

SCHRAMM

10/06 -

Forestry Suppliers, Inc.

1-800-647-5368

49354 Level Book

DAYTONA BEACH

SCHRAMM
10/06 -

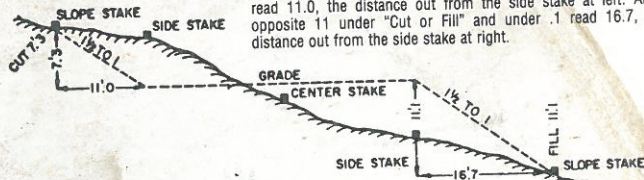
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DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

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

M012-1 Smith

2/26 566

2/27 565

2/28 566

3/2 587

3/12 581

3/14 591

3/15 602

3/16 613

3/17 623

10" = 15 X 17 - opening
steel (19x26) (2)
1/4"

10x16 (2)

2 gen. purpose cutting tips
smooth touch

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

clearing to

[illegible]

29° 10' 36" N
81° 07' 00" W

29° 12' 02" N
81° 02' 22" W

29° 12' 40" N
81° 05' 13" W

10/23 - 10/29

NEED:

W18814

4" x 2" BELL TREDNER (FEM x FEM)
PVC GLUE (BIG)
PVC PRIMER (BIG)

DAYTONA BEACH WATER MGMT. FACILITY²

10-23-06 CB, LB

FERRY DEPARTS w/ CARGO TRAILER
& DRY 2890 w/ BLUE FLAT BED TO
DAYTONA DRIP @ H₂O MGMT. FACILITY

10-24-06 CB, LB

ARRIVE @ SITE & TAKE DELIVERY
OF MATERIAL & HIRE DELIVERIES.
ADDRESS PRO FOR DRILL SITE &
H₂O SOURCE.

10-25-06 CB, LB - EH, GR

CB, LB TO PACIFICA TO PULL
PERMIT & MEET EH, GR w/ DESSER
& GOSWICK, HAVE TO PULL
PERMIT & VOLUNTIA G. HEATH
DEPT. EH, LB TO TRH w/ DEP 4854
CB, GR TO DAYTONA w/ DEP 5561
& GOSWICK

10-26-06

CS, GR

3

PULL PERMITS FROM UOWSIA Co.
TO SITE CHECK ON ARO PROGRESS

10-27-06

CS, GR

TO WILLOWOOD TO GET RIG. WORK
ON WIRE W/ LEO. BACK TO DITCHING
w/out RIG

10-28-06

CS, GR

BACK TO WILLOWOOD TO GET RIG.
BIN TO DITCHING W/ RIG & SET UP
SITE.

10-29-06

CS, GR

SET UP SITE, FIN TO TALK

11-7-06

CS, CO, GR

CONTINUE SETTING UP TO HAVE
DEPT. ? HUGHES FOR SUPPLIES
CANT GET MISSION PUMP PRICES
OR PUMPING STORMS

11-8-06

CS, LB, GR

PRIME MISSION PUMP
WORKS FINE. BOTTOM FITTING
IS INTAKE, TOP DISCHARGE
MIX MUD. BEGIN COLUMB

3-6

LT BRN/TAN F SAND. EXT. SHALE

6-16

LT BRN TO DARK GRN F SAND
POOR REC EXP. SHALE

16-26

LT. GR. SAND OVER PUMP
REC EXT. SHALE

PULL HQ Run 12" ROSSER CANT
TO 20'. PULL CANT. LOOSE
20' 8" PVC. SET. UP
CIRCUMFERENCE SYSTEM. HOIST PULG
8" PVC. 8.5 BBL HOLE PULG.

26-36

TAN F SAND. GR/SILT CLAY @
SITING IN RUN. EXT. SHALE

447 hrs

5

- 36-46 NO RECOVERY. Rx. shoes
- 46-53 OK GR & SAND w/ STEEL.
BT. SHOES ON MOST TIME GETTING
UNDER ALL IN. HAD 7 AMP
HOLE COGN.
- 53-56 OK GR SAND w/ STEEL FRAGMENTS
BT. SHOES
- 56-66 TRIED BT. SHOES WOULD NOT PUSH
PUT ON Rx SHOES. 4" DEC
ALL LARGE STEEL FRAGS.
MELANCHOLIA
- 66-76 NO RECOVERY. Rx. shoes
- 76-86. UNDER ALL WILL NOT GO IN.
PUMP HOLE. 4" DEC. BT. SHOES
GR STEEL & SAND. Rx @ BOTTOM OF
ROW
- 86-93 " GR LS. w/ STEEL FRAGS
BT. SHOES
- 93-96 GR SAND w/ STEEL FRAGS
pull N.G.

