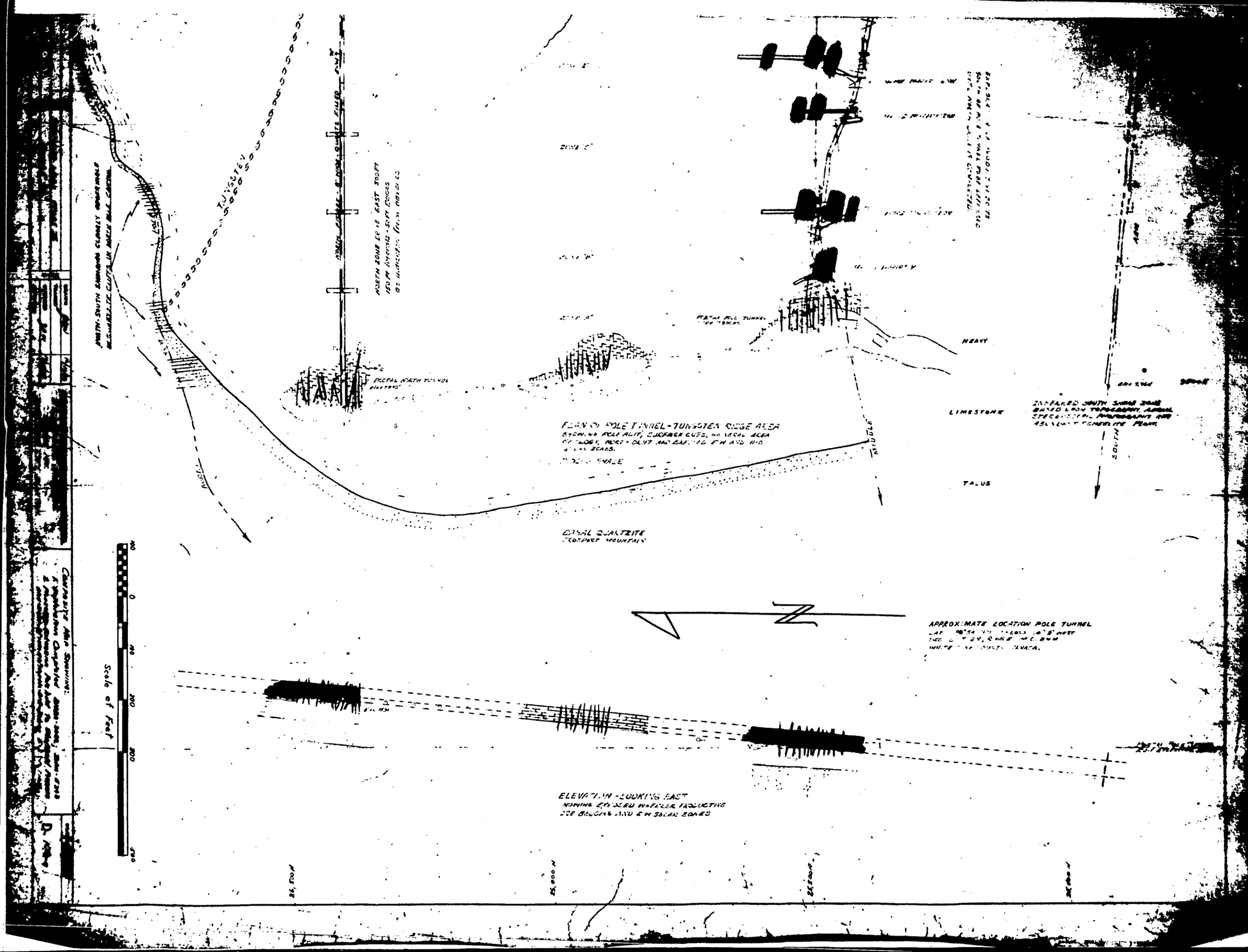

NORTH ZONE 12 VS EAST 300 FT
ZONE C
ZONE B
ZONE A
HEAVY
LIMESTONE
TALUS
SOUTH
MIDDLE
PLAN OF POLE TUNNEL-TUNGSTEN RIDGE AREA
BASAL QUARTZITE
"COMPACT MOUNTAIN"
APPROXIMATE LOCATION POLE TUNNEL
ELEVATION-LOOKING EAST
Scale of Feet
25,500 N
25,000 N
24,500 N
24,000 N

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS ADMINISTRATION
DOCKET NO. 2082

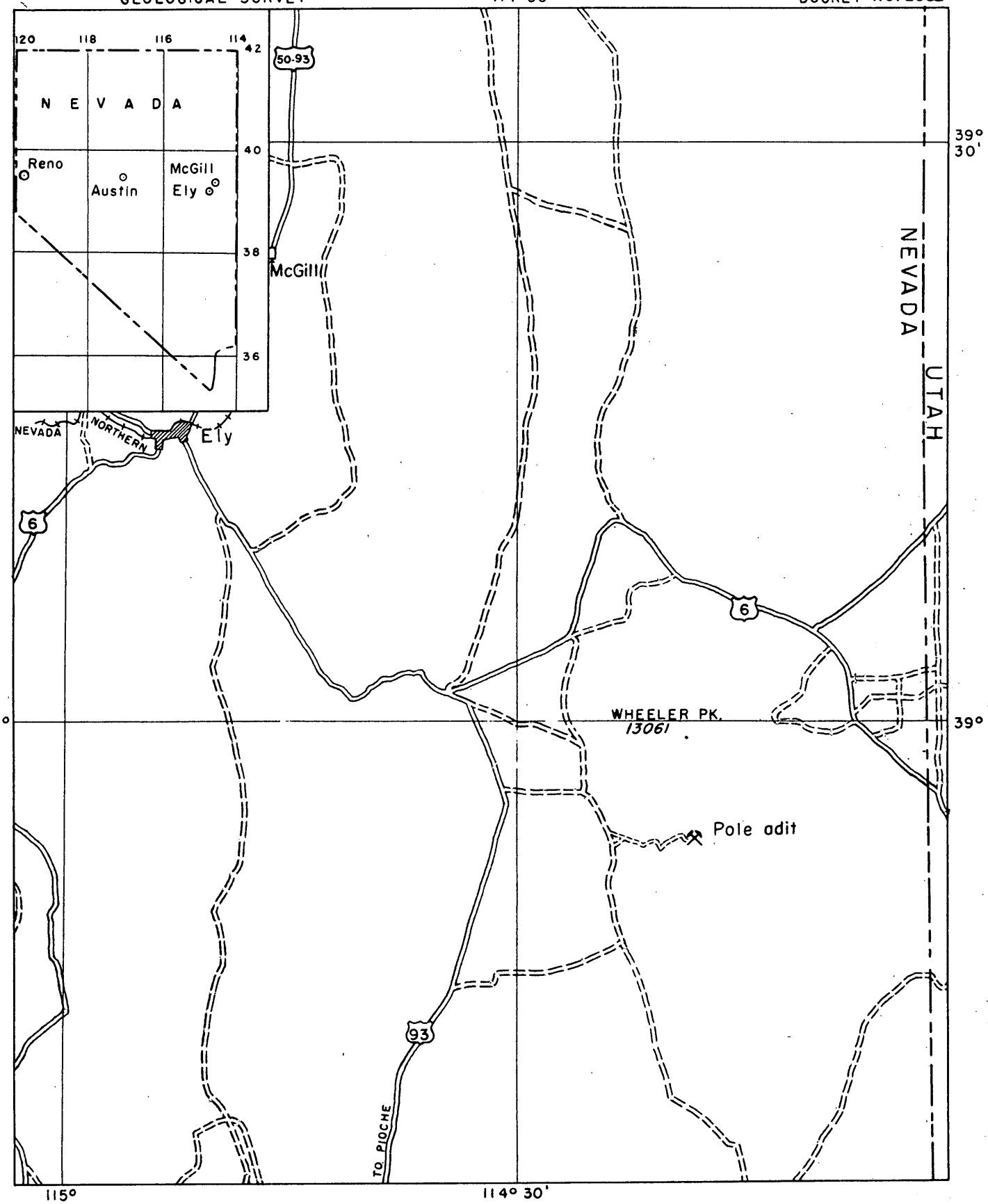


FIG. 1

INDEX MAP OF NEVADA

0 5 10 MILES
Scale

Note: Map being prepared from the one attached -

EXHIBIT "A"

MAP SHOWING PROPOSED EXPLORATION

STAGE I

KAROLTON KLASP—8¾ x 11¼
MADE BY
THE AMERICAN ENVELOPE CO.
WEST CARROLLTON, OHIO

EXHIBIT "B"

WORK SHEETS SHOWING
CONVERSION OF ESTIMATED
COSTS TO MF-104 ITEMS

STAGE I

KAROLTON KLASP—8¾ x 11¾
MADE BY
THE AMERICAN ENVELOPE CO.
WEST CARROLLTON, OHIO

EXHIBIT "C"

MAP SHOWING PROPOSED EXPLORATION

STAGE II

KAROLTON KLASP—8¾ x 11¼
MADE BY
THE AMERICAN ENVELOPE CO.
WEST CARROLLTON, OHIO

EXHIBIT "D"
WORK SHEETS SHOWING
CONVERSION OF ESTIMATED
COSTS TO MF-104 ITEMS
STAGE II

KAROLTON KLASP—8¾ x 11¼
MADE BY
THE AMERICAN ENVELOPE CO.
WEST CARROLLTON, OHIO

Recap. of Project Cost

Sheet 1

WMEA-2082; Idm-E248

Total Advance 1465.0 Ft.

Item No.	Item of Expense			Total.	Cost per Foot.
1-a	Compressor Building			$1996.03	1.363
1-b-1	20# rail			2009.98	1.372
1-b-2	Rail splices			155.80	0.106
1-b-3	4"x6" ties			351.19	0.240
1-b-4	Track spikes			141.76	0.096
1-b-5	Track bolts			33.30	0.023
1-b-6	Switches			862.86	0.589
1-b-7	Freight			342.00	0.233
1-c-1	3" air line			829.81	0.566
1-c-2	2" air line			172.87	0.118
1-c-3+4	1" water line			810.21	0.553
1-c-5	Vent tube			1151.60	0.786
1-c-6	Air receiver			40.00	0.027
1-c-7	Valves and fittings			251.02	0.171
1-c-8	Freight			220.00	0.150
1-d-1	Bulldozer - Bldg. sites			192.00	0.131
1-d-2	" Pipe line			352.00	0.240
1-d-3	" Snow removal			646.00	0.441
2-a	Rental - Compressor			4700.00	3.208
2-b	" Machine			2655.00	1.812
2-c	" Generator			1550.46	1.058
2-e	" Drammer			4275.00	2.918
2-f	" Jumbo			1155.00	0.788
3-a	Fuel tanks			89.17	0.061
3-b	Blower			518.63	0.354
3-c	Rafters (2)			1750.00	1.195
3-d	Misc. small tools			820.94	0.560
3-e	Slusher equipment			591.80	0.404
4-a	Supporting labor			11509.63	7.856
4-b	Cook			2300.00	1.570
4-c	Supt. - Engr.			5000.00	3.413
4-e	Labor - Pole Adit	1465.0'	$10,299.53	15838.69	10.811
4-f	" - Laterals		4116.81		
4-g	" Raises		1422.35		
4-h	Comp. Ins. & P.R. taxes			4026.43	2.749
5-a	Blacksmith shop & change room			1382.42	0.944
6-a	Powder, fuse & caps			4056.23	2.769
6-b	Steel and bits			2367.18	1.616
6-c	Fuel and lube			2621.99	1.790
6-d	Timber			57.16	0.039
6-e	Misc. expense			4801.58	3.278
6-f	Aerial Photo			250.00	0.171
6-g	Jacking, etc.			526.58	0.359
				83402.32	56.920
	Less suspension by 7/31/52 Audit			592.91	0.405
				82809.41	56.525

Breakdown of Project Costs — Sheet 2

DMEA-2082; IDM-5248

Total advance 1465.0 ft.

		Total	Cost Per Foot
1. Direct Underground Costs.			
A. Trackage			
1-b-1	20# rail	2009.98	1.372
1-b-2	Rail splices	155.80	0.106
1-b-3	4"x6" ties	351.19	0.240
1-b-4	Track spikes	141.76	0.096
1-b-5	Track bolts	33.30	0.023
1-b-6	Switches	862.86	0.589
1-b-7	Freight on above	342.00	0.233
		3896.89	2.659
B. Pipe and Vent lines			
1-c-1	3" air line	829.81	0.566
1-c-2	2" air line	172.87	0.118
1-c-3&4	1" water line	810.21	0.553
1-c-5	Vent tube	1151.60	0.789
1-c-7	Valves and fittings	251.02	0.171
1-c-8	Freight on above	220.00	0.150
		3435.51	2.345
C. Equipment Rental			
2-a	Compressor	4700.00	3.207
2-b	Mucker	2655.00	1.812
2-c	Generator	1550.46	1.058
2-d	Trammer	4275.00	2.918
2-f	Jumbo	1155.00	0.789
		14335.46	9.785
D. Labor and Supervision			
4-a	Supporting labor	11509.63	7.856
4-b	Cook	2300.00	1.570
4-c	Supt - Engr.	5000.00	3.413
4-e	Adit		
4-f	Laterals	15,838.69	10.811
4-g	Raises		
4-h	Comp. Ins & P.R. taxes	4026.43	2.748
		38674.75	26.398
E. Supplies			
6-a	Powder, fuse & caps	4056.23	2.768
6-b	Steel and bits	2367.18	1.616
6-c	Fuel and lube	2621.99	1.790
6-d	Timber	57.16	0.039
3-d	Misc. small tools	820.94	0.560
		9923.50	6.773

		Total	Cost per Foot
2. Other costs			
1-d-3	Bulldozer - snow removal	646.00	0.441
6-f	Aerial photography	250.00	0.171
6-e	Miscellaneous expense		
	1. Accounting	1000.00	0.683
	2. Truck rental	500.00	0.342
	3. Jeep Mileage	1061.16	0.724
	4. Report printing - MKA	182.80	0.125
	5. Freight-in - supplies	314.29	0.215
	6. Freight in - Equipment	270.44	0.185
	7. Misc. operating supplies	930.80	0.635
	8. Assaying	39.00	0.026
	9. Equipment repairs	503.09	0.343
		5,697.58	3.891
3. New Facilities and Equipment			
A. New Facilities			
1-a	Compressor building	1996.03	1.362
5-a	Blacksmith shop & change room	1382.42	0.944
1-d-1	Bulldozer - bldg. sites	192.00	0.131
1-d-2	" Pipe line	352.00	0.240
		3922.45	2.677
B New Equipment			
1-c-6	Air receiver	40.00	0.027
3-a	Fuel tanks	29.17	0.061
3-b	Blowers	518.63	0.354
3-e	Shovels	591.80	0.404
6-g	Jackleg	526.58	0.359
3-c	Drifters (2)	1750.00	1.195
		3516.18	2.400
		83,402.32	56.930
Less suspension by 12/31/52 Audit		592.91	0.405
		$82,809.41	56.525

Analysis of Project Costs
DMEA-2032; Idm-5248
Total Advance 1965.0 Ft.

