

COLLIER COUNTY 4/03

WATERGATE WAY

26° 13.386' N

91° 48.490' W

Forestry Suppliers, Inc.

1-800-647-5368

#49354 Level Book

18522

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WELL NAME/NUMBER	PAGE #
Watergate Way	5

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.



Pedro
239
734-0146
cell

	.8	.9	Out or Fill
1.2	1.4	0	
2.7	2.9	1	
4.2	4.4	2	
5.7	5.9	3	
7.2	7.4	4	
8.7	8.9	5	
10.2	10.4	6	
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22.2	22.4	14	
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25.2	25.4	16	
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28.2	28.4	18	
29.7	29.9	19	
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32.7	32.9	21	
34.2	34.4	22	
35.7	35.9	23	
37.2	37.4	24	
38.7	38.9	25	
40.2	40.4	26	
41.7	41.9	27	
43.2	43.4	28	
44.7	44.9	29	
46.2	46.4	30	
47.7	47.9	31	
49.2	49.4	32	
50.7	50.9	33	
52.2	52.4	34	
53.7	53.9	35	
55.2	55.4	36	
56.7	56.9	37	
58.2	58.4	38	
59.7	59.9	39	
61.2	61.4	40	

ALICIA ALBERT → 239-530-5344

WESTERN 800 367-5285

FAIRMING 800-759-7441

SHOP # 907197

ASSEMBLY DRUM BRAKE RELEASE

ROD 14276 (2)
STOP 14276 (2)
DAN NOTE 4F9 (4)
CUTTER PWS 3CP-10
PWS 14485

16824 (2)

POD OFF 335.96

3-4-11-11

KELLY # 2080.56
PUSHING 9891.88

#850.00

15066

ENGINEERING
GENERAL NOTE
X 221

2-11-11

CME
800-325-8829

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

JOE JENNY
314-409-2291

Kenny
11/26/11 student

BASIC TECHNIQUES (405) 853-6790

ENG, OK

15WX108

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	AMERICAN PLANE	
	267-0011	
	16250 00 US 41	
	* 377542685	
	000000	
	CR 42406	
	TRIMKEN 672	
	TRIMKEN	
	FIELDS EQUIP (863) 755-1122	
	2040 SPRING A294610 2000	
	BEARING CUP	
	93-595-0841 008284 RACE	
	CHIZ	
	NORTHMAN	

BASIC TECH.
FIELD# 73-1394559

60200 WATERGATE WAY
34108.

SWICKEL

DA

2³/₈ IF LHPAN



Kelly top PK Red deal Lh

Diff PK Red deal Rh



2⁷/₈ Mayhew Jr

203426

WATERGATE WAY

4-24-03 CB, LB

- 0-3 HAND DUG. BEN F SAND W/ ORGANICS
3 LB COBBLES.
- 3-6 DK BEN F SAND - CUTTINGS
- 6-9 DK BEN F SAND - CUTTINGS
- 9-12 LT BEN F SAND - CUTTINGS
- 10-13 LT BEN F SAND - CUTTINGS.
- 13-15 NO SAMPLE

REAM HOLE W/ 7 7/8".
RIN 6" PVC CSG TO 15'.
CEMENT IN PLACE.

4-25-03

13-23 NO SAMPLE.

23-33 SAND WASHED OUT. 2 OR 3
LS PEbbles w/ CLAY

38-

SET 3" CSG TO 30'

33-43 TAN F SAND w/ CLAY & LS

SAMPLES NOT STAYING INSIDE.
INNER BEL. NEED FULL
COLLARS CORE CATCHER

FAILING:

KEY TO BEAN FLOW VALVE
 1-FG-452 GRAVEL SEATS. FM 45 12.78 x 8
 14260 BRAKE LEVER SPRING 1.82 x 4
 14CB-CP KELLY SET SCREWS. 5.43 x 2

BRIGGS F. STRATION

65 HP OHV
 INTER I/C 206

FAMILY YBSXS.2051HF 275160
 020118FD 121432 0636 E2

12 78

5-7-03

CB, LB

43-53

GR FCLAND TO GR LS.
 POSE REC. USED NEW FULLY
 COLLAPSE CORE LATER. RD
 GOT CAUGHT IN IT.

