

MBL DRILL #25

9/30/2013

TO

9/18/2014

Forestry Suppliers, Inc.

1-800-647-5358

49354 Level Book

[illegible]

Parked equipment & heading back
for lodging.

10-24-2013

unloaded 4" x 10' x 7
on water truck

Loaded 4" x 10' x 10
4" x 5' x 3 / in 5's?
4" x 2' x 1
3" x 10' x 15 / in 5's?

NQ x 10' x 20

core barrels x 2
inner barrel x 1

Stainless Trimmer 10 x 30
Steel

4 traction mats

Core boxes 11 complete

5-gal. non-ETH.

need 15-gal. diesel

2-bgs. soda ash

1- bx. trash bags

1- case of water

10-02-2013

ET, JH. heading back to Tallahassee
arriving @ 12:30 p.m.

Gov. Shutdown 16 day's
Mobilizing & starting coring
on Thomas Creek 10-28-2013

10-24-2013

ET & JH unload 4" casing 4" x 7 x 10'
Core box material 11 complete boxes
& put FGS stickers on water truck.
Red count on truck w/ materials

10-28-2013

E.T. @ Warehouse 7:30 a.m. loading last
minute things. Spoke w/ Meaghan @
Pumpkin Hill about picking up equipment.
No one will be there today but, she gave
me the combo to gate. GR. arriving @
8:30 a.m. / also waiting on a call back
from Shawana Ray Allen Contact person
@ Thomas Creek. alt. # 904-502-6357
Departing Talla. @ 9:30 a.m.

W-19461

arrived in Jacksonville @ 12:30 p.m.
met w/ Nick from Forrestry. Escorted
C.R. & I onto property. Down to site &
gave us the access key. onto Pumpkin Hill
to pick up Rig, cargo trailer & mud life.
C.R. & I mobilized to Thomas Creek
& parked equipment. & exited site & headed
for lodging. @ hotel 5:35 p.m. (Red Hat Inn
on Airport Rd. Jacksonville Fla.)

10-29-13

C.R. & E.T. met @ 7 a.m. headed to
site & Fuel Water Truck, 3-5 gal diesel
containers, on site & preparing to drill.
Rig starting hrs. 3047

Quarry Pond @ Thomas Creek

0'-2.5' gry brn sand, brn sand

2.5'-5' brn sand, gry brn tan sand

5'-7.5' same, drk gry silty sand
collapse @ 4'6"

7.5'-10' drk gry silty sand, brn tan silty sand

10'-15' brown sand

Cleaning tools & site to shut down for the day. (Rig hours 3852.1)

Secure site & head for lodging. @ hotel
5:40 pm.

10-30-2013 Met w/ G.R. @ B.a.m.
on site continuing to core

15' - direct push to 17.5' dark gray blk sand

17.5' - 20' same
pulling NR & extending 3" (deploying 3")

20' - 25'

25' - 30' little to no sample
direct push

30-32.5 little to no sample
extending casing 3"

32.5-35' sample dark gray clay w/ coarse
sand's

Securing site (3856 Rig hrs.)
@ hotel 6 pm

10-21-2013

met w/ G.R. @ 8:30 am.
on site extending 3" casing
3" casing @ 33.25'
lowering R/O

35-40

Sand locked, pulled I.B. out, clearing hole
40-42.5' drk grey sand & clay
starting to make 2.5' runs until
recovery improves, gear box is making grinding
noise that I have never heard before. ???
222

42.5'-45' plugging off again, pulled I.B.
out clear hole down to 42.5' again & hopefully
start sampling again. F.E. run fluids between
each movement of sampling / drk grey quartz
sand w/ clays

45'-47.5' Ran without I.B. in, bailed sample
drk grey blk clay w/ quartz sand

47.5'-50' same, little to no sample,
lost circulation, extending 3" casing (Rig 3860)
Securing site, @ hotel 6:15 p.m.

15-gal diesel
✓ NON ETR. Gas is good

✓ 16-bags quick gel

✓ 7-bags soda Ash

bags ✓ 2 1/2 - quick Trol LV

2-ex. shoes

1-basket

5-rock shoes / 2-onsite
3-in water truck

11-1-2013

Met w/ QR @ 6:30 a.m., checking out
& headed for site. pulling NQ, extending
3" casing to 48.25', tried to set 3" @
48.25' there was really soft sediment &
3" settled @ 51', close to where we lost
circulation yesterday, lowering NQ

50' - 51.25' dk gry clay sand w/ quartz

51.25' - plugged off pulling inner barrel,
5' to reclear hole, cleared hole plugged
off again, tried up could not advance,
changing to rock shoe, big hanks of
quartz sand keep plugging us off.

Try. Try rock shoe to advance
no circulation, cutting something very
hard. 55" strange rock gry hard
hard rock took 3 pits to cut. damn!

(Fig 3864)

Tuesday 11/5/13 Arrive at site at
6:55 Fill 6017 with water set up
site with caton hoses for filling, water
stationary. Trip out 58' of NQ

No
Circulation



move 3" Bar and pull up to see it
There is a 2' or 3' of NW 3" pull 3"
NW up to ~~45~~ 41 5' = ~~53~~ 53.50
50 45

Start Coring From:

53'-52'

Dark smoky Gray Sediment Clay
lends with organics and minerals
Layers of Stolls Crystallized almost like
Corn/bed layers and layers changing to
much larger layers of Stolls Crystallized
lends with minerals Tanish Gray in Color

52'-58'

Tanish Gray in Color layers of Crystallized
Stoll changing to a Sand Shew on a
pale shew bedded with minerals and
organics. Curly, Curly fill

58'-60'

Dark Blueish Gray in Color Crystallized
Stoll pale Curly. Curly fill
light Gray in Color Sand Shew on
med Shew with organics and
minerals

There were 3 cracks in
This run causing 3' of
sample

Shell Pack looks like
Anistashia Formation

60' - 65'

Light Gray in Color Sand Stone or mud
stone becoming very crumbly. Cracks.
Light Tanish Gray in Color Sand Stone
with Crystallized Shell Pack, Cracks.
Crumbly Sand Stone. Cracks. Light
Tanish Gray in Color Sand Stone or mud
stone. Changing back to Crystallized
shell pack. Tanish Gray in Color

65' - 70'

Crumbly Olive Gray Color Gravel
intergrading to a Dark Tanish Gray
Shell Pack Crystallized with veins
with seams of Tan Color shell pack

70' - 75'

Bluish Gray Shell Pack or Crystallized
shell pack intergrading to a light Tanish
Gray in Color combination thin stone or
sand stone with veins with a seam
of Dark Sandier Gray Clay light Gray combination
mud stone

872 hrs

11/6/13

6³⁵ AM Safety Meeting
Trip 2-5" up out to 65' add 10'

Slows Rotation Down and Increased
Pressure Feed to where I was about
plugging off. Did not change recovery

N.P. well at condition hole start coming
from:

25' - 80'

Concretion light Gray in Color ~~Concretion~~
some what Dense

80' - 85'

little darker Gray in Color Dense
Clay pump out of Barrel

85' - 90'

Clayish Concretion run slow with
organic and minerals light Gray in
Color becoming Gritty at end of run
Change of Concretion

90' - 95'

light Gray in Color Concretion run
slow with Phosphates migrating to
A Dark Sinker Gray Clay unable to get
full recovery No indication of any
change in drilling No indication of
pressures in casing

95' - 100'

Poor Recovery Dark Sinker Gray

must seek other Alternatives
in Core

Try 2.50' run instead of full
run

95'-100' Continuum

Clay Very Dense Clay is loaded
with Quartz sand medium Grains
and Phosphates and minerals

100'-105'

how to poor recovery Soft to medium
mass stone with Phosphates dark
Gray in Color Changing to a light Gray
in Color Very Dense Clay with minerals

105'-107.50'

Tight Gray in Color Hard Dense Clay with
mass stone with minerals and Phosphates

107.50'-110'

Same as Above

110'-112.50'