CLAMPS

CHECK VALVES

PLYWOOD

8" COUPLINGS

2x6

PORTLAND - AUGUST

448 hrs

SANZAN BLADES

DRIVER HEAD

120 STEEL NAILS

CRAYONS

11-9-01

CS, LB, ER

ER TO HUBS FOR FOOT VALVES
FOR MISSION PUMP. ALSO TO HONG
DEPT FOR BIKANO. SET UP TO
RUN 12" TRICONT 75 SET 8" P/C.
HAD TO DESIGN WAY TO HOLD 8" PK
UNDER TABLE B/C 8" COUPLING
WILL NOT GO THROUGH TABLE
ER PICK UP SHEET OF PLYWOOD,
2x6, & 2 RAR CLAMPS. BUILD
GROUND TABLE TO HOLD 8". PUT
CHECK VALVE ON SECTION END
OF MISSION PUMP. REPLUMB
AND MACHINE GETTING BACK
PRESSURE

4566r

11-10-06

VETERAN'S DAY 7
CD, LBER

PULL 8" PVC SURFACES CS6.
VERY TIGHT! PVC BROKE & BENT
STEEL ROD USED FOR PULLING.
CUT OFF TOP OF 8" DRILL 2
NEW HOLES LOWER ON PVC,
USE ROPE (3PLY) TO PULL PVC
PULL VERY SLOW AS TO NOT
BREAK PVC OR ROPE 55 UP
TO RUN 12" ROPEL CAME TO
90-93'

* MOD MACHINES WORKING 1650R

RUN 12" TO 93' PULL 12"
ROPEL CAME. BEGN COVERING 8" PVC
CS6 GOT TO 40' CUT PVC RUN
7 7/8" ROPEL CAME UNDER 8" PVC. CAME
AT BOTTOM OF PIPES PVC 7 7/8"
RUN 8" TO 86' CLINT

19 Sacks PictHARD

LB, GR HANS

M.	10			
T	10	(2x1.5)	+3	} +18
W	12			
4	10			
F	12	+ 10 holiday	+12	
Sat	10			
Sun	10	UNAVAILABLE		
M	12	(2x1.5)	+3	
T	8			

458 hrs

~~458~~

8

11-11-06

CS, LB, GR

REN TRENCH PITS DOWN
OUTSIDE OF 8" PVC, GROUT 10'
BLE PULL TRENCH & REN
INSIDE OF 8" PVC. NO GROUT @
BOTTOM MIX GROUT: pump with 8"
8" PVC TO BOTTOM TO SET ARMS
BOTTOM OF 8" PVC. PULL TRENCH,
REN OUTSIDE OF 8" PVC
TO 10' BLE PUMP GROUT.

6 PITS PORTLAND

11-12-86

CS, LB, GR

Run in No. BEGIN CORING.
pump this clean, mix M.O.
BEGIN CORING

93-96 LTGR GRAY LS

96-106 AS ASATS

106-126 GR MICROL FRACTURED LS

126-136 126-138 GR GRANITONE

133-136 SOFT. WASH OUT

~~136-138~~

136-146 136-138 SOFT. WASH OUT

138-139 GR FRACTURED MICROL
LS

139-141 SOFT. WASH OUT.

141-144 GR MICROL LS

144-146 SOFT. WASH OUT.

146-156 SOFT DRILLING VERY SOFT.

146-147 GR MICROL LS

147-152 CAVITY

possible cavity 500.
WASHED OUT

464 hr

10

156-166 INTERMITTENT SOFT USU/CLAY?
GR. CL

166-176 LOST CIRCULATION! @ TOP
OF RUN. SOFT @ TOP FROM
166-168. GR US u/soft US
INTERMITTENTLY

176-186 176-178 HARD GR CL
178-180 CAVITY
180-182.5 HARD GR CL
182.5-185 CAVITY
185-186 HARD GR CL

PIPE LOOSED UP GOT TIGHT.
HUNG. COULD GET US ON.
OUTSIDE OF PIPE AGAINST
BUREAU'S WALL. ABIS TO GET
PRESS. PULL NO NO 3"
SHOS.

468 hrs

11-13-06

CB, CB, GR

CB TO LEBURG (INDEPENDENT DRILLERS)
TO GET 3" CSG SHOS OVER NEW
SHOE: HAVE DELIVERED TO INDEPENDENT

LB, ER - Rig MNT.

SET UP TO DRILL IN 3" TO 186' BSC.
Run N NQ

186-196 INTERMITTENT OR CONS. CS ✓
PURELY CONS. L.S. WASH OUTS
PRESENT

196-206 AS ABOVE

206-216 AS ABOVE

216-226 AS ABOVE

226-236 AS ABOVE

11-28-06 CB, UB, GR

DIFFICULT TIME ENGAGING ATQ
MATT STARKWEATHER APPROVED

11/27/06. WILL REPLACE
WILKINS WING W/ NEW ONE

236-246 GR MINOR CS w/ INTERMIT.
PORELY COND. CS.

