790' 791' 792' 793' 794' 795' 796' 797' 798' 799' 800' 801' 802' 803' 804' 805' 806' 807' 808' 809' 810' 811' 812' 813' 814' 815' 816' 817' 818' 819' 820' 821' 822' 823' 824' 825' 826' 827' 828' 829' 830' 831' 832' 833' 834' 835' 836' 837' 838' 839' 840' 841' 842' 843' 844' 845' 846' 847' 848' 849' 850' 851' 852' 853' 854' 855' 856' 857' 858' 859' 860' 861' 862' 863' 864' 865' 866' 867' 868' 869' 870' 871' 872' 873' 874' 875' 876' 877' 878' 879' 880' 881' 882' 883' 884' 885' 886' 887' 888' 889' 890' 891' 892' 893' 894' 895' 896' 897' 898' 899' 900' 901' 902' 903' 904' 905' 906' 907' 908' 909' 910' 911' 912' 913' 914' 915' 916' 917' 918' 919' 920' 921' 922' 923' 924' 925' 926' 927' 928' 929' 930' 931' 932' 933' 934' 935' 936' 937' 938' 939' 940' 941' 942' 943' 944' 945' 946' 947' 948' 949' 950' 951' 952' 953' 954' 955' 956' 957' 958' 959' 960' 961' 962' 963' 964' 965' 966' 967' 968' 969' 970' 971' 972' 973' 974' 975' 976' 977' 978' 979' 980' 981' 982' 983' 984' 985' 986' 987' 988' 989' 990' 991' 992' 993' 994' 995' 996' 997' 998' 999' 1000' 1001' 1002' 1003' 1004' 1005' 1006' 1007' 1008' 1009' 1010' 1011' 1012' 1013' 1014' 1015' 1016' 1017' 1018' 1019' 1020' 1021' 1022' 1023' 1024' 1025' 1026' 1027' 1028' 1029' 1030' 1031' 1032' 1033' 1034' 1035' 1036' 1037' 1038' 1039' 1040' 1041' 1042' 1043' 1044' 1045' 1046' 1047' 1048' 1049' 1050' 1051' 1052' 1053' 1054' 1055' 1056' 1057' 1058' 1059' 1060' 1061' 1062' 1063' 1064' 1065' 1066' 1067' 1068' 1069' 1070' 1071' 1072' 1073' 1074' 1075' 1076' 1077' 1078' 1079' 1080' 1081' 1082' 1083' 1084' 1085' 1086' 1087' 1088' 1089' 1090' 1091' 1092' 1093' 1094' 1095' 1096' 1097' 1098' 1099' 1100' 1101' 1102' 1103' 1104' 1105' 1106' 1107' 1108' 1109' 1110' 1111' 1112' 1113' 1114' 1115' 1116' 1117' 1118' 1119' 1120' 1121' 1122' 1123' 1124' 1125' 1126' 1127' 1128' 1129' 1130' 1131' 1132' 1133' 1134' 1135' 1136' 1137' 1138' 1139' 1140' 1141' 1142' 1143' 1144' 1145' 1146' 1147' 1148' 1149' 1150' 1151' 1152' 1153' 1154' 1155' 1156' 1157' 1158' 1159' 1160' 1161' 1162' 1163' 1164' 1165' 1166' 1167' 1168' 1169' 1170' 1171' 1172' 1173' 1174' 1175' 1176' 1177' 1178' 1179' 1180' 1181' 1182' 1183' 1184' 1185' 1186' 1187' 1188' 1189' 1190' 1191' 1192' 1193' 1194' 1195' 1196' 1197' 1198' 1199' 1200' 1201' 1202' 1203' 1204' 1205' 1206' 1207' 1208' 1209' 1210' 1211' 1212' 1213' 1214' 1215' 1216' 1217' 1218' 1219' 1220' 1221' 1222' 1223' 1224' 1225' 1226' 1227' 1228' 1229' 1230' 1231' 1232' 1233' 1234' 1235' 1236' 1237' 1238' 1239' 1240' 1241' 1242' 1243' 1244' 1245' 1246' 1247' 1248' 1249' 1250' 1251' 1252' 1253' 1254' 1255' 1256' 1257' 1258' 1259' 1260' 1261' 1262' 1263' 1264' 1265' 1266' 1267' 1268' 1269' 1270' 1271' 1272' 1273' 1274' 1275' 1276' 1277' 1278' 1279' 1280' 1281' 1282' 1283' 1284' 1285' 1286' 1287' 1288' 1289' 1290' 1291' 1292' 1293' 1294' 1295' 1296' 1297' 1298' 1299' 1300' 1301' 1302' 1303' 1304' 1305' 1306' 1307' 1308' 1309' 1310' 1311' 1312' 1313' 1314' 1315' 1316' 1317' 1318' 1319' 1320' 1321' 1322' 1323' 1324' 1325' 1326' 1327' 1328' 1329' 1330' 1331' 1332' 1333' 1334' 1335' 1336' 1337' 1338' 1339' 1340' 1341' 1342' 1343' 1344' 1345' 1346' 1347' 1348' 1349' 1350' 1351' 1352' 1353' 1354' 1355' 1356' 1357' 1358' 1359' 1360' 1361' 1362' 1363' 1364' 1365' 1366' 1367' 1368' 1369' 1370' 1371' 1372' 1373' 1374' 1375' 1376' 1377' 1378' 1379' 1380' 1381' 1382' 1383' 1384' 1385' 1386' 1387' 1388' 1389' 1390' 1391' 1392' 1393' 1394' 1395' 1396' 1397' 1398' 1399' 1400' 1401' 1402' 1403' 1404' 1405' 1406' 1407' 1408' 1409' 1410' 1411' 1412' 1413' 1414' 1415' 1416' 1417' 1418' 1419' 1420' 1421' 1422' 1423' 1424' 1425' 1426' 1427' 1428' 1429' 1430' 1431' 1432' 1433' 1434' 1435' 1436' 1437' 1438' 1439' 1440' 1441' 1442' 1443' 1444' 1445' 1446' 1447' 1448' 1449' 1450' 1451' 1452' 1453' 1454' 1455' 1456' 1457' 1458' 1459' 1460' 1461' 1462' 1463' 1464' 1465' 1466' 1467' 1468' 1469' 1470' 1471' 1472' 1473' 1474' 1475' 1476' 1477' 1478' 1479' 1480' 1481' 1482' 1483' 1484' 1485' 1486' 1487' 1488' 