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BEACH SANDS INVESTIGATION.

by

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DEPARTMENT OF SUPPLY AND DEVELOPMENT.

Bureau of Mineral Resources, Geology and Geophysics.

Report No. 1949/66 - (Geol. Ser. 47).

Plan No. Q25-10B-7.

BEACH SANDS INVESTIGATION.

THE BROADBEACH AREA, FROM THE NORTHERN BOUNDARY OF THE CROWN LAND TO PEERLESS AVENUE (BOUNDED ON THE EAST BY THE AREA COVERED IN REPORT NO. 1948/35).

Plans and sections of the area are included at the back of this report.

INTRODUCTION.

This area forms portion of a coastal sandy belt 1,500 to 2,000 feet wide, which extends from Main Beach (Southport) to South Nobby (North Burleigh), and is about 5 to 15 feet higher than the low-lying (in part swampy) coastal plain adjoining it on the west. The Pacific Highway runs close to the western edge of the sandy belt. The known deposits and probably all of the deposits of heavy minerals between Southport and North Burleigh occur either on the present sea beaches or in the eastern half of the narrow sandy belt. The deposits of heavy minerals in portions of the sandy belt have been covered in the following Reports :-

Report No. 1948/35.
1948/52 - (Geol. Ser. 19).
1948/61 - (Geol. Ser. 24).
1949/71 - (Geol. Ser. 52).

The area dealt with in this report adjoins, on the east, the area of Report No. 1948/35.

LOCALITY.

The area is four to five miles south of Southport, extends from 100 feet west to 1,500 feet west of the beach, and is bounded on the west by the Pacific Highway.

FIELD WORK.

Boring and Sampling. Preliminary boring and sampling of the area was carried out early in 1948 and the work was completed in November, 1948. Bores were put down to water level using a post hole auger. When the sand brought up from a borehole appeared to contain appreciable quantities of heavy minerals it was sampled by quartering. Details of samples taken are given in Table A at the end of this report.

LABORATORY WORK.

Samples were dried and their weights and volumes were determined. The samples were then concentrated by means of a laboratory Wilfley table, and the weights and volumes of the

dry concentrates were determined. The percentage composition of a composite sample of the concentrates from each bore line was determined by grain counting. The quantities of heavy minerals in the samples expressed as weight per cent and "Lbs./Cu.Yd." (pounds weight of heavy mineral concentrate per cubic yard of sand) are given in Table A at the end of this report. The average percentage composition of the heavy mineral concentrate in the area, obtained from the percentage composition at each bore line, weighted for the quantity of mineral at the line, is given in Table 2.

RESULTS.

Distribution of Heavy Mineral. The plan accompanying this report shows that heavy mineral-bearing sand occurs from the eastern boundary of the area, except where the eastern portion has been mined, to about 1,100 feet west of the boundary. The deposit is interrupted by long narrow barren strips which appear to be parallel to the eastern boundary, viz. parallel to the beach line. These barren strips have served to subdivide the area into Blocks I, I^1 and III. Tables 1/300 and 1/120 show that the thickness and grade of the mineral bearing sand are greatest in the eastern part of the area but decrease towards the west. The greatest quantities of heavy minerals now occur in the southern half of Block I; most of the heavy mineral of the northern part of Block I has been mined. No systematic variation can be seen in the distribution from north to south of the heavy minerals in Block II. In Block III the quantity of heavy mineral appears to increase from south to north. Over the area in general, the overburden increases from east to west.

Quantities. Two separate estimates have been made (Tables 1 and 2) of the tonnages of heavy minerals, volumes and average thicknesses of mineral-bearing sand and of overburden, average grade of mineral-bearing sands, and tonnages of each of the heavy minerals. The figures of Table 1/300 are based on a thickness of mineral-bearing sand in each borehole which has a minimum average grade of 300 lbs. of heavy mineral per cubic yard, while the figures of Table 1/120 are based on a minimum average grade of 120 lbs. per cubic yard. Quantities of overburden have been included with the Mineral-bearing sands to obtain a maximum thickness of "working face" and a minimum thickness of overburden, while still maintaining the desired grade.

Where the minimum grade is 300 lbs. per Cu. Yd. the total thickness of mineral-bearing sand given for a small number of the bores does not represent a continuous working face, but is made up of two portions separted by barren sand. For a minimum grade of 120 lbs./Cu. Yd. the thickness of mineral-bearing sand given for each bore represents a continuous or unbroken working face.

Tonnages available for Mining. The plans accompanying this report show that the greater part of the mineral-bearing sand, viz. in Block I and most of Block II occurs within D.C.31, M.L. 180 and ML.181. The remainder of the mineral occuring in the Crown Land is probably available for mining.

D. E. GARDNER
Geologist in Charge.

SOUTHPORT, QUEENSLAND.

MINIMUM GRADE 300 lbs./cub.yd.

PAGE 1. **LINES 500S - 5234S.**

TABLE 1./300. **BLOCK I.**

TONNAGES OF HEAVY MINERAL CONCENTRATE, VOLUMES AND AVERAGE THICKNESSES OF MINERAL-BEARING SANDS AND OF OVERBURDEN, AND AVERAGE GRADES OF MINERAL-BEARING SANDS.

AREA BETWEEN BORE LINES.	WEIGHT OF HEAVY MINERAL CONCENTRATE. (TABLE F.) TONS	VOLUME MINERAL-BEARING SANDS (TABLE F.) CUBIC YDS.	VOLUME OVERBURDEN (TABLE F.) CUBIC YDS.	AVERAGE THICKNESS MINERAL-BEARING SANDS (TABLE G.) FEET INCHES	AVERAGE THICKNESS OVERBURDEN (TABLE G.) FEET INCHES	AVERAGE GRADE OF MINERAL-BEARING SANDS. LBS. OF HEAVY MINERAL CONCENTRATE PER CUB YD
500S	46.12 Ia.	341.2 Ia.	1233.0 Ia.	1 6.4 Ia.	5 6.6 Ia.	
	417.8 Ib.	3019.2 Ib.	13949.8 Ib.	1 11.3 Ib.	8 11.6 Ib.	
	1395.7 Ic.	5057.4 Ic.	14989.6 Ic.	2 0.7 Ic.	6 1.1 Ic.	
900S	1859.62	8417.8	30172.4			494.8
900S	457.60	2218.1	7391.5	2 4.3	7 10.2	
1300S						462.1
1300S	MOSTLY	WORKED	AREA.			
2100S						
2100S	4872.1	14463.1	78999	2 1.0	11 5.7	
2900S						754.5
2900S	1269.59 Ia.	6523.5 Ia.	9169.1 Ia.	4 0.9 Ia.	5 8.8 Ia.	
	4213.29 Ib.	9545.2 Ib.	58679.3 Ib.	2 0.5 Ib.	12 6.6 Ib.	
3700S	5482.88	16068.7	67848.4			764.3
3700S	2781.25 Ia.	17391.5 Ia.	17351.5 Ia.	3 9.8 Ia.	3 9.7 Ia.	
	1235.06 Ib.	8881.1 Ib.	904.1 Ib.	2 11.9 Ib.	0 3.7 Ib.	
4500S	4016.31	26272.6	18255.6			342.4
4500S	5866.74	39012.9	43925.5	3 8.2	4 1.8	
5234S						336.9
TOTAL :-	22555.25	106453.2	192165.9	3' 5.9"	6' 3.6"	474.6

MINIMUM GRADE 300 lbs./cub. yd.

TABLE 1. /300. **BLOCK II.** TONNAGES OF HEAVY MINERAL CONCENTRATE, VOLUMES AND AVERAGE THICKNESSES OF MINERAL-BEARING SANDS AND OF OVERBURDEN, AND AVERAGE GRADES OF MINERAL-BEARING SANDS.

AREA BETWEEN BORE LINES.	WEIGHT OF HEAVY MINERAL CONCENTRATE. (TABLE F.) TONS		VOLUME MINERAL-BEARING SANDS (TABLE F.) CUBIC YDS.		VOLUME OVERBURDEN (TABLE F.) CUBIC YDS.		AVERAGE THICKNESS MINERAL-BEARING SANDS (TABLE G.) FEET	INCHES	AVERAGE THICKNESS OVERBURDEN (TABLE G.) FEET	INCHES	AVERAGE GRADE OF MINERAL-BEARING SANDS. LBS. OF HEAVY MINERAL CONCENTRATE PER CUB YD
500S 900S	1575.3		8597.8		32,385.2		2	1.6	8	0.3	410.4
900S	430.5	IIa.	3193.9	IIa.	17,738.2	IIa.	1	9.5	9	11.8	
	448.7	IIb.	2951.3	IIb.	23,827.4	IIb.	0	11.7	7	9.8	320.47
1300S	879.2		6145.2		41,565.6						
1300S	595.2	IIa.	4400.2	IIa.	28,678.2	IIa.	1	5.2	9	4.2	
	183.7	IIb.	1270.3	IIb.	17,069.1	IIb.	0	6.3	7	6.6	307.68
1700S	778.9		5670.5		45,747.3						
1700S	332.2	IIa.	2148.8	IIa.	22,141	IIa.	0	9.8	8	1.9	
	36.2	IIb.	357.2	IIb.	12,823.5	IIb.	0	2.4	7	1.5	329.28
2100S	368.4		2506.0		34964.6						
2100S	534.3	IIa.	3355.1	IIa.	41002.5	IIa.	0	5.7	5	8.1	
	156.38	IIb.	555.9	IIb.	20362.5	IIb.	0	2.0	6	2.5	395.58
2900S	690.68		3911.0		61365.0						

MINIMUM GRADE 300 lbs./cub.yd.

TABLE 1./300. **BLOCK II.** TONNAGES OF HEAVY MINERAL CONCENTRATE, VOLUMES AND AVERAGE THICKNESSES OF MINERAL-BEARING SANDS AND OF OVERBURDEN, AND AVERAGE GRADES OF MINERAL-BEARING SANDS.

AREA BETWEEN BORE LINES.	WEIGHT OF HEAVY MINERAL CONCENTRATE. (TABLE F.) TONS		VOLUME MINERAL-BEARING SANDS (TABLE F.) CUBIC YDS.		VOLUME OVERBURDEN (TABLE F.) CUBIC YDS.		AVERAGE THICKNESS MINERAL-BEARING SANDS (TABLE G.) FEET	INCHES	AVERAGE THICKNESS OVERBURDEN (TABLE G.) FEET	INCHES	AVERAGE GRADE OF MINERAL-BEARING SANDS. LBS. OF HEAVY MINERAL CONCENTRATE PER CUB YD
2900S											
	181.40	IIa.	1336.2	IIa.	11,062.7	IIa.	1	1.5	9	3.4	
	198.04	IIb.	1413.5	IIb.	18,597.0	IIb.	0	3.9	4	3.9	
3700S	158.22	IIc.	1120.1	IIc.	27,664.8	IIc.	0	4.5	9	2.8	311.2
	537.66		3869.8		57,324.5						
3700S	675.74	IIa.	4464.6	IIa.	23,088.2	IIa.	1	1.9	5	11.8	
	663.21	IIb.	4803.3	IIb.	29,043.6	IIb.	0	11.2	5	7.6	323.5
4500S	1,338.95		9267.9		52,131.8						
4500S											
	1,601.0	IIa.	11406.8	IIa.	41,514.5	IIa.	2	0.8	7	3.4	
	319.61	IIb.	2131.3	IIb.	20,242.5	IIb.	0	6.6	5	3.1	317.8
5234S	1,920.61		13538.1		61,757.0						
TOTAL :-	8,090		53506.3		387,241.0		0	11.2	6	9.1	338.8

MINIMUM GRADE 300 lbs./cub.yd.

TABLE 1./300. **BLOCK III.**

TONNAGES OF HEAVY MINERAL CONCENTRATE, VOLUMES AND AVERAGE THICKNESSES OF MINERAL-BEARING SANDS AND OF OVERBURDEN, AND AVERAGE GRADES OF MINERAL-BEARING SANDS.

AREA BETWEEN BORE LINES.	WEIGHT OF HEAVY MINERAL CONCENTRATE, (TABLE F.) TONS		VOLUME MINERAL-BEARING SANDS (TABLE F.) CUBIC YDS.	VOLUME OVER-BURDEN (TABLE F.) CUBIC YDS.	AVERAGE THICKNESS MINERAL-BEARING SANDS (TABLE G.) FEET	INCHES	AVERAGE THICKNESS OVER-BURDEN (TABLE G.) FEET	INCHES	AVERAGE GRADE OF MINERAL-BEARING SANDS. LBS. OF HEAVY MINERAL CONCENTRATE PER CUB YD
500S 900S	1663.2		10737.3	32,398.6	2	9.2	8	4.0	347.0
900S 1300S	2223.9		15598.8	38,863.6	3	5.5	8	7.5	319.4
1300S 1700S	1741.1		7990.0	39,126.2	3	11.3	7	1.4	488.1
1700S 2100S	528.5 121.67 650.17	IIIa. IIIb.	3643.1 811.8 4454.9	21,004.1 16,181.3 37,185.4	1 0	3.5 7.6	7 12	5.1 6.7	326.9
2100S 2900S	891.00 72.83 963.83	IIIa. IIIb.	6483.5 522.7 7006.2	21,949.4 6,803.5 28,752.9	1 0	1.4 11.4	2 12	9.2 4.1	308.1
2900S 3700S	573.0		4120.5	16,396.7	0	8.5	2	9.6	311.5
4600S 5234S	388.8		2728.4	18,525.0	0	8.0	4	2.0	319.0
TOTAL:	8204.0		52636.1	211,248.4	1	6.2	6	1.2	349.1
TOTAL FOR BLOCKS I, II, III.	35531.0		201487.6	790,655.3					395.0

MINIMUM GRADE 120 lbs./cub.yd.

PAGE 1. **LINES 500S to 5234S.**

TABLE 1. /120. **BLOCK I.** TONNAGES OF HEAVY MINERAL CONCENTRATE, VOLUMES AND AVERAGE THICKNESSES OF MINERAL-BEARING SANDS AND OF OVERBURDEN, AND AVERAGE GRADES OF MINERAL-BEARING SANDS.

AREA BETWEEN BORE LINES.	WEIGHT OF HEAVY MINERAL CONCENTRATE. (TABLE F.) TONS	VOLUME MINERAL-BEARING SANDS (TABLE F.) CUBIC YDS.	VOLUME OVER-BURDEN (TABLE F.) CUBIC YDS.	AVERAGE THICKNESS MINERAL-BEARING SANDS (TABLE G.) FEET	INCHES	AVERAGE THICKNESS OVER-BURDEN (TABLE G.) FEET	INCHES	AVERAGE GRADE OF MINERAL-BEARING SANDS. LBS. OF HEAVY MINERAL CONCENTRATE PER CUB YD
500S	654.1 Ia.	11,663.8	16,489.2	4	9.3 Ia.	6	8.9 Ia.	
900S	1245.1 Ib.	11,997.0	11,117.2	5	4.4 Ib.	4	11.7 Ib.	197.7
	1899.2	23,660.8	27,606.4					
900S 1300S	636.1	11,823.7	16,062.6	4	4.2	5	11.0	120.5
1300S 1700S	574.9	10,570.7	14,982.9	4	0.9	5	9.4	121.8
1700S 2100S	138.6	2,439.4	6,438.4	2	11.8	7	10.5	127.3
2100S 2900S	3381.3	43,589.1	19,435.1	8	3.2	3	8.2	173.0
2900S 3700S	3580.4	40,309.9	30,285.8	14	4.2	10	9.4	198.0
3700S 4500S	2745.2	28,659.3	46,201.8	7	9.3	12	6.5	215.0
4500S – 5234S	4530.9	46,400.6	35,756.2	4	1.0	5	2.2	219.0
TOTAL :-	17486.6	207,453.5	196,769.2	Average:- 7'	0.2"	6'	7.9"	188.8

MINIMUM GRADE 120 lbs./cub.yd.