53-63

LT GR/OK GR FOSS MUNDIC
 LS. 55% REC

5-8-03

CB, LB

CLEAN HOLE 3' SLOPE

63-73

LT GR/OK GR MUNDIC FOSS LS.
 COBBLES IN SECTIONS SAND @ 64'-
 69'

73-83

LT GR MUNDIC FOSS LS.

5-8-03 CONT.

83-93 93-85 CY GR Foss Mammal U.
83-88 LS ABOLLS. i. Sams. DIO NOT CORR.
88-93 LT. GR Foss Mammal U.

93-103 TAN Foss Mammal Mammal U.

103-113 TAN SILTY LS. Poor RES
POORLY CONJUGATED TO TAN
SILTY w/ LS PERCOLS.

113-123 TAN Foss U.

123-133 INTERMITTANT TAN LF SAND w/
LS COBBLES. POOR RES

133-143 LF GR Foss Mammal U.

143-153 GR Fossily Sams.

153-163 NO SAMPLE

163-173 GR Fossily Sams

173-183 NO SAMPLE

5-1-83

pull back 100' to 63' BLS.
pull up 1' camp @ 43' BLS.

Bill said thanks to Ann Mike
crackin'. order new ones.

5-21-03

CA, US

REPLACE BT'S GAS TANKS ON
MOO MUCK. LOAD 7 1/8" STAMPER
ON JACK TO TAKE TO KEN.

RUN NP INTO 183' BL. 7' OF
EATING IN HOLE

183-193 GR/PAW FAN MOLOR W. 2" REC
PLUGGED STOP.

193-203 OR GR/GREEN LS w/ CLAY.
PLUGGED STOP.

203-213 GR/GREEN CLAY
TO BE SAMPLED 204.5-206.

RUN NP. PREPARE TO
RUN IN 3" CSB

~~NEEDLE NOSE PLIES~~

2 1 1/2" x 8'

~~LOW CUTTER Pliers~~

BUCKET

REBAR

HAMMER

~~GASOL PAIL - DRUMS~~

~~SPARK PLUG SOCKETS~~

~~5/8" DEEP WRENCH~~

* SPARK PLUGS *

↓ CHAMPION 12YC

↓ AIR FILTER 491588

S-22-03

GA, LA

RUN IN 3" CSG TO 210' BLS.

ORDER:

LONG YEAR: DIAMOND BIT
CRACKER JACK?

ATLANTIC: SPRINGS FOR CLAMP (2 SETS)

6-17-03

CB, LB, BF

REAR WIRELINE CLAMP. UNWIND
TRUCK, MUD, HALLWAG, 1' 7 7/8"
STABILIZER. BEGIN RUNNING IN
NQ.

6-18-03

CB, LB, BF

213-223 GR/GREEN CLAY W/ LS.

223-233 NO REC.

PULL NQ. CORE BEL NOT
LATCHING. SAMPLE IN CORE BEL.
~ 1' BEUSO BIT. ^{DRAWING} SWITCH TO
CRACKER JACK.

233-243 DK GR/GREEN PHOSPHATIC SANDY
CLAY. 9' REC.

243-253 DK GR/GREEN PHOSPHATIC SANDY
CLAY. 10' REC. REAL SLOW
DRAWING. ~ 1/HR.

253-263 DK GR/BLACK PHOSPHATIC CLAY
SAND.

6-18-03
CONT.

263-273 LOSING CIRCULATION. ADD 3 BCK
QUICKSET LU. HEAVY W/ LOSS
OF CIRCULATION. DK GR/BLACK PHOSPHATIC
SANDY CLAY. LAST 3' SAND. ^{DID} NOT
RECOVER! LAST 3'! BEGANTO HOOK @ 270.'

