MOUNT MAHON PROJECT

YAHK, B. C.

CHEVRON CANADA RESOURCES LIMITED

GRAVITY SURVEY 1983

82G-4

Ager, Berretta & Ellis #606 - 595 Howe Street Vancouver, B. C.



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SUMMARY

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A gravity survey was completed over Chevron's Mount Mahon project, Yahk, B. C. during the fall of 1983. Station interval was 100 metres on lines 200 metres apart. The purpose was to investigate the potential for extensive massive sulphides. Data analysis indicates that most variations in the gravitational field can be explained by lithological variations or topography. One significant potential target remains in the north east corner of the grid.

Respectfully submitted,

Gregory Paguin

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MOUNT MAHON PROJECT, YAHK, B. C. GRAVITY SURVEY

At the request of Chevron Standard Limited, Minerals Division, Ager, Berretta & Ellis Inc. completed a gravity survey on the Mount Mahon Grid near Yahk, B.C. (Figure 1). The purpose of the work was to assist in the search for massive sulphides.

SURVEY PROCEDURE

The ABE crew stayed in a hotel in Yahk and used a truck for transportation to and from the job site. The gravity base for the survey was established at line 0 stn. 0, next to the drill hole (Y-6).

Gravity observations were made using a LaCoste & Romberg model G gravity meter(#618) with a reading accuracy of ± 0.01 milligals. Instrument and diurnal drift were accounted for by tying to the base station and to temporary base stations on the grid and drifting the data accordingly.

Elevations were determined by the use of an electronic level developed by ABE. Standard survey closure methods were used and station elevations were calculated to within a relative accuracy of +0.03 meters.

Field results were calculated and plotted in the field. Final data preparation was completed in the Vancouver office.

GEOLOGY

The survey area lies on the eastern flank of a gently folded anticline, with Mount Mahon very near the axis. The formation is plunging to the north. The area contains sandstone, siltstone, argillites and some conglomerates of the Aldridge Formation. A more complete description of the geology can be found in "Geology of Mount Mahon Area (Yahk Claim Group)" as completed by Larry Decker of Chevron Canada Resources Limited.

DATA REDUCTION

A brief outline of gravity fundamentals is included as Appendix I.

The survey area crossed several statigraphic layers of varying densities. From correlation of gravity values Elevation Density Factors for different rock units were determined. For the higher elevation area of Mount Mahon



(above 1700 meters) a density of 2.10 grams per cc was derived. The remaining portion of the grid was evaluated at 2.67 grams per cc yielding an overall average elevation density factor of 2.45 grams per cc.

A density of 2.67 grams per cc was used for terrain correction calculations. The resulting Complete Bouguer Gravity Map is given as Figure 7.

INTEPRETATION

Several features can be observed from the Complete Bouguer Gravity Map.

A gravity high trends across the grid 200 to 400 meters west of the base line. This feature shifts to the west if the elevation density factor is lowered slightly and becomes only a gradient at an elevation correction factor of 2.1 grams per cc (see Figures 2, 3, & 4). Using geological information supplied by Chevron, line 0 has been modelled. As can be geen on Figure 6, variations in gravitational fields can be explained by changes in local geology.

In the eastern portion of the grid a gravity low, indicative of stream sediments, can be observed at line 10 north, 200 east trending south along the existing stream. This low separates, and accentuates a gravity high on lines 8 and 10 north. Observation of gravity profiles at various different density factors indicates that this feature is not topographically related. The feature is not closed off to the north east. If this area is geologically favourable, further investigations are warranted.







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GRAVITY PROF	ILE LINE 8	Ν
CHEVRON CANADA YAH	A RESOURCE K, B.C.	S LTD.
Ager Berretta	DWN BY B.J.C.	FIG. NO.
& Ellis Inc.	DATE: JAN. 1984	4





APPENDIX I

GRAVITY FUNDAMENTALS

There are a number of steps required in order to obtain meaningful, relative gravity values from raw field data. The final values are referred to as Complete Bouguer Gravity and are derived from the following components:

go

9₁

g_t

- = observed gravity = field observations corrected for drift and adjusted to primary base station gravity datum.
- gfa = free air effect = correction for the relative distance of the gravity station from the mass of the earth (point source mass). This calculation assumes a normal free air and corrects for relative differences in distance from the elevation datum.
- slab effect = correction for the = Bouquer 9_{bs} differences in thickness of rock relative material between gravity stations and the elevation datum. This calculation requires that a mean density for rock types between the lowest and highest grid elevations be established. All stations are then corrected for the gravity effect caused by this assumed slab of the derived density above the elevation datum.
 - = latitude effect = correction for change of observed gravity with change in latitude - due primarily to the difference in the earth's radius between the poles and equator.
 - = terrain effect = correction for variations caused by local terrain. The vertical component of the gravitational effect exerted by nearby hills, or not exerted by valleys or gullies, will affect the net reading obtained at any one station. The overall effect on a given line profile or grid area will be a function of the station spacing relative to the frequency of the terrain correction.

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Accurate and appropriate application of the above corrections yields Complete Bouguer Gravity values which are, in theory, free from all effects except those caused by relative changes in density within rock units below the survey area.

 $G_{cb} = g_0 - (g_{fa} + g_{bs} + g_1 + g_t) = Complete Bouguer Gravity.$

Changes in relative gravity values which may result in "anomalies" are a function of:

- the difference in densities between rock units;
- the sizes of rock units relative to each other and relative to the grid spacing or "target" size;
- the distance from the area of density contrast to the observation points.