Same as Above but a lighter shade of
Gray and less minerals

112.50'-115'

Light Gray in Color Graining mass stone
with Phosphates and minerals

115' - 120'

Same as Above

117.50 - 120'

Same as Above but migrating to a Darker
Smoky Gray Colored Clay Soft to medium
in density

120' - 125'

Dark Smoky Gray in Color Soft to
medium Clay loam with Phosphates
Changing to a Grayer light colored Gray
more silty with Phosphates Changing
back to a Darker Color Gray Soft Clay
with Phosphates

3880, Ry haves

11/7/13

Arrived at site at 6:15 AM

125' - 130'

Dark Smoky Gray Clay with Phosphates
and minerals. Soft very light medium Clay with
Phosphates. Crumbly. Very soft light gray in
color mud with phosphates. Clayish Smoky
Gray in Color Dense mud Clay with
Minerals and Phosphates

Switch to extension
Shale being pushed
not to hit mud stone or
sand stone

130' - 132'.50

Did 2.50' run poor recovery core
broken up Clayish mud with light
Tannish Gray mud with phosphates and
minerals

132.50 - 135'

Dark Sandier Gray in color Clayish
mud with light Tannish Gray Clayish
mud with Phosphates and minerals

135' - 140'

Dark Sandier Olive Gray in color Clay
with Marbling of light tan muddy
Clay with minerals

140' - 145'

Same as Above but has Quartz, sand
with phosphates

145' - 150'

Dark Sandier Gray in color Clay very
Dense

150' - 155'

Dark Sandier Gray in color with some
marbling of light Tan mud Clay with

Went to wash out below
Pettay Iron Barrel
in

Signs of fine sand

Sample was dropped
but got back in column
in which it was dropped

150'-155' Centurion
Small amounts of Phosphorus and
minerals

155'-160'
Same as Above

160'-165'
Same as Above maybe a little more
Quartz sand

165'-170'
Same as Above really sandy
coming out of barrel
Samples from 160'-170' lots of
medium & fine Quartz sand

170'-175'
Poor poor recovery Percent but
ending is Dark Gray Clay

30° 33.000 ACC 49.2
W 081° 38.722 GRV 132.6

THOMAS Creek Quarry Pond

Erico!
Hajoco
Gorman's of Jville
904-786-4338
904-384-0631

11-12-2013

Met w/ L.H. @ 7:45 a.m.
loading slot, leaving wk. @ 9:30 a.m.
Fla. - Ga. Hwy, Filled w.f.
Continuing to Duval Co. Talked w/ Tyler
met @ RV Park off of Pensacola Rd.
& entered site. Ran Gamma through
NA drill rods, pulled 120' ft x NA

Now running induction probe xxx
cable head is bad cannot run.

Poly Probe xxx could not run, bad
cable head

Calliper successful, securing site &
heading for lodging
(3809 rig)

1 p.m.

11-13-13 met w/ i. Hartman @
6 a.m. Called Hajoco for grant,
& Gorman's, no luck @ either.
Picked up 5-bags of Portland Type II
onside & setting up to grout well.

6 gal. - per 94 lbs. bags
Portland Type I/II
(1-94 lbs. bag Portland Type I/II
does 3 Ft. x 3" nominal
annulus)

1-94 lbs. bag of grout & 6 gals. of
water, 1/4 bag of Quick-Gel. pumped
& pulled 60' of trimmings. Taking a
measurement to see how far we came
up the hole. Tape measure slowed down
@ 102' then sank to 138' ??? si.
we averaged it @ 40' to 50' grouted
securing site
(3882) Rig hours @ hotel 6:30 p.m.

11-14-13

Met w/ Lee H. @ 8 a.m. Tagged grout
@ 104', continuing to grout, pumped 1-batch
waiting to tag, while waiting Lee H.
has to scout salt water marsh for C. Williams

Tagged grout @ 38' pulled 3" casing x 55'
now topping off well & cleaning site
& equipment. @ Hotel 6:30 p.m.

(3895 Rig)

11-15-13

Met w/ Lee H. @ 8 a.m. headed to
site to mobilize to Cedar Point

W-19476
ANF#2

(N 30° 20' 22.0
W 084° 16' 47.6)

In Tallahassee @ 4:40 p.m.
leaving office @ 5:20 p.m.

Dec. 3, 2013
Push sample

0-2.5' brown sand
2.5-5' orange brown sand
5-7' orange sand
7-9.5' pale orange sand
9.5-12' pale orange to white sand
12-14.25' AS ABOVE, getting hard to push
14.25-15.25' AS ABOVE - further attempts
result in refusal and cavings.
pick up site head to whse 3pm.

12/4/13 ET + DTP

pick up pallet portland cement after
off loading easily + tacken mats @ whse.
set up NAWL coring + load portland into
drillers.

Set up run 17.5' 4" CG, 16.9' open w/
1.5' stick up. make up recirc system
and trip in core bbl.

Main hoses need replacing
& fittings.

Fittings maybe able to be
cleaned

rip in 18", clean hole.
add 5', begin sampling
15.25 - 20.5

20.5 - 25.5

25.5 - 30.5

30.5 - 35.5

35.5 - 40.5

cleanup + secure site 5pm

3904 hrs.

end day 5:45pm

12-05-2013 E.T. J.H.

E.T. @ work 9 a.m., Filling Water Truck
& loading 30' x 3" casing.

departure for the field @ 10:15 a.m.

(18.3 static water level)

onsite pulled 13' wa, water table
and now extend 3" casing.

Replace seals in King Service

3" @ ~~37.5~~ 37.5', Now lowering NQ
to 35.5' to wash out & coring
from 40.5' - 50.5',

^N 43.95
40.5' - ~~43.5~~ hit something hard & decided
to stop & pull sample ^N 43.95'

43.9' - 45.5'

45.5' - 49'

49' - 50.5'

50.5' - 55.5'

Securing & cleaning site
pulled 20' X NR off, NQ @ 38' inside 3"
(Rig 3908)
@ office 5 p.m.

12-06-2013

PT & JH leaving Port Field @ 9:45 a.m.
on site set up tools, hole collapsed below 3"
now clearing out back down to 55.5'

55.5' - 60.5' dark gray very silty sand, w/ peat

12/10/2013

loaded 50' x 3"
50' x NR
3 bgs. Quick-CCL

(18.75" WT. 12-11-2013)

replacing slips w/ old slips

60.5' - 65.5' same

65.5' - 67' hard to cut pulled sample
14 gyl sand

67 - 70.5 same

70.5' - 75.5

75.5 - 80.5

hole stability is getting weak, we need to
run 3" casing. & water is getting low.

So we are cleaning up picking up
tools securing site & pulling 40' FT x NR
out. To keep from being sand locked

Monday. Departing site & heading for
Tallahassee

(3912 Rig)

12-11-2013 E.T., Lee H. leaving office
@ 9am, Packed water truck. Driving
on site, open up boxes, Cargo trailer
pulled 43' x NR, water measurement

16.75' water table, now about
to extend 3" down to 80.5'
advanced 1st-10' ft. section
of 3" & the King Swivel was
leaking for hrs. stop & repair King
Swivel. now running 3" casing.

3" @ 78.5', now lowering 10" X 83'
stopped @ 78' wash out to ~~83.5'~~
80.5' Ft.

80.5' - ~~85'~~ 85' - dk grey blk silty
sand - securing site, @ office

6:15 pm, & looking over email. out @
6:33 pm.

Rig 3916

12

12-12-2013

In @ 8:10, met w J.H. departing for
site @ 9 am. looked around for
reaming shell ??? on site opened up
& pacing garbage bags under front jack, &
near drive side jack to catch hydraulic leak
now cleaning well to 85.5' to continue
coring. lost a half pit of mud, losing it in
the formation somewhere ???

85.5' - 90.5' dk grey blk silty sand
w/clays

90.5 - 95.5 -

95.5 - 100 - lost circulation -

95.5 - 96.75 brn tan sand / dk grey blk
silty sand

96.75 - sand locked, trying to free up
we hit something hard that sounded
like limestone, trying not to force
the issue & damage extend shoe
we pulled the sample. after we
tried to core the rest of the run
& inner barrel is sand locked. Now
we are going to pull all the wa.

