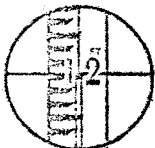


CONTROL SURVEY COORDINATES FOR  
CYPRUS-ANVIL MINING CORPORATION LIMITED  
TANTALUS BUTTE COAL MINE  
CARMACKS, Y.T.  
MAY-JUNE 1975



HOSFORD IMPEY AND WELTER LIMITED  
LEGAL SURVEYS, CONTROL  
SURVEYS, ENGINEERING  
P.O. BOX 4418  
WHITEHORSE, Y.T.

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## CONTROL DESCRIPTION AND METHOD

Bearings are astronomic, derived from the bearing  $346^{\circ}50'40''$  between Cyprus-Anvil stations 74-03 and 74-01.

Coordinates are derived from Cyprus-Anvil coordinates for station 74-03 used in previous survey work. Distances, bearings and coordinates shown are balanced by the compass rule and have not been corrected for scale factor or reduced to sea level.

Elevations are derived from the Cyprus-Anvil elevation of station 74-01 and are of a common datum to that used in the photogrammetric mapping of the surface area.

Control stations placed in this survey consist of an iron spad driven vertically into roof stations with an aluminum tag stamped with the respective station number affixed to the spad. Surface stations consist of an iron bar  $5/8''$  x  $30''$  driven vertically into the ground with the top six inches protruding monumented by a wooden tripod and aluminum tag with the respective station number affixed to the tripod.

Horizontal and vertical survey ties were made to points identifiable on Lockwood Survey Corporation's reconnaissance map No. 72-210. From those ties the position of the Cyprus-Anvil underground grid system has been positioned on the topographic map.

CONTROL SURVEY, COORDINATES AND ELEVATIONS

STATION	ELEVATION	NORTHINGS	EASTINGS	DESCRIPTION
71-2	2078.6	14,126.27	9,896.52	original station - main entry
74-01	2076.6	14,544.15	9,827.61	original station - main entry
74-03	2077.3	14,645.05	9,804.02	original station - main entry - nail in railway switch boards
HIW-1	2054.3	11,340.80	10,472.73	main entry - portal entrance
HIW-2	2061.4	11,443.45	10,406.07	main entry
HIW-3	2062.3	11,436.95	10,314.11	main entry
HIW-4	2063.2	11,445.88	10,275.65	main entry
HIW-5	2062.5	11,716.58	10,264.73	main entry
HIW-6	2062.2	11,916.68	10,281.29	main entry
HIW-7	2060.3	12,277.26	10,303.25	main entry
HIW-8	2061.7	12,394.37	10,289.42	main entry
HIW-9	2062.6	12,529.54	10,265.00	main entry
HIW-10	2062.9	12,611.06	10,241.18	main entry
HIW-11	2063.1	12,683.98	10,262.39	main entry
HIW-12	2067.6	12,875.89	10,193.66	main entry
HIW-13	2066.4	12,966.96	10,174.57	main entry
HIW-14	2067.6	13,099.08	10,172.48	main entry
HIW-15	2062.4	13,199.93	10,119.42	main entry
HIW-16	2069.4	13,280.85	10,139.16	main entry

CONTROL SURVEY, COORDINATES AND ELEVATIONS

STATION	ELEVATION	NORTHINGS	EASTINGS	DESCRIPTION
HIW-17	2071.8	13,317.79	10,129.47	main entry
HIW-18	2070.9	13,308.49	10,065.95	main entry
HIW-19	2075.4	13,465.26	10,022.15	main entry
HIW-20	2076.6	13,715.18	9,957.79	main entry
HIW-21	2073.8	14,343.45	9,864.30	main entry
HIW-22	2076.7	14,414.17	9,846.33	main entry
HIW-23	2076.4	14,479.08	9,842.12	main entry
HIW-24	2080.0	14,125.60	9,901.53	main entry - bottom 25 raise
HIW-25	2151.8	14,133.58	9,953.25	counter
HIW-26	2155.3	14,477.03	9,905.72	counter
HIW-27	2186.1	14,513.29	9,912.27	28 angle
HIW-28	2231.4	14,592.91	9,914.22	28 angle approximately 9" east of 74-10
HIW-29	2320.2	14,741.94	9,914.57	28 angle
HIW-31	2344.7	14,705.34	9,938.74	28c back angle
NOTE: No station 30 or 39				
HIW-32	2417.2	14,599.31	9,992.64	28c back angle - spike in floor
HIW-33	2481.7	14,690.87	9,989.48	28d back angle - spike in floor
HIW-34	2541.4	14,631.70	10,037.41	28d back angle
HIW-35	2579.5	14,641.54	10,072.69	surface - iron bar in ground
HIW-36	1772.0	4,751.20	26,473.32	east end Carmacks Airstrip