For example: Steeply dipping, near surface massive sulphide deposits or coal seams will give sharp featured gravity anomalies, the former greater than background, the latter less than background. Density contrasts at depth, such as slopes or changes in basement stratigraphy, will result in very low frequency changes, often referred to as gradients.

APPENDIX II

GRAVITY LISTING

Elevation density factor : 2.10 grams per cc above 1700 meters 2.67 grams pre cc below 1700 meters Gravity datum as printed : arbitrary Elevation datum : 1524 meters at line 0 station 0 Grid spacing : 100 meter stations on lines offset 200 meters, see Figure X

GRAVITY

Base station at line 0 station 0 : 4158.50 milligals Field work : 2 October to 14 October 1983 Meter Counter Reading : 4000.00

Pertinent Meter Factor : 1.02681

CREW

Gregory Paquin Larry Carlson Tom Roney Project Geophysicist/ Gravity Observer Surveyor Field Assistant

	STN. NO.	ELEV. METRES	ELEV. FEET	OBSERVED GRAVITY	LATITUDE COR.	TERRAIN COR.	COMPLETE BOUGUER
LINE 10	S						
1000S 1000S 1000S 1000S	20W 19W 18W 17W	1607.46 1631.68 1659.35 1687.75	5273.81 5353.28 5444.07 5537.25	123.33 118.53 112.86 107.18	2.60 2.64 2.68 2.72 2.76	3.02 2.92 2.78 2.62	459.96 460.09 460.01 460.06
1000S 1000S 1000S 1000S	15W 15W 14W 13W	1713.23 1732.04 1739.53 1728.33	5620.83 5682.55 5707.11 5670.37	97.91 96.37 98.79	2.76 2.80 2.84 2.88	2.51 2.52 2.49 2.39	459.90 459.90 459.96
 1000S 1000S 1000S 1000S	12W 11W 10W 9W	1703.43 1675.62 1652.92 1630.40	5588.68 5497.45 5422.98 5349.09	104.26 110.25 114.91 119.50	2.92 2.96 3.00 3.04	2.20 2.16 2.18 2.22	460.15 460.41 460.46 460.49
1000S 1000S 1000S 1000S	8W 7W 6W 5W	1603.77 1578.24 1554.25 1530.63	5261.70 5177.95 5099.23 5021.75	124.80 129.92 134.76 139.62	3.08 3.12 3.16 3.20	2.25 2.24 2.22 2.15	460.38 460.27 460.19 460.16
1000S 1000S 1000S 1000S	4W 3W 2W 1W	1505.63 1485.34 1466.18 1452.27	4939.72 4873.15 4810.30 4764.66	144.66 148.80 152.71 155.44	3.24 3.28 3.32 3.36	2.04 1.92 1.78 1.70	459.98 459.86 459.73 459.55
1000S 1000S 1000S 1000S	OW 1W 2W 3W	1436.41 1417.78 1401.12 1385.63	4712.64 4651.51 4596.86 4546.03	158.46 162.17 165.46 168.50	3.40 3.44 3.48 3.52 3.56	1.57 1.49 1.38 1.23	459.22 459.05 458.84 458.58 458.26
1000S 1000S 1000S 1000S	5W 6W 7W 8W	1362.48 1354.33 1346.21 1342.03	4497.41 4470.07 4443.33 4416.71 4402.99	172.84 174.29 175.84 176.41	3.60 3.64 3.68 3.72	1.08 1.00 .98 .95	458.08 457.81 457.71 457.43
1000S 1000S 1000S 1000S	9W 10W 11W 12W	1331.28 1313.41 1314.60 1317.56	4367.72 4309.10 4313.00 4322.71	178.28 181.51 181.42 180.80	3.76 3.80 3.84 3.88	•92 •88 •82 •84	457.10 456.65 456.78 456.83
LINE 8S							
800S 800S 800S 800S 800S 800S 800S 800S	18W 17W 16W 15W 14W 13W 12W 11W 10W 9W 8W	1719.58 1739.09 1758.18 1760.65 1740.56 1711.81 1683.11 1655.84 1632.55 1608.09 1580.96	5641.68 5705.69 5768.32 5776.42 5710.49 5616.18 5522.03 5432.54 5356.15 5275.88 5186.88	99.93 95.90 91.77 91.36 95.74 102.25 108.45 114.29 119.14 123.94 129.52	2.54 2.58 2.62 2.66 2.70 2.74 2.78 2.82 2.86 2.90 2.94	2.95 2.88 2.82 2.68 2.50 2.46 2.28 2.28 2.28 2.35 2.38 2.39	443.66 443.44 443.04 443.02 443.31 444.16 444.58 445.09 445.47 445.53 445.83