Sheet 4

	Total	Cost per foot
1. Direct Underground Costs		
Trackage	3896.89	2.659
Pipe and Vent lines	3435.51	2.345
Labor and Supervision (Inc. CE & P.R. taxes)	23259.81	15.877
Supplies	9923.50	6.775
Miscellaneous expense	4801.58	3.278
	45317.29	30.934
2. Supporting Costs		
Equipment rental	14335.46	9.785
Outside labor (inc. CE & P.R. taxes)	15414.94	10.522
Bulldozer - snow removal	646.00	0.441
	30396.40	20.748
3. Facilities and Equipment		
New Facilities	3922.45	2.677
New Equipment	3516.18	2.400
Aerial photos	250.00	0.171
	7688.63	5.248
	83402.32	56.930
Less: Suspensions by audit of 12/31/52	59.91	0.405
	$82809.41	$56.525

Distribution of Misc. Exp. items EMCA-2082; Idm-E248.

	Month	Account.	Accounting	Truck Rental	Jeep Mileage	EMCA report Printing	Freight Supplies	Freight Eqt.	Misc. opr. Supplies	Packaging	Eqt Repairs
1952	February	$ 134.82	100.00		34.82						
	April - May	578.83	100.00	100.00	43.50 68.00			165.38 105.06	2.89		
	June	515.71	100.00	50.00	103.68 18.50	23.60			10.71 153.90		55.32
	July	336.34	100.00	50.00	62.30	25.20	3.96		94.88		62.28
	August	597.38	100.00	50.00	67.80 64.00	38.25			41.19 47.66 57.25		3.57 58.70 5.77
	September	364.01	100.00	50.00		20.90	14.39		148.58	6.00	16.14
	October	497.42	100.00	50.00	155.52		19.82		49.78 52.05 54.30	3.00	32.95
	November	566.23	100.00	50.00	132.64	13.00	6.79		46.40 56.50		30.66 6.64 22.00 61.71 29.89
	December	496.27	100.00	50.00	101.60	30.55	41.42 9.90		11.23 66.83 5.34 11.91	20.00	13.85 13.35 5.40 6.84
		$ 4087.01	900.00	450.00	846.36	159.50	96.28	270.44	889.36	39.00	436.07
1953	January	714.57	100.00	50.00	214.80	23.30	21.01		41.44		67.02
		4801.58	1000.00	500.00	1061.16	182.80	314.29		930.80		503.09
Feet adv. 14250'		$ 3.378	0.683	0.342	0.724	0.125	0.215	0.185	0.635	0.026	0.343

EXHIBIT "E"

COST ANALYSIS OF
INITIAL 1465 FT. OF
EXPLORATION COMPLETED

KAROLTON KLASP—8¾ x 11¾
MADE BY
THE AMERICAN ENVELOPE CO.
WEST CARROLLTON, OHIO

Sheet No. 1. Work Sheet showing conversion of Amendment Cost Items to classification of MF-104 Form. - Stage I.

Cost Items as shown in Requested Amendment - Stage I.	2. Labor and Supervision: Labor	Supervision	Technical	3. Operating Materials and Supplies: Misc. Spec. Supplies	Timber	Explosives	Pipe and Ventilation	Stock	Fuel and Lube	Steel and Bits	Misc. Small Tools	Freight	4. Operating Equipment: Eqpt.	Freight	5. Initial Dev. & Repairs: Materials	Labor	6. New Bldg. & Improv.: Materials	Labor	7. Miscellaneous: Accounting Blueprint	Repairs to Equipment	Assaying	Payroll Taxes	Comp. Ins.	Admin.	8. Contingencies: Building	Trucking
A. Underground Exploration																										
1. Misc. Bedding Exploration																										
(a) "A" Lateral North & South 140'																										
1. Labor	2160.00																									
2. Pipe and Ventilation							260.80																			
3. Powder, fuse & caps						432.00																				
4. Steel and bits										244.80																
5. Timber					73.60																					
6. Fuel and lube									219.20																	
7. Misc. Small tools											88.00															
8. Comp. Insurance																							152.00			
9. Payroll Taxes																						97.60				
(b) No. 1 Lateral South 280'																										
1. Contract labor	3780.00																									
2. Pipe and Ventilation							690.80																			
3. Powder, fuse & caps						756.00																				
4. Steel and bits										428.40																
5. Timber					128.80																					
6. Fuel and lube									383.60																	
7. Misc. Small tools											154.00															
8. Shoveler cable											70.00															
9. Comp. Insurance																							266.00			
10. Payroll Taxes																						170.80				
(c) No. 3 Lateral North 285'																										
1. Contract labor	3847.50																									
2. Pipe and ventilation							601.35																			
3. Powder, fuse & caps						769.50																				
4. Steel and bits										436.05																
5. Timber					131.10																					
6. Fuel and lube									390.45																	
7. Misc. small tools											156.75															
8. Shoveler cable											71.25															
9. Comp. Insurance																							270.75			
10. Payroll Taxes																						173.85				

Sheet No. 2.

		2. Labor and Supervision			3. Operating Materials and Supplies									4. Operating Equipment		5. Initial Rel. & Repairs		6. New Bldg. & Improv.		7. Miscellaneous						8. Contingency	
		Labor	Supervision	Technical	Misc. Gen. Supplies	Timber	Explosives	Pipe and Ventilation	Teach.	Fuel and Lube	Steel and Bits	Misc. small Tools	Freight	Eqt.	Freight	Materials	Labor	Materials	Labor	Accounting Blueprint	Repairs to Equipment	Assaying	Payroll Taxes	Comp. Insu.	Adm.	Bondsing	Trucking
(5) No. 5 Lateral North	280'																										
1. Contract labor		9780.00																									
2. Pipe and Ventilation								590.80																			
3. Powder, fuse & Caps							756.00																				
4. Steel and bits											428.60																
5. Timber						128.80																					
6. Fuel and lube										383.60																	
7. Misc. small tools												154.00															
8. Shaker cable												70.00															
9. Comp. Insurance																								266.00			
10. Payroll Taxes																							170.80				
(6) Other Bedding drives	300'																										
1. Contract labor		4050.00																									
2. Pipe and ventilation								633.00																			
3. Powder, fuse & Caps							810.00																				
4. Steel and bits											459.00																
5. Timber						138.00																					
6. Fuel and lube										411.00																	
7. Misc. small tools												165.00															
8. Comp. Insurance																								285.00			
9. Payroll Taxes																							183.00				
B. Underground Facilities																											
1. Misc. Bedding Exploration																											
(a) Shafts and Manways																											
1. A' Lateral South																		127.00	70.02								
2. A' Lateral North																		127.00	70.02								
3. No. 1 Lateral South																		396.60	350.14								
4. No. 3 Lateral North																		396.60	350.14								
5. No. 5 Lateral North																		396.60	350.14								
(b) Contract Shaft Sinking																		842.43	630.27								
(c) Other preparation																											
1. Air and water lines																		402.50	175.08								
2. Air receiver																		610.50	105.04								
3. 12 Draft outs																		338.00	315.13								
4. Electric lights																		338.00	105.04								

	2. Labor and Supervision			3. Operating Materials and Supplies									4. Oper. Equipment		5. Initial Rch. & Repairs		6. Mine Bldg. & Improv.		7. Miscellaneous						8. Contingencies	
	Labor	Supervision	Technical	Mine Opr. Supplies	Timber	Explosives	Vent. and Ventilation	Track	Fuel and Oils	Steel and Bits	Misc. small Tools	Freight	Eqt.	Freight	Materials	Labor	Materials	Labor	Recording Blueprint	Repairs to Eqt.	Charging	Payroll Mine	Comp. Insur.	Adm.	Accidents	Teaching
1. Surface Facilities																										
a. Bins - Rock Sampling																										
a. Mine Bin																	2355.00	1297.52								
b. Transfer Bin																	1019.00	612.27								
2. Other Facilities																										
a. Change House																	2370.00	1050.42								
b. Powder Magazine																	689.00	420.17								
c. Waste Dump																	631.60	350.14								
d. Blower installation																	145.00	70.03								
2. Mine Equipment																										
1. Drilling Equipment													4080.00													
2. Mine Cars													3065.00													
3. Bucket													6040.00													
4. Fire extinguishers													880.00													
5. Shovels													2776.90													
6. Power rental units													12193.80													
3. Supervisory & Supporting																										
1. Supervisory & Technical		9200.00																								
2. Supporting Labor	12531.20																									
3. Comp. Insurance																							1523.38			
4. Payroll Taxes																						977.90				
4. Other Costs																										
1. Freight - supplies												1311.00														
2. Freight - equipment														1126.85												
3. Truck operation																										4860.88
4. Recording & Blueprint																			1240.00							
5. Jeep mileage																								768.00		
6. Charging																					1248.00					
7. Equipment repairs																				459.36						
8. Mine Operating supplies				939.60																						
	30148.70	9200.00		939.60	600.30	3523.50	2676.75		1787.85	1996.65	927.00	1311.00	30638.70	1126.85			12072.75	6617.67	1240.00	459.36	1248.00	1977.90	2523.38	768.00		4860.88

Sheet No. 1 Work Sheet showing Conversion of Amendment bost Items to Classification of MT-10a Form - Stage II

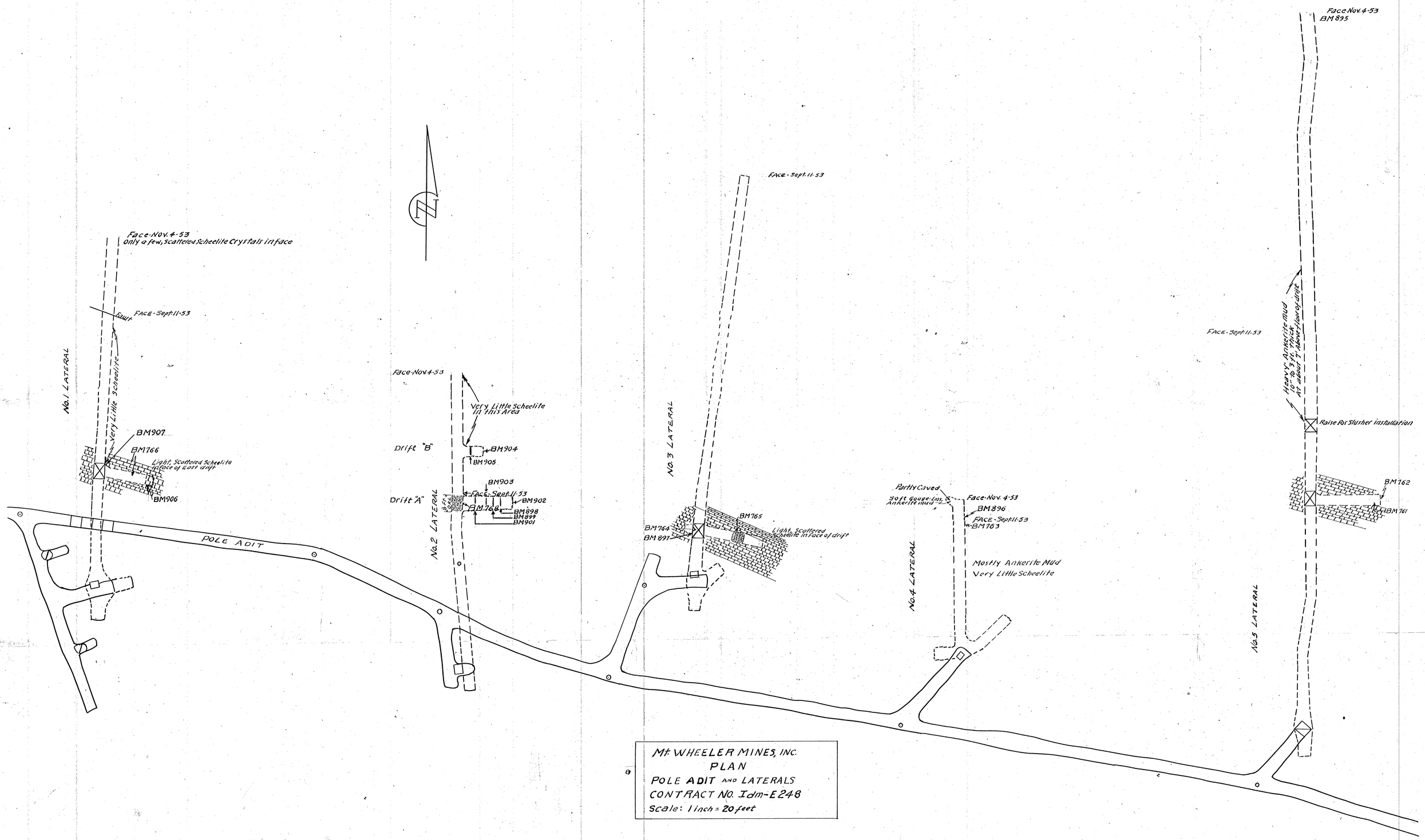
Cost Items as Shown in Requested Amendment - Stage II		1. Labor and Supervision: Labor	Supervision	Technical	2. Fire Oil Supplies	Timber	Explosives	3. Operating Materials and Supplies: Pipe and Ventilation	Track	Fuel and Lube	Steel and Bits	Misc. Small Tools	Freight	4. Operating Equipment: Eqt.	Freight	5. Initial Rib & Pillars: Materials	Labor	6. Pur. Bldg. & Improv.: Materials	Labor	7. Miscellaneous: Carpenting Blasting	Repairs to Equipment	Assaying	Payroll Taxes	Comp. Insur.	Adm.	8. Contingencies: Matl. Spoiling	Teaching
A. Underground Exploration																											
1. Main Building Raise North																											
a. Main drift	1050'																										
1. Contract labor		14,175.00																									
2. Pipe and ventilation								2,215.50																			
3. Powder, fuse & caps							2,835.00																				
4. Steel and bits											1,606.50																
5. Timber						493.00																					
6. Fuel and lube										1,138.50																	
7. Misc. small tools												577.50															
8. Shaker cable												262.50															
9. Power cable												1,050.00															
10. Comp. insurance																								997.50			
11. Payroll taxes																							640.50				
b. Side drifts	1000'																										
1. Contract labor		13,500.00																									
2. Pipe and ventilation								1,030.00																			
3. Powder, fuse & caps							2,700.00																				
4. Steel and bits											1,530.00																
5. Fuel and lube										1,970.00																	
6. Misc. small tools												550.00															
7. Comp. insurance																								950.00			
8. Payroll taxes																							610.00				
2. Hole Tunnel Drive Easterly																											
a. Main adit	1200'																										
1. Contract labor		16,200.00																									
2. Trackage									3,120.00																		
3. Pipe and ventilation								2,582.00																			
4. Powder, fuse & caps							3,240.00																				
5. Steel and bits											1,836.00																
6. Timber						552.00																					
7. Fuel and lube										1,644.00																	
8. Misc. small tools												660.00															
9. Comp. insurance																								1,140.00			
10. Payroll taxes																							732.00				
b. Latitude & S. Sheffield Right	540'																										
1. Contract labor		7,290.00																									
2. Contract switches		208.20																									

