

Gravity Survey of the Colville Indian Reservation,  
Northeastern Washington

by

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U.S. Geological Survey

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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards.

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## Introduction

This report presents part of the work undertaken by the U.S. Geological Survey (USGS) in behalf of the U.S. Bureau of Indian Affairs evaluation program of mineral resource potential on Indian lands. During the summer field seasons of 1979-1981, 1,136 gravity stations were established in the area of the Colville Indian Reservation, Washington. This report presents the principal facts for these data and includes a complete Bouguer gravity anomaly map (plate 1). These data complement an earlier gravity survey which extended over the area of the Colville Indian Reservation (Cady and Mayer, 1976).

## Data Collection

Gravity observations were made using five gravity meters. Three of the meters were LaCoste Romberg<sup>1</sup> gravity meters G-24, G-113 and G-328. The other two meters were Worden<sup>1</sup> gravity meters W-90 and W-147. The gravity stations were referenced to the U.S. Department of Defense (DOD) base at Grand Coulee Dam, Washington, which is part of the International Gravity Standardization Net (IGSN) of 1971, established by the Defense Mapping Agency, Aerospace Center (Morelli, 1974). The International Gravity Standardization Net (IGSN-71) value of 980710.73 mgals was used for the base at Grand Coulee Dam for gravity data compiled and presented in this report. Secondary bases established in the study area were tied to the DOD base in Grand Coulee Dam and are described in Appendix A. Gravity loops were started and closed daily by making repeat observations at one or more of the primary or secondary bases.

## Elevation Control

The survey area is bounded by lat. 47°45' to 48°30' N. and long. 118°7'30" to 119°45' W., and is located on the Okanogan and Ritzville 1° x 2° quadrangles Fig. 1. The station elevations were obtained from benchmarks, spot elevations, or section corners on 1:62,500-scale USGS topographic maps and on preliminary 1:24,000-scale USGS topographic maps. The uncertainty for elevations based on benchmarks is assumed to be 0.15 m; for spot elevations and section corners with map elevations, the uncertainty is assumed to be one-third of the contour interval. At a contour interval of 40 ft (12.2 m) this is an uncertainty of about 13.3 ft (4 m), which translated to possible Bouguer value errors of 0.2 mgal/m using a density of 2.67 g/cm<sup>3</sup>..

## Data Reduction

Computer programs existing on the USGS Honeywell<sup>1</sup> Multics computer system were used to obtain principal facts, terrain-corrected gravity values, and anomaly contour maps for this survey. Station coordinates were determined using program "digit" (R. Sweeney, unpub. documentation, 1976). Program "gravity-red" (D. A. Dansereau and R. R. Wahl, unpub. documentation, 1968) calculated earth tide and corrected for linear meter-drift to give observed gravity values using the 1967 geodetic reference system (IUGG, 1967) and the 1971 Potsdam gravity value (Morelli, 1971). The program also computed free-

<sup>1</sup>The use of trade names in this report is for descriptive purposes only and does not necessarily constitute endorsement by the U.S. Geological Survey.

air and simple-Bouguer anomaly values. Program "bouguer" (R. H. Godson, unpub. documentation, 1978) computed terrain corrections radially from the observed stations out to 166.7 km using the method of (Plouff, 1977). The program uses mean elevation data digitized on a 15-second grid for corrections from 0 to 5 km, 1-minute terrain data for corrections from 5 to 21 km, and 3-minute terrain data for corrections from 5 to 166.7 km. An assumed density of  $2.67 \text{ gm/cm}^3$  was used for terrain corrections. Program "bouguer" also calculated earth curvature corrections and complete (terrain corrected) Bouguer anomaly values. For brevity, we refer to "Bouguer anomaly" instead of "complete-Bouguer anomaly".

A grid based on the Bouguer anomaly values was formed with 2 km spacing between grid points using program "MINC" (Webring, 1981). "MINC" forms a surface of minimum curvature (Briggs, 1974) through existing data points. Computer plotted contour maps of the gridded data were produced using program "CONTOUR" (Godson and Webring, 1982), which uses a linear interpolation technique for positioning contours.

#### Principal Facts

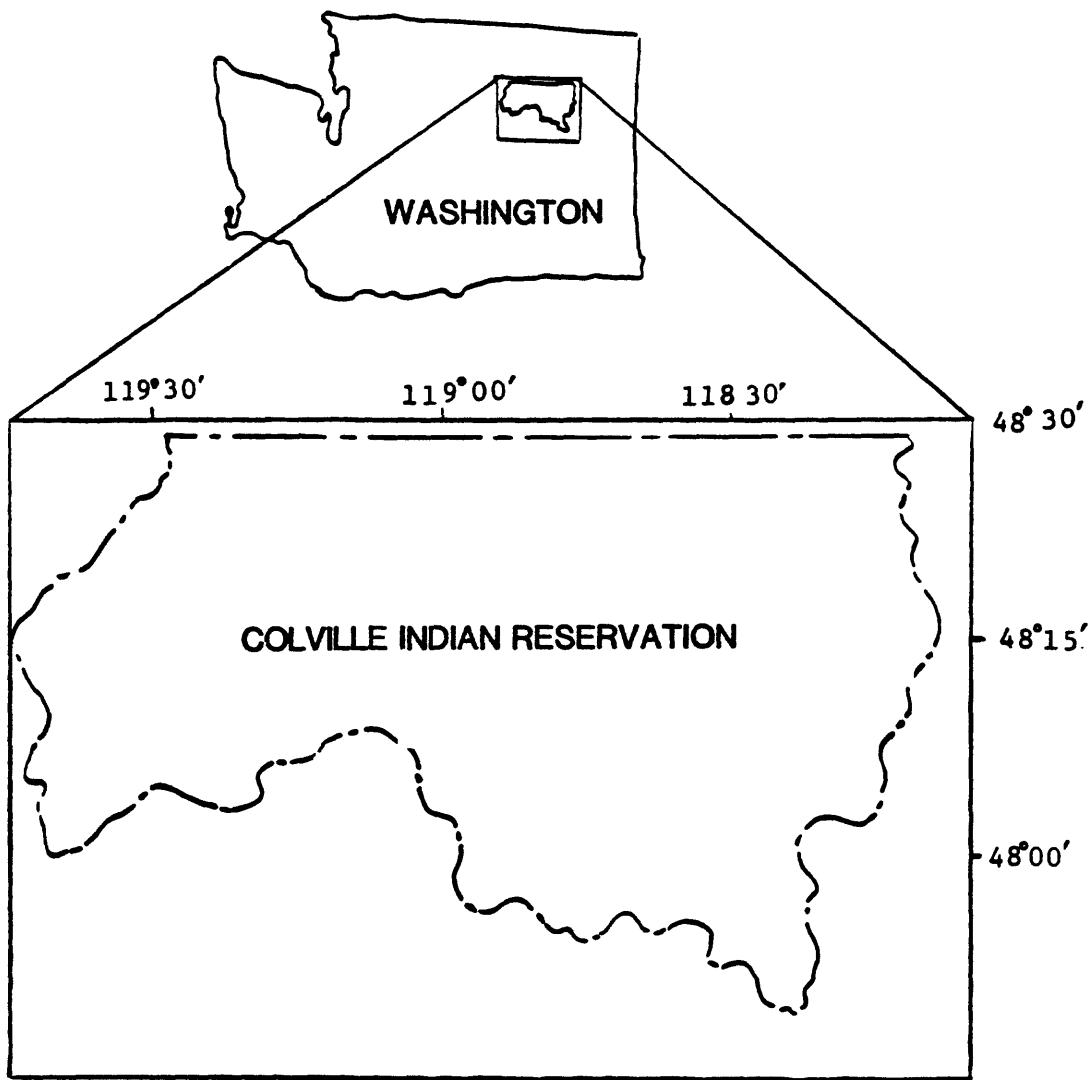
The principal facts of the data within the present survey area are listed in Appendix B. The data are shown as a contoured Bouguer gravity anomaly map in plate 1.

#### References

- Briggs, I. C., 1974, Machine contouring using minimum curvature: Geophysics, v. 39, no. 1, p. 39-48.
- Cady, J. W., and Mayer, R. F., 1976, Principal facts for gravity stations in the Okanogan, Sandpoint, Ritzville, and Spokane  $1^\circ \times 2^\circ$  quadrangles, northern Washington and northern Idaho: U.S. Geological Survey Open-File Report 76-290.
- Defense Mapping Agency Aerospace Center, 1974, World Relative Gravity Reference Network, North American, Part 2: DMAAC Reference Publication 25, with supplement updated gravity values to the International Gravity Standardization Net 1971, 1635 p.
- Godson, R. H., and Webring, M. W., 1982, CONTOUR: U.S. Geological Survey Open-File Report 82-797.
- International Association of Geodesy, 1971, Geodetic Reference System, 1967: International Association of Geodesy Special Publication 3, 116 p.
- Morelli, Carlo, ed., 1974, The International Gravity Standardization Net 1971 (IGSN. 71): International Association of Geodesy Special Publication No. 4, 116 p.

Plouff, Donald, 1977, Preliminary documentation for a FORTRAN program to compute gravity terrain corrections based on topography digitized on a geographic grid: U.S. Geological Survey Open-File Report 77-535.

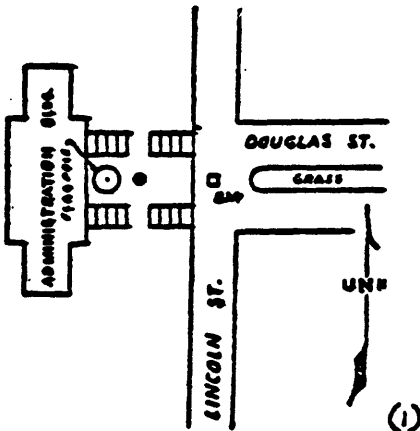
Webring, M. W., 1981, MINC: A gridding program based on minimum curvature:



**Figure 1** Index map showing the location of the Colville Indian Reservation, Washington State.

## **Appendix A**

**Gravity base station descriptions.**

LATITUDE 47° 58.5'N (1)		STATION DESIGNATION	
LONGITUDE 119° 02.0'W (1)		GRAND COULEE	
ELEVATION 362.1 METERS (1)		COUNTRY/STATE USA/Washington	
REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACTC 2102.1		g = 980710.73 mgals	
		ESTIMATED ACCURACY	
		DATE	
		/YEAR	
		± 0.1 mgals	
		1971	
DESCRIPTION AND/OR SKETCH			
<p>The station is at Grand Coulee dam, in front of the Administration Building, directly in front of the flagpole on the street side.</p> <p>A USBR bronze disk is located under a cast iron cover centered in the intersection of Lincoln and Douglas Streets, in front of the Administration Building. (1)</p>			
			
REFERENCE SOURCE			
(1) 02615			



U.S. GEOLOGICAL SURVEY  
GRAVITY BASE STATION

STATE/COUNTRY Washington		STATION DESIGNATION MTB (DH #10)		OBSERVED GRAVITY 980608.03 mgal
NEAREST TOWN Keller		LONGITUDE 118° 42.05'		LATITUDE 48° 3.07'
ELEVATION 912.27 m 2993'		TOPOGRAPHIC MAP(S) Keller scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-24	Base 01	980710.73 mgal
		G-24	Base 02	980685.34 mgal

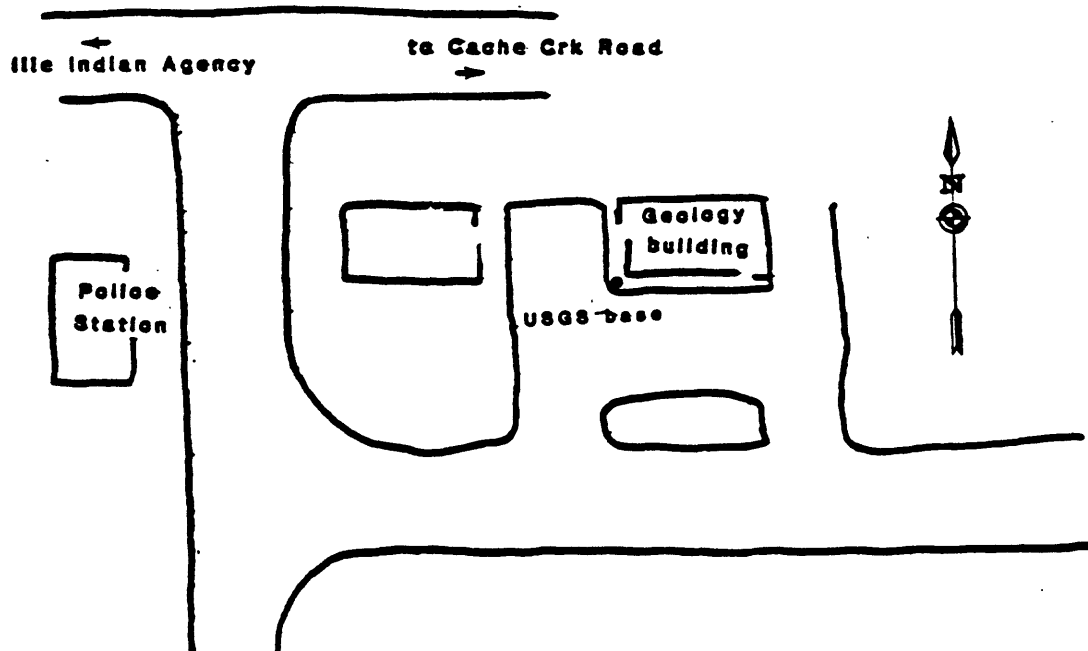
DESCRIPTION/SKETCH

MTB is located at drill hole #10 on Mount Tolman.  
Marked by a steel cap on drill hole casing stamped "dh 10"  
For more information on the location of this drill hole it  
will be necessary to inquire at the Mt. Tollman Geologist  
office at the base of Mt. Tollman. Permission for access  
to the property may also be required here.

# GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION Base 02		OBSERVED GRAVITY 980685.34 mgal
NEAREST TOWN Naspelem		LONGITUDE 118° 58.09'		LATITUDE 48° 08.01'
ELEVATION 543.15 m (1782')		TOPOGRAPHIC MAP(S) Naspelem scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-328	Grand Coulee (Base 01)	980710.73 mgal
		G-24	Grand Coulee (Base 01)	980710.73 mgal

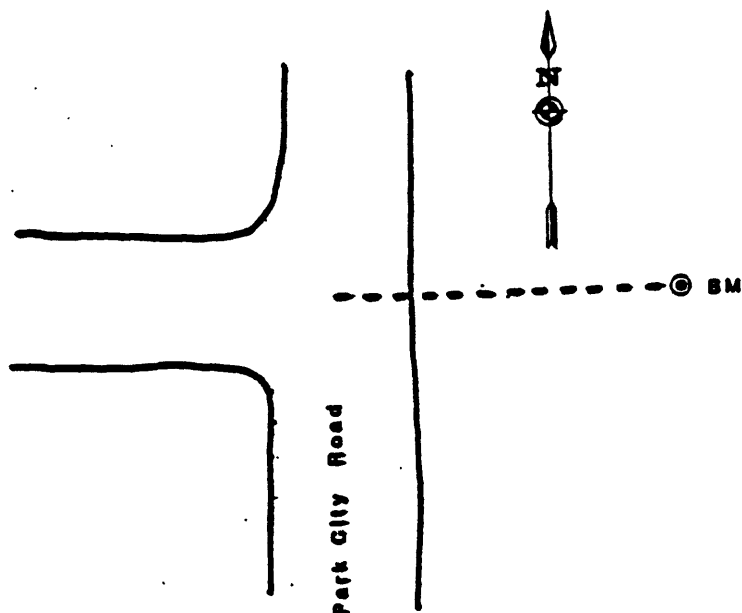
DESCRIPTION/SKETCH The station is located in T30N, R31E, Sec 6 at the SW corner of the Colville geology building on the corner of the sidewalk. (unmarked)



# GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION Base 03		OBSERVED GRAVITY 980680.44 mgal
NEAREST TOWN Naspelem		LONGITUDE 118° 58.19'		LATITUDE 48° 14.47'
ELEVATION (1919.227 ft) 584.95 m		TOPOGRAPHIC MAP(S) Naspelem scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-24	Base 02	980685.34 mgal

DESCRIPTION/SKETCH Station is located in T32N,R31E,Sec30 SW 1/4  
It is located 51 ft east of the center of Park City Road junction  
with a road heading off to the west marked by a Benchmark  
located in a concrete post (83 B 1945 1920).

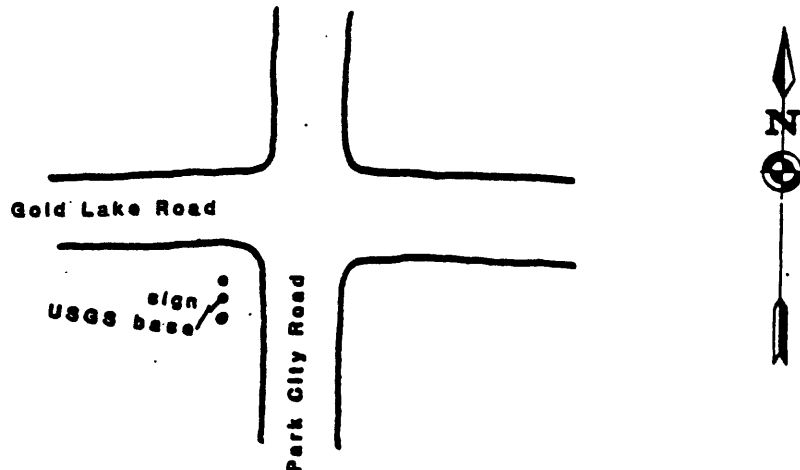


**U.S. GEOLOGICAL SURVEY  
GRAVITY BASE STATION**

<b>STATE/COUNTRY</b> WASHINGTON		<b>STATION DESIGNATION</b> Base 05		<b>OBSERVED GRAVITY</b> 980619.37 mgal
<b>NEAREST TOWN</b> Nespelem		<b>LONGITUDE</b> 118° 53.20'		<b>LATITUDE</b> 48° 22.22'
<b>ELEVATION</b> (3130') 954.07 m		<b>TOPOGRAPHIC MAP(S)</b> Bald Knob scale 1:24,000		
<b>DATE</b>	<b>OBSERVER</b>	<b>METER</b>	<b>REFERENCE STATION</b>	<b>REFERENCE VALUE</b>
		G-24	Base 01	980710.73 mgal
		W-90	Base 02	980685.34 mgal

**DESCRIPTION/SKETCH**

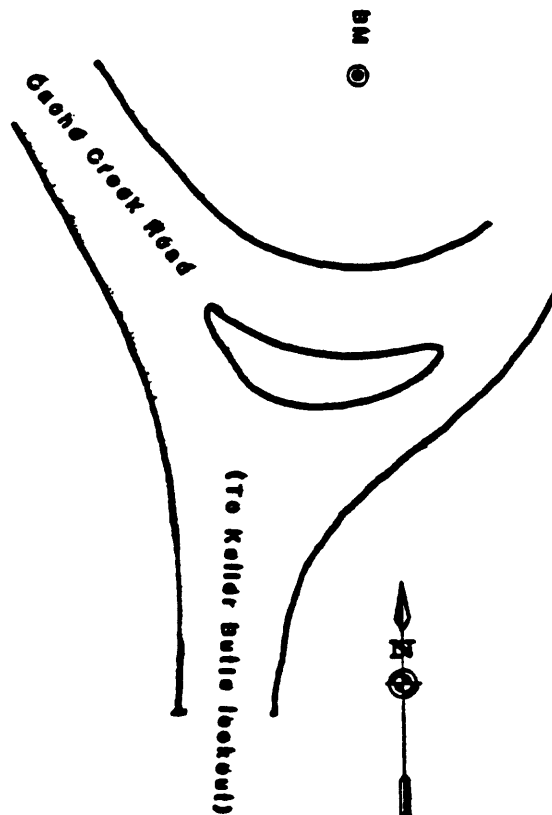
Station is located beneath the center of a double pole sign at the junction of Gold Lake Road and Park City Road.