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	STN.	ELEV.	ELEV.	OBSERVED	LATITUDE	TERRAIN	COMPLETE
	NO.	METRES	FEET	GRAVITY	COR.	COR.	BOUGUER
8005	70	1556.81	5107-63	134.52	2,98	2.35	446.08
8005	6W	1533.67	5031.72	139.26	3.02	2.22	446.17
8005	510	1512 46	4962 15	143.56	3.06	2.09	446.21
8005	AW	1/05 33	4905 94	147.04	3,10	1.98	446.25
8005	211	1479 18	4852 96	150.21	3.14	1.88	446.19
8005	2147	1479.10	4052.90	153 56	3.18	1.78	446.01
8005	110	1401-36	4793.13	156 65	3.22	1.70	445.87
8005	OW	1422 54	4667 13	161 09	3.26	1,60	445.76
8005	11	1408 61	4607.13	163.91	3,30	1.47	445.75
8005	211	1393 70	4572 49	166.83	3,34	1.31	445.62
8005	211	1383 36	4538 57	168.78	3,38	1.20	445.47
8005	AW	1381 44	4532.29	169.10	3.42	1.06	445.31
8005	5147	1380.06	4532.25	169.18	3.46	- 98	445.08
8005	6W	1377.90	4520.67	169.51	3,50	.97	445.01
8005	767	1376.23	4515.21	169.66	3.54	1.00	444.90
8005	RW	1362.52	4470.20	172.02	3,58	.96	444.57
8005	QW	1343 31	4407.20	175.70	3.62	-90	444.45
8005	1.00	1349.60	4407-82	174.50	3.66	. 80	444.43
8005	11W	1340.54	4398.08	176.40	3.70	.67	444.45
8005	1.2W	1336.24	4383,99	177.27	3.74	.55	444.40
0002		2000021		_,,,_,			
LINE 6	S						
	-						
600S	18W	1769.53	5805.55	88.95	2.40	3.15	442.57
600S	17W	1784.95	5856.13	85.68	2.44	3.15	442.37
600S	16W	1789.51	5871.11	84.78	2.48	3.10	442.36
600S	15W	1768.94	5803.61	89.57	2.52	2.79	442.83
600S	14W	1738.61	5704.11	96.36	2.56	2.67	443.58
600S	13W	1708.49	5605.29	102.96	2.60	2.63	444.25
600S	12W	1676.70	5500.99	109.65	2.64	2.61	444./1
600S	11W	1646.82	5402.95	115.90	2.68	2.62	445.13
600S	10W	1618.57	5310.26	121.71	2.72	2.64	445.44
600S	9W	1587.92	5209.72	127.94	2.76	2.68	445.72
600S	8W	1559.20	5115.47	133.79	2.80	2.65	445.94
600S	7W	1535.92	5039.10	138.68	2.84	2.54	446.18
600S	6W	1517.02	4977.09	142.48	2.88	2.32	446.08
600S	5W	1501.60	4926.52	145.73	2.92	2.15	446.17
600S	4W	1485.84	4874.81	148.97	2.96	2.02	446.22
600S	3W	1469.86	4822.36	152.04	3.00	1.95	446.11
600S	2W	1449.04	4754.07	156.03	3.04	1.90	446.00
600S	lW	1429.32	4689.36	159.94	3.08	1.83	446.00
600S	OW	1413.65	4637.96	163.04	3.12	1.74	445.97
600S	1W	1408.06	4619.61	164.10	3.16	1.56	445.79
600S	2W	1406.13	4613.30	164.27	3.20	1.30	445.36
600S	ЗW	1408.93	4622.48	163.54	3.24	1.17	445.09
600S	4W	1411.75	4631.72	163.07	3.28	T•08	445.12
600S	5W	1411.60	4631.25	162.92	3.32	1.02	444.92
600S	6W	1405.52	4611.30	164.37	3.36	1.04	445.24
600S	7W	1402.21	4600.44	164.73	3.40	T.07	445.02

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	STN. NO.	ELEV. METRES	ELEV. FEET	OBSERVED GRAVITY	LATITUDE COR.	TERRAIN COR.	COMPLETE BOUGUER
6000	OTAT	1200 22	4554 00	167 10	2 11	1 02	115 02
6003	OW	1274 47	4554.90	170 24	2 10	1.02	445.02
6005	9W	12/4+4/	4009.41	170.24	2.40		445.03
6003		1301.09	4400+14	175 10	2.54	• 90	445.05
6005		1349.80	4428.07	175.10	3.00	• 04	443.02
6005	12W	1339•/1	4395.30	1//.04	3.60	•84	444.90
LINE 4	S						
1005	1 9147	1920 45	5072 60	77 45	2 26	3 70	441 49
4005	174	1020+45	5006 17	71.425	2.20	3 20	111 15
4005	164	1020.07	6000.57	75+45	2.50	3.00	441.45
4005	LOW	1004 04	5010.77	/5•/1	2+34	3.05	441.00
4005	WCL TAL		5918.//	81.38	2.38	3.00	442.42
4005	14W	1/05.50	5/92.53	89.89	2.42	3.30	442.90
4005	L3W	1/32.24	5683.19	97.33	2.40	3.06	443.58
4005	12W	1697.75	5570.05	104.//	2.50	2.95	444.1/
4005	WIT	1663.72	5458.39	111.85	2.54	2.87	444.51
4005	TOM	1632.83	5357.05	118.34	2.58	2.80	444.90
4005	9W	1601.89	5255.53	124.68	2.62	2.75	445.14
400S	WB	1572.78	5160.04	130.53	2.66	2.68	445.24
400S	7W	1546.47	5073.72	135.87	2.70	2.61	445.37
400S	6W	1524.96	5003.15	140.33	2.74	2.45	445.48
400S	5W	1505.04	4937.80	144.38	2.78	2.33	445.53
4005	4W	1484.27	4869.65	148.57	2.82	2.24	445.59
400S	3W	1464.27	4804.04	152.74	2.86	2.04	445.66
400S	2W	1459.33	4787.82	153.92	2.90	1.73	445.60
400S	lw	1455.26	4774.49	154.90	2.94	1.58	445.67
400S	OW	1452.02	4763.86	155.44	2.98	1.46	445.49
400S	lE	1450.50	4758.85	155.61	3.02	1.37	445.31
400S	2E	1455.69	4775.88	154.54	3.06	1.30	445.23
400S	3E	1450.90	4760.18	155.59	3.10	1.20	445.28
400S	4E	1444.58	4739.44	156.83	3.14	1.18	445.30
4005	5E	1435.43	4709.42	158.64	3.18	1.16	445.33
400S	6E	1424.88	4674.79	160.65	3.22	1.13	445.27
4005	7E	1412.03	4632.63	163.06	3.26	1.10	445.17
4005	8E	1395.75	4579.22	166.27	3,30	1.06	445,17
4005	9E	1380.71	4529.90	169.09	3.34	1.01	445.03
4005	10E	1366.43	4483.04	171.84	3,38	.99	444.99
4005	115	1352.63	4437.77	174.56	3.42	.98	445.02
400B	12E	1338.63	4391.83	177.25	3.46	•95	444.97
LINE 2	<u>s</u>						
200S	18W	1870.35	6136.32	65.85	2.12	4.70	440.57
200S	17W	1890.14	6201.25	60.53	2.16	5.10	439.58
2005	160	1871-45	6139.93	65.00	2.20	4.44	439.75
2005	15W	1829.51	6002.32	75.13	2.24	3.90	441.14
2005	14W	1790.77	5875.24	83.97	2.28	3.60	442.10