273-283 NO CIRCULATION. SWITCH TO MUD
PUMP, 220 PSI STILL NO CIRCULATION.
DK GR/BLACK PHOSPHATIC CLAY & SAND.
FOUR SEC. MUD PUMP Q ~ 400 GPM!
BLOWING SAND. AGAIN? AGAIN?

CLEAN UP.

END DAY.

6-19-03

CS, CB, CF

ADJUST BELTS ON SHAKER. ADJUST
CLUTCH OUT 2 NOTCHES ON
WIRELINE. CLEAN HOLE TO
283' BEGIN CIRING. SWITCH
BACK TO BRAN PUMP.

283-293 OK GR SANDY CLAY TO 288'.
GR MUDGY LS TO 293 w/ INTERMR.
LENSES of CALC. CLAY.

293-302

302-313 GR FINE MUDGY CL

8-20-03

CS, LB, BF, BC

UNCAP. 3" CS₆ @ 210' #MX
WEIGHTED MUD TO SURFACE,
ADVANCE CS₆.

10-6/13-03

CB, LB

MAINTENANCE WEEK

NEW KEY ARRIVED 9/12 @ 12:15 PM

10-21-03

CP, LA

CHECK KELLY/SUBS TO MAKE
SURE RIGHT. CUT UP OLD KELLY BAR.
STAINING $7/16"$ CABLE. HANG NEW
KELLY BAR. BOTTOM 5TH CUT
OUT IF 3" STICK. NEEDS TO BE
CUT DOWN TO $2\frac{7}{8}"$

TAKE TO DISINFECTED WELDING

10-22-03

11-4-63

CS, CA

NEW BITTIN SUSPENSE ARMING.
PUT ON KELLY LOWER KELLY
INTO DRIVE HEAD PUT BUSHING
TOGETHER. NEED KILL SWITCH.

GO TO JOHN COLLINS & PICK
UP KILL SWITCH INSTALL.

STORM SETTING IN

11-5-63

CS, CA

GO TO LOWER 1 P/O 3" PUC
CS FAN TIMING TO KADEY.

BUILD NEW CIRCULATION SYSTEM.

BEGIN ADVANCING CS₂ KELLY

BAR STILL NOT RUNNING INDEPENDENT
OF AUTO PULLDOWN. CALL VIRGIL
@ BARKER TECH.

TELL ABOUT AUTO PULLDOWN

SHUT OFF COLLAR ASY WORK

ORDER NEW PARTS

11-6-03

C3, L4

DETERMINED that
Drill frame supports under failing
1500 draw works are failing -
unsafe to run / difficult to repair
pull rig for site
replace w CME 25

WESD

2.3-04

2" NWC/FEM CARLOUS

~~WESD~~

~~2.3-04~~

~~GRAND SETBACK UP CAMP~~

~~WESD~~

~~2.3-04~~

~~2.3-04~~

~~GRAND SETBACK UP CAMP~~

~~WESD~~

CD, LS

2-3-84

CONTINUE SETTING UP CME
WELD DRILL STAND.

PUT RESULT $\frac{1}{2}$ WELDED
CHECK CYLINDER BACK ON RIG
RUN ALL HOSES

CS 10

2-403

RUN CONNECTING 2" HOSE
BETWEEN MUN TUB : MIXER
HOT H₂O, MIX M.O.

RUN IN 3" CS6 TO 310' BLS.

CLEAN UP, RINSE OFF RIG

END DAY

UPS 800 ~~742~~ 742-5877

128403200 146780621

CS, LB

2-5-03

RUN NQ INTO 310' BLS
SET UP CORE EXTRACTION HOSE
BEGIN CORING, FLUID BLOCKED.

~~335~~ - pull INNER BLL. INNER
BLL HUNG UP IN A.P.E. MUST
HAVE STICK OF BENT PIPE REEARS
INNER BLL PER NQ.