Sheet No. 2 - Stage II

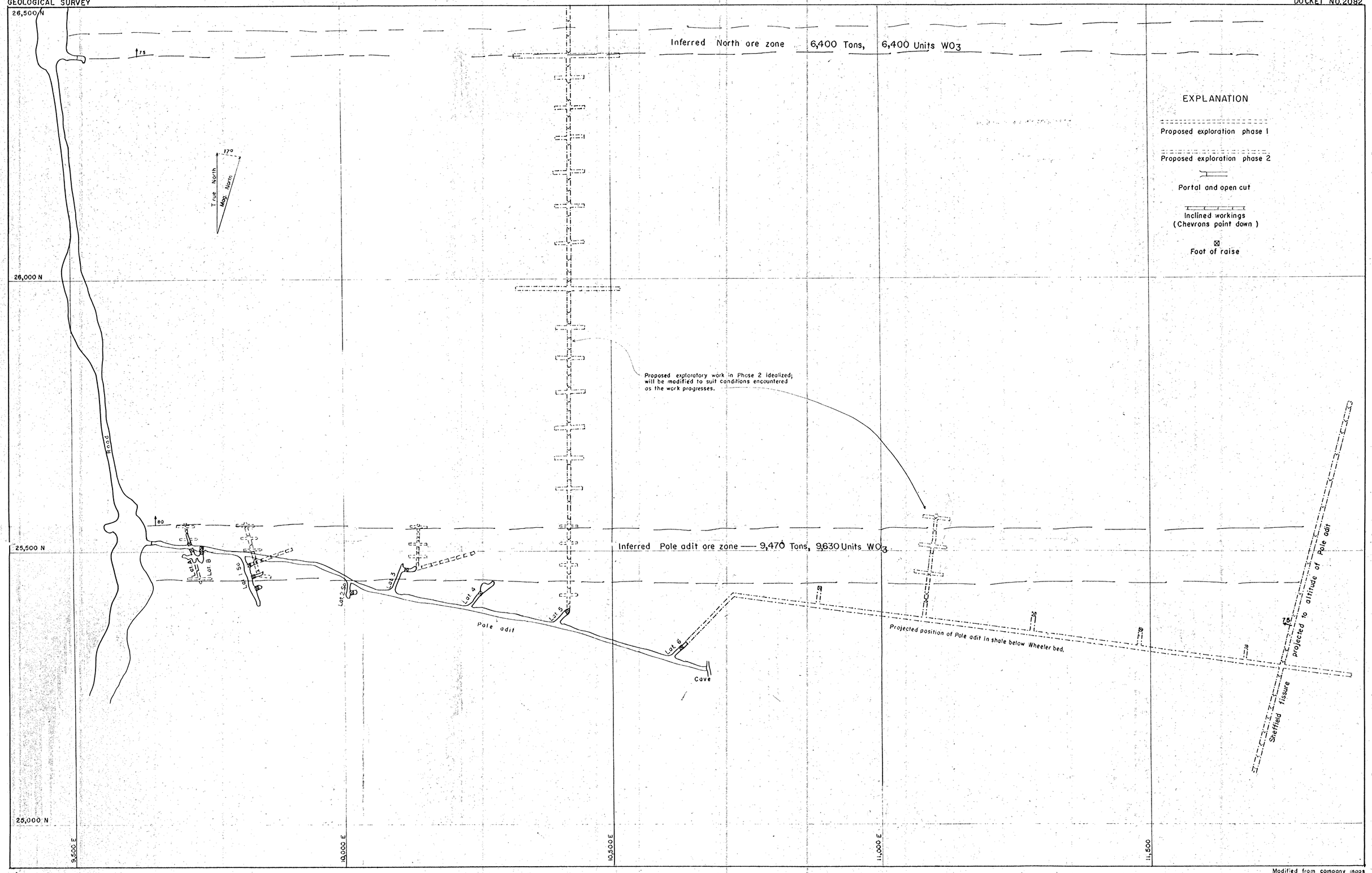
	2. Labor and Supervision			3. Operating Materials and Supplies									4. Operating Equipment		5. Central Rib. & Repairs		6. Mur. Bldg. & Compress.		7. Miscellaneous						8. Contingencies	
	Labor	Supervision	Technical	Mac. Oper. Supplies	Timber	Explosives	Pipe and Ventilation	Track	Fuel and Lube	Steel and Bits	Mac. Small Tools	Freight	Equip.	Freight	Materials	Labor	Materials	Labor	Preventing Blueprint	Repairs to Equipment	Assaying	Payroll Taxes	Comp. Ins.	Misc.	Blasting	Drilling
3. Trackage								1404.00																		
4. Powder, fuse & caps						1458.00																				
5. Steel and bits										826.20																
6. Timber					248.40																					
7. Fuel and lube									739.80																	
8. Mac. small tools											297.00															
9. Comp. Insurance																							529.20			
10. Payroll taxes																						340.20				
C. Cross and Bed Drifts 1770'																										
1. Contract labor	23.995.00																									
2. Pipe and ventilation							2885.10																			
3. Powder, fuse & caps						4779.00																				
4. Steel and bits										2708.10																
5. Timber					814.20																					
6. Fuel and lube									2422.90																	
7. Mac. small tools											973.50															
8. Comp. Insurance																							1691.50			
9. Payroll taxes																						1079.70				
d. Sheffield Bed Drift 700'																										
1. Contract labor	7450.00																									
2. Pipe and ventilation							1141.00																			
3. Powder, fuse & caps						1890.00																				
4. Steel and bits										1071.00																
5. Timber					322.00																					
6. Fuel and lube									959.00																	
7. Mac. small tools											385.00															
8. Shaker cable											175.00															
9. Comp. Insurance																							665.00			
10. Payroll taxes.																						427.00				
B. Underground Facilities																										
1. Main Bedding Drive North																										
a. Power line in tunnel																	2180.00	140.05								
b. Replace air shaker																	100.00	175.07								
c. Permanent Unit line																	2450.00	280.11								
2. Pole Tunnel Drive Easterly																										
a. Planning tracks																	562.00	182.84								

Sheet No. 3 - Page 2

	2. Labor and Supervision			3. Operating Materials and Supplies									4. Operating Equipment		5. Initial Ch. & Repairs		6. New Bldg. & Equipment		7. Miscellaneous					8. Contingencies	
	Labor	Supervision Technical	Mat. Oper. Supplies	Timber	Explosives	Pipe and Ventilation	Track	Fuel and Lube	Steel and Bits	Mat. Wood Tools	Freight	Expl.	Freight	Materials	Labor	Materials	Labor	Prospecting Blueprints	Repairs to Equipment	Assaying	Payroll Taxes	Comp. Ins.	Adm.	Bookkeeping	Trucking
b. "Chevy-Pickup"																500.00	35.01								
c. Air receivers																610.50	105.04								
d. Chutes and Manways																2379.60	2100.40								
C. Surface Facilities																									
1. Mine Water system																									
a. Cribbed Well																440.50	350.10								
b. Pumps & Pump line																453.50	210.09								
c. Storage tanks																1050.00	850.14								
d. Supply line																426.70	536.05								
e. Power line to pumps																900.00	350.14								
2. Generator Building																									
a. b. Building																1648.00	980.39								
c. Switchboard																106.40	105.04								
d. Fuel tanks																428.50	105.04								
e. Transformers																302.50	70.03								
3. Other Facilities																									
a. Bunkhouse																908.75	4096.65								
b. Cooling Tower																265.00	175.00								
D. Additional Equipment																									
1. Diesel-Electric Generator													8020.30												
2. Air Compressor													9024.09												
3. Mine Cars													5065.00												
4. Electric Shovels													12373.20												
E. Supervisory & Supporting Labor																									
1. Supervisory & technical		18400.00	8900.00																						
2. Supporting labor	20,862.40																								
3. Comp. Insurance																						3719.67			
4. Payroll Taxes																					2387.8				
F. Other Costs																									
Freight on Supplies											2506.83														
Freight on Equipment														2108.75											
Truck Operation																									4194.47
Power Generation								6844.70																	
Accounting & Blueprinting																		2480.00							
Jeep Mileage																									
Assaying																				760.00					
Equipment repairs																			2,20.52						
Misc. operating supplies	11057.60	18400.00	8900.00	4507.20	2419.60	16902.00	9903.60	6844.70	14520.98	4577.80	4930.50	2506.83	34492.59	2108.75		2388.495	10647.75	2480.00	2,20.52	760.00	2387.8	3719.67	[illegible]	[illegible]	4194.47



Mt. WHEELER MINES, INC.
PLAN
POLE ADIT AND LATERALS
CONTRACT NO. Idm-E248
Scale: 1 inch = 20 feet



Modified from company maps

Figure 5

MAP SHOWING PROPOSED EXPLORATION, MT. WHEELER TUNGSTEN PROSPECT
WHITE PINE COUNTY, NEVADA

0 100 200 300 ft.
Scale

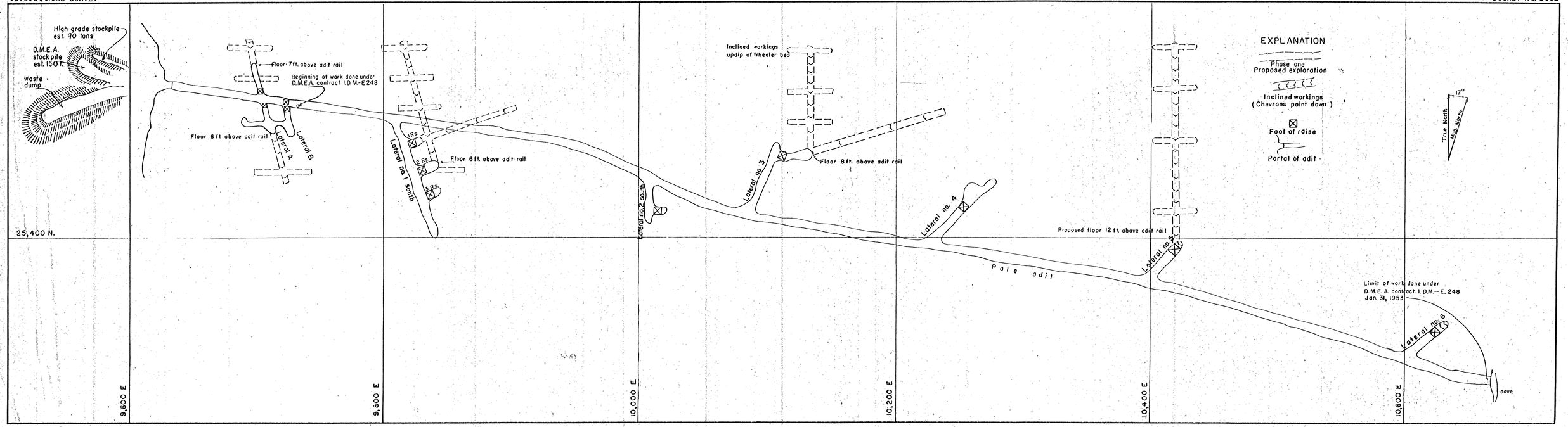
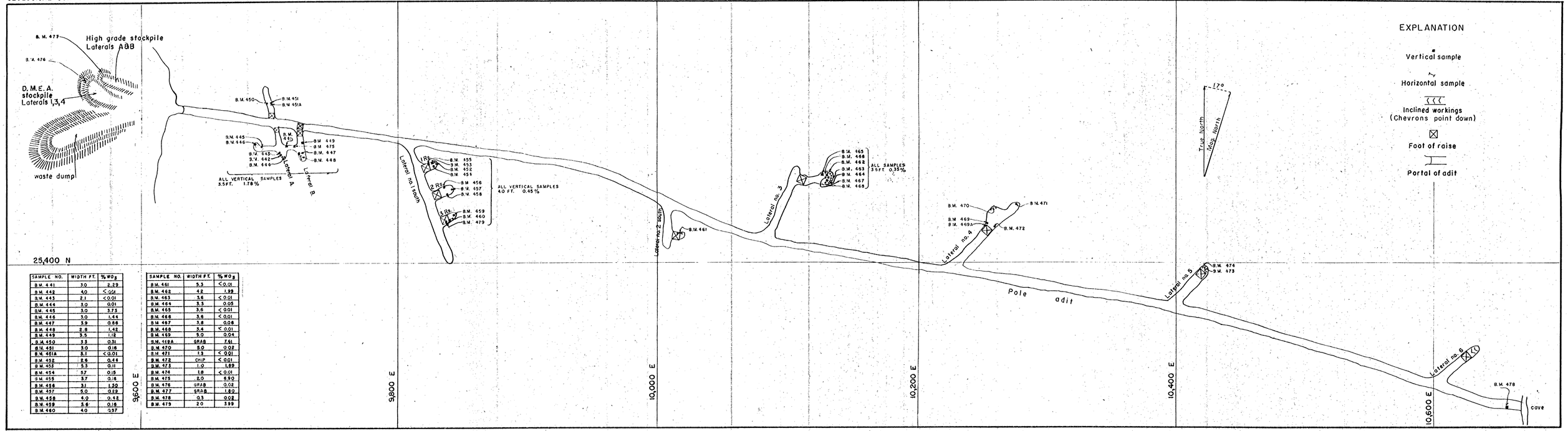