That's okay though - because we
will extend cas 3" down to 96.75
tomorrow. Today will be a shoot day
J.H. and I are close to 40 hrs. and
no overtime is available now.
Pulling NQ. Securing Site & heading
to the Office

(Rig 3920)

12-16-13

Wade 19.1

Rotation hydro. hose leak
is getting worse

grab 4" F from drill/shed

replace jaws on 1-2" pipe
wrench

under table 12-17-2013
19.4

12/16/2013

P.T. @ work 8:30 a.m., Filling W.T.

J.H. @ work 8 a.m., on site &
extending 3" casing to 96'?? -

Trying to mix mud, mud pump did
not start properly, cleaned carb. & spark
plug, pump is now working. Was sand locking
inner barrel & core barrel and now
mixing mud & extending 3" casing.
Lowering NA, 96.75' - 100.5' NA
Sample

100.5 - sand locked pulling every-
thing back out, inner barrel is
sand locked

Securing site @ 7

@ office 6:05 p.m.
Rig 3924

12-17-2013

@ site 12:17 p.m.

Washing out 4" barrel & inner barrel
was sand locked w/ a 10' x NA, this took
forever. Lowering NA back to 100.5'
Sand was inside 3" up to 79' ft BLS.

12-17-2013

2-hydraulic ram's leaking

1-rotation feed lever leaking

still need new suction hoses

NQ 118' including O.B.

Rig 3932

now washing back out down to 100.5'

100.5 - 105.5 no lost circulation, no sample
rock shoe

105.5 - 110.5 ex. shoe - some sample
securing site and @ office Egan

110.5 - 115.5 sand locked

(Rig 3928)

12-26-13

J.H. & E.T. Barn, filling water truck
& repairing pipe wrench & mud pump.

~~110.5 - 115.5 sand locked~~

pulling NQ, 118' & NQ plus core barrel
out. Flushing out w/ water to
clear space between inner barrel &
core barrel. Mud pump w/replaced gasket
now good.

next run will be 110.5 - 115.5
After a few hours of trying to
unlock inner barrel, no luck
the weather is starting to get
nasty again, so I decided to
return to shop and use torch
to heat the core barrel up to see
if it would free up. 3:30 pm
securing site.

12/26/13

Mud pump repaired

Still need new suction hoses

2 - hydrolic rams still leaking

1 - rotation pressure hose fitting
still leaking

@ office 5:00 p.m.

12/27/13

Met w/ S.H. @ 8 am. / office
Touch did work on firing up
sand locked, cleaned inner &
outer barrels on both assemblies
while water truck was filling.
Also loaded 50' x 4" casing.

#

Main goal of today is to
extend the 3" casing another
10' ft. / which will put us @ 110.5' ft.
BLS.

Also, I feel we need to extend
4" casing down to 110.5' also to
improve our hole stability also
to prevent soil erosion. (to avoid
a sink hole opening up)

I feel that we are getting
way too much mud running up
into our casing. It maybe coming
from below, but it could also
be coming from top of the
formation. Therefore we are

extending 4" casing today along
w/ 3".

This will put us in position to
have a better chance at finishing
next week.

Leaving office @ 10 am.

onsite, opening up, hooking up pumps
& mixing product.

Extending 3" casing.

had to put top 15' off, starting to plug
off, casing out w/ 3", lifting
up 10' Ft. and starting back case
of the plugging off.

Now adding 10' Ft. back to extend to
105' Ft. X 3" casing on string

@ ~ 105' 3" tried to sandlock
now pulling 5' off top to redrill
from 100' to 105', thickening mud.
Also something stopped my rotation
@ ~ 104'.

Cleaning hole down to 103' Ft.
Mix mud this way is too slow,

12-27-2013

leak getting worse!

it takes 3 times as long to mix
w/ the mud like system.
1 pit per 5' Ft. of running casing.
30 to 45 min. to mix and this also
may be causing cave in. or lost
hole stability. Down to 100.5' Ft.
on 3" casing. We dumped heavy mud
(Rig 3938) to bottom of hole, to
keep it open through the weekend.
Sealing site and heading for office.

Rig - (~~1834~~ MLS) (was informed by DT?
3940 12/30/2013 to pull off pits and take
mobile to the shop.)

met w/ J.H. @ W.H. 8 am.
While I was filling tank w/ water
J.H. & B.R. went to Shiner to
p/u the dually.

J.H., E.T. headed to site to
move Mobile Rig to Talla. Hydrolics
Picked up hoses, drill rod, etc.
To secure site & took Mobile to
Talla. Hydro. @ office 2 p.m.

Pack mul light
55 cargo trailer
set up site
i mix fluids

2-11-14 Replaced wind shield wipers on Mobile Rig

2-11-14 water truck deck was supposed to
be swept off per-vehicle inspections
were not done (G.R.)

2-11-14 water truck floor was not
vacuumed per-vehicle inspections (G.R.)

~~water~~ water 19.5'

2-11-2014

ET, TH heading to FAMU ANF#2
@ 9:15 a.m. Finally back @ drilling
onsite 55 the cargo trailer, this will
allow us to pull equipment as needed
faster v/s walking on or stepping
over product & equipment. Also 55'ing
the water truck.

while 55'ing the cargo trailer we had
to even the load out between 2 pallets
the concrete was weighing down the floor
as if it wanted to ~~break~~^{break} through or
collapse, so J.H. & I broke it down
between 2 pallets.

We put buckets with contaminated soil
inside a garbage bag to take
back to the office for proper disposal

Back @ the whse. 5:20 p.m.

2/19/14

39⁰⁰ beginning hrs. mobile

ET & Levi H. @ office 8 a.m.

loading up water & ice, heading to ANF#1

Replaced mid pressure
gauge 2/19/14

onsite hooking up hoses, desanding
water pits and cleaning sand and
rust out of the mud light.

Putting the rig on hole missing fluids
and lowering NO. @ ^{105'} ~~110'~~ BLS started
washing out w/ clean mud. Unhooked down
to 110', lowered inner barrel and started
to sample.

110.5-115.5' dk grey blk silty sand

~~115'~~ Securing site and heading to office
we are at a good stopping point
we got a good 3' to 3 1/2 ft. sample.
The hole is conditioned and we
have good fluids in the hole.
so we should be in good position
to finish strong tomorrow.
Rig 3948 @ whse 6pm

2/20/14

Met w/ Levi H. @ whse 8:15 a.m.
meeting w/ DTP. Leaving office @
9:30 a.m.

P/U non Eth. gas

15 gal diesel

load more NG

FILL WATER TRUCK

anpito setting up to drill
mixing fluids.

115.5 - 120.5 drk gry silty sand w/
some organics also w/ some clays

120.5 - 125.5' - same w/ more
organics

125.5' - 130.5' same w/ organics, it
changed in the last foot, to lt gry sand

130.5' - 135.5' - tan brn lt gry sand

135.5' - 140.5' same

140.5' - 145.5' tan brn gry sand

145.5' - 150.5'

Rig
3953

2-27-14

ET @ office 7:30 a.m. Phill & BR @ 8 a.m.
filling water truck w/ water. Stopped for
15 gals. diesel and heading to site

Rig 3957

onsite, giving job overview &
job safety to Bri & Phill.

152.5 - 153 drk gray brn sandy clay
Pull 2 1/2' run

153 - 155.5 Same, 2 1/2' runs seem to work well

Securing the site, and heading to office

~~156.5 - 156.4~~ @ office 6:40 p.m.

~~156.4 - 156.4~~

2/28/14 Met w/ Lew H. and Phil, headed to
site after passing vehicle inspection.

(155.5 - ~~156~~ 156.4) in, into the sea we hit
something hard, so I'm pulling out to
collect the sample and change the shoe.