1489' 1490' 1491' 1492' 1493' 1494' 1495' 1496' 1497' 1498' 1499' 1500' 1501' 1502' 1503' 1504' 1505' 1506' 1507' 1508' 1509' 1510' 1511' 1512' 1513' 1514' 1515' 1516' 1517' 1518' 1519' 1520' 1521' 1522' 1523' 1524' 1525' 1526' 1527' 1528' 1529' 1530' 1531' 1532' 1533' 1534' 1535' 1536' 1537' 1538' 1539' 1540' 1541' 1542' 1543' 1544' 1545' 1546' 1547' 1548' 1549' 1550' 1551' 1552' 1553' 1554' 1555' 1556' 1557' 1558' 1559' 1560' 1561' 1562' 1563' 1564' 1565' 1566' 1567' 1568' 1569' 1570' 1571' 1572' 1573' 1574' 1575' 1576' 1577' 1578' 1579' 1580' 1581' 1582' 1583' 1584' 1585' 1586' 1587' 1588' 1589' 1590' 1591' 1592' 1593' 1594' 1595' 1596' 1597' 1598' 1599' 1600' 1601' 1602' 1603' 1604' 1605' 1606' 1607' 1608' 1609' 1610' 1611' 1612' 1613' 1614' 1615' 1616' 1617' 1618' 1619' 1620' 1621' 1622' 1623' 1624' 1625' 1626' 1627' 1628' 1629' 1630' 1631' 1632' 1633' 1634' 1635' 1636' 1637' 1638' 1639' 1640' 1641' 1642' 1643' 1644' 1645' 1646' 1647' 1648' 1649' 1650' 1651' 1652' 1653' 1654' 1655' 1656' 1657' 1658' 1659' 1660' 1661' 1662' 1663' 1664' 1665' 1666' 1667' 1668' 1669' 1670' 1671' 1672' 1673' 1674' 1675' 1676' 1677' 1678' 1679' 1680' 1681' 1682' 1683' 1684' 1685' 1686' 1687' 1688' 1689' 1690' 1691' 1692' 1693' 1694' 1695' 1696' 1697' 1698' 1699' 1700' 1701' 1702' 1703' 1704' 1705' 1706' 1707' 1708' 1709' 1710' 1711' 1712' 1713' 1714' 1715' 1716' 1717' 1718' 1719' 1720' 1721' 1722' 1723' 1724' 1725' 1726' 1727' 1728' 1729' 1730' 1731' 1732' 1733' 1734' 1735' 1736' 1737' 1738' 1739' 1740' 1741' 1742' 1743' 1744' 1745' 1746' 1747' 1748' 1749' 1750' 1751' 1752' 1753' 1754' 1755' 1756' 1757' 1758' 1759' 1760' 1761' 1762' 1763' 1764' 1765' 1766' 1767' 1768' 1769' 1770' 1771' 1772' 1773' 1774' 1775' 1776' 1777' 1778' 1779' 1780' 1781' 1782' 1783' 1784' 1785' 1786' 1787' 1788' 1789' 1790' 1791' 1792' 1793' 1794' 1795' 1796' 1797' 1798' 1799' 1800' 1801' 1802' 1803' 1804' 1805' 1806' 1807' 1808' 1809' 1810' 1811' 1812' 1813' 1814' 1815' 1816' 1817' 1818' 1819' 1820' 1821' 1822' 1823' 1824' 1825' 1826' 1827' 1828' 1829' 1830' 1831' 1832' 1833' 1834' 1835' 1836' 1837' 1838' 1839' 1840' 1841' 1842' 1843' 1844' 1845' 1846' 1847' 1848' 1849' 1850' 1851' 1852' 1853' 1854' 1855' 1856' 1857' 1858' 1859' 1860' 1861' 1862' 1863' 1864' 1865' 1866' 1867' 1868' 1869' 1870' 1871' 1872' 1873' 1874' 1875' 1876' 1877' 1878' 1879' 1880' 1881' 1882' 1883' 1884' 1885' 1886' 1887' 1888' 1889' 1890' 1891' 1892' 1893' 1894' 1895' 1896' 1897' 1898' 1899' 1900' 1901' 1902' 1903' 1904' 1905' 1906' 1907' 1908' 1909' 1910' 1911' 1912' 1913' 1914' 1915' 1916' 1917' 1918' 1919' 1920' 1921' 1922' 1923' 1924' 1925' 1926' 1927' 1928' 1929' 1930' 1931' 1932' 1933' 1934' 1935' 1936' 1937' 1938' 1939' 1940' 1941' 1942' 1943' 1944' 1945' 1946' 1947' 1948' 1949' 1950' 1951' 1952' 1953' 1954' 1955' 1956' 1957' 1958' 1959' 1960' 1961' 1962' 1963' 1964' 1965' 1966' 1967' 1968' 1969' 1970' 1971' 1972' 1973' 1974' 1975' 1976' 1977' 1978' 1979' 1980' 1981' 1982' 1983' 1984' 1985' 1986' 1987' 1988' 1989' 1990' 1991' 1992' 1993' 1994' 1995' 1996' 1997' 1998' 1999' 2000' 2001' 2002' 2003' 2004' 2005' 2006' 2007' 2008' 2009' 2010' 2011' 2012' 2013' 2014' 2015' 2016' 2017' 2018' 2019' 2020' 2021' 2022' 2023' 2024' 2025' 2026' 2027' 2028' 2029' 2030' 2031' 2032' 2033' 2034' 2035' 2036' 2037' 2038' 2039' 2040' 2041' 2042' 2043' 2044' 2045' 2046' 2047' 2048' 2049' 2050' 2051' 2052' 2053' 2054' 2055' 2056' 2057' 2058' 2059' 2060' 2061' 2062' 2063' 2064' 2065' 2066' 2067' 2068' 2069' 2070' 2071' 2072' 2073' 2074' 2075' 2076' 2077' 2078' 2079' 2080' 2081' 2082' 2083' 2084' 2085' 2086' 2087' 2088' 2089' 2090' 2091' 2092' 2093' 2094' 2095' 2096' 2097' 2098' 2099' 2100' 2101' 2102' 2103' 2104' 2105' 2106' 2107' 2108' 2109' 2110' 2111' 2112' 2113' 2114' 2115' 2116' 2117' 2118' 2119' 2120' 2121' 2122' 2123' 2124' 2125' 2126' 2127' 2128' 2129' 2130' 2131' 2132' 2133' 2134' 2135' 2136' 2137' 2138' 2139' 2140' 2141' 2142' 2143' 2144' 2145' 2146' 2147' 2148' 2149' 2150' 2151' 21