STATE/COUNTRY WASHINGTON		STATION DESIGNATION Base 07		OBSERVED GRAVITY 980597.79 mgal
AREST TOWN Naspelem		LONGITUDE 118° 47.00'		LATITUDE 48° 11.41'
ELEVATION (1360') 1024.13 m		TOPOGRAPHIC MAP(S) Naspelem scale 1:24,000		
TE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-24	Base 02	980685.34 mgal
		G-24	Base 02	980685.34 mgal

DESCRIPTION/SKETCH

Benchmark "G30-1933" located along abandoned road north of the junction of Cache Creek Road and the road to Keller Butte lookout.

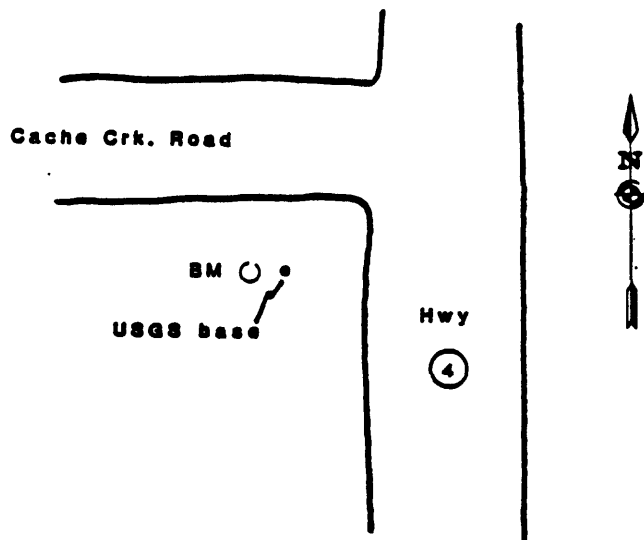


**U.S. GEOLOGICAL SURVEY  
GRAVITY BASE STATION**

<b>STATE/COUNTRY</b> WASHINGTON		<b>STATION DESIGNATION</b> BASE 09		<b>OBSERVED GRAVITY</b> 980700.18 mgal
<b>NEAREST TOWN</b> Keller		<b>LONGITUDE</b> 118° 42.40'		<b>LATITUDE</b> 48° 10.36'
<b>ELEVATION</b> (1609 ft) 490.42 m		<b>TOPOGRAPHIC MAP(S)</b> Keller scale 1:24,000		
<b>DATE</b>	<b>OBSERVER</b>	<b>METER</b>	<b>REFERENCE STATION</b>	<b>REFERENCE VALUE</b>

**DESCRIPTION/SKETCH**

Station is at a destroyed Benchmark located at junction of Cache Creek Rd and State Highway 4; in NW 1/4 sec 19 T31N R33E (station 6 ft E of broken BM).

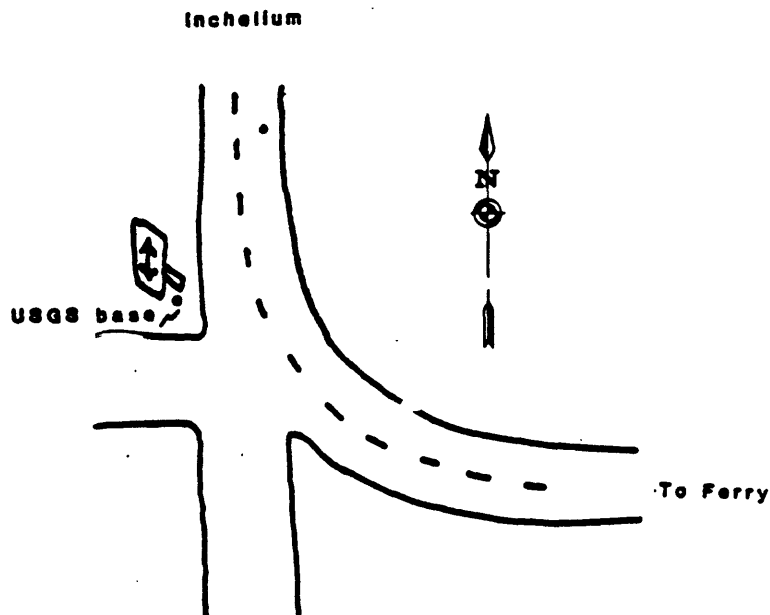


U.S. GEOLOGICAL SURVEY  
GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION BASE 17		OBSERVED GRAVITY 980726.51 mgal
NEAREST TOWN Inchelium		LONGITUDE 118° 11.23'		LATITUDE 48° 17.42'
ELEVATION 477.01 m (1565 ft)		TOPOGRAPHIC MAP(S) Inchelium scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-328	BASE 02	980685.34 mgal

DESCRIPTION/SKETCH

Station is at base of double arrow sign (South side).

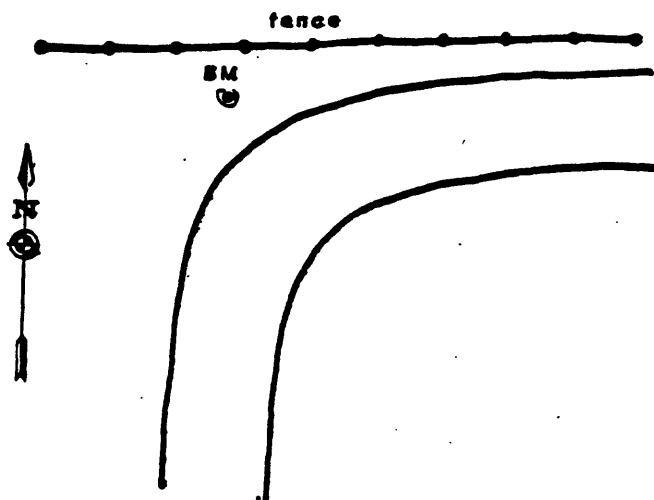


U.S. GEOLOGICAL SURVEY  
GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION BASE 20		OBSERVED GRAVITY 980722.90 mgal
NEAREST TOWN Nespelem		LONGITUDE 119°13.62'		LATITUDE 48°07.71'
ELEVATION 398.68 m (1308 ft)		TOPOGRAPHIC MAP(S) Alameda Flat scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
7-13-80		G-328	BASE 02	980685.34 mgal
7-25-79		W-147	BASE 02	980685.34 mgal
9-8-79		W-147	BASE 01	980710.73 mgal

DESCRIPTION/SKETCH

Station located at Benchmark between fence and road where road takes a sharp bend. NW 1/4 Sec 6 T30N, R29E  
Benchmark "P29 1933"



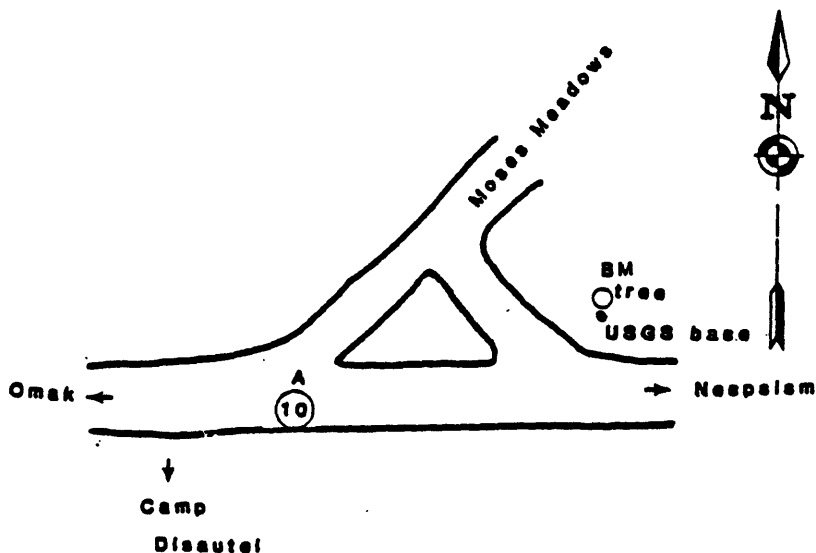


U.S. GEOLOGICAL SURVEY  
GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION BASE 21		OBSERVED GRAVITY 980671.63 mgal
NEAREST TOWN Camp Disautel		LONGITUDE 119°13.09'		LATITUDE 48°21.71'
ELEVATION 776.33 m (2547 ft)		TOPOGRAPHIC MAP(S) Disautel scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-328	BASE 02	980685.34 mgal

DESCRIPTION/SKETCH

Station located at base of preliminary Bench tree  
"B66 47" SW side.

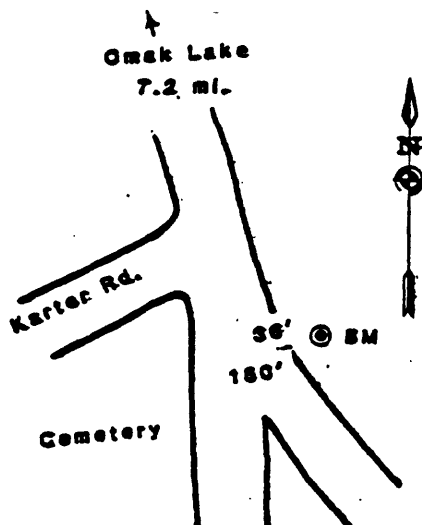


GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION BASE 24		OBSERVED GRAVITY 980729.85 mgal
NEAREST TOWN Omak		LONGITUDE 119° 16.04'		LATITUDE 48° 13.23'
ELEVATION 399.90 m (1312 ft)		TOPOGRAPHIC MAP(S) Boat Mtn scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-328	BASE 02	980685.34 mgal

DESCRIPTION/SKETCH

Benchmark "86H 1947 1311" located just south of junction of Karter Rd and road to Lake Omak. 36 ft W of center of road, 150 ft W cemetery

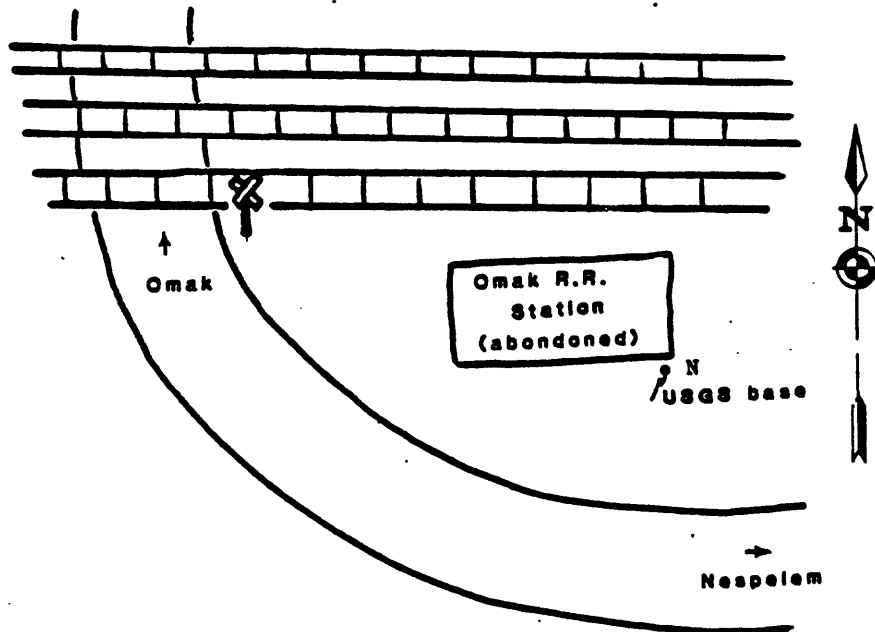


# GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION BASE 26		OBSERVED GRAVITY 980770.22 mgal
NEAREST TOWN Omak		LONGITUDE 119° 30.69'		LATITUDE 48° 24.24'
ELEVATION 262.43 m (861 ft)		TOPOGRAPHIC MAP(S) Okanogan scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-328	BASE 02	980685.34 mgal

## DESCRIPTION/SKETCH

Station is located at SE corner of abandoned Omak RR station.

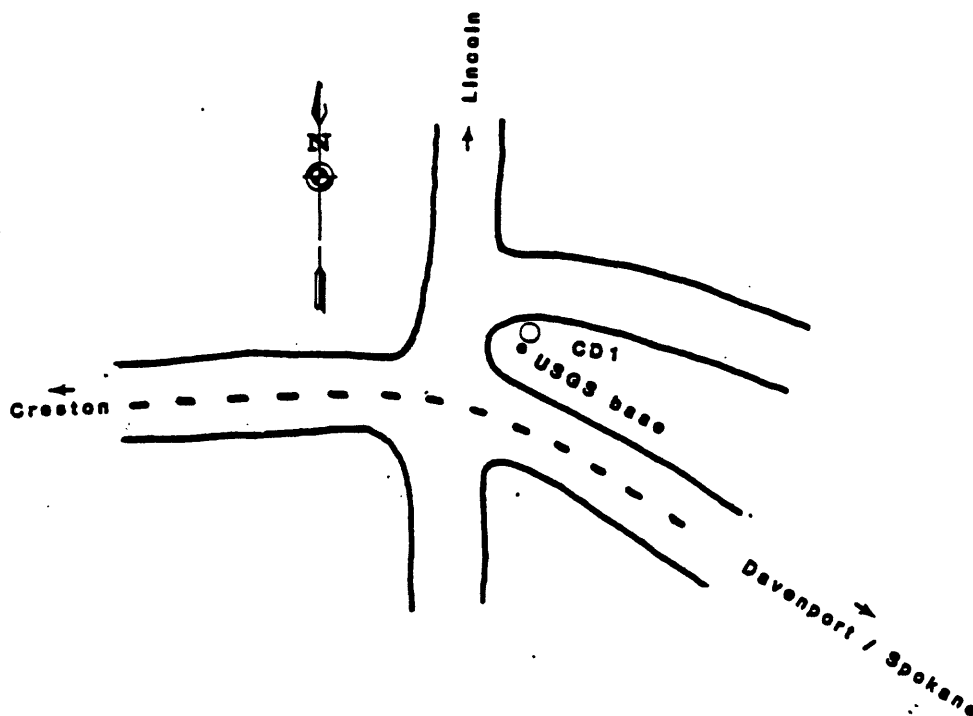


## GRAVITY BASE STATION

STATE/COUNTRY WASHINGTON		STATION DESIGNATION BASE 28		OBSERVED GRAVITY 980634.48 mgal
NEAREST TOWN CRESTON		LONGITUDE 118° 30.24'		LATITUDE 47° 45.52'
ELEVATION 745.24 m (2445 ft)		TOPOGRAPHIC MAP(S) Wilbur scale 1:24,000		
DATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-328	BASE 02	980685.34 mgal

## DESCRIPTION/SKETCH

Station is at base of large telephone pole (CD1): SW side.

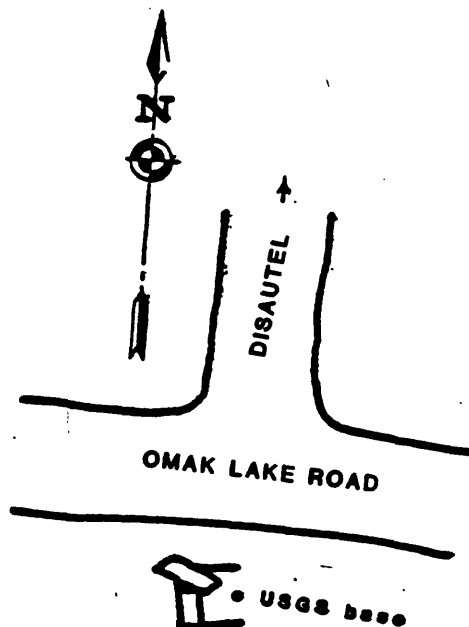


STATE/COUNTRY WASHINGTON	STATION DESIGNATION Base 35	OBSERVED GRAVITY 980651.90 mgal
NEAREST TOWN Omak	LONGITUDE 119° 17.66'	LATITUDE 48° 16.19'
ELEVATION (2773 ft) 845.21 m	TOPOGRAPHIC MAP(S) Omak Lake scale 1:24,000	

STATE	OBSERVER	METER	REFERENCE STATION	REFERENCE VALUE
		G-328	Base 02/01	980685.34 mgal
		W-147	Base 24	980729.85 mgal
		W-147	Base 24	980729.85 mgal

DESCRIPTION/SKETCH

Station is located beneath a double pole sign located at the junction of Omak Lake Road and a road to Disautel.



## **Appendix B**

**Bouguer gravity data.**

## Principal Facts of Gravity Data

### Explanation of headings

#### Identification

proj	Project name.
sta id	Gravity identification.

#### Location

latitude	North latitude in degrees minutes and hundredths of minutes.
longitude	West longitude in degrees, minutes, and hundredths of minutes.
ele	Station elevation in feet.
st	State where station is located.

#### Gravity

observed	Observed gravity in milligals.
theoretical	Theoretical gravity.

#### Corrections

terrain	Terrain correction out to 166.7km in milligals.
Bouguer	Elevation correction in milligals.
curv	Curvature correction in milligals.
special	Not used.

#### Anomalies

free-air	Free-air anomaly in milligals.
complete-Bouguer	Complete Bouguer anomaly in milligals for designated densities.
spec fields	Not used.