(156.4 - 156.4) too brn sand w/some
clays lost some when retrieving sample. 29

Need new mud pressure gauge
main hose needs to be replaced
need more 3" casing

Rig 3962

158.4 - 160.5 lt grey tan brown sand

160.5' - 165.5 163.5 same, couldn't push
rest of run, so we pulled the sample
163.5 - 165.5 same

165.5' - 166.5' same

166.5' - 168.0 same

168.0' - 169.0 same, could not finish run
main hose busted.

securing site and headed for office

@ office 5:36 p.m.
off @ 6 p.m.

3/4/14 S.B. & C.T. met @ 8 a.m.
headed to site in F-150 to p/u
main suction hose, headed back in
to Holley Inc., no luck, went to
Tallahassee rubber. They replaced

Main Suction hose replaced
2-4-14 \$22.00

hose within 10 mins., on to
office to get rig & back.

Filling water truck. Its having
problems shifting into gear.

Water truck is throwing a code
that says (range limited). I called
Ward International and along with the
Tech. we started trouble shooting
the problem checking the transmission
fluid was one method. And it was
a little low on transmission fluid.
Seth and I went over to Connie
Liles and purchased 1 gal. & 3 qts. of
specified Trans. Fluid, came back to
the shop and started to refill transmiss-
ion. Carefully filled and checked
I was 2 1/2 qts. low. And when it
got up to operating temp. The Intern-
ational went into gear. But we have
to check periodically to make sure
its not leaking from the Transmission
seals.

3/10/14

E.T. & ARIE met @ whse 8 a.m.

water 14' 5 1/2"

loaded and headed to site after waiting on travel to be signed.

By C.P.W., drove out around

the circle to Burger King.

Grabbed a quick bite to eat, got into the water truck tried to drive off and the transmission wouldn't engage into gear. Called J. Heard, when he got there 30 mins. later, it engaged into gear. And we took it to Ward International to let the mechanics look it over for transmission problems. Jesse, Brice & I drove back to the office to finish out the day.

3/18/14

Met w/ Seth B. @ whse 8:13 a.m. Loading water truck and heading to site.

Opening up site, and mixing fluids and pickling equipment

8:00 arrived on site, rig settled and

Rig 3969

rotation feed lever is leaking
when under extreme pressure

When sand locked, tripping 5' x 10'
off top seems to clear the
bit for now.

broke sanitary tee, run to
Ace Hardware in Woodville &
purchased two.

Back on site & mixing fluids.
Dave stopped by, coring, sand locked
169 - 170.5 dk grey sand, tan sand
Sand locked no circulation
170.5 - 171 lt grey tan sand

171 - 174.5- good 3' run, tan org clayey
sand, change to lt grey wht sand

174.5 - 175.5 lt grey wht sand

175.5 - 178.5 same

178.5 - 180.5 same

no returns all day
securing site, and heading to office.

@ office 7:15 p.m. / off grounds @ 7:30 p.m.

3/19/14 ETDTP

trip out drilled - bottom hole lightened
hole open to 140.9 BLS

trip in tremmie, mix, pump 1 bag
quick cement

~~11~~ TAP out 15' H₂O

Tag top grant @ 89' BLS

Mix + pump 2 bags pull 45'

pack up and tag grant @ 75' BLS

Rights 3972

3-20-14 ET, KC

to site, pull 3" csq

sd top of grant @ 31' bws

washed in 3 1/2 bags hole plug
to 1' bws

Rights 3976

3/21/2014 ET, JH met @ office

8:30 a.m. we load Kubota, load

grout onto black single axle
trailer. And headed to ANF #2

to clear site & mobilize to ANF #3

J.H. and E.T. took over Cargo trailer,
mud light etc., covered rutts, & flagged
site to secure. Mobilizing through
the woods to set up on ANF #3

office 6:05 p.m.

W-19477

ANF#3

(N 30°21'32.5
W 084°16'13.8)

4" 3' Breaking Point
10' string - 8' BLS
3" 10' string - 8' BLS

Rig 3982

3-25-14 Pick up
Diesel 15 gals
Coolant (Antifreeze)
hole plug

5/28 SWL 11.4' BTOL
TOL +37" ALS
TDwell 52.5' BTOL

TRIMBLE PDP 1.89
30.3590456
84.27040814

H2

On ANF#3 securing site & heading
to office.

3-24-2014

E.T., B.A. met @ office B.A.
(@ office 8 am E.T. in @ 8:15 a.m.
filling water truck. Driving to site,
one site & starting, to push.

0'-2.5' Brn gry sand, last 6" in. changed
to a brn tan sand
2.5'-5' brn tan sand, change @ 3' to a
tan gry sand
5'-7.5' Lt gry sand, change @ 7' Ft. to a
Lt gry tan sand clay (hpc)
7.5'-10' Lt gry tan sand (moist), @ 8' Ft.
change - gry red org (hpc)

10'-10.5' refusal @ 11.5'-

10.5' - 11.5'

11.5' - 15'

receiving site, heading to office.
ET & B.A. @ office 7:30 p.m.

3/25/2014 ET in @ 8 a.m., loading
Coolant, 2-bgs. hole plug. S.B. @
whse. 8:20 a.m. leaving for site.
On site #2 ANF, getting well location.
On to ANF #3

Coring - 11.5-15' plunging to see if
partial sample was drop yesterday.
on site @ #3, Coolant in Mobile
Diesel in Mobile (15 gals), lowered
inner bbl. clear to bottom.

Mixed fluids w/ soda ash, a little
quick gel & penetrol.

Coring
15'-17.5' two $\frac{1}{2}$ ' run / 16 grey rd
org hpc, full recovery

17.5-20' hpc, only 40%-45% recovery

20'-25' 75% recovery, red ^{drk grey blk} grey brn org
modeled clay hpc, attempting to bail sample
w/ ex-shoe no sample on bailing w/
ex-shoe (sample also had lime stone pellets
in clay sample (Fullers Earth))



Rig 3988

3-25-14

Box materials

25' - 30' gry hpc, 28.5' dk gry hpc,
gry rock (fullers earth??) 27.5 gry rock
w/ organics, 28.5 gry rock (fullers earth???)
w/ organics full recovery

30' - 35' - same, full recovery

35' - 40' - @ 38.75, lost circulation - @
39' we regained circulation, gry rock

40' - 45' lost circulation @ 44' - S.B. $\frac{1}{2}$

I observed that its taking 20 minutes per
run once we hit rock. - we regained circulation

@ 44.75' - gry limestone w/ organics

45' - 50' lost circulation again, sampling
we went through hard and soft
sediments, we got circulation again.

@ 48' and back into hard stuff

most samples we took today had to
be pumped out of I.B.C., S.B. & E.T.
securing site and heading to office.

@ the office 6:20 p.m., off work @
6:30 p.m.,

3-26-2014 DTP / ET

load up green trailer w/ NWS + 8" reamer,
grinder, protective casing, 6 5/8" HSTS.
depart whse ~ 1:45 pm

SWL 8.8' BLS

Mix up mud add 5' and proceed.

50-55' gray fossiliferous mudstone to ~52'
then laminae suggesting a fac change?
Fossiliferous - mollusc orange / gray mudstone,
pelletal grains.

55' TD.

stop casing disassemble reamer, leave
csg in hole and run 6 5/8" HSTS
to seat 8" temp PVC csg
secure hole/site

RIA HRS: 3990

38

4-02-2014

E.T., J.H., AND BA. LEFT OFFICE AT 11:30 am.

STOPPED FOR FUEL

ON-SITE, UNLOADED MATERIALS: 7 BAGS SAND

5 BAGS OF HOLE PLUG, 3 BAGS QUICK GROUT.

Also unll construction materials.

Reamed to 31' BLS

Securing Site, heading to office @ 6:16 p.m.

@ office 6:45 p.m.

Rig 3995

4-4-2014

J.H. & E.T. leaving office @ 3 p.m.
to secure well @ ANF #3.