GET INNER BLL UNSTUCK
REMOVE BENT STICK OF NQ.
ADJUST INNER BLL. CANNOT
ADJUST. ORDER PARTS FROM
LONGYEAR

CB, CB

2-6-03

PROD FROM LONGYAL AREA
LATE MOUNTAIN MTS.

CB, CB

2-7-03

REMOVED INNER BLK of new
PROD. PAN SET IN

CB, LB

2-17-53

RUN NO BACK IN HOLE
MAKES SURE INNER SEAL
RUN IN NO OK. PUMP
THROUGH NO TO MAKE SURE
H₂O FLOWS BY INNER SEAL.
THROUGH BIT. ALL OK.
REST ON NO TO 313'. BEGIN
CIRKING

313-323 NO REC CHANGES SHOTS TO
RY SIDE w/ TANGS.
~~323~~ GETTING RESTORED

323-333 LT HL PROOK Y

333-343 AS ABOVE

343-345 AS ABOVE

PLUGGED BIT. INNER SEAL
HUNG UP. PULL NO. BROKEN
CONK ON INNER SEAL. COLLECTED
BIT. ORDER NEW FROM LONGBEAR.

WORKS FREE AWAY ON 3/4 WAREHOUSE

CB, CO

2-18-03

MAINTENANCE WHILE WAITING ON AER
REBUILD NQ2 INNER BRL
LATCHING MECHANISM. PULL BOLT,
WASHER & SPRING COMPLETELY OUT
TO REASSEMBLE LATCH LINKS.

REPLACE NQ2 SERIES II BOLT.

ADJUST INNER BRL &

BEGIN TRIPPING NQ BACK IN
HOLE.

GS LS

2-19-03

CONTINUE RUNNING NQ INTO HOLE.
BEGIN CORING.

345-355 INNER BRL HANG UP IN NQ
ROD CANNOT BREAK FREE. BEGIN
TRIPPING NQ OUT OF HOLE
NO REC. SAMPLES WENT OUT WHILE
TRYING TO GET INNER BRL UNSTUCK.
BENT PIECE OF NQ CAME OUT.
TRIP NQ BACK IN SLAMMING W/
INNER BRL EVERY 100'.

355-358 GR/OR GR MEDIUM LS - BENT ROD.

~~358-363~~ FINE, SO STRE

358-363 GR/OR GR MEDIUM GRAY
LS.

363-373 GR/OR GR MEDIUM GRAY LS
W/ ~ 2' OF VOID/SOFT SPACE
ALLOW CUTTING TO FEEL OUT
SOFT ZONE AHEAD, SHEAR BACK

AB, LB

2-20-03

373-383 GR/TAN FOSI MOLDIC GRANT LS
SOFT ZONE

383-393 AS ABOVE

393-403 GR MOLDIC LS W/ OYSTERS, FOSI.

403-413 SOFT TAN CLAY LS TO MOLDIC LS
LAST TOP OF ROP. SOFT INTERSECTION.

413-418 GR MOLDIC LS TO GRN CLAY

418-423 NO REC

423-433 GR CLAY TO GRN/TAN FOSI CLAY
OYSTERS

433-443 GR/TAN MOLDIC FOSI CLAY W/ LS
TO GR/TAN MOLDIC LS

443-449 GR MOLDIC LS TO INTERMEDIATE
GR/TAN & CLAY/LS

449-453 GR/TAN LS TO GR CLAY W/ LS

CS, LB

2-21-04

PUMP OFF TWO TWS. START
PUSH.

453-463 GR MOLAR CS. BLEND OUT
START OFF VALVE ON INNER SEL.
REPLACE.

463-472 GR MOLAR FORT CS

INNER ALL HANG
PUMP NO. LINE LEFT ON
INNER SEL. BLEND IN. REPAIRS

CB, CB, BC

3-2-08

SUPPRESS FLOW. RUN NG TO
472'

472-473 GL MOLDIC LS, FOSS.

473-483 GL MOLDIC LS TO CLAYED LS
@ END OF RUN. PLUGGED
SHSS.