Date: 10/20/80

ROUGUER GRAVITY DATA

page

1

STATION		L O C A T I O N		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S								
IDENTIFICATION	ST	LATITUDE	LONGITUDE	ELE	ST	OBSERVED	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE	COMPLETE	ROUGHER	SPE	
proj	sta-id	deg	min	deg	min	(in ft)						AIR	d1=2.67	d2=2.50	FIELD	
:	base02	48	8.01	-118	58.09	1782.0	wa	980685.34	980902.16	1.21	-60.78	-0.69	0.00	-49.27	-109.53	-105.69
:	base11	48	23.55	-118	44.60	1920.0	wa	980691.04	980925.47	6.35	-65.49	-0.74	0.00	-53.90	-113.77	-109.96
:	base15	48	13.91	-118	35.80	2760.0	wa	980640.65	980911.02	3.31	-94.14	-0.98	0.00	-10.87	-102.68	-96.83
:	base13	48	16.88	-118	25.22	2641.0	wa	980650.17	980915.47	2.73	-90.08	-0.95	0.00	-16.99	-105.28	-99.66
:	base14	48	24.81	-118	22.53	2289.0	wa	980681.23	980927.35	11.11	-78.07	-0.85	0.00	-30.90	-98.71	-94.39
:	base17	48	17.82	-118	11.23	1565.0	wa	980726.51	980916.28	1.16	-53.38	-0.62	0.00	-42.62	-95.45	-92.09
:	base29	48	0.79	-118	17.71	2111.0	wa	980668.40	980891.33	0.58	-72.00	-0.80	0.00	-24.45	-96.66	-92.06
:	base28	47	45.52	-118	30.24	2445.0	wa	980634.48	980868.41	0.32	-83.39	-0.89	0.00	-4.03	-88.00	-82.65
:	base27	47	45.53	-118	30.24	2327.0	wa	980639.06	980868.41	1.25	-79.37	-0.86	0.00	-10.56	-89.54	-84.51
:	base01	47	57.80	-118	59.27	1122.0	wa	980710.73	980886.84	4.50	-38.27	-0.46	0.00	-70.60	-104.83	-102.65
:	base20	48	7.71	-119	13.62	1308.0	wa	980722.90	980901.71	1.77	-44.61	-0.53	0.00	-55.82	-99.19	-96.43
:	base33	48	10.49	-119	18.63	2073.0	wa	980683.95	980905.88	2.29	-70.70	-0.78	0.00	-27.02	-96.22	-91.81
:	base24	48	13.23	-119	16.04	1312.0	wa	980729.85	980909.99	2.58	-44.75	-0.53	0.00	-56.77	-99.47	-96.75
:	base35	48	16.19	-119	17.66	2773.0	wa	980651.90	980914.43	2.05	-94.58	-0.98	0.00	-1.82	-95.33	-89.38
:	base25	48	9.72	-119	29.32	2418.0	wa	980667.04	980904.73	0.56	-82.47	-0.89	0.00	-10.34	-93.14	-87.87
:	base26	48	24.24	-119	30.69	861.0	wa	980770.22	980926.50	1.94	7.37	-0.36	0.00	-75.32	-103.11	-101.34
:	base36	48	21.45	-119	29.24	1412.0	wa	980739.01	980922.32	2.85	-48.16	-0.56	0.00	-50.54	-96.42	-93.49
:	base21	48	21.71	-119	13.09	2547.0	wa	980671.63	980922.71	1.79	-86.87	-0.92	0.00	-11.60	-97.61	-92.13
:	base22	48	21.70	-119	13.10	2543.0	wa	980671.89	980922.70	1.80	-86.73	-0.92	0.00	-11.71	-97.56	-92.10
:	base23	48	25.34	-119	7.94	3685.0	wa	980670.40	980928.15	1.76	-125.68	-1.20	0.00	26.09	-99.04	-91.07
:	a001	47	57.88	-119	0.15	1822.0	wa	980670.63	980886.91	1.93	-62.14	-0.70	0.00	-44.95	-105.87	-101.99
:	a002	47	58.46	-119	0.88	2026.0	wa	980660.46	980887.64	2.62	-69.10	-0.77	0.00	-36.88	-104.13	-99.85
:	a003	47	58.67	-119	3.61	2419.0	wa	980641.06	980888.15	0.40	-82.50	-0.89	0.00	-19.64	-102.64	-97.35
:	a004	47	58.57	-119	4.47	2363.0	wa	980644.01	980888.00	0.30	-80.59	-0.87	0.00	-21.81	-102.98	-97.81
:	a005	47	59.45	-119	4.95	2412.0	wa	980641.79	980889.32	0.25	-82.27	-0.89	0.00	-20.75	-103.65	-98.37
:	a006	47	59.89	-119	5.59	2434.0	wa	980642.40	980889.98	0.38	-83.02	-0.89	0.00	-18.73	-102.26	-96.94
:	a007	48	0.54	-119	5.84	2501.0	wa	980640.32	980890.95	0.28	-85.30	-0.91	0.00	-15.49	-101.42	-95.95
:	a008	48	1.63	-119	6.18	2457.0	wa	980645.46	980892.59	0.27	-83.80	-0.90	0.00	-16.12	-100.55	-95.17
:	a009	48	3.80	-119	6.24	2612.0	wa	980637.88	980895.85	0.60	-89.09	-0.94	0.00	-12.38	-101.31	-96.12
:	a010	48	4.29	-119	6.22	2485.0	wa	980645.91	980896.59	0.59	-84.76	-0.91	0.00	-17.02	-102.10	-96.68
:	a011	48	4.68	-119	6.21	2479.0	wa	980646.23	980897.17	0.70	-84.55	-0.90	0.00	-17.85	-102.61	-97.21
:	a012	48	4.67	-119	7.17	2322.0	wa	980656.84	980897.16	0.65	-79.20	-0.86	0.00	-21.99	-101.39	-96.34
:	a013	48	6.39	-119	7.86	1603.0	wa	980700.29	980899.73	2.38	-54.67	-0.63	0.00	-48.72	-101.64	-98.27
:	a014	48	3.80	-119	7.18	2572.0	wa	980641.11	980895.85	0.55	-87.72	-0.93	0.00	-12.91	-101.02	-95.41
:	a015	48	3.80	-119	8.79	2539.0	wa	980645.06	980895.85	0.63	-86.60	-0.92	0.00	-12.06	-98.95	-93.42
:	a016	48	5.05	-119	9.44	2319.0	wa	980660.45	980897.73	0.79	-79.09	-0.86	0.00	-19.23	-98.39	-93.35



colville gravity  
stations-lat/lon  
Meter ID: obsrv

Date: 10/20/80

BUUGUER GRAVITY DATA

STATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S		S P E C I A L		F R E E		C O M P L E T E - B O U G U E R		S P E C I A L	
IDENTIFICATION	sta-id	LATITUDE	LONGITUDE	ELE	ST	OBSERVED	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	AIR	FREE	COMPLETE	BOUGUER	SPECIAL	FIELD
		deg min	deg min	(in ft)													
:	a017	48 6.63	-119 10.20	1366.0	wa	980717.67	980900.09	1.42	-46.59	-0.55	0.00	-53.98	-53.98	-99.70	-96.78		
:	a018	48 3.80	-119 9.44	2524.0	wa	980645.61	980895.85	0.65	-46.09	-0.92	0.00	-12.93	-12.93	-99.28	-93.78		
:	a019	48 0.69	-119 12.71	2510.0	wa	980642.99	980891.18	0.25	-45.61	-0.91	0.00	-12.19	-12.19	-98.46	-92.97		
:	a020	48 1.18	-119 12.67	2560.0	wa	980640.37	980891.91	0.31	-47.31	-0.93	0.00	-10.85	-10.85	-98.78	-93.19		
:	a021	48 2.04	-119 12.70	2544.0	wa	980642.29	980893.20	0.43	-46.77	-0.92	0.00	-11.73	-11.73	-98.99	-93.43		
:	a022	48 2.94	-119 13.03	2539.0	wa	980644.15	980894.55	0.70	-46.60	-0.92	0.00	-11.69	-11.69	-98.51	-92.98		
:	a023	47 54.89	-118 55.75	2499.0	wa	980641.32	980899.98	4.00	-45.23	-0.91	0.00	-13.70	-13.70	-95.84	-90.61		
:	a024	47 54.63	-119 12.70	2543.0	wa	980638.42	980889.59	0.24	-46.73	-0.92	0.00	-12.07	-12.07	-99.49	-93.92		
:	a025	47 59.02	-119 12.70	2566.0	wa	980635.00	980888.67	0.25	-47.52	-0.93	0.00	-12.41	-12.41	-100.61	-95.00		
:	a026	47 58.33	-119 11.75	2565.0	wa	980633.04	980887.64	0.32	-47.48	-0.93	0.00	-13.43	-13.43	-101.53	-95.92		
:	a027	47 58.57	-119 10.48	2404.0	wa	980643.76	980888.00	0.18	-41.99	-0.88	0.00	-18.21	-18.21	-100.91	-95.64		
:	a028	47 58.52	-119 9.47	2395.0	wa	980644.29	980887.92	0.14	-41.69	-0.88	0.00	-18.45	-18.45	-100.87	-95.63		
:	a029	47 58.54	-119 7.96	2362.0	wa	980645.46	980887.95	0.20	-40.56	-0.87	0.00	-20.41	-20.41	-101.64	-96.47		
:	a030	47 58.41	-119 6.71	2369.0	wa	980643.54	980887.76	0.26	-40.80	-0.87	0.00	-21.48	-21.48	-102.89	-97.71		
:	b0809	48 10.36	-118 42.40	1609.0	wa	980700.18	980905.69	4.43	-54.88	-0.63	0.00	-54.22	-54.22	-105.30	-102.05		
:	b0807	48 11.41	-118 47.00	3360.0	wa	980597.79	980907.27	1.70	-4.60	-1.13	0.00	6.42	6.42	-107.61	-100.35		
:	n025	48 9.94	-118 47.21	3858.0	wa	980564.16	980905.06	5.76	-131.59	-1.23	0.00	21.81	21.81	-105.25	-97.16		
:	n031	48 3.68	-118 47.67	4020.0	wa	980550.17	980895.67	13.12	-137.11	-1.26	0.00	32.43	32.43	-92.82	-84.85		
:	n027	48 7.54	-118 47.94	4110.0	wa	980543.73	980901.46	6.56	-140.18	-1.28	0.00	28.66	28.66	-106.24	-97.65		
:	b0803	48 14.47	-118 58.19	1920.0	wa	980680.44	980911.85	2.56	-65.49	-0.74	0.00	-50.89	-50.89	-114.55	-110.49		
:	n009	48 11.48	-118 59.25	1857.0	wa	980684.47	980907.37	1.49	-63.34	-0.72	0.00	-48.29	-48.29	-110.86	-106.86		
:	a032	47 59.02	-118 56.00	2646.0	wa	980619.78	980888.67	4.92	-90.25	-0.95	0.00	-20.11	-20.11	-106.39	-100.90		
:	a034	48 2.96	-118 55.54	2013.0	wa	980629.58	980894.59	5.73	-68.66	-0.77	0.00	-75.74	-75.74	-139.43	-135.37		
:	a035	48 4.19	-118 56.96	2778.0	wa	980618.98	980896.43	4.97	-94.75	-0.99	0.00	-16.26	-16.26	-107.03	-101.25		
:	a036	48 5.03	-118 58.11	2492.0	wa	980638.94	980897.70	5.47	-44.99	-0.91	0.00	-28.45	-28.45	-108.89	-103.76		
:	a037	48 6.72	-118 57.95	2497.0	wa	980638.94	980900.23	3.40	-45.17	-0.91	0.00	-26.52	-26.52	-109.19	-103.93		
:	a038	48 6.60	-118 55.73	2482.0	wa	980641.66	980900.05	2.16	-44.65	-0.91	0.00	-25.02	-25.02	-108.42	-103.11		
:	a039	48 6.94	-118 54.78	2472.0	wa	980640.80	980900.56	2.47	-44.31	-0.90	0.00	-27.34	-27.34	-110.08	-104.81		
:	a040	48 5.97	-118 54.17	2843.0	wa	980614.97	980899.10	3.58	-96.97	-1.00	0.00	-16.84	-16.84	-111.23	-105.22		
:	a041	48 4.96	-118 54.93	2957.0	wa	980608.97	980897.59	3.24	-100.85	-1.03	0.00	-10.61	-10.61	-109.25	-102.97		
:	a042	48 5.23	-118 52.84	3287.0	wa	980587.61	980897.99	6.02	-112.11	-1.11	0.00	-1.35	-1.35	-106.55	-101.73		
:	a043	48 5.08	-118 51.74	3232.0	wa	980593.36	980897.77	4.46	-110.23	-1.10	0.00	-0.55	-0.55	-107.42	-100.62		

Date: 10/20/80

BOUGUER GRAVITY DATA

STATION IDENTIFICATION proj	sta-id	L O C A T I O N S		ELE (in ft)	ST	G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S		SPEC
		LATITUDE deg min	LONGITUDE deg min			THEORETICAL	TERRAIN BOUGUER CURV	SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67 d2=2.50	FIELD	
:	0044	48 4.35	-118 49.54	3526.0	WA	980574.46	980896.72	0.00	9.24	-108.27	-100.79	
:	0046	48 7.75	-118 50.48	3029.0	WA	980609.49	980901.77	0.00	-7.50	-109.06	-102.59	
:	0047	48 7.71	-118 52.11	2848.0	WA	980619.60	980901.71	0.00	-14.34	-108.67	-102.66	
:	0048	48 7.79	-118 54.05	2607.0	WA	980631.50	980901.84	0.00	-25.22	-111.90	-106.38	
:	0049	48 8.90	-118 54.10	2811.0	WA	980620.45	980903.50	0.00	-18.76	-110.90	-105.03	
:	0050	48 9.19	-118 52.26	2842.0	WA	980620.24	980903.94	0.00	-12.73	-110.37	-104.15	
:	0051	48 9.89	-118 51.80	2802.0	WA	980625.01	980904.98	0.00	-16.53	-111.03	-105.02	
:	0052	48 10.49	-118 54.75	2830.0	WA	980622.46	980905.88	0.00	-17.35	-113.44	-107.32	
:	0053	48 11.76	-118 53.63	2787.0	WA	980625.52	980907.79	0.00	-20.23	-114.19	-108.20	
:	0054	48 13.58	-118 55.18	3065.0	WA	980606.47	980910.52	0.00	-15.89	-118.21	-111.70	
:	0055	48 13.66	-118 53.05	2674.0	WA	980636.35	980910.64	0.00	-22.87	-114.42	-108.59	
:	0056	48 13.76	-118 49.09	3860.0	WA	980557.44	980910.79	0.00	9.54	-115.19	-107.25	
:	0057	48 12.39	-118 46.31	4081.0	WA	980548.93	980908.73	0.00	23.86	-108.10	-99.70	
:	0058	47 57.15	-118 57.53	2052.0	WA	980650.83	980885.87	0.00	-42.10	-104.62	-100.64	
:	0059	47 57.95	-118 52.45	2449.0	WA	980622.70	980897.07	0.00	-34.10	-106.75	-102.12	
:	0060	47 58.72	-118 49.74	2557.0	WA	980620.74	980888.23	0.00	-27.07	-107.97	-102.82	
:	0061	47 55.95	-118 45.98	2606.0	WA	980615.19	980884.06	0.00	-23.86	-103.86	-98.77	
:	0062	47 59.86	-118 45.78	4067.0	WA	980521.78	980889.94	0.00	14.19	-104.51	-96.96	
:	0063	48 19.66	-119 4.49	5327.0	WA	980478.69	980919.63	0.00	59.80	-108.23	-97.53	
:	0064	48 22.30	-119 3.61	6774.0	WA	980383.38	980923.59	0.00	96.50	-109.15	-96.06	
:	0065	48 22.39	-119 5.98	5373.0	WA	980483.81	980923.73	0.00	65.16	-106.70	-95.76	
:	0066	48 23.22	-119 8.62	4824.0	WA	980529.34	980924.97	0.00	57.86	-98.98	-89.00	
:	0067	48 25.50	-119 9.81	4688.0	WA	980549.43	980928.39	0.00	61.74	-94.15	-84.23	
:	0068	48 27.94	-119 6.93	5148.0	WA	980512.52	980932.05	0.00	64.41	-102.21	-91.60	
:	0069	48 27.87	-119 3.69	4627.0	WA	980533.90	980931.94	0.00	36.93	-107.75	-98.53	
:	0070	48 26.04	-119 4.18	4124.0	WA	980570.83	980929.20	0.00	29.33	-108.17	-99.42	
:	0071	48 24.87	-119 2.33	5963.0	WA	980440.25	980927.45	0.00	73.32	-108.64	-97.05	
:	0072	48 27.10	-118 56.19	5855.0	WA	980443.14	980930.79	0.00	62.72	-117.01	-105.56	
:	0073	48 28.43	-118 54.61	4638.0	WA	980529.84	980932.78	0.00	33.07	-116.58	-107.06	
:	0074	48 27.69	-118 53.40	4193.0	WA	980558.48	980931.67	0.00	21.00	-117.09	-108.29	
:	0075	48 22.22	-118 53.20	3130.0	WA	980619.37	980923.48	0.00	-9.83	-115.36	-108.64	
:	0076	48 21.33	-118 55.65	4150.0	WA	980554.45	980922.14	0.00	22.46	-106.74	-98.52	
:	0077	48 20.63	-118 55.38	4185.0	WA	980549.33	980921.09	0.00	21.67	-109.24	-100.90	
:	0078	48 19.73	-118 57.02	3298.0	WA	980610.37	980919.74	0.00	0.69	-105.93	-99.14	
:	0079	48 21.58	-118 57.70	3936.0	WA	980566.85	980922.52	0.00	14.37	-114.75	-106.52	
:	0079	48 23.10	-118 58.40	4604.0	WA	980530.44	980924.79	0.00	38.46	-94.82	-86.34	