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	STN.	ELEV.	ELEV.	OBSERVED	LATITUDE	TERRAIN	COMPLETE
	NO.	METRES	FEET	GRAVITY	COR.	COR.	BOUGUER
2005	13W	1755.44	5759.33	92.10	2.32	3.35	443.07
200S	12W	1717.53	5634.93	100.42	2.36	3.15	443.77
200S	11W	1682.84	5521.11	108.01	2.40	2.92	444.35
2005	10W	1651.41	5418.02	114.83	2.44	2.74	444.84
200S	9W	1626.35	5335.81	120.02	2.48	2.62	445.02
2005	8W	1603.13	5259.61	124,95	2.52	2.53	445.34
200S	7W	1577.88	5176.77	130.30	2.56	2.42	445.65
2005	6W	1554.53	5100.16	135.06	2.60	2.28	445.72
200S	5W	1531.05	5023.12	139.89	2.64	2.05	445.74
2005	4W	1513.39	4965.20	143.51	2.68	1.82	445.69
200S	3W	1505.87	4940.52	145.27	2.72	1.63	445.83
200S	2W	1493.22	4899.02	147.77	2.76	1.48	445.73
2005	1W	1490.04	4888.60	148.38	2.80	1.38	445.65
200S	OW	1493.11	4898.66	147.69	2.84	1.34	445.57
200S	1E	1493.29	4899.26	147.66	2.88	1.30	445.57
2005	2E	1490.52	4890.17	148.18	2.92	1.27	445.56
2005	3E	1480.83	4858.37	149.99	2.96	1.24	445.47
2005	4E	1468.28	4817.18	152.29	3.00	1.22	445.32
2005	5E	1454.50	4771.98	154.94	3.04	1.23	445.31
2005	6E	1441.43	4729.09	157.55	3.08	1.22	445.38
2005	7E	1423.00	4668.64	161.11	3.12	1.19	445.32
2005	8E	1404.31	4607.31	164.86	3.16	1.15	445.40
2005	9E	1388.48	4555.39	167.94	3.20	1.12	445.37
2005	10E	1372.12	4501.70	171.20	3.24	1.08	445.42
2005	11E	1356.06	4449.02	174.20	3.28	1.04	445.26
200S	12E	1331.26	4367.65	178.90	3.32	1.02	445.10
BASELIN	NE NORTH	SOUTH					
		1.660.07		100 60	1 50	2 45	150 25
U	28W	1669.07	54/5.95	109.62	1.58	3.45	400.00
0	27W	1702.93	558/.04	102.64	1.62	3.39	400.32
0	26W	1/38.23	5/02.85	95.06	1.70	3.30	40/.90
0	25W	1/69.91	5806.79	10-88	1.70	3.10	437.27
U	24W	1/96.66	5894.55	82.47	1.74	2.98	457.10
U	2.3W	1/9/.58	5897.58	82.94	1.02	2.50	407+30
0	22W	1804.85	5921.42	81.40	1.82	2.48	457.42
0	21W	1822.66	5979.86	77.49	1.86	2.73	457.40
0	20W	1846.61	6058.42	/1.91	1.90	3.20	457.20
0	19W	1867.20	6126.00	6/.0/	1.94	3.85	457.35
0	18M	1896.19	6221.10	59.67	1.98	4.65	450.70
0	L/W	1908.06	6260.04	56.51	2.02	5.10	450.54
0	16W	1900.21	6234.28	58.10	2.06	5.00	456.45
0	1.5W	1861.78	6108.19	67.53	2.10	4.35	45/.36
0	14W	1821.41	59/5.74	77.18	2.14	3.90	458.29
U	13W	1787.64	5864.97	84.60	2.18	3.60	458.49
0	12W	1/44.89	5724.72	94.12	2.22	3.25	458.90
0	TIM	1702.68	5586.21	103.88	2.26	2.92	459.68
Û	TOM	1671.39	5483.56	111.04	2.30	2.62	460.13
U	9W.	1649.46	5411.63	TT2•37	2.34	2.48	437.0/

