

GL04751

WELL Bl-VF-T-1

WELL CONSTRUCTION SUMMARY

LOCATION or COORDS: Beryl, Utah
335, 17W, 21dd

ELEVATION: GROUND LEVEL 5300 ft.
TOP OF CASING 5302 ft.

DRILLING SUMMARY:

TOTAL DEPTH 353 ft. below land surface
BOREHOLE DIAMETER 9 1/2"
DRILLER Stephenson Drilling;
Andrew McPherson
Russ Mangelsen
RIG RT-1800
BIT(S) Tricone
DRILLING FLUID Bentonite
SURFACE CASING 40' of 22" ID.

WELL DESIGN:

BASIS: GEOLOGIC LOG GEOPHYSICAL LOG
CASING STRING(S): C=CASING S=SCREEN
C - 0 - 180
S - 180 - 240
C - 240 - 260
S - 260 - 340
C - 340 - 353

CASING: C1 0-180'
C2 240-260'
C3 340-353'
C4 _____
SCREEN: S1 180-240'
S2 260-340'
S3 _____
S4 _____

CENTRALIZERS Every 100'
FILTER MATERIAL see comments
CEMENT 0-40'; 245-255; plug=348-353'
OTHER 2" ID SOUNDING PIPE 0-320'

CONSTRUCTION TIME LOG:

TASK	START		FINISH	
	DATE	TIME	DATE	TIME
DRILLING: <u>0-353'</u>	<u>12-5-80</u>	<u>1824</u>	<u>12-6-80</u>	<u>0800</u>
GEOPHYS. LOGGING:	<u>12-6-80</u>	<u>0930</u>	<u>12-6-80</u>	<u>1245</u>
CASING:				
FILTER PLACEMENT:				
CEMENTING:				
DEVELOPMENT:				
OTHER: <u>Reaming</u>	<u>12-7-80</u>	<u>1305</u>	<u>12-80</u>	

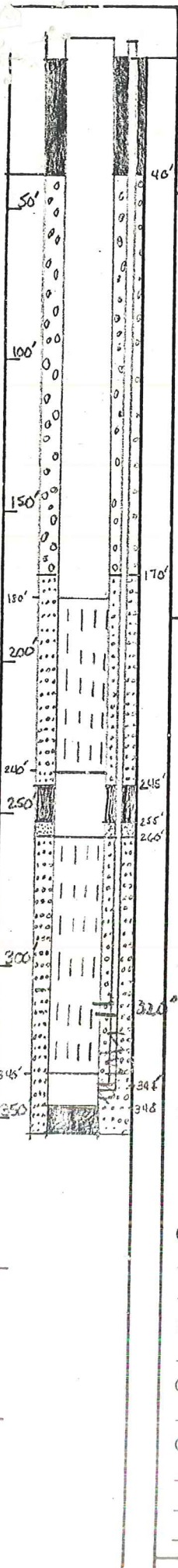
WELL DEVELOPMENT

Air lifting
260-340'; 150-200 gpm
Began 12/10/80 1408
Finish 12/10/80 - 1935
180-240'; 30-40 gpm
Began 12/10/80 1935
Finish 12/10/80 2335

COMMENTS:

Filter material:
Pro gravel 40-170'
.8-12. 170-240'
" 255-353'
~~Sand 255-260' (Fine Sand)~~

PROJECT BMO-MX 80-300-45
VALLEY FILL DRILLING PROGRAM FY-81
LOCATION Beryl, Utah 335, 17W, 21dd
PERSONNEL D. Williams



LOC. or COORDS. Beryl, Utah
33S, 17W, 21dd
 GROUND ELEV. 5300 ft.
 TOTAL DEPTH 353 ft.
 BOREHOLE DIAM. 9 7/8"

DRILLER Stephenson Drilling
Andrew McPherson
Russ Mangrison
 RIG RT-1800
 BIT(S) Tricone
 FLUID Bentonite

START DATE	12-5-80	FINISH DATE	12-6-80
TIME	1824		0800
GEOPHYS. LOG	<input checked="" type="checkbox"/> YES		<input type="checkbox"/> NO
HOW LEFT	<u>cased</u>		