Figure 4

PLAN MAP OF MT. WHEELER TUNGSTEN PROSPECT
POLE ADIT
WHITE PINE COUNTY, NEVADA

0 40 80 120 ft.
Scale

Modified from company maps



SAMPLE NO.	WIDTH FT.	% WO_3
B.M. 441	3.0	2.29
B.M. 442	4.0	< 0.01
B.M. 443	2.1	< 0.01
B.M. 444	3.0	0.01
B.M. 445	3.0	3.73
B.M. 446	3.0	1.44
B.M. 447	3.9	0.66
B.M. 448	2.8	1.42
B.M. 449	3.5	1.12
B.M. 450	3.3	0.31
B.M. 451	3.0	0.16
B.M. 451A	3.1	< 0.01
B.M. 452	2.6	0.44
B.M. 453	5.3	0.11
B.M. 454	5.7	0.15
B.M. 455	3.7	0.16
B.M. 456	3.1	1.20
B.M. 457	5.0	0.22
B.M. 458	4.0	0.42
B.M. 459	3.6	0.16
B.M. 460	4.0	0.57

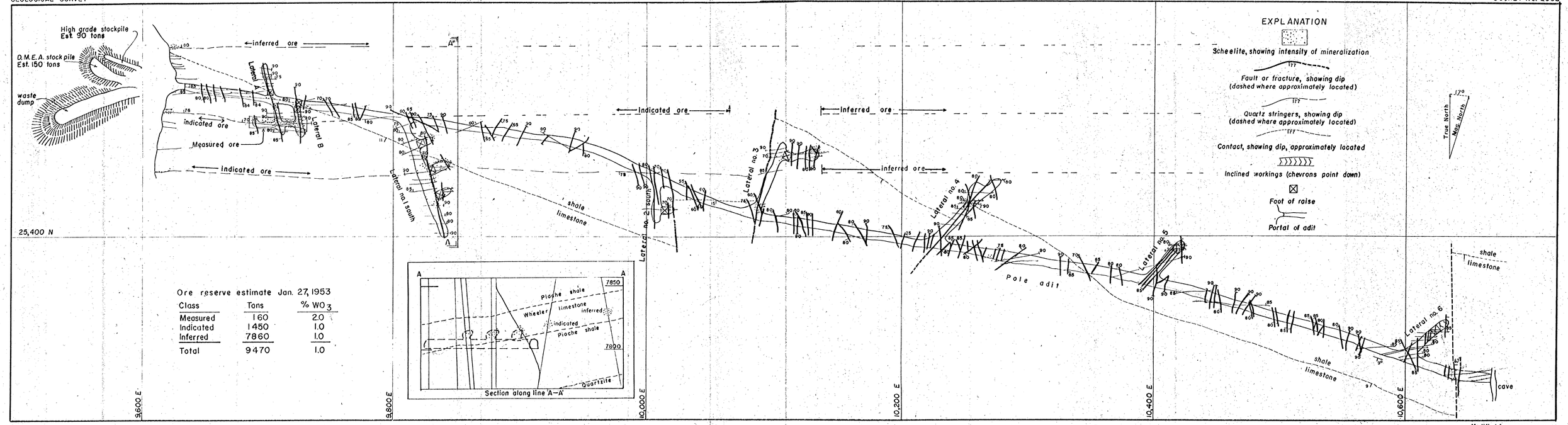
SAMPLE NO.	WIDTH FT.	% WO_3
B.M. 461	5.3	< 0.01
B.M. 462	4.2	1.99
B.M. 463	3.6	< 0.01
B.M. 464	3.3	0.05
B.M. 465	3.6	< 0.01
B.M. 466	3.6	< 0.01
B.M. 467	3.8	0.06
B.M. 468	3.4	< 0.01
B.M. 469	5.0	0.04
B.M. 469A	GRAB	7.61
B.M. 470	5.0	0.02
B.M. 471	1.3	< 0.01
B.M. 472	CHIP	< 0.01
B.M. 473	1.0	1.89
B.M. 474	1.8	< 0.01
B.M. 475	2.0	6.90
B.M. 476	GRAB	0.02
B.M. 477	GRAB	1.80
B.M. 478	0.3	0.02
B.M. 479	2.0	3.99

Figure 3

ASSAY MAP OF MT. WHEELER TUNGSTEN PROSPECT
POLE ADIT
WHITE PINE COUNTY, NEVADA

0 40 80 120 ft
Scale

Modified from company maps
Samples by U. S. Bureau of Mines



Ore reserve estimate Jan. 27, 1953

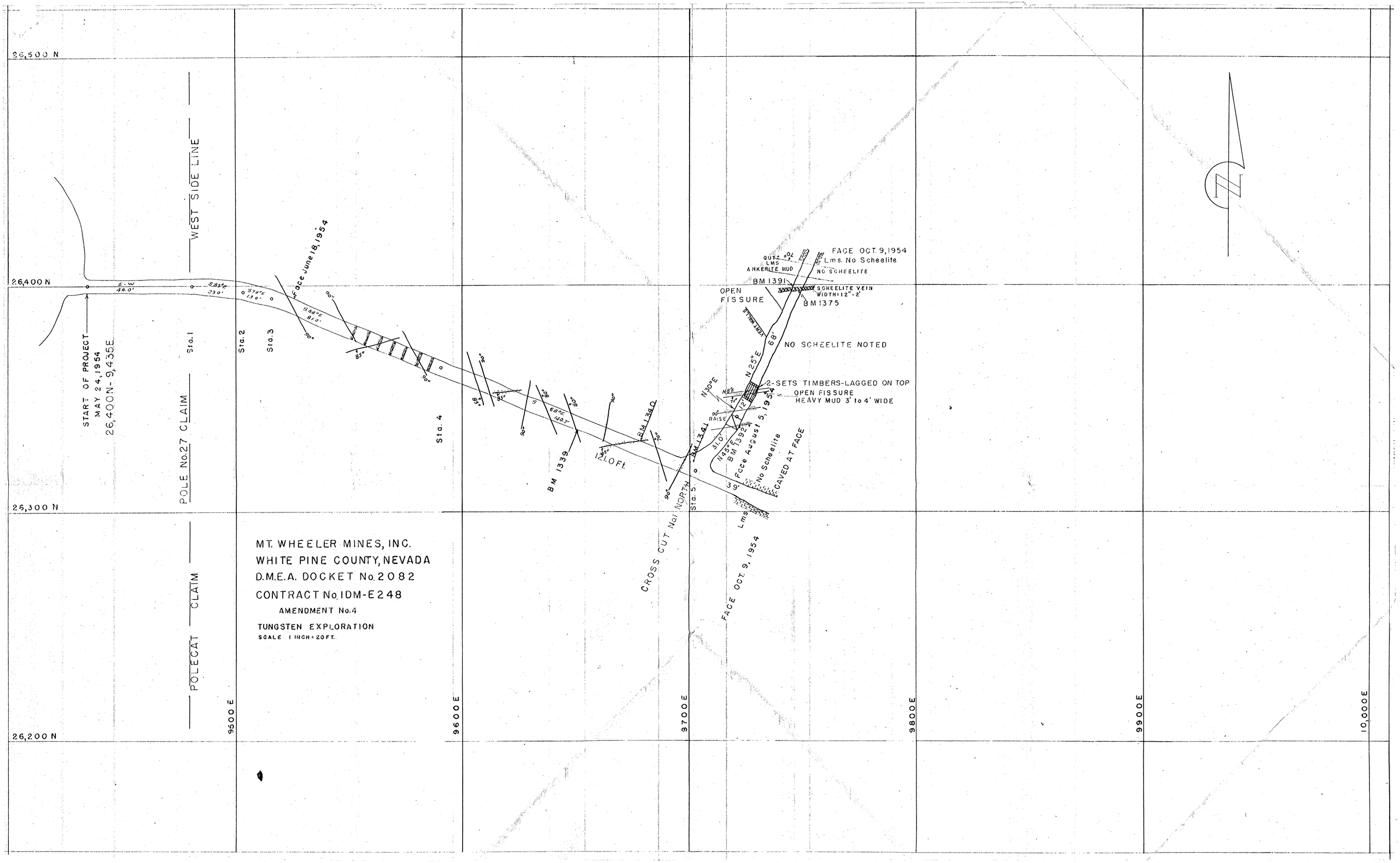
Class	Tons	% WO_3
Measured	160	2.0
Indicated	1450	1.0
Inferred	7860	1.0
Total	9470	1.0

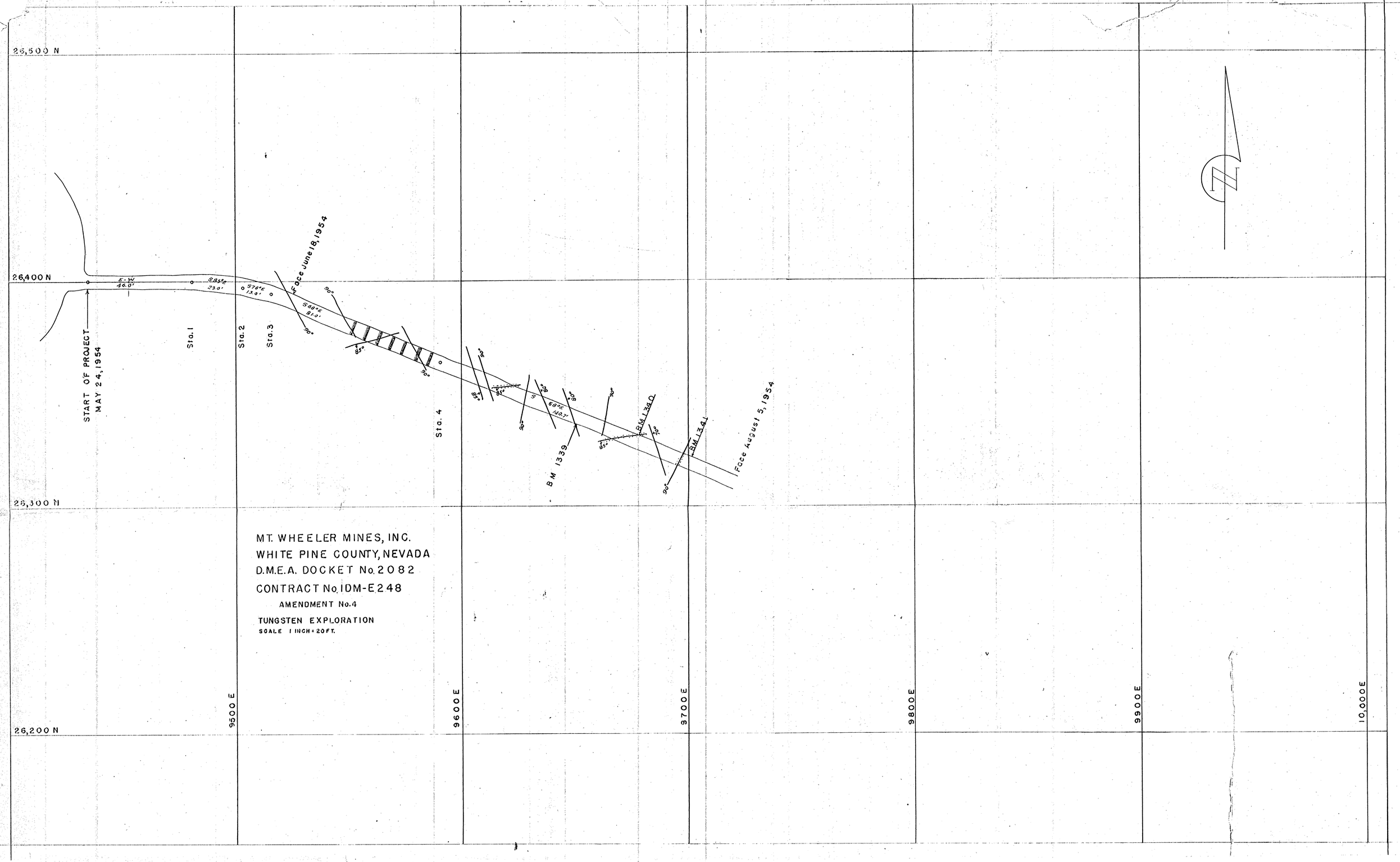
Modified from company maps

Figure 2

GEOLOGIC SKETCH MAP OF MT. WHEELER TUNGSTEN PROSPECT
POLE ADIT
WHITE PINE COUNTY, NEVADA

0 40 80 120 ft
Scale


26,500 N
26,400 N
26,300 N
26,200 N
9500 E
9600 E
9700 E
9800 E
9900 E
10,000 E
WEST SIDE LINE
POLE No.27 CLAIM
POLECAT CLAIM
START OF PROJECT
MAY 24, 1954
26,400N-9,435E
Sta. 1
Sta. 2
Sta. 3
Sta. 4
Sta. 5
Face June 18, 1954
BM 1339
121.0 Ft.
BM 1340
BM 1341
CROSS CUT No.1 NORTH
FACE OCT. 9, 1954
Lms. No Scheelite
QUTZ
LMS
ANKERITE MUD
NO SCHEELITE
BM 1391
OPEN FISSURE
SCHEELITE VEIN
WIDTH=12"-2'
BM 1375
NO SCHEELITE NOTED
2-SETS TIMBERS-LAGGED ON TOP
OPEN FISSURE
HEAVY MUD 3' to 4' WIDE
RAISE
BM 1392
Face August 5, 1954
No Scheelite
CAVED AT FACE
Lms.
MT. WHEELER MINES, INC.
WHITE PINE COUNTY, NEVADA
D.M.E.A. DOCKET No. 2082
CONTRACT No. IDM-E248
AMENDMENT No. 4
TUNGSTEN EXPLORATION
SCALE 1 INCH = 20 FT.


26,500 N
26,400 N
26,300 N
26,200 N
9500 E
9600 E
9700 E
9800 E
9900 E
10,000 E
START OF PROJECT
MAY 24, 1954
Sta. 1
Sta. 2
Sta. 3
Sta. 4
Face June 18, 1954
Face August 5, 1954
BM 1339
BM 1340
BM 1341
E-W
46.0'
S85°E
23.0'
S78°E
13.0'
S68°E
91.0'
S68°E
140.7'
90°
85°
70°
N
MT. WHEELER MINES, INC.
WHITE PINE COUNTY, NEVADA
D.M.E.A. DOCKET No. 2082
CONTRACT No. IDM-E 248
AMENDMENT No. 4
TUNGSTEN EXPLORATION
SCALE 1 INCH = 20 FT.