246-256 246-251 GR MINOR CS
251-253 CAVITY
253-256 GR/BRN FINE CS.

256-266 CAVITY

266-276 266-268 CAVITY
269-270 GR MINOR CS
270-272 CAVITY
272-276 GR/BRN CS

276-286 GR MINOR CS w/ INTERMIT.
CLAY & POREY COND. CS. -
CAVITY FILL?

AVON PARK? →

336-337 CAVITY
 337-338 R
 338-348 CAVITY
 348-354 R
 354-356 CAVITY

474 hrs

1300
 .45
 56500
 56500

2350
 .45
 18000
 14000
 15400

286-296 GR VUGGY LS TO GEN/TAN
 LAMINATED CL
 296-306 GEN/TAN VUGGY LS/MUDSTONE
 306-316 GEN/TAN LS w/CLAY LENSES.
 DIPS UP Slightly.
 316-326 AS ABOVE
 326-336 GR/TAN VUGGY CL
 333-336 CAVITY TRU
 336-337 CAVITY
 337-338 GR/TAN MUDSTONE TO GR
 POORLY SORTED CL.
 338-348 CAVITY
 348-352 GR/GEN/TAN LAMINATED CL
 352-354 AS ABOVE
 354-356 CAVITY
 356-366 GR/TAN VUGGY MUDCL CL.
 366-376 GR/TAN/GEN LAMINATED CL

11-29-06

CB, LB, GR

HOUSE CORN TO 376 BOGGS
CORNH.

376-386 BEN/TAN S&T LS w/ INTERA.
BEN/TAN/BLACK LAMINATED LENSES.
TO 380. 380-383 GR S&T LS.
383-384 BEN/TAN BLACK LAMINATED
LENSES. 384-386 GR/TAN/BLACK
LAMINATED LENSES

386-396 GR LS/MUDSTONE TO BEN/TAN/BLACK
LAMINATED LENSES TO TAN OOLITE
LS TO GR MUDSTONES TO TAN
LS.

396-406 GR/TAN VAGUELY w/
GR CLAY LENS @ 400!

406-416 TAN MOODIC CS

SWIRL TO NORTH ROAD

WIRELINE JUMPED SHEAVE
@ TOP OF MAST. FIX

RAW SPARKS SET IN

11-30-06

CB, LB, GR

HOLE OPEN & CLEAN TO 4 1/6' BLS.

416-422 BEN/TAN FRACTURED DOUMITIC
LS. PLUGGED OFF.

422-426 GR/TAN/CT-BEN LS.

426-436 GR/TAN/CT-BEN VUGGY &
INTERMIT. LAMINATED LS.436-446 TAN FOR MUDS LS
VUGGY.SWITCHED FROM ~~11/16~~ TO
LO/HI TO HI/LO IN GEAR
BOX 1330 RPM 150-175
PSI MUD PRESSURE. EXCELLENT
PERFORMANCE & RECOVERY.

446-456 TAN/GR MARSED LS. VUGGY

456-466 AS ABOVE. MOLDIC

466-476 BLACK/DK GR/GR MOLDIC LS
INTERMIT. SOFT SPOTS.

476-486 LT GR/TAN MARSTONE TO
GRN DOLOMITIC MOLDIC LS.

486-496 DRN MOLDIC DOLOMITIC LS w/
INTERMIT. BLACK LENSES.

496-506 TAN MOLDIC LS. MARSED/
LENSED.

506-516 TAN VUGGY LS TO GR/TAN
MARSED LS.

516-521 GR/DK GR MARSED MOLDIC LS
TO GR. ROCKY CONT. LS
TO GRN DOLOMITIC VUGGY LS

526-536 BRN DOWNY SUGGY U.
TO TAN MARE U. WORM
BURROWS.

536-546 BRN/GR DUGGY MARLEY U
W/ WORM BURROWS

546-556 AS ABOVE.
1300 AM H/LG GRAR
175-200 PSI HUG ADRIUS
ECC. REC.

556-566 AS ABOVE

566-576 GR/BRN DUGGY U. W/ INTERLING.

576-586 TAN DUGGY U. TO 4th BLACK
LENS TO TAN DUGGY U W/
BLACK INTERLING BURROWS.
TO TAN/GR DUGGY CONG.
LG

586-596 BEN/TAN/GR MOLDIC LS.
MOST GOOD CONSOLIDATION &
INTERMITT. POORLY CONS. LS.