PAGE 2. LINES 500S to 5234S.

TABLE 1. /120. BLOCK II. TONNAGES OF HEAVY MINERAL CONCENTRATE, VOLUMES AND AVERAGE THICKNESSES OF MINERAL-BEARING SANDS AND OF OVERBURDEN, AND AVERAGE GRADES OF MINERAL-BEARING SANDS.

AREA BETWEEN BORE LINES.	WEIGHT OF HEAVY MINERAL CONCENTRATE. (TABLE F.) TONS		VOLUME MINERAL-BEARING SANDS (TABLE F.) CUBIC YDS.		VOLUME OVERBURDEN (TABLE F.) CUBIC YDS.	AVERAGE THICKNESS MINERAL-BEARING SANDS (TABLE G.) FEET	INCHES	AVERAGE THICKNESS OVERBURDEN (TABLE G.) FEET	INCHES	AVERAGE GRADE OF MINERAL-BEARING SANDS. LBS. OF HEAVY MINERAL CONCENTRATE PER CUB YD
500S 900S	1699.5		29,339.3		35,193.7	7	1.5	8	6.7	129.8
900S 1300S	422.4		7,558.1		22,554.4	2	5.2	7	3.0	125.2
1300S 1700S	202.8		3,639.1		20,968.1	1	4.4	7	9.1	124.8
1700S 2100S	228.1 79.4 307.5	IIa. IIb.	4,278.9 1,426.3 5,705.2	IIa. IIb.	18,608.7 12,650.2 31,258.9	1 0	11.1 9.1	8 6	4.5 8.4	120.7
2100S 2900S	2,789.7		30,179.1		52,253.6	3	4.9	5	10.9	207.1
2900S 3700S	3,825.7		48,441.2		192,005.3	2	0.4	8	0.6	181.5
3700S 4500S	2,842.0		53,826.5		142,177.8	3	0.1	7	3.3	118.27
4500S 5234S	3,602.1		53,934.3		68,488.0	4	1.0	5	2.2	149.6
TOTAL:-	15,691.7		232,622.8		564,499.8	Average:- 2' 5.3"		7	1.3	151.1

MINIMUM GRADE 120 lbs./cub.yd.

TABLE 1./120. **BLOCK III.** TONNAGES OF HEAVY MINERAL CONCENTRATE, VOLUMES AND AVERAGE THICKNESSES OF MINERAL-BEARING SANDS AND OF OVERBURDEN, AND AVERAGE GRADES OF MINERAL-BEARING SANDS.

AREA BETWEEN BORE LINES.	WEIGHT OF HEAVY MINERAL CONCENTRATE. (TABLE F.) TONS	VOLUME MINERAL-BEARING SANDS (TABLE F.) CUBIC YDS.	VOLUME OVER-BURDEN (TABLE F.) CUBIC YDS.	AVERAGE THICKNESS MINERAL-BEARING SANDS (TABLE G.) FEET	INCHES	AVERAGE THICKNESS OVER-BURDEN (TABLE G.) FEET	INCHES	AVERAGE GRADE OF MINERAL-BEARING SANDS. LBS. OF HEAVY MINERAL CONCENTRATE PER CUB YD
500S 900S	1653.8	30,299.1	21,144.4	7	6.9	5	3.4	122.3
900S 1300S	2669.4	35,311.2	60,411.6	7	6.3	12	10.4	169.3
1300S 1700S	2182.8	24,940.4	42,149.5	4	10.2	8	2.4	196.0
1700S 2100S	698.8	11,197.2	47,214.9	2	2.8	9	5.2	139.8
2100S 2900S	1619.0	28,179.6	124,022.3	1	10.2	8	0.8	128.6
TOTAL:-	8823.8	129,927.5	296,942.7	Average:-	3' 9.6"	8'	8.1"	152.1
TOTAL FOR BLOCKS I, II, III.	42002.1	430262.4	1,058,611.7					151.1

TABLE X. 2.

TONNAGES OF EACH OF THE HEAVY MINERALS.

ESTIMATED FROM PERCENTAGE COMPOSITIONS DETERMINED BY GRAIN COUNTING.

AREA BETWEEN BORE LINES.	TONNAGES OF HEAVY MINERAL CONCENTRATES.	PERCENTAGE COMPOSITIONS AND TONNAGES OF HEAVY MINERALS.											
		MONAZITE		ZIRCON		RUTILE		ILMENITE		GARNET		OTHER MINERALS.	
		PER CENT	TONS	PER CENT	TONS	PER CNT	TNS	PER CNT.	TONS	PER CENT	TONS	PER CENT	TONS.
Min. Grade 300 lbs./Cu. Yd.													
BLOCK I.	22,556	0.38	85.4	36.41	8211	35.49	8005	24.28	5477.0	1.30	293.1	2.14	482.3
BLOCK II.	8,090	0.35	28.6	35.65	2884.3	35.63	2882.3	24.58	1988.3	1.35	109.0	2.43	197.1
BLOCK III.	8,204	0.33	27.2	33.37	2737	37.11	3044	24.78	2033	1.37	112.0	3.04	249.3
TOTAL, BLOCKS I,II,III.	38,850	0.36	141	35.61	13832	35.86	13931	24.45	9498	1.32	514	2.39	929
Min. Grade 120 lbs./Cu. Yd.													
BLOCK I.	17,486	0.37	64.7	36.28	6354.5	35.50	6218.6	24.32	4259.0	1.30	228.5	2.22	388.7
BLOCK II.	15,691	0.38	59.5	36.20	5679.2	35.57	5580.1	24.35	3819.9	1.31	205.8	2.20	344.4
BLOCK III.	8,824	0.32	28.5	32.87	2900.0	37.55	3313.1	24.77	2185.6	1.35	118.9	3.14	277.4
TOTAL, BLOCKS I,II,III.	42,001	0.36	153	35.53	14934	35.96	15,112	24.42	10,264	1.31	553	2.40	1010

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 500S/-

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT. PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 300	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 120	OVERBURDEN 300	OVERBURDEN 120
138W. 14.7'	N.W. CORNER	1	L6454	0' 0"	12' 9"	Trace	Trace				
168W. 14.6'	OF	No Sample									
198W. 14.9'	D.C.22.	No Sample									
228W. 14.5'	ADOPTED	1	L6455	9' 9"	10' 1"	1511.1	42.0	503.7		0-9'9	
	MERIDIAN	2	L6456	11' 3"	11' 6"	179	5.9	44.9		+11'6-12'4	
	IS	3	L6457	12' 6"	12' 9"	517.1	16.6	129.3		= 10'7"	7' 2"
	W. BOUNDARY		Thickness		2' 2"	313.2					
					5' 7"	121.4		677.9	677.9		
258W. 14.9'	OF	1	L6458	6' 0"	6' 3"	109.5	3.8				
	D.C.22.	2	L6459	6' 9"	6'11"	329.7	10.5	54.9	-		
		3	L6460	8' 7"	9' 2"	188.6	6.4	-	109.9	6'9"	8'4"
			Thickness		0' 2"	329.4					
					0'10"	131.9		54.9	109.9		
288W. 14.5'				10' 9"	11' 4"	Nil.					
		1	L6461	9' 0"	9' 2"	1009.5	28.9	168.3			
		2	L6462	11' 4"	11' 6"	215.0	7.0	35.8		0-9' + 9'6-10'9	
		3	L6463	12' 0"	12' 2"	868.6	24.6	508.7		= 10' 3"	
			Thickness		2' 4"	304.5		710.8	710.8		
					5'11"	120.1					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 500S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS.PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 300	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 120	OVERBURDEN 300	OVERBURDEN 120
318W. 14.6'	N.W. CORNER	1	L6464	8' 6"	9' 1"	1946.1	50.6	1136.1		5' 4"	Nil.
			Thickness		3' 9"	302.0					
					9' 1"	125.1		1136.1	1136.1		
348W. 14.9'	OF	1	L6465	7' 0"	7' 6"	219.0	7.6	109.5			
	D.C.22.	2.	L6466	10'0"	10'3"	893.2	31.1	223.3			
	ADOPTED	3.	L6467	10'3"	10'9"	2133.7	52.7	1066.9		6'10"	Nil.
	MERIDIAN	4.	L6468	12'0"	12'2"	1275.4	36.8	212.6			
			Thickness		5'4"	302.4		1612.3	1612.3		
	IS				12'2"	132.5					
378W. 14.5'	W. BOUNDARY	1	L6469	6'6"	6'8"	834.6	26.1	139.1			
	OF	2	L6470	6'8"	7' 3"	2180.6	52.9	1271.9			
	D.C.22.	3	L6471	7'9"	8'2"	318.5	10.6	132.7		3'11"	Nil.
		4	L6472	9'2"	9'8"	406.9	12.5	203.5			
			Thickness		5'9"	303.8					
					9'8"	180.7		1747.2	1747.2		
408W. 14.8'		1	L6473	9'0"	9'3"	562.0	17.3	140.5		0 - 9'	
		2	L6474	10'9"	11'3"	687.7	21.5	343.9		9'6-10' = 9'6	6'3"
		3	L6475	11'6"	11'8"	1059.0	29.8	173.5			
			Thickness		2'2"	303.6					
					5'5"	121.4		657.9	657.9		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 500S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS. PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 300	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 120	OVERBURDEN 300	OVERBURDEN 120
438W. 14.6'				0' 0"	8' 8"	Nil	Nil	Nil			
	N.W.CORNER	1	L6476	8' 8"	8'11"	568.5	17.5	142.1			
	OF	2	L6477	8'11"	10' 2"	2660.0	66.6	3325.0		Nil	Nil.
			Thickness		10' 2"	341.0		3467.1			
488W. 16.7'	D.C.22.	1	L6478	8'10"	8'11"	185.4	6.5	-	-		
	ADOPTED	2	L6479	13' 0"	13' 2"	215.3	7.5	-	-		
523W. 17.0'	MERIDIAN	1	L6207	7' 9"	8' 1"	42.95	1.5	-	14.3		
	IS	2	L6208	9'	9' 9"	130.2	4.8	-	97.7		
	W. BOUNDARY	3	L6209	10'10"	11' 3"	1002.8	30	417.8	417.8	9'11"	6'11"
	OF		Thickness		1' 4"	313.3		417.8	529.8		
553W. 18.6'	D.C.22.	1	L2225	11'10"	12'	302	10.65	50.3	50.3		
		2	L2226	12' 2"	12' 5"	437	14.8	145.7	109.2		
		3	L2227	13'	14' 1"	442	15.0	478.7	478.4		
		4	L2228	14' 3"	14' 4"	203	7.2	-	16.9	11'10"	9' 7"
		5	L2229	15'	15' 2"	174	6.1		29.0		
		6	L2230	15' 6"	15' 7"	513	16.6		42.7		
			Thickness		2' 3"	299.9					
					6' 0"	121.1		674.7	726.5		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 500S (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS.PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD.) 300	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD.) 120	OVERBURDEN. 300	OVERBURDEN. 120
593W. 15.0'	N. W. CORNER OF D.C.22.	1	L2231	5' 6"	5'10"	987	31.8	329.0			
		2	L2232	6' 0"	7' 4"	1124	34.8	1498.4			
		3	L2233	7' 6"	8' 3"	755	20.0	943.5			
		4	L2234	8' 7"	9' 8"	1303	40.0	1313.0		Nil	Nil.
		5	L2235	10' 1"	10'11"	262	9.2	218.5			
			Thickness		10'11"	361.2		4302,4			
623W. 17.2'	ADOPTED MERIDIAN IS W. BOUNDARY OF D.C.22.	1	L2236	9'	9' 3"	102	3.6				
		2	L2237	13'10"	14'	489	15.1	81.5			
		3	L2238	14'10"	15'	140	5.3	-		13'9"	13' 4"
			Thickness		3"	326					
					8"	121.5		81.5			
658W. 15.5'				(9' 2")	(9' 6")			Nil			
		1	L2239	8' 6"	8' 8"	174	6.3		29.0		
		2	L2240	9' 6"	10' 0"	536	17.5	268	268.0		
		3	L2241	10' 4"	11' 0"	100	3.5		66.6		
		4	L2242	11' 3"	11'11"	182	6.4		120.6	9' 2"	7'11"
			Thickness		0'10"	321.6		268	484.2		
					4' 0"	121					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 500S. (continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS.PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 300	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD). 120	OVERBURDEN 300	OVERBURDEN 120
696W. 17.5'		1	L2243	5' 3"	5' 9"	392	13.7	-	196.9		
		2	L2244	11'	12' 9"	807	26.1	1412.25	1345.0	8'1"	Nil
	N.W. CORNER			Thickness	4' 8"	302.4					
					12' 9"	121.6		1412.25	1541		
728W. 15.0'	OF	1	L2245	5' 9"	6' 6"	405	14.4	304.5			
	D.C.22.	2	L2246	7'	7'10"	1812	53.0	1510.0			
	ADOPTED	3	L2247	8' 6"	8' 9"	141	5.1	35.25			
	MERIDIAN	4	L2248	9'10"	10'	302	10.8	50.3			
	IS	5	L2249	10' 2"	10'11"	187	6.8	140.			
	W. BOUNDARY	6	L2250	12' 4"	12'10"	190	6.8	95.0		5'9"	Nil.
	OF			Thickness	7' 1"	301.4		2135.0	2135.0		
					12'10"						
776W. 17.5	D.C.22.	1	L2251	11' 5"	11'10"	181	6.7	75.4			
		2	L2252	12' 7"	13' 1"	1460	44.5	730.			
		3	L2253	13' 5"	13'10"	621	20.8	250.4		10'4"	Nil.
				Thickness	3' 6"	301.6					
					8'10"	120.6		1055.8	1056		
				(5' 7")	(7' 2")			Nil.			
808W. 21.9'		1	L6210	7' 2"	7' 7"	1482	42.7	617.5			
		2	L6211	7'10"	8' 2"	474.9	16.1	158.3		5'7"	Nil.
		3	L6212	9' 3"	9' 9"	984.7	29.6	492.3			
				Thickness	4' 2"	304.3		1268.1	1268.1		
					9' 9"	131.2					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 500S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS.PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT.	THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD). 300	THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD). 120	OVERBURDEN. 300	OVERBURDEN. 120
838W. 13.8'	N.W. CORNER OF D.C.22 .	1	L2254	5'	5' 7"	1389	42.3	810.2	810.2		
		2	L2255	5' 9"	6' 6"	172	6.3	129	129	4' 7"	2'0"
		3	L2256	7' 8"	7' 9"	204	7.7	17	17		
		4	L2257	10'	10' 4"	134	4.9	-	44.6		
			Thickness		3' 2"	301.9					
					8' 4"	120.1		956.2	1000.5		
868W. 23.0'	ADOPTED MERIDIAN IS W. BOUNDARY OF D.C.22.	1	L6213	5' 6"	6' 3"	264.9	10.1	198.7			
		2	L6214	8' 9"	9' 3"	184.5	6.5			5'6"	4'8"
		3	L6215	10'11"	11' 4"	82.5	3.2				
			Thickness		0' 9"	264.9					
					1' 7"	126.0		198.7	198.7		
910W. 17.4'		1	L2258	11' 3"	12' 4"	615	20.9	666.2			
		2	L2259	13' 3"	13' 6"	264	9.5	66		11' 3"	6'5"
			Thickness		2' 3"	325.4					
					6' 1"	120.4		732.2	732.2		
943W. 26.3'		1	L6216	12' 6"	13' 1"	448.5	15	261.5			
			Thickness		0'10"	313.8				12' 3"	10'11
					2' 2"	120.6		261.5	261.5		
978W. 22'				(13' 9")	(15' 3")			Nil.			
		1	L2260	15' 3"	16' 3"	136	4.9	136			
		2	L2261	17' 9"	18' 5"	1956	54.8	1304	-	13'9"	5'5"
			Thickness		4' 8"	306.5		1440	1440		
					12' 0"	120.0					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 500S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS.PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU.YD.) 300	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU.YD.) 120	OVERBURDEN 300	OVERBURDEN 120
4											
1018W. 24.7'	N.W. CORNER OF	1	L6217	10' 3"	10' 6"	806	24.16	201.5			
		2	L6218	10' 9"	11' 3"	1939	53.92	969.5		8' 5"	1'6"
			Thickness		2'10"	305.4		1171.0	1171.0		
					9' 9"	120.1					
1055W. 17.0'	D.C.22. ADOPTED MERIDIAN IS W. BOUNDARY OF	1	L2262	6' 3"	8'	290	100	555.8			
		2	L2263	12' 2"	12' 6"	152	5.5				
		3	L2264	13' 2"	13' 5"	149	5.2			6' 3"	3' 7"
		4	L2265	13' 8"	13'11"	232	8.2				
		5	L2266	14' 3"	14' 5"	190	6.7				
			Thickness		1'11"	290.0		555.8	555.8		
					4' 7"	121.2					
1098W. 20.0'	D.C.22.	X 1	L2267	12' 9"	13' 7"	1192	36	993.3			
		2	L2268	13'10"	14' 3"	952	30.1	388.3			
		3	L2269	14' 6"	14'9"	1351	40.4	337.7		10'6"	1'7"
		4	L2270	16'	16' 2"	186	6.6	31			
			Thickness		5' 8"	308.8		1750	1750		
					14' 7"	120					
1128W. 25.0'		1	L6219	8' 9"	9' 1"	631.6	20.25	210.5	210.5	0-8'6"	
		2	L6220	11' 3"	11' 9"	143.6	5.13	-	71.8	9'1-12'6	
		3	L6221	12' 6"	13' 3"	631.1	20.62	473.3	473.3	=11'10"	7' 4"
		4	L6222	14' 0"	14' 4"	277.8	9.78	92.6	92.6		
			Thickness		2' 6"	310.5		776.4	848.0		
					7' 0"	121.1					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 900S.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO.		DEPTH		QUANTITY OF HEAVY MINERALS		THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD).		OVERBURDEN	
		FIELD	LABORATORY	FROM	TO	LBS.PER CU.YD.	WT.PER CENT	300	120	300	120
108W. 16.0'	N.W. CORNER OF D.C.22.	1	L6426	10' 8"	11'	304.9	9.5		101.6	11'1	5'6
		2	L6427	11'	11' 3"	127.4	4.2	11'1-11'3" 20.3	31.8		
		3	L6428	12'	12' 3"	1900.2	47.6	475	475		
		4	L6429	12' 3"	13'	712.3	22.0	178.1	178.1		
		5	L6430	13'11	14' 2"	1027.1	28.7	256.8	256.8		
			Thickness		3' 1"	301.8		930.1	1043.3		
					8' 8"	120.5					
138W. 16.2'	ADOPTED		NO SAMPLE.								
168W. 17.2'	MERIDIAN	1	L6431	0	15'	58.8	1.9				
198W. 16.8	IS	1	E6432			Grade too	low.				
228W. 16.9'	WEST BOUNDARY OF D.C.22.	1	L6433	8'	8' 9"	534.4	16.5	400.8	400.8	7'11"	0'7"
		2	L6434	8' 9"	9' 9"	364.7	12.0	364.7	364.7		
		3	L6435	10'	10' 6"	1466.8	38.7	733.4	733.4		
		4	L6436	13'	13' 1"	745.	21.6	62.1	62.1		
		5	L6437	14'	14' 3"	323.2	10.2	-	80.8		
			Thickness		5' 2"	302.5		1561.0	1641.8		
					13' 8"	120.04					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 900S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS.PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.) 300	THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.) 120	OVERBURDEN 300	OVERBURDEN 120
258W. 16.0'	N.W.CORNER OF	1	L6438	10' 4"	10'10"	746.3	22.2	323.1	323.1	9'8	8'9"
		2	L6439	11' 6"	11'10"	1095.2	30.5	365.1	365.1		
			Thickness		2' 2"	303.1					
		X			3' 1"	122.1		688.2	688.2		
288W.16.0' 378W.16.3'	D.C.22.	1	L6440		Trace		Grade	too low.			
408W. 17.0'	ADOPTED MERIDIAN IS	1	L6441	12' 6"	13' 2"	1400.6	36.8	933.7	933.7	10'1	5'5
			Thickness		3' 1"	303.1					
					7' 9"	121.1		933.7	933.7		
438W. 17.3'	WESTERN BOUNDARY OF D.C.22.	1	L6442	10'	10' 3"	372.1	11.8	93	93.0	8'5"	9'9"
		2	L6443	11' 9"	12' 4"	2366.3	55.3	1372.5	1372.5		
		3	L6444	12' 4"	12' 7"	1185.1	31.5	296.3	296.3		
		4	L6445	14' 4"	14' 7"	428.7	12.8	107.2	107.2		
			Thickness		6' 2"	303.4					
					4'10"	120.7		1869.0	1869.0		
468W. 18.1'		1	L6446	9'8"	9'10"	407.9	13.2		135.96	10'4"	5'8"
		2.	L6447	11'10"	12'	1797.0	47.9	299.3	299.5		
		3.	L6448	12'	12'6"	746.3	22.3	373.1	373.1		
		4.	L6449	13'	13' 2"	136.8	4.5	-	22.8		
		5.	L6450	13'10"	14' 2"	587.6	17.1	-	195.86		
			Thickness		2' 2"	311.3					
					8' 6"	120.9		672.4	1027.22		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 900S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS.PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD.) 300	THICKNESS OF SAMPLE (FT.) X (LBS. PER CU. YD.) 120	OVERBURDEN 300	OVERBURDEN 120
498W. 17.3'	N.W.CORNER OF D.C.22 . ADOPTED MERIDIAN IS WESTERN BOUNDARY OF D.C.22.	1	L6451	12' 9"	13' 6"	277.8	9.9		188.35	12'9"	12'5"
		2	L6452	14' 3"	14' 5"	366.3	11.5	61.1	61.05		
			Thickness		0' 2"	366.3		61.1	249.4		
					2' 0"	124.7					
508W. 20.1'		1	L5607	4' 6"	5 '9"	Trace	Trace			11'6"	10'7"
		2	L5608	11' 6"	11'10"	637.8	19.9	265.6	-159.7		
		3	L5609	11'10"	12' 6"	21.1	.7	11'10-12'5 12.2			
		4	L5610	12' 6"	13'3"	45.8	1.71				
		5	L5611	14' 9"	14'11"	Trace	Trace				
			Thickness		11"	303.0					
					1' 3"	127.6		277.8	159.7		
475W. 19.2'		1	L5612	6' 6"	6' 8"	156.2	5.2	GRADE	26.0		6' 6"
		2	L5613	9'	9' 4"	Trace	Trace	TOO			
		3	L5614	11' 4"	11' 6"	Trace	Trace	LOW			
			Thickness		0' 2"	156.2			26.0		
505W. 19.2'		1	L5955	10'	11'	20.7	.8	Grade Too Low			
			NO MINIMUM								
570W. 20.0'		1	L5615	11' 9"	12' 6"	Trace	Trace	Grade Too Low.			
			NO MINIMUM								