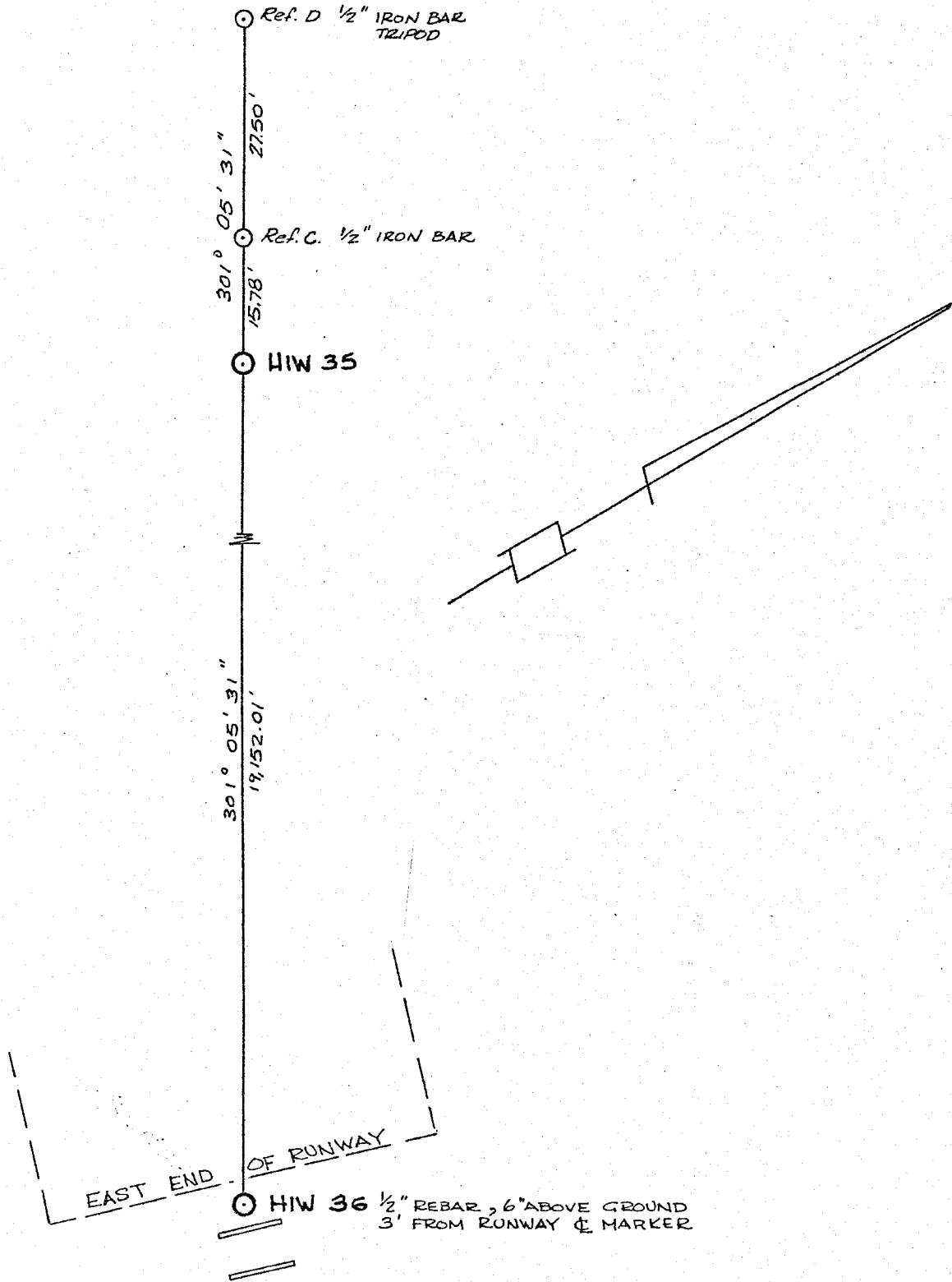
CONTROL SURVEY, COORDINATES AND ELEVATIONS