596-606 BEN/GR MOLDIC LS. GOOD
CONSOLIDATION

606-616 TAN/GR MOLDIC LS.

CALL BOB W/ MESSINGER
GOING TO DISCUSS CSH
DEPTH: $\approx$ SAT H₂O INTERFACED

616-626 TAN GR MOLDIC LS

485/2

12-01-06

CB, UB, GR

626-636

TAN MOLIC LS.

HI/LO CHSR, 1480 RPM,

NO FEO. 100% RSC, 1200 PSI ROT.

150 PSI MUD PRESSURE

636-646

AS ABOVE

646-656

AS ABOVE

656-666

AS ABOVE

666-676

GR MOLIC LS TO TAN
MOLIC LS

676-686

AS ABOVE

686-696

TAN MOLIC LS TO TAN/TAN/
BLACK MARLES LS.

696-706 TAN DUBBY LS

706-716 TAN DUBBY LS TO LTGR/SWLS
LS U/TAN LS MANY TO
GR LS

716-726 GR LS TO TAN/SW LAMINATED
LS TO GR LS w/ WORN
BIRDS

726-736 AS ABOVE

736-746 AS ABOVE

746-756 AS ABOVE

756-766 AS ABOVE

766-776 AS ABOVE

4864

2/2/06

CB, US, GR

76-78 BEN/TAN Foss LS. CLASTIC.
1520 RPM, HI/LO GEAR, 150 PSI
MUD PRESSURE, 1200 PSI ROTATION,
0 PSI FROD PRESSURE.

78-79 AS ABOVE

79-80 AS ABOVE TO 798' GR MUD
LS W/ TAN LS MAPPING TO 803'.
BEN/TAN Foss. CLASTIC LS TO 804'.
GR MUD LS TO 806'.

806-816 GR/GLOB/TAN LS TO OR GR
HIGHLY MUD LS TO CT. GR./
TAN MUD LS.

816-826 TAN/BEN DOLOMITIC LS TO
GR MUD LS TO BLONN/
DOLOMITIC @ 825-826'

826-836 AS ABOVE

825 → TOP OF LOWER FLORIDAN

2-12-06

CB, CB, & R

TO LOWER HIRE SEAT, WEST
 MAINE: GRANGER FOR SUPPLIES.
 NEED SUPPLIES TO FIX SING-ONK
 IN CARGO TRUCK. HINGE STAPLES
 OUT. NEED TO PUT STRIPS OF
 BAR STOCK ON BACKS OF DOOR
 FRAMES, DRILL & BOLT.

NEED GRANTS, WELSH FITTINGS,
 ETC: OTHER HARDWARE.

2/3-06

CB, LB, GR

836-846

1740 RPM, 150 PSI MUD PRESSURES,
200 PSI, 1000, 1200 PSI ROTATION.

SLOW COLUMBIA HARD LX.

INTERMIT. DOLOMITE? DOLOMITE
LC

846-852

INTERMIT. GR. SUFF. L.S. w/ CALDEN
DOLOMITE L.S. DOLOMITE.

852-866

BEN DOLOMITE

857-859 - CAUTION

857-859 CAUTION

866-876

BEN VALLEY DOLOMITE

876-886

BEN DOLOMITE & DOLOMITE L.S.

886-896

AS ABOVE

505 W

896-906 GR Vuggy LS w/ INTERNT.
BLW. DOLOMITE BEDS.

906-916 GR Vuggy LS w/ SCAR
OG ? CENSEL

7-14-06

CB, LB, AR

916-926

1850 RPM, 1400 PSI ROTATION,
NO FEED, 150 PSI MUD PRESSURE
GR. VUGGY LS.

GATES 18 MB 2 1/2" AIR DRILL HOSE
500 PSI (2.45 MA) OUP

- (1) 20' 2" LONG BOSS CONNECTORS
(2) 7' LONG

WIRELINE JUMPED PULLEY.

18' NGAHP CAUGHT MUD HOSE
& TORE OVER LATER AT HOSE.
NEED TO ORDER NEW HOSES.
DOES NOT APPEAR TO BE
LEAKING @ PRESENT TIME.

926-936

GR/BEN VUGGY LS. DOLOMITIC?

936-946

SL/BEN VUGGY CLAYING LS.
DOLOMITIC?

946-956

CL/BEN VUGGY MUDIC LS (GUM?)
DOLOMITIC?

570 hrs

956-966 BEN/GR MOLASSIC URBAN DOLOMITE
 Ls. GRAY in ~~TOP~~ BOTTOM
 of RUL. (S. AT 700)

966-976 GR GRANITONE.

976-986 GR. GRANITONE.