483-485 GL FOSS MOLDIC LS PLUGGED
SHSS.

LET HOLE FLOW TO CLEAN
OUT COTTING.

485-503' Gray to light brown, moldic
FOSS., molluscas, with
varying amounts of phosphate

503'-513' Light gray ^{moldic} FOSS. LS with
phosphate as an accessory.
Grades into Dolostone @ about
~511'. (possibly dolostone)

513-523' Poor recovery, creamy
tan to brown ~~to~~ moldic LS
that grades into muddy LS.

523' → 528' Gray ls with some fossils, heavy amount of phosphate, and contains fine sand. Last 4" is a gray silty clay that contains fine sand.

plugged shoe

528' → 533' Creamy light brown ls w/some fossils, heavy amount of phosphatic sand, and some fine sand.

Interval grades into a light gray/white ls of the same composition at ~130.5'.

533-538' muddy, gray, ls w/ phosphate.

plugged shoe

538- hole is filled with cuttings, flush out and ended coring for day.

3.2.04 CB, LB, BC

538-543' interval consists of a clayey, gray phosphatic rock w/ fossil hash. At ~540' it turns into possibly dolosilt w/ phosphate, fine sand, and fossil fragments.

543-553' dark to light gray dolosilt w/ significant clay & phosphate. Coarse sand. Last 1' of interval is a clay w/ phosphate. fossil ~~fragments~~ fragments.

553-561 light gray → dark gray LS from 553 → 554, rubbly clay w/ fossils until 561.

561-563 gray, and creamy tan LS (possibly dolostone, moldic with high content of phosphate

W. 3.4^{Be}.04 CB, LB, BC

563-565' light gray, blue moldic, foss.,
Ls w/ phosphate.

565-570' light gray Ls, phosphate
and sand. Some fossils
more muddier at 569'

570-573 olive clay / Ls with
phosphate and sand.

573-576 Sandy, light gray, silt-size
Ls, poorly indurated.

576-577 Olive gray Ls with
sand, fossil frags +
phosphate.

577-583 olive gray to light brown
Ls (calcareous) with
fossil frags, sand, and phosphate

583-593 First 5 in. is stuff
olive gray dolostone that
is silt-sized. fossil molds +
fragments. Last 4' is sacrosic

593-600' Light gray LS, rubbly,
Some fossils, phosphate, and
sand.

600-603 No sample

603-612 dark gray, olive dolomite
sucrosic, some fossil frags.
gets to rubbly towards end
of run @ 609'.

612-613 GR, clay w/ LS clasts.
some phosphate and sand.

613-616 DRK GR, dolostone, Sucrosic
well indurated

616-618 DR GR clay

618-620 ~~DR~~ GR Dolostone, Large
intra clasts, Some phosphate

620-621 DR GR Dolostone, Sucrosic

621-622 DR GR CLAY

622-622.5 DR GR DOLOSTONE, SUCROSIC

622.5
~~622.5~~-624 VERY DR GR CLAY

624-625 SAA, IN TUBE

* DRILLING SLOW THROUGH CLAY

LOST FLOW. RUN 100' TAP
INTO HOLE TO DETERMINE H₂O
LEVEL. TAP COMES OFF FRAME
? GOES DOWN HOLE. TOUCH
BOTTOM w/ BIT SPINNING/PUMPING
TRY TO GET FLOW BACK
DO SO. LET FLOW IN HOLES
TAP IS BROKEN FROM FILE;
FLOW OUT. NOT SO

3.5.04 CB, LB, BC

Permco KZ-0574

WIRELINE H1A. MOTOR

~~ROD IN INNER BOX. INNER~~

~~THE HANGING. STUCK~~

~~INNER BOX. INNER BOX. STUCK.~~

~~DOWN~~

ROD IN INNER BOX. BEGIN
CUMULATING.