Heavy rain is due to come through
this weekend. So we will go out to
site and secure the well to prevent
hole erosion or well collapse.

on site filter sands to cargo trailer
and

4/8/2014

DTP, ET

clean hole to bottom, add 5' drill down

→ 36' BLS



TOP ROTATION HOSE
LEAKS @ UNION, NOT
FITTING. Bottom hose
appears OK. drive end
of hose leaks too.
=> repl- hose between
jobs & PM on ex.

4/8 (cont'd)

pull 25s, hang 10, add 5 -> 41'

pull 5, hang 10 -> 46'

Secure site

rig hrs 4002

@ wkse 6:15 p.m.

4/9 ET/DTP after lunch start.

clean hole (after SWL)

SWL 5.9' BLS

add 5' -> to 51', easy + quick for ~3.5'

add 5' -> to 55'

flush hole w/ clean water, tripart
NWS & ventur.

Secure site

RR hrs 4005

4/11 ET/DTP on site 11:30am

hole open to ~~52.3'~~ 52.3' BLS

attempt to clean hole by airlifting,
lost hole b/c airlifted all the
basehole fluid out and hole
began to ravel.

4-16-14
water from Publix
Gatorade

4/11 (cont'd)
ran reamer back in w/ quickgel to
open and stabilize water hole.
ran out of water

PLAN FOR THURSDAY

- try TD IF OK, pull reamer &
mud tub, hang well assy,
sand pack / hole plug and
grout.
- if TD not open, mix up mud
and flush / clean hole. then proceed
with well.

hole open to 57' BTOC
RIG HRS 4010

4/16/14

ET & JH @ office 8 a.m.
Headed to site @ 10 a.m.,
Publix p/w 3 cases - water
Gatorade - 6
enroute measuring open hole
well open to 25' BLS
mixing fluids to clean well

P/U 15 gal.
Diesel

Rig 4014 / 4/16/14

Desanding mud pit.

Good clear fluids, & cleaning out back
down to 55' @ 36" there is some
thing still bridging the hole.
And we are having to re-ream
the entire hole.

Securing site and heading to the office
J. has an appointment after work.

@ office 5:45 p.m.

4/17/2014

JH & ET headed to site.

Fueled 6017 & 15-gal. for 4719
on site, mixing fluids & running
fluids.

41' down re-clearing well to 55' BLS
upon breaking 5' off top I (ET) dropped
a 24" aluminum wrench.

S.H. & I tried for an hour or so
to retrieve the wrench but no
luck. DIF called district & they

4- bags of sand
- hole plug

delayed grouting the bottom 5' of the well as long as the wrench was @ the bottom and was separated w/ hole plug or geot between the well and the wrench.

proceeding to ream.

4/21/14 ET/DTP/MEL RV hrs 4021
SWL 7.1' BLS
check open hole
tape to 46.9'

pour 2 bags sand, 1 bag hole plug.

* AFTER hole plug, sand + hole plug settled down such that hole plug was opposite screen.

- pulled well assy, reamed hole and circulated sand + hole plug out.
 - new point $\frac{1}{2}$ screen, set to 50'
 - pour 5 bags of sand and airlift to settle sand pack + evacuate mud.
- clean up, secure site, depart 5pm
~~sent~~

6:10 p.m. @ office

4/25 Cap Truck b/c p/hydr.
18387.4 miles
4025 hrs

Rig Cap Truck for PM

rights 4025
miles 18,385.8

4/22 BT: DTP

RIG HRS 4023

SWL 613' BLS

tape goes to 36.6' firm stop

add 2 bags sand = 33.5' BLS

add hole plug = 28' BLS

mix + pumped 10 bags portland

~~then~~ pumped until cement came up
out of 8" temp. PVC csg. stop and
pulled 8" csg.

→ clean grout & site.

grout firming up @ 16' BLS.

secure site & depart

4/23 KMC + DTP

8:30am start

SWL 11.2' BTOL

hole 7' BLS

well 52.5' BTOL

2.25' riser on 50' well csg + sc.
+ .75' point = 53' well assay.

- developed well, then removed mud hob and
set rig down and moved forward. prepped
ground for cement pad. mixed 3 bags
portland cement and topped grout column
and filled firm. added 1 bag sand to
pad.

cleaned + packed up site, rig to

Capital truck. back to site by 4pm.

44

5/28

SWL	11.7' BTOL	30.33430199
TD	49.4' BTOL	84.39007049
TOL	+ 36.5' ALS	pdop 1.62

ANF #1 Location w/ hand held Garmin GPS3

30° 20' 3.4"

84° 20' 24.2"

pdop 1.6

Trimble WGS 84
30.334 ~~30.334~~ 25663
84. ~~84.390~~ 1 ~~84.390~~
33990521

PDOP 3.32

4/24/14 DTP/ET

get rig from Cap Hydr + return to
Cap Truck to assess low power problem

4025 hrs

18389 mi

5-7-14 ET & JH picking up mobile Rig
from Capt. Trucks, & heading to ANF#3
to clean site & mobilize equipment to
ANF#1,

ANF#1

W-19479

5-12-14

E.T. in @ 7:15 a.m., Filling water
truck 6017, & waiting for J.H.

Cleaning trash & debris from Cargo
trailer, & restocking of consumables.

J.H. in @ 8 a.m.

On site moving equipment.

Cleaning & organizing Cargo trailer &
starting to push sample.

0-2.5 - brn gry tan sand

2.5-5 same @ 3.5' change to

lt grey tan brn sand

(water @ 6:6") 6 ft 6 in

5-7.5 white tan sand somewhat silty
"moist"

Securing site

Rig 4028

@ office 6:15 p.m.

5-13-14

ET & BA in office @ 8 a.m.
heading to field.

Onsite mixing fluids & setting
up to core.

2.5-10 lt grey sandy clay

10'-12 hit some resistance &
changing to a rock shale - lt grey sp-sc

12-15 lt grey sandy clay

15-20 rd blk grey sc

securing site

Rig 4832

back @

6:30 p.m.

5/14/14

ET & JH met @ whse 8 a.m.

Filling water truck, and headed to
site @ 9:23 a.m.

onsite & conditioning well w/ fluids
installing 3" casing to 20' BLS.

minor set back w/ 3" casing. Grant or
something.

20' - 25' 23' - X Lost some / org. grey sc
changed to rock shale

23' - 25' This is strange, we are not
getting circulation back. But there are
fluids in the annulus and may
recovery is low. IDK but it's strange
and we are not plugging off.

Red se

Small voids ???

25' - ~ 28' 15' some w/ lime stone @
the tip

Fig 4036

28.75 - 30' lime stone

30 - 35 sample was somewhat crumbled - minimal sample - lime stone
small voids ??? still no circulation

35 - 40 - cavity, dk grey clay, org clay
lime stone @ 40'

40 - 42.5 Swiss cheese, really loose
lime stone minimal sample, 2 ft.
run was made to improve recovery
but to no avail

42.5 - 45 soft & powdery material
loss of sample or void ??

45 - 50 grey ss, lt grey white
lime stone, still no circulation

50 - 55 lime stone
Securing site
@ office 5 pm

12- bags of sand
Quartz sand
Play sand

load sand - 12 bgs.
well casing 40' casing
10' screened casing
mud pit

5/20

NEED

hook plug

AAA + AA batteries

5/16/2014 ET. Met w/ J.H. @ 8 a.m.
filling water truck, & loading
quick gel. Heading to jobsite.

Filling up w/ fuel. Onsite &
pulling NP, running auger system
to clear hole to clay and set
surficial casing.

Rig 4041

Back @ 6:50 p.m.

5/20 ET/DTP 9am start

SWL 11'4" BTOL $\rightarrow$ 8.5'
34'

hole open to: 13.3' BTOL $\rightarrow$ 10.5'
- set up to ream borehole to 8"
lots of sand + clayey sand returns at
first, circulation gradually decreased.
@ ~30' GWS hit rock and circulation
gone. Asked ET to prep well casing so
it is ready to hang as soon as reaming is
complete.

well casing elev = +3' ~~MS~~ ALS
temp 8" casing el = +2' ALS

5/20 cont'd

ream to ~51' ALS, stop, pull NWT reamer
assy and bring the well assy.
well assy to ~47' BLS.