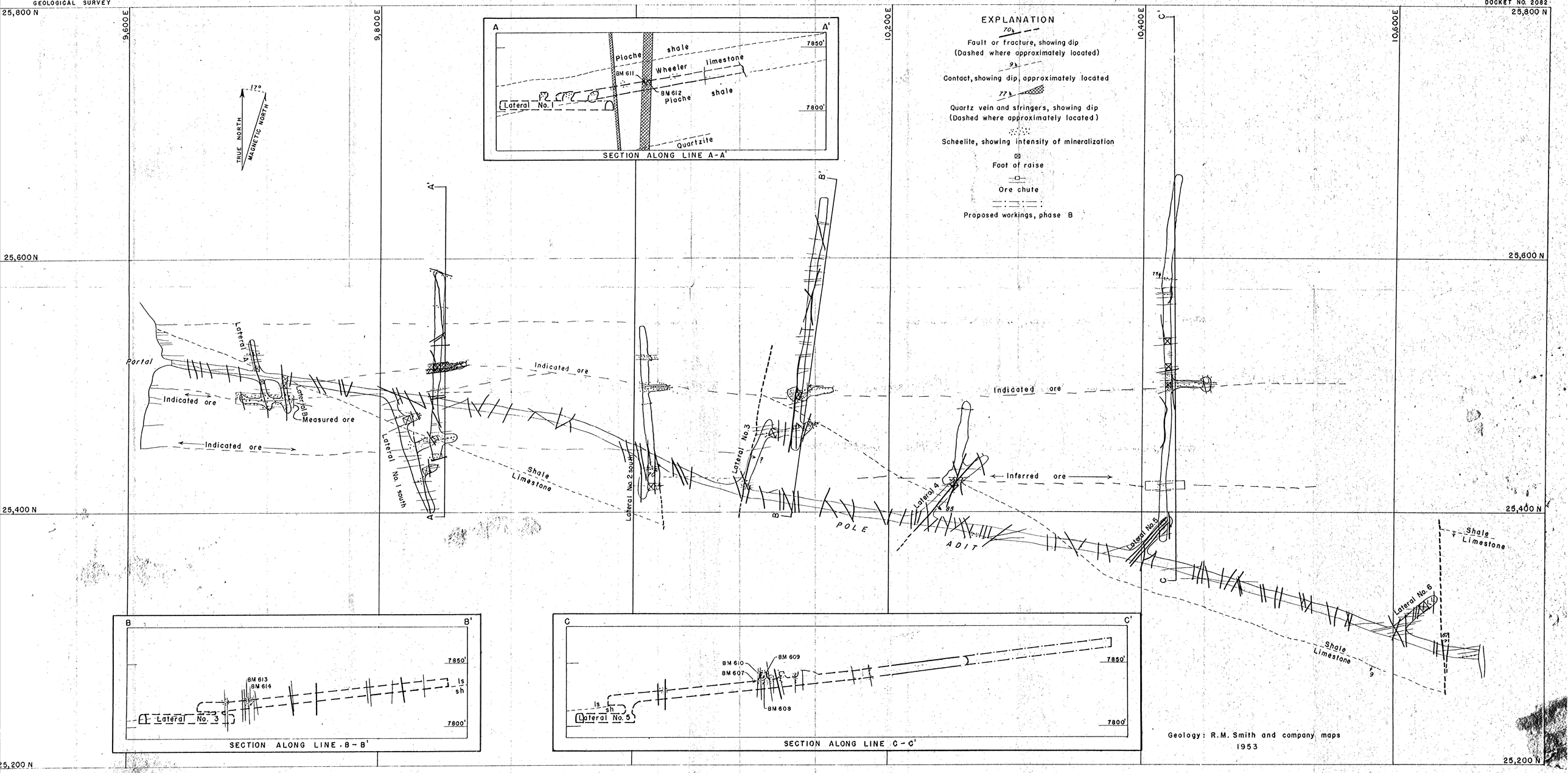
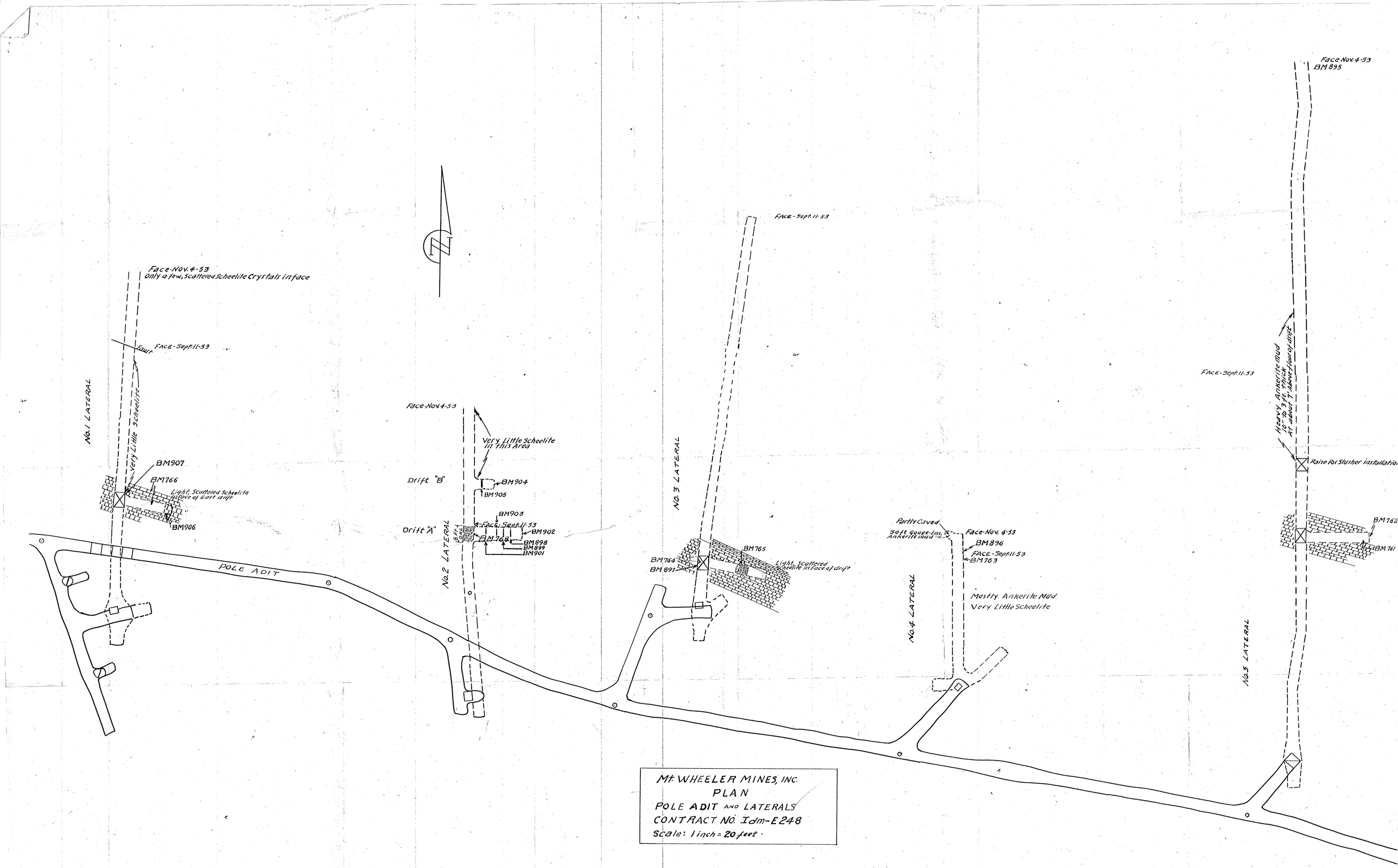
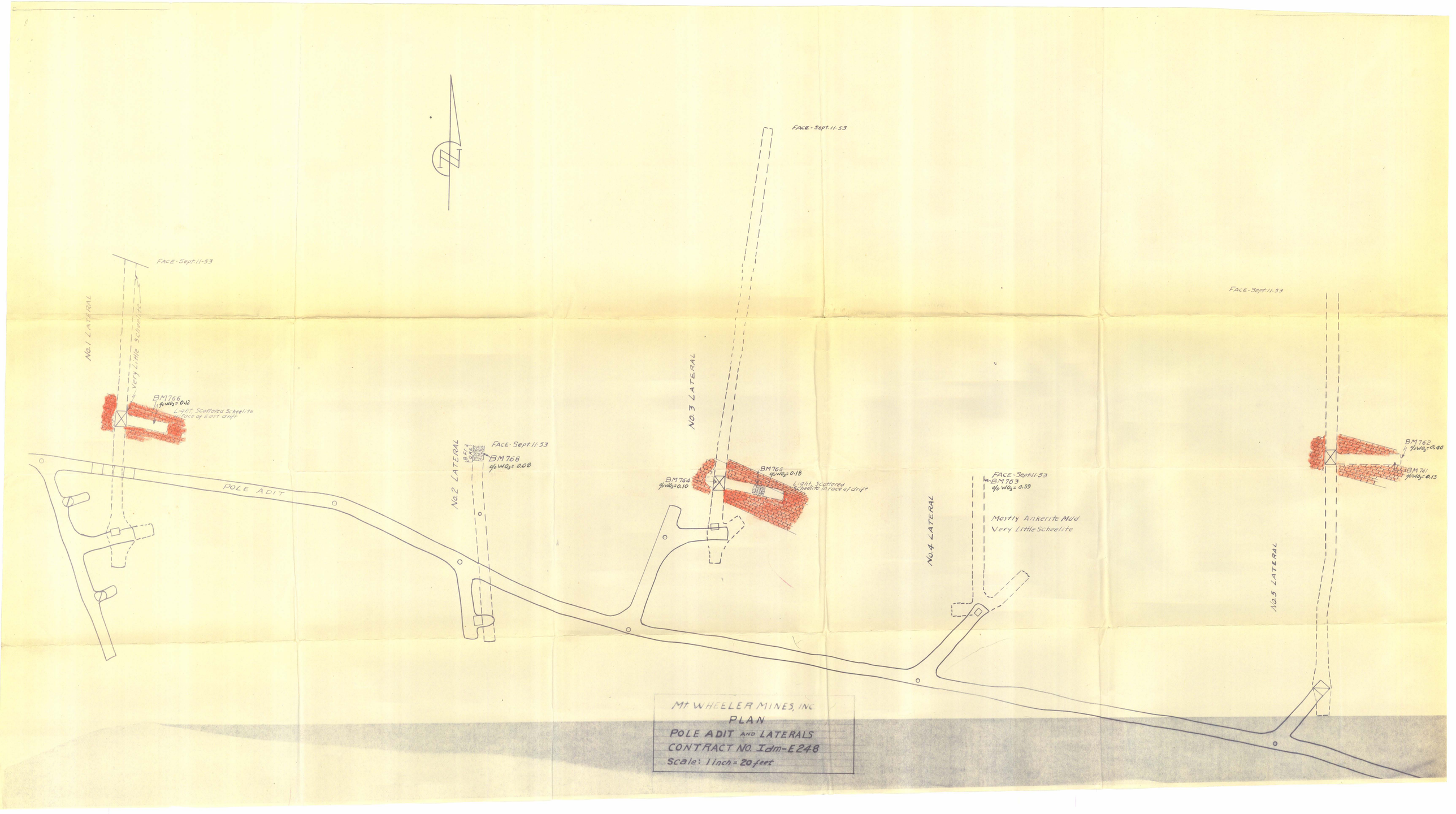
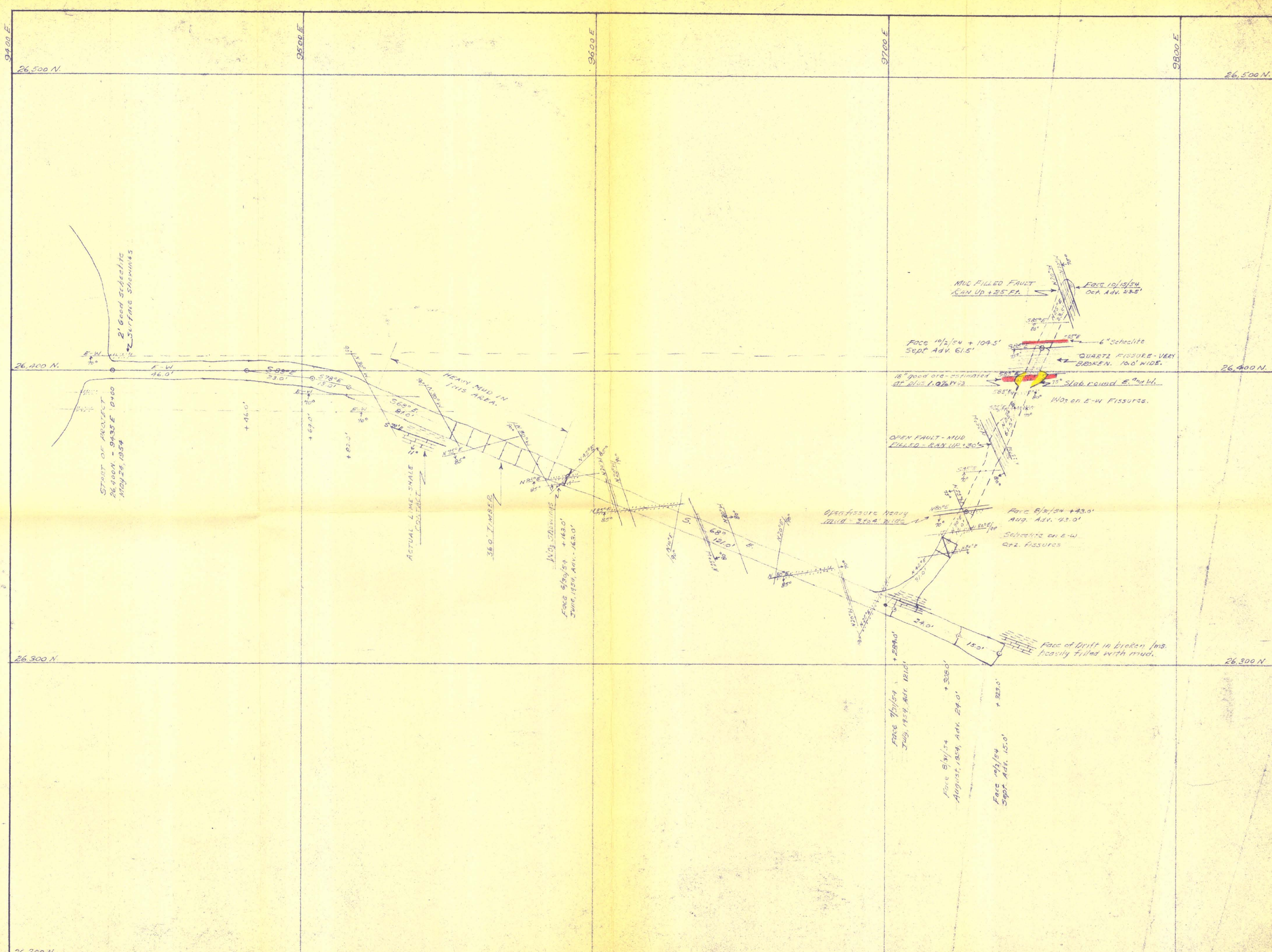