625-630 LITTLE C1 BUT GOT TAP

& FIVE INNER BOX

HANGING INNER BOX

FINALLY COMES OUT BUT BROKEN

OVER PARTS

3-16-04

CB, LB

630-633 LT GRAY MOLDIC LS TO
OK GRAY MOLDIC LS.

633-636 LT GRAY MOLDIC FSS LS TO
LT GRAY/WHITE CARBONATE CLAY.
PULSED SHOE IN CLAY. LA
HOLE FILL TO EXCAVATE
CUTTINGS.

636-643 LT GRAY/LT BROWN, POORLY CONS,
SOFT FSS MOLDIC LS.

643-650 AS ABOVE TO OK GRAY
MOLDIC LS. DK GRAY CALC.
CLAY AT END OF RUN

THUNDERBOLT

3-17-84

CS, LB

650-653 LT GRAY MUDIC CS

653-658 LT GRAY CLAYBY CARB. SAND TO
LT GRAY MUDIC CS. WASHED OUT
TOP OF RUN PULVERIZED

658-663 LT GRAY MUDIC CS

663-668 AS ABOVE. PULVERIZED

TRANSMISSION STUCK IN
3RD GEAR DUE TOP COVER
TO MAINT. OFF I TAKE TO
AAACO

3-18-04 CS. US

p/o TRANS @ AMCO.
PUT TRANS (TIP IN NEUTRAL.

NOTE: TIP GEAR BROKE, WREN.!!
NEEDS REBUILD.

PUT TRANS BACK TOGETHER.
BELOW CRANK.

668-673 LT GRAY MUD & TS SAND
CLAY AT BOTTOM.

673-683 LT GRAY POINTY CONG. MUD & TS
PLUGGED STOPS

683-687 AS ABOVE

687-693 LT GR. FINE MUD & TS.
REXTLIZIA

693-698 AS ABOVE LAST 4" CARBONATE
CLAY. PLUGGED STOP

698-703 LT GRAY MOUND C.I. ~~STAD~~
701-703 CLAY - WASHED OUT
NO SAMPLES

KEYHOLE SWINE

3-19-04

CB, LB

ADD ANTIFREEZE ? & GAS TO K16.

703-713 LT GR FILL MUDSIC LS.

713-713.5 HIGH FLUID PRESSURE, BIT
PLUGGED. INNER OIL
HUNG TRY WORKING INNER
OIL CABLE BREAKS

BEGIN PULLING NQ.

PULL WIRELINE HYD METER ? TAKE TO
FLA HYD IN 5 METERS

3-20-04

CB, LB

CONTINUE PULLING NQ.

AT ~200' BS HESL JAW ON
BREAKOUT (30) WIRELINE BREAKS.

DO NOT HAVE REPLACEMENT.
TAKE WIRELINE CABLES OFF

WASH RTH

3-30-07 CB, CA

LES NOT FEEDING WELL

PUT 1100' $3/16"$ W/R WIRELINE
ON SPDL. INSTALL REBUILT
HYD MOTOR TO WIRELINE.

NOTICE $3/8"$ CABLES BLIKEN.

GO TO CEMENTED SLING IN FT MYERS
TO GET 70' $3/8"$ CABLE

PUT $3/8"$ CABLES ON RIG.
REPAIRS HELL JOIN ON
 $3/8$ WRENCH.

AFTER REPAIRING HYD. MOTOR,
CABLE FALLS FROM RIG, CHECKS
SELF OUT HITCH STANLOCK.

REPORTS TO CORREL.

3-31-04 AT C13, LA
CRANK SHOULDER SURE
STAY PULLING REMAINING
NO PIPE. HEEL JAW PIN
TO 3/0 WRENCH BREAKS 2X.

NOTICE FRAME TO 3/0 WRENCH
WREN: BROKEN. TAKE NEW
48" PIPE WRENCH: DO 3/0
WRENCH TO TITAN IN FS
MISRE TO HAVE NEW 3/0 WRENCH
FABRICATED.