TOC (uncut) = 39" ALS

well assy 50.75' long

bring filter sand ~2' A screen. ~38' (TOC)

poored 5 bags 50 lb sand, bring level up
to. ~38' TOC (~35' BLS)

- airlift to help settle & develop filter pack.
- cut top of casing to 30" ALS

RK HRS 4045

5/21 DTP + ET

well SWL 10.9' BTOC $\Rightarrow$ 7.9' BLS

annulus SWL 9.3' BTOC $\Rightarrow$ 7.3' BLS

tape to ~27' BLS in annulus. need to wash
bridge & pump grout?

8 bags grout, clean grater + load up NWT
reamer.

rk hrs 4047

5/22 DTP + SH

well SWL 10.95' BTOC $\rightarrow$ 7.95' BLS
annular seal 9' BTOC $\rightarrow$ 7' BLS

developed well / air lifting @ 42' + 47', slowly
hanging eductor lower on wireline.

tag top grout @ ~25' BLS, hang 20'
borehole and pump 7 bags portland
to bring grout to TOC - pull 8" PVC
casing, grout level dropped, mix + pump
2 more bags portland.

* out of cement, clean grout.
empty tubs, pick up site.

rig hrs 4050

5/23 ET + DTP

SWL 11.1' BTOC $\rightarrow$ 8.1' BLS

grout @ 6.5' BLS

• prep form for 24" $\times$ 9' $\times$ 6"

• mix + pour cement 12 bags

• complete well, pack up + abandon site

rig hrs 4051 miles 18425

51

5/29/2014

W-19483

NWFWMD GW-7F

WNUMBER W-19483

Section 20

T03N

R03E

LAT 30.65 ~~29~~ 7277

pdop 201

LOH 84.04372153

ELEV ~115' topo

CO Leon

Mobilize - Eric Thomas; Dave Paul meet Tony Countryman @ site and setup to core w/ augers.

posthole dig surface sediments

0-3' reddish brown clayey sand (P/dl)

3-6.2 AS ABOVE, collected cuttings P/HSTs, then spl.

6.2-8.7 S sample. AS ABOVE. shw hard penetration shorten lengthen splter.

8.7-11.2 poor recovery, spl too short. lengthen before next run. orange clayey sand to sandy clay

11.2-13.7 full recovery. orange sandy clay.

13.7-16.2 ET operate. collected interval in 2 runs, first 2' run was a full spler. orange sandy clay.

R/L HRS 1456

end day 5:45pm

5/30/14

E.T. & J.H. @ wkse @ a.m.

check needs for the day.

And leaving the office @ 9 a.m.

16.2 - 17.2 Rd brn tan sc

17.2 - 18.7 Rd ^{tan} brn sc

18.7 - 21.2 Lt gray brn tan org sc

21.2 - 23.2 Same w/ some hpc

23.2 - 23.7 Sinner, moist (wet) w/
iron of,

23.7 - 26.2 brn tan org sandy clay (wet)
tan brn org sandy clay integrated w/
hpc
(w.t. 26.6)

26.2 - 28.7 wet sandy clay, gray tan
white clay sand

28.7 - 31.2 tan lt gray sandy clay

Rig hrs 4059

WT 25.8 16-5-2014

31.2 - 32.7 lt gray tan sand,
gray lt gray tan org brn sc
water reading @ 33" inside
hollow augers, this is an
incorrect reading.

Securing site and heading to
the office. @ office 4:45 pm

6-5-14

E.T. & J.H. @ office 8 a.m. unload
mud pit.

Driving to site
filled w/ fuel, water truck
Dually & 15 gals. for
the mobile rig.

on site parking mud pit
water truck & dually
water table 25.8'

32.7 - 34.2 wet, org gray sc

34.2 - 34.8 lt gray org clay w/ some hps

34.8 - 36.7 tan gray lt gray org brn sc

Rig 4064

36.7 - 39.2 lt gray brn org sc
wet @ bottom / w - cemented sands

39.2 - 41.7 lt gray brn org sc, org tan brn sc,
lt gray dk gray black organic $\frac{1}{2}$ cemented sands

41.7 - 44.2 org brn tan dk gray sc,
lt gray org brn tan sc w/ cemented sands
@ 42.7 gray dk gray sp sand w/ shell
soft, @ 43' lt gray org highly plastic, clay
(calcareous clay)

44.2 - 46.7 softer, auger are cutting real
easy, gray brn tan wet sands & clay,
@ 43' white lt gray org limey substance
@ 43.5 it turns into a brn org sand w/
some clays, @ 44' lt gray silty sand

46.7 - 49.2 calcareous lime stone

49.2 - 51.7 cable broke, or slipped
pulling hollow stems, sample gray white
very silty sand

Install 4" casing string 51'

48' 4" BLS

back fill w/ cuttings

Securing site and heading to the
office.

@ office 7:25pm

6/6/14 DTP+ET 10am start.

run 3" csg to ~53' BLS

trip in NA and beginning.

53-55.5 white & gray kaolinitic silt
with LS or chert? rubble

55.5-58 grey & olive grey clayey silt, hard stop
@ 58' - stopped to pull sample.

58-60.5 very hard rock. should have stopped and
pulled sample; washed rest of run.

60.5-65.3 NOTE could not finish run last 2-3".
only 2 sample, should go 2.5 @ min. white
to pale orange siltstone, some red pieces
in upper portion. Run ends in orange
clay, infill?

NOTE loss of circulation @ 63', but
it came back throughout the remainder
of the run.

pack up site

rights 4068

end day 5.45

water 12.3

6-9-14

ET headed out w/ GR @

10:22 a.m.

on site setting up hoses, blowers etc.

~~due~~ due to theft this has to happen daily

65.3-68 org sl w/ sand stone

68-71.5 lost circulation, lt gray white
line substance

71.5-74 white gray line stone

74-76.5 pushing sample w/ no rotations
sediments are soft enough to where this
may work to recover better samples
still no circulation x-block minimal
sample, white gray line stone

76.5-79 white pink lt gray line stone

79-81.5 white pink lt gray line stone

81.5-84.5 as above

84.5-85 as above

Rig 4072

Securing site

10-10-14 2T & DTP fill water truck
and preparing to head to site

SWL 56' BLS

85.5-88 white fossiliferous limestone

88-90.5 white fossiliferous limestone

90.5-95.5 AS ABOVE

95.5-100.5 AS ABOVE

100.5-105.5 AS ABOVE, fining up a bit

105.5-108 AS ABOVE

108-110.5 AS ABOVE

110.5-115.5 AS ABOVE

115.5-120.5 AS ABOVE

120.5-125.5 AS ABOVE ~ 60% recovery

125.5-130.5 AS ABOVE

out of H₂O, pack up site + trailer.

Rig H₂S 4076

ARR WSE 4:15 p.m.

6/11 DTP + 2T

SWL 56' BLS

Note: 3' CSG FOLLOWED BIT, To ~ 57' BLS

6/11/14 CONT'D

130.5 - 135.5 as above while pulling LS
with in string on fractures

135.5 - 140.5 AS ABOVE, into white fossil-
mudic grainstone / rockstone

140.5 - 145.5' AS ABOVE, lost ~ 1' chattered and
drilled fast, sign of high porosity
and core shattered as drilled.

145.5 - 150.5' AS ABOVE, then into tighter lithology

150.5 - 152.6 ~ 1' of material as above, then
brown dolostone. drilled hard with
lots of chatter, stopped run short

152.6 - 153 hard dense dolostone.

TD

Pull NA

Pull NW casing

RIG HRS 4080

REL WTS 4:53 pm

6/17/14

switched Rigs w/ Guy & Rob, set up
bring mobile Rig to office.