colville gravity  
stations-lat/lon  
water ID: obsrv

Date: 10/20/80

BOUGUER GRAVITY DATA

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STATION IDENTIFICATION		LATITUDE		LONGITUDE		ELEVATION (in ft)	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS		SPECIAL	ANOMALIES		SPEC FIELD	
proj	sta-id	deg	min	deg	min				TERRAIN	BOUGUER		CURV	FREE AIR		COMPLETE-ROUGHER
:	a080	48	24.28	-118	55.68	3810.0	980570.71	980926.56	3.59	-129.95	-1.22	0.00	10.34	-117.24	-109.12
:	a081	48	23.66	-118	54.09	3830.0	980574.58	980925.63	5.95	-130.63	-1.23	0.00	9.01	-116.89	-108.88
:	a082	48	25.15	-118	52.98	3980.0	980567.71	980927.87	8.93	-135.75	-1.26	0.00	14.01	-114.06	-105.91
:	a083	48	26.43	-118	52.40	4071.0	980565.62	980929.78	7.32	-138.85	-1.27	0.00	18.55	-114.25	-105.79
:	a084	48	26.03	-118	54.33	4154.0	980557.75	980929.18	6.78	-141.68	-1.29	0.00	19.09	-117.10	-108.43
:	a085	48	28.67	-118	46.32	4063.0	980561.59	980933.14	13.62	-138.58	-1.27	0.00	10.42	-115.81	-107.77
:	a086	48	26.76	-118	48.06	3656.0	980584.90	980930.27	11.03	-124.70	-1.19	0.00	-1.66	-116.52	-109.21
:	a085	48	13.66	-118	53.05	2674.0	980636.64	980910.64	0.62	-91.20	-0.96	0.00	-22.59	-114.13	-108.30
:	a088	48	15.04	-118	54.99	3315.0	980590.84	980912.71	5.32	-113.06	-1.12	0.00	-10.20	-119.07	-112.13
:	a089	48	16.24	-118	54.94	3426.0	980583.73	980914.51	8.12	-116.85	-1.14	0.00	-8.68	-118.55	-111.56
:	a090	48	17.12	-118	52.62	3823.0	980568.30	980915.83	7.40	-130.39	-1.23	0.00	11.88	-112.34	-104.43
:	a091	48	18.52	-118	52.43	4187.0	980548.37	980917.93	8.91	-142.81	-1.29	0.00	24.06	-111.13	-102.52
:	a092	48	20.40	-118	52.47	4611.0	980522.14	980920.74	10.06	-157.27	-1.36	0.00	34.86	-113.70	-104.25
:	a093	48	22.14	-118	50.60	4711.0	980510.02	980923.35	12.57	-163.07	-1.38	0.00	36.11	-115.76	-106.09
:	a094	48	22.10	-118	45.60	3768.0	980569.72	980923.30	17.23	-128.52	-1.22	0.00	0.67	-111.83	-104.67
:	a095	48	20.40	-118	46.40	3619.0	980582.03	980920.74	9.30	-123.43	-1.19	0.00	1.52	-113.80	-106.45
:	a096	48	20.77	-118	47.20	3640.0	980582.83	980921.30	7.33	-124.15	-1.19	0.00	3.74	-114.27	-106.76
:	a097	48	19.92	-118	48.74	3815.0	980571.75	980920.02	6.38	-130.12	-1.22	0.00	10.38	-114.58	-106.62
:	a098	48	18.43	-118	47.14	4001.0	980556.58	980917.79	9.94	-136.46	-1.26	0.00	14.93	-112.86	-104.72
:	a100	48	20.46	-118	39.70	4764.0	980512.59	980920.84	13.82	-162.49	-1.38	0.00	39.61	-110.44	-100.89
:	a101	48	18.10	-118	39.87	3791.0	980574.62	980917.30	7.16	-129.30	-1.22	0.00	13.72	-109.64	-101.78
:	a102	48	16.64	-118	40.57	3497.0	980587.18	980915.11	10.31	-119.27	-1.16	0.00	0.84	-109.28	-102.27
:	a103	48	12.66	-118	43.76	3839.0	980561.68	980913.64	6.92	-130.94	-1.23	0.00	8.96	-116.29	-108.32
:	a104	48	16.30	-118	45.70	3732.0	980572.83	980914.60	8.87	-127.29	-1.21	0.00	9.09	-110.54	-102.92
:	a105	48	15.87	-118	49.70	3669.0	980575.18	980913.95	5.32	-125.14	-1.20	0.00	6.16	-114.85	-107.15
:	a106	48	22.93	-118	50.34	4334.0	980572.35	980924.54	9.14	-147.82	-1.32	0.00	55.25	-84.75	-75.83
:	a108	48	23.71	-118	48.31	3702.0	980590.61	980925.70	5.54	-126.26	-1.20	0.00	12.94	-108.99	-101.22
:	a110	48	24.54	-118	47.87	3825.0	980579.12	980926.95	6.83	-130.40	-1.23	0.00	11.76	-113.09	-105.14
:	a111	48	24.52	-118	48.38	4080.0	980567.46	980926.92	7.30	-137.70	-1.27	0.00	20.35	-111.41	-103.03
:	a112	48	25.16	-118	49.89	3962.0	980570.95	980927.88	8.44	-135.13	-1.25	0.00	15.55	-112.40	-104.25
:	a113	48	26.29	-118	47.36	3788.0	980585.22	980929.57	6.35	-127.83	-1.21	0.00	8.01	-114.69	-106.88
:	a114	48	25.89	-118	45.82	3570.0	980593.17	980928.98	7.43	-121.76	-1.17	0.00	-0.17	-115.68	-108.32
:	a115	48	27.64	-118	43.62	3632.0	980588.43	980931.59	13.41	-123.88	-1.19	0.00	-1.71	-113.36	-106.25
:	a116	48	28.03	-118	41.63	4072.0	980562.61	980932.18	8.46	-138.88	-1.27	0.00	13.24	-118.45	-110.07
:	a117	48	29.22	-118	33.99	6152.0	980444.31	980933.96	22.56	-209.83	-1.50	0.00	88.62	-100.15	-88.13

colville gravity  
stations-lat/lon  
water ID: obsrv

Date: 10/20/80

STATION		L O C A T I O N		E L E		G R A V I T Y		C N R R E C T I O N S		A N O M A L I E S	
IDENTIFICATION		LATITUDE		LONGITUDE		OBSERVED THEORETICAL		TERRAIN BOUGUER CURV		FREE COMPLETE-BOUGUER SPEC	
proj	sta-id	deg	min	deg	min	(in ft)				AIR	d1=2.67 d2=2.50 FIEL
:	a119	48	8.62	-118	38.67	3598.0	wa	11.09	-122.72	8.15	-104.65 -97.47
:	a119	48	7.03	-118	38.60	3598.0	wa	11.40	-122.72	7.75	-104.75 -97.59
:	a120	48	10.64	-118	39.48	4167.0	wa	15.85	-142.12	23.91	-103.66 -95.54
:	a121	48	10.24	-118	36.38	4200.0	wa	10.65	-143.25	34.40	-99.50 -90.97
:	a122	48	12.42	-118	37.61	4174.0	wa	11.76	-142.36	30.54	-101.36 -92.96
:	a123	48	12.55	-118	40.87	3935.0	wa	17.08	-134.21	9.04	-109.34 -101.80
:	a124	48	14.12	-118	40.23	3302.0	wa	12.97	-112.62	-12.50	-113.27 -106.86
:	a125	48	14.87	-118	38.47	3976.0	wa	9.89	-135.61	13.04	-113.94 -105.85
:	a127	48	15.70	-118	36.20	4135.0	wa	7.96	-141.03	23.50	-110.86 -102.30
:	a128	48	16.52	-118	36.01	4104.0	wa	5.75	-139.98	22.58	-112.92 -104.30
:	a129	48	17.24	-118	36.00	4243.0	wa	5.41	-144.72	20.08	-120.53 -111.58
:	a130	48	17.01	-118	38.01	3605.0	wa	8.83	-122.96	3.70	-111.61 -104.27
:	a131	48	18.82	-118	38.31	3621.0	wa	5.85	-123.50	9.80	-109.04 -101.47
:	a132	48	21.02	-118	37.24	3780.0	wa	3.74	-128.92	14.63	-111.77 -103.72
:	a133	48	19.23	-118	41.19	3571.0	wa	3.02	-121.80	10.44	-109.51 -101.87
:	a134	48	18.02	-118	42.24	3433.0	wa	4.83	-117.09	2.77	-110.64 -103.42
:	a135	48	20.59	-118	43.55	3296.0	wa	7.89	-112.42	-9.70	-115.34 -108.61
:	a136	48	20.84	-118	41.53	4042.0	wa	7.51	-137.86	20.13	-111.49 -103.11
:	a137	48	22.93	-118	38.31	4639.0	wa	10.93	-158.22	39.09	-109.57 -100.11
:	a138	48	23.61	-118	40.50	4015.0	wa	9.77	-136.94	18.69	-109.75 -101.57
:	a139	48	23.22	-118	42.46	3928.0	wa	9.94	-133.97	10.55	-114.73 -106.75
:	a140	48	24.71	-118	41.56	4116.0	wa	9.80	-140.39	17.11	-114.76 -106.36
:	a141	48	26.46	-118	41.59	3581.0	wa	5.25	-122.14	1.81	-116.26 -108.74
:	a142	48	27.59	-118	39.29	3866.0	wa	5.16	-131.86	12.79	-115.14 -107.00
:	a143	48	26.59	-118	38.11	4665.0	wa	9.18	-159.11	41.12	-110.18 -100.54
:	a144	48	26.24	-118	37.53	4033.0	wa	5.22	-137.55	21.79	-111.81 -103.30
:	a145	48	25.02	-118	37.22	4931.0	wa	10.10	-168.18	51.51	-107.97 -97.62
:	a146	48	26.10	-118	35.00	4704.0	wa	4.80	-140.44	47.53	-109.48 -99.49
:	a147	48	27.76	-118	34.24	5509.0	wa	12.19	-187.90	73.56	-103.61 -92.33
:	a148	48	28.31	-118	32.29	4868.0	wa	9.54	-166.03	58.28	-99.61 -89.56
:	a149	48	25.35	-118	33.34	6009.0	wa	15.96	-204.95	80.66	-109.83 -97.70
:	a150	48	16.42	-118	34.56	4031.0	wa	7.73	-137.49	20.99	-110.03 -101.60
:	a151	48	25.63	-118	29.93	6397.0	wa	26.27	-218.18	87.09	-106.34 -94.02
:	a152	48	24.26	-118	33.21	5839.0	wa	14.28	-199.15	75.76	-110.60 -98.73
:	a153	48	22.30	-118	31.79	5545.0	wa	11.43	-189.12	68.06	-111.10 -99.69

colville gravity  
stations-lat/lon  
Meris ID: obsrv

Date: 10/20/80

BOUGUER GRAVITY DATA

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STATION IDENTIFICATION		L U C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S			
proj	sta-id	LATITUDE deg	LONGITUDE min	ELE (in ft)	ST OBSERVED	TERRAIN	BOUGUEN CURV	SPECIAL	FREE AIR	COMPLETE-ROUGHER	SPEC FIELD
:	a154	48 19.84	-118 32.57	5167.0	wa	980489.32	980919.91	0.00	55.13	-113.30	-102.58
:	a155	48 19.20	-118 28.91	5463.0	wa	980465.87	980918.95	0.00	60.45	-113.64	-102.56
:	a156	48 22.57	-118 25.47	5709.0	wa	980455.44	980924.00	0.00	68.09	-106.24	-95.14
:	a157	48 25.26	-118 24.04	4731.0	wa	980520.84	980928.03	0.00	42.26	-98.55	-89.59
:	a159	48 17.16	-118 30.58	5438.0	wa	980472.95	980915.89	0.00	68.25	-107.36	-96.18
:	a160	48 3.76	-118 31.20	2876.0	wa	980622.96	980895.79	0.00	-2.43	-95.74	-89.80
:	a161	48 1.30	-118 30.47	4762.0	wa	980492.14	980892.09	0.00	47.71	-96.36	-87.19
:	a163	48 2.16	-118 30.96	3811.0	wa	980556.46	980893.39	0.00	21.36	-102.36	-94.48
:	a164	48 2.66	-118 35.42	3657.0	wa	980572.82	980894.14	0.00	22.49	-94.08	-86.66
:	a165	48 1.56	-118 35.53	3392.0	wa	980591.50	980892.48	0.00	17.92	-90.81	-83.89
:	a166	48 0.29	-118 35.51	3419.0	wa	980581.82	980890.58	0.00	19.68	-91.77	-84.68
:	a167	48 0.20	-118 34.64	3792.0	wa	980565.85	980890.45	0.00	31.91	-88.46	-80.79
:	a172	48 5.39	-118 35.13	3499.0	wa	980583.78	980898.23	0.00	14.51	-94.80	-92.52
:	a168	48 0.55	-118 37.24	2929.0	wa	980622.70	980890.97	0.00	7.12	-89.11	-82.98
:	a173	48 5.61	-118 31.83	3455.0	wa	980587.03	980898.56	0.00	13.29	-98.57	-91.45
:	a169	48 0.09	-118 40.01	1933.0	wa	980675.72	980890.28	0.00	-32.81	-93.67	-89.79
:	a170	48 2.58	-118 38.11	2462.0	wa	980646.95	980894.02	0.00	-15.58	-94.31	-84.30
:	a171	48 4.01	-118 37.04	2877.0	wa	980620.41	980896.16	0.00	-5.25	-99.09	-93.12
:	a174	48 4.16	-118 33.66	2792.0	wa	980632.34	980896.39	0.00	-1.54	-96.06	-90.04
:	a175	48 3.91	-118 34.66	3533.0	wa	980581.02	980896.02	0.00	17.17	-97.92	-90.59
:	a176	48 3.03	-118 33.93	2613.0	wa	980643.83	980894.70	0.00	-5.19	-94.13	-88.47
:	a177	47 57.86	-118 40.21	1919.0	wa	980675.58	980886.93	0.00	-30.92	-94.71	-90.64
:	a178	47 59.04	-118 38.34	3374.0	wa	980580.62	980888.70	0.00	9.13	-90.37	-84.04
:	a179	47 59.04	-118 35.34	3800.0	wa	980558.94	980888.70	0.00	27.89	-91.19	-83.64
:	a180	47 57.31	-118 36.88	2739.0	wa	980627.51	980886.11	0.00	-1.07	-88.72	-83.14
:	a181	47 57.92	-118 33.98	2832.0	wa	980621.80	980887.02	0.00	1.04	-92.70	-86.73
:	a182	47 55.33	-118 29.66	3063.0	wa	980601.28	980883.13	0.00	6.13	-89.38	-83.30
:	a183	47 53.36	-118 29.75	2688.0	wa	980618.39	980880.18	0.00	-9.06	-86.60	-81.66
:	a184	47 52.23	-118 24.83	2903.0	wa	980608.88	980878.48	0.00	3.34	-91.15	-85.13
:	a185	47 54.41	-118 24.30	3045.0	wa	980603.78	980881.75	0.00	8.32	-91.46	-85.11
:	a186	47 55.85	-118 23.03	2114.0	wa	980661.74	980883.91	0.00	-23.40	-93.40	-88.95
:	a187	47 55.85	-118 26.42	2944.0	wa	980614.38	980883.91	0.00	7.26	-90.72	-84.48
:	a188	47 57.89	-118 26.87	4287.0	wa	980524.82	980886.98	0.00	40.87	-91.36	-82.94
:	a189	47 59.17	-118 29.50	4639.0	wa	980503.65	980888.90	0.00	50.85	-87.55	-78.74
:	a190	47 59.08	-118 25.43	2342.0	wa	980653.68	980886.77	0.00	-14.88	-92.97	-87.99
:	a191	48 0.26	-118 27.86	3756.0	wa	980563.49	980890.54	0.00	26.07	-92.35	-84.81



ROUGHNER GRAVITY DATA

colville gravity  
stations-lat/lon  
Meter ID: obsary

Date: 10/20/80

STATION IDENTIFICATION proj	sta-id	L U C A T I O N S		G R A V I T Y	TERRAIN	C O R R E C T I O N S		FREE AIR	A N O M A L I E S	
		LATITUDE deg min	LONGITUDE deg min	THEORETICAL ELE (in ft)	ST URSED	TERRAIN	CURV	SPECIAL	COMPLETE-BOUGUER d1=2.67	SPEC FIELD d2=2.50
:	231	48 7.55	-118 45.82	3486.0	WA	980585.26	980901.48	5.17	-118.90	-1.16
:	232	48 9.20	-118 49.70	3105.0	WA	980617.84	980903.95	3.35	-105.90	-1.07
:	233	48 10.64	-118 48.68	3231.0	WA	980601.84	980906.11	2.97	-110.20	-1.10
:	234	48 12.83	-118 46.73	3909.0	WA	980562.07	980909.40	5.19	-133.32	-1.24
:	235	48 13.77	-118 49.11	3860.0	WA	980557.82	980910.60	8.15	-131.65	-1.23
:	236	48 14.46	-118 56.07	2522.0	WA	980641.40	980911.84	1.82	-86.02	-0.92
:	237	48 15.55	-118 59.50	2351.0	WA	980656.22	980913.48	2.44	-80.19	-0.87
:	238	48 12.71	-119 4.38	3189.0	WA	980607.10	980909.21	4.57	-108.77	-1.09
:	239	48 12.48	-119 7.50	2457.0	WA	980654.52	980908.87	0.83	-83.80	-0.90
:	240	48 12.47	-119 13.90	1637.0	WA	980706.64	980908.85	3.28	-55.83	-0.64
:	241	48 13.99	-119 13.31	2438.0	WA	980663.02	980911.13	2.00	-83.15	-0.69
:	242	48 10.12	-119 9.07	2931.0	WA	980617.81	980905.33	7.34	-99.57	-1.03
:	243	48 10.61	-119 9.99	2868.0	WA	980626.60	980906.06	3.58	-97.12	-1.01
:	244	48 10.28	-119 4.39	2864.0	WA	980621.23	980905.57	5.21	-97.68	-1.01
:	245	48 9.34	-119 3.05	2554.0	WA	980637.99	980904.16	6.87	-87.11	-0.93
:	246	48 15.74	-119 6.06	3888.0	WA	980569.17	980913.76	3.78	-132.61	-1.24
:	247	48 15.80	-119 2.41	3252.0	WA	980600.78	980913.85	4.93	-110.92	-1.10
:	248	48 17.39	-119 5.17	4094.0	WA	980554.95	980916.23	7.02	-139.63	-1.28
:	249	48 17.05	-119 2.20	3389.0	WA	980601.60	980915.73	4.49	-115.59	-1.14
:	250	48 17.15	-118 58.84	3030.0	WA	980618.56	980915.88	4.19	-103.34	-1.05
:	251	48 18.86	-118 59.69	3668.0	WA	980592.41	980918.44	7.06	-125.11	-1.20
:	252	48 20.12	-118 59.53	3533.0	WA	980595.52	980920.33	4.50	-120.50	-1.17
:	253	48 22.98	-119 13.66	3271.0	WA	980630.23	980924.61	2.18	-111.56	-1.11
:	254	48 24.25	-119 13.97	3893.0	WA	980587.88	980926.52	3.68	-132.78	-1.24
:	255	48 25.65	-119 13.56	4702.0	WA	980551.33	980928.62	7.59	-160.37	-1.37
:	256	48 26.98	-119 11.90	5622.0	WA	980491.86	980930.61	11.44	-191.75	-1.47
:	257	48 27.80	-119 11.35	5098.0	WA	980530.41	980931.84	5.51	-173.88	-1.42
:	258	48 26.71	-119 14.42	5667.0	WA	980485.61	980930.20	18.92	-193.28	-1.47
:	259	48 27.99	-119 16.56	4534.0	WA	980562.12	980932.12	7.29	-154.64	-1.35
:	260	48 28.43	-119 20.25	4225.0	WA	980582.80	980932.78	6.49	-144.10	-1.30
:	261	48 29.53	-119 24.40	4126.0	WA	980588.80	980934.43	10.44	-140.73	-1.28
:	262	48 27.43	-119 24.84	3246.0	WA	980642.06	980931.28	8.43	-110.71	-1.10
:	263	48 26.96	-119 18.49	5749.0	WA	980475.15	980930.58	23.47	-196.08	-1.48
:	264	48 25.28	-119 19.05	5162.0	WA	980516.40	980928.06	15.68	-176.06	-1.43
:	265	48 24.42	-119 22.23	2954.0	WA	980658.54	980926.77	3.05	-100.75	-1.03
:	267	48 18.27	-119 16.93	4423.0	WA	980548.04	980917.55	11.21	-150.86	-1.33
:	268	48 18.58	-119 13.95	4324.0	WA	980553.44	980918.02	8.76	-147.48	-1.32

