

019043

SURVEY NOTES & CALCURATIONS

FOR GRUM TRAVERSE FOR D.D.H.'S

80-A-200

TO

80-A-213

BY: D ARMSWORTHY
J. MOROZ

DATE: MAY 22/81

2030D LOOP TRAVERSE

① BRUM FOR

D.O.H LOCATIONS

B.S. H.I.W 1422
 STA. H.I.W 1405
 F.S. A

H.I. 1.351 m.
 H.P. 1.426 m.

HZ L 300-30-42 } 300-30-27
 241-00-54 }

V L - 92-59-57 } 92° 59' 07"
 267-01-42 }

H.D. 89.016 m 89.019
 S.D. 89.140 m 89.139

②

B.S. H.I.W 1405

STA. A

FS B

H.I. 1.484

H.P. 1.370

HZ < 194-23-09 } 194-22-58
28-45-54 }

VERT < 93-00-13 } 92°59'36"
267-01-00 }

H.D. 213.820 m 213.822

S.D. 214.120 m 214.118

③

B.S. A

STA B

I.S C

H.T 1.486

H.I.D. 1.373

HZ. < 182-25-12 } 182-25-03
 04-50-06 }

VERT. < 94-35-03 } 94°32'09"
 265-28-45 }

H.D. 137.396 m 137.389

S.D. 137.827 m 137.826

✓
D.D.H 80-A-209

H.J. 1.496

H.P. 1220

BS. A

S.D. B

F.S.

(100H's)

HORZ. D. 83.735

V. D. -7.510

H2 L 112-22-42 } 112-22-23
224-44-46 }

D.D.H 80-A-204

H.D 33.150 33.160

V.D -6.86 -6.84

H2 L 137-49-42 } 137-49-49
275-39-39 }

DD. 17 80-A-202

H.D 42.460 42.454

V.D -5.937 -5.947

H2 L 238-52-00 } 238-51-45
117-43-30 }

D.D.H. 80-A-205

(5)

HZ DIST. 129.488 ✓

V. DIST. -7.464 -7.458

HZ. < $\left. \begin{array}{l} 232-56-38 \\ 105-53-24 \end{array} \right\} 232-56-42$

D.D.H. 80-A-208

HZ. DIST. 233.254 ✓

V. D. -6.589 -6.612

HORIZ. < $\left. \begin{array}{l} 237-58-00 \\ 115-56-08 \end{array} \right\} 237-58-04$

D.D.H. 80-A-212

HZ. DIST. 104.651 104.652

V. D. -7.872 -7.877

HORIZ. < $\left. \begin{array}{l} 213-08-48 \\ 66-17-08 \end{array} \right\} 213-09-34$

DD.H 80-A-210

(6)

H.D. 92.861 92.860

V.D. -8.458 -8.463

HORZ. < 206-51-50 }
V 53-43-22 } 206-51-41

DD.H 80-A-211

H.D. 89.053 89.055

VD -7.964 -7.973

H2 < 168-33-06 }
337-05-50 } 168-02-55

DDH. 80-A-209

LIFT

1.80w

HORZ.D. v 120.248 120.212

V.D. -8.059 -8.071

H2 < 139-38-03 }
272-15-42 } 139-38-19
279-16-39 }

BS. B

H.I. 1.565 m

SU. C

H.P. 1.22 m

F-S

(7)