986-996 GR GRANITONE, CONGLOMERATED

996-1006 GR/GRN CONGLOMERATED
 GRANITONE w/ BLACK
 (ORGANIC?) LENSES (PHOSPHATE)

TD

RAIN, THUNDERSTORMS

2-15-06

CB, LB, GR

RAIN, THUNDERSTORMS W.A.M.

OPEN HOLE TO 120' DEEP,
PLUGGED BIT. PULL ROD.

BIT 6005

4-3-07

CS, CB, CR.

Blowby 760' 3 1/2 pipe w/
 more tracers, 1-T new bit
 of STADAUZER, etc.

Mud Pump won't start,
 Tear down: UNISERS,
 Put back together

To post office to mail
 VHS of logs: CITATION (OBT.)

28 x 20' MAYHEW JR
520'

1-4-67

CH 40, 62

30

BEGIN OPENING UP HOLE

OPEN HOLE TO : 200' B.C.

SHALL & SAND BED FROM 160 - 200

PULL PIPE INTO 8" C.S.G.

LET SIF OVER HOLE TO SEE
HOW MUCH CLAYE OCEAN

SWITCH TO AIR @ 140'

1. 5-06

1-6-86

C3, C4, C5

pull post to make it
 7 1/2" steel Run in Trench
 4" @ 82' B.L. Bottom of
 4" C4 @ 86' B.L.

Long Runway from top - down
 it

Down up ?

1-7-07

ABC 36R

26.9

$$\begin{array}{r} 98.0 \\ 75.5 \\ \hline 12.5 \end{array}$$

$$\begin{array}{r} 5 \\ 39 \\ 26.9 \\ \hline 20.0 \\ 52 \\ \hline 180 \\ 156 \\ \hline 240 \\ 239 \\ \hline \end{array}$$

$$\begin{array}{r} 98.0 \\ 75.5 \\ \hline 22.5 \end{array} \quad \begin{array}{r} 27 \\ 2 \end{array}$$

$$\begin{array}{r} 26.9 \\ 22.5 \\ \hline 4.4 \end{array}$$

$$\begin{array}{r} 4.4 \\ 2 \\ 2.6 \\ 4.4 \\ \hline 10 \\ 104 \\ \hline 114 \end{array}$$

TOTAL TOP OF GROUT. @
75.5' BL. LET SET UP
THIS WEEK

GROUTED FROM 98' BL TO
75.5' BL

1-16-07

CS, LB, HM

Ran down the GABLA TO
 711 of HUNT. appears
 67m 21' section of 8" PVC
 above ASHLEY. and on top
 of HUNT. MIX more HUNT and
 64' to 64' BCL

1-17-07

CS, LB, HM

Ran down the GABLA TO
 711 of HUNT (2) 71' BCL
 67m 21' section of 8" PVC
 above ASHLEY. and on top
 of HUNT. MIX more HUNT and
 64' to 64' BCL

120-07. 05, 03, 6R

Rig will NOT start
JUMP HP 530

SUITED TO 6 1/2" PULLEY
CONE & BEARING DRILLING
THROUGHT GROUT

1-31-07

CS, LB, GR

36

FUEL RIG. SINK HOLE
OPEN UP UNDER RIG. CITY OFFICE
IN PROHIBIT TO CLEAN OUT
BOTTOM OF SINK. MOVE RIG
TALK W/ KC & SAK ABOUT
GETTING EMERGENCY PURCHASE
POWER FOR CONCRETE.
20 CUBIC YD CONCRETE DUMPED
INTO HOLE. NEED A CUBIC YD
MORE

2-1-07

CS, LB, RR

37

ORDER 8 AM C. 401 TO
PUT IN HOLE, ARRIVE N 11:00 AM.
DUMP IN HOLE. TAPE OFF.
LET CURE.

2-2-07

CS, LB, GR

TORONTOES LAST NIGHT.
VOLUNTARY & RAKE CO. CURFEWS.
POLICE ASKING PEOPLE TO
NOT LEAVE HOMES.

33-07

03, 40, 60

TO SITE. CONCRETE STILL
GREEN. LOTS OF RAIN. TO
LOWES TO GET NEW TIMBER
FOR UNDER RAIL.