LOCATION Beryl, Utah 33S, 17W, 21dd
 LOGGED BY D. Williams

PROJECT 80-300-45
FY-81 Valley Fill Drilling Program

DEPTH	PENE RATE	CIRC RET LOSS	AIRLIFT Q (gpm)	MATERIAL	SYM BOL	DESCRIPTION and COMMENTS
0	14 min			Clayey Sand w gravel		Clayey Sand w gravel - (0-10) () reddish brn (5% R 4/3) (2 SVR 6/3) 20% clay, 50% fsd-csd (60% volc, 30% carb, 10% gz) ps; sdt-subind - subang; gvl-subind; strucless; n.p. not stky; no consol; mod Hcl rxn. 30% f gvl (90% volc, 10% carb)
10	42 min			Sand & gravel		Sand & gravel (16-20) () brn (w 10% R 4/3) (d 10% R 3/3) 50% fsd-csd (75% volc, 20% carb, 5% gtz) 50% f gvl (100% volc) sd-subind to subang; gvl-subind to subang; ps; strucless, n.p. not stky; no consol; wk. Hcl rxn. Bit chatter
20	30 min			Sand w very little gravel		Sand (20-30) () very dk grayish brn (w 10% R 3/3) (d 10% R 6/2) 90% fsd-csd (80% volc, 10% gtz, 10% carb) 10% f gvl (100% volc) ms; sd-subind to subang; gvl-subang to ang; strucless; n.p; not stky; no consol; no Hcl rxn. Ang chips might indicate boulders encountered.
30	22 min			Sand w very little gravel		Sand w/v little gravel (30-40) () same as above
40	Not there			Sand w some gravel		Sand w some gravel (40-50) () dk brn (w 10% R 3/3) (d 10% R 5/3) 80% fsd-csd (75% volc, 15% gtz, 10% carb) 20% f gvl (100% volc) - ps; subind to subang sd; gvl-subind to ang; strucless; n.p; not stky; no consol; wk. Hcl rxn.
50	10 min			Sand w same gravel		Sand w some gravel (50-60) () same as above
60	9 min			Sand w very little gravel		Sand w very little gravel (60-70) () dk reddish gray (w 5% R 4/3) (d 5% R 6/3) 95% fsd-csd (80% volc, 15% gtz, 5% carb) 5% f gvl (100% volc) ms; sd-subind to subang; gvl-subang to ang; strucless; n.p, not stky; no consol; no Hcl rxn.
70	10 min			Sand w very little gravel		Sand w very little gravel (70-80) () same as above
80						

LOC. or COORDS. Beryl, Utah 335, 17W, 21dd
 GROUND ELEV. 5300 ft.
 TOTAL DEPTH 353 ft.
 BOREHOLE DIAM. 9 1/8 inch

DRILLER Stephenson Drilling
Andrew McPherson
Russ Mangelson
 RIG RT 1800
 BIT(S) TRICONE
 FLUID BENTONITE

	START	FINISH
DATE	<u>12-5-80</u>	<u>12-6-80</u>
TIME	<u>1824</u>	<u>0800</u>
GEOPHYS. LOG	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
HOW LEFT	<u>CASED</u>	

LOCATION Beryl, Utah 335, 17W, 21dd
 LOGGED BY D. Williams

PROJECT BMD-MX 80-300-45
Fy-81 Valley Fill Drilling Program

DEPTH	PENE RATE	CIRC RET LOSS	AIRLIFT O (gpm)	MATERIAL	SYM BOL	DESCRIPTION and COMMENTS
80	15min			Sand		Sand (80-90) () reddish brn (w/10% 4/3) (d 10% 6/3) 99% fcd-csd (80% volc, 15% gte, 5% carb) ms; subnd to subang; strucless; n.p; not stky; no consol, wk Hcl rxn.
90	13min			Sand		Sand (90-100) () same as above
100	20min			Sand		Sand (100-110) () same as above
110	12min			Sand		Sand (110-120) () same as above
120	13min			Sand		Sand (120-130) () same as above
130	9min			Sand		Sand (130-140) () same as above exception sd - msd - csd 99%
140	11min			Sand		Sand (140-150) () same as above exception fcd - csd - 100%
150	12min			Sand		Sand (150-160) () same as above
160						