**Date: 10/20/80**

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colville gravity  
stations-lat/lon  
Meter 10: obsrv

Date: 10/20/80

STATION IDENTIFICATION prof	sta-id	L LATITUDE deg	C LONGITUDE deg	A TIME min	I IN ft	N ST ELE (in ft)	G RAVITY OBSERVED	T HEORETICAL	C ONR E CT I ON S TERRAIN	BOUGUER	C URV	S PECIAL	F REE AIR	A N O M A L I E S COMPLETE-BOUGUER d1=2.67 d2=2.50	S PEC FIELD
:	3310	47 57.70	-119 17.86	2386.0	WA	980886.70	980886.26	980886.70	0.08	-81.38	-0.88	0.00	-14.10	-96.27	-91.04
:	3311	47 59.01	-119 17.92	2352.0	WA	980886.66	980886.40	980886.66	0.18	-80.22	-0.87	0.00	-14.12	-95.03	-89.67
:	3312	47 59.45	-119 17.93	2331.0	WA	980889.32	980889.68	980889.32	0.26	-79.50	-0.86	0.00	-14.47	-94.58	-84.48
:	3309	47 56.69	-119 17.40	2384.0	WA	980885.87	980885.18	980885.87	0.12	-81.31	-0.88	0.00	-15.16	-97.23	-92.00
:	3313	47 57.70	-119 17.80	2345.0	WA	980886.70	980886.46	980886.70	0.18	-79.58	-0.67	0.00	-20.75	-101.41	-96.28
:	3314	47 55.04	-119 17.83	2307.0	WA	980883.45	980883.45	980883.45	0.06	-78.68	-0.85	0.00	-22.33	-101.81	-96.75
:	3315	47 55.04	-119 16.53	2348.0	WA	980882.70	980882.70	980882.70	0.11	-80.08	-0.87	0.00	-21.11	-101.95	-96.80
:	3316	47 55.03	-119 15.25	2407.0	WA	980882.69	980882.69	980882.69	0.16	-82.10	-0.88	0.00	-19.15	-101.97	-96.70
:	3317	47 55.04	-119 19.11	2219.0	WA	980882.70	980882.70	980882.70	0.10	-75.68	-0.83	0.00	-24.84	-101.25	-96.39
:	3318	47 54.39	-119 19.61	2066.0	WA	980881.73	980881.73	980881.73	0.14	-70.47	-0.78	0.00	-30.39	-101.50	-96.97
:	3319	47 54.40	-119 20.41	2028.0	WA	980881.74	980881.74	980881.74	0.30	-69.17	-0.77	0.00	-30.51	-100.15	-95.71
:	3320	47 53.30	-119 20.41	2148.0	WA	980880.09	980880.26	980880.09	0.06	-73.26	-0.81	0.00	-25.86	-99.87	-95.16
:	3321	47 52.42	-119 20.40	2148.0	WA	980878.77	980878.77	980878.77	0.08	-73.25	-0.81	0.00	-26.00	-99.99	-95.28
:	3322	47 51.54	-119 20.42	2148.0	WA	980877.45	980877.45	980877.45	-0.04	-74.44	-0.82	0.00	-24.31	-99.65	-94.86
:	3323	47 50.66	-119 20.42	2167.0	WA	980876.13	980876.13	980876.13	-0.02	-73.91	-0.81	0.00	-24.27	-99.01	-94.25
:	3324	47 50.66	-119 19.14	2187.0	WA	980876.13	980876.13	980876.13	-0.03	-74.59	-0.82	0.00	-25.13	-100.57	-95.77
:	3325	47 50.65	-119 16.55	2196.0	WA	980876.11	980876.11	980876.11	0.00	-74.90	-0.82	0.00	-27.19	-102.91	-98.09
:	3326	47 50.68	-119 21.66	2112.0	WA	980876.16	980876.16	980876.16	0.00	-72.03	-0.80	0.00	-25.42	-98.25	-93.62
:	3327	47 51.65	-119 21.68	2137.0	WA	980877.61	980877.61	980877.61	0.05	-72.89	-0.80	0.00	-24.42	-98.06	-93.37
:	3328	47 52.48	-119 22.18	2096.0	WA	980878.86	980878.86	980878.86	0.36	-71.49	-0.79	0.00	-26.13	-98.05	-93.47
:	3329	47 54.38	-119 22.31	2007.0	WA	980881.71	980881.71	980881.71	0.12	-68.45	-0.76	0.00	-28.47	-97.56	-93.16
:	3330	47 55.11	-119 23.30	1940.0	WA	980882.80	980882.80	980882.80	0.28	-66.17	-0.74	0.00	-29.19	-95.82	-91.58
:	3331	47 57.01	-119 24.59	2168.0	WA	980885.66	980885.66	980885.66	0.02	-73.94	-0.81	0.00	-18.55	-93.29	-88.53
:	3332	47 57.70	-119 24.46	2236.0	WA	980886.70	980886.77	980886.70	0.07	-76.26	-0.83	0.00	-15.68	-92.71	-87.80
:	3333	47 58.56	-119 24.45	2236.0	WA	980887.98	980887.98	980887.98	0.06	-76.26	-0.83	0.00	-13.97	-91.01	-86.10
:	3334	47 59.43	-119 24.46	2250.0	WA	980889.29	980889.29	980889.29	0.10	-76.78	-0.84	0.00	-12.31	-89.79	-84.86
:	3335	47 59.43	-119 25.74	2244.0	WA	980889.29	980889.29	980889.29	0.13	-76.54	-0.84	0.00	-11.21	-88.45	-83.53
:	3336	47 59.45	-119 27.07	2191.0	WA	980889.98	980889.98	980889.98	0.05	-74.73	-0.82	0.00	-13.33	-88.83	-84.02
:	3337	47 57.68	-119 25.77	2228.0	WA	980886.66	980886.66	980886.66	0.06	-75.99	-0.83	0.00	-13.31	-90.07	-85.18
:	3338	47 57.68	-119 26.84	2186.0	WA	980886.66	980886.66	980886.66	0.02	-74.56	-0.82	0.00	-12.53	-87.89	-83.09
:	3339	47 56.94	-119 30.35	1746.0	WA	980885.55	980885.55	980885.55	0.53	-59.55	-0.68	0.00	-27.93	-87.63	-83.83
:	3340	47 56.49	-119 29.38	1786.0	WA	980887.88	980887.88	980887.88	0.39	-60.92	-0.69	0.00	-29.06	-90.28	-86.38
:	3341	47 56.04	-119 28.15	1822.0	WA	980883.90	980883.90	980883.90	1.54	-62.14	-0.70	0.00	-28.98	-90.29	-86.39
:	3342	47 55.65	-119 26.94	1852.0	WA	980883.62	980883.62	980883.62	1.11	-63.17	-0.71	0.00	-27.43	-90.20	-86.20
:	3343	47 55.29	-119 24.51	1903.0	WA	980883.08	980883.08	980883.08	0.64	-64.91	-0.73	0.00	-29.17	-94.17	-90.03
:	3344	47 56.09	-119 19.77	2240.0	WA	980884.27	980884.27	980884.27	0.02	-76.40	-0.83	0.00	-20.51	-97.73	-92.81
:	3345	47 55.04	-119 31.98	2226.0	WA	980882.70	980882.70	980882.70	0.09	-75.92	-0.83	0.00	-7.72	-84.39	-79.50
:	3346	47 53.29	-119 30.68	2205.0	WA	980880.07	980880.07	980880.07	-0.02	-75.21	-0.82	0.00	-10.62	-80.67	-81.82
:	3347	47 53.30	-119 34.60	2212.0	WA	980880.09	980880.09	980880.09	0.03	-75.45	-0.83	0.00	-6.24	-82.48	-77.62

colville gravity  
stations-lat/lon  
Meter ID: obsarv

Date: 10/20/80

STATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A M O M A L I E S	
IDENTIFICATION	prol	lat	lon	ele	obs	ter	curv	free	spec
sta-id		deg	deg	(in ft)				air	fields
334A		47 54.15	-119 35.70	2141.0	980669.03	0.09	-73.02	-10.23	-79.27
3349		47 55.03	-119 34.58	2169.0	980668.33	0.13	-73.98	-10.42	-80.32
3350		47 58.55	-119 32.42	2309.0	980664.25	0.47	-78.75	-6.62	-80.72
3351		47 58.55	-119 33.55	2295.0	980665.45	0.51	-78.28	-6.73	-80.34
3352		47 56.62	-119 33.27	1630.0	980706.06	1.23	-55.59	-25.74	-77.25
3353		47 56.72	-119 35.03	1487.0	980712.08	1.53	-50.72	-32.91	-79.52
3354		47 57.24	-119 34.35	1215.0	980727.62	2.26	-41.44	-44.14	-81.29
3355		47 58.09	-119 39.02	1074.0	980736.87	2.71	-36.63	-49.42	-81.59
3356		47 59.84	-119 39.07	836.0	980753.64	2.08	-28.51	-57.65	-82.36
3357		47 57.02	-119 39.65	1344.0	980716.02	1.74	-45.84	-42.87	-84.67
3358		47 55.37	-119 40.93	1642.0	980696.28	1.13	-56.00	-32.52	-84.50
3359		47 55.04	-119 43.32	2205.0	980658.35	0.81	-75.21	-17.02	-87.46
3360		47 53.07	-119 43.30	2134.0	980665.60	0.65	-72.78	-13.30	-81.59
3361		47 52.42	-119 41.05	2330.0	980656.73	0.14	-79.47	-2.96	-78.04
3362		47 51.55	-119 39.74	2293.0	980657.08	0.07	-78.21	-4.78	-78.74
3363		47 48.94	-119 34.52	2226.0	980657.29	0.00	5.92	-6.95	-78.82
3364		47 51.54	-119 34.57	2237.0	980659.53	0.01	-76.10	-7.58	-79.79
3365		47 51.54	-119 31.97	2270.0	980656.11	0.01	-77.42	-7.90	-81.17
3366		47 48.94	-119 29.35	2196.0	980652.24	-0.04	-74.90	-14.82	-85.76
3367		47 48.93	-119 21.69	2160.0	980647.09	0.02	-73.67	-23.34	-93.06
3368		47 48.92	-119 19.15	2231.0	980639.07	0.13	-76.09	-24.67	-96.58
3369		47 47.19	-119 19.16	2236.0	980637.32	0.28	-76.26	-23.35	-95.28
3370		47 47.18	-119 21.71	2172.0	980644.72	0.02	-74.08	-21.95	-92.06

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gravity  
Meter ID: w-147

Date: 10/23/80

STATION IDENTIFICATION proj sta-id	LATITUDE deg min	LONGITUDE deg min	ELEVATION (in ft)	GRAVITY OBSERVED	THEORETICAL	TERRAIN	CORRECTIONS			FREE AIR	ANOMALIES		
							SPECIAL	BOUGUER	CURV		COMPLETE-BOUGUER	SPEC	FIELDS
colind: hu01	48 12.95	-118 12.09	1904.0	980697.49	980909.58	2.33	0.00	-64.94	-0.73	-33.06	-96.40	-92.36	
colind: hu02	48 12.99	-118 12.68	1822.0	980701.93	980909.63	1.67	0.00	-62.14	-0.70	-36.39	-97.57	-93.67	
colind: hu03	48 12.45	-118 12.56	1828.0	980701.28	980908.83	2.46	0.00	-62.35	-0.71	-35.66	-96.26	-92.40	
colind: hu04	48 13.19	-118 11.82	1864.0	980699.88	980909.94	2.53	0.00	-63.58	-0.72	-34.79	-96.55	-92.62	
colind: hu05	48 13.65	-118 11.49	1809.0	980706.65	980910.63	2.52	0.00	-61.70	-0.70	-33.88	-93.76	-89.95	
colind: hu06	48 13.69	-118 11.02	1750.0	980708.28	980910.98	2.29	0.00	-59.69	-0.68	-38.16	-96.23	-92.54	
colind: hu07	48 14.06	-118 11.33	1810.0	980708.28	980911.24	1.46	0.00	-61.73	-0.70	-32.77	-93.74	-89.86	
colind: hu08	48 14.23	-118 11.61	1785.0	980707.85	980911.49	2.24	0.00	-60.88	-0.69	-35.80	-95.14	-91.36	
colind: hu09	48 14.36	-118 11.82	1804.0	980704.71	980911.69	2.08	0.00	-61.53	-0.70	-37.35	-97.50	-93.67	
colind: hu10	48 14.46	-118 11.94	1809.0	980704.23	980911.84	2.31	0.00	-61.70	-0.70	-37.51	-97.60	-93.78	
colind: hu11	48 14.74	-118 9.51	1618.0	980713.36	980912.26	2.63	0.00	-55.19	-0.64	-46.76	-99.95	-96.57	
colind: hu12	48 14.56	-118 9.85	1644.0	980712.76	980911.99	2.29	0.00	-56.07	-0.64	-44.65	-99.08	-95.61	
colind: hu13	48 14.77	-118 10.67	1889.0	980704.49	980912.30	2.14	0.00	-64.43	-0.73	-30.20	-93.21	-89.20	
colind: hu14	48 14.76	-118 11.04	1838.0	980707.65	980912.29	2.46	0.00	-62.69	-0.71	-31.82	-92.76	-88.88	
colind: hu15	48 14.94	-118 10.86	1764.0	980712.51	980912.56	1.55	0.00	-60.17	-0.68	-34.19	-93.49	-89.71	
colind: hu16	48 14.51	-118 11.16	2136.0	980687.88	980911.91	2.12	0.00	-72.92	-0.80	-23.01	-94.61	-90.05	
colind: hu17	48 14.71	-118 11.37	2286.0	980677.76	980912.21	2.63	0.00	-77.97	-0.85	-19.52	-95.71	-90.86	
colind: in10	48 17.02	-118 12.26	2098.0	980692.08	980915.68	2.54	0.00	-71.56	-0.79	-26.34	-96.15	-91.70	
colind: in11	48 17.25	-118 14.57	1757.0	980712.32	980916.02	1.04	0.00	-59.93	-0.68	-38.50	-98.07	-94.27	
colind: in12	48 18.08	-118 11.93	1584.0	980725.75	980917.27	1.59	0.00	-54.03	-0.62	-42.58	-95.64	-92.26	
colind: hu18	48 10.47	-118 14.76	1549.0	980712.86	980905.85	2.19	0.00	-52.83	-0.61	-47.34	-98.60	-95.34	
colind: wc01	48 11.70	-118 16.41	1829.0	980697.63	980907.70	2.11	0.00	-62.38	-0.71	-38.09	-99.07	-95.19	
colind: wc02	48 12.33	-118 17.13	1993.0	980686.09	980908.65	1.68	0.00	-67.98	-0.76	-35.16	-102.21	-97.94	
colind: wc03	48 12.89	-118 17.82	2122.0	980678.47	980909.48	1.61	0.00	-72.38	-0.80	-31.49	-103.06	-98.50	
colind: wc04	48 10.95	-118 15.96	1810.0	980700.25	980906.58	2.37	0.00	-61.73	-0.70	-36.14	-96.20	-92.38	
colind: wc05	48 10.16	-118 16.13	1866.0	980697.97	980905.39	3.52	0.00	-63.64	-0.72	-31.97	-92.81	-88.94	
colind: wc06	48 9.29	-118 15.82	1623.0	980712.81	980904.09	2.63	0.00	-55.36	-0.64	-38.67	-92.03	-88.63	
colind: in13	48 19.47	-118 13.56	1874.0	980709.89	980919.35	0.97	0.00	-63.92	-0.72	-33.25	-96.92	-92.87	
colind: in14	48 19.67	-118 14.21	1895.0	980711.17	980919.95	1.41	0.00	-64.63	-0.73	-30.60	-94.55	-89.48	
colind: t101	48 20.42	-118 15.30	1926.0	980710.81	980920.77	1.52	0.00	-65.69	-0.74	-28.87	-93.78	-89.65	
colind: t102	48 20.74	-118 15.86	1911.0	980710.34	980921.26	1.76	0.00	-65.18	-0.73	-31.23	-95.38	-91.30	
colind: t103	48 20.81	-118 17.57	2003.0	980703.04	980921.36	1.87	0.00	-68.32	-0.76	-29.99	-97.20	-92.92	
colind: t104	48 21.19	-118 19.42	2134.0	980691.42	980921.93	4.12	0.00	-72.78	-0.80	-29.86	-99.33	-94.90	