C-1

Final well depth 22.45'

TOC 4" bLS

SWL 13.2' B TOC

yield ~ 69pm

completed 6-5-02

Hickory
well depth
yield

Magnolia
well depth,
yield

MANATEE Springs
LAT/LON

C-1

5-29-02 CONT.

PACKED UP.

END DAY 8pm RAIN

40

5-30-02

7am START EH, BQ, JS

BAILED DEPTH TO 21' 8"

* LIGHTING STRINGS 8-20 MILES.

AIR LIFTED TO OPEN HOLE TO ~24'

SET WELL SCREEN 12.5' - 22.5"

~~ROUTED~~ WELL PACKED TO 10' GROUTED

BOTH S-1 & C-1 TO ABOUT 18" BGS.

RAIN/LIGHTING 1hr DINNER BREAK, CELEBRATED

10pm ~~END DAY~~ WELL COVER ON, STAKED

out. Cleaned up & DEPARTED

END DAY @ 10pm

5-31-02

7am - 10am REPACKED TRAILER

CHIEFMAN TO TLM.

MSSP
Magnolia M1D

MSSP
Magnolia M6

MSSP
Magnolia M7

MSSP
Magnolia M

MSSP
Hickory C2
Hickory C3A

C-2

C-2

41

6-4-02 KC, LB, & some
TAM start - loading/fuel up
to MN. Sprg

Hickory campground C-2

SEC, T, R

LAT

LOW

Elev

Co: CBY

0-2.5' push spc - 0-1.5' gray
+ yel. or sand then orange
clayey sand

2.5-3.5' ssp - pushed - refusal
at 3.5'

change to new

3.5-5.5' ls. soft rubble ~50% rec

5.5-10.5' ls. alt. soft + harder zone

10.5-15.5' granular mass porous
ls.

15.5-20.5' granular + pebbly ls.
soft drilling ~3' sec.

20.5-25.5' harder granular ls.

25.5-30.5' ls. granular, mod ind

Hickory
Well depth
SWL

Magnolia
Well depth
SWL

MANATEE Springs
LAT/LON

C-2

42

30.5 - 32.5' TD 15, or above

main 3 7/8" to 18'

~~set~~ SWL 13.5'

set well arm - screen

13.5 - 23.5' washed in

1.5 bags filter sand - started

pump + surge - sand to

10.25' bcs - will cont

deep.

cont surge + deep - wash

in tot of 3.5 bags filter

sand to ~10'

natural fill to ~8'

bentonite chips to 4.5'

pour quick gravel dry, layd.

in stages to -1.5' set manhole

cover next cut / 5' to bottom

MSSP
Magnolia M1D

SSP
Magnolia M6

SSP
Magnolia M7

MSSP
Magnolia M-1

SSP
Magnolia M

MSSP
Hickory C3A

MSSP
Hickory C

Hickory
Well depth
SWL

Magnolia
Well depth
SWL

MANATEE Springs
LAT/LON

#79100

Jesse Seward C-3A 43

6-4-02 KE, LB, JS.

C-3A

S

T

R

LAT

CON

Elev

CD : LEVY

0 - 2.5' push spec - gy bn sand
loose - dist by Arch. ck
2.5 - 4.25' push spec -

4.25 - 6.75' push spec white sd
thin or chgsd ab ~ 6'
6.75 - 9.25' push spec - or chgsd

chg over to N4

9.25 - 10' or chgsd

10 - 15' paler or chgsd w ls frag

15 - 20' macroporous white ls,

some iron staining - var

indicative

MSSP
Magnolia M10

MSSP
Magnolia M6

MSSP
Magnolia M7

MSSP
Magnolia M-1

MSSP
Magnolia M

MSSP
Hickory C3A

MSSP
Hickory C

Hickory
well depth
SWL

Magnolia
well depth
SWL

MANATEE Springs
LAT/LON

C-3A

END day 700 pm

44

6-5-02 7AM start

SWL 15' 0"

20-25' var muddy granular
ls. minor iron staining

25-30' ls as above - mottled off
+ loss btm 8"

30-35' TO SAME

SET 6' 9 6" PVC surface csg

SET 25' well casing

pump + surge after pouring
filter pack 12.6'

soft clay squeeze in to ~
9'

pour granular bentonite
to 6.5' - hydrated in stages

pump 1/2 bag gunk govt to -1.5 set manhole
cover

pump + surge 51 + C5 + set
manhole covers - still not deep.

complete C-3A AND C-2

6-6 7AM-7PM

reth TLT 200 pm

completed
6-13-02

3 gunk govt
3 clays
11 SAND

MSSP
Magnolia M1D

MSSP
Magnolia M6

MSSP
Magnolia M7

MSSP
Magnolia M-1

MSSP
Magnolia M5

MSSP
Magnolia M8

MSSP
Hickory C

Hickory
well depth
SWL

Magnolia
well depth,
SWL

MANATEE Springs
LAT/LON

45

Hickory well summary

S-1 7-10-02

S-2 6-5-02

S-3 7-10-02

S-4 6-5-02

C-1 completed 6-5-02

C-2 6-5-02

C-3A ~~6-5-02~~ 6-13-02

C-4

C-5

C-6 7-11-02

	SWL	TD	Csg ht	6-17-02
S-1	14.6'	26'	-4.5"	
S-2	14'	25'	-5"	
S-3	12.5'	23'	-3.25"	
S-4	14.5'	25.4'	-3"	
C-1	13.2'	22.5'	-4"	
C-2	13.6'	24'	-3"	
C-3A	14.3'	24.7'	-2.5"	
C-4	14.1'	25.55'	-2"	
C-5	14.4'	25.2'	-4"	
C-6	14'	25.5'	-2.5"	