PLU NEW 26" PIPE WRENCH @
EXTRACTOR AND PIN RET
OF NO USING 48", 36" PIPE WRENCH
3 WINCH ON TRUCK.

PIPE REAL TORQ USED UP

BIT BURNED AWAY
CHANGE BIT.

4-1-04

CB, LB

CRAIG RT SHOULDER WEST
SIDE CARVE CORNER TO MAKE
PLAN TO GO SSE DR. DR.
REPORTS INTO RT SHOULDER STRAIN

RETURN TO SITE, CRAIG ON
LIMITED DUTY, NOTHING OVER
10/16.

BEGIN RUNNING NQ TACK IN
HOLE RUN INNER GRL IN NQ
EVERY 200' TO SEE IF ALL
NQ PIPE IS GOOD, IT IS NOT.
ALL NQ REMOVE BENT PIPE

CHECK ALL PIPE ON GROUND TO
SEE IF LOCKING WINGS ON
INNER GRL WILL GO THROUGH
NQ REMOVE 160'. ALL BENT
FROM USING WINCH IN TRUCK.

RUN NQ IN TO S13!

4-2-04 CS, CS

CATCH STROLOGER STILL SOLID

CONTINUOUS RUNNING ^{NO} PIPE INTO
713.1' MAKE SURE INNER BAR
GOES THROUGH NO. PUMP HEAVY
MUD OUT OF PIPS : LET
PRESS FLOW.

10' CUTTINGS. SET NO. ✓
BITTON : LET FREE FLOW AGAIN

EW TO PT MYERS TO PU
NEW B/O WRENCH

03, 04

4-3-04

713-723 LT GR MICAL LS

CAP HILL

WASH RIS LONG PIX

CLEAR OR

4-13-04

03, 04

723-730.5 GR MICAL LS TO GR MICAL
POORLY CONS LS

730.5-740.5 AS ABOVE. POOR REG

• DUN SET IN

CRAIG HAS CAN CRO

4-14-84

CB, LA

CRASH STILL HAD HANDS

740.5-750.5 GR/GRN LS TO GR/LT TAN
DOLOMITIC LS.

750.5-760.5 GR/LT TAN DOLOMITIC LS TO GR/GRN
FOSS MOLLUSC LS

760.5-770.5 GR/GRN FOSS MOLLUSC LS TO
GR/TAN PURELY CONG FOSS MOLLUSC
LS. LAST .5' GR/GRN CLAY
W/ LS FRAGS.

770.5-775.5 GR LS CLAY TO GR/TAN
MOLLUSCS

775.5-783 GR LS CLAY TO GR/TAN MOLLUSC
LS

783-788 GRN MOLLUSCS TO GR MOLLUSC LS
TO GR CLAY.

788-792 GR MOLLUSC LS TO GR CONG
PURELY CONG LS.

4-15-77

C3, C3

CATH STILL SICK

798-808 GR MAR 2 U

808-818 AS ANUS

• PIPE DROPPED OUT OF
SLIPPS. WORK UNDER THE
PAVE OVER CORSE / JUNK IN
BY

BOTTOM IN CORE ALL.
LIFT FELD. GROSS NICK
ON SWINE BLUES ALL REPAIRS
COVERING AFTER 7.10 TO 7.15

818-822 NT RES.

4-16-14

CO, LS

CRACK STICK

THE HIG. BOWNECK

BEATS IN SWING A GAW.

CANNOT TALK ON IT.

CLOSE THE BOWNECK

HAS SOME OF THE CORN -
MARK. PEARCE

4-27-04

CB, US

REPLACE TOP HOUSING TO
SWIVEL. RUN INNER DR IN.
RUN NO TO 822' TO CUTTING
IN HOLE. ADD MCE.

822-823 LT GR POROUS LS
824' DR GR/GRN CLAY STRONGER
831-832 LT GR CHALKY LS

833-843 LT GR MUDCLAY TO 837
TAN/GR GR LS TO 843 GRAY

843-850 GR GRAY LS TO 847
GR/TAN SHEL LS TO 850.5
GR GRAY LS TO 853.