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Meter ID: w-147

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BOUGUER GRAVITY DATA

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STATION IDENTIFICATION		L U C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S							
proj	sta-id	LATITUDE	LONGITUDE	ELE	ST	OBSERVED	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE	COMPLETE	BOUGUER	SPEC
		deg	min	deg	min	(in ft)						AIR	d1=2.67	d2=2.50	FIELDS
colind:	hu20	48 12.06	-118 12.64	1812.0	wa	980702.95	980908.24	2.93	-61.80	-0.70	0.00	-34.91	-94.48	-90.69	
colind:	hu21	48 11.76	-118 12.96	1804.0	wa	980702.06	980907.79	2.88	-61.53	-0.70	0.00	-36.10	-95.45	-91.67	
colind:	hu22	48 11.26	-118 12.98	1805.0	wa	980701.81	980907.04	2.60	-61.56	-0.70	0.00	-35.51	-95.17	-91.37	
colind:	hu23	48 13.18	-118 13.73	2071.0	wa	980686.92	980909.92	1.56	-70.64	-0.78	0.00	-28.27	-98.13	-93.68	
colind:	hu24	48 13.39	-118 13.26	1858.0	wa	980699.77	980910.23	2.26	-63.37	-0.72	0.00	-35.76	-97.59	-93.65	
colind:	hu25	48 13.30	-118 12.82	2069.0	wa	980688.57	980910.10	1.09	-70.57	-0.78	0.00	-26.99	-97.25	-92.78	
colind:	hu26	48 13.74	-118 13.24	2032.0	wa	980691.10	980910.76	0.96	-69.31	-0.77	0.00	-28.60	-97.72	-93.32	
colind:	hu27	48 13.78	-118 12.81	2071.0	wa	980697.26	980910.82	0.89	-70.64	-0.78	0.00	-18.84	-89.37	-84.88	
colind:	hu28	48 14.11	-118 12.92	1935.0	wa	980697.56	980911.31	1.40	-66.00	-0.74	0.00	-31.81	-97.15	-92.99	
colind:	in15	48 16.67	-118 13.79	1701.0	wa	980711.29	980915.16	1.60	-58.02	-0.66	0.00	-43.92	-101.00	-97.37	
colind:	in16	48 17.30	-118 14.06	1743.0	wa	980714.43	980916.10	1.14	-59.45	-0.68	0.00	-37.78	-96.77	-93.01	
colind:	tl05	48 17.36	-118 23.69	2623.0	wa	980656.11	980916.19	1.52	-89.46	-0.94	0.00	-13.46	-102.35	-96.69	
colind:	tl06	48 17.75	-118 21.57	2612.0	wa	980658.23	980916.77	1.14	-89.09	-0.94	0.00	-12.95	-101.84	-96.18	
colind:	tl07	48 17.38	-118 21.69	2581.0	wa	980659.08	980916.22	1.07	-88.03	-0.93	0.00	-14.47	-102.36	-96.77	
colind:	tl08	48 16.68	-118 22.16	2619.0	wa	980654.36	980915.17	0.84	-89.33	-0.94	0.00	-14.57	-104.00	-98.30	
colind:	tl09	48 16.47	-118 22.35	2607.0	wa	980654.18	980914.85	0.83	-88.92	-0.94	0.00	-15.56	-104.59	-98.92	
colind:	tl10	48 16.16	-118 20.40	2675.0	wa	980655.06	980914.39	0.84	-91.24	-0.96	0.00	-7.82	-99.18	-93.36	
colind:	tl11	48 15.54	-118 18.57	2224.0	wa	980680.14	980913.46	1.64	-75.85	-0.83	0.00	-24.21	-99.25	-94.47	
colind:	tl12	48 16.00	-118 18.33	2369.0	wa	980671.25	980914.15	1.59	-80.80	-0.87	0.00	-20.16	-100.24	-95.14	
colind:	tl13	48 15.77	-118 17.89	2204.0	wa	980678.22	980913.80	1.37	-75.17	-0.82	0.00	-28.36	-102.98	-98.23	
colind:	tl14	48 16.02	-118 17.04	1883.0	wa	980697.41	980914.18	2.30	-64.22	-0.72	0.00	-39.71	-102.36	-98.37	
colind:	tl15	48 17.34	-118 15.53	1855.0	wa	980708.63	980916.16	1.02	-63.27	-0.71	0.00	-33.11	-96.07	-92.06	
colind:	tl16	48 17.32	-118 17.48	2202.0	wa	980684.19	980916.13	1.55	-75.10	-0.82	0.00	-24.90	-99.28	-94.54	
colind:	tl17	48 17.75	-118 19.10	2280.0	wa	980679.09	980916.77	2.19	-77.76	-0.85	0.00	-23.31	-99.73	-94.86	
colind:	hu29	48 14.28	-118 8.91	1334.0	wa	980732.45	980911.57	3.75	-45.50	-0.54	0.00	-53.68	-95.97	-93.27	
colind:	hu30	48 13.49	-118 9.82	1311.0	wa	980735.20	980910.38	3.29	-44.71	-0.53	0.00	-51.91	-93.86	-91.19	
colind:	hu31	48 12.16	-118 10.68	1497.0	wa	980722.35	980908.39	1.90	-51.06	-0.59	0.00	-45.28	-95.03	-91.86	
colind:	hu32	48 10.65	-118 10.01	1816.0	wa	980705.44	980906.13	2.23	-61.94	-0.70	0.00	-29.93	-90.35	-86.50	
colind:	hu33	48 9.22	-118 10.11	1708.0	wa	980710.13	980903.98	1.63	-58.26	-0.67	0.00	-33.25	-90.54	-86.89	
colind:	hu34	48 8.47	-118 11.44	1564.0	wa	980717.34	980902.85	2.26	-53.34	-0.62	0.00	-38.45	-90.15	-86.86	
colind:	hu35	48 7.87	-118 12.27	1687.0	wa	980708.79	980901.95	1.56	-57.54	-0.66	0.00	-34.54	-91.18	-87.57	
colind:	hu36	48 5.28	-118 12.24	1793.0	wa	980697.32	980898.07	1.37	-61.15	-0.69	0.00	-32.16	-92.64	-88.79	
colind:	hu37	48 1.99	-118 14.06	1523.0	wa	980695.06	980893.13	1.54	-51.95	-0.60	0.00	-54.86	-105.87	-102.62	
colind:	hu38	48 4.29	-118 11.90	1831.0	wa	980685.91	980896.59	1.06	-62.45	-0.71	0.00	-38.51	-100.60	-96.65	
colind:	hu39	48 7.16	-118 13.12	1575.0	wa	980712.91	980900.89	1.05	-53.72	-0.62	0.00	-39.88	-93.17	-89.78	

# ROUGHER GRAVITY DATA

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STATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S						
IDENTIFICATION	proj sta-id	LATITUDE	LONGITUDE	ELE	ST	OBSERVED	THFORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE	COMPLETE-BOUGUER	SPEC
		deg min	deg min	(in ft)								AIR	d1=2.67 d2=2.50	FIELDS
colind:	cd01	47 59.42	-118 57.53	973.0	wa	980720.11	980889.27	4.60	-33.19	-0.40	0.00	-77.67	-106.66	-104.82
colind:	ne01	48 1.14	-118 56.81	998.0	wa	980721.22	980891.86	5.03	-34.04	-0.41	0.00	-76.79	-106.21	-104.34
colind:	ne02	48 1.89	-118 57.52	1079.0	wa	980717.72	980892.98	3.69	-36.80	-0.44	0.00	-73.80	-107.36	-105.22
colind:	ne03	48 2.61	-118 58.20	1257.0	wa	980697.61	980894.06	2.75	-42.87	-0.51	0.00	-78.26	-118.89	-116.30
colind:	ne04	48 3.25	-118 59.12	1467.0	wa	980693.70	980895.02	1.15	-50.03	-0.58	0.00	-63.88	-113.35	-110.20
colind:	ne05	48 4.00	-118 58.34	1740.0	wa	980682.35	980896.15	1.65	-59.35	-0.68	0.00	-50.19	-108.56	-104.85
colind:	ne06	48 4.81	-118 58.91	1763.0	wa	980681.54	980897.37	1.61	-60.13	-0.68	0.00	-50.06	-109.26	-105.49
colind:	ne07	48 6.49	-118 59.26	1789.0	wa	980682.86	980899.88	1.04	-61.02	-0.69	0.00	-48.81	-109.48	-105.62
colind:	ne08	48 12.72	-118 59.07	1879.0	wa	980683.21	980909.23	1.52	-64.09	-0.72	0.00	-49.34	-112.63	-108.60
colind:	ne09	48 11.48	-118 59.25	1856.0	wa	980684.23	980907.37	1.50	-63.30	-0.72	0.00	-48.62	-111.14	-107.16
colind:	ne10	48 9.40	-118 59.76	1813.0	wa	980690.24	980904.25	1.26	-61.84	-0.70	0.00	-43.54	-104.82	-100.91
colind:	ne11	48 8.99	-118 58.44	1800.0	wa	980685.25	980903.63	3.47	-61.39	-0.70	0.00	-49.14	-107.76	-104.02
colind:	ne12	48 7.27	-118 58.63	1723.0	wa	980687.40	980901.05	1.02	-58.77	-0.67	0.00	-51.65	-110.06	-106.34
colind:	ne13	48 11.02	-118 58.06	1841.0	wa	980685.74	980906.68	2.23	-62.79	-0.71	0.00	-47.83	-109.11	-105.20
colind:	ne14	48 13.20	-118 57.66	1886.0	wa	980680.51	980909.95	1.98	-64.33	-0.72	0.00	-52.11	-115.18	-111.16
colind:	af01	48 8.06	-119 0.30	1619.0	wa	980696.91	980902.24	0.98	-55.22	-0.64	0.00	-53.09	-107.97	-104.48
colind:	af02	48 8.04	-119 1.79	1144.0	wa	980724.05	980902.21	3.06	-39.02	-0.47	0.00	-70.59	-107.02	-104.70
colind:	af03	48 8.52	-119 3.50	1003.0	wa	980731.23	980902.93	4.91	-34.21	-0.41	0.00	-77.38	-107.10	-105.20
colind:	af04	48 8.58	-119 6.02	989.0	wa	980731.69	980903.02	3.66	-33.73	-0.41	0.00	-78.33	-108.81	-106.87
colind:	af05	48 9.13	-119 7.46	948.0	wa	980729.30	980903.84	5.63	-32.33	-0.39	0.00	-85.41	-112.50	-110.78
colind:	af06	48 8.72	-119 9.27	968.0	wa	980735.32	980903.23	4.72	-33.02	-0.40	0.00	-76.88	-105.58	-103.75
colind:	af07	48 8.49	-119 9.80	948.0	wa	980733.65	980902.88	4.64	-32.33	-0.39	0.00	-80.09	-108.18	-106.39
colind:	af19	48 9.18	-119 7.77	948.0	wa	980728.60	980903.92	5.88	-32.33	-0.39	0.00	-86.18	-113.02	-111.31
colind:	af20	48 12.41	-119 0.59	1980.0	wa	980678.72	980908.77	1.06	-67.53	-0.75	0.00	-43.88	-111.10	-106.82
colind:	af21	48 12.78	-119 1.27	2098.0	wa	980673.31	980909.32	1.39	-71.56	-0.79	0.00	-38.74	-109.70	-105.18
colind:	af11	48 13.46	-119 2.94	2566.0	wa	980648.67	980910.34	1.06	-87.52	-0.93	0.00	-20.41	-107.80	-102.23
colind:	af12	48 14.20	-119 5.02	2706.0	wa	980640.07	980911.45	2.15	-92.29	-0.97	0.00	-16.96	-108.07	-102.27
colind:	af13	48 14.34	-119 7.26	2841.0	wa	980634.90	980911.66	1.68	-96.90	-1.00	0.00	-9.65	-105.87	-99.75
colind:	af14	48 14.59	-119 7.80	3012.0	wa	980624.10	980912.03	2.04	-102.73	-1.05	0.00	-4.75	-106.49	-100.01

## BOUGUER GRAVITY DATA

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STATION		L U C A T I		O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S	
IDENTIFICATION		LATITUDE		LONGITUDE		ELEVATION		TERRAIN BOUGUER CURV		FREE AIR	
proj	sta-id	deg	min	deg	min	(in ft)			SPECIAL	d1=2.67	d2=2.50
colind:	d101	48	20.70	-119	10.86	2674.0	wa	2.05	-91.20	-102.76	-97.02
colind:	d102	48	19.20	-119	9.14	2723.0	wa	2.00	-92.87	-105.29	-99.44
colind:	d103	48	18.18	-119	8.26	2913.0	wa	1.65	-99.35	-108.88	-102.59
colind:	d104	48	15.68	-119	8.37	3056.0	wa	4.12	-104.23	-109.56	-103.12
colind:	d105	48	26.99	-119	7.71	3853.0	wa	1.93	-131.41	-99.15	-90.83
colind:	d106	48	28.15	-119	9.28	4438.0	wa	2.18	-151.37	-94.74	-85.16
colind:	d107	48	29.01	-119	10.17	4315.0	wa	2.06	-147.17	-93.96	-84.63
colind:	d108	48	28.96	-119	12.60	4512.0	wa	2.41	-153.89	-92.28	-82.55
colind:	d109	48	26.51	-119	7.52	3671.0	wa	2.04	-125.21	-99.35	-91.43
colind:	ok01	48	22.08	-119	33.56	916.0	wa	2.39	-31.24	-107.18	-105.32
colind:	ok02	48	21.76	-119	34.55	832.0	wa	3.00	-28.38	-106.60	-104.96
colind:	ok03	48	20.34	-119	36.09	832.0	wa	3.75	-28.38	-107.21	-105.62
colind:	ok04	48	17.49	-119	42.33	858.0	wa	3.60	-29.26	-106.22	-104.57
colind:	ok05	48	17.30	-119	42.17	841.0	wa	3.36	-28.68	-105.93	-104.30
colind:	ok06	48	17.30	-119	41.45	820.0	wa	3.26	-27.97	-107.90	-106.31
colind:	ok07	48	17.64	-119	41.04	832.0	wa	3.20	-28.38	-108.16	-106.53
colind:	ok08	48	17.84	-119	40.74	857.0	wa	3.05	-29.23	-109.29	-107.60
colind:	ok09	48	18.05	-119	40.22	845.0	wa	3.11	-28.82	-109.94	-108.28
colind:	ok10	48	18.11	-119	39.52	833.0	wa	3.30	-28.41	-110.56	-108.94

## BOUGHER GRAVITY DATA

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STATION IDENTIFICATION proj sta-id	LATITUDE deg min	LONGITUDE deg min	TIME min	ELEVATION (in ft)	STATION TYPE	GRAVITY OBSERVED	THEORETICAL	TERRAIN BOUGHER	CURV	SPECIAL	FREE AIR	ANOMALIES	
												COMPLETE-BOUGHER	SPEC FIELDS
col ind:	ok11	48 18.34	-119 38.87	819.0	wa	980754.41	980917.66	3.54	-27.93	-0.34	0.00	-86.23	-110.97 -109.39
col ind:	ok12	48 21.78	-119 34.68	829.0	wa	980762.27	980922.81	2.94	-28.27	-0.35	0.00	-82.59	-108.27 -106.63
col ind:	ok13	48 23.13	-119 33.32	838.0	wa	980761.83	980924.84	2.84	-28.58	-0.35	0.00	-84.21	-110.30 -108.64
col ind:	ok14	48 24.16	-119 32.45	836.0	wa	980768.34	980926.38	2.81	-28.51	-0.35	0.00	-79.43	-105.48 -103.82
col ind:	ok15	48 24.37	-119 32.23	835.0	wa	980768.32	980926.70	2.80	-28.48	-0.35	0.00	-79.86	-105.89 -104.23
col ind:	ok16	48 24.60	-119 32.17	834.0	wa	980768.90	980927.04	2.72	-28.44	-0.35	0.00	-79.72	-105.79 -104.13
col ind:	t130	48 26.29	-118 24.71	2531.0	wa	980667.66	980929.57	10.67	-86.33	-0.92	0.00	-23.94	-100.51 -95.64
col ind:	t131	48 26.74	-118 25.91	2619.0	wa	980660.61	980930.25	10.96	-89.33	-0.94	0.00	-23.40	-102.71 -97.66
col ind:	t132	48 27.47	-118 28.12	2872.0	wa	980647.21	980931.34	7.65	-97.96	-1.01	0.00	-14.11	-105.42 -99.61
col ind:	t133	48 27.37	-118 28.65	3058.0	wa	980637.02	980931.19	5.74	-104.30	-1.06	0.00	-6.66	-106.28 -99.94
col ind:	t134	48 27.71	-118 29.82	3094.0	wa	980635.32	980931.70	8.30	-105.53	-1.07	0.00	-5.49	-103.78 -97.53
col ind:	t135	48 25.90	-118 23.45	2444.0	wa	980671.87	980928.99	11.15	-83.36	-0.89	0.00	-27.33	-100.43 -95.78
col ind:	wb10	47 55.83	-118 41.31	1297.0	wa	980706.94	980883.88	1.21	-44.24	-0.52	0.00	-54.99	-98.54 -95.77
col ind:	wb11	47 55.21	-118 41.29	1379.0	wa	980699.37	980882.95	1.68	-47.03	-0.55	0.00	-53.92	-99.83 -96.90
col ind:	wb12	47 54.89	-118 41.78	1542.0	wa	980687.67	980882.48	1.79	-52.59	-0.61	0.00	-49.81	-101.22 -97.95
col ind:	wb13	47 54.49	-118 41.59	1580.0	wa	980684.86	980881.88	1.87	-53.89	-0.62	0.00	-48.45	-101.09 -97.74
col ind:	wb14	47 53.89	-118 42.34	1516.0	wa	980686.42	980880.98	3.61	-51.71	-0.60	0.00	-52.00	-100.70 -97.60
col ind:	wb15	47 53.58	-118 42.79	1570.0	wa	980682.55	980880.51	2.25	-53.55	-0.62	0.00	-50.33	-102.25 -98.95
col ind:	wb16	47 53.00	-118 43.02	1620.0	wa	980677.80	980879.63	3.51	-55.25	-0.64	0.00	-49.51	-101.89 -98.56
col ind:	cd02	47 53.80	-118 59.09	2339.0	wa	980637.61	980880.84	0.43	-79.78	-0.86	0.00	-23.31	-103.52 -98.41
col ind:	cd03	47 53.04	-118 58.69	2353.0	wa	980635.69	980879.70	0.30	-80.25	-0.87	0.00	-22.77	-103.59 -98.45
col ind:	cd04	47 52.74	-118 57.54	2511.0	wa	980624.48	980879.25	0.37	-85.64	-0.91	0.00	-18.67	-104.86 -99.37
col ind:	cd05	47 52.46	-118 56.23	2629.0	wa	980617.84	980878.83	0.44	-89.67	-0.95	0.00	-13.80	-103.97 -98.23
col ind:	ln08	47 45.37	-118 25.11	2072.0	wa	980656.33	980868.18	1.05	-70.67	-0.78	0.00	-17.03	-87.43 -82.95
col ind:	ln09	47 47.90	-118 25.19	1660.0	wa	980681.76	980871.98	3.49	-56.62	-0.65	0.00	-34.13	-87.91 -84.49
col ind:	ln10	47 48.77	-118 25.88	1609.0	wa	980677.94	980873.28	1.87	-54.88	-0.63	0.00	-44.06	-97.70 -94.28
col ind:	ln11	47 49.61	-118 25.73	1540.0	wa	980691.26	980874.55	1.84	-52.52	-0.61	0.00	-38.48	-89.78 -86.51