Magnolia
well depth,
width

MANATEE Springs
LAT/LON

6-17-02 KL, BQ

46

KL 7AM start BQ 730
load up, to JCL, then to
WHL - check in mud light
system then to MSSP.

change out slidramatic
bushings, install drive flange
& spindle adaptor + swivel

Bobby + Jerry deep. wells,
make gas run, measure
swc, well depth + stickups
end day 6:30 pm

MSSP
Magnolia M1D

SSP
Magnolia M6

SSP
Magnolia M7

MSSP
Magnolia M-1

SSP
Magnolia M5
Magnolia M8

MSSP
Magnolia C

9V bat.
firing stops
□ shank somewhere

GE
40wt. High int.
inf. base
40S11N CD
PC 38156

M-10

6-18-02 KC, BQ 7AM start
rain + thunder storm
start setup at Magnolia

Batteries in lightning detector
go out - go to chief land for
more since have T.S.

W#

Magnolia 10

LEVY CO

S

T

R

LAT

CON

ELEV

0-2.5' push spec - ssp.
~1' heavy - disturbed sand
below ~4' interbedded white +
dk bn sand

2.5-4.25' atp ssp. sand
but mostly limestone - no sand
4.25-6.75' push spec soft clayey
ls. lt yl.

6.75' - chg nw to NQWZ

Magnolia
well depth
height

MANATEE Springs
LAT/LON

MSSP
Magnolia M10
SSP
Magnolia M6

SSP
Magnolia M7

MSSP
Magnolia M-1

SSP
Magnolia M5
Magnolia M8

0-2.5' ss
25' ls w ss fill
17' clay w ss
16' ls

M-10

48

6.75 - 10' ~ 2' covered gl rubble
ls at top grids to gray br clay
10-15' upper part br clay & ls
then ls.

15-20' even variably indurated ls.
fossiliferous

20-25' ls as above - somewhat
harder.

25' TD

REAM hole - hole fills in
w VF ss - work bail
CAN back in to wash out -
didn't like back out.

RUN 3 1/4" HSA's install
21' well casing - pull back
auger + work to in 26' again
20-30 sand to 11'
quit for day

Thunderstorm killed ~ 3 hrs
leave site 740 p
end day 8:00 pm

Magnolia
well depth
well

MANATEE Springs
LAT/LON

MSSP
Magnolia M-10

MSSP
Hickory C

MSSP
Magnolia M-1

MSSP
Magnolia M-6

MSSP
Magnolia M-7

MSSP
Magnolia M-1

MSSP
Magnolia M-5

MSSP
Magnolia M-8

Magnolia
well depth,
LAT/LON

M-10

6-19-02 KC, BQ VS

700 stand

SWZ 5.5" 608

pull + surge, wash in add.
from sand to 10'

pull tra's, wash in 3.5 bags
bentonite chips 10' - 2.4'

MSSP
Magnolia M-10

MSSP
Hickory C

MSSP
Magnolia

MSSP
Magnolia M 6

MSSP
Magnolia M 7

MSSP
Magnolia M-1

MSSP
Magnolia M 5

MSSP
Magnolia M 8

Magnolia
well depth,
width

MANATEE Springs
LAT/LON

M-6¹⁹

50

6-13-02 move rig to M-6

W#

M-6

LEVY CO.

S T R

LAT

LOW

Elev

0-2.5' push spec. distributed
lt. gy + br sand w organic ssp.
2.5-5.0' ssp - lt. br sd ssp

recovery

5-7.5' dk br sd ~ 1 1/4' then
gray br clayey sd + ls frag.

last 6" mostly ls

7.5-9.5' NO RECOVERY SAND(?)
9.5-14.5' - hit rock at 10'

hard - interbedded hard + soft
stuff, last 15" soft, plugged
off - only retr top rock

14.5-17' hard rock ls thru softer gumula
ls. ~ 60% rec

17-19.5' ls, cm, lt or, var ind,
~ 2' me.

□ M10

□

□ M9

□

□ M8

□

□ M3

□ M2

□

□ M6

□

□ M7

□ M5

□ M1



MSSP
Magnolia

MSSP
Magnolia M6

MSSP
Magnolia M7

MSSP
Magnolia M-1

MSSP
Magnolia M5

MSSP
Magnolia M8

MSSP
Magnolia M-10

MSSP
Hickory C

Magnolia
well depth
115 ft

MANATEE Springs
LAT/LON

M-6

5!

19.5-22 ls. 14 gl. granular, fossil
moldic

22-24.5' ls, less moldic, mod ind,

24.5-27' TD SAME

27' TD

Retn TEL 8:15 pm

6-24-02 7:15 start KC, JS

KC to Sp - travel with,
rins + ambient iron, to
shut- load up materials
then to Manatee Spr. - soaked
in - to turn

SWL 5' bLS, turn in 12.5' ASA
pull NQWL have 25'
hole

SET 25' well away w top of
SWL at ~12'

Washed in 2 bags 20-30
sand + started deep.

ARLIFT at ~ 5 pm, surge
+ prep. prep at 15-18
pm. pressure backflowed
top of filter pack at

10.5' bLS

pulled ASA

washed in 3 bags bentonite

MSSP
Magnolia M-2
Magnolia

MSSP
Magnolia M-7

MSSP
Magnolia M-1

MSSP
Magnolia M-5
Magnolia M-8

MSSP
Magnolia M-10

MSSP
Hickory &

Magnolia
Well depth
WELL

MANATEE Springs
LAT/LON

M-6

chips 10.5-2' bLS

shut down rig + lock down

52

End dry 7:30pm

6-25-02

KC, J Sunday 7:30

SWL 4.5" bLS

pump + surge well

01-W 2010

25

MSSP
Hickory C

MSSP
Magnolia M-2
Magnolia

MSSP
Magnolia M7

MSSP
Magnolia M-1

MSSP
Magnolia M5
Magnolia M8

M-7

6-25-02 cont

move rig + trailer to M-7

M-7

CO: Lery

S T R N W N E 35, T I N, R 13 E

LAT 29° 29.182'

LOn 82° 58.720'

Elev

0-2.25' push spl - refusal on
ls at 2.25 - grey + br sd

2.25 - change over to N W N E

2.25 - ~~5~~ washed top only

remained 2'

3.5 - ~~10~~ some ls, then sd, clay
+ paper recovery

10 - ~~15~~ clayey sd, lt br gy

some rock at btm. soft - pushed

coribbl. - only 1' rem.