FIG. 2 GEOLOGIC SKETCH MAP AND SECTIONS OF MT. WHEELER TUNGSTEN PROSPECT - POLE ADIT, WHITE PINE COUNTY, NEVADA



Mt. WHEELER MINES, INC.
PLAN
POLE ADIT AND LATERALS
CONTRACT NO. Idm-E248
Scale: 1 inch = 20 feet


FACE - Sept. 11-53
No. 1 LATERAL
Very Little Scheelite
BM 766
% WO3 = 0.12
Light, Scattered Scheelite
Face of East drift
POLE ADIT
No. 2 LATERAL
FACE - Sept. 11-53
BM 768
% WO3 = 0.08
No. 3 LATERAL
FACE - Sept. 11-53
BM 764
% WO3 = 0.10
BM 765
% WO3 = 0.18
Light, Scattered Scheelite in face of drift
No. 4 LATERAL
FACE - Sept. 11-53
BM 763
% WO3 = 0.59
Mostly Ankerite Mud
Very Little Scheelite
No. 5 LATERAL
FACE - Sept. 11-53
BM 762
% WO3 = 0.40
BM 761
% WO3 = 0.13
Mt. WHEELER MINES, INC
PLAN
POLE ADIT AND LATERALS
CONTRACT NO. Idm-E248
Scale: 1 inch = 20 feet



REVISIONS	June, 1954, Advance 163.0'	REFERENCES	October 1954 Advance 23.5'	WORK	DRAWN 7/7/54
	July, 1954, Advance 121.0'		November, 1954 - Final Report.		TRACED 8/9/54 ✓
	Aug., 1954, Advance 67.0'		Total Project Advance - 451.0 Ft.		CHECKED 9/3/54 ✓
	Sept. 1954, Advance 76.5'				APPROVED 10/7/54 ✓ 2/28/55 ✓

Mt. Wheeler Mines, Inc.
218 Felt Building
Salt Lake City, Utah.

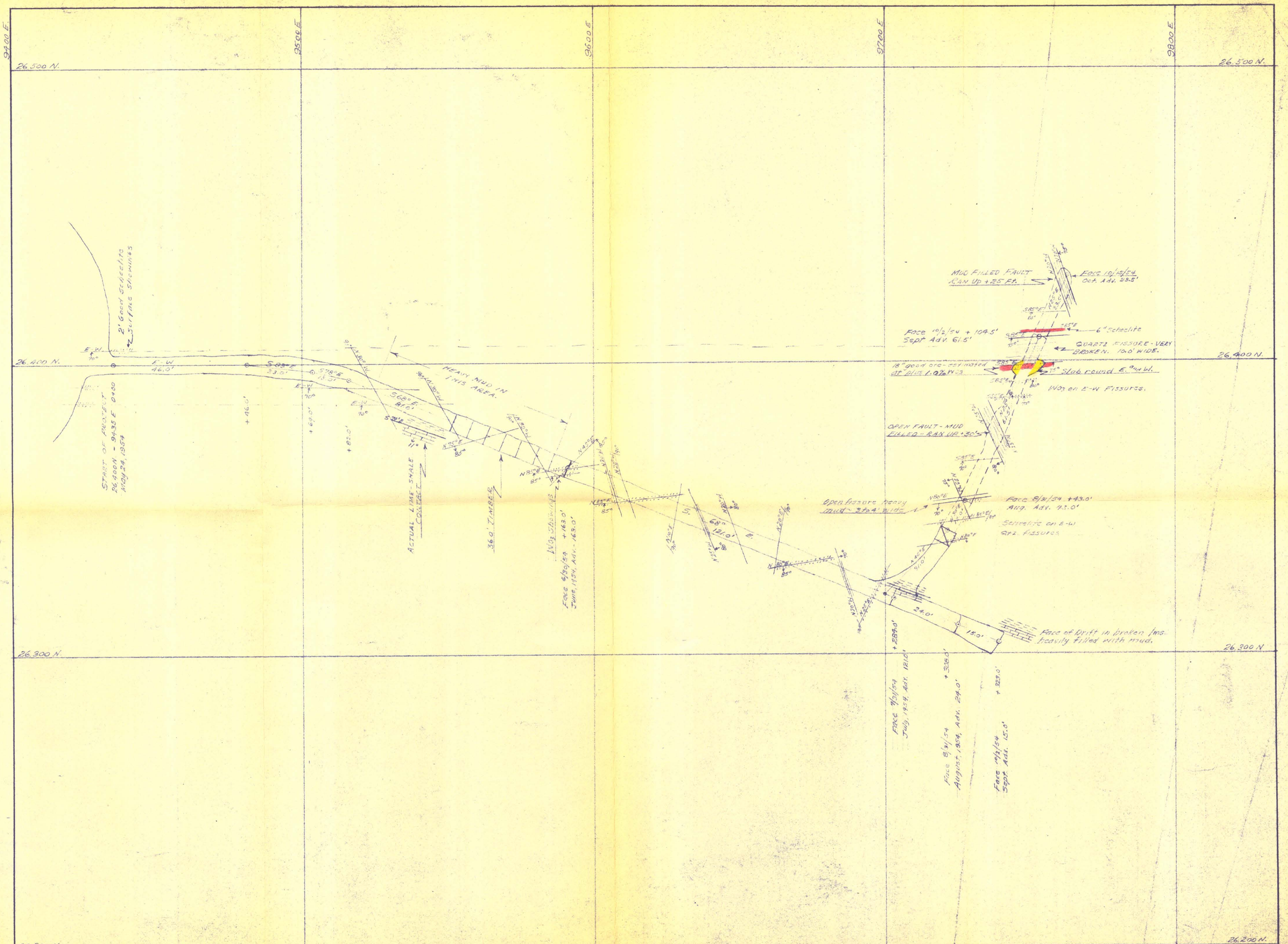
PLANT

D.M.E.A - 2082 - TUNGSTEN
Contract Idm-E248 Amend. No. 4
PROGRESS MAP ~ NORTH ZONE.

SCALE 1" = 20'

C-100

CESCO-1000M



REVISIONS		REVISIONS		REFERENCES		WORK		
		June, 1954, Advance	163.0'	October 1954 Advance	23.5'	DRAWN 7/7/54		
		July, 1954, Advance	121.0'	November, 1954 - Final Report		TRACED 8/9/54	✓	
		Aug. 1954, Advance	67.0'	Total Project Advance - 451.0 Ft.		CHECKED 9/3/54	✓	
		Sept. 1954, Advance	76.5'			APPROVED 10/8/54	✓	
						2/28/55	✓	

MT. WHEELER MINES, INC.
218 Felt Building
SALT LAKE CITY, UTAH.

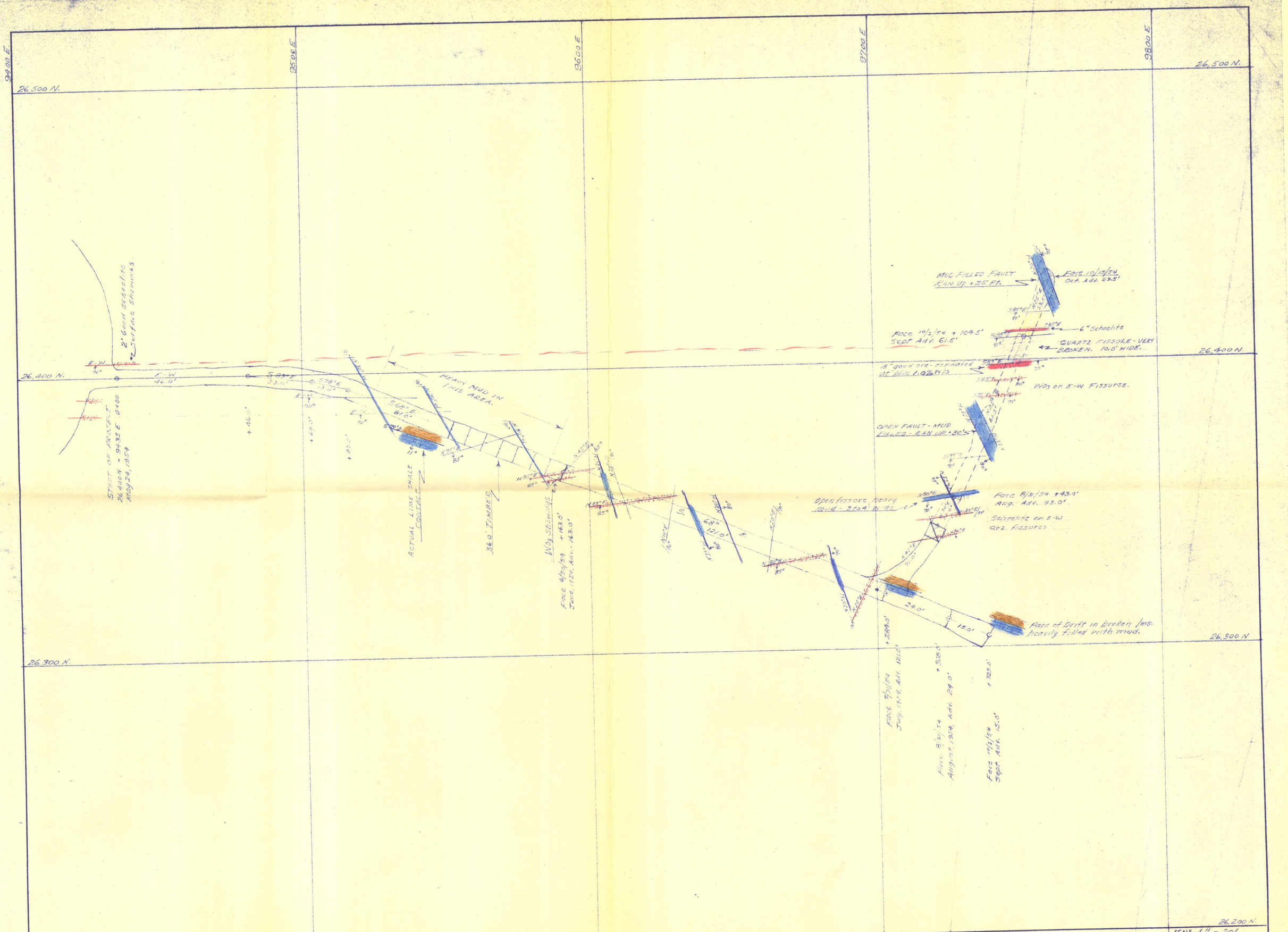
PLANT

D.M.E.A. - 2082 - TUNGSTEN
Contract I-dm-E248 Amend. No. 4
PROGRESS MAP - NORTH ZONE.

SCALE 1" = 20'

C - 100

CESCO-1000H



REVISIONS		REVISIONS		REFERENCES	
		June, 1954 Advance	163.0'	October, 1954 Advance	23.5'
		July, 1954 Advance	121.0'		
		Aug. 1954 Advance	67.0'		
		Sept. 1954 Advance	16.5'		

WORK		
DRAWN	7/7/54	Dcw
TRACED	8/9/54	✓
CHECKED	9/3/54	✓
APPROVED	10/8/54	✓

MT. WHEELER MINES, INC.
218 Felt Building
SALT LAKE CITY, UTAH.

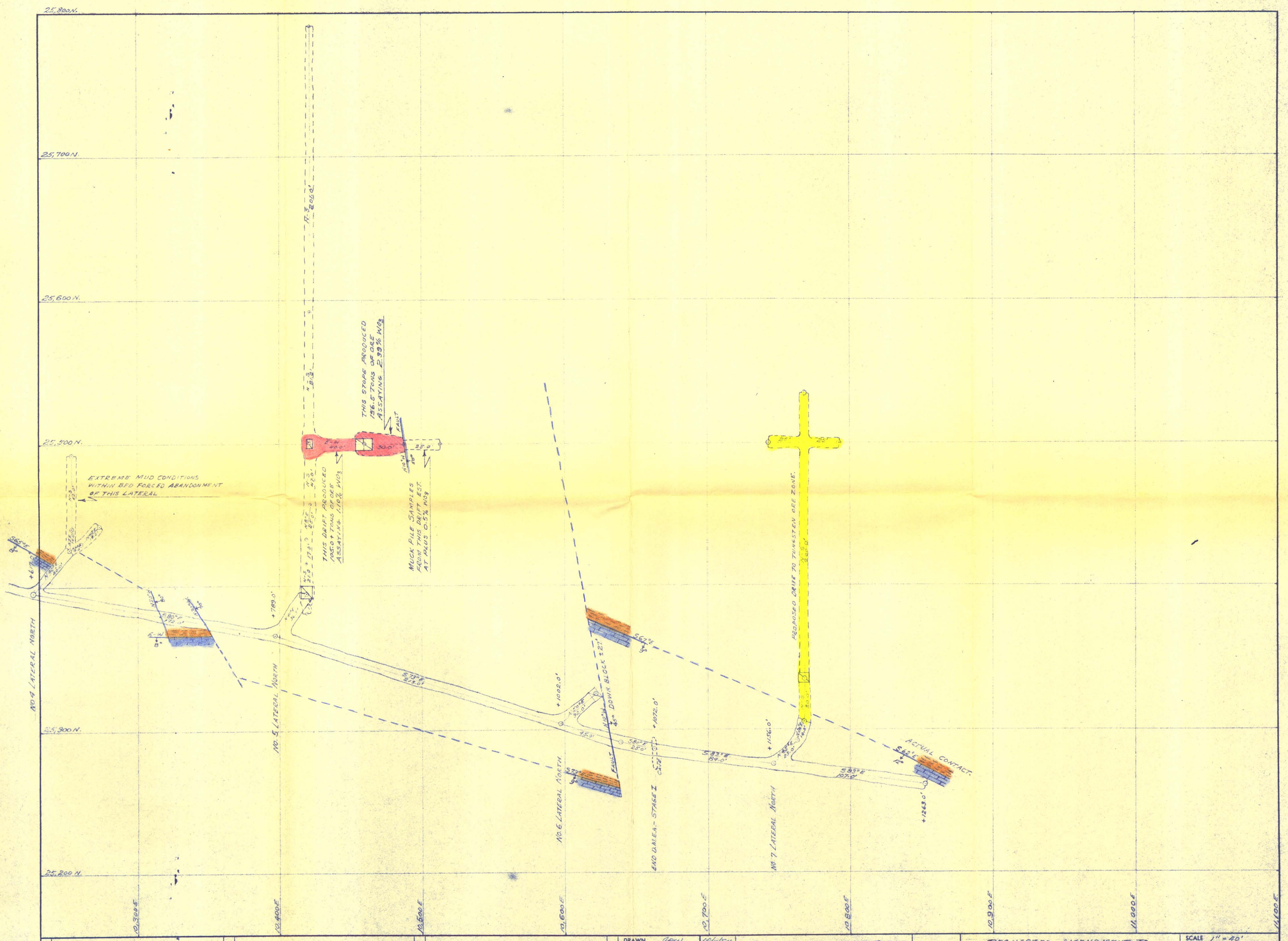
PLANT

D.M.E.A. - 2082 - TUNGSTEN
Contract Idm - E248 Amend. No. 4
PROGRESS MAP ~ NORTH ZONE.