# ROUGHER GRAVITY DATA

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STATION		L O C A T I O N S		G R A V I T Y		C O N R E C T I O N S		A N O M A L I E S		S P E C	
IDENTIFICATION	sta-id	LATITUDE	LONGITUDE	ELE	ST	TERRAIN	BOUGUER CURV	SPECIAL	FREE	COMPLETE-BOUGUER	FIELDS
col ind:	col ind:	deg min	deg min	(in ft)					AIR	d1=2.67 d2=2.50	
col ind:	ln12	47 50.08	-118 26.79	1536.0	wa	4.15	-52.39	0.00	-36.89	-85.74	-82.63
col ind:	ln13	47 50.76	-118 27.46	1456.0	wa	4.14	-49.66	0.00	-40.26	-86.36	-83.42
col ind:	ln14	47 51.59	-118 28.14	1580.0	wa	2.50	-53.89	0.00	-37.42	-89.43	-86.12
col ind:	ln15	47 49.07	-118 29.40	2474.0	wa	0.73	-84.38	0.00	-3.05	-87.60	-82.22
col ind:	wb17	47 48.99	-118 31.57	2527.0	wa	0.87	-86.19	0.00	-4.48	-90.72	-85.23
col ind:	wb18	47 50.75	-118 32.51	2487.0	wa	0.53	-84.82	0.00	-9.92	-95.12	-89.70
col ind:	ln16	47 46.85	-118 23.20	2397.0	wa	0.38	-81.76	0.00	-6.09	-88.34	-83.11
col ind:	ln17	47 47.51	-118 23.24	2404.0	wa	0.69	-81.99	0.00	-6.44	-88.63	-83.40
col ind:	ln18	47 46.42	-118 20.97	2457.0	wa	0.50	-83.80	0.00	-1.38	-85.58	-80.22
col ind:	ln19	47 48.99	-118 18.91	1404.0	wa	1.90	-47.89	0.00	-45.45	-92.00	-89.03
col ind:	ln20	47 48.81	-118 19.31	1363.0	wa	2.61	-46.49	0.00	-45.46	-89.89	-87.06
col ind:	ln21	47 50.77	-118 19.68	1823.0	wa	1.38	-62.18	0.00	-33.59	-95.09	-91.17
col ind:	ln22	47 52.36	-118 19.40	1850.0	wa	1.63	-63.10	0.00	-34.33	-96.52	-92.56
col ind:	ln23	47 53.63	-118 16.30	1890.0	wa	1.35	-64.46	0.00	-35.23	-99.07	-95.01
col ind:	ln24	47 54.06	-118 18.01	1671.0	wa	1.08	-56.99	0.00	-40.94	-97.51	-93.91
col ind:	ln25	47 55.51	-118 19.59	1842.0	wa	1.31	-62.83	0.00	-36.20	-98.43	-94.46
col ind:	ln26	47 58.12	-118 18.09	2307.0	wa	0.98	-78.68	0.00	-18.38	-96.94	-91.94
col ind:	ln27	47 56.75	-118 18.92	2334.0	wa	2.39	-79.61	0.00	-22.36	-100.43	-95.46
col ind:	wc01	48 0.65	-118 20.99	1953.0	wa	0.92	-66.61	0.00	-29.00	-95.43	-91.20
col ind:	wc02	48 1.47	-118 16.77	2014.0	wa	0.84	-68.69	0.00	-32.00	-100.62	-96.25
col ind:	wc03	48 0.85	-118 16.69	2107.0	wa	0.62	-71.86	0.00	-27.06	-99.10	-94.51
col ind:	hu40	48 0.82	-118 13.02	1815.0	wa	1.15	-61.90	0.00	-45.30	-106.76	-102.85
col ind:	hu41	48 1.57	-118 12.69	1958.0	wa	0.86	-66.78	0.00	-40.51	-107.18	-102.93
col ind:	hu42	48 2.04	-118 12.99	1974.0	wa	0.75	-67.33	0.00	-39.13	-106.46	-102.17
col ind:	cd06	47 55.43	-118 56.27	1521.0	wa	1.54	-51.88	0.00	-54.09	-105.03	-101.79
col ind:	cd07	47 55.53	-118 54.92	1676.0	wa	1.17	-57.16	0.00	-48.45	-105.10	-101.49
col ind:	cd08	47 55.97	-118 52.27	1963.0	wa	1.75	-66.95	0.00	-29.16	-95.11	-90.91
col ind:	cd09	47 53.33	-118 56.18	2564.0	wa	0.53	-87.45	0.00	-17.96	-105.81	-100.22

## BOUGUER GRAVITY DATA

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STATION		L O C A T I O N		D N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S	
IDENTIFICATION		LATITUDE		LONGITUDE		ELEVATION		TERRAIN BOUGUER CURV		FREE AIR	
proj	sta-id	deg	min	deg	min	(in ft)	observed	thfuretical	special	d1=2.67	d2=2.50
colind:	cd10	47	53.33	-118	54.89	2659.0	980614.95	980880.13	0.00	-15.18	-106.01
colind:	cd11	47	53.33	-118	53.56	2667.0	980615.41	980880.13	0.00	-13.96	-105.06
colind:	cd12	47	53.33	-118	52.28	2709.0	980613.21	980880.13	0.00	-12.22	-104.50
colind:	cd13	47	53.34	-118	50.99	2698.0	980612.23	980880.15	0.00	-14.24	-105.90
colind:	cd14	47	54.08	-118	51.61	2630.0	980615.22	980881.26	0.00	-18.76	-108.27
colind:	cd16	48	18.05	-119	10.26	2995.0	980632.94	980917.22	0.00	-2.70	-104.57
colind:	cd17	48	17.19	-119	11.55	3444.0	980605.93	980915.93	0.00	13.79	-103.37
colind:	cd18	48	15.80	-119	12.84	2992.0	980632.18	980913.85	0.00	-0.37	-101.19
colind:	cd19	48	15.42	-119	10.44	3036.0	980624.64	980913.28	0.00	-3.20	-105.31
colind:	cd20	48	26.67	-119	5.74	3449.0	980616.89	980910.14	0.00	11.01	-105.68
colind:	cd21	48	28.11	-119	4.91	3633.0	980603.87	980932.30	0.00	13.12	-109.60
colind:	cd22	48	28.07	-119	1.53	3231.0	980626.04	980932.24	0.00	-2.43	-111.96
colind:	cd23	48	27.90	-119	2.14	3215.0	980627.27	980931.98	0.00	-2.45	-111.11
colind:	cd24	48	29.81	-119	1.25	3231.0	980627.17	980934.84	0.00	-3.91	-113.59
colind:	cd25	48	29.55	-119	3.24	3671.0	980603.30	980934.46	0.00	13.96	-110.43
colind:	cd26	48	25.42	-119	4.38	3534.0	980607.38	980928.27	0.00	11.36	-107.59
colind:	cd27	48	24.94	-119	6.54	3510.0	980612.94	980927.55	0.00	15.38	-103.88
colind:	ef09	48	12.49	-119	10.10	2387.0	980660.11	980908.88	0.00	-24.34	-105.61
colind:	ef10	48	11.63	-119	10.10	2438.0	980668.29	980907.59	0.00	-10.08	-93.29
colind:	ef15	48	8.17	-119	11.94	1398.0	980715.96	980902.41	0.00	-54.99	-101.58
colind:	ef16	48	8.24	-119	11.48	1398.0	980715.27	980902.51	0.00	-55.78	-102.06
colind:	ef17	48	8.99	-119	11.41	1446.0	980712.93	980903.63	0.00	-54.74	-102.17
colind:	ef18	48	7.03	-119	13.17	945.0	980743.05	980900.70	0.00	-68.79	-99.20
colind:	bm01	48	7.52	-119	15.53	1287.0	980725.54	980901.43	0.00	-54.87	-97.52
colind:	bm02	48	7.86	-119	17.36	1374.0	980721.66	980901.94	0.00	-51.08	-96.80
colind:	bm03	48	8.94	-119	18.87	1273.0	980729.35	980903.56	0.00	-54.51	-95.64
colind:	bm04	48	10.25	-119	20.24	1228.0	980734.07	980905.52	0.00	-55.99	-96.43
colind:	bm05	48	11.83	-119	21.22	1289.0	980733.06	980907.90	0.00	-53.63	-95.83
colind:	bm06	48	13.16	-119	21.81	1369.0	980728.99	980909.89	0.00	-52.17	-97.07
colind:	bm07	48	14.62	-119	22.91	1384.0	980728.52	980912.08	0.00	-53.42	-97.94
colind:	ol01	48	15.04	-119	23.39	1419.0	980727.09	980912.71	0.00	-52.19	-97.72

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col ind res

gravity

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col ind res		gravity		Meter ID: w-147		Date: 10/23/80								
STATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S						
IDNIFICATION	proj sta-id	LATITUDE	LONGITUDE	ELE	ST	OBSERVED	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE	COMPLETE-BOUGUER	SPEC
		deg min	deg min	(in ft)								AIR	d1=2.67	d2=2.50
														FIELDS
colind:	bm08	48 14.78	-119 21.97	1056.0	wa	980749.11	980912.32	3.08	-36.02	-0.43	0.00	-63.91	-97.28	-95.16
colind:	bm09	48 14.65	-119 20.87	970.0	wa	980753.56	980912.13	3.54	-33.08	-0.40	0.00	-67.35	-97.30	-95.39
colind:	bm10	48 14.67	-119 19.59	999.0	wa	980749.62	980912.16	4.65	-34.07	-0.41	0.00	-68.60	-98.43	-96.53
colind:	bm11	48 14.05	-119 18.78	1157.0	wa	980737.80	980911.23	5.23	-39.46	-0.47	0.00	-64.63	-99.34	-97.13
colind:	bm12	48 13.78	-119 17.55	1206.0	wa	980736.26	980910.82	3.34	-41.13	-0.49	0.00	-61.16	-99.44	-97.01
colind:	bm13	48 12.95	-119 16.87	1243.0	wa	980733.46	980909.58	3.00	-42.40	-0.50	0.00	-59.23	-99.13	-96.59
colind:	bm14	48 12.28	-119 17.27	1247.0	wa	980733.77	980908.57	3.52	-42.53	-0.51	0.00	-57.54	-97.06	-94.54
colind:	bm15	48 11.89	-119 18.48	1281.0	wa	980732.45	980907.98	3.30	-43.69	-0.52	0.00	-55.08	-95.99	-93.38
colind:	bm16	48 11.69	-119 19.44	1246.0	wa	980734.67	980907.69	2.80	-42.50	-0.51	0.00	-55.85	-96.05	-93.49
colind:	bm17	48 11.08	-119 20.70	1271.0	wa	980731.96	980906.77	1.60	-43.35	-0.51	0.00	-55.30	-97.56	-94.87
colind:	bm18	48 9.66	-119 19.49	1236.0	wa	980733.04	980904.64	3.21	-42.16	-0.50	0.00	-55.38	-94.83	-92.32
colind:	bm19	48 13.49	-119 15.47	1635.0	wa	980711.58	980910.38	2.05	-55.77	-0.64	0.00	-45.07	-99.43	-95.97
colind:	bm20	48 13.76	-119 14.76	1894.0	wa	980696.38	980910.79	1.76	-64.60	-0.73	0.00	-36.32	-99.89	-95.84
colind:	bm21	48 14.94	-119 13.03	2521.0	wa	980657.95	980912.56	1.60	-85.98	-0.92	0.00	-17.58	-102.88	-97.45
colind:	bm22	48 9.28	-119 28.40	2553.0	wa	980657.38	980904.07	0.61	-87.07	-0.93	0.00	-6.65	-94.04	-88.48
colind:	bm23	48 8.75	-119 27.25	2445.0	wa	980661.42	980903.27	0.45	-83.39	-0.89	0.00	-11.97	-95.80	-90.47
colind:	bm24	48 9.13	-119 25.06	2414.0	wa	980660.94	980903.84	0.52	-82.33	-0.89	0.00	-15.94	-98.64	-93.37
colind:	bm25	48 8.63	-119 23.04	2186.0	wa	980674.14	980903.09	0.56	-74.56	-0.82	0.00	-23.42	-98.23	-93.47
colind:	bm26	48 9.66	-119 22.62	2039.0	wa	980684.24	980904.64	1.56	-69.54	-0.77	0.00	-28.68	-97.44	-93.06
colind:	bm27	48 13.02	-119 24.14	2666.0	wa	980650.98	980909.68	1.58	-90.93	-0.96	0.00	-8.04	-98.34	-92.59
colind:	bm28	48 13.70	-119 24.57	2719.0	wa	980648.40	980910.70	1.77	-92.74	-0.97	0.00	-6.66	-98.60	-92.74
colind:	bm29	48 14.68	-119 25.62	2776.0	wa	980647.08	980912.17	1.60	-94.68	-0.99	0.00	-4.09	-98.16	-92.17
colind:	bm30	48 12.45	-119 25.29	2803.0	wa	980641.60	980908.83	1.06	-95.60	-0.99	0.00	-3.69	-99.22	-93.14
colind:	bm31	48 12.51	-119 25.22	2808.0	wa	980640.90	980908.91	1.11	-95.77	-0.99	0.00	-4.01	-99.66	-93.57
colind:	bm32	48 12.06	-119 25.62	2733.0	wa	980646.42	980908.24	0.89	-93.21	-0.97	0.00	-4.86	-98.16	-92.22
colind:	bm33	48 8.64	-119 23.04	2683.0	wa	980650.63	980903.11	8.93	-91.51	-0.96	0.00	-0.22	-83.76	-78.44
colind:	bm34	48 12.00	-119 27.58	2637.0	wa	980655.71	980908.15	0.49	-89.94	-0.95	0.00	-4.50	-94.90	-89.15
colind:	bm35	48 12.75	-119 29.49	2587.0	wa	980656.97	980909.27	0.39	-88.24	-0.93	0.00	-9.07	-97.85	-92.20
colind:	bm36	48 14.72	-119 29.51	2581.0	wa	980658.15	980912.23	0.58	-88.03	-0.93	0.00	-11.41	-97.79	-94.17
colind:	bm37	48 13.87	-119 29.50	2517.0	wa	980661.44	980910.95	0.72	-85.85	-0.92	0.00	-12.86	-98.91	-93.43
colind:	bm38	48 11.66	-119 29.52	2633.0	wa	980656.62	980907.64	0.49	-89.80	-0.95	0.00	-3.46	-93.73	-87.98
colind:	bm39	48 10.43	-119 29.56	2507.0	wa	980664.32	980905.80	0.37	-85.51	-0.91	0.00	-5.76	-91.81	-86.33
colind:	bm40	48 9.08	-119 29.64	2449.0	wa	980662.22	980903.77	0.40	-83.53	-0.90	0.00	-11.29	-95.31	-89.96
colind:	bm41	48 8.34	-119 26.67	2470.0	wa	980659.64	980902.66	0.80	-84.25	-0.90	0.00	-10.78	-95.13	-89.76

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proj sta-id		LATITUDE		LONGITUDE		(in ft)		OBSERVED THEORETICAL		TERRAIN BOUGUER CURV		SPECIAL		COMPLETE-BOUGUER	
		deg min		deg min										d1=2.67 d2=2.50 FIELDS	
colind:	bm41	48	6.23	-119	22.70	2343.0	wa	980663.06	980899.49	0.67	-79.91	-0.87	0.00	-16.13	-96.04
colind:	bm42	48	5.73	-119	23.33	2264.0	wa	980667.94	980898.74	0.73	-77.22	-0.84	0.00	-17.94	-95.27
colind:	bm43	48	5.55	-119	24.13	2264.0	wa	980669.07	980898.48	0.92	-77.22	-0.84	0.00	-16.53	-93.67
colind:	bm44	48	9.11	-119	20.94	1411.0	wa	980723.36	980903.81	1.75	-48.12	-0.56	0.00	-47.78	-94.72
colind:	bm45	48	9.03	-119	19.46	1213.0	wa	980733.48	980903.70	2.14	-41.37	-0.49	0.00	-56.15	-95.88
colind:	bm46	48	8.25	-119	19.43	1203.0	wa	980732.90	980902.52	2.14	-41.03	-0.49	0.00	-56.51	-95.89
colind:	bm47	48	7.86	-119	19.06	1191.0	wa	980733.45	980901.94	1.78	-40.62	-0.48	0.00	-56.49	-95.82
colind:	bm48	48	7.15	-119	18.85	1172.0	wa	980735.67	980900.88	1.73	-39.97	-0.48	0.00	-55.00	-93.72
colind:	bm49	48	3.81	-119	21.12	1229.0	wa	980732.64	980895.86	1.54	-41.92	-0.50	0.00	-47.66	-88.53
colind:	bm50	48	3.80	-119	20.08	1089.0	wa	980739.28	980895.85	2.10	-37.14	-0.45	0.00	-54.17	-89.66
colind:	bm51	48	3.64	-119	19.91	1008.0	wa	980742.97	980895.61	2.74	-34.38	-0.42	0.00	-57.85	-89.91
colind:	bm52	48	3.48	-119	21.44	1222.0	wa	980729.86	980895.37	2.06	-41.68	-0.50	0.00	-50.60	-90.72
colind:	bm53	48	3.99	-119	25.02	1069.0	wa	980738.72	980896.13	2.82	-36.46	-0.44	0.00	-56.89	-90.97
colind:	bm54	48	5.55	-119	26.93	1376.0	wa	980723.25	980898.48	1.19	-46.93	-0.55	0.00	-45.84	-92.13
colind:	bm55	48	6.02	-119	27.14	1432.0	wa	980719.81	980899.18	1.27	-48.84	-0.57	0.00	-44.72	-92.86
colind:	bm56	48	10.46	-119	19.54	1427.0	wa	980722.83	980905.84	2.75	-48.67	-0.57	0.00	-48.83	-95.32
colind:	bm57	48	10.23	-119	17.69	2684.0	wa	980646.35	980905.49	3.21	-91.54	-0.96	0.00	-6.79	-96.09
colind:	bm58	48	10.11	-119	17.21	2807.0	wa	980638.56	980905.31	3.40	-95.74	-0.99	0.00	-2.84	-96.17
colind:	bm59	48	9.76	-119	17.12	3015.0	wa	980624.77	980904.79	4.20	-102.83	-1.05	0.00	3.45	-96.23
colind:	bm60	48	9.57	-119	15.86	2875.0	wa	980632.78	980904.51	3.55	-98.06	-1.01	0.00	-1.42	-96.94
colind:	bm62	48	8.21	-119	15.56	1865.0	wa	980691.07	980902.46	2.24	-63.61	-0.72	0.00	-36.04	-98.12
colind:	bm63	48	6.99	-119	16.07	1246.0	wa	980726.96	980900.63	1.43	-42.50	-0.51	0.00	-56.51	-98.08
colind:	bm64	48	6.57	-119	15.41	1031.0	wa	980739.57	980900.01	2.14	-35.16	-0.43	0.00	-63.49	-96.94
colind:	bm65	48	14.40	-119	17.68	1392.0	wa	980727.98	980911.75	3.20	-47.48	-0.56	0.00	-52.88	-97.71
colind:	bm66	48	14.40	-119	17.68	1392.0	wa	980727.98	980911.75	3.20	-47.48	-0.56	0.00	-52.88	-97.71

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STATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S							
IDENTIFICATION		LONGITUDE		ELE		TERRAIN BOUGUER CURV		COMPLETE-BOUGUER SPEC							
proj	sta-id	deg	min	deg	min	(in ft)	ST	OBSERVED	THEORETICAL	TERRAIN BOUGUER CURV	SPECIAL	FREE	d1=2.67	d2=2.50	FIELDS
											</				