24-07

03, 40, 60

THUNDERSTORMS. BUILD
HEADGATE RAIL FOR BLUE
TRAILER

2-13-07

CB, BL, LB, BL

RAIN, RAIN, RAIN. BL TO
ERR SITE, GPR LOOKS
GOOD. MOVE RIG BACK
OVER HOLE. SET UP RIG

MORE RAIN BL SAYS
GPR CANNOT BE RUN IN
RAIN. WANT TO GPR NEXT
SITE AS WELL

2-14-07

CB, LB, BL, R

CB, BL TO MEET CITY PARK
@ TULSAWILL A PARK TO GPR
& DISCUSS FENCING, OPTIONS

DRILL TO SITE & DRILL OUT
AERAND PLUG. STILL
GETTING HARD PLUG NOT
HOLDING. FILL HOLE 1)
HOLE PLUG. LET HYDRATE

CB, LB, GR

40

2-15-07

DRILL OUT HOLE PROB SEAL.
SAND STILL COMING INTO HOLE,
PULL OUT. CALL TOM MICHENER
TO DISCUSS POSSIBILITIES FOR
FIXING HOLE. DECIDE TO
DRILL OUT GR : PUT IN 10" PUL

ORDER 10" PVC FROM HUGHES.
LOCATE 13" HOLE DEENER :
LIC IN LAKE CITY. CB TO
LIC TO P/U HOLE DEENER.
10" DELIVERY TO TOMORROW 2/11

2-16-07

03, 10, 15R

41

USE HOLE OPENER TO OPEN
HOLE & DRILL OUT 8" ONLY
PULLED THROUGH CHARGES.
DO NOT WANT TO DRILL DEEP
UNTIL CSB IN AVAILABLE.

HUGHES DOES NOT DEPEND

LOCATED 10" PVC @ MORGAN
WELL IN MORGAN

2-17-07

CB, BL

LB SICK. P/O CSK @
MILKIN GRO. DRIVE TO
SITE & PREPARE TO
DRILL OUT ON 2/18/02

2-18-07

CB, BL

LB - SICK - WENT HOME

DRILL OUT 8" TO 102.5' O.C.
PULL ROD, SET 10" PVC CSK
TO 95' GROUT.

2-27-07

03, LB

CR-SICK

DRILL OUT PUGH IN BOTTOM
OF HOLE DRILL TO 106.5' DEEP

PULL ROD. & MIX GROUT.
PUMP GROUT INTO BOTTOM
OF HOLE: ALLOW GROUTING
LET CURE

2-28-07

43 LB.

OK - SICK

SET UP TO PULL OUT BOTTOM
BLON HYDRAULIC LINE.

PULL LINE & HAVE NEW HOSE
MADE

REPAIR THE LINES

RAIN? T-SHOWN NOT
IN

3-1-07

C3, L4, G2

DIRE NOT PROB I
 ONWARD DIRE TO 126'
 BLI HOLE CLEANSING, OR
 GOOD, BUT LOT: LOT
 OF COTTON NO SAND.

Q NOT FEELING GOOD
 TO DOCTOR IN
 MEDICAL DEPT - SINUS
 UPPER RES. INFECTION.
 IN ANTI-BIOTIC

3-2-07

LB, GR

LB - SICK

LB, GR TO STE. 7-4-4 H

HEADACHE BACK: CLEAN UP

SITE BEFORE RAIN, T-SIDE, 10-15
IN.

3-3-07

CO, LB, GR

TRIP IN 7 7/8" OPEN
TO 10' LBS, COMED CLOGGED
w/ PVC. PULL PIPE CLEAN
LINES / BOTTOM, T-SIDE

AGF2 FOAMING AGENT
QUICK BEL
SPINDEL ADAPTER
8X10 PACKER
8X10 FRAMCO
1/2 TENSAR

3-4-07

CB, LB, GR

CLEAN OUT MUD TH, SPIN
OVER 7410 IN PIPE (7 1/8)

DRILL TO 240' ACH. BODING
ALONG 10' PVC RAIL
CB. PULL PIPE,

WANT TO RUN 8" PVC BOW
10" TO JOINT CORK

CB TO ORLANDO - ATLANTIC
TO GET 8 1/2 INCHES

3-5-07

CB, LB, ER

LB, ER TO MILWAU QUOL
TO GET 8" PUL : ATTEND

CB, COULD NOT GET PACKERS IN
OCEANO. THEN ATLANTIC OR
TO DAY BACK TO VITO, THEN
W/ KL

OCEANO TO VITO 4x8 : 6x10"
PACKERS TO EXTRE IN 4" PUL
TO STOP USE FOR WORK

TO TUN

3-13-07

CB, LB, GR

ARRIVED SITE. DELIVERED FROM
ATLANTIC NOT AT SITE. TO
ORLANDO TO A/ DELIVERED
BACK TO SITE. LB COT 12"
WING RIF TO 93 1/2". PILL TABS
RUN WING RIF TO 126' 1/2".
SET 8" PJC. 6000 SETS

HAD TO POST COT 20'

HAD TO

3-14-07

CS US GR

PUT JOINT BACK TOGETHER
TAKE $9\frac{3}{4}$ " WINGBIT AND
 $7\frac{7}{8}$ " STABILIZER PUT $7\frac{7}{8}$ "
TRI CONE ON $7\frac{7}{8}$ " STAB. RUN
IN PIPE AND TO 126' B.S.
BOTTOM OF 8" CSG

MIX MUD, START RUNNING
PIPE.