STATION	ELEVATION	NORTHINGS	EASTINGS	DESCRIPTION
HIW-37	2590.5	14,550.31	10,107.51	surface - iron bar in ground
HIW-38	2583.1	14,336.90	10,141.87	iron bar on surface - adjacent to #73-16 entrance to 26 raise
HIW-40	2155.0	14,606.59	9,867.21	counter
HIW-41	2166.7	14,683.39	9,826.28	counter - 1' left of 75-4
HIW-42	2166.6	14,799.92	9,775.58	counter
HIW-43	2334.0	14,766.03	9,907.05	28 angle extension
HIW-44	2342.6	14,784.18	9,912.91	28 angle extension
HIW-45	2359.6	14,810.03	9,909.27	28 angle extension
HIW-46	2378.9	14,842.35	9,914.29	28 angle extension set 10' from end
HIW-A	2077.0	14,680.95	9,746.75	main entry extension
HIW-B	2077.3	14,837.21	9,754.81	main entry extension
HIW-C	2077.5	14,916.07	9,740.94	main entry extension
HIW-D	2077.5	14,972.23	9,760.55	main entry extension

OPEN PIT CONTROL SURVEY STATION COORDINATES AND ELEVATIONS

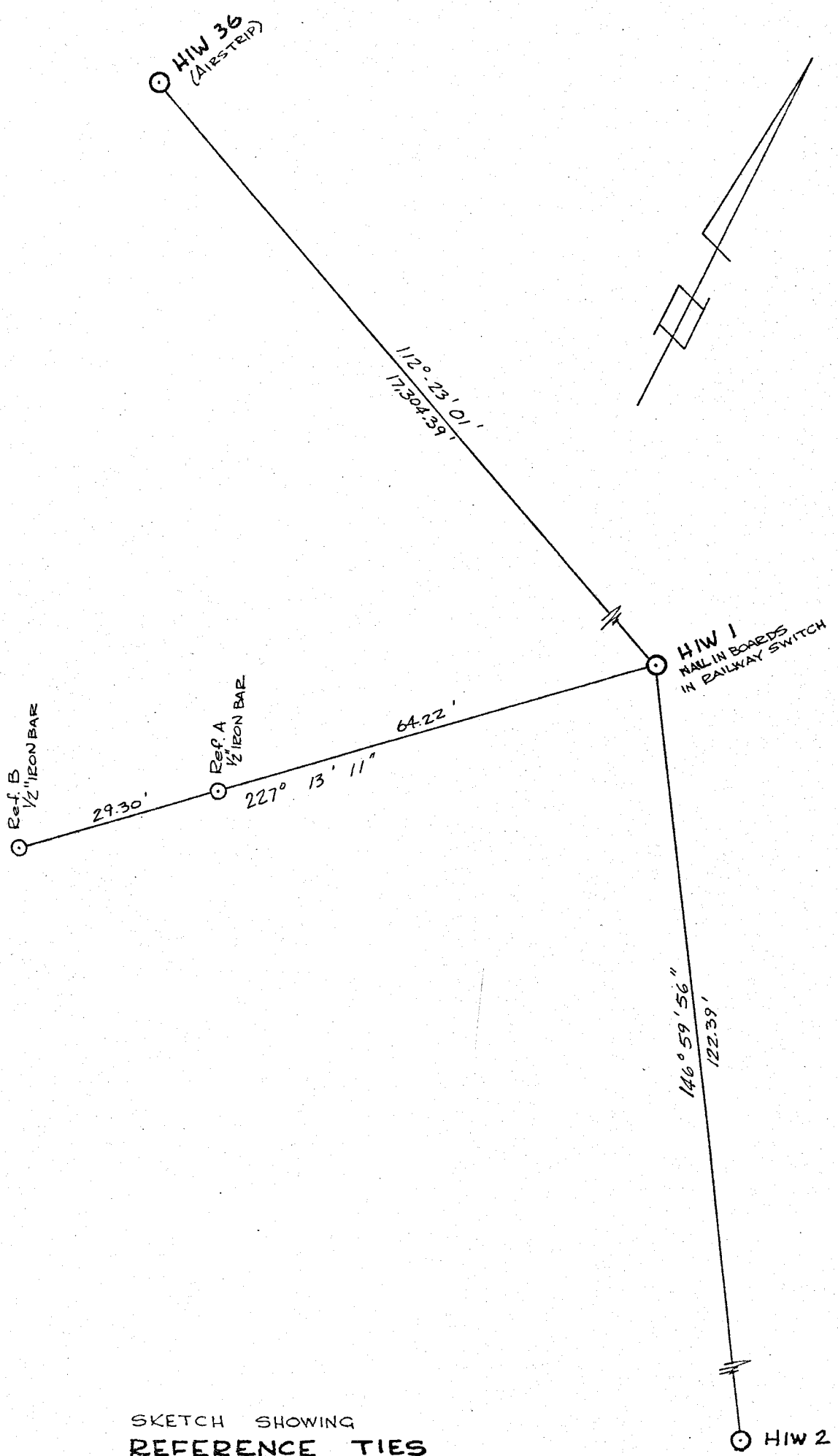
STATION	ELEVATION	NORTHINGS	EASTINGS	DESCRIPTION
HIW-60	2555.8	16,800.59	9,691.80	surface - 1/2" iron bar - tripod
HIW-61	2592.0	17,335.00	9,998.48	surface - 1/2" iron bar - tripod
HIW-62	2551.3	16,180.95	10,168.70	surface - 1/2" iron bar - tripod
REF'D	2591.0	14,663.89	10,035.63	surface - 1/2" iron bar - tripod
T4869	1998.71	11,057.98	10,604.40	surface - 2"x2" red top in centre of old target
HIW-50	2078.7	11,496.88	10,699.44	surface
HIW-51	1726.5	8,506.90	9,373.58	surface
HIW-52	2047.6	11,190.10	10,366.98	surface