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	g	STN.	ELEV.	ELEV.	OBSERVED	LATITUDE	TERRAIN	COMPLETE
O		NO.	METRES	FEET	GRAVITY	COR.	COR.	BOUGUER
	•	01.1	1 () 1 00	5221 10	121 00	2 38	2,38	459.83
	0	8W 71.7	1621.90	5221.10	126.64	2.42	2.23	459.82
	0	 GW	1575 06	5167 53	130.89	2.46	2.08	459.77
	0	5W	1552 04	5092 01	135.78	2.50	1.86	459.74
	0	AV	1527 21	50/3 34	138.93	2.54	1.62	459.63
	0	2147	1520 10	5017 04	140.71	2.58	1.43	459.61
	0	5W 717	1520 14	1987 35	142.55	2.62	1.36	459.56
	0	200	1525 70	5005.57	141.42	2.66	1.33	459.58
	0	UM TW	1524 00	5000.00	141.78	2.70	1.30	459.60
	0	15	1517.82	4979.73	142.97	2.74	1.28	459.54
•	0	2F	1509.33	4951.87	144.46	2.78	1.27	459.31
	0	211 3F	1494.51	4903.25	147.26	2.82	1.26	459.09
	0		1477.65	4903023	150.50	2.86	1.25	458.89
	0	55	1462.42	4797.95	153.46	2.90	1.24	458.74
	0	5E 6E	1445.30	4741.81	156.65	2.94	1.23	458.44
		75	1423-89	4671.54	160.79	2.98	1.22	458.20
	0	8E	1405.51	4611.26	164.40	3.02	1.21	458.05
		9E	1387.71	4552.87	167.94	3.06	1.18	457.94
	- 0	JOE	1362.44	4469.95	172.90	3.10	1.12	457.67
	0	11E	1351.32	4433.46	175.08	3.14	1.08	457.56
	0	12E	1337.81	4389.13	177.94	3.18	1.05	457.65
	õ	13E	1324.57	4345.69	180.60	3.22	1.00	457.58
	Õ	14E	1304.21	4278.91	184.67	3.26	.94	457.43
()	Õ	15E	1289.28	4229.93	187.78	3.30	•87	457.44
	Õ	16E	1279.15	4196.70	190.00	3.04	.84	457.28
	Õ	17E	1266.86	4156.38	192.43	3.08	•87	457.25
	0	18E	1246.47	4089.48	196.29	3.12	.89	456.97
	0	19E	1235.85	4054.62	198.47	3.16	.92	457.04
	0	20E	1221.69	4008.16	201.15	3.20	1.04	456.96
	0	21E	1222.02	4009.26	200.55	3.24	1.22	456.65
	0	22E	1221.65	4008.04	200.12	3.28	1.30	456.26
	0	23E	1258.51	4128.98	193.26	3.32	1.37	457.10
	0	24E	1264.74	4149.41	192.39	3.36	1.60	457.79
	0	25E	1273.38	4177.76	190.54	3.40	1.88	458.04
	0	26E	1308.37	4292.56	183.90	3.44	2.07	458.83
	0	27E	1334.21	4377.34	178.92	3.48	2.24	459.38
	0	28E	1363.75	4474.26	173.26	3.52	2.48	460.08
	0	29E	1393.36	4571.39	167.39	3.56	2.55	460.42
	0	30E	1427.92	4684.79	160.93	3.60	2.62	461.19
	0	31E	1457.25	4780.99	155.56	3.64	2.62	461.90
	0	32E	1461.69	4795.56	155.04	3.66	2.52	462.21
	LINE 2N							
	200N	18W	1894.48	6215.50	60.30	1.84	4.08	438.86
	200N	17W	1886.98	6190.89	62.19	1.88	4.10	439.34
\cap	200N	16W	1879.16	6165.22	63.82	1.92	4.12	439.49
	200N	15W	1862.87	6111.79	67.91	1.96	4.00	440.30
	200N	14W	1831.02	6007.29	75.38	2.00	3.65	441.19