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 900S.(Continued)

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120	OVERBURDEN FT. 300	OVERBURDEN FT. 120
605W. 16.2'	N.W. CORNER OF D.C.22. ADOPTED MERIDIAN IS WESTERN BOUNDARY OF D.C.22.	1	L5616	4'9"	5' 3"	145.6	5.1		72.8		
		2	L5617	6'0"	6' 4"	338.9	14.1	112.6	112.6		
		3	L5618	11' 3"	11' 6"	151.3	5.1		-	6'0"	4'9"
				Thickness	4"	338.9	-	112.6	185.4		
					1' 7"	117.0					
660W 20.1'		1	L5619	11' 5"	12'	326.4	11.07	190.4	190.4		
				Thickness	7"	326.4				11'5"	10' 6"
					1' 6"	126.9		190.4	190.4		
695W. 17.0'		1	L5620	6' 5"	7'	850.9	25.4	567.2	567.2		
		2	L5621	8' 6"	8' 9"	541.7	17.8	135.4	135.4		
				Thickness	2' 4"	301.2		702.6	702.6	6' 5"	2'11"
					5'10"	120.6		Nil.			
770W. 22.5'		1	L5622	13' 6"	13'10"	675.5	20.3	225.2	225.2		
		2	L5623	14'	14' 5"	632	23.3	263.3	263.5	12'10"	10' 5"
				Thickness	1'7"	300.7		488.5	488.7		
					4'0"	122.7					
810W. 18.4'		1	L5624	6' 6"	9'	Trace	Trace	Grade too low.			
860W. 22.3'		1	L5625	6'	11'	Trace		Grade too low.			
885W. 20.06'		1	L6223	12'10"	13'	171.3	7.9	Grade too low.	28.6	-	12'10
				Thickness	0'2"	171.8			28.6		

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 9008. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120	OVERBURDEN FT. 300	OVERBURDEN FT. 120
910W. 20.0'	N.W. CORNER OF	1	L5956	9'3"	9'7"	954.8	29.8	318.3	318.3		
		2	L5957	10' 9"	11'3"	1154	37.1	577.0	577.0		
		3	L5958	13' 9"	14'	26.7	1%	-	-		
			Thickness		2'11"	302.9		895.3	895.3	8'4"	
					7' 5"	120.7					
960W. 21.1'	D.C.22. ADOPTED	1	L5626	12' 2"	13' 2"	2578	70.3	2578	2578		
			Thickness		8'7"	300.3		2578	2578	4'7"	Nil.
					13'2"	195.8		Nil.			
1010W. 24.5'	MERIDIAN IS WESTERN BOUNDARY	1	L5959	9' 6"	10'	230.9	8.4	115.45	115.45		
		2	L5960	11' 9"	12' 3"	879.8	28.8	439.9	439.9		
		3	L5961	12' 9"	13' 6"	1493.	45.1	1119.75	1149.-	8'1"	Nil.
			Thickness		5' 5"	309.6		1675.1	1704.4		
					13'6"	133.6		Nil.			
1043W. 21.8'	OF D.C.22.	1	L6224	9'	9'3"	413.2	14.46	103.3	137.7		
		2	L6225	9' 9"	10'	742.0	24.11	185.5	187.3	0-8'11	
		3	L6226	12'	12'3"	399.5	17.93	-	99.8	9'3-9'5	8'9"
			Thickness		11'	314.4		288.8	424.8		
					3' 6"	121.4					
1076W. 24.14'		1	L6227	14'	14'3"	302.6	10.7	75.65	75.8		
			Thickness		3"	302.6		75.65	75.8	14'0"	13' 8"
					7"	129.6					
1110W. 24.5'		1	L5627	1'	2'	Trace	Trace	Grade too low			
			NO	MINIMUM							

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 900S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.	OVERBURDEN FT.
1185W. 17.2'	N.W.CORNER	1	L5628	2' 6"	5' 6" NO MINIMUM	Trace	Trace	Grade too low.	
1285W. 15.4'	OF	1	L5629	2'	5' NO MINIMUM	Trace	Trace	Grade too low.	
1385W. 11.2'	D.C.22.	1	L5630	2'	3' NO MINIMUM	Trace	Trace	Grade too low.	
1485W. 8.4'	ADOPTED	1	L5631	1'	3' NO MINIMUM	Trace	Trace	Grade too low.	
	MERIDIAN IS WESTERN BOUNDARY OF D.C.22.								

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 1300S.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.	OVERBURDEN FT.	
								300.	120.	300. 120.
308W. 14.3'	N.W. CORNER		NO	SAMPLE.						
338W. 14.7'	OF		NO	SAMPLE.						
368W. 15.2'	D.C.22.	1	L6316 NO	12'8" MINIMUM	13'	103.5	3.8	Grade too low.		
	ADOPTED			(7'9")	(9'0")			Nil.		
398W. 15.7'	MERIDIAN	1	L6317	9' 0"	9'8"	361.2	12.2	240.8		
	IS	2	L6318	9'8"	10'2"	1086	32.4	542.5	7'9"	3'8"
	WESTERN			Thickness	2'7"	303.2		783.3	783.3	
					6' 6"	120.4				
	BOUNDARY	1	L6319	12'	12'6"	924.9	28.3	462.5		
428W. 15.8'	OF	2	L6320	13'3"	13'8"	1013	31.4	422.0		
	D.C.22.			Thickness	2'11"	303.6		884.5	884.5	10'9" 6'4"
					7' 4"	120.6				
458W. 15.8'		1	L6321	9' 9"	10'1"	260.3	9.3			
		2	L6322	12' 6"	12'9"	298.8	10.5	74.7		12'6" 9'6"
				Thickness	0'3"	298.8		74.7		
					0'8"	129.3				
488W. 16.3'		1	L6323	5' 9"	6'	288.4	10.5	72.1	72.1	
		2	L6324	10'	10'2"	241.7	9.2			5'9"
		3	L6325	11'	11'1"	112.7	4.1			6'-13'4
		4	L6326	13' 6"	13'9"	529.4	19.8	132.3		Tot.13'6 5'5"
				Thickness	0'8"	304.4		204.4	72.1	
					0' 7"	123.6				

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 1300S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
518W. 15.9'	N.W. CORNER OF D.C.22, ADOPTED MERIDIAN IS WESTERN BOUNDARY OF D.C.22.	1	L6327	7' 9"	8'3"	117.1	4.4		58.5		
		2	L6328	8' 9"	9'	246.5	9.0		88.1		
		3	L6329	9' 9"	10'9"	124.0	3.5	124	124	9'9"	6'2"
		4	L6330	11'	11' 4"	1067	33.6	355.7	355.7		
			Thickness		1' 7"	302.4		479.7	626.2		
					5' 2"	121.2					
548W. 14.8'		R.	L6331	9' 9"	10'	291.1	10.1		72.8		
		2.	L6332	12'	12'1"	364.2	12.8	30.3	30.3		
		3	L6333	12' 8"	13'	1829	51.9	609.7	609.7	10'11"	6'11"
			Thickness		2'1"	307.2		640	712.9		
					5'11"	120.0					
578W. 15.2'		1	L6334	8' 8"	9'4"	655.5	22.3	437			
		2	L6335	10' 3"	11'	387.7	13.3	296.7			
		3	L6336	11'	11'9"	724.1	24.2	543.0			
			Thickness		4'3"	300.4				7'6".	1'2"
					10'7"	120.0		1276.7			
608W. 14.9'		1	L6337	9'10"	10'2"	T r a c e.		Grade too low.			
638W. 14.3'				NO SAMPLE.							
668W. 15.3'				NO SAMPLE.							