T4869 is Station used in photogrammetric mapping with given elevation of 1993.4.



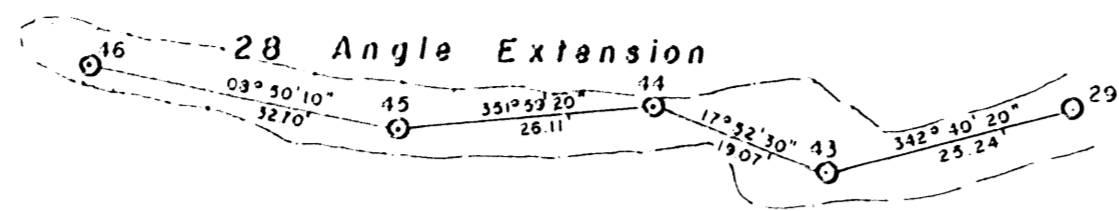
SKETCH SHOWING  
REFERENCE TIES

1" = 20'

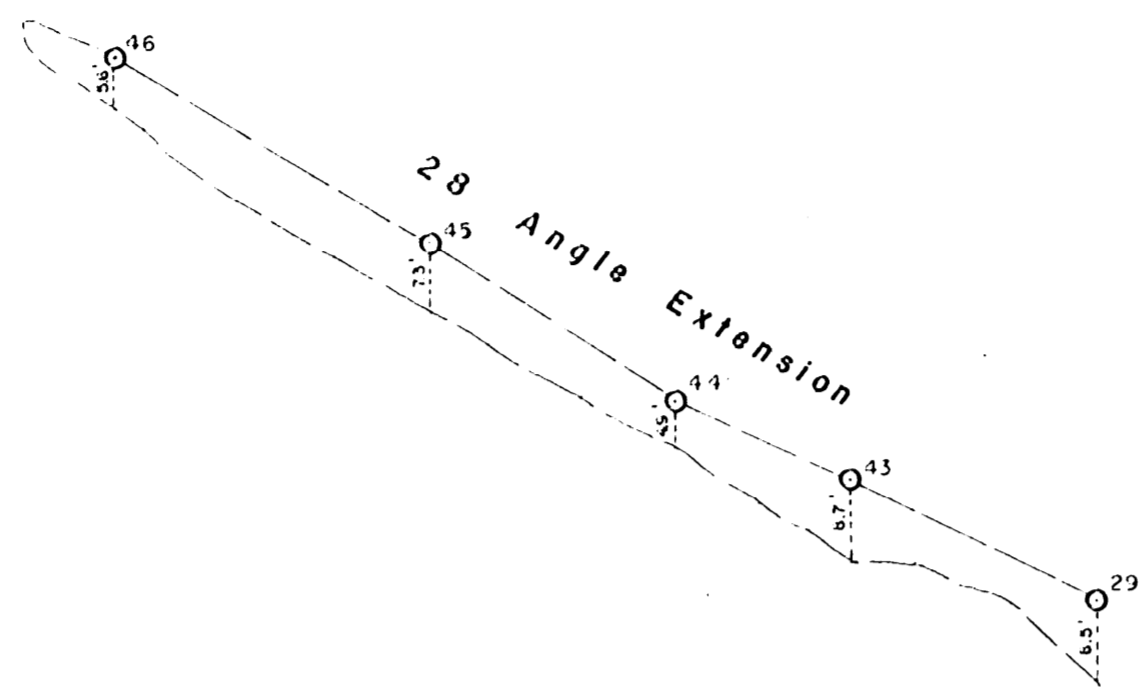


SKETCH SHOWING  
REFERENCE TIES

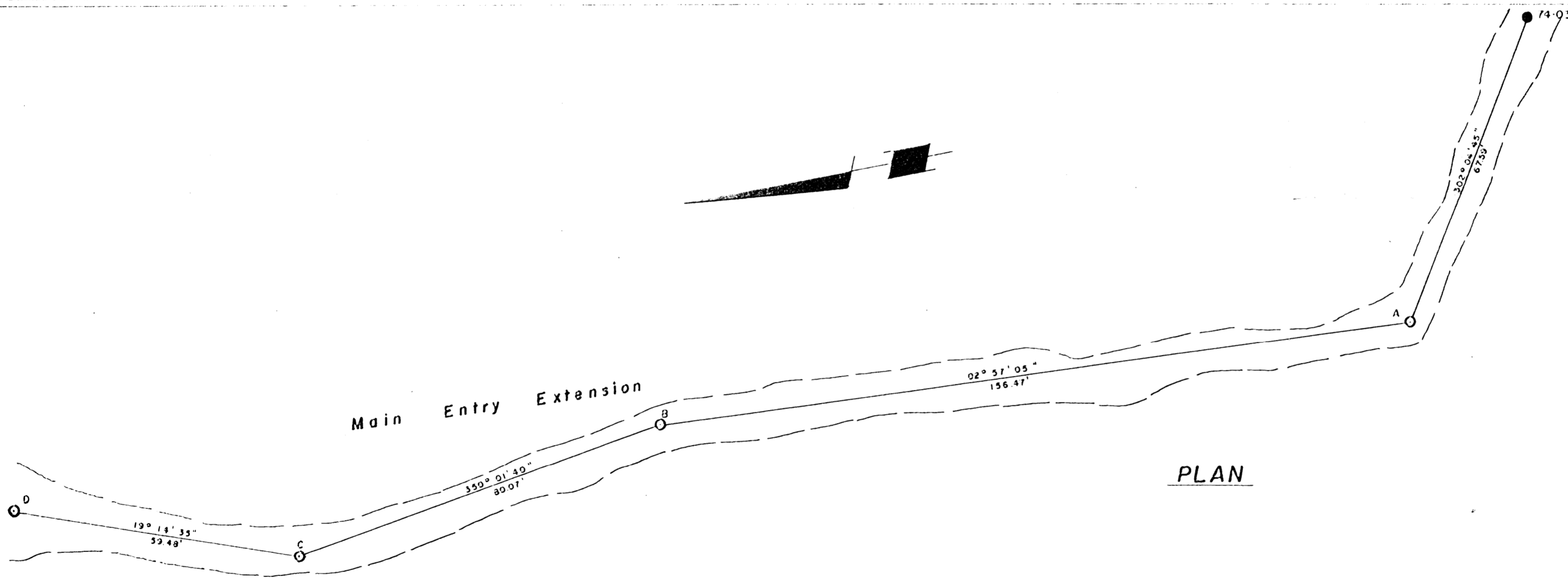
1" = 20'