	STN.	ELEV.	ELEV.	OBSERVED	LATITUDE	TERRAIN	COMPLETE
	NO.	METRES	FEET	GRAVITY	COR.	COR.	BOUGUER
200N	1 3W	1801.32	5909,84	82,11	2.04	3.30	441.77
2000	120	1763.82	5786.82	90.56	2.08	3.05	442.63
2000	110	1726.23	5663.48	99.13	2.12	2.72	443.52
2000	100	1689.69	5543.61	107.38	2.16	2.47	444.37
2000	QW	1664 68	5461 55	112.86	2.20	2.25	444.75
200M	80	1645 99	5400.24	116.79	2.24	2.14	444.94
2000	767	1621.88	5321 13	121.81	2.28	2.00	445.11
200N	6W	1595.07	5233.17	127.40	2.32	1.80	445.27
2000	510	1579.04	5180.59	130.73	2.36	1.60	445.29
200N	4W	1564.12	5131.62	133.80	2.40	1.46	445.32
200N	3W	1550.64	5087.39	136.57	2.44	1.37	445.39
200N	2W	1551.89	5091.49	136.43	2.48	1.34	445.51
200N	1W	1547.28	5076.37	137.31	2.52	1.30	445.48
200N	OW	1535.27	5036.96	139.69	2.56	1.25	445.49
200NE	1	1523.08	4996.97	142.03	2.60	1.27	445.49
200NE	2	1508.16	4948.03	144.87	2.64	1.31	445.48
200NE	3	1491.55	4893.53	148.12	2.68	1.32	445.51
200NE	4	1476.77	4845.05	150.87	2.72	1.30	445.37
200NE	5	1457.36	4781.35	154.60	2.76	1.26	445.28
200NE	6	1438.18	4718.43	158.33	2.80	1.23	445.25
200NE	7	1416.39	4646.94	162.60	2.84	1.20	445.24
200NE	8	1393.96	4573.35	166.97	2.88	1.20	445.24
200NE	9	1373.41	4505.95	171.00	2.92	1.17	445.24
200NE	10	1372.54	4503.10	171.14	2.96	1.14	445.22
200NE	11	1363.83	4474.50	172.71	3.00	1.12	445.10
200NE	12	1345.81	4415.40	176.32	3.04	1.10	445.18
LINE 4N	•						
400NW	23	1841.52	6041.73	71.74	1.50	4.20	439.67
400NW	22	1842.36	6044.49	72.07	1.54	3.40	439.40
400NW	21	1834.48	6018.63	74.62	1.58	2.92	439.96
400NW	20	1838.61	6032.20	73.81	1.62	2.86	439.95
400NW	19	1839.18	6034.05	73.88	1.66	2.82	440.13
400NW	18	1832.76	6012.98	75.65	1.70	2.58	440.43
400NW	17	1829.15	6001.16	76.54	1.74	2.58	440.65
400NW	16	1818.63	5966.64	79.12	1.78	2.55	441.18
400NW	15	1805.84	5924.67	82.04	1.82	2.55	441.62
400NW	14	1791.97	5879.17	85.18	1.86	2.58	442.10
400NW	13	1773.66	5819.10	89.25	1.90	2.50	442.53
400NW	12	1748.00	5734.91	95.13	1.94	2.38	443.28
400NW	11	1725.82	5662.15	100.09	1.98	2.24	443.78
400NW	10	1697.96	5570.74	106.23	2.04	2.12	444.38
400NW	9	1677.81	5504.62	110.45	2.06	2.00	444.54
400NW	8	1652.05	5420.12	115.89	2.10	1.89	444.84
400NW	7	1631.94	5354.15	120.15	2.14	1.77	445.06
400NW	6	1607.66	5274.48	125.47	2.18	L•58	445.40
400NW	5	1596.59	5238.15	12/./1	2.22	1.43	445.41
400NW	4	1581.69	5189.27	130.85	2.20	1.30	440.09

\$	STN.	ELEV.	ELEV.		OBSERVED	LATITUDE	TERRAIN	COMPLETE
	NO.	PIEIRES	LULL.		GRAVIII	COR.	COR.	DOOGORK
400NW	3	1572.73	5159-87		132.57	2.30	1.33	445.56
400NW	2	1561.55	5123.18		134.79	2.34	1.29	445.58
40000	ĩ	1549.33	5083 10		137.14	2.38	1.27	445.54
40000	ñ	1533 13	5029 95		140.23	2.42	1.28	445.50
AOONE	1	1515 87	1073 31	•	143 56	2.46	1.30	445.49
400NE	· 1		4975.54		145.50	2.50	1 40	445.68
AOONE	2	1402 00	4919.42		140.04	2.50	1 44	445.49
400115		1404.33	4003.44		149.01	2.59	1 30	445.36
400NE		1427.00	4/02.09		150 00	2.50	1 22	115 25
400NE	5	1455.02	4/10.70		150.90	2.02	1 22	445.25
400NE	- 0	1411.12	4029.07		103.89	2.00	1.22	445.54
400NE		1398.50	4588.45		106.29	2.70	1.10	440+27
400NE	8	1399.43	4591.32		100.00	2.74	1.10	440.22
400NE	9	1399.82	4592.59		165.81	2.78	1.19	445.12
400NE	10	1384.83	4543.41		168.64	2.82	1.21	445.07
400NE	11	1362.08	4468.77		173.27	2.86	1.20	445.25
400NE	12	1344.80	4412.09		176.70	2.90	1.18	445.30
LINE 6N								
600NW	18	1786.82	5862.27		86.53	1.56	1.96	441.52
600NW	17	1786.95	5862.69		86.69	1.60	2.00	441.78
600NW	16	1780.46	5841.41		88.21	1.64	1.94	442.01
600NW	15	1762.48	5782.42		92.26	1.68	1.88	442.50
600NW	14	1750.52	5743.16		95.01	1.72	1.86	442.92
600NW	13	1735.18	5692.84		98.44	1.76	1.84	443.35
600NW	12	1718.83	5639.21		102.20	1.80	1.79	443.88
60000	11	1704.07	5590.78		105.41	1.84	1.78	444.22
60000	10	1692.36	5552.36		107.89	1.88	1.78	444.44
60000	q	1673.60	5490.80		111.80	1.92	1.78	444.70
600NW	2	1655 19	5430 41		115.46	1.96	1.72	444.72
GOOM	7	1630 54	53/0 56		120 65	2 00	1.60	444.98
600NW	6	1609 71	5277 01		125 29	2.00	1.45	445.21
GOONW	5	1500.02	5217.91		127 47	2.04	1 27	445.25
COONT	ر ۸	1504 02	5106 05		120 41	2.00	1 33	445•25 AA5 AA
COONT	4. 0	1504.05	5150.95		122 01	2.14	1 20	445.30
COONT	<u>ງ</u>	15/1.08	5154.47		126 01	2.10	1.23	44.0.09
GOONN	2	1535.07	5104.50		120.01	2.20	1.25	44J.JZ
600NW	1	1541.38	5057.01		142 67	2.24	1.27	440+40
600NW	0	1520.90	4989.83		142.67	2.28	1.27	443.38
600NE	Ţ	1501.85	4927.32		146.31	2.32	1.29	445.33
600NE	2	1483.27	4866.37		149.//	2.30	1.35	445.24
600NE	3	1456.97	4780.08		154.91	2.40	1.40	445.30
600NE	4	1426.48	4680.07		160.71	2.44	1.29	445.03
600NE	5	1429.89	4691.23		160.16	2.48	.96	444.86
600NE	6	1431.33	4695.95		160.14	2.52	1.05	445.25
600NE	7	1423.20	4669.29		161.85	2.56	1.12	445.47
600NE	8	1412.13	4632.97		164.09	2.60	1.17	445.63
600NE	9	1404.39	4607.57		165.45	2.64	1.21	445.54
600NE	10	1385.31	4544.99		169.02	2.68	1.24	445.43
600NE	11	1365.56	4480.19		172.62	2.72	1.24	445.19
600NE	12	1342.32	4403.93		177.24	2.76	1.21	445.24