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 1300S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.	OVERBURDEN FT.
								300. 120.	300. 120.
703W. 16.8'	N.W. CORNER OF D.C.22. ADOPTED MERIDIAN IS WESTERN BOUNDARY OF D.C.22.	1	L2748	5' 6"	6'1"	412	14.9	239.5	
		2	L2749	9' 2"	9' 5"	193	7.1	-	
		3	L2750	12'9"	13'4"	301	10.8	-	
			Thickness		9"	319.3		239.5	5'4" 4'1"
					2'0"	120.0			
737W. 14.9'		1	L2740	4' 6"	4'9"	314	11.2	78.5	
		2	L2741	8'10"	9'0"	210	7.7		
		3	L2742	10'6"	10'8"	1000	38		
		4	L2743	12'8"	13'	254	9.3		
		5	L2744	14'3"	14'7"	33	1.3		
			Thickness		3"	314.0	11.2	78.5	4'6" 4'2"
					7"	134.4			
769W. 17.4'		1	L2746	12'	12'4"	111	4.5	- 37.0	
		2	L2747	13'	13' 8"	595	21.6	396.6 396.6	
			Thickness		1'3"	316.2		396.6 433.6	12' 5" 10'1"
					3'7"	120.9			
798W. 15.5'		1	L2745	9'6"	10'3"	685	40.8	513.75	
			Thickness		1'8"	308.2		513.75 513.7	8'7" 6'3"
		X			4'3"	122.5			
849W. 16.8'			NO SAMPLE.						

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 1300S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
882W. 18.4'		1	L2272	12'6"	12'10"	77	2.9				
		2	L2273	15'	15'4"	527	18.5	175.6		14'9"	14'0"
			Thickness		0'7"	301.08		175.6	175.6		
	N.W. CORNER				1'4"	126.2					
924W. 16.8'	OF	1	L6228	9'	9'6"	79.4	2.9		39.7		
	D.C.22.	2	L6229	10'	10'2"	1112	33.7	185.3	185.3		
	ADOPTED	3	L6230	11'	11'9"	580	19.9	435	435		
	MERIDIAN	4	L6231	12'9"	13'	1453	41.3	363.2	363.2		
	IS		Thickness		3'3"	302.6		983.5	1043.5	9'9"	
					8'8"	120.3					
938W. 16.0'	WESTERN	1	L2274	8'2"	8'5"	119	9.7	29.75			
	BOUNDARY	2	L2275	8'11"	9'11"	1588	49.0	1588.			
	OF		Thickness		5'4"	303.3		1617.75	1617.7	4'7"	Nil.
					9'11"	168.3					
977W. 20.0'	D.C.22.	1	L2276	11'	11'5"	226	8.0		94.0		
			Thickness		0'9"	124.2			94.0		10'8"
1011W. 17.2'		1	L6232	9'6"	9'8"	239.8	8.48		39.9		
		2	L6233	12'4"	12'10"	1453	43.78	725.1	725.1	10'5"	6'6"
			Thickness		2'5"	300		725.1	765.0		
					6'4"	120.9					
1056W. 19.5'		1	L2277	10'	10'3"	860	27.9	215			
		2	L2278	11'3"	11'7"	675	22.7	225			
		3	L2279	12'	13'	2004	55.7	2004		4'11"	Nil.
			Thickness		8'1"	302.3		2444			
					13'0"	188.0					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 1300S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
1091W. 18.5'		1	L6234	11'	11'4"	273	9.91	91	91.0		
		2	L6235	11'4"	12'1"	959.2	29.63	719.4	719.4	9'5"	6'8"
			Thickness8		2'8"	303.9		810.4	810.4		
	N.W. CORNER				5'5"	120.0					
1127W. 20.8'	OF	1	L2280	11'6"	12'	298	10.2	149			
	D.C.22.	2	L2281	15'	15'2"	330	11.7	55			
	ADOPTED	3	L2282	15'11"	16'11"	665	22.6	665		11'6 + 12'-14'3 = 13'9"	8'1"
	MERIDIAN	4	L2283	17'3"	17'5"	1510	44.4	251.6			
			Thickness		3'8"	305.4		1120.6	1120.6		
	IS				9' 4"	120.1					
1152W. 20.0'	WESTERN	1	L6236	12'10"	13'	1267	37.45	211.1	211.1		
	BOUNDARY	2	L6237	13'	15'10	1047	31.06	261.7	1919.5	12'10 + 13'6-15'11 = 15'3"	Nil.
			Thickness		1'6"	314.4		472.8	2130.6		
	OF				15'10"	134.4					
1181W. 19.0'	D.C.22.	1	L2284	9'	9'8"	565	19.98	376.7			
		2	L2285 }	10'11"	13'2"	1396 } 1887	42.8 }	4245.7			
		3	L2286 }			2378 }	64.4 }				
			Thickness		13'2"	351.0		4622.4		Nil.	Nil.

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
1198W. 18.8'		1	L2288	9'	9'8"	398.8	14.0	265.8		8'10 + 9'8-11'1 = 10'3"	5'0"
		2	L2289	13'	13'8"	1169	36.2	779.3			
			Thickness		3'5"	306.0		1045.1	1045.1		
					8'8"	120.3					
1232W. 23.5'		1	L2287	13'	13'1	389	13.4	32.4		13'0"	12'10"
			Thickness		0'1"	389		32.4	32.4		
					0'3"	129.6					

APPENDIX. TABLE A.

LINE 1700S.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
533W. 16.9'	N.W. CORNER			(10'11"	11'3)	Nil.		Nil.			
	OF	1	L6281	11'3"	11'6	788.6	26.9	197.1			
			Thickness		0' 7"	337.92				10'11"	9'11"
	D.C.22.				1' 7"	124.8		197.1	197.1		
558W. 16.9'	ADOPTED	1	L6282	9'9"	10'0"	1028	31.4	257.0			
	MERIDIAN	2	L6283	11'0"	11'6"	695.6	24.5	347.8		9'6"	6'6"
			Thickness		2'0"	302.4					
	IS				5'0"	120.9		604.8	604.8		
584W. 17.3'	WESTERN	1	L6284	10' 0"	10'9"	893.2	29.6	669.9			
			Thickness		2'2"	309.0		669.9		8' 7"	
608W. 19.2'	BOUNDARY	1	L6285	11'0"	11'6"	252.8	8.5		126.4		
	OF		Thickness		1'0"	126.4			126.4		
643W. 16.7'	D.C.22.	1	L6286	8' 6"	8'10	329	11.9	329.0	109.6		
		2	L6287	10'6"	10'7"	617.7	22.9				
		3	L6288	12'0"	12'2"	626.7	21.1			7'10"	8'0"
			Thickness		1'0"	329.0					
					0'10"	130.8		329.0	109.6		
668W. 19.4'		1	L6289	8'0"	8'2"	155.9	3.5				
		2	L6291	12'0"	12'4"	514.6	17.4	171.5			
		3	L6292	14'0"	14'3"	265.6	9.5			11'9"	10'11"
			Thickness		0'7"	294					
					1'5"	120.7		171.5	171.5		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 1700S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.	OVERBURDEN FT..
								300. 120.	300. 120.
704W. 16.3'	N.W. CORNER	1	L6293	0' 0"	14'0"	Trace	Trace	Grade too low.	
733W. 18.3'	OF	1	L6293	0' 0"	12'9"	Trace	Trace	Grade	
	D.C.22.	2	L6294	14'0"	14'1"	258.5	9.0	21.5	13'11"
	ADOPTED		Thickness		0'2"	129.0			
758W. 18.9'	MERIDIAN			(12'8"	13'3")	Nil.		Nil.	
	IS	1	L6295	13' 3"	13'5"	1490	42.2	248.3	
			Thickness		0'9"	330.4			
	WESTERN				2'0"	121. 4		248.3 248.3	12' 8" 11'5"
798W. 14.9'		1	L6296	7'10"	8'1"	466.6	15.9	118.8 118.8	
	BOUNDARY		Thickness		0'4"	356.4			
					1'3"	124.3		118.8	7'9" 6'10"
828W. 14.8'	OF	1	L6297	0'0"	12'0"	Trace	Trace	Grade too low.	
	D.C.22.								
853W. 13.5'			NO SAMPLE.						
883W. 15.6'		1	L6298	0' 0"	13'0"	34.34	1.3	Grade too low.	
908W. 18.0'		1	L6299	0' 0"	16'0"	Trace	Trace	Grade too low.	
943W. 19.4'			NO SAMPLE.						
978W. 16.8'		1	L6300	8'9"	8'11"	220.9	7.8	- 36.8	
		2	L6301	11'9"	12'0"	977.0	31.0	325.6	
			Thickness		0' 3"	325.6		325.6 36.8	11'9" 8'8"
					0' 3"	147.2			

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 17008. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
1003W. 17.5'	N.W. CORNER	1	L6302	8' 3"	8'6"	593.4	19.7	148.3			
	OF	2	L6303	9' 6"	9'9"	1146	34.6	284.5			
	D.C.22.	3	L6304	11' 0"	11'4"	809.1	26.6	269.7			
	ADOPTED	4	L6305	11' 9"	12' 0"	1954	54.2	488.5			
	MERIDIAN	5	L6306	12' 2"	12' 3"	749.4	23.4	62.4		8'3"	1'10"
	IS		Thickness		4' 0"	310.8					
					10'5"	120.0		1253.4	1253.4		
1033W. 20.7'	WESTERN	1	L6307	8' 0"	8'3"	283.1	10.3		70.7		
	BOUNDARY	2	L6308	11'0"	11'3"	447.5	15.5	111.9	111.9		
	OF	3	L6309	11'6"	11'10"	1766	50.7	588.6	588.6	9'6"	5'5"
	D.C.22.		Thickness		2'4"	300.0					
					6'5"	120.1		700.5	771.2		
1072W. 16.2'		1	L6310	9'1"	9'3"	109.2	3.1				
		2	L6311	11'6"	11'8"	996.1	31.7	199.0		11'1"	10'1"
			Thickness		0'7"	340.8		199.0	199.0		
					1'7"	124.8					
1116W. 21.0'			NO SAMPLE.								
1152W. 18.7'		1	L6312	12'6"	12'7"	420.2	14.2	35.5	35.0		
		2	L6313	13'9"	14'0"	643.9	21.1		160.9	12'6"	12'5"
			Thickness		0'1"	426.0					
					1'7"	123.6		35.5	195.9		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 1700S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.	OVERBURDEN FT.
								300. 120.	300. 120.
1193W. 21.4'	N.W. CORNER	1	L6314	14' 0"	14'3"	484.1	16.01	121.0 121.0	
			Thickness		0'4"	363.0		121.0	13'8"
	OF				1'0"	121.0		121.0	13'3"
1253W. 15.7'	D.C.22.	1	L6315	0'0"	14' 0"	Trace	Trace	Grade Too Low.	
			Thickness:-		Nil.				
1313W. 12.1'	ADOPTED		NO SAMPLE.						
1413W. 6.7'	MERIDIAN IS WEST		NO SAMPLE.						
1493W. 13.6'	BOUNDARY OF D.C.22.		NO SAMPLE.						

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2100S.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
308W. 16.7'	N.W. CORNER		NO	SAMPLE.							
338W. 16.6'	OF		L6355	13' 0"	13'2"	51.4	1.8	-		Grade too low.	
368W. 16.7'	D.C.22.	1	L6356	11' 6"	12'3"	1793.0	51.3	1344.7	1344.7		
	ADOPTED	2	L6357	12' 3"	12'7"	473.3	15.8	157.7	157.7	0'-7'7"	0'1"
	MERIDIAN		Thickness		5'0"	300.5		1502.4	1502.4		
	IS				12'6"	120.1					
398W. 17.2'	WESTERN	1	L6358	11'0"	11'3"	655.4	21.5	163.6	163.6		
	BOUNDARY	2	L6359	14'1"	14'3"	231.0	8.0	-	-	0'-10'9"	
			Thickness		0'6"	327.2		163.6			0'-9'11
					1'4"	122.7			163.6		
428W. 17.6'	OF	1	L6360	11' 5"	11'10"	1517	42.4	632.0	632.0		
	D.C.22.	2	L6361	11'10"	12'4"	378.1	13.1	189.0	189.0		
		3	L6362	13' 9"	13'10"	502.4	16.2	41.8	41.8	0'-11'0"	
			Thickness		2'10"	304.8		862.8	862.8		0'-6'8'
					7' 2"	120.5					
458W. 16.6'		1	L6363	10' 0"	10' 3"	1417	50.7	354.2	354.2		
		2	L6364	10' 3"	10' 8"	839.9	26.6	349.9	349.9		
										0'-8'5"	
		3	L6365	10' 8"	11' 0"	261.9	9.2	87.3	87.3		0'-4'5'
			Thickness		2' 7"	306.3		791.4	791.4		
					6' 7"	120.2					

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 21006. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
488W. 16.4'	N.W.CORNER OF D.C.22. ADOPTED MERIDIAN IS WESTERN BOUNDARY OF D.C.22.	1	L6366	5' 9"	7' 6"	130.8	4.6	-	228.9		
		2	L6367	8' 6"	8'10"	149.5	5.3	-		Grade too low.	0'-5'8"
			Thickness		1'10"	124.8			228.9		
518W. 15.7'		1	L6368	7' 9"	7'11"	101.4	3.6	-			
		2	L6369	8'11"	8'8"	31.6	1.1	-		Grade too low.	
		3	L6370	10' 0"	10'2"	236.9	8.2	-	39.4		
			Thickness		0'3"	157.6			39.4		
548W. 15.5'		1	L6371	7' 0"	7' 4"	72.5	2.6	-		Grade too low.	0'-9'11"
		2	L6372	12' 0"	12'3"	Trace	Trace	-			
577W. 15.7'		1	L6373	9' 7"	9'11"	515.1	17.1	171.7	171.7		
		2	L6374	11' 0"	11'3"	231.1	8.1	-	57.7	0'-9'5"	
			Thickness		0'6"	343.4		171.7			0'-9'5"
					1'10"	127.4			229.4		
643W. 15.0'		1	L2290	6' 6"	6' 8"	569	21.0	94.8	94.8		
		2	L2291	7' 0"	7' 6"	359	12.6	179.5	179.5	0'-6'6" + 6'11-7' = 6'7"	
		3	L2292	9' 0"	9' 4"	293	10.1	-	97.6		0'-6'3"
			Thickness		0'11"	301.4		274.3			
					3'1"	120.7			371.9		

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2106S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
693W. 18.0'	N.W. CORNER	1	L2293	6' 0"	6'5"	248	9.0	-			
	OF	2	L2294	9' 6"	9' 9"	231	8.0	57.7	57.7	0'-9'2" + 10'6-11'4 = 10'0"	
	D.C.22.	3	L2295	10'0"	10' 6"	786	24.8	393.0	393.0		
	ADOPTED	4	L2296	11' 6"	11' 8"	441	24.0	73.5	73.5		0'-7'4"
	MERIDIAN		Thickness		1' 8"	314.5		524.2			
					4' 4"	120.9			524.2		
713W. 17.8'	IS	1	L6375	7' 0"	7' 6"	608	20.2	304.0	304.0		
	WESTERN	2	L6376	8' 0"	8' 6"	538.1	18.1	269.0	269.0	0'-6'7"	
	BOUNDARY		Thickness		1'11"	300.0		573.0			0'-3'9"
	OF				4' 9"	120.6			573.0		
733W. 18.3'			NO SAMPLE.								
758W. 17.6'	D.C.22.		NO SAMPLE.								
781W. 17.6'		1	L2297	10' 0"	10' 6"	193	7.0	-	96.5	Grade too	
		2	L2298	13' 0"	13' 1"	53	1.9	-	96.5	low	0'-9'9"
			Thickness		0' 9"	128.6					
850W. 17.0'		1	L2299	6' 9"	6'10"	969	32.3	80.7	80.7		
			Thickness		0' 3"	322.8				0'-6'7"	0'-6'2"
					0' 8"	122.2		80.7	80.7		
900W. 19.0'		1	L2300	9' 2"	9'10"	264	8.4	-	176.0	Grade too	
			Thickness		1' 5"	125.7			176.0	low.	0'-8'5"