SCALE 1" = 20'

C - 100

CESCO-1000M



REVISIONS	REVISIONS	REFERENCES	WORK		
			DRAWN		11/11/54
			TRACED		
			CHECKED		
			APPROVED		

MT. WHEELER MINES, INC
218 Felt Building
SALT LAKE CITY, UTAH.

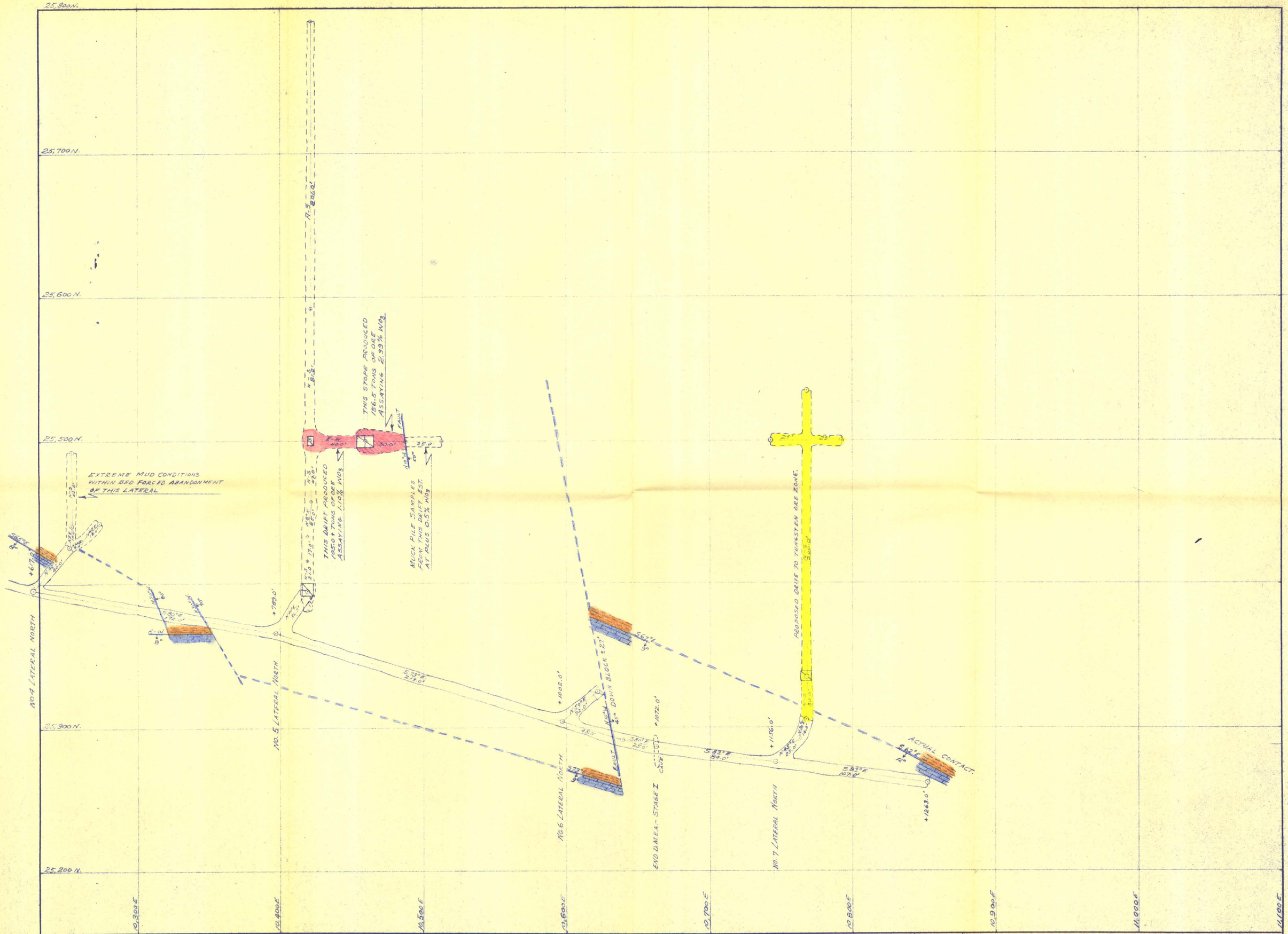
PLANT

REQUESTED AMENDMENT TO
CONTRACT Idm-E248 (Amend. 5/20/54)
DMEA-2082-TUNGSTEN

SCALE 1" = 40'

C-101

CE500-1000M



REVISIONS	REVISIONS	REFERENCES	WORK		
			DRAWN		10/10/54
			TRACED		
			CHECKED		
			APPROVED		

MT. WHEELER MINES, INC
218 Felt Building
SALT LAKE CITY, UTAH

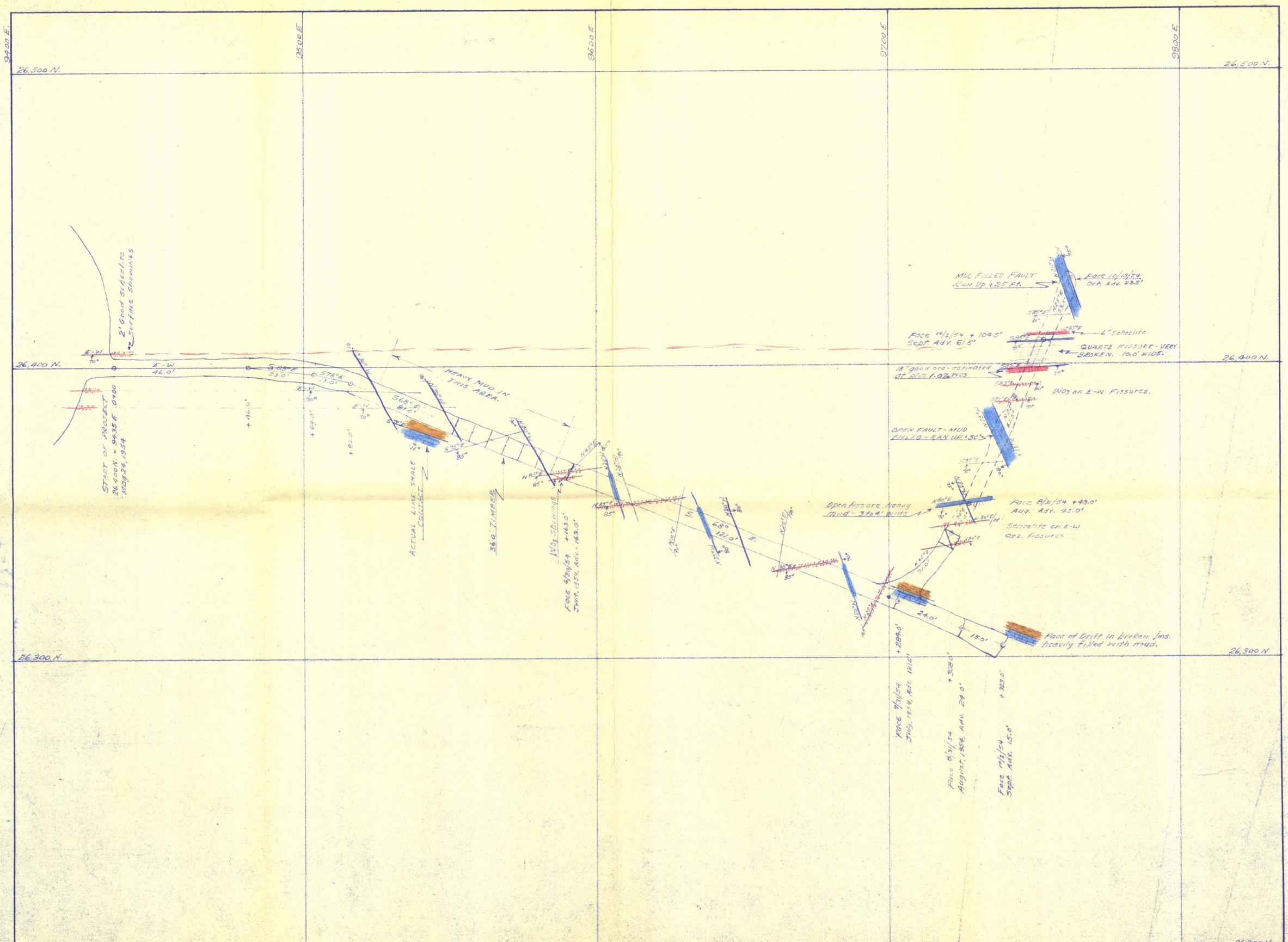
PLANT

REQUESTED AMENDMENT TO
CONTRACT Idm-E248 (Amend. 5/29/54)
DMEA 2082 - TUNGSTEN

SCALE 1" = 40'

C - 101

CEBCO-10'00M



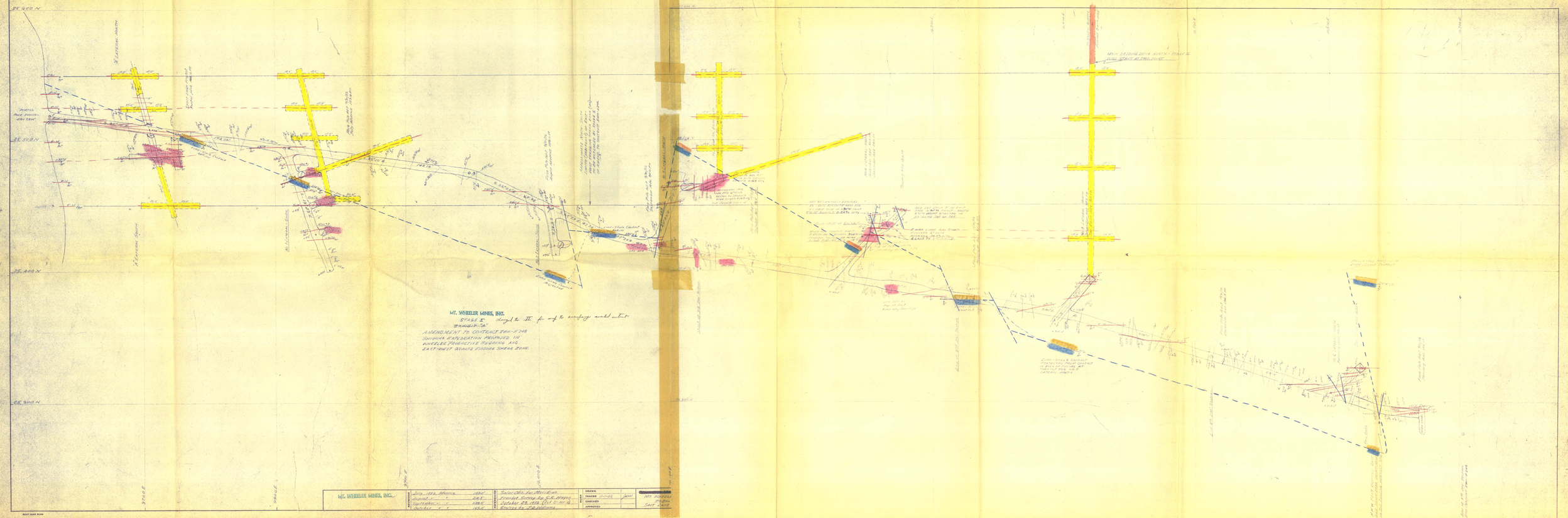
REVISIONS		REVISIONS		REFERENCES		WORK			
		June, 1954, Advance	163.0'	October 1954 Advance	23.5'	DRAWN 7/7/54	Dave	Mt. Wheeler Mines, Inc. 218 Felt Building SALT LAKE CITY, UTAH.	PLANT
		July, 1954, Advance	121.0'			TRACED 8/9/54	✓		
		Aug. 1954, Advance	67.0'			CHECKED 9/9/54	✓		
		Sept. 1954, Advance	76.5'			APPROVED 10/9/54	✓		