	STN. NO.	ELEV. METRES	ELEV. FEET	OBSERVED GRAVITY	LATITUDE COR.	TERRAIN COR.	COMPLETE BOUGUER
LIN	E 8N						
80	0NW 18	1744.74	5724.22	96.31	1.42	1.40	442.32
80	ONW 17	1741.73	5714.35	97.23	1.46	1.36	442.65
80	0NW 16	1731.24	5679.93	99.47	1.50	1.35	442.86
80	0NW 15	1719.99	5643.03	102.13	1.54	1.36	443.35
80	ONW 14	1709.41	5608.29	104.35	1.58	1.37	443.54
80	ONW 13	1695.96	5564.16	107.38	1.62	1.37	443.97
80	0NW 12	1688.64	5540.14	108.84	1.66	1.38	444.04
80	0NW 11	1673.35	5490.00	112.17	1.70	1.38	444.40
80	0NW 10	1664.02	5459.39	114.21	1.74	1.41	444.67
80	ONW 9	1655.06	5429.99	115.94	1.78	1.49	444.76
80	0NW 8	1637.38	5371.98	119.44	1.82	1.52	444.85
80	0NW 7	1615.74	5300.99	123.87	1.86	1.46	445.01
80	ONW 6	1597.65	5241.64	127.77	1.90	1.38	445.31
80	0NW 5	1584.63	5198.91	130.45	1.94	1.34	445.43
80	0NW 4	1568.99	5147.59	133.69	1.98	1.29	445.58
80	0NW 3	1555.45	5103.18	136.32	2.02	1.27	445.57
80	0NW 2	1542.81	5061.72	138.79	2.06	1.25	445.57
80	0NW 1	1530.50	5021.34	141.01	2.10	1.23	445.39
80	ONW 0	1506.78	4943.52	145.74	2.14	1.22	445.48
80	ONE 1	1485.10	4872.39	150.10	2.18	1.21	445.61
80	0NE 2	1460.07	4790.27	154.97	2.22	1.14	445.53
80	0NE 3	1455.07	4773.85	156.10	2.26	1.02	445.59
80	0NE 4	1459.63	4788.81	155.39	2.30	1.05	445.85
80	ONE 5	1452.89	4766.71	156.99	2.34	1.18	446.29
80	ONE 6	1441.42	4729.06	159.21	2.38	1.13	446.25
80	0NE 7	1430.34	4692.73	161.42	2.42	1.17	446.36
80	ONE 8	1419.21	4656.21	163.67	2.46	1.21	446.50
80	ONE 9	1405.31	4610.60	166.18	2.50	1.25	446.35
80	ONE 10	1386.84	4550.00	169.61	2.54	1.2/	446.21
80	ONE 11	1367.41	4486-26	172.94	2.58	1.23	445.72
80	UNE 12	1344.49	4411.06	177.22	2.62	1.19	445.49
LIN	E 10N						
100	0NW 18	1722.07	5649.84	101.80	1.28	1.17	442.98
100	0NW 17	1721.95	5649.46	101.83	1.32	1.06	442.92
100	0NW 16	1714.14	5623.81	103.67	1.36	1.03	443.23
100	0NW 15	1701.02	5580.78	106.54	1.40	1.04	443.57
100	0NW 14	1688.96	5541.21	109.12	1.44	1.07	443.85
100	ONW 13	1678.99	5508.48	111.20	1.48	1.10	444.04
100	ONW 12	1666.95	5469.00	113.75	1.52	1.14	444.30
100	0NW 11	1658.45	5441.10	115.50	1.56	1.18	444.46
100	0NW 10	1650.06	5413.58	117.20	1.60	1.23	444.60
100	0NW 9	1640.05	5380.74	119.15	1.64	1.30	444.69
100	0NW 8	1621.91	5321.23	122.95	1.68	1.36	445.02
100	onw 7	1606.41	5270.37	126.21	1.72	1.35	445.26
100	0NW 6	1585.37	5201.33	130.47	1.76	1.28	445.35