NO LEAKS.

TRUCK ON.

LOST CIRCULATION @
336' B.S.

STAB JOINT JOINT.
PULL OUT ROD. & OUT
 $7\frac{7}{8}$ " TRI CONE.

CLEAN IR

WILL DOBLER

601-649-3200

GREEN-ELC

WES WILSON

601-764-8106

Bruce

501-8880

3-15-07

03, 03, 6R

CONTINUE STRESSING THIS W/

FOAM / A.R. TO 390' BLI

GR TO 1-C TO PK BID

3-16-07

03, 03, 6R

ABTD 422'

STAMPED 420'04

TO 442

C44 56Y
BLACK CHERRY 4.5Y P_u

- CHECK VALVE FOR AIR LINE
- 1" STEEL Y⁶ 2" HOSE PRESSURE
- QUICK FIRM
- 82 MUD
- 1" HOSE BOSS 20' 200 PSI
PRESSURE
- KELLY HOSE - p. 26
- 3 1/2" SUPPLY AIR TROUS
- 2" AIR LINE ~~2" PT X~~
2" HOSE BOSS
- 2" CHECK VALVE

3-17-87

CB, CS, GR

SPACE W/ JIM M. BOY
: JEFF LYNN (SARCO)

RUNNING QUICK FIRM
W/ 82 MUD. INTERIOR W/
MUD INTO AIR
/ STOP FIRM @ 470'
RUNNING 85 PSI AIR.
GUM CON. DOWN TO

542' BUT NOT ENOUGH
AIR TO REACH CUTTING
TO SURFACE NEED
MIN. 480 PSI @ 1000'

NEED COMPARISON

542'

4/9-12/07 O.S.B. CR

Still don't have authorization
to get core. Please
for Okinawa, Nant.

1x 20' water fall in h/a

Build well hook & remove

SULLAIR COMPRESSOR 40.6 hr
@ Delivery.

Took Delivery @ 8am 4/17/07

Sullair
42.7 hr

4/17/07

CB, CB, GR

TOOK DELIVERY of
COMPRESSOR @ 8am. 50'
HSE NOT LONG ENOUGH.
NEED 2 x 2" BOSS CONNECTION
TO MAKE UNDER THIS ALSO
NEED FUEL PUMP HSE ETC.

CB. TO FL HSE. TO GET BOSS/
HSE BOSS NOT AVAILABLE ON
Amazon, Tim Madsen + P/L
@ Delivery to Vt. Name HSE

Begin drawing. Madsen HSE
at Farm

Drive to 520'

Sullair
52.10 hr

642'

4/18/69

CB, CB, GA

Continue pumping W) and /
from / at times

STAIN COVER ONLY COULD FOR
INTERVIEW

Run to 642'

SCIDE NOT WORKING PROPERLY
CAN NOT STALKWATER TO
DETERMINE PROBLEM. NEED TO
PUT PRESSURE ON HILL WHEN
@ FAR LEFT. GET TO WORK

360' BUS

5/1/67

Res

800-
432-6197

4/19/67

OS, LB, GR

Because can blow slide Res (good so it will slide better. Run pipe, Drop clean to bottom

Run w/ 52 mud / quick turn mixture. blow head.

352 to 375 psi good air pressure drilling

Run to 682' 4.000 bars
mud / 3 1/2 in 3

Run pipe to 585 ftu near

top of 4.000 bars @ 360'
Btu. Bottom @ ~680'

4.20.07 03.03.62

On to LIVE MAX - D
p/o. MAXWELL JOURNAL.

Am able to take to 6th
5/96

need 3 1/2 / maxwell sub to land
top.

4-21-07

24, 13, 62

new on $3\frac{1}{2}''$ / new
50% delivery. Run in
 $3\frac{1}{2}''$, want 50%

Weld to Rod. Run in
TAPER

4.22-07

03, 14, 62

Run in NGLK to
TOP of STAGNANT to and 450'

only got to 320' work
60 further.

NEED 1" BLACK IRON PIPE
680'

1-2)-02

03, 03, 04

LOOSE ~~1'~~ 1" PIPE
CANNOT GET UNTIL TAILER
ORDER.

TO 2H

~~5-1-07~~

5-1-07 C3, L3 GL

P/O 1" ALACK, now
PIPE. NEED T MAKE
FINE TO HOLD 1" P/O

TIGHTEN ALL CAPS

NO O₂ - GL TO HULL 2
GET O₂ ? AERATION FINE.