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2100S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
923W. 17.8'	N.W. CORNER	1	L6377	8' 0"	8'4"	295.9	10.5	-	98.6	Grade too low.	0'-7'7"
			Thickness		0'9"	131.4			98.6		
954W. 17.5'	OF	1	L2301	10' 0"	10'4"	76	2.9	-		Grade too low.	
	D.C.22.	2	L2302	11' 6"	11'9"	63	2.2	-			
978W. 19.0'	ADOPTED	1	L6378	11' 2"	11' 4"	279.2	97	-	46.5	Grade too low.	0'-11'0"
	MERIDIAN		Thickness		0'4"	140.9			46.5		
1011W. 15.1'	IS	1	L2303	5' 3"	5' 6"	321	10.9	80.2	80.2		
	WESTERN	2	L2304	6' 6"	8' 2"	608	20.0	1009.2	1009.2	0'-5'3" + 5'6-6'4 = 6' 1"	Nil.
	BOUNDARY	3	L2305	9' 3"	9' 6"	164	5.7	41.0	41.0		
	OF	4	L2306	10' 0"	10' 2"	640	17.3	106.6	106.6		
	D.C.22.		Thickness		4' 1"	303.0		1237.0	1237.0		
					10' 2"	121.8					
1063W. 19.0'		1	L2307	13' 0"	13'11"	715	22.9	655.4	655.4		
			Thickness		2' 2"	303.4		655.4		0'-11'9"	
					5'5"	121.3			655.4		0'-8'6"
1093W. 15.8'		1	L2308	7' 0"	7'3"	370.8	13.0	92.7	92.7		
		2	L2309	10' 0"	10' 2"	327.4	11.6	54.8	-	0'-7'0 + 7'3"-10' = 9'9"	0'-6'6"
			Thickness		0' 5"	359.7		147.5			
					0' 9"	123.3			92.7		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2100S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
1115W. 16.8'	N.W. CORNER OF	1	L2308	9' 0"	9'3"	250	9.0		62.5	Grade too low.	0'-8'9"
		2	L2309	12' 0"	12'1"	150	5.2				
			Thickness		0'6"	125.6			62.5		
1148W. 20.0'	D.C.22.		NO SAMPLE.								
1185W. 21.0'	ADOPTED MERIDIAN IS WESTERN	1	L2310	10' 0"	10'3"	330	11.9	82.5	82.5	0'-10'	
		2	L2311	14' 0"	14' 4"	1539	45.8	513.0	513.0	+ 10'3-12'8 = 12'5"	
			Thickness		1'11"	311.7		595.5			0'-9'5"
					4'11"	121.5			595.5		
1228W. 19.5'	BOUNDARY OF	1	L6381	8' 0"	16'6"	Trace					
1265W. 15.1'	D.C.22.	1	L2312	6' 0"	6'1"	260	8.5	-	21.6	Grade too low.	0'-5'11
			Thickness		0'2"	144			21.6		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2900S.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.	OVERBURDEN FT.
								300. 120.	300. 120.
190W. 18.5'	N.W. CORNER	1	L2313	0' 0"	8'6"	18	0.6	- 153.0	
	OF	2	L2314	8' 6"	11'6"	170	6.5	510 510.0	
	D.C.22.	3	L2315	11'6"	13'	811	26.6	1216.5 1216.5	
	ADOPTED	4	L2316	13'0"	14'9"	257	9.2	449.2 449.7	
	MERIDIAN	5	L2317	?	?	37	1.4	-	
	IS		Thickness		7'0"	310.9		2176.7	7'9" Nil.
					14'9"	157.9		2329.2	
230W. 20.5'	WESTERN							10'6-13'6	
	BOUNDARY	1	L2318	9'6"	13'6"	83	3.0	244.5 332	
		2	L2319	13' 6"	14'9"	1105	23.4	1381.2 1381.2	
	OF	3	L2320	14' 9"	15' 9"	64	2.4	64.0	
	D.C.22.		Thickness		5' 3"	309.7		1625.7	10'6" 1'0"
					14' 9"	120.1		1777.2	
310W. 15.5'		1	L2321	0'0"	6'0"	89	3.6	534.0 534.0	
		2	L2322	6'0"	8'6"	943	26.7	2357.5 2357.5	
		3	L2323	8'6"	10'6"	835	26.8	1670.0 1670.0	
		4	L2324	11'6"	12'0"	1351	33.7	675.5 675.5	
			Thickness		12'0"	436.4		5237.0 5237.0	Nil. Nil.

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2900S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
398W. 21.1'	N.W. CORNER OF D.C.22. ADOPTED MERIDIAN	1	L2325	0' 0"	10'6"	44	1.7	13'6-15'	3.5		
		2	L2326	10' 6"	15'0"	64	2.3	96.0	288.0		
		3	L2327	15'0"	15' 5"	879	27.4	366.2	366.2		
		4	L2328	15'5"	16'3"	32	1.2				
			Thickness		1' 6"	308.2		462.2		14'9"	10'0"
					5' 5"	121.8			657.7		
485W. 20.5'	IS WESTERN BOUNDARY OF D.C.22.	1	L2329	0' 0"	6' 6"	57	3.2				
		2	L2330	7' 6"	11'0"	39	1.6	Grade			
		3	L2331	11' 0"	12'0"	69	2.6	too			
		4	L2332	12' 0"	14'6"	25	1.0	low.		Grade too low.	
		5	L2333	14' 6"	16'0"	50	1.9				
572W. 17.0'		1	L2334	0' 0"	6' 4"	58	1.6	Grade	2.3		
		2	L2335	6' 4"	9' 0"	30.8	1.1	too	87.1		6'1"
		3	L2336	9' 0"	13'0"	167	6.1	low.	668.0		
			Thickness		5'11"	128.4			757.4		
617W. 20.7'		1	L2337	11' 6"	13'6"	103	3.7	Grade too low.			
631W. 19.6'		1	L5918	5' 6"	6'9"	Trace	-				
		2	L5919	7'	7'2"	315.1	11.2	52.5	52.5		6'3½"
		3	L5920	8' 6"	8'7"	407.3	14.1		39.2	7'0"	1'4"
			Thickness		2"	310		52.5	92.4		
					0'8"	130.2					

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2900S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.		OVERBURDEN FT.	
								300.	120.	300.	120.
652W, 20.3'	N.W. CORNER	1	L5645	0' 0"	2' 0"	Trace					
	OF	2	L5646	7' 0"	8' 2"	Trace					
	D.C.22.	3	L5647	11' 9"	12'0"	734.9	25.3	183.7	183.7		
	ADOPTED	4	L5648	12' 0"	14'6"	Trace					
			Thickness		7"	314.88		183.7		11'5"	10'5"
	MERIDIAN				1' 6"	122.4			183.7		
692W. 21.6'	IS	1	L5917	9' 6"	10'0"	498.5	16.8	249.2	249.2		
			Thickness		9½"	314.88		249.2	249.2	9'2½"	8'0"
	WESTERN				0'2"	124.1					
722W. 22.4'	BOUNDARY	1	L5642	2' 0"	5' 0"	Trace	-	Grade			
	OF	2	L5643	10' 0"	10'2"	Trace	-	too			
	D.C.22.	3	L5644	13' 6"	13'9"	Trace	-	low.			
775W. 17.5'		1	L5914	6' 6"	7'0"	988.6	31.5	494.3	494.3		
		2	L5915	7' 6"	8'0"	57.0	2.1		28.5		
		3	L5916	8' 6"	9'0"	21.9	0.8		10.9		
			Thickness		1'7½"	304.24		494.3	533.7	4'10½"	4'7½"
					4'4½"	122.0					
797W. 20.0'		1	L5638	2'0"	5'0"	Trace					
		2	L5639	5' 0"	7' 0"	Trace					
		3	L5640	7'10"	8'1"	558.6	19.6	139.6	139.6		
		4	L5641	10'0"	10'3"	Trace					
			Thickness		5½"	304.8		139.6	139.6	7'7½"	7'0"
					1'1"	128.9					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2900S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
846W. 21.0'	N.W.CORNER	1	L5912	9'9"	9'11"	1231.4	38.2	205.2	205.2		
	OF	2	L5913	10' 3"	11'3"	19.5	0.8		19.5		
			Thickness		8"	307.8		205.2	224.7	9'3"	9'5"
	D.C.22.				1'10"	122.6					
877W. 20.8'	ADOPTED	1	L5637	0'0"	14'6"	Trace	Trace	Grade too low.			
	MERIDIAN		Thickness:-		Nil.						
915W. 22.0'	IS	1	L5910	3'0"	4'6"	Trace		Grade			
	WESTERN	2	L5911	12'0"	12'2"	178	6.5	too	29.7		
	BOUNDARY		Thickness		2"	178.2			29.7		12'0"
959W. 21.7'	OF	1	L5908	5'0"	7'6"	Trace					
	D.C.22.	2	L5909	10'1"	10'7"	333.5	10.7	166.7	166.7		
			Thickness		6½"	307.68		166.7		10'0½"	9'3"
					1'4"	125.0			166.7		
1015W. 21.2'		1	L5632	2'0"	4'0"	Trace					
		2	L5633	7'6"	8'1"	435.4	15.4	261.2	261.2		
		3	L5634	8'1"	10'0"	Trace	-				
		4	L5635	10'0"	10'4"	825.8	26.2		275.3		
			Thickness		0'10"	313.4		261.2	536.5	6'8"	5'11"
					4' 5"	121.0					
1061W. 24.6'		1	L5907	1'6"	5'0"	Trace	Trace	Grade too low.			
			Thickness :-		Nil.						

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 2900S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
1126W. 23.8'	N.W. CORNER OF	1	L5903	10'0"	10'4"	Trace	Trace				
	D.C.22.	2	L5904	12'6"	12'9"	480	16.4	120	120.0		
	ADOPTED MERIDIAN	3	L5905	12'9"	13'0"	752.15	24.1	188.3	188.3		
	IS WESTERN BOUNDARY	4	L5906	13'7"	14'0"	373.7	12.6	152.8	152.8		
	OF D.C. 22.		Thickness		1'6"	307.4		461.1			
					3'10"	121.4			461.1	12'6"	10'2"
1190W. 24'		1	L5901	11'0"	11'6"	182.8	6.5	Grade	91.4		
		2	L5902	14'0"	14'2"	98.46	3.5	too low.			
			Thickness		0'8"	137.1			91.4		11'0"

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 3700S.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
00 28.5'	N.W. CORNER OF D.C.22.	1	L5568	0' 0"	5'0"	22.6	.9	-		Grade	
		2	L5569	5'0"	10'0"	Trace	Trace	-		too	
		3	L5570	10'0"	21'0"	16.8	.6	-		low.	
33W. 31.7'	ADOPTED MERIDIAN IS 99' WEST OF D.C. 22.	1	L5564	0'0"	5'0"	47.6	1.8	-			
		2	L5565	5' 0"	9'6"	11.5	.4	-		Grade	
		3	L5566	9' 6"	15'6"	Trace	Trace	-		too	
		4	L5567	15'6"	22'0"	29.5	1.1	-		low.	
66W. 25.3'		1	L5555	0'0"	5'0"	Trace	Trace				
		2	L5556	5' 0"	10'0"	16.5	.6	8'3-14'9 28.8	82.5		
		3	L5557	10'0"	14'9"	Trace	Trace				
		4	L5558	14' 9"	15'3"	470.0	14.4	235.0	235.0		
		5	L5559	15' 5"	15'9"	823.0	26.3	274.3	274.3		
		6	L5560	15' 9"	16'4"	156.4	6.2	91.2	91.2		
		7	L5561	16'4"	16'10"	1821.	48.8	910.5	910.5		
		8	L5562	16'10"	19'0"	178.1	6.7	385.9	385.9		
		9	L5563	19' 0"	20'0"	1629.0	49.7	1629.0	1629.0		
			Thickness		11'9"	302.5		3554.7	3608.4	0'-8'3"	N11.
					20'0"	180.4					

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 3700S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT 120.	OVERBURDEN FT. 300.	OVERBURDEN 120.
75W. 19.5'	N.W. CORNER		NO SAMPLE.								
150W. 16.6'	OF	1	L6412	11'0"	11'2"	27.6	1.0	-			
	D.C.22.	2	L6413	12'9"	12'11"	187.3	6.6	-	31.2		12'8"
			Thickness		0'3"	124.8			31.2		
230W. 17.1'	ADOPTED	1	L5571	0'0"	5'0"	Trace	Trace	-			
	MERIDIAN	2	L5572	5'0"	13'0"	10.6	.41	-			
306W. 17.6'	IS	1	L5573	0'0"	5'0"	Trace	Trace	-			
	WESTERN	2	L5574	5'0"	13'6"	13.9	.5	-			
366W. 17.7'	BOUNDARY	1	L6071	0'0"	11'0"	Trace	Trace	-			
	OF	2	L6072	11'0"	11'4"	224.2	8.1	-	74.7		10'9"
	D.C.22.		Thickness		0'7"	128.7					
416W. 17.9'		1	L5575	0'0"	9'6"	Trace	Trace	-			
		2	L5576	9'6"	10'0"	Trace	Trace	-			
		3	L5577	10'0"	10'6"	235	8.8	-	117.5		
		4	L5578	10'6"	13'6"	Trace	Trace	-			9'7"
			Thickness		0'11"	129.1			117.5		

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 3700S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
427W. 17.7'	N.W. CORNER OF D.C.22. ADOPTED MERIDIAN IS	1	L6073	8'0"	8'2"	142.8	5.2	-	23.8		
		2	L6074	8'6"	8'8"	64.04	2.3	-	10.6		
		3	L6075	9'0"	9'2"	249.7	8.4	-	41.6		
		4	L6076	11'3"	11'9"	617.6	22.0	308.8	308.8		
		5	L6077	12'3"	12'6"	809.1	25.4	202.2	202.2		
			Thickness		1'8"	313.8		511.0		0'-10'10"	7'8"
					4'10"	121.5			587.0		
466W. 17.8'	WESTERN BOUNDARY OF D.C.22.	1	L6078	8'6"	8'9"	301.8	10.3	75.4	75.4		
		2	L6079	9'6"	9'10"	1065.0	35.9	355.0	355.0		
		3	L6080	10' 9"	12'0"	76.1	2.9	- - -	95.1	0'-8'5"	7'8"
			Thickness		1'5"	305.2		430.4			
					4'4"	121.3			525.5		
496W. 17.8'		1	L6414	8'6"	9'2"	266.9	9.3	-	177.9	Grade too	
		2	L6415	11'0"	11'3"	236.0	7.9	-	[illegible]	low.	7'9"
			Thickness		1'5"	126.1			177.9		
527W. 18.1'		1	L6081	0'0"	13'9"	10.4	0.4	-		Grade too	
		2	L6082	13'9"	14'3"	180.9	6.4		90.4	low.	13'6"
			Thickness		0'9"	124.0					
576W. 19.6'		1	L5579	2'6"	5'0"	Trace	Trace	-			
		2	L5580	5'0"	10'0"	Trace	Trace	-			
		3	L5581	10'0"	16'6"	Trace	Trace	-		Grade too low.	