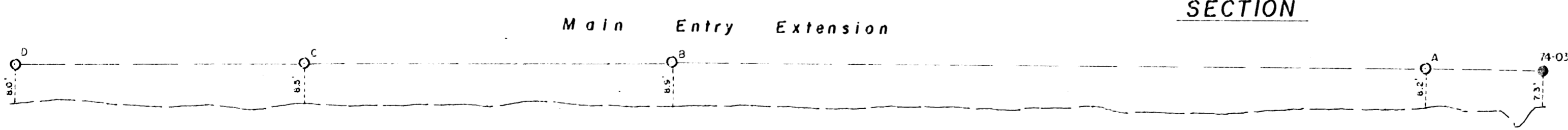
PLAN



SECTION

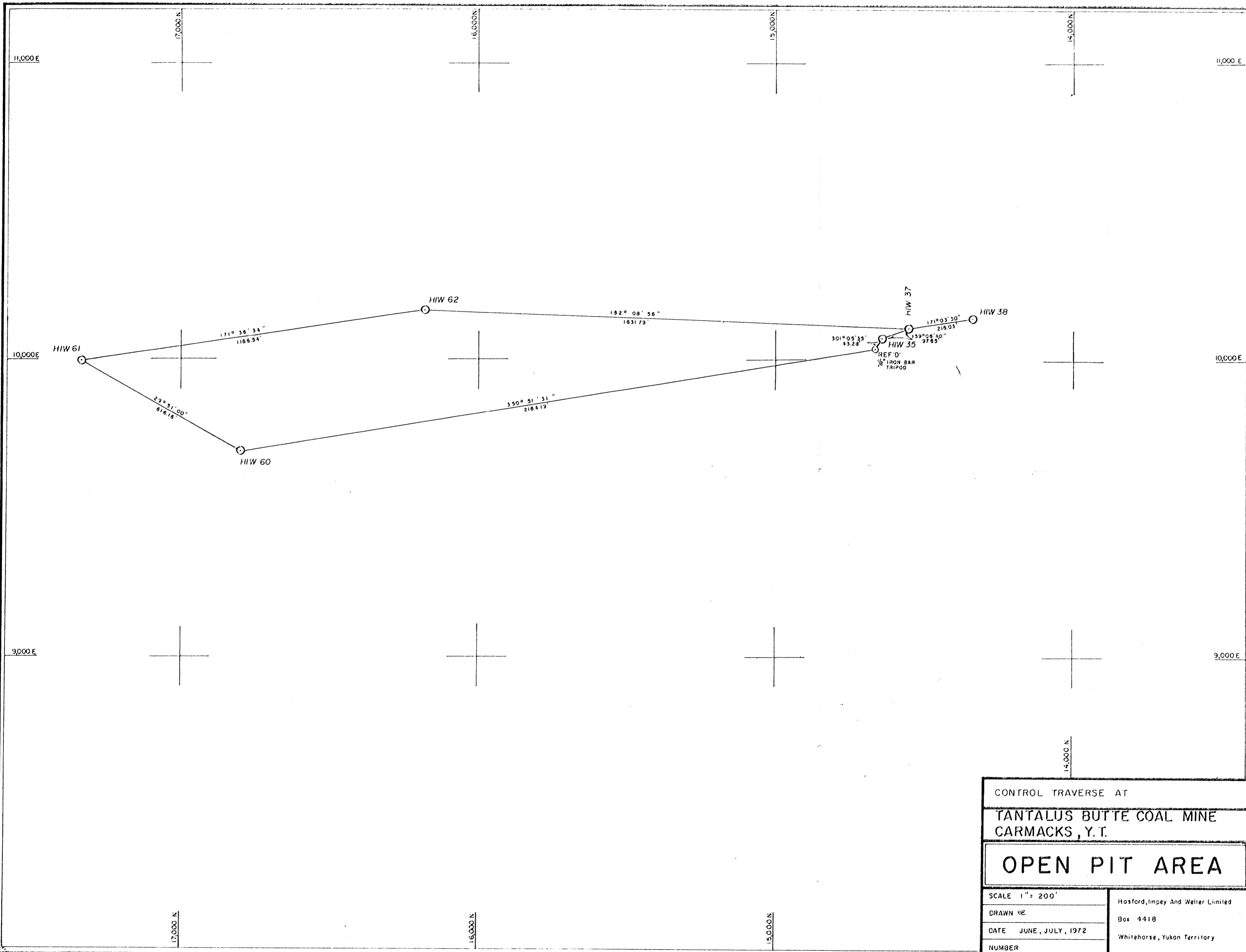


PLAN



SECTION

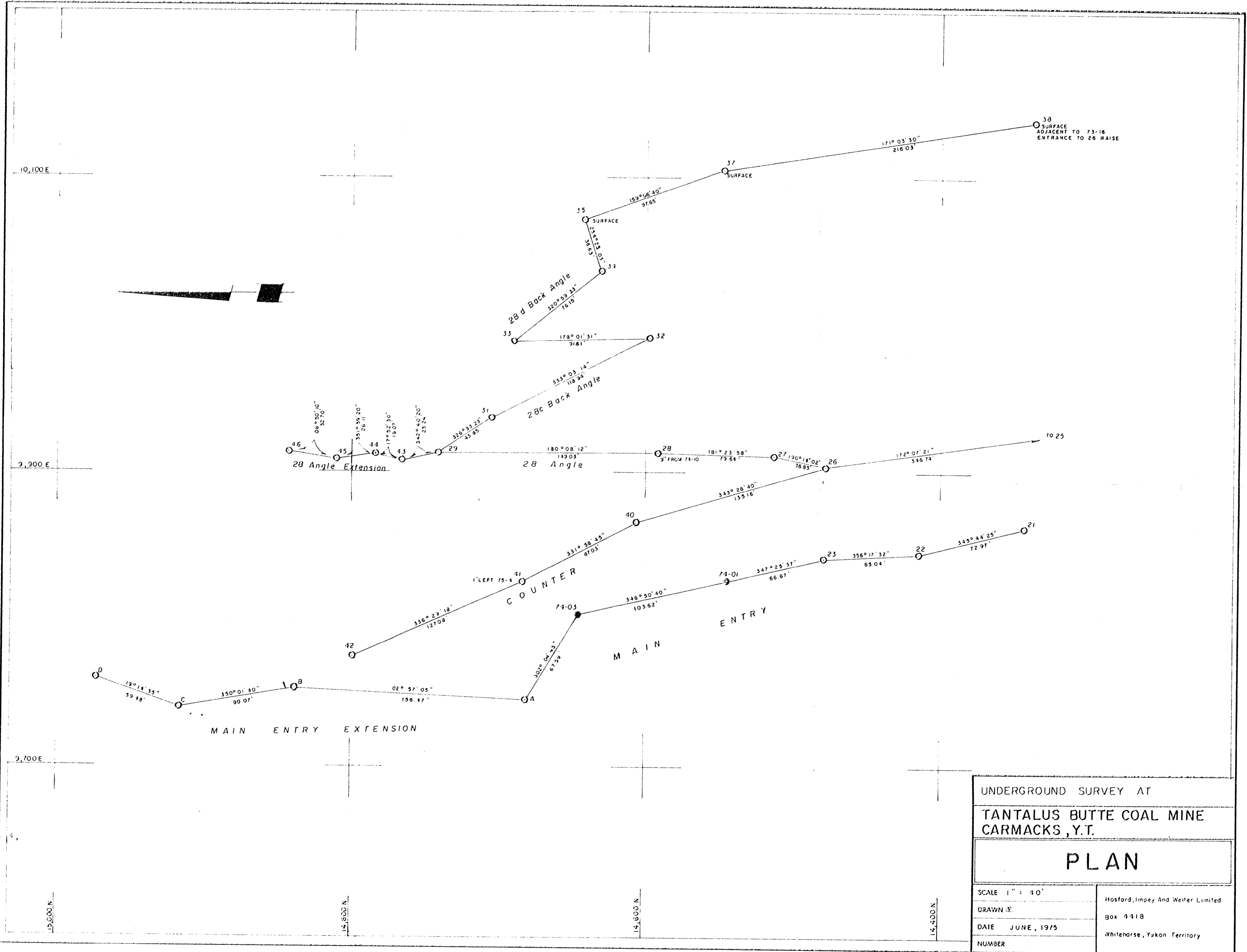
UNDERGROUND SURVEY AT	
TANTALUS BUTTE COAL MINE CARMACKS, Y.T.	
<b>TOPOGRAPHY</b>	
SCALE 1" = 20'	Hosford, Impney And Weller Limited
DRAWN <i>EE</i>	Box 4418
DATE JUNE, 1975	Whitehorse, Yukon Territory
NUMBER	