15 - ~~15~~ ext shre - 3" penetration into ls

15-17.5 - ~~2~~ runs - plugged off - ls.

17.5 - ~~20~~ granular ls, gravel matrix

20 - ~~22.5~~ same

22.5 - ~~25~~ same

- number of 2 1/2' somewhere
fired now time

0-2 sd
2-7.5 ls
7.5-12.5 clay + sd
12.5-17.5

some rock at
~14'

53

M-7

Drill in HSA's to blank off string
to 19'

- drill in add'l 5' NQ to
New TD 29.9' -
will back track to correct #'s
Done

SET well array w son btm
at 25.5' bts

start washing in filter sand

4³⁰ pm EH & BQ ARRIVE

5³⁰ pm KC dep't for TLH

6⁴⁵ JESSIE ENDS DAY DUE TO LIGHTNING

7¹⁵ CHECKED IN HOLIDAY INN
END DAY

6/26/02 EH, BQ, JS 11⁰⁰ am VISIT FROM Mark
7 am GROT FUEL & Herman.

7³⁰ pm ARRIVED AT SITE

~~WE~~ WELL PACK TO ~14' TRIP AUGERS

10' 6" WELL PACK GROUT ~3'

M-6 CONT'D well development

MOVED TO M-1 SET UP PUMPS TO ~6.5"

6.5 Rock, SWITCHED TO NQ

LIGHTNING/RAIN

6⁴⁵ pm END DAY

20' 9"

M-1

6/27/02 EH, BQ & J. Serrano

55

1:00 PM START 7:30 AM J. Serrano STARTER

CONT: M1

0' - 6.5' SAND

6.5' SOFT UNCONSOLIDATED ROCK

6.5' - 11.5' Limestone ~ 3' WASH OUT

11.5' - ~13.5' SANDY CLAY DARK COLOR

~ SOME WASH OUT ~ 2' POOR RECOVERY

13.5' - 16.5' QUARTZITE PEBBLES

16.5' - ~17' ROCK w/ CLAY

17' - 21.5' LIME STONE

21.5' - 26.5' same as above

26.5' - 31.5' " " "

TO 31.5 TD " " "

USED 15' AUGERS PULLED NQ
OPEN HOLE TO 20.5 FEET

4 PM J. Serrano ENDS DAY.

SURGED
~~STARTED~~ / Pumped M-6 ALL DAY CLEANS UP FIRST

PUMP ~ 15 GPM

BEGAN TO RUN MORE AUGERS.

Bobby got sick HEAT EXHAUSTION
END DAY @ 6 PM

MAGNOLIA
well depth
well

MANATEE SPRINGS
LAT/LON

MSSP
MAGNOLIA M-2

MSSP
MAGNOLIA M-3

MSSP
MAGNOLIA M-4

MSSP
MAGNOLIA M-1

MSSP
MAGNOLIA M-5

MSSP
MAGNOLIA M-8

M-1

6/28/02 EH, BQ, J. Serrano 56

7^{AM} EH, BQ started

7¹⁵ San J. Serrano started

~~EH~~ EH SICK WORKED ANYWAY

RAN AUGERS TO TD 31.5'

W/ PLUG, KNOCKED OUT PLUG.

ATTEMPTED TO SET WELL. PULLED

AUGERS, WOOD CHIPS FROM PLUG

KEPT PULLING WELL UP.

PULLED WELL, COVERED AUGERS

PUT UP CAUTION TAPE, PACKED UP

AND MOVED EQUIPMENT.

7:45 DEPARTED FOR TLM

11¹⁵ ARRIVED @ TLM

Magnolia MANATEE Springs
well depth, LAT/LON

MSSP
Magnolia M-2

MSSP
Magnolia M-3

MSSP
Magnolia M-4

MSSP
Magnolia M-5

MSSP
Magnolia M-8

SP
voice M-10

Magnolia
well depth
well
MANATEE Springs
LAT/LON

7-10-02

Manatee Springs

37 ①

MW #	DTW	TD
M-10	4'	13'0" 19'11"
M-6	4' 0.5"	21' 8"
M-7	4' 7.5"	24' 5"

MSSP
Magnolia M-2

MSSP
Magnolia M-3

MSSP
Magnolia M-4

MSSP
Magnolia M-5

MSSP
Magnolia M-5
Magnolia M-8

58

7-10-02 KC, John + Bobby.
7AM start - loadout, hook up
to MN. Spgs mt. Seem there.

Eric left 20' hsa in hole,
sed to 12'

pulled all, set wood plug +
drilled 30' hsa in.

set 27' well Assy, start
filter packing - NAT pack to
~ 20'

well pulled up when attempting
to pull hsa. - pulled well
array up to well point
with wash down valve +
washed array back in to depth
seen ~ 12-27' to avoid clay
layer at 16'

washed in ~ 1 bag filter
sand to ~ 14' start deep.
surge plug + air lift

John + Bobby - take SWC + TD
+ surge M filter (6, 7, 10)
End day 6:30 pm.