LOC. or COORDS. Beryl, Utah
 GROUND ELEV. 5300 ft
 TOTAL DEPTH 353 ft
 BOREHOLE DIAM. 9 7/8 in

DRILLER Stephenson Drilling
Andrew McPherson
Russ Mangelson
 RIG RT 1800
 BIT(S) Tricone
 FLUID Bentonite

START	FINISH
DATE <u>12/5/80</u>	<u>12/6/80</u>
TIME <u>1824</u>	<u>0900</u>
GEOPHYS. LOG <input checked="" type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
HOW LEFT <u>Cased</u>	

LOCATION Beryl Utah 33S, 17W, 21dd
 LOGGED BY D. Williams

PROJECT FIMS-WN 20-205-46
RIFY Valley Fall Drilling Program

DEPTH	PENE. RATE	CIRC RET LOSS	AIRLIFT Q (gpm)	MATERIAL	SYM-BOL	DESCRIPTION and COMMENTS
160	10min			Sand		Sand (160-170) () reddish brn (w 50% 4/3) (d 5VR 6/3) 99% fsd-csd (85% volc, 15% qtz, 5% carb) ms; subang to ang; streakless; n.p.; not stky; no consol; no Hcl rxn.
170	5min			Sand		Sand (170-180) () same as above
180	27min			Sand		Sand (180-190) () dk grayish brn (w 10% 4/3) (d 10% 9/2) fsd-csd 99% (60% volc, 35% qtz, 5% carb) ms; subang to subang; streakless; n.p.; not stky; no consol, no Hcl rxn.
190	10min			Sand		Sand (190-200) () same as above
200	3min			Sand		Sand (200-210) () same as above exception: 10% silt 90% fsd-csd
210	7min			Sand		Sand (210-220) () same as above
220	9min			Sand		Sand (220-230) () same as above exception: 5% silt 95% fsd-csd; r nd to subang
230	9min			Sand		Sand (230-240) () same as above
240						

LOC. or COORDS. Beryl, Utah
33S, 17W, 21 dd
 GROUND ELEV. 5300 ft.
 TOTAL DEPTH 353 ft.
 BOREHOLE DIAM. 9 1/2 inch

DRILLER Stephenson Drilling
Andrew McPherson
Russ Mangelson
 RIG RT 1800
 BIT(S) Tricone
 FLUID Bentonite

	START	FINISH
DATE	<u>12/5/80</u>	<u>12/6/80</u>
TIME	<u>1824</u>	<u>0800</u>
GEOPHYS. LOG	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
HOW LEFT	<u>casual</u>	

LOCATION Beryl Utah 33S, 17W, 21 dd
 LOGGED BY D. Williams

PROJECT BMD-MX 80-200-46
FY-80 Valley Fill Drilling Program

DEPTH	PENE. RATE	CIRC. RET. LOSS	AIRLIFT Q (gpm)	MATERIAL	SYM. BOL	DESCRIPTION and COMMENTS
240	12min			Sand		Sand (240-250) () dk grayish brn (w/10YR 4 1/2) (d/10YR 6 1/2) fsl-csd 99% (70% volc, 20% qtz, 10% mafics) ms; subrd to ang; strucless; n.p; not stky; no consol; 100 Hcl rxn.
250	10min			Sand		Sand (250-260) () same as above
260	14min			Sand		Sand (260-270) () same as above.
270	16min			Sand		Sand (270-280) () same as above exception: 10% silt + clay 90% fsl-csd (65% volc; 30% qtz, 5% mafics)
280	25min			Sand		Sand (280-290) () same as above
290	10min			Sand		Sand (290-300) () same as above
300	8min			Sand		Sand (300-310) () same as above
310	20min			Sand		Sand (310-320) () same as above exception 15% silt + clay 85% fsl - msd
320						

LOC. or COORDS. Beryl, Utah
33S, 17W, 21dd
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 TOTAL DEPTH 353 ft
 BOREHOLE DIAM. 9 7/8 inch

DRILLER Stephenson Drilling
Andrew McPherson
Russ Mangelsen
 RIG RT 1800
 BIT(S) Tricone
 FLUID Bentonite