	STN. NO.	ELEV. METRES	ELEV. FEET	OBSERVED GRAVITY	LATITUDE COR.	TERRAIN COR.	COMPLETE BOUGUER
1000NW	5	1567.84	5143.84	134.05	1.80	1.24	445.48
1000NW	4	1553.53	5096.88	136.89	1.84	1.20	445.51
1000NW	3	1539.20	5049,88	139.76	1.88	1.19	445.59
1000NW	2	1524.95	5003.13	142,50	1.92	1.19	445.57
1000NW	<u>ີ</u> 1	1503.88	4933.99	146.62	1.96	1.18	445.57
10000	ō	1489.63	4887.25	149.37	2.00	1.15	445.53
1000 N	ĨE	1481.15	4859.42	150.97	2.04	1.08	445.43
1000 N	2 E	1457.41	4781.53	155.53	2.08	1.00	445.28
1000 N	3 E	1466.81	4812.38	153.47	2.12	1.00	445.11
1000 N	4 E	1462.28	4797.52	154.50	2.16	1.07	445.36
1000 N	5 E	1451.13	4760,94	156.54	2.20	1.13	445.31
1000 N	6 E	1439.79	4723.72	158.81	2.24	1.16	445.42
1000 N	7 E	1425.38	4676.43	161.64	2.28	1.20	445.49
1000 N	8 E	1410.88	4628.86	164.55	2.32	1.22	445.61
1000 N	9 E	1396.32	4581,10	167.28	2.36	1.28	445.58
1000 N	10 E	1376.94	4517.53	170.93	2.40	1.28	445.45
1000 N	11 E	1361.95	4468.33	174.06	2.44	1.22	445.62
1000 N	12 E	1335.70	4382.22	179.09	2.48	1.20	445.50
BASELIN	e east v	VEST					
0 W	20 S	1473.66	4834.83	149.77	4.10	2.55	446.29
0 W	19 S	1461.92	4796.31	152.21	4.03	2.51	446.31
0 W	18 S	1451.41	4761.86	154.33	3.96	2.44	446.22
0 W	17 S	1439.16	4721.67	156.86	3.89	2.39	446.22
0 W	16 S	1430.74	4694.03	158.58	3.82	2.28	446.11
0 W	15 S	1428.16	4685.58	159.13	3.75	2.17	445.97
0 W	14 S	1431.77	4697.40	158.80	3.68	2.00	446.11
0 W	13 S	1433.18	4702.02	158.68	3.61	1.86	446.06
0 W	12 S	1434.91	4707.70	158.62	3.54	1.77	446.18
0 W	11 S	1435.73	4710.40	158.58	3.47	1.68	446.14
0 W	10 S	1436.41	4712.64	158.46	3.40	1.57	445.97
0 W	9 S	1431.32	4695.93	159.45	3.33	1.58	445.90
0 W	8 S	1422.54	4667.13	161.08	3.26	1.60	445.75
0 W	7 S	1418.71	4654.56	162.01	3.19	1.68	445.94
0 W	6 S	1413.65	4637.96	163.03	3.12	1.74	445.96
0 ₩	5 S	1431.52	4696.59	159.60	3.05	1.61	445.84
0 W	4 S	1452.02	4763.86	155.42	2.98	1.46	445.47
0 W	3 S	1474.02	4836.01	151.17	2.91	1.37	445.39
0 W	2 S	1493.11	4898.66	147.69	2.84	1.34	445.57
0 W	1 S	1508.26	4948.36	144.93	2.77	1.32	445.70
0 W	0 S	1524.00	5000.00	141.79	2.70	1.30	445.56
W 0	1 N	1533.96	5029.37	140.18	2.63	1.28	445.82
W 0	2 N	1535.27	5036.96	139.69	2.56	1.25	445.49
0 W	3 N	1533.77	5032.04	140.12	2.49	1.26	445.56
0 W	4 N	1533.13	5029.95	140.20	2.42	1.27	445.46
W 0	5 N	1528.10	5013.46	141.23	2.35	1.28	445.44
0 W	6 N	1520.90	4989.83	142.67	2.28	1.27	445.38
0 W	7 N	1516.62	4975.79	143.64	2.21	1.25	445.42

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	STN.	ELEV.	ELEV.	OBSERVED	LATITUDE	TERRAIN	COMPLETE
	NO.	METRES	FEET	GRAVITY	COR.	COR.	BOUGUER
0 W	8 N	1506.78	4943.52	145.74	2.14	1.22	445.48
0 W	9 N	1498.14	4915.17	147.54	2.07	1.19	445.48
0 W	10 N	1489.63	4887.25	149.37	2.00	1.15	445.53
0 W	11 N	1494.25	4902.39	148.64	1.93	1.15	445.64
0 W	12 N	1500.41	4922.61	147.60	1.86	1.18	445.77
0 W	13 N	1506.26	4941.80	146.95	1.79	1.22	446.24
0 W	14 N	1506.44	4942.39	147.14	1.72	1.24	446.42
0 W	15 N	1487.77	4881.14	150.82	1.65	1.23	446.34
0 W	16 N	1474.06	4836.16	153.73	1.58	1.19	446.45
0 W	17 N	1461.49	4794.91	156.47	1.51	1.17	446.63
0 W	18 N	1456.90	4779.87	157.32	1.44	1.16	446.49
0 W	19 N	1450.00	4757.23	158.64	1.37	1.15	446.38
0 W	20 N	1439.23	4721.87	160.76	1.30	1.14	446.30
0 W	21 N	1437.13	4714.98	161.43	1.23	1.13	446.47
0 W	22 N	1440.77	4726.94	160.91	1.16	1.12	446.59
0 10	23 N	1439.72	4723.48	161.49	1.09	1.11	446.88
0 W	24 N	1437.55	4716.38	162.24	1.02	1.11	447.14
0 W	25 N	1432.61	4700.15	163.25	.95	1.10	447.09

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2:1 at hy her elevation of Ht Halen why model the animitally flast values base in 1973.