Filled rig. w/ Fuel

Doug Keller
467 - 790 - 0205

168.00
15.25

6-20-2014

ET, BC, GA

23.2'

headed to site. water @

6-25-2014 water @ 25.8'

14435
ST 0395

0-20 NOSM

20-22 TFSH

22-64 NOSM

64-66 IN COOS

66-7 SSP SPWS

175 DLAL
385 Aynk



7-24-14 DEEP CREST

County: ST. JOHNS

S T R
LAT 29° 41' 33"

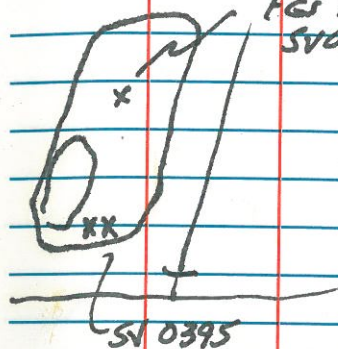
LONG 81° 27' 01.1"

AVG 430 readings WPT 15 GPS BT
Elev

KALL
ET
Phil Boudreau

Rig hours - arrive site 4089

FGS Drill site - 134.75' dr
SV0395 (taped)



SET up rig, push spws
0-7.5' set 11' 4" csg
- 1.5' stickup

fuel truck, ck in motel
End day 900 pm

7-25-14 8AM start KL, ET, PP

8.1 - 9.7 NQ setup, EXT. shoe - ~ 6"
clayey mg rich sand recovered, blue/gry
clay coming up in cuttings

9.7 - 12.2' blue gry clay, plastic ~ 3"
recovered

12.2 - 14.7 blue gy clay, ~15" recovery, to shell
e base

14.7 - 17.2 blue gy clay w shell frag.

17.2 - 18.45 same

18.45 - 19.7 same

19.7 - 22.2, 22.2 - 24.7 same, less shell
w depth

~~24.7~~ 24.7 - 27.2, 27.2 - 29.7 gy clay, NO
visible shell

KC, ET
7-28-14 Arr site 600 pm - drop trailer
w csq. ck. SWC 4.3' bls
repl. landing shoulder on inner
bbl. fuel rig etc
End day 7:30 pm

7-29-14 KC, ET, 8 AM start
ACE hdw, thin to site -
chg slide bushings, grease rig,
pull NQ, Adv. 3" csq to 29'
Adv 4" to ~14.5'

29.7 - 32.2' blue gy clay, - shell a
top may be stuff for setting csq
32.2 - 33.45' private counted sd.
33.45 - 34.7' bd private counted sd

34.7 - 37.2 med lg sd, sh. clay?

sl. org

37.2 - 38 lt bn sd, med - uncon

38 - 39.7 bn shelly sd, var clay

End coring for day

End day 6:00 pm

30

7-28-14 KL, ET 8 AM Start

mix mud

SWL 5.2' bLS

NQW EXT shoe

39.7 - 42.2' bn + gy mostly fine shell

fy. var sd + clay

42.2 - 44.7 lt gy clay + sd w v abd lt

bn shell some blk + gy, var to
shell bed

44.7 - 47.2' gy + lt bn sd + shell

47.2 - 49.7 gy sand w sparse shell

49.7 - 52.2 blue gy clay somewhat
shelly at top

52.2 - 54.7 - 2 runs blue gy sl clay sd
sl cohesive

54.7 - 57.2' blue gy sd, clay variably
clay, scattered fine shell

57.2 - 59.7' gray shelly clay + sd (inter-
bedded) top half. btm is

2" lost valve

5.65
3
- 2.65

H-med gy pasty shelly clay/w ls
dip (?)

59.7-62.2 gray shelly phosphatic
sand + clay - ~~quartzite at base~~

62.2-64.7 gray to greenish clay + clay sd
phosphatic - greenish at base

64.7-69.7 ol. gw + blk mottled clay,
phos sdg

69.7-74.7 ol gw / gy clay + clay sd

74.7-79.7 same

79.7-84.7 same - start

slow artesian (?) flow (trickle)
(+ 58" head) - dripping

have drip of fluid out return
(ie pass outside 3" csf.)

set 5' of 4" 3" + ng on
top to provide flow

end day 7:15 pm

7-31-14 KLET BAN start

SWL 4" ~~2.24"~~ + 2.24"

SWL 3" + 27.5"

SWL NQ + 27.5"

NOTE - pulled inner bbl + top
5' of 3" + SWL dropped to -2.65'
(?)

- ✓ ~~Rags~~ PIPE DOPE
- (NO) @ 1/2" gate valve
 ← 50' - NQ to make 200'
 ✓ 50' - 3"
 ✓ 20' - 4"
 15 GALS. FUEL
 ✓ EX-SHOES
 ← ✓ BOX MATERIALS FOR - 5 COMPLETE
 BOXES
 ✓ 10 - BAG'S QUIK-GEL
 (NO) BARIO (WEIGHTING MUD)

(NEXT) QUIK-GROUT (FOLLOWING TRIP)
 (TRIP) ✓ PORTLAND CEMENT
 NEW CORE BARREL

NEED to get 3" to 67-70'

SWC @ 10:45 AM - W NQ
 pulled - 6.0' (normal volume)

Pull NQ

run 3" CSG to 66.5' (2'
 stickup - 1" proud of top of 4" CSG
 SEAL top of hole w 4" CSG
 + hoist plug (w 7' stickup)

Rig hours 4111

Back @ office 6:15 P.M.

8-04-2014

ET, PB @ office loading out
 leaving office @ 11:09 a.m.

Fueled in Starke Pl., riding through thunder
 storms to site @ 5:05 p.m.,
 weather not permitting
 securing site & heading for
 lodging.

@ hotel 6:30 p.m.

Rm 411B

8-05-2014

ET, PB start time @ 8 a.m.
no artesian pressure, mud @ normal level
pulled 4" off top 5' (to await flow while going)
installed 68' x 1 1/2" & working down to 84.7' Ft.
(stabilized @ 15" of head inside 3")
starting to core

84.7 - 89.7 drk ^{green} clayey sand w/ spherul

89.7 - 94.7 same

94.7 - 99.7 Lt grey clay

99.7 - 104.7 same / dry grey green
clay clay

104.7 - 109.7 clay, tried a 2.5' Ft. run
sample slipped out of rock shoe. Bailed for the
sample, ran the second half of the run
3' 8" of sample. bailed 2 times.
recovered 1' Ft. total.

securing site & heading for lodging. leaving site 6:57
@ hotel 7:30 p.m.

8-06-2014 ET & P.B. / P.B. @ 8 a.m. working
on plates. ET @ 8:30 a.m. Onsite opening up
water table: ~~6.5'~~ 6.5' / 6.5' 6.5'

Rig 4125

109.7 - 114.7 5' ft. run sample slipped out
of rock shoe - re-drilling to catch sample
w/ ex-shoe / lifted up 2.5' ft. to recover bottom
half of the run

114.7 - 119.7 dirt grey clay/sand
w/ phos. sands / there was a little extra sample

119.7 - 124.7 same

124.7 - 129.7 ditto

129.7 - 134.7 ditto

134.7 - 139.7 ditto w/ more sands /
upper penny fauna ?? clayey phosphate
sp

139.7 - 143.1 same / hit something ?
could not penetrate w/ ex-shoe, stopping
pulling sample. dol. stone, penny fauna ??
changing shoes

143.1 - 144.7 dirt dolomitic stone w/ clays
changing shoes

144.7 - 146.2 same w/ some clays
dol. stone

146.2 - stop

Securing site & heading for lodging
at hotel 7:30 p.m.

Rig 4130
4130

7-7-2014 ET, BB. @ b-East 7am.
Start time 8am.

Water table 4' 55" 6.5'

146.2 - 149.7 hard dk grey clay

149.7 - 154.7 grey dk grey clay

154.7 - 159.7 ditto

159.7 - 164.7 Half way through the run
it got really soft, I was going to stop
& pull the sample but, it started to get
hard again. I thought the hard stuff
would push up soft sediment. It
did not. I think it soaked it away.
(same)

164.7 - 169.7

Sandy phosphate clay, beds of
pure grey clay between. Olive color
Some dolomite present. Lighter clay
above and darker sandy clays below
Most likely upper penny farms

Securing site and heading to Tally
@ whse. 7:30p.m.