	START	FINISH
DATE	<u>12/5/80</u>	<u>12/6/80</u>
TIME	<u>024</u>	<u>0800</u>
GEOPHYS. LOG	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
HOW LEFT	<u>cased</u>	

LOCATION Beryl, Utah 33S, 17W, 21dd
 LOGGED BY D. Williams

PROJECT BIRD-MX 80-300-45
EY-81 Valley Fill Drilling Program

DEPTH	PENE. RATE	CIRC RET LOSS	AIRLIFT Q (gpm)	MATERIAL	SYM-BOL	DESCRIPTION and COMMENTS
320	15min			Sand		Sand (320-330) () dk grayish brn (w 10% 4/2) (d 10% 5/1) 15% silt, 85% fsd-msd (80% volc, 15% qtz, 5% mafics) ms; subnd to subang; n.p; not stky; no consol; no Hcl rxn.
330	23min			Silty Sand		Silty Sand (330-340) () dk grayish brn (w 10% 4/2) (d 10% 5/1) 20% silt; 80% fsd-msd; (80% volc, 15% qtz, 5% carb) ms; subnd to subang; attrless; n.p; not stky; no consol; ut Hcl rxn
340	27min			Silty Sand		Silty Sand (340-350) () same as above exception fsd-msd (75% volc) 5% qz, 5% carb, 5% mafic
350						

CENTURY GEOPHYSICAL CORPORATION
Tulsa, Oklahoma

COMPANY: **FUGRO NATIONAL**

BOREHOLE: **BL-VF-T-3**

AREA: **BERYL** ELEVATION: **5300'**

COUNTY: **IRON** STATE: **UTAH**

SECTION: **21dd** TOWNSHIP: **33S** RANGE: **17W**

HOLE DATA

TOTAL DEPTH - DRILLER: **350'** BIT SIZE: **9.9"**

TOTAL DEPTH - LOGGER: **353'** CASING - TYPE & SIZE: **NONE**

TOTAL FOOTAGE LOGGED: **353'** CASING DEPTH: **NONE**

LOGGING SPEED: **60/MIN** BOREHOLE FLUID: **MUD**

REFERENCE LEVEL: **6.1** FLUID RESISTIVITY: **18.0 @ 1"**

PROBE NO.: **9055A-238** SOFTWARE LEVEL: **V3L10**

SCALE SELECTION: OPERATOR CLIENT

REMARKS:

BOREHOLE: **BL-VF-T-3** DATE: **12-06-80**

UNIT/OPERATOR: **7740/JONES** FIELD OFFICE: **CARSON CITY**

EQUIPMENT DATA

PROBE MODEL	9010	9020	9030S	9030
PROBE DIAMETER	1.87"	2.6"	1.87"	1.4"
DETECTOR TYPE	NM	NM	NM	NM
DETECTOR SIZE	8.5" x 1.25"	1.25" x 4.5"	8.5" x 4.5"	5" x 3.12"
STD. FACTOR	1.58 x 10 ⁻⁴	---	5.68 x 10 ⁻⁴	1.62 x 10 ⁻⁴
STD. DEATH TIME	1.41 sec	---	1.19 sec	1.24 sec
CALIB. MODEL LOC.	---	---	---	---
CALIB. DATE	---	---	---	---
K FACTOR x 10 ⁻³	---	---	5.6	---
DEATH TIME (min)	---	---	1.1	---
TEST READING	---	---	---	---
WATER FACTOR	---	---	---	---
CASING FACTOR	---	---	---	---