853-86 GR CHALKY LS TO GR CLAY. PLUGGED
STOP

RAIN/THUNDERSTORMS

4-28-04

CB, LS

860-864 INTERMITTENT LENSES OF GR CLAY L/
GR LS. PLUGGED S408

864-867 GR FINE LS. OF CLAY @ END OF
ROW. PLUGGED S408.

867-873 GR SOFT LS TO GR CLAY. PLUGGED
S408.

873-882 GR SANDS TO DK GR/LT GR
GRAIN LS TO 880. 880-882
CAVITY. 882-883 GR/TAN
CLAYEY LS. UNCONS. NO FLOW.
STATIC H₂O LEVEL FALLING

883-893 GR SLURRY w/ R_h, SHELL ROCK,
SAND TO R_h, SHELL, SAND CLAY

6-22-04 LB & EH

AlphaBit™

www.boartlongyear.com

SURFACE SET / IMPREGNATED BIT TAG

Part #	4050182
Description	BIT NQ2 02 RSG 2.980 X 1.995
Serial #	L13358 - 2

ROCK TYPE	ROCK CONDITION	AlphaBit
ULTRA HARD Jasperlite Taconite Quartz Chert	Competent Non-Abrasive Fine Grain	10, 10 _{Comp}
		09, 09 _{Comp}
VERY HARD Quartzite Gneiss Granite Rhyolite Diorite Gabbro	Competent or Broken Abrasive Medium Grain	08, 08 _{Abr} , 08 _{Comp}
		07, 07 _{Abr} , 07 _{Comp}
		06, 06 _{Abr}
MEDIUM HARD Andesite Schist Peridotite Pegmatite Gabbro Weathered Granite	Broken/Abrasive Large Grain	04
		02
		01

Date	Hole#	DEPTH		FEET	
		From	To	Drilled	Core
2/18/04	WATER GATE WAY	343'	713'		
TOTAL					

7' CORE SRL
 250' 10'
 100' 5'

8-31-01 CB CO CAN
 TO HANNA

8-31-01 CB, CO 671

127' NQ IN HOLE. CONTINUE RUNNING
 NQ IN HOLE NQ STOP @ 192'
 DRILL OUT. NQ TO 302'

303-307 (303.5-304.5 CAVITY)
 (306-307 - CAVITY)
 INSER SRL WHT PULL.
 PULL NQ

Schwell @ 190'
 Burkhead to 240'

CW

BUY or RESERVE
140 ft / run pump
TRADE OR MATHS? $\sqrt{}$
WEIGHT?
PRICE?

$$\begin{array}{r} 150 \\ .65 \\ \hline 250 \\ 900 \\ \hline 97.50 \end{array}$$

$$\begin{array}{r} 2.6 \\ 50 \\ \hline 10.00 \\ 50 \\ .38 \\ \hline 400 \\ 150 \\ \hline 15.00 \end{array}$$

CB - 13'

Beam 6'

64

5 7/8" STABILIZER

LIGHTS

MUD

BARRE

HELP.

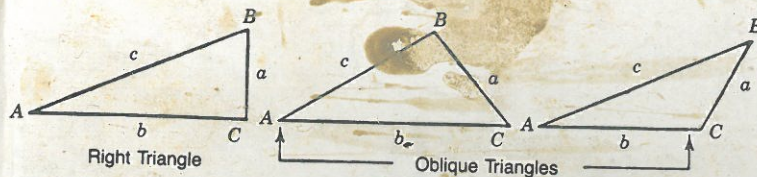
QUICK FROST

13 3/4
46
8 1/2
68
118

Harley

528-2837

TRIGONOMETRIC FORMULAE



Solution of Right Triangles

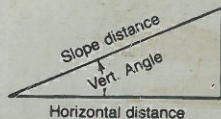
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\csc = \frac{c}{a}$

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

Solution of Oblique Triangles

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

REDUCTION TO HORIZONTAL



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

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