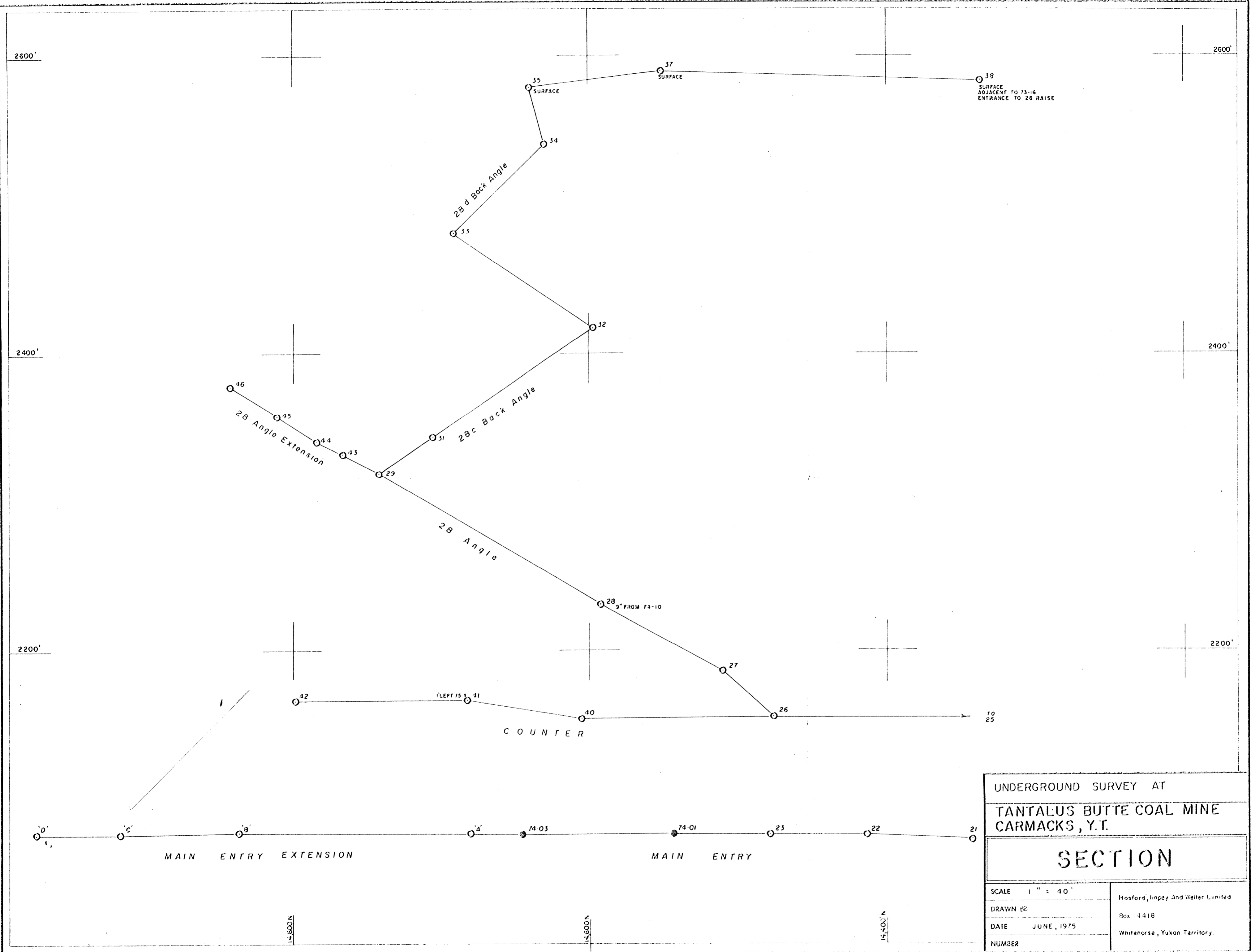
CONTROL TRAVERSE AT  
**TANTALUS BUTTE COAL MINE**  
**CARMACKS, Y.T.**

**OPEN PIT AREA**

SCALE 1" = 200'	Hosford, Impey And Weller Limited Box 4418 Whitehorse, Yukon Territory
DRAWN BY	
DATE JUNE, JULY, 1972	
NUMBER	



UNDERGROUND SURVEY AT	
TANTALUS BUTTE COAL MINE	
CARMACKS, Y.T.	
<b>PLAN</b>	
SCALE 1" = 40'	Hosford, Impney And Weiler Limited Box 4418 Whitehorse, Yukon Territory
DRAWN BY	
DATE JUNE, 1975	
NUMBER	



UNDERGROUND SURVEY AT	
TANTALUS BUTTE COAL MINE	
CARMACKS, Y.T.	
<b>SECTION</b>	
SCALE	1" = 40'
DRAWN BY	
DATE	JUNE, 1975
NUMBER	
Hosford, Impey And Weller Limited	
Box 4418	
Whitehorse, Yukon Territory.	

HIW WHSE

ANVIL VCR

DEC 14/77

HOSFORD IMPEY AND WELTER  
WHITEHORSE

ATTN J FRED WELTER

PREFER FEET AT PRESENT

IF YOU HAVE NOT ALREADY DONE SO, PLEASE:

- (A) PROVIDE TPCS COORDINATES AND ELEVATIONS FOR ALL SURVEY CONTROL STATIONS REFERRED TO IN YOUR REPORT JOB NUMBER 1032-75
- (B) PREPARE MODIFIED CLAIM MAP (ONE INCH EQUALS HALF MILE) SHOWING LOCATIONS OF ALL LOTS AND COAL MINING LEASES DETERMINED BY TARGETTING AND AEROTRIANGULATION, AND SUBMIT COPIES TO ME AND TO THE MINING RECORDER

I WILL BE ON VACATION UNTIL JANUARY 3

MERRY CHRISTMAS AND HAPPY NEW YEAR

ROD HILL  
CYPRUS ANVIL MINING CORPORATION

HIW WHSE

ANVIL VCR