MAKE FINE

C3 GLT STEEL IN AS
SHE OF BRIDGE, CAN
EVAL AS TO DR

UNDER. AERATION

FOR N 13

5-2-07 CB, LB, BL

CB only seen to date
on 5/3/02

continue looking in the
to the lake.

5/3

5/4

5/5

5/2

5/21

5/22

5/23

5/21

5/25

5/26

6/5

4/6

6h

6/8

6/3

6/10

6/14

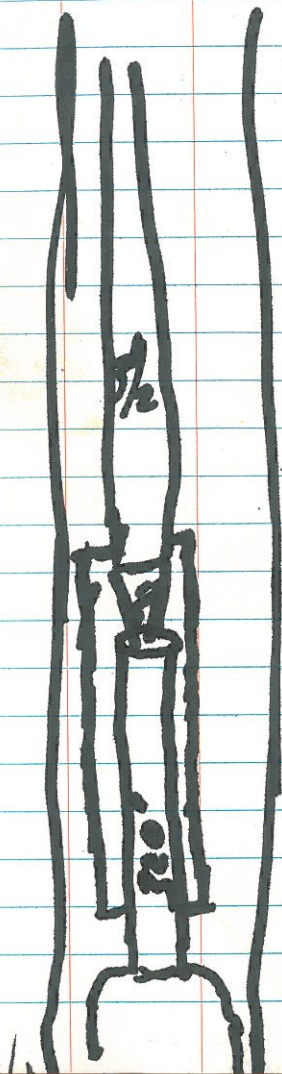
03.14.02

Run in 1" Back man
p. 15 to 680' 04.

MR 23 SAKS GROT TWO
pump. pull to 80!

85 1/2° Above Ground

TAP
Cant.
Wells.



CURVE TABLES

HOW TO USE CURVE TABLES

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

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

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

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

EXAMPLE

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

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

Tan. in Tab. I opp. 23° 20' = 1183.1
1183.1 ÷ 10 = 118.31.

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

(If corrected Ext. is required find in same way)

Ang. 23° 20' = 23.33° ÷ 10 = 2.3333 = L. C.

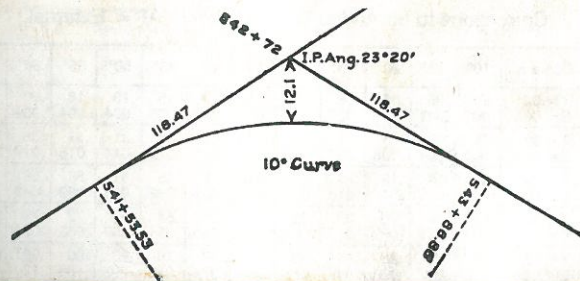
2° 19 1/2' = def. for sta.	542	I. P. = sta.	542 + 72
4° 49 1/2' = " " "	+ 50	Tan. =	1 .18.47
7° 19 1/2' = " " "	543	B. C. = sta.	541 + 53.53
9° 49 1/2' = " " "	+ 50	L. C. =	2 .33.33
11° 40' = " " "	543 +	E. C. = Sta.	543 + 86.86
	86.86		

100 - 53.53 = 46.47 × 3' (def. for 1 ft. of 10° Cur.) = 139.41' =

2° 19 1/2' = def. for sta. 542.

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

Def. for 36.86 ft. = 1° 50 1/2' for a 10° Curve.



$$3^{\circ} = 460'$$

$$4300^{\circ}$$

$$\begin{array}{r} 4 \\ 520 \\ 340 \\ \hline 180 \end{array}$$

$$231$$

$$320$$

$$4620$$

$$79$$

$$\begin{array}{r} 125.20 \end{array}$$

$$\begin{array}{r} 520 \\ 220 \\ \hline 300 \end{array}$$

$$18 = 360$$

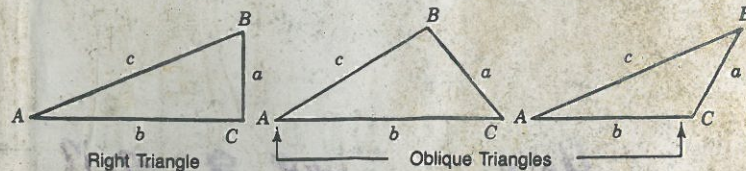
$$38 = 760$$

$$1120$$

$$1303$$

$$4581 - 712 - 283 - 1$$

TRIGONOMETRIC FORMULAE



Solution of Right Triangles

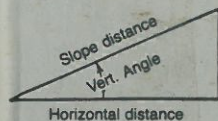
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\csc = \frac{c}{a}$

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

Solution of Oblique Triangles

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

REDUCTION TO HORIZONTAL



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