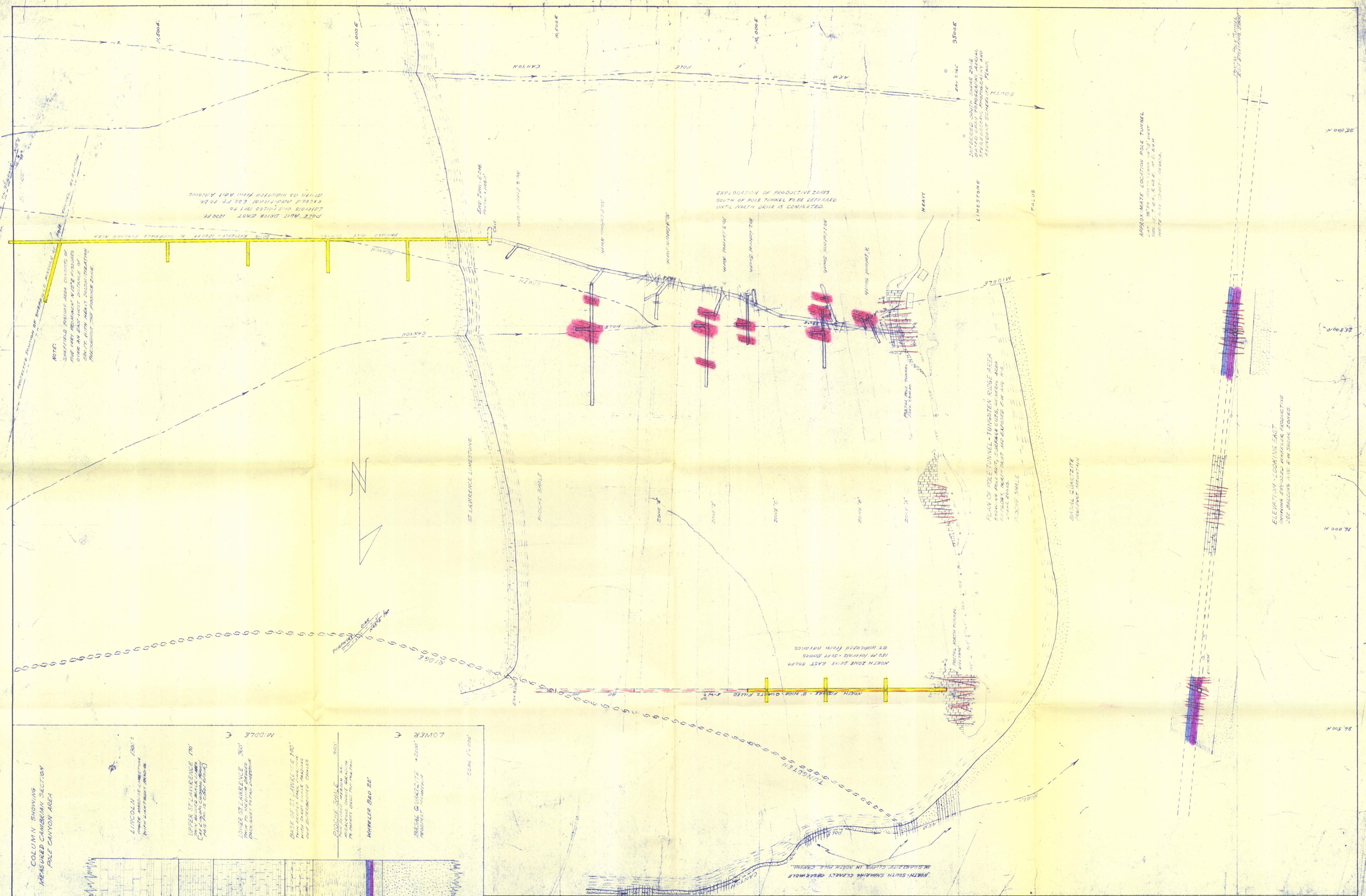
D.M.E.A.-2082-TUNGSTEN
Contract Idm-E348 Amend. No. 4
PROGRESS MAP - NORTH ZONE.

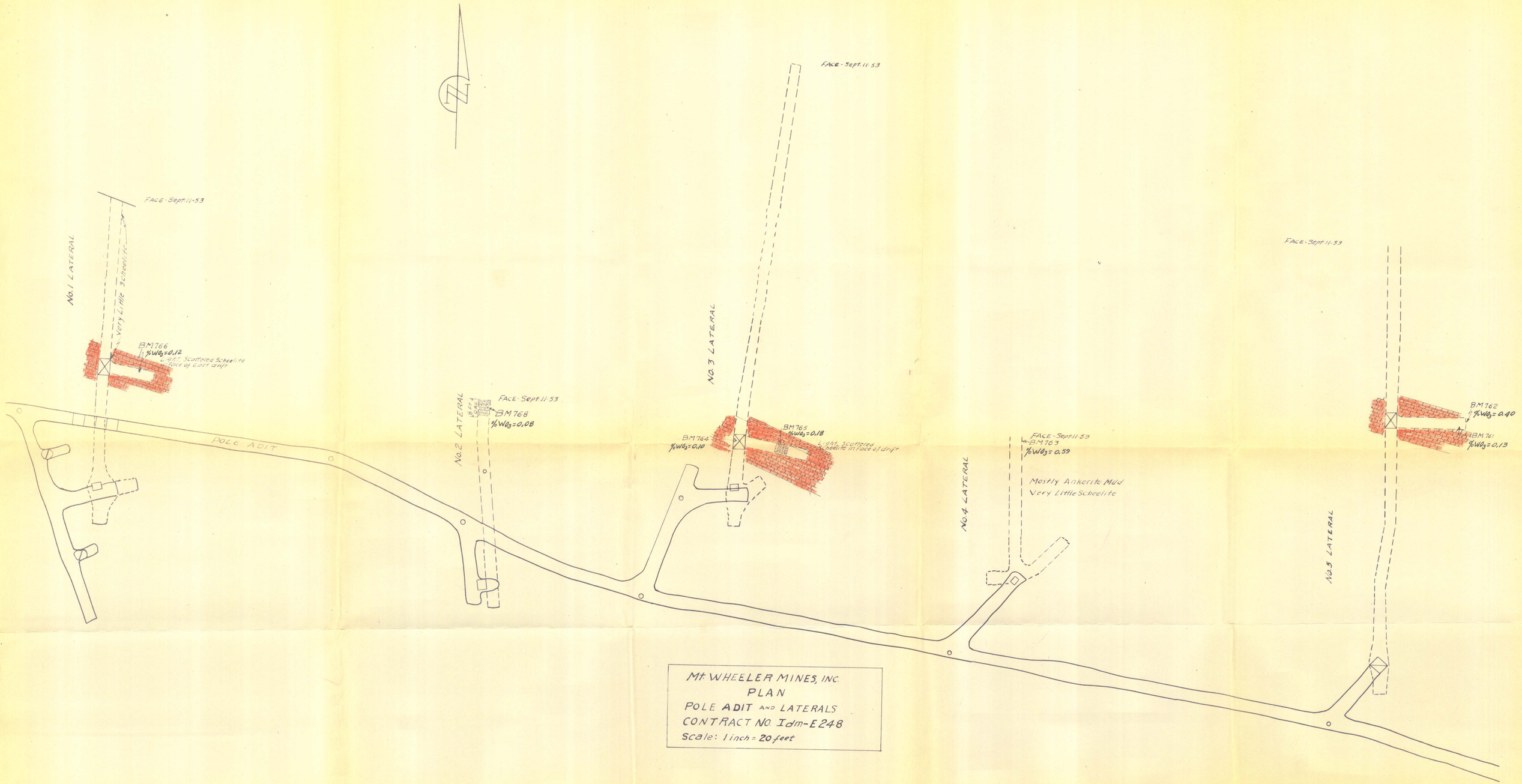
SCALE 1" = 20'

C-100

CESCO-10000W


MT. WHEELER MINES, INC.
STAGE I
"EXHIBIT A"
AMENDMENT TO CONTRACT IDA-E-248
SCHEMATIC EXPLORATION PROGRAM TO
WHEELER PRODUCTIVE BEDDING AND
EAST-WEST QUARTZ VEIN OR SHEAR ZONE.
MAIN DRIFTING DRIVE NORTH - STAGE II
FINAL STATIC BLOCK LOCK
LIMIT - SHALE & CONTACT
PROTECTED FROM CONTACT
IN BACK BY FOLDING AT
SHALE & CONTACT
LATERAL PARTS
MT. WHEELER MINES, INC.
July 1952 Approx.
August " "
September " "
October " "
1956
R.M.S.
R.M.S.
R.M.S.
Solar Obs. for Meridian
Transit Survey by G.H. Hayes
Sunset 22.1956 (Cy 1 in 4)
Stations by F.B. Williams
DRAWN
TRACED 11-1-52
CHECKED
APPROVED
MT. WHEELER
P.A. Zeh
Salt Lake


NOTE:
SHEFFIELD PRESSURE AREA CONSISTS OF FIVE VERY PROMINENT N 15° E FISSURES OVER AN EAST-WEST OUTCROP OF COLITE WITH MANY SOLID TRAVERTIN PRECIPITATE THE PRODUCER ZONE.
POLE ADIT DRIVE EAST 120 FT
LOCATION OF LINES OF TS
EXCEL INFORMATION SEE FT 10 IN
GIVEN AS INDICATED FROM ADIT ABOVE
EXPLORATION OF PRODUCTIVE ZONES SOUTH OF POLE TUNNEL TO BE DEFERRED UNTIL NORTH DRIVE IS COMPLETED.
TWEEKED SOUTH SHEAR ZONE BASED ONLY TOPOGRAPHY, ARGILL STRUCTURE, MAPPED ADIT AND CROSSCUT SOUTH OF POLE.
APPROXIMATE LOCATION POLE TUNNEL
CAT. 38°04' 00" LONG 112°13' 24" WEST
SEC. 10 T 2 N R 4 W W.C.B.&M
WHITE ROSE QUADRANGLE UTAH.
PROPOSED POLE TUNNEL EXT. 1962
ST LAWRENCE LIMESTONE
PIOCHE SHALE
ZONE "A"
ZONE "B"
ZONE "C"
ZONE "D"
ZONE "E"
PLAN OF POLE TUNNEL - TUNGSTEN RIDGE AREA
SHOWING EXPLORATORY WORK
POLE TUNNEL AND CROSSCUTS
ELEVATION - LOOKING EAST
SHOWING EXPOSED WHEELER PRODUCTIVE
ZONE BELOW AND E.W. SHEAR ZONES.
BASAL QUARTZITE
PROSPECT MOUNTAIN
TALUS
LIMESTONE
HEAVY
MIDDLE
POLE
CANYON
ARM
SOUTH
TUNGSTEN
NORTH
NORTH FISSURE - 8' WIDE - QUARTZ FILLED
NORTH ZONE DRIVE EAST 500 FT
150 FT INTERVALS - SOFT ROCKS
OF WHITEROCK FROM OBVIOUS
NORTH-SOUTH SHEARING CLEARLY DISCERNABLE
IN QUARTZITE CLIFFS IN NORTH POLE CANYON.
COLUMN SHOWING
MEASURED CAMBRIAN SECTION
POLE CANYON AREA
LINCOLN 180'
UPPER ST LAWRENCE 170'
LOWER ST LAWRENCE 360'
BASE OF ST LAWRENCE 170'
PIOCHE SHALE 800'
WHEELER BED 52'
BASAL QUARTZITE 4-2000'
MIDDLE
LOWER
SCALE 1" = 100'
PROPOSED WORK STAGE II
EXHIBIT "A"
DRAWN
TRACED
CHECKED
APPROVED
12/10/62
12/21/62
NT. WHEELER MINES INC
PO. BOX 150
SALT LAKE CITY 10, UTAH.
COMPOSITE MAP SHOWING:
1. Exploration Completed DMEA-2082; Idm-5248
2. Phase III Extension Pole Adit to Sheffield Fissure
and Adit Drive at North Orb Zone
SCALE 1" = 100'
D-100-7



Mt. WHEELER MINES, INC.
PLAN
POLE ADIT AND LATERALS
CONTRACT NO. Idm-E248
Scale: 1 inch = 20 feet

COLUMN SHOWING
MEASURED CAMBRIAN SECTION
POLE CANYON AREA

LINCOLN 1800'
WHITE MASSIVE LIMESTONE
WITH CHERTY BANDS ON TOP

UPPER ST. LAWRENCE 170'
THIN BEDDED BLACK CHERT
[AT LINCOLN CANYON PROPER
AS FAR AS I COULD SEE]

LOWER ST. LAWRENCE 500'
THIN TO MEDIUM BEDDED
DARK GRAY TO TAN LIMESTONE

BASE OF ST. LAWRENCE 140'
THIN BEDDED DARK LIMESTONE
WITH SANDY SHALE PARTINGS
AND INTERBEDDED SHALES

PROCTOR SHALE 320'
THIN TO VERY MEDIUM BED
MICACEOUS SHALE SEPARATE
TO THICKER BEDS TAN LIMESTONE

WHEELER BED 32'

BASAL QUARTZITE +2000'
PROSPECT MOUNTAIN

MIDDLE Є

LOWER Є

SCALE 1" = 200'

NOTE:
SHEFFIELD PASSAGE AREA CONSISTS OF FIVE VERY PROMINENT N.E.&E. FISSURES OVER AN EAST-WEST DISTANCE OF 1000 FT. WITH HEAVY BOLDATTERATION THROUGHOUT THE FISSURE ZONE.

PROJECTED POSITION OF SHEFFIELD PASSAGE FISSURES

PROJECTED POSITION OF WHEELER BED FISSURE ON SURFACE

ELEVATION 9500 FT.

POLE TUNNEL

11,500 E.

11,000 E

10,500 E

10,000 E

9500 E

END TUN-ELEV. PORTAL +100 FT

HEAVY

LIMESTONE

TALUS

ZONE "E"

ZONE "D"

ZONE "C"

ZONE "B"

ZONE "A"

EXPLORATION OF PRODUCTIVE ZONE SOUTH OF POLE TUNNEL TO BE REPORTED SEPARATELY UNLESS CONNECTED

INFERRED SOUTH SHEAR ZONE BASED UPON TOPOGRAPHY, AERIAL STEREOSCOPIC PHOTOGRAPHY AND ABUNDANT SCHEELITE FLOAT.

TUNGSTEN

NORTH-SOUTH SHEARING CLEARLY PRESENT
OR SUGGESTED ELSEWHERE IN NORTH PART CANYON.

NORTH FISSURE - E. RIDGE QUARTZ FILLED

PROPOSED NORTH TUNNEL
ELEV. 7890'

PROPOSED POLE TUNNEL
ELEV. 7890'

PLAN OF POLE TUNNEL - TUNGSTEN RIDGE AREA
SHOWING POLE AND SUGGESTED CUTS, WHEELER BED
BATTERY, NORTH DRIFT AND EXPOSED E.H. AND N.S.
SHEAR ZONES.

BASAL QUARTZITE
PROSPECT MOUNTAIN

APPROXIMATE LOCATION POLE TUNNEL
LAT. 38° 24' NORTH - LONG. 114° 15' WEST
SEC. 15, T. 12 N., R. 49 E., M.D. B.&M.
WHITE PINE COUNTY, NEVADA.

PORTAL POLE TUNNEL
ELEV. 8500 FT.

ELEVATION - LOOKING EAST
SHOWING 2000 FT. WHEELER PRODUCTIVE
SEE BEDDING AND E-H SHEAR ZONES.

26,500 N.

26,000 N.

25,500 N.

25,000 N.

REVISIONS

REFERENCES
PROPOSED WORK, STAGE II
EXHIBIT "A"

WORK
DRAWN
TRACED
CHECKED
APPROVED

11/1/56

MT. WHEELER MASSIF
PLAN OF
SALT LAKE CITY, UTAH

COMPOSITE MAP SHOWING:
1. Exploration Completed Under 2885, Jan. 2, 1948
2. Plan of Extension, Adit and Shaft Project
3. Plan Drift and Future Mining Development.

SCALE 1" = 100'

D. 100-6.