MSSP
Magnolia M-2
MSSP
Magnolia M-3
MSSP
Magnolia M-4
MSSP
Magnolia M-5
MSSP
Magnolia M-8

SP
volc M-10

7-12-02

M-1 SWL 7.8' b/w

Site 92

29° 29.299

82° 58.535

Magnolia
Well depth
WELLMANATEE Springs
LAT/LON

LAT/LON

59

Magnolia	1	29° 29.176	82° 58.714
	2	29° 29.177	82° 58.717
	3	29° 29.179	82° 58.721
	4	29° 29.180	82° 58.728
	5	29° 29.182	82° 58.721
	6	29° 29.176	82° 58.733
	7	29° 29.182	82° 58.720
	8	29° 29.174	82° 58.711
	9	29° 29.167	82° 58.722
	10	29° 29.172	82° 58.726

Hickory	51	29° 29.274	82° 58.531	comp
	52	29° 29.260	82° 58.494	✓
	53	29° 29.261	82° 58.498	✓
	54	29° 29.261	82° 58.515	✓
	C1	29° 29.299	82° 58.535	✓
	C2	29° 29.287	82° 58.525	✓
	C3A	29° 29.289	82° 58.542	✓
	C4			✓
	C5	29° 29.281	82° 58.533	✓
	C6			✓

Front of bath house 29° 29.291 82° 58.513

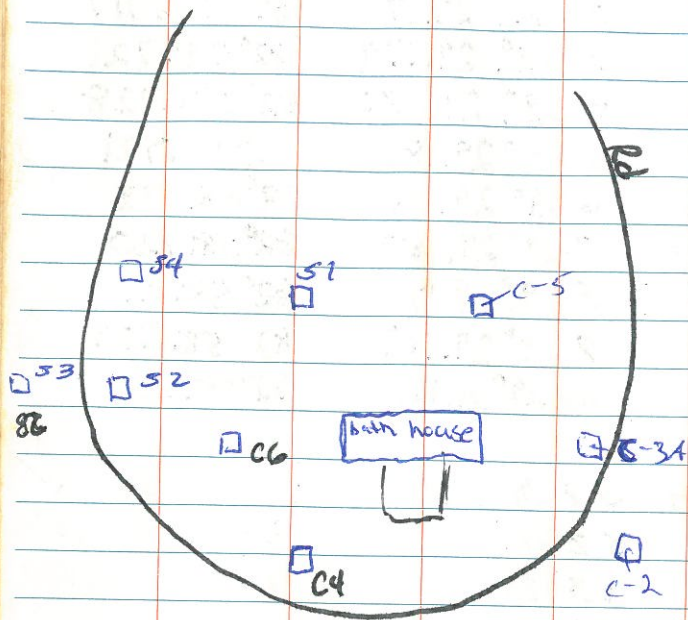
S^W back part of #82 29° 29.261 82° 58.498

adjacent bath house 29° 29.279 82° 58.517

S^E back of bath house 29° 29.274 82° 58.531

All Hickory Comp. nps sent

MSSP
Magnolia M-2MSSP
Magnolia M-3MSSP
Magnolia M-4MSSP
Magnolia M-5MSSP
Magnolia M-6MSSP
Magnolia M-7



60
7-11-02 KC, Bobby, John, Jenece
7AM start - gas for pump
LAT con for all sites
M1 SWL 8.2' bLS
fm + filter sand to 14'
pump 1.5 bags Quik grout
flown HSA's to -1'

mortar mix for surface pads
on M1, M6, M7, + M10

7-12-02

M-1 SWL 7.8' bLS

TOP of casing set at 0.25' bLS
SWL 7.95' bLDC
RETN to TCH 500pm

Magnolia
well depth, SWL
415' bLS

MSSP

Magnolia M-2

MSSP

Magnolia M-3

MSSP

Magnolia M-4

MSSP

Magnolia M-5

MSSP

Magnolia M-6

MSSP

Magnolia M-7

MSSP

Magnolia M-8

MSSP

Magnolia M-9

MSSP

Magnolia M-10

MSSP

Magnolia M-11

MSSP

Magnolia M-12

Magnolia
well depth, sub
high

7-11-02 3:00 pm - move
rig to M-5

61

M-5

W #

S

T

R

LAT

Lon

Elev

CO LEVY

0 - 2.5' push spl - white sand
+ organic - disturbed, lowermost
3" yellow sand ~ 50% rec
2.5 - 4.25' white, or + lt grey sd
4.25 - 6.75' ssp - ~ 50% rec -
sand H. gy + br
6.75 - 7.75' sand upper ~ 1' thin
ls.
7.75 - 8 ~ 9' pushed hard no recovery
?- pushing wouldn't into clay?
clay over to NQ

7/14

NQ - ~ 9 - 10.25'

3" white ls 4 in y. gw clay

SSP 10 - 10.25'

10.25 - 15.25' - drilled like clayey sd.

slight rubble of rock last few inches

15.25 - 17.75' ran ext shoe - soft

rubbly - no ~ 1'

17.75 - 20.25' reg shoe - soft rubble

prob still clay - v poor recovery

~~20.25~~ small amt clay + rock frag.

20.25 - 24.25' no recovery - run w

ext. shoe - soft clay? cavity?

24.15 - 29.25' 5 ft push, no water

no rob. w ext. shoe

~ 1.5' soupy clay, sand ls fragments recovered.

gravity fed 20 gpm down

NQ for ~ 5 min before it

backed up to top 15 v loose

around end of pipe

Quit for day

End day 7:15 pm

Auger D Rings
mbl dnl spur compl.
2 compl. / Mbl dnl spur tubes
spits? / shaver

~~ck mbl dnl big red paint~~
~~rust? spur heads avail rust?~~
NEW DIED 3 1/4" HSAS
~~rust pin sub~~
~~rust 3 1/4" box~~
fresh bags

7-12-02

TAM START - to Gilchrist Bldg.
Suppl. - sand.

SWZ MS 6.6' BLS

Drill in NQ to 32.5'
drill 3 1/4" HSAS new NQ to 17'
pull NQ
have 31' of hole / SWL = 6'

SETUP 2" AIRLIFT - pumps
lots of water, etc. hole
to 30'

SET well array, start
washing in filter sand.
Thunderstorm - ~11 AM
well set w sen 17-27
2 bags filter sand to 15' BLS

Airlift w 1 1/4" tremmie - ~1 hr
pumps at ~39 PM

Magnolia
well depth, SWL
WELL

64

7-16-02 KL, E.M., JH, JS
7AM start, load up, to MSSP

M-5 SWL 5.8' bLS
well depth 27.8'

surge + pump w airlift w 1 bar
top of fish pack at 15' 8"
pump 2 bags quick grab
then 2 bags to surface
- dug bentonite grout out
to -2' for CEMENT

MSSP
Magnolia M-2

MSSP
Magnolia M-3

MSSP
Magnolia M-4

Magnolia 9

MSSP
Magnolia M-8

Magnolia
well depth, SWC
Hick

7-16-02 move to M-8 300 pm

65

~~###~~

M-8

SEC

T

R

LAT

LOW

Elev

Co: Levy

0-2.5' push spc 16.99 + bn
sand, btm 4" gl. or ls

2.5-3.75' ssp. white ls and
or bn clay

3.75-5.75' rubbly ls at top then
orange bn clayey sand - plastic

5.75-9' ssp. or + bn clay sd
~ 1.5' med.