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 3700S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
656W. 15.9'	N.W.CORNER	1	L5582	0'0"	6'0"	Trace	Trace	-			
	OF	2	L5583	6'0"	6'6"	Trace	Trace	-			
	D.C.22.	3	L5584	6'8"	6'10"	253	9.1	-	42.1		
	ADOPTED	4	L5585	6'10"	8'6"	3.4	1.7	-		Grade too low.	6'6"
	MERIDIAN	5	L5586	8'6"	10'0"	Trace	Trace	-			
	IS	6	L5587	10'0"	11'6"	Trace	Trace	-			
			Thickness		0'4"	127.5			42.1		
	WEST										
706 W. 21.5'	BOUNDARY	1	L5588	0'0"	5'0"	Trace	Trace	-			
	OF	2	L5589	5'0"	10'0"	Trace	Trace	-			
	D.C.22.	3	L5590	10'0"	12'6"	Trace	Trace	-			
		4	L5591	12'6"	14'0"	59.4	2.1	-		Grade too low.	
		5	L5592	14'0"	17'6"	109.7	4.4	-			
756W. 19.2'		1	L6083	12'9"	13'1"	305.2	10.3	101.7			
			Thickness		0'4"	305.2		101.7		0'-12'9"	12'3"
					0'10"	122.5			101.7		
806W. 16.3'		1	L5593	0'0"	7'0"	Trace	Trace	-			
		2	L5594	7'0"	10'0"	Trace	Trace	-			
		3	L5595	10'0"	12'6"	Trace	Trace	-		Grade too low.	

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 3700S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. ~~120.~~	OVERBURDEN FT. 300.	OVERBURDEN FT. ~~120.~~
886W. 16.9'	N.W. CORNER OF D.C.22. ADOPTED MERIDIAN IS WESTERN BOUNDARY OF D.C.22.			7' 7"	8'0"	Nil	Nil	Nil.			
		1	L6084	8' 0"	8'4"	920.6	29.2	306.8			
		2	L6085	9' 3"	9'8"	818.3	26.9	340.9		0'-7'7"	4'4"
			Thickness		2'1"	311.3		647.7			
					5'4"	121.5			647.7		
915W. 18.6'		1	L6416	12'9"	13'8"	113.2	4.0	-		Grade too low.	
936W. 20.6'		1	L5596	0'0"	10'0"	Trace	Trace	-			
		2	L5597	12'9"	14'0"	131.5	4.85	-	164.3	Grade too low.	12'8"
		3	L5598	15'6"	17'6"	73.3	2.9	-			
			Thickness		1'4"	123.5			164.3		
1036W. 22.9'		1	L5599	0'0"	8'0"	Trace	Trace	-			
		2	L5600	8'0"	8'6"	Trace	Trace	-			
		3	L5601	9'6"	10'0"	84.7	3.1	-		Grade too low.	
		4	L5602	10'0"	15'6"	Trace	Trace	-			
		5	L5603	15'6"	17'0"	Trace	Trace	-			
		6	L5604	17'0"	19'0"	Trace	Trace	-			
1186W. 10.9' ~~1019W~~		1	L5605	0'0"	7'6"	Trace	Trace	-		Grade too low.	
1346W. 8.8' ~~818~~		1	L5606	0'0"	5'3"	Trace	Trace	-		Grade too low.	

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 4500S.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.		OVERBURDEN FT.	
								300.	120.	300.	120.
41W. 20.4'	N.W.CORNER OF D.C.22. ADOPTED MERIDIAN IS WESTERN BOUNDARY OF D.C.22.			(0'-11')	(13'11-15')		nil.	-			
		1	L6048	11'	11'3"	102.9	3.6	25.7	25.7		
		2	L6049	11'8"	12'	1799	49.1	599.7	599.7		
		3	L6050	12'6"	13'11"	2785	69.3	3945.7	3945.7		
			Thickness		15'	304.7		4571.1		Nil	Nil.
					13'11"	328.4			4571.1		
96W. 20.9'		1	L6051	13'10"	14'4"		GRADE TOO LOW.				
		2	L6052	14'4"	14'8"					NIL.	
140W. 19.4'				7'7"	13'			1035.0			
		1	L6053	6'0"	13'0"	180	6.71	-	2340		
		2	L6054	13'	13'3"	2730	63.5	682.5	682.5		
		3	L6055	13'6"	13'9"	537	18.02	134.2	134.2		
		4	L6056	14'2"	14'5"	1192	34.5	298.0	298.0		
			Thickness		6'10"	304.2		2077.7	3454.7	7'7"	Nil.
					14'6"	238.2					
190W. 19.7'			NO SAMPLE.								
240W. 19.7'				7'10"	8'3"			Nil			
		1	L6057	8'3"	8'6"	830	26.5	207.5	207.5		
			Thickness		8"	311.1		207.5		7'10"	6'0"
					1'8"	124.5			207.5		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 4500S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
290W. 20.6'	N.W. CORNER			8'2"	13'2"			Nil.			
	OF	1	L6058	13'2"	14'2"	1860	51.0	1860	1860		
			Thickness		6'2"	301.6		1860		8'2"	Nil.
	D.C.22.				14'2"	131.2			1860		
340W. 22.6'	ADOPTED			7'4"	10'			Nil.			
	MERIDIAN	1	L6059	10'	10'7"	1006	31.4	586.8	586.5		
	IS	2	L6060	11'6"	11'11"	965	29.8	402.1	402.4		
	WESTERN	3	L6061	12'3"	12'11"	1057	33.9	704.6	705.0		
			Thickness		5'7"	303.5		1693.5		7'4"	Nil.
	BOUNDARY				12'11"	131.0			1693.9		
390W. 24.4'	OF		NO SAMPLES.								
440W. 24.2'	D.C.22.			15'3"	15'6"			Nil.			
				15'6"	15'8"						
		1	L -	estimated		830	26.5	138.3	138.3		
			Thickness		5"	301.92		138.3		15'3"	14'7"
					1' 1"	127.2			138.3		
490W. 23.5'			NO SAMPLES.								
570W. 17.0'				6'7"	8'			31.8	769.6		
		1	L6063	0'0"	8'	21.2	.82				
		2	L estimated 8'		8'5"	301.8	10.3	125.75	125.7	6'7"	0-8"
		3	estimated 9'		9'9"	1065	35.9	798.7	798.4		
			Thickness		3'2"	318.7		956.2			
					9'1"	120.1			1693.7		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 45008. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD.	OVERBURDEN FT.
								300. 120.	300. 120.
620W. 20.2'	N.W. CORNER		NO	SAMPLES.					
653W. 17.8'	OF	1	L6066	9'3"	10'6"	238	7.91	Grade too low.	
	D.C.22.								
700W. 22.0'	ADOPTED	1	L6067	11'6"	13'	29.6	1.6	Grade too low.	
763W. 17.2'	MERIDIAN			6'3"	7'9"			Nil.	
	IS	1	L6068	4'	5'9"	47	1.77	- 350.3	
	WESTERN	2	L6069	7'9"	8'6"	904	30.1	678 678.0	
	BOUNDARY		Thickness		2'3"	301.2		678	6'3" Nil.
	OF				8'6"	120.8		1028.3	
829W. 24.2'	D.C.22.	1	L6070	15'6"	15'9"	100	3.6	Grade too low.	

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 5234S.

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
39W.		1	L5649	0' -	7'10"	Trace					
	N.W. CORNER	2	L5650	7'10"	8'2"	248	8.38				
	OF	3	L5651	9'9"	10'2"	285.9	9.75		119.1		
	D.C.22 .	4	L5652	11'10"	12'3"	463.7	15.82	192.8	192.8	11'8"	9'9"
			Thickness		0'7"	330.5		192.8			
	EASTERN				2'6"	124.8			311.9		
100W.	FENCE	1	L6173	8'9"	9'2"	506	15.03	210.8			
	LINE	2	L6174	9'2"	9'5"	2962	73.3	740.5			
	IS	3	L6175	12'8"	13'3"	1540	42.7	899.0		7'1"	Nil.
			Thickness		6'2"	300.0		1850.3			
	ADOPTED				13'3"	138.8			1850.3		
120W.	MERIDIAN.	1	L6238	10'6"	10'8"	650	21.9	108.3	108.3		
		2	L6239	10'10"	11'1"	164.5	6.12		41.1		
		3	L6240	11'6"	11'7"	1115	34.4		92.9		
			Thickness		0'4"	324.9		108.3		10'4"	9'7"
					2'0"	121.1			242.3		
178W.		1	L6241	11'0"	11'6"	1260.0	38.1	630			
		2	L6242	13'0"	13'9"	1120.0	23.2	840			
			Thickness		4'10"	3041		1470		8'11"	1'9"
					12'0"	122.5			1470		
190W.		1	L6176	8'8"	9'1"	800	25.5	333.3			
		2	L6177	10'6"	11'1"	2800	68.9	1633.3		4'5"	Nil.
			Thickness		6'6"	302.6		1966.6			
					11'1"	177.4			1966.6		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 5234S. (Continued)

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
230W.	N.W. CORNER OF D.C.22.	1	L6178	7'9"	9'0"	2390	60.3	3186.6			
		2	L6179	9'0"	9'3"	1002	31.5	250.5			
		3	L6180	10'0"	11'0"	1511	43.8	1511.0		N11.	N11.
			Thickness		11'0"	449.8		4948.1	4948.1		
264W.	EASTERN FENCE LINE IS ADOPTED MERIDIAN.	1	L5653	5'0"	6'6"	80.26	2.92	120.4			
		2	L5654	8'10"	9'7"	1157	32.87	867.7			
		3	L5655	10'	10'7"	1536	43.18	896.0		4'3"	N11.
		4	L5656	11'9"	12'3"	1074	31.9	537.0			
			Thickness		8'0"	302.6		2421.1			
					12'3"	197.6			2421.1		
294W.		1	L6243	14'	14'2"	337	12.1	56.1			
			Thickness		0'2"	337		56.1		14'	13'9"
					0'5"	134.8			56.1		
324W.		1	L6244	7'1"	7'4"	176	6.42		44		
			Thickness		0'4"	132			44		7'0"
354W.		1	L6245	11'3"	11'5"	540	18.9	90.0			
		2	L6246	11'6"	11'9"	962	29.2	240.5		10'8"	0'9"
			Thickness		1'1"	305.1		330.5			
					2'9"	120.2			330.5		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 5234S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
384W.	N.W. CORNER OF D.C.22.	1	L6247	10'	10'2"	213	8.0	35.5			
		2	L6248	11'6"	12'1"	560	19.3	326.7		10'11	9'1"
			Thickness		1'2"	310.5		362.2			
					3'0"	120.7			362.2		
414W.	EASTERN FENCE LINE IS ADOPTED MERIDIAN.	1	L5657	0'	14'6"	352	11.8	5104.0			
			Thickness		14'6"	352		5104.0	5104	Nil.	Nil.
444W. 20.1'		1	L6249	9'6"	9'10"	1100	33.7	366.6	366.6		
		2	L6250	11'8"	11'10"	1305	40.5	-	217.5	8'8"	7'0"
			Thickness		1'2"	314.2		366.6			
					4'10"	120.9			584.1		
479W. 19.4'		1	L5658	0'	11'3"	167.3	5.05		1882.1		
		2	L5659	11'3"	11'7"	296.5	10.17	98.8	98.8	11'3"	Nil.
			Thickness		0'4"	296.5		98.8			
					11'7"	171.1			1980.9		
500W. 20.9'		1	L6251	10'9"	11'0"	930	30	232.5			
			Thickness		0'9"	310		232.5		10'3"	9'1"
					1'11"	121.3			232.5		
530W. 23.7'		1	L6181	0'	15'	11.13	0.45	GRADE TOO LOW.			
579W. 23.2'		1	L5660	10'1"	10'3"	463.3	14.82	77.2			
			Thickness		0'3"	308.8		77.2		10'0"	9'8"
					0'7"	132.3			77.2		

APPENDIX. TABLE A. QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 5234S. (Continued).

BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
628W. 18.2'	N.W. CORNER OF D. C. 22. EASTERN FENCE LINE IS ADOPTED MERIDIAN.	1	L6278	10'5"	10'9"	152	5.78		50.7		
			Thickness		0'5"	121.7			50.7		10'4"
658W. 16.6'		1	L5661	5'9"	5'11"	396	12.48	66.0			
		2	L5662	7'10"	8'0"	326	10.71	-		5'9"	5'5"
			Thickness		0'2"	396		66.0			
					0'6"	132			66.0		
710W. 22.9'		1	L6182	9'	10'	240	8.6	-	240.0		
			Thickness		2'0"	120			240.0		8'0"
737W. 20.1'		1	L6279	9'	9'4"	53	2.4				
		2	L6278	10'	10'3"	109.8	4.01				
758W. 19.8'		1	L5663	10'8"	10'10"	Trace					
840W. 23.7'		1	L6183	10'	10'6"	84.9	3.38				
		2	L6184	13'3"	13'5"	198	7.14		33		13'2"
			Thickness		0'3"	132			33		
895W. 20.1'		1	L5664	9'9"	9'10"	185.9	6.42	15.5			
		2	L5665	10'	10'7"	1677	48.06	978.2		7'4"	2'4"
			Thickness		3'3"	305.8		993.7			
					8'3"	120			993.7		

APPENDIX. TABLE A.

QUANTITIES OF HEAVY MINERALS INTERSECTED IN BORES.

LINE 5234S. (Continued)

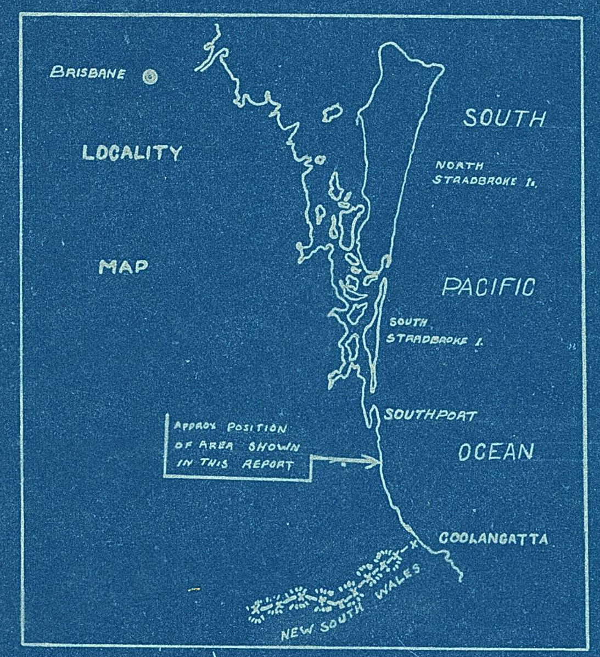
BORE NO. & R.L.	CO-ORDINATES FROM	SAMPLE NO. FIELD	SAMPLE NO. LABORATORY	DEPTH FROM	DEPTH TO	QUANTITY OF HEAVY MINERALS LBS PER CU.YD.	QUANTITY OF HEAVY MINERALS WT.PER CENT	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 300.	PRODUCT THICKNESS OF SAMPLE (FT.) X (LBS.PER CU.YD. 120.	OVERBURDEN FT. 300.	OVERBURDEN FT. 120.
932W. 21.9'	N. W. CORNER	1	L5666	0'	13'3"	Trace					
	OF	2	L5667	13'3"	13'6"	878.4	27.4	219.6		12'10"	11'9"
	D. C. 22.	3	L5668	13'6"	15'	9.86	0.375				
	EASTERN		Thickness		0'8"	329.4		219.6			
					1'9"	125.3			219.6		
967W. 19.8'	FENCE										
	LINE	1	L5669	8'3"	8'10"	407.8	13.4	237.8			
			Thickness		0'9"	317.1		237.8		8'1"	6'10"
	IS				2'0"	118.9			237.8		
1010W. 22.5'	ADOPTED	1	L6185	9'10"	10'1"	186	6.9		46.5		
	MERIDIAN.		Thickness		0'4"	139.5			46.5		9'9"
1064W. 21.9'			NO MINERAL.								
1154W. 14.4'			NO MINERAL.								