NATURAL GAMMA

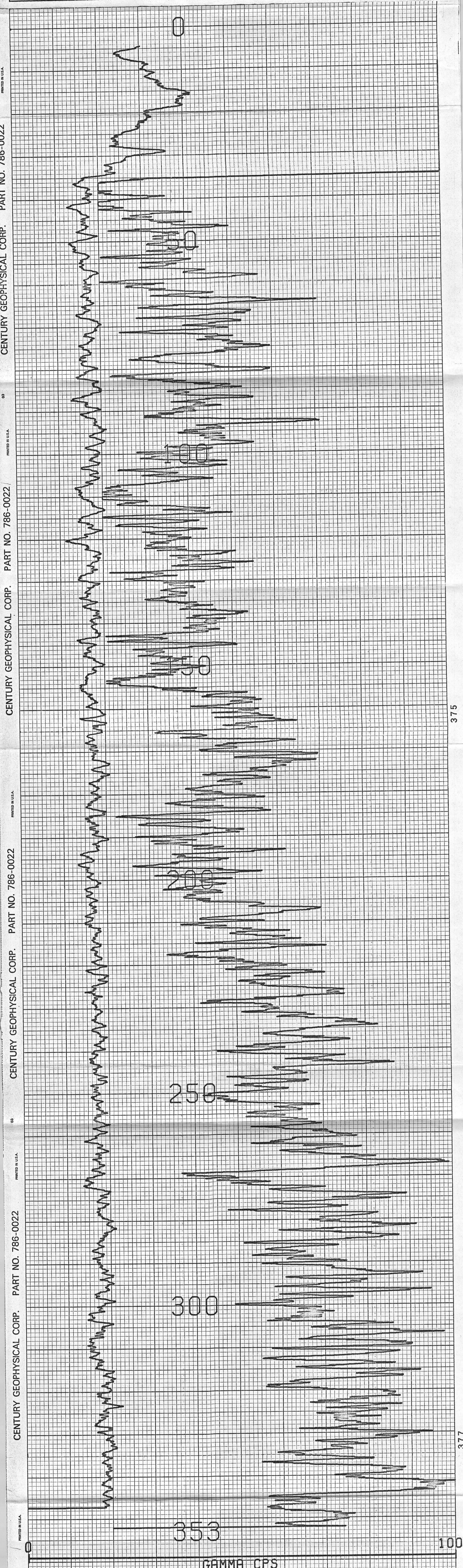
DETECTOR TYPE	---	NM	---	NM
DETECTOR SIZE	---	5" x 1.5"	---	5" x 1.5"
SOURCE TYPE	---	GM	---	GM
SOURCE NO.	---	---	---	---
SOURCE STRENGTH	---	---	---	---
SOURCE SPACING	---	---	---	---

DENSITY

DETECTOR TYPE	---	---	1.8" x 0.8"	---
DETECTOR SIZE	---	---	---	---
SOURCE TYPE	---	---	---	---
SOURCE NO.	---	---	---	---
SOURCE STRENGTH	---	---	71-1-434	---
SOURCE SPACING	---	---	10"	---

RESISTIVITY

ENCL. PT. RESISTANCE	1.40 x 2.51"	---	1.40 x 2.51"	1.70 x 2.51"
RESISTIVITY	---	8" FOCUSED	---	---
SELF POTENTIAL	YES	---	YES	YES
TEMPERATURE	---	---	---	---
DEVIATION	---	---	---	---
CALIBER	---	YES	---	---



226 442

GAMMA CPS

N-N CPS

COMPU-LOG V3L9 PLOT 12-06-80

BL-VF-T-3

FUGRO NATIONAL

BERYL

HOLE DIAMETER: 09.9

CAL STD CPS = 0000 CAL RUN CPS = 0000

PROBE # 9055A-238 PROBE CAL BIAS = +00000

TRUCK # 7740 DATA: V3L10

APPL. #7 D

JONES, F.

VERTICAL DEVIATION

COMPULOG V3L1 DEVIATION

HOLE ID: BL-VF-T-3

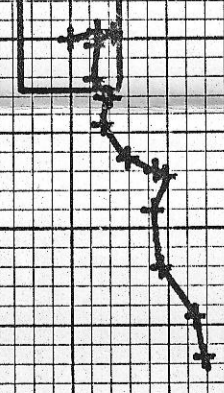
SCALE: 1 FT/IN Δ = 25 FOOT INCR

MAG DECL: 16.0 Δ = TOP OF ZONE

TRUE DEPTH: 354. FT ◇ = BOTTOM OF ZONE

AZIMUTH: 158. TRUE NORTH ↑

DISTANCE: 1.8 FT



CENTURY GEOPHYSICAL CORP. PART NO. 786-0022

375 377 1000 379