9- chg over to NQWL

(at least to get a straight hole)

9-11.8' sand, clay sd + ls frag

~~11.8~~ got hard at btm

11.8- run w ext shoe - won't go
chy slower

11.8-14.3' ls. thin chy zone 1 ft
down.

MSSP
Magnolia M-2
MSSP
Magnolia M-3
MSSP
Magnolia M-4
Magnolia 9
MSSP
Magnolia M-8

STRAPPING tape
no garbage bags

benadryl
poison ivy wash
excedrin
NASACEROM

Magnolia
well depth, SWL
M1512

14.3 - 17.1 ls. white, fossiliferous
17.1 - 19.6 ls. or above
END day 6:45 p.

7-12-02 CONT M-8
KC 7AM START

SWL M8 6.0' BLS

putted well cap off M5 - had
growth fed into top of well -
used ENVIROCAP - will use
air lift to try to remove the
clay (ran down inside of csg
but is not falling any depth
19.6-22.6' white porous fossilif
ls.

22.6-24.6' same

24.6-29.6' same, lower 2'
softer, crumbly.

drill rod stuck - wrote to get per
drill in 13' of 3 1/4" hsa - went
to pull rods - stuck tube again
would turn some & go up & dn.
Attemp. to free - twisted off NQ
pin 15' down: drill go in w

66

MSSD
Magnolia M-2
Magnolia M-3
Magnolia M-4
Magnolia 9

Don

488-5372

Magnolia
well depth, SWL
WEL

moving tap on NO then drill in 6".
now csg over drill rod + put rods
to welding shop. heat joint
above core bbl. brk loose.
will need to do the same with
the remainder

SET WELL ASSY + start
pulling NW csg - set screen
at 13.5-23.5' start airlifting
to pull twice ft. dm + pass
settle coarse sands
wash in filter sand to ~10.5'
air lift until filter canister
blows out on compression -
fix that, clean up etc
End day 7:30 pm

7-18-02 7:00 AM start (KL)
730 start Ed, Jake, Jesse

SWL: ~~4.2~~ 6.2' 6.2'
Surge + pump well - pull
3" csg + 6" surface csg.
filter pack to 10.5' NAT.
fill to 8.5'
~1 bag bentonite chips 6-8.5'
add 1.5 bag chips to 4'

Magnolia
well depth, suc
yield

68.
pump 1 bag putland / 5% bentonite
slurry to -1'

MSSP
Magnolia N-2

MSSP
Magnolia M-3

MSSP
Magnolia M-4

Magnolia 9

M-2

7-18-02

11:00A MOVE rig

S

T

R

LAT

Lon

Elev

0-2.5' push - sand w org
at top qd to white then
yl. br ch sd

2.5-4.25' push sd qd to
yl. or ch sd. chg over to NAWL

4.25-6.6' v poor recovery - rd
rxcl ls. rubble - plugged off

6.6-10.25' ls. com, porous (last circ)
~ 2' measured

10.25-12.75' ls. wht. v soft, crumbly
calicheitic - granular

12.75-15.25' ls. com, as above

15.25-20.25' ls. com, var
porous, some part soft
partly

2 $\frac{1/2}{3/4}$
1 $\frac{1/4}{1/4}$

Magnolia Springs Gate Code:

2710

~~Fern rope~~
fuel for rig

dollys for pumps

~~ROPS~~

~~SAND~~

~~elc. tape~~

2" end caps

2 1/2" end caps

NUT PIN x PIN

366 rotor

366 stator

366 drive bit

3 1/4" diedrich HSA box

Selma/VANNA

order for compressor

filter, belt +

DEXTRON II 3 GAL

Magnolia
well depth, SWC
wick

70

20.25' - 25.25' TD

15. or above

drill in 3 1/4" hsa's to depth of
6.5'

wash in 2 1/2 bags sand for
filter pack. start pickoff
development

SCREEN SET at 7-12'

RETN TLH 10:00 PM

7-22 EH, CK, RJ

-10:30a depart TLH

MOVED EQUIP.

FILLED RIG w/ FUEL
SET UP OVER HOLE

6³⁰ PM END DAY

9 hrs.

7-23-02 EH, CK, RJ

7am START 7³⁰ JUNE

PULLED ANGLE 5' DOWN HOLE

AIR LIFT

CONT. WELL DOWN ON M-5 & B

USED 1 Bg. BANG CHIPS ON M-2

benzoin
chips
5'-1.5'

Magnolia
well depth, sure
uskel

7.23.02

Moved to M.3

71

M.3

SEC

T

R

LAT

LOW

ELEV

Co. LEVY

PUSH

0-2.5' SAND

2.5-5.5' SAND

5.5-~8.0 CLAY SLIP SPUN samples

8.0-8.5 ROCK

SWITCH TO NQ

RAIN/LIGHTING

6:15 PM END DAY

11/13

7.24.02 EH, CK, RJ. Jesse didn't
TAM START WORK TODAY

~8.5 ROCK

8.5-10' SAND

10'-15' LIMESTONE

15'-20' LIMESTONE

20'-25' "

25-30 " TD.