D.D.H. 80-A-200

H2 D. 149.778 149.777

V.D. +6.534 +6.512

H2. C 319-36-58 } 319-07-06
279-14-12 }

D.D.H. 80-A-213

H2 D 98.288 -

V. D. +3.018 +3.025

H2. C 265-02-12 } 265-02-04
170-04-08 }

D.D.H. 80-A-206

H2 D. 42.469 42.471

V. D. +1.326 +1.316

H2. C 258-22-24 } 258-22-15
156-44-30 }

⑧

D.D.H. 80-A-203

H.D. 20.881 20.880

V.D. -1.422 -1.419

H2. < 116-30-36 } 116-30-15
V 233-00-30 }

D.D.H. 90-A-201

H.D. 83.815 83.813

V.D. -5.011 -5.040

H2. < 98-18-24 } 98-18-1A
196-36-28 }

MAY 25/81

CRUM CLOSED LOOP Cont'd

B.S. B

S.O. L

F.S. H.I.W. 1423

HORZ. L 180-09-30
00-19-00

VERT. L 89-41-54
270-19-12

H.I. 1.588 m

H.P. 0.996 m

H.D. 410.442 m ✓

S.D. 410.449 m 410.449

00-18-06
60 19-42

37-16
2 18-39

②

BS. C
SV. HIW 1423
FS HIW 1422

HZ L. 340-02-16 } 340° 02' 03"
 320-04-16 }

340
- 14
320

SURVEY CALCULATION SHEET

Closed loop traverse for Grum May 22 1923/81

Station	Horiz. Angle	Azimuth	Slope Dist.	Vert. Angle	Horiz. Dist.	Lat.	Dep.	Calculated		Adjusted	
								Northings	Eastings	Northings	Eastings
I W 1422		263-04-25 ✓									
I W 1422	300-27-27 (-4")	202-34-48 ✓						6905052.811 ✓	592712.796 ✓		
"A"	174-42-53 (-4")	217-57-42 ✓			88.970 ✓	-81.541 ^(+.003)	-35.591 ^(+.005)	6904971.270 ✓	592677.205 ✓	6904971.278 ✓	592677.210 ✓
"B"	182-25-03 (-5")	220-22-40 ✓			213.714 ✓	-168.497 ^(+.019)	-131.463 ^(+.012)	6904802.773 ✓	592545.742 ✓	6904802.800 ✓	592545.759 ✓
"C"	182-31-30 (-4")	220-32-06 ✓			137.324 ✓	-104.612 ^(+.012)	-88.962 ^(+.008)	6904698.161 ✓	592456.780 ✓	6904698.200 ✓	592456.805 ✓
I W 1423	340-02-03 (-4")	20-34-10 ✓			410.237 ✓	-311.784 ^(+.021)	-266.618 ^(+.024)	6904386.377 ✓	592190.162 ✓	6904386.451 ✓	592190.211 ✓
I W 1422					850.245			(- .174) ✓	(- .049) ✓		
										1:9580 ✓	
						actual Pz = 20-34-31 ✓					
						expected Pz = 20-34-10 ✓					
						DIP = 00-00-21 ✓					
						actual 1423		6904386.451	592190.211		

D.D.H. LOCATIONS

CALCULATION SHEET.

DA

GRUM TRAVERSE

U.T.M. CO-ORDS.

BACKSIGHT	A	✓	✓	✓	✓
STATION	B	✓	✓	✓	✓
FORESIGHT	80-A-207	80-A-204	80-A-202	80-A-205	80-A-208
HORZ. DIST.	83.693 ✓	33.138 ✓	42.436 ✓	129.423 ✓	233.137 ✓
H.I.	+ 1.486	✓	✓	✓	✓
V.P.	- 1.220	✓	✓	✓	✓
DIFF.	- 7.510 ✓	- 6.850 ✓	- 5.942 ✓	- 7.461 ✓	- 6.600 ✓
STA. FLEV.	1284.452	✓	✓	✓	✓
DIFF.	- 7.244 ✓	- 6.584 ✓	- 5.676 ✓	- 7.195 ✓	- 6.334 ✓
OLLAR	1277.208 ✓	1277.868 ✓	1278.776 ✓	1277.257 ✓	1278.118 ✓
AZIMUTH FS	217-57-42	✓	✓	✓	✓
to 180°	180-00-00	✓	✓	✓	✓
B.S. AZIMUTH	37-57-42 ✓	37-57-42 ✓	37-57-42 ✓	37-57-42 ✓	37-57-42 ✓
HORZ. ∠	112-22-23 ✓	137-49-49 ✓	238-51-45 ✓	232-56-42 ✓	237-53-04 ✓
AZIMUTH	150-20-05 ✓	175-47-31 ✓	276-49-21 ✓	270-54-24 ✓	275-55-46 ✓
BEARING					
STA. NORTHING	6904802.800				
LAT.	- 72.723	- 33.049	+ 5.042	+ 2.048	+ 24.084
HLE COORD.	6904730.077	6904769.751	6904807.842	6904804.848	6904826.834
STA. EASTING	592545.759				
DEP.	+ 41.422	+ 2.432	- 42.135	- 129.407	- 231.890
HOLE COORD	592537.181	592548.191	592503.624	592416.352	592313.869