- ✓ LAST SAMPLE BOX
- 15 - GALS. FUEL
- ✓ CORE BLOCKS
- ✓ 5 - COMPLETE BOXES (CORE) BX.
- WATER & GRADUATE
- CORE BARREL ??

169.7
2.5
172.2

178
5.5
172.5

ET, PB, KC Leaving whse. @
8:04 a.m.

P/U Dually from Neece tire @ 7:30

Fuel in Lake City
onsite @ 12:44 p.m.

WAITING ON THUNDER STORMS

WATER TABLE =

MEASURE TO BOTTOM OF WELL =

169.7 - 172.2² dkgy blk chg gw to oz
9" chg. stopped run - got soft.
shoggy blk in - refusal w ext.
shoe, blk in w rk shoe - no
penetration w rk shoe - chatter
- will pull string + chg bbl.
- change over to NB-2 bit - @ 172.2'

172.2 - 174.7 - 172.2 - 172.5 no running
prob still clay washed

172.5 - 174.7⁷ top of PWFm dolomite -
slow cutting 1-1.5"/min
phosphatized hardground at top -
clastic LWFm dolomite w
banded clasts etc

End coring for day

Rig hours 4135

End day 800 pm

8-19-14 KC, ET, PB 7.30 start

SWL 6.05' bLS

174.7-179.7 (hard) multi cyclic dolomite
gray, bn. plus clasts, filled
burns etc

179.7-182.2 - start as above.
start losing circulation - fine,
soft. ~ 1' recovered - 3" dolomite
as above, dk olive clay + water
ls then ~ 5-6" ocal ls. - soft
below - probably no recovery

182.2-184.7 - push empty bbl - no
rot. or fluids - little or no
resistance upper 2' - rec. ~ 3"
partly ls at bit (drilled w/o fluids
to plug bbl.

184.7-187.2 Ocala

187.2-189.7 Ocala ls. fossil.

189.7-193.45' TD Ocala ls

TD

Rig 4139

Rig 4140 8-26-14

Rig 4145 8-27-14

KE headed back to Tallahassee
ET & PB breaking down site
& putting away tools.
Tyler from St. Johns River Water Manage-
ment District made it to drill site
to run gamma logs.
Bottom @ 193.41'
Securing site
hook up mud line
@ hotel 5:30 p.m.

8-26-2014 ET @ work 7 a.m. getting
last minute things. out @ 8:30 a.m.
Back in @ 10 a.m. DTP picked up & internate
onal DEP 6817. P.B. & ET.
loading grout & Quik-Great
leaving Tally @ 1:15 p.m., On site @
6 p.m. pulling NQ-2
Securing site @ hotel 8:17 p.m.

8-27-2014 ET & PB met @ 7:30 a.m.
on site & grout
5-bgs. Quik-Great 182' Ft.
grout and breaking down site.
loading drill rod & casing. Cleaning site.
securing site & heading for lodging
@ hotel

[Faint, illegible handwriting visible through the paper from the reverse side]

[Blank page with faint blue horizontal lines and red vertical margin lines]

8-29-2014

Et & PB met @ 8 a.m. heading
to check out & heading to site.
Making sure the site is clean
& loading granter.

@ office 3:30 p.m.

W-19498

GW-7S

4158 Rig

OFFICE 6:06 p.m.

W-19498.

9-10-14 ET, Kc to Milwaukee
GW7S site set up rig for
shallow well. Hand auger
& post hole to 4' then
set up mobile drill sample
system & auger 5 ft to
8' in light blue clayed
Tan Concretionary core out

9-11-14 Met w/PT @ 8 am.
Loading 2" screen & 2" risers

30' screen

30' risers

Well cap, & well point

5' riser

Fill track w/ water

0-8' Rd clay

8-10.5 Rd sc w/ cemented sands

10.5-12.7 Rd sc w/ cs

12.7-13 tan org sc

13-15.5 same

15.5-17.2 same / 17.2-19 same w/ s-s

19 - 21.4 tan brn sc w/ers

21.4 - 22.2 lt tan brn sandy clay

22.2 - 23.0 same w/ cemented sands
securing site, heading for whse
ET & PB arrive @ whse 6:15 p.m.

9-12-2014 ET & DTP

23.0 - 25.5 drk brn black sandy clay w/
cemented sands, lt gry brn sc (change @ 25)

25.5 - 28' gry brn sandy clay, lt gry
white hpc

28' - 30.5' lt gry white plastic sands
shoe is wet

30.5 - 33' lt gry v. fine clayey sand

* WET *

stop drilling, let water level come up. 75

NL come up to 24.8 BLS slowly
while we ate lunch.

King 4/16/1

DTP r/c from Louisa

1/4 Trash BAGS

Hand towels

Portland cement

2 augers to DTP's office

✓ 100' tape

✓ 300' tape near

✓ trials

33-35.5 Same info bottom cream IB v.f.
clayey sand

35.5-38 IB It + med grey v.f. sand - silt
v. clayey

38-40 AS ABOVE

Stop coring, hang WL tape & let WL
come up.

hang well assay point + ASTM x tiloc adapter
20' screen, 20' riser. stick up
~11" put cap on well, wash in sand
5 bags brought filter pack to ~28'
BLS

2 augers out, 6 augers in. cap well
w/ PVC threaded cap, make auger bull
up to augers. hole is secure

Securing site & headed to whse

4:18 pm @ whse

Rig 4161

2/15/14

ET, BA, DTP

SWL 29.5' BLS

Finish sanding in well's filter pack.

~ 3.75 bags sand

pull augers, FP @ 18.5' BLS

add .25 + .5 bags filter sand

add ~ 3/4 bag play sand $\Rightarrow$ 16' BLS

add ~ .25 bag hok plug $\Rightarrow$ ~15' BLS

mix & pump 3 bags Portland $\Rightarrow$ ~2' BLS

RAIN, tighten up site, clean gator

leave site 5:10pm

rig hrs 4161

2/16/14 ET+DTP

dept where, Norm

SWL = 21.1' BTOL

TOL = 10"

Grant = 17" BTOL

Set up airlift, evacuate well, introduce clean water to well while developing

Rig 4164

alternate pattern of duckpant until 2:30pm

- duckp while adding water
- shut off water and let duckp make water heat off, then add fresh water again.
- repeat.

@ 2:30pm shutdown duckpant and buy mastdown, make rig firm and prepare for cement pad.

storm rolled in, secure site & depart

R/E hrs 4163

Back to whse arriving @ 4:21 p.m.

brunye cards

zipties

✓ H₂O

2" quick clamp

✓ hotsty wand

3/8" ope

duct tape

✓ e-tape & plenty ☺

GW75

Coordinate 75 averages

N 30° 39' 11.3"

W 084° 02' 36.9"

9/17/14 ~~11:15~~ Rig 4/68

9/17/14

ET & KMC develop GW-7F

DTP work on GW-75 completion

finish setting up form, mix 3 bags
portland, pour pad. mix sand into
pad. clean up and wait for
cement to stiffen up.

KMC & ET setup gir/lift on GW7F

• gir/lift in 10' intervals up & down hole
but 2" well so cover fits.

@whse 5:16 p.m.

9/18/14 ET & DTP

• develop GW7F

• finish completion / remove form
on GW-7F.

• develop GW-7F

SWL 59.4' GW7F

SWL 28.3' GW75

} BLS

GW75 TD 39.4' BLS

~~TD~~ 39.45' BTOL

TOL 0.45' BLS

2/18 (cont'd)

GW 7E - flow filled 5g bucket in 16s
= 18.75 gpm
w/air valve ~ 1/4 open and 2" eductor
pipe @ 149'

dump GW 7S until empty, introduce
water to well, dump out, repeat.

clean up & depart demob site.

leave 2 new mud cones to demark
well, pad not cured yet.

3:20pm.

arr home 7:11pm