MSSD
Magnolia M.3
Magnolia M.4
Magnolia 9

bentonite chips
8' - 1.75'

Magnolia
well depth, suc
vial

72

CONT. WELL DEVELOPMENT

SET AUGERS ~10'

PULSED WQ - WILL SET WELL SCREEN
FROM 10' - 20' OUT OF SCREEN

CALLED KC

END DAY 7³⁰ PM

(12 hrs)

7:25:02 EH, CK, RJ, Jesse S.
8am START CONT. WELL DEVEL.
ON M-2, M-8

9am CLINT TRAVELED TO TLH AREA
TO PICK UP SCREEN

12 noon RETURNED

M-3 OPEN HOLE TO ~12' - 30 TD

AIR LIFT HOLE OPEN TO ~22'

SET WELL SCREEN 10-20' ^{PULSED} _{WQ}
NATURAL PACK TO 9' BELOW LAND SURFACE

AIR LIFT / SERVED WELL TO SET WELL
PACK ADD 3/4 BAG SAND WELL PACK
8' OPEN USED 4 bags. CHIPS

20' 10" WELL DEPTH

CONT. AIRLIFT

Move Equip. SET UP ON M-4

Got Fuel for TRUCK & Equip:

Leve. SURGS / PUMP ON M-3, M-8

END DAY @ 7¹⁵ PM

(11 hrs)

MSSD
Magnolia M-4
Magnolia 9

"M4"

Magnolia
well depth, SWC
M4

73

7-26 EH, CK, RJ, Jesse
Bam START - CHECKED OUT HOTEL
M-4

SEC.

TW.

Rg.

LAT $29^{\circ}29.180'$

LONG. $82^{\circ}58.728'$

ELEV.

Co. L6V4

PUSH

0'-2.5' SAND

2.5'-5' "

SEP 5'-7.5 SAND/CLAY SPLIT STOPS

7.5-10 SAND/CLAY

SW. to NO

10-15 CLAY/ROCK/PEBBLES POOR RECOVER

15-20 SAME AS ABOVE POOR RECOVER

M-3 CONT. DEVEL. APPROX $\sim$ 10-15gpm
CLEANED UP REAL WELL

20-25 SOFT SAND/LIME STONE
POOR RECOVER

25-30 SAND: POOR RECOVER

30-35 SAND W/ SOFT SANDY LIME STONE

35 TD.

20-30 GOOD FOR SCREEN

MSSO
Magnolia M-4
Magnolia 9

7-26 CONT.

74

PUT IN 19' AUGERS / Wagon
PACK UP CAMP / CORR.

3pm ↑ 4pm DEST TLH.

8:50 PM ARRIVE @ T.H.

10.5 hrs

7-30-02 KC, Jenn Koch, Bobby Q
7am start loadup - to
MN spec. hook up trailer +
rig - to site

pull NQWL rods -
all very clayey. run 2" AIR
left setup in open hole
starting at ~ 25'

SET 30' 8" well log w
SEN 20-30', poured 1.5 bags
filter sand to 18' 6" L.S.
START right deep. Natural
fill to 14'
pump 1 bag quick grout
14' - F 2.5'

pack up rig move to M-9
END day 6:10 PM

W 18437

Magnolia
well depth, SWC
YIELD

75

7-31-02

M-9 MANATEE Spgr

SEC T R

LAT

LONG

Elev

CO: Levy

0-2.5' push spc - ~ 8" sand
then yf./cm ls

2.5-3.5' push spc - to refusal - ls

3.5-5.1' ls, upper part washed
out (try to straighten hole
~ 9" recovered)

5.1-7.6' ~ 6" ls frg then clay
only 6" ls recovered

7.6-10.1' clay / clayey sand /
cavity? - no recovery
clean to bottom

10.1-12.1 - clay? then ls → clay
pushed thru clay - rotated in
rock + plugged off

12.1-15.1 limestone, soft, fossilif
rare porous

18437 Magnolia 9

15.1 - 17.6 1/2 cm soft ls ⁷⁶

soft clayey zone too

17.6 - 20.6 ls or above

20.1 - 22.6 cream granular fossilif
ls -

22.6 - 25.1 - ls, mod ind, granular
fossilif.

25.1 - 27.6 ls granular, var
ind. + fossils. more micritic
section

27.6 - 30.1 same, poorer ind

30.1 - 35.1 - ls, com, granular
mod ind

35.1 - 40.1 - same

40.1 - 45.1 upper half same
lower 1/2 cm scale paper
chips. last foot cream
micritic ls w lots of open
+ num. sps

45.1 - 50.1 - same

50.1 - 55.1

55.1 - 60.1 ls com + Hbn foss.
mod ind

60.1 - 65.1 MORE micritic,
mod ind.

65.1 - 70.1 ls, com + Hbn well
ind. macro porosity. some

iron staining
70.1 - 75.1' HARD rock ~ 1' then soft
(no resistance) cavity?
inner bbl sand locked in
place

- pull 1 6' NQ. inner bbl
from 8" hole is removed
sand not removed

75.1' TD

turn in 13' 3/4" HSA, pull
NQWC, backfill hole to
28' w sand, backfill 28-23.5'
w/bentonite chips

INSTALL 22.5' well array

SCN 12-22'

washed w filter sand to ~9.5'
stand Airtight deep.

clean up site, lock down
+ end day 7:30 pm

8-1-02 7 AM START

wash in 3 1/2 bags bentonite
chips to 10' - 2'

reat cement/sand mix to surface
+ for pad return BLH 6:15 pm

~~Mech. Rig Needs List~~
~~SODA ASH~~

to do

AWT lift plug
 root on NQ rack
 mayno / hydr mtr
 survival
 rebuild quick chg

comp. 8/10
 mtr

✓ 7-10

8-10 ✓

✓ 8-1

✓ 8-1

✓ 7-25

✓ 7-16

✓ 7-16

7-31-02

8-7-02

✓ 7-11

Magnolia
 well depth, SWL
 yield

78

~~green gun~~

~~5/8" cold chisel~~

~~2 C.F. face drill bits~~

~~1 turbo diamond ream shell~~

~~LIGHTNING DETECTOR~~

~~WEATHER RADIO~~

7-31-02

MAGNOLIA

	FINAL well depth	SWL	yield 6 PM	depth to top of CSG (in.)
M-1	26.7	8.1	~15	3.25"
M-2	17.5	7.0	5	3"
M-3	20.6	5.9	~10	3"
M-4	30.0	4.5	710	3"
M-5	27.3	6.3	25	3"
M-6	21.9	4.4	~15	3.75"
M-7	24.6	5.1	16	3.5"
M-8	23.7	6.2	10+	23.7 3.5"
M-9	22.3	6.35	10+	2.75"
M-10	19.7	4.4	5	4.0

120/10

2/10
LEE E.
Combat Studies
832-715-4983

KAGG Mart \$10.6135
B. Gibbs 544 4412
Gibbs Ave 898.8733

 2×302.6