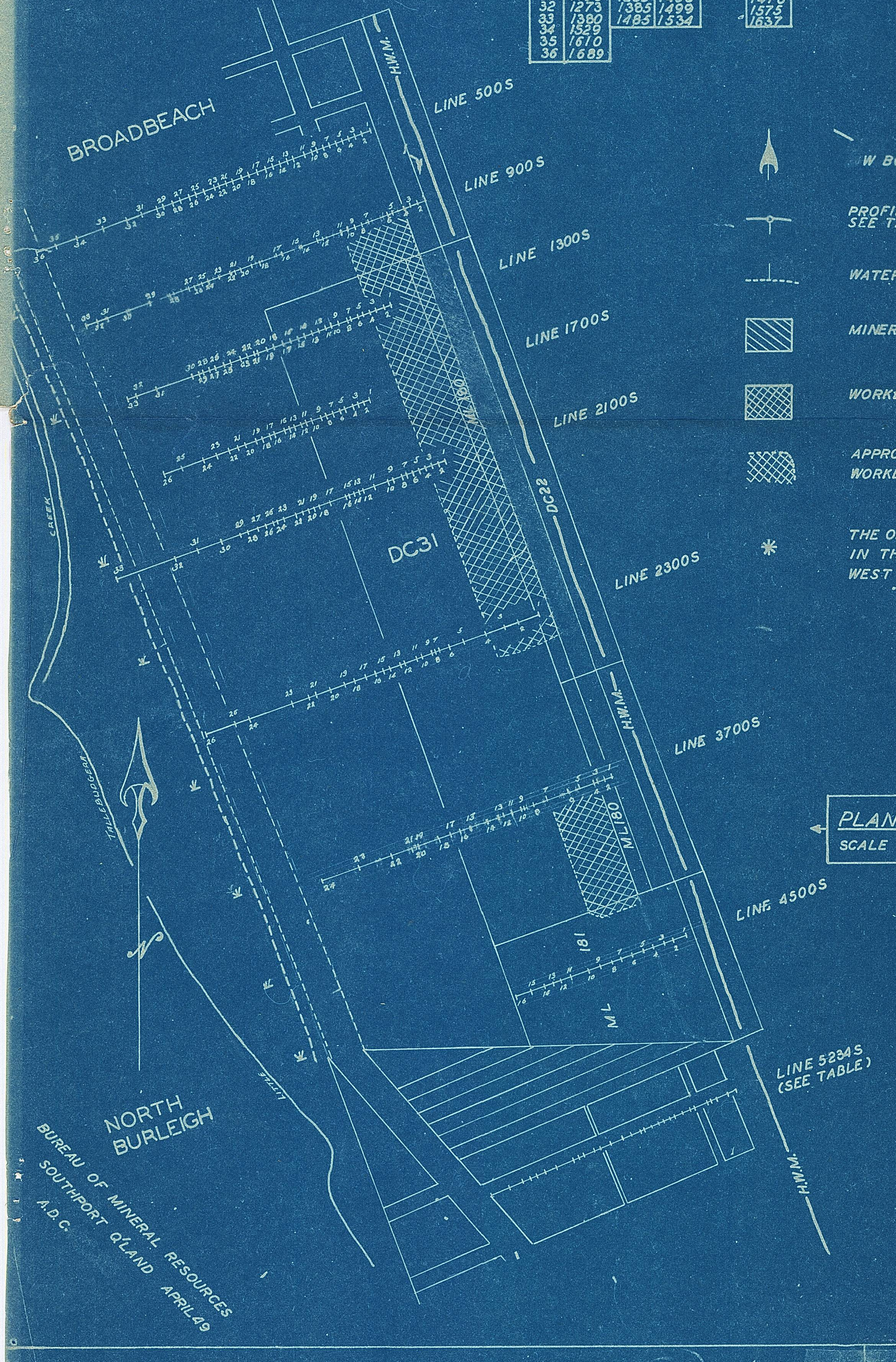
BROADBEACH AREA
DC 22

FROM LINE 500S TO LINE 5234S

DISTANCES REFERED TO IN TABLES BELOW ARE DISTANCES IN FEET WEST OF WESTERN BOUNDARY OF DC22

BORE Nº	LINES 500S	900S	1300S	1700S	2100S	2900S	3700S*	4500S	5234S
	D	I	S	T	A	N	C	E	S
1	138	108	308	533	308	170	00	41	SEE DRAWING Nº QG25-10C-6 REPORT Nº
2	168	138	338	558	338	230	33	96	
3	198	168	368	584	368	310	66	140	
4	228	198	398	608	398	398	75	190	
5	258	228	428	643	428	485	150	240	
6	288	258	458	668	458	572	230	290	
7	318	288	488	704	488	617	306	340	
8	348	378	518	733	518	631	366	390	
9	378	408	548	758	548	652	416	440	
10	408	438	578	798	577	692	427	490	
11	438	468	608	828	643	722	466	570	
12	488	475	638	853	693	775	496	620	
13	523	498	668	883	713	797	527	653	
14	553	505	703	908	733	846	576	700	
15	593	508	739	943	758	877	656	763	
16	623	570	769	978	781	915	706	829	
17	658	605	798	1003	850	959	756		
18	696	660	849	1033	900	1015	806		
19	728	695	882	1072	923	1061	886		
20	776	770	924	1116	954	1126	915		
21	808	810	938	1152	978	1190	936		
22	838	860	977	1193	1011	1221	1036		
23	869	885	1011	1253	1063	1316	1186		
24	910	910	1056	1313	1093	1435	1346		
25	943	960	1091	1413	1115	1565			
26	978	1010	1127	1493	1148	1705			
27	1018	1043	1152		1185				
28	1055	1076	1181		1228				
29	1098	1110	1198		1265				
30	1128	1185	1232		1360				
31	1198	1285	1408		1473				
32	1273	1385	1499		1575				
33	1380	1485	1534		1637				
34	1529								
35	1610								
36	1689								





BUREAU OF MINERAL RESOURCES SOUTHPORT Q'LAND APRIL 49 A.D.C.

W BOUNDARY OF DC22

PROFILE SHOWING BORE Nº SEE TABLE FOR DISTANCES

WATER TABLE

MINERAL BEARING SAND

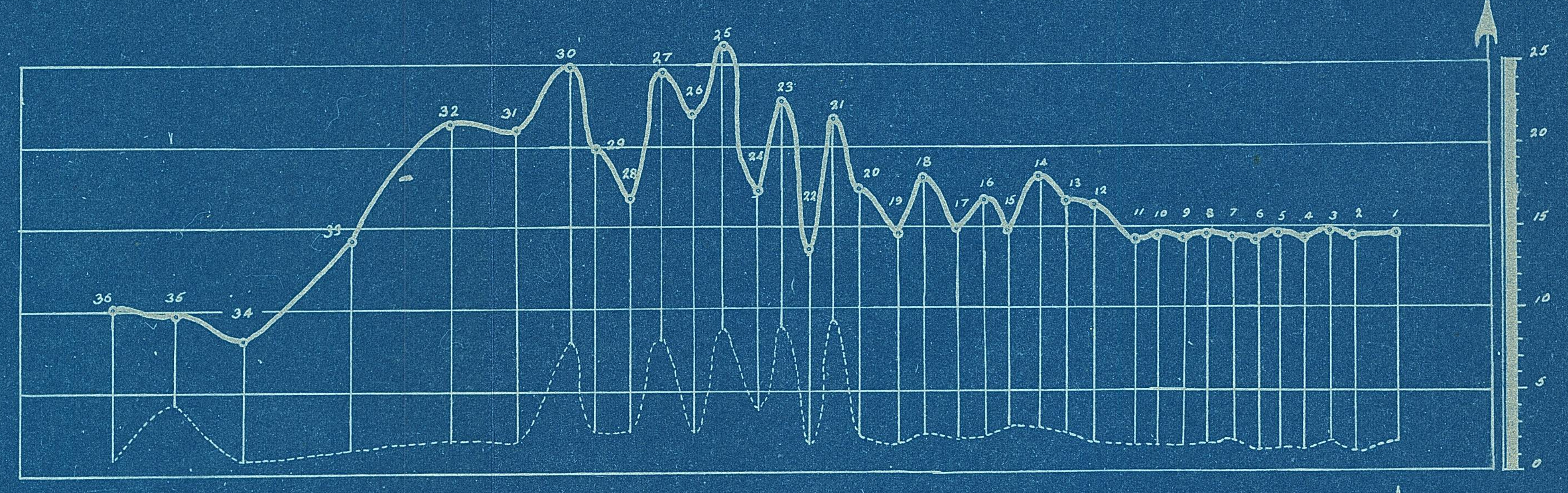
WORKED AREA

APPROXIMATE BOUNDARY OF WORKED AREA

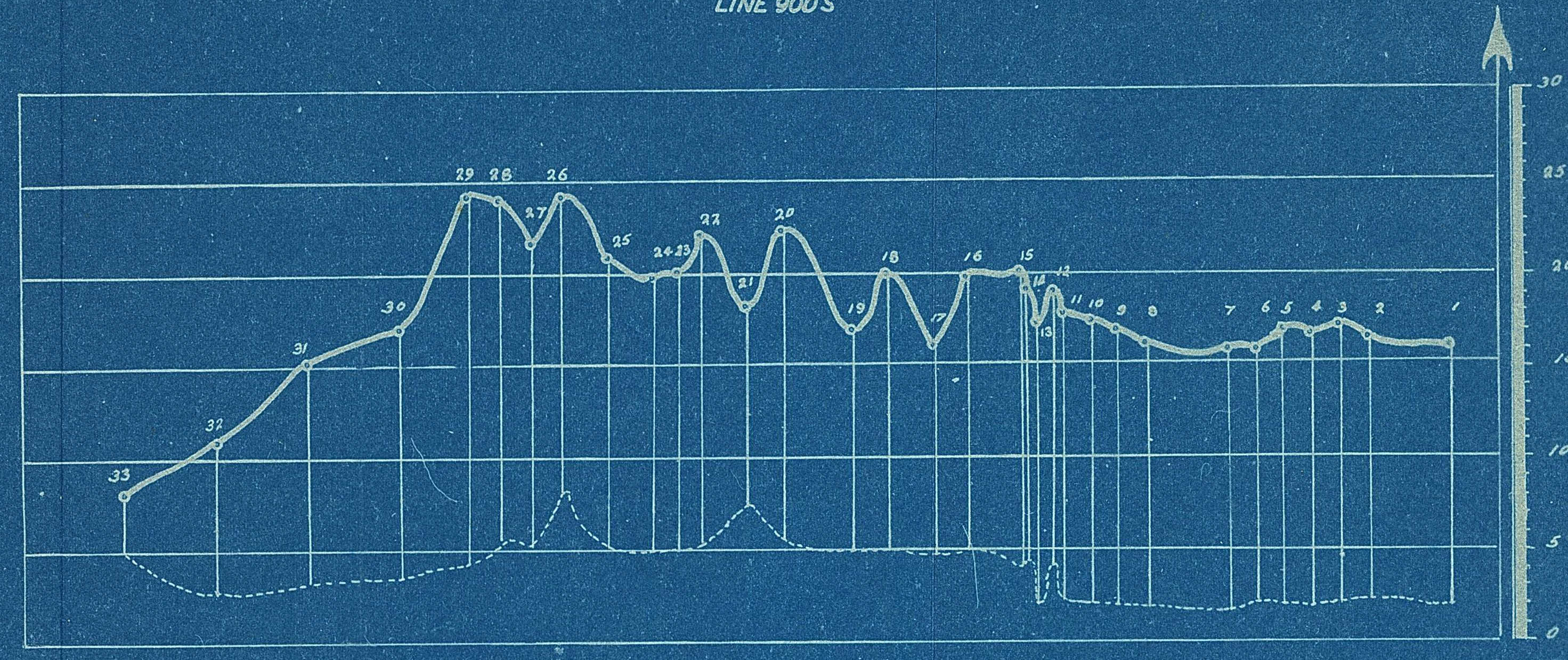
* THE ORIGIN OF THE BORES IN THIS LINE IS 99 FEET WEST OF DC22 BOUNDARY

PLANS SCALE 0 250' 500' 1000'