D.D.H. LOCATIONS

CALCULATION SHEET.

DA

GRUM TRAVERSE

BACKSIGHT	A	✓	✓	✓	
STATION	B	✓	✓	✓	
FORESIGHT	80-A-212	80-A-210	80-A-211	80-A-209	
HORZ. DIST.	104.599	92.814	89.009	120.170	
H. I.	+1.486	✓	-	1.486	
H. P.	-1.220	-	✓	-3.020	
DIFF.	-7.875	-8.460	-7.969	-8.065	
STA. ELEV.	1284.452	✓	✓	✓	
DIFF.	-7.609	-8.194	-7.703	-9.599	
OLLAR	1276.843	1276.258	1276.749	1274.853	
AZIMUTH FS	217-57-42	-	-	-	
Cor. 180°	180	-	-	-	
B.S. AZIMUTH	37-57-42	37-57-42	37-57-42	37-57-42	
HORZ. <	213-08-34	206-51-41	168-02-55	139-38-19	
AZIMUTH	251-06-16	244-49-23	206-00-37	177-36-01	
BEARING					
STA. NORTHING	6904902.800	✓	✓	✓	
LAT.	-33.874	-39.484	-79.994	-120.065	
HOLE COORD.	6904768.926	6904763.316	6904722.806	6904692.735	
STA. EASTING	592545.759	✓	✓	✓	
DEP.	-98.962	-83.997	-39.033	+5.032	
HOLE COORD	592446.797	592461.762	592506.726	592550.791	

CALCULATION SHEET.

DA

GRUM TRAVERSE

BACKSIGHT	B				
STATION	C				
FORESIGHT	80-A-200	80-A-213	80-A-206	80-A-203	80-A-201
HORZ. DIST.	149.703	98.239	42.449	20.870	83.772
H. I.	+ 1.565	-	-	-	-
H. P.	- 1.220	-	-	-	-
DIFF.	+ 6.523	+ 3.020	+ 1.321	- 1.421	- 5.026
STA. ELEV.	1273.660				
DIFF.	+ 6.868	+ 3.365	+ 1.666	- 1.076	- 4.681
COLLAR	1280.528	1277.025	1275.326	1269.584	1268.979
AZIMUTH FS.	220-22-40				
Cor. 180°	180				
B.S. AZIMUTH	40-22-40	40-22-40	40-22-40	40-22-40	40-22-40
HORZ. <	319-07-06	265-02-04	254-22-15	116-30-15	35-16-14
AZIMUTH	359-29-46	305-24-44	298-44-55	156-52-55	138-40-54
BEARING					
STA. NORTHING	690462.200	✓	✓	✓	✓
LAT.	+ 149.697	+ 56.925	+ 20.417	- 19.194	- 62.917
HOLE COORD.	6904847.897	6904755.125	6904718.617	6904679.006	6904635.283
STA. EASTING	592456.805	-	-	-	-
DEP.	- 1.317	- 80.065	- 37.217	+ 8.194	+ 55.310
HOLE CO-ORD	592455.488	592476.740	592419.588	592464.999	592512.115

GRUM TRAVERSE FOR

D.D.H.'S 80-A-200
50
80-A-213

SURVEYED BY: D. ARNSWORTHY
J. MDROZ

DATE: MAY 22, 1981

SCALE: 1" = 2000'