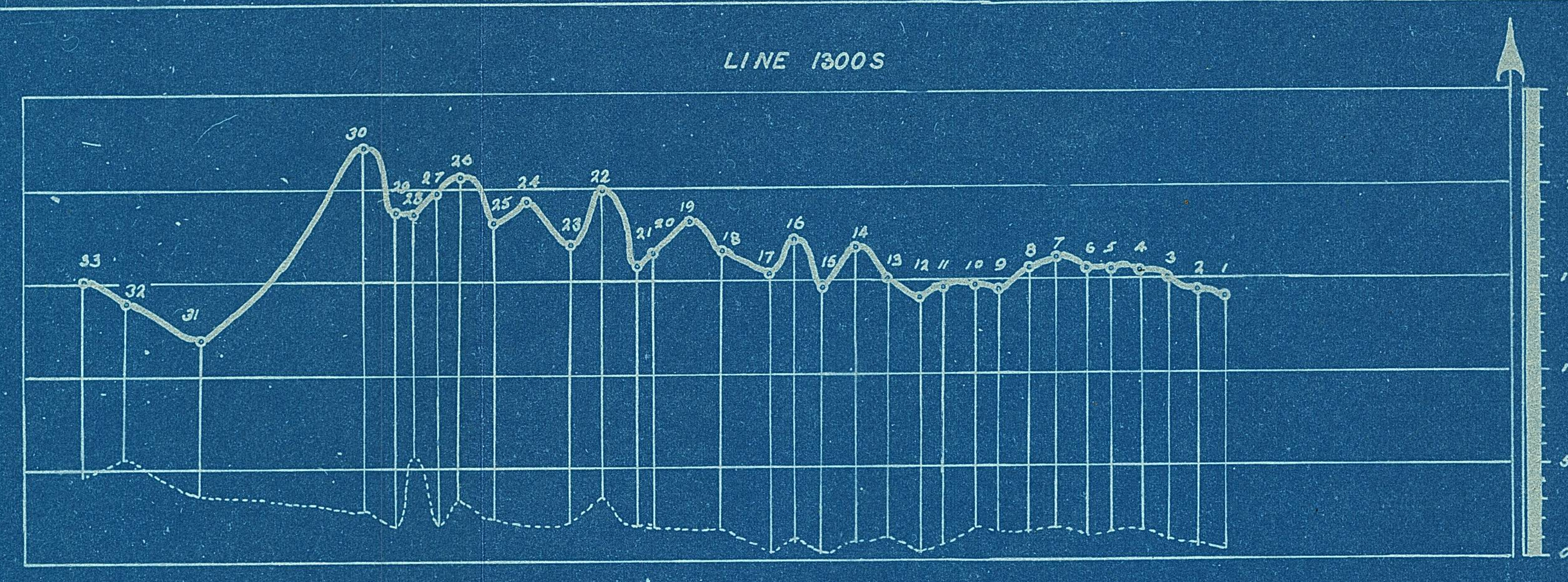
LINE 500S



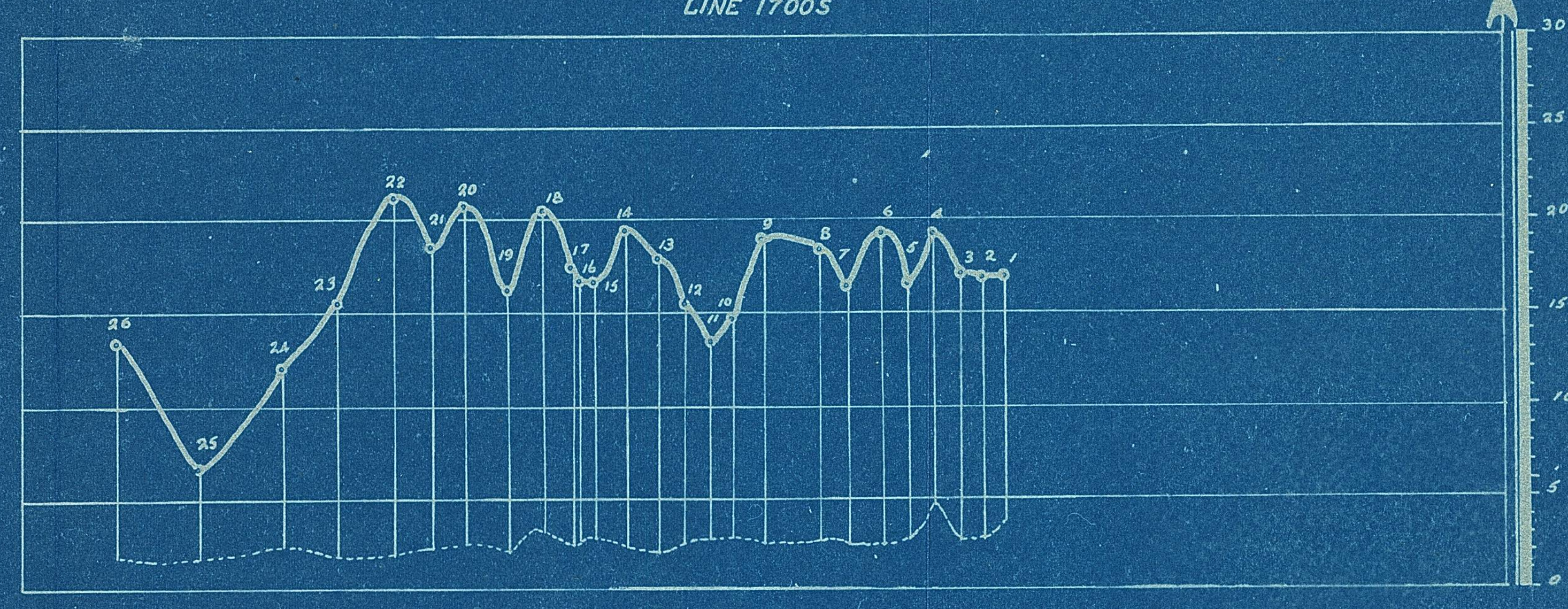
LINE 900S



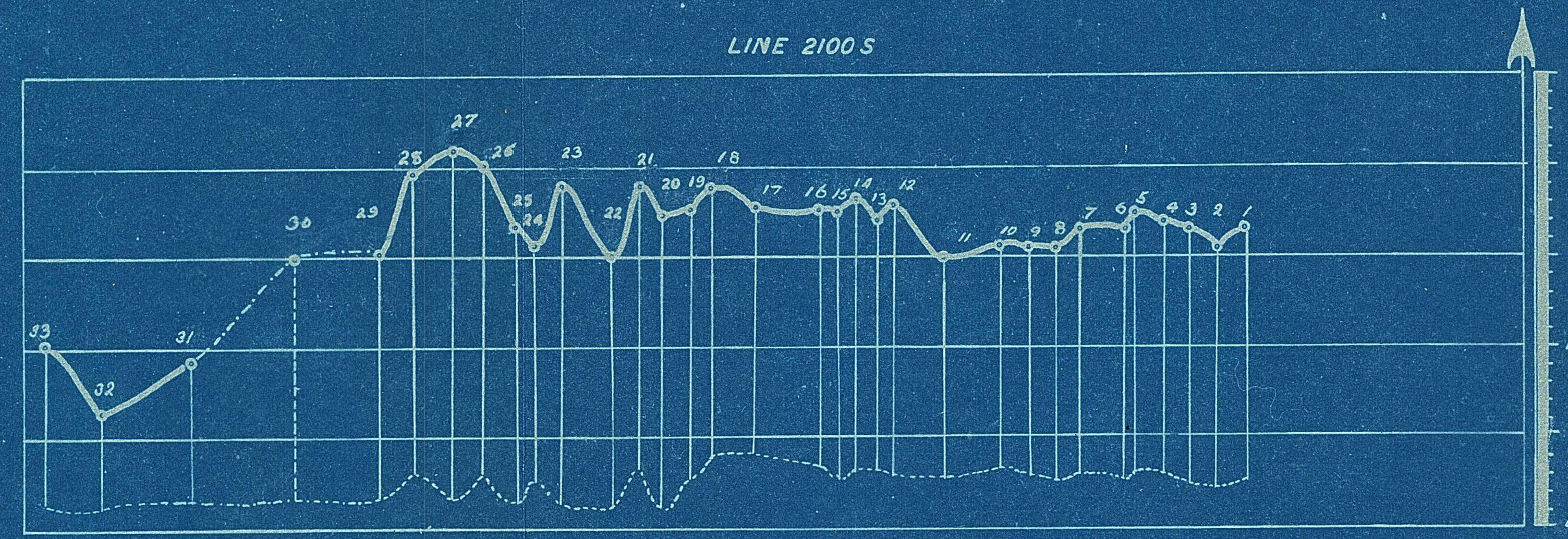
LINE 1300S



LINE 1700S



LINE 2100S



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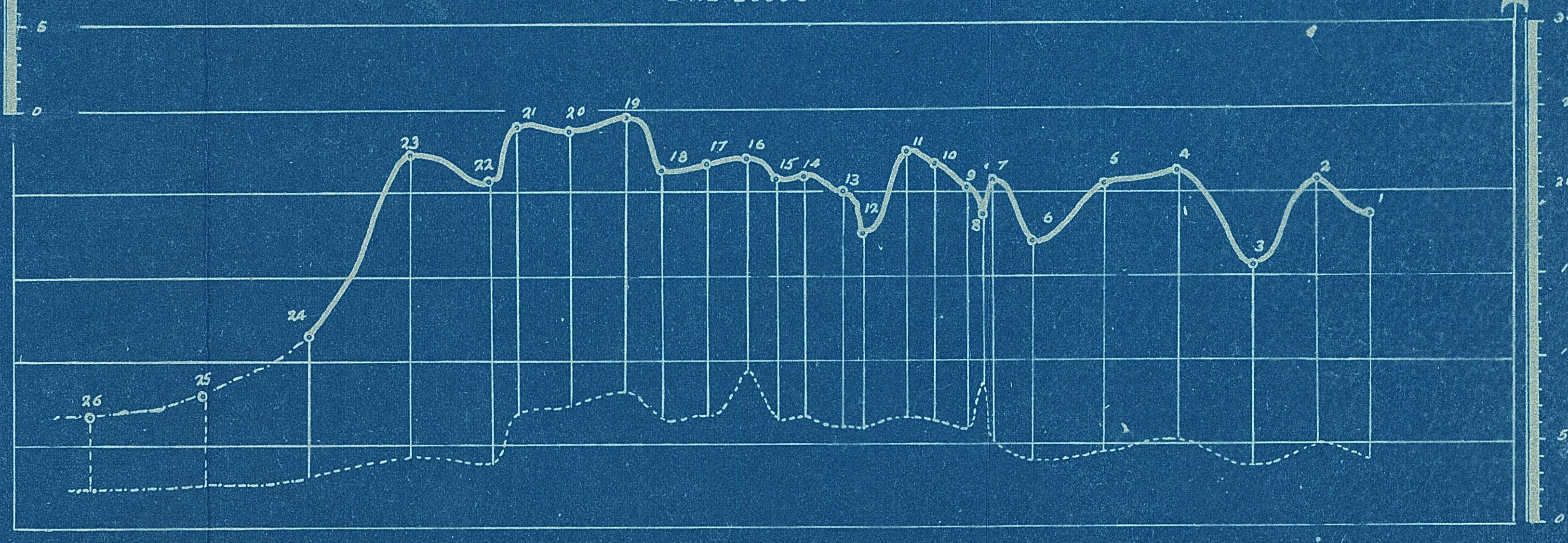
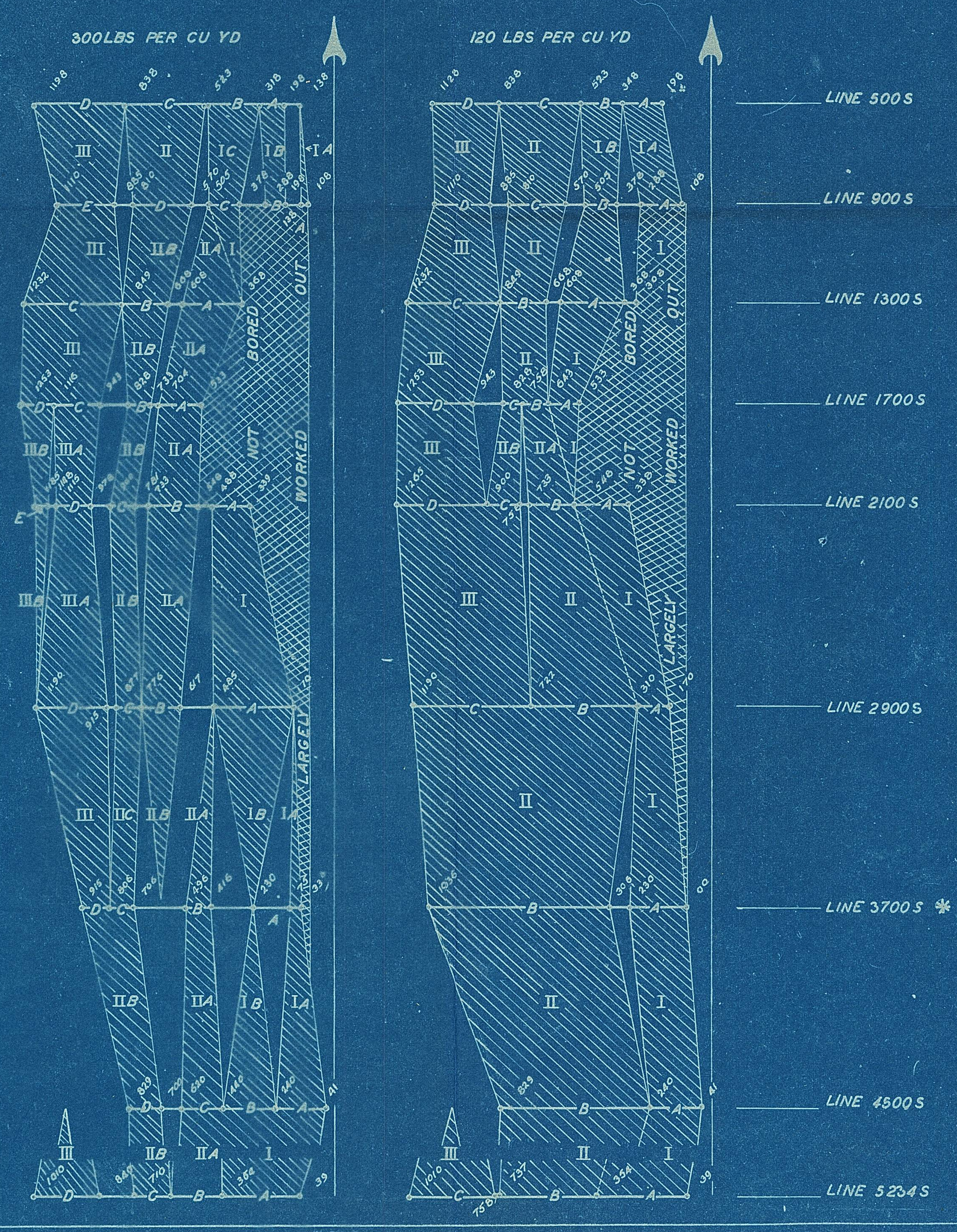
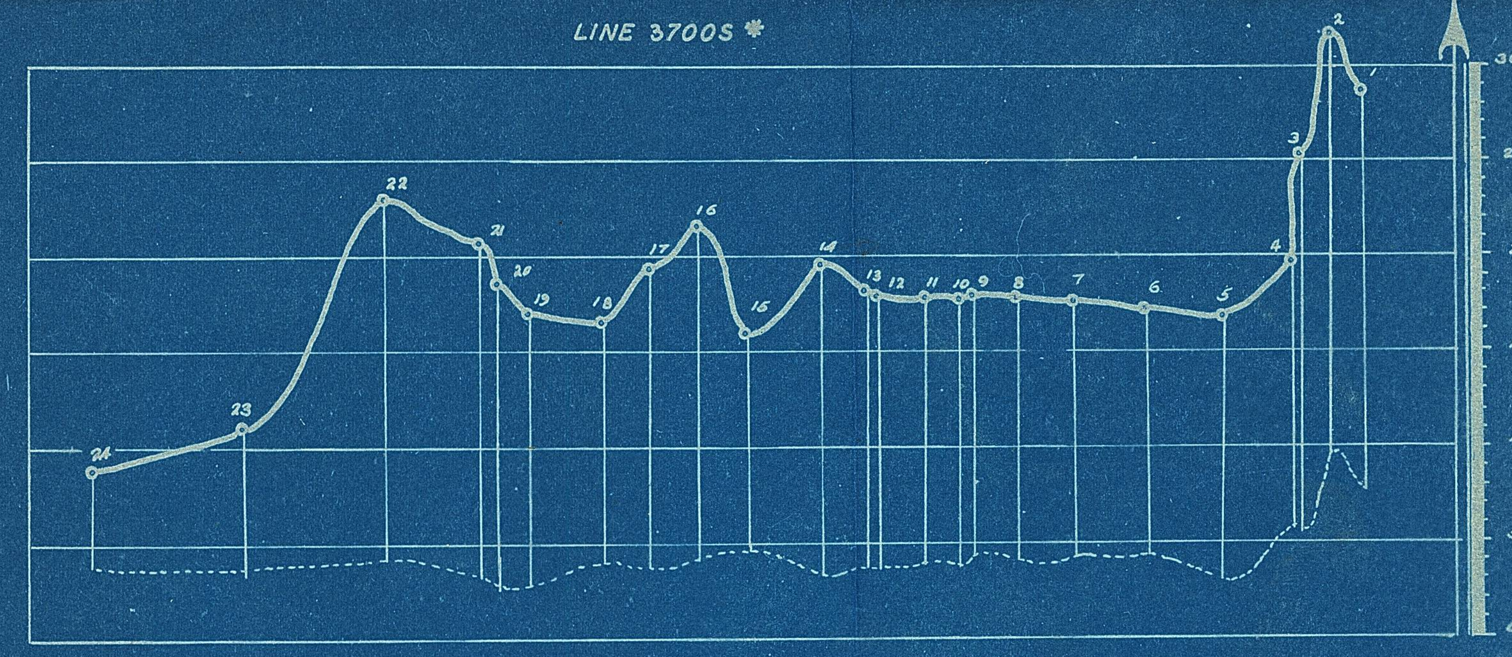


PLAN OF MINERAL BEARING SAND
BETWEEN LINE 500S & LINE 5234S



LINE 3700S *



SECTIONS
SCALES VERTICAL 0' 5' 10' 20'
HORIZONTAL 0' 100' 200' 400'

DATUM FOR LEVELS (APPROX) MEAN LOW WATER

LINE 4500S