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STATION		L U C A T I		O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S	
IDENTIFICATION		LATITUDE		ELE		OBSERVED THEORETICAL		TERRAIN BOUGUER CURV		FREE AIR	
proj	sta-id	deg	min	deg	min	(in ft)			SPECIAL		COMPLETE-BOUGUER
col ind:											d1=2.67 d2=2.50 FIELDS
col ind:	0123	48	23.18	-119	15.60	2797.0	WA	2.20	-95.40	-0.99	0.00
col ind:	0124	48	23.26	-119	16.05	2893.0	WA	1.99	-98.67	-1.02	0.00
col ind:	0125	48	24.14	-119	18.01	3683.0	WA	3.06	-125.62	-1.20	0.00
col ind:	0126	48	24.05	-119	18.77	3524.0	WA	3.51	-120.19	-1.16	0.00
col ind:	0127	48	24.02	-119	17.45	3619.0	WA	2.59	-123.43	-1.19	0.00
col ind:	0129	48	15.74	-119	28.48	2710.0	WA	0.96	-92.43	-0.97	0.00
col ind:	0130	48	15.88	-119	28.05	2803.0	WA	0.94	-95.60	-0.99	0.00
col ind:	0131	48	16.36	-119	27.23	2919.0	WA	2.12	-100.24	-1.03	0.00
col ind:	0132	48	15.62	-119	26.26	2856.0	WA	1.97	-97.41	-1.01	0.00
col ind:	0133	48	16.30	-119	26.50	2871.0	WA	2.67	-97.92	-1.01	0.00
col ind:	0134	48	15.97	-119	25.64	2587.0	WA	3.32	-98.24	-0.93	0.00
col ind:	0135	48	17.94	-119	28.41	2648.0	WA	2.03	-90.32	-0.95	0.00
col ind:	0136	48	19.28	-119	29.42	2617.0	WA	2.03	-89.26	-0.94	0.00
col ind:	0137	48	18.63	-119	29.46	2753.0	WA	1.73	-93.90	-0.98	0.00
col ind:	0138	48	18.11	-119	29.84	2778.0	WA	1.27	-94.75	-0.99	0.00
col ind:	0139	48	17.57	-119	29.86	2774.0	WA	1.09	-94.61	-0.99	0.00
col ind:	0140	48	17.39	-119	29.55	2833.0	WA	1.11	-96.63	-1.00	0.00
col ind:	0141	48	16.83	-119	29.02	2767.0	WA	0.97	-94.37	-0.98	0.00
col ind:	0142	48	16.46	-119	29.17	2752.0	WA	0.90	-93.86	-0.98	0.00
col ind:	0143	48	16.19	-119	29.47	2751.0	WA	0.81	-93.83	-0.98	0.00
col ind:	0144	48	15.58	-119	29.29	2818.0	WA	0.86	-96.11	-1.00	0.00
col ind:	0149	48	21.92	-119	14.53	2521.0	WA	1.63	-85.98	-0.92	0.00
col ind:	0145	48	21.93	-119	15.45	2501.0	WA	1.61	-85.30	-0.91	0.00
col ind:	0146	48	22.03	-119	17.89	2466.0	WA	1.57	-84.11	-0.90	0.00
col ind:	0147	48	22.08	-119	19.28	2297.0	WA	1.55	-78.34	-0.85	0.00
col ind:	0148	48	22.20	-119	20.43	2100.0	WA	2.15	-71.62	-0.79	0.00
col ind:	0149	48	22.50	-119	21.77	2177.0	WA	1.30	-74.25	-0.82	0.00
col ind:	0150	48	22.51	-119	23.58	2012.0	WA	1.55	-68.62	-0.76	0.00
col ind:	0151	48	22.93	-119	25.20	1660.0	WA	2.05	-56.62	-0.65	0.00

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STATION IDENTIFICATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S	
proj	sta-id	LATITUDE deg min	LONGITUDE deg min	ELE (in ft)	ST	THEORETICAL	TERRAIN	BOUGUER	SPECIAL
col ind:	0152	48 27.57	-119 27.85	903.0	wa	980776.37	980931.49	4.46	-30.80 -0.38
col ind:	0153	48 28.29	-119 28.41	863.0	wa	980777.76	980932.57	4.93	-29.43 -0.36
col ind:	0154	48 28.61	-119 27.72	893.0	wa	980777.79	980930.05	3.43	-30.46 -0.37
col ind:	0155	48 23.56	-119 27.51	1246.0	wa	980757.02	980925.48	1.84	-42.50 -0.51
col ind:	0156	48 23.31	-119 26.38	1420.0	wa	980747.51	980925.11	2.18	-48.43 -0.57
col ind:	0157	48 22.85	-119 27.06	1170.0	wa	980759.79	980924.41	2.47	-39.91 -0.48
col ind:	0158	48 21.36	-119 26.39	1180.0	wa	980755.50	980922.19	4.49	-40.25 -0.48
col ind:	0159	48 20.85	-119 26.48	1132.0	wa	980757.68	980921.42	4.72	-38.61 -0.46
col ind:	0160	48 19.65	-119 25.53	1008.0	wa	980770.15	980919.62	5.60	-34.38 -0.42
col ind:	0161	48 19.20	-119 25.13	1069.0	wa	980753.84	980918.95	6.18	-36.46 -0.44
col ind:	0162	48 23.70	-119 29.79	966.0	wa	980768.45	980925.70	2.28	-32.95 -0.40
col ind:	0163	48 25.01	-119 29.64	997.0	wa	980766.16	980927.66	1.75	-34.01 -0.41
col ind:	0164	48 25.43	-119 29.00	1054.0	wa	980762.89	980928.28	1.83	-35.95 -0.43
col ind:	0165	48 26.29	-119 29.00	1089.0	wa	980761.70	980929.57	1.82	-37.14 -0.45
col ind:	0166	48 27.18	-119 28.99	1135.0	wa	980762.94	980930.91	2.13	-38.71 -0.46
col ind:	0167	48 28.06	-119 28.59	1228.0	wa	980758.22	980932.23	1.89	-41.88 -0.50
col ind:	0168	48 26.76	-119 29.61	1167.0	wa	980761.23	980930.27	1.58	-39.80 -0.48
col ind:	0169	48 20.50	-119 28.44	1403.0	wa	980735.75	980920.90	5.39	-47.85 -0.56
col ind:	0170	48 19.76	-119 27.95	1392.0	wa	980734.24	980919.79	5.39	-47.48 -0.56
col ind:	0171	48 18.60	-119 26.74	1333.0	wa	980736.67	980918.05	4.71	-45.46 -0.54
col ind:	0172	48 18.48	-119 26.48	1357.0	wa	980734.62	980917.87	4.92	-46.28 -0.55
col ind:	0173	48 17.15	-119 25.29	1348.0	wa	980731.85	980915.88	5.88	-45.98 -0.54
col ind:	0174	48 20.99	-119 29.89	1754.0	wa	980714.48	980921.63	3.29	-59.82 -0.68
col ind:	0175	48 22.51	-119 28.65	1511.0	wa	980738.13	980923.91	1.41	-51.54 -0.60
col ind:	0176	48 22.25	-119 28.38	1645.0	wa	980730.33	980923.52	1.55	-56.11 -0.65
col ind:	0177	48 22.12	-119 28.18	1728.0	wa	980725.44	980923.32	1.68	-58.94 -0.67
col ind:	0178	48 21.93	-119 27.88	1824.0	wa	980719.42	980923.04	2.54	-62.21 -0.70
col ind:	br01	48 9.46	-119 30.81	2497.0	wa	980660.74	980904.34	0.36	-85.17 -0.91
col ind:	br02	48 8.62	-119 30.81	2485.0	wa	980658.19	980903.08	0.44	-84.76 -0.91
col ind:	0152								
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STATION IDENTIFICATION		L U C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S			
proj	sta-id	LATITUDE deg min	LONGITUDE deg min	ELE (in ft)	ST	OBSERVED	THEORETICAL	TERRAIN BOUGUER CURV	SPECIAL AIR	COMPLETE-BOUGUER d1=2.67 d2=2.50	SPEC FIELDS
colind:	br03	48 8.01	-119 32.35	2578.0	wa	980654.24	980903.06	0.74 -87.93 -0.93	0.00	-6.44 -94.56	-88.95
colind:	br04	48 8.58	-119 33.69	2504.0	wa	980657.47	980903.02	0.60 -85.40 -0.91	0.00	-10.12 -95.84	-90.38
colind:	br05	48 8.16	-119 34.70	2500.0	wa	980659.35	980902.39	1.06 -85.27 -0.91	0.00	-7.98 -93.10	-87.68
colind:	br07	48 6.85	-119 34.73	2450.0	wa	980660.08	980900.42	0.90 -83.56 -0.90	0.00	-9.99 -93.55	-88.23
colind:	br08	48 6.30	-119 36.12	2448.0	wa	980659.56	980899.60	2.48 -83.49 -0.90	0.00	-9.87 -91.78	-86.56
colind:	br09	48 7.01	-119 33.40	2520.0	wa	980656.63	980900.06	0.77 -85.95 -0.92	0.00	-7.09 -93.19	-87.71
colind:	br10	48 6.44	-119 32.10	2494.0	wa	980656.27	980899.81	0.97 -85.06 -0.91	0.00	-9.04 -94.05	-88.63
colind:	br11	48 7.73	-119 30.80	2468.0	wa	980658.86	980901.74	0.63 -84.18 -0.90	0.00	-10.84 -95.28	-89.91
colind:	ok18	48 15.37	-119 33.90	2589.0	wa	980659.92	980913.20	0.75 -88.30 -0.94	0.00	-9.86 -98.35	-92.71
colind:	br12	48 14.56	-119 34.35	2418.0	wa	980671.40	980911.99	1.00 -82.47 -0.89	0.00	-13.24 -95.60	-90.36
colind:	br13	48 11.79	-119 33.42	2405.0	wa	980671.94	980907.84	0.43 -82.03 -0.88	0.00	-9.77 -92.26	-87.00
colind:	br14	48 9.48	-119 33.39	2559.0	wa	980655.55	980904.37	0.75 -87.28 -0.93	0.00	-8.22 -95.68	-90.11
colind:	ok19	48 16.78	-119 42.20	819.0	wa	980755.97	980915.32	3.30 -27.93 -0.34	0.00	-82.34 -107.31	-105.72
colind:	br15	48 14.45	-119 43.48	873.0	wa	980754.56	980911.83	2.72 -29.78 -0.36	0.00	-75.17 -102.59	-100.85
colind:	br16	48 9.59	-119 39.76	815.0	wa	980760.36	980904.53	2.10 -27.80 -0.34	0.00	-67.54 -93.58	-91.92
colind:	br17	48 8.33	-119 40.08	813.0	wa	980760.16	980902.65	2.11 -27.73 -0.34	0.00	-66.03 -91.99	-90.34
colind:	br18	48 7.75	-119 40.09	1019.0	wa	980748.87	980901.77	1.57 -34.76 -0.42	0.00	-57.09 -90.69	-88.56
colind:	br19	48 7.30	-119 39.40	1228.0	wa	980735.63	980901.10	0.94 -41.88 -0.50	0.00	-50.00 -91.44	-88.80
colind:	br20	48 7.20	-119 37.99	1338.0	wa	980731.47	980900.95	1.24 -45.64 -0.54	0.00	-43.67 -88.60	-85.74
colind:	br21	48 6.40	-119 39.17	1194.0	wa	980734.87	980899.75	0.87 -40.72 -0.49	0.00	-52.61 -92.95	-90.38
colind:	br22	48 6.03	-119 38.52	1266.0	wa	980735.00	980899.20	1.11 -43.18 -0.51	0.00	-45.15 -87.73	-85.02
colind:	br23	48 6.21	-119 41.14	822.0	wa	980756.33	980899.46	1.20 -28.04 -0.34	0.00	-65.84 -93.02	-91.29
colind:	br24	48 1.69	-119 40.57	897.0	wa	980747.61	980892.68	2.36 -30.59 -0.37	0.00	-60.72 -89.33	-87.51
colind:	br25	48 0.74	-119 39.80	921.0	wa	980746.83	980891.26	2.16 -31.41 -0.38	0.00	-57.82 -87.46	-85.57
colind:	br26	48 2.30	-119 35.26	1295.0	wa	980735.98	980893.59	1.52 -44.17 -0.52	0.00	-35.84 -79.01	-76.27
colind:	br27	48 2.65	-119 34.68	1163.0	wa	980738.41	980894.13	1.78 -39.67 -0.47	0.00	-46.35 -84.71	-82.27
colind:	ok20	48 15.55	-119 43.24	876.0	wa	980752.21	980913.48	2.96 -29.88 -0.37	0.00	-78.89 -106.17	-104.44
colind:	ok21	48 18.38	-119 37.82	846.0	wa	980757.86	980917.72	4.22 -28.85 -0.35	0.00	-80.31 -105.29	-103.70
colind:	ok179	48 22.04	-119 29.38	1316.0	wa	980746.72	980923.20	2.13 -44.89 -0.53	0.00	-52.74 -96.03	-93.27
colind:	ok180	48 25.06	-119 26.38	1624.0	wa	980737.60	980927.73	2.71 -55.39 -0.64	0.00	-37.43 -90.74	-87.35
colind:	ok181	48 25.52	-119 24.43	2104.0	wa	980710.83	980928.42	2.34 -71.76 -0.79	0.00	-19.76 -89.98	-85.51
colind:	ok182	48 26.56	-119 22.86	2746.0	wa	980674.65	980929.98	2.35 -93.66 -0.98	0.00	2.85 -89.44	-83.56



col ind res gravity  
stations bases  
meter ID: W-90

Date: 10/23/80

STATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S									
IDENTIFICATION		LATITUDE		LONGITUDE		ELEVATION		SPECIAL		FREE AIR		COMPLITE-ROUGHER		SPEC			
prof	sta-id	deg	min	deg	min	deg	min	(in ft)	TERRAIN	BOUGUER	CURV	SPECIAL	FREE	AIR	d1=2.67	d2=2.50	FIELDS
colind:	k-11	48	3.32	-118	32.10	2377.0	wa	980654.73	980895.13	1.11	-81.07	-0.88	0.00	-16.90	-97.74	-92.59	
colind:	k-12	48	14.57	-118	32.40	4032.0	wa	980558.85	980912.01	4.92	-137.52	-1.27	0.00	25.90	-107.96	-99.44	
colind:	k-13	48	14.52	-118	30.53	3848.0	wa	980569.25	980911.93	4.16	-131.24	-1.23	0.00	19.08	-109.23	-101.06	
colind:	base16	48	14.78	-118	29.58	3838.0	wa	980571.04	980912.32	3.05	-130.90	-1.23	0.00	19.54	-109.54	-101.32	
colind:	wc18	48	13.01	-118	28.25	3809.0	wa	980572.63	980909.66	3.46	-129.91	-1.22	0.00	21.06	-106.61	-98.48	
colind:	wc20	48	10.85	-118	27.98	4686.0	wa	980515.32	980906.42	15.34	-159.83	-1.37	0.00	49.41	-96.44	-87.16	
colind:	wc21	48	10.49	-118	28.91	3955.0	wa	980568.92	980905.88	5.74	-134.89	-1.25	0.00	34.85	-95.55	-87.25	
colind:	in17	48	19.49	-118	11.62	1519.0	wa	980731.46	980919.38	1.73	-51.81	-0.60	0.00	-45.09	-95.77	-92.55	
colind:	in18	48	21.86	-118	11.79	1401.0	wa	980743.53	980922.94	2.35	-47.78	-0.56	0.00	-47.67	-93.66	-90.74	
colind:	in19	48	22.39	-118	11.76	1420.0	wa	980743.86	980923.73	2.45	-48.43	-0.57	0.00	-46.35	-92.90	-89.93	
colind:	in20	48	24.02	-118	12.34	1350.0	wa	980749.29	980926.17	2.52	-46.04	-0.54	0.00	-49.94	-94.01	-91.20	
colind:	in21	48	24.67	-118	12.92	1368.0	wa	980749.94	980927.15	3.33	-46.66	-0.55	0.00	-48.57	-92.45	-89.66	
colind:	in22	48	26.06	-118	13.26	1299.0	wa	980753.74	980929.23	3.83	-44.31	-0.52	0.00	-53.34	-94.34	-91.73	
colind:	in23	48	29.38	-118	12.22	1309.0	wa	980753.91	980934.20	4.42	-44.65	-0.53	0.00	-57.20	-97.96	-95.36	
colind:	in24	48	29.01	-118	12.75	1445.0	wa	980743.96	980933.65	5.11	-49.29	-0.58	0.00	-53.81	-98.57	-95.72	
colind:	in25	48	19.33	-118	8.65	1774.0	wa	980715.51	980919.14	3.57	-60.51	-0.69	0.00	-36.83	-94.45	-90.78	
colind:	in26	48	25.78	-118	10.19	1724.0	wa	980729.70	980928.75	1.72	-58.80	-0.67	0.00	-36.94	-94.69	-91.02	
colind:	in27	48	27.08	-118	10.34	1721.0	wa	980730.02	980930.76	1.90	-58.70	-0.67	0.00	-38.91	-96.38	-92.72	
colind:	in29	48	24.10	-118	10.06	1573.0	wa	980735.94	980926.29	2.65	-53.65	-0.62	0.00	-42.45	-94.07	-90.78	
colind:	in30	48	21.47	-118	8.32	1934.0	wa	980709.51	980922.35	2.47	-65.96	-0.74	0.00	-31.00	-95.23	-91.14	
colind:	in31	48	20.29	-118	8.64	1882.0	wa	980711.34	980920.58	2.62	-64.19	-0.72	0.00	-32.28	-94.57	-90.61	
colind:	in32	48	17.46	-118	8.39	1415.0	wa	980728.93	980916.34	3.22	-48.26	-0.57	0.00	-54.36	-99.96	-97.06	

col ind res gravity  
stations&bases  
Meter 10: w-90

Date: 10/23/80

STATION		L U C A T I		O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S						
IDENTIFICATION	proj	LATITUDE	LONGITUDE	ELE	ST	THEORETICAL	BOUGUER	SPECIAL	FREE	COMPLETE-BOUGUER	SPEC					
sta-id		deg	deg	min	(in ft)				AIR	d1=2.67	d2=2.50	FIELDS				
ke14	colind:	48	13.76	-118	35.10	3081.0	wa	980622.04	980910.79	2.93	-105.08	-1.06	0.00	0.92	-102.30	-95.73
ke15	colind:	48	14.11	-118	33.65	3640.0	wa	980584.23	980911.31	3.20	-124.15	-1.19	0.00	15.13	-107.01	-99.23
ke16	colind:	48	13.28	-118	30.57	3300.0	wa	980602.05	980910.07	1.87	-112.55	-1.12	0.00	2.23	-109.57	-102.45
ke17	colind:	48	11.82	-118	31.74	2646.0	wa	980649.08	980907.88	1.76	-90.25	-0.95	0.00	-10.02	-99.46	-93.77
ke18	colind:	48	12.68	-118	30.68	3162.0	wa	980614.11	980909.17	1.66	-107.85	-1.08	0.00	2.22	-105.05	-98.22
ke19	colind:	48	10.38	-118	31.64	2281.0	wa	980668.66	980905.72	3.12	-77.80	-0.85	0.00	-22.59	-98.11	-93.30
sm13	colind:	48	23.63	-118	43.78	2379.0	wa	980661.73	980925.59	4.60	-81.14	-0.88	0.00	-40.17	-117.59	-112.66
sm14	colind:	48	23.61	-118	42.09	2913.0	wa	980632.70	980925.86	3.05	-99.35	-1.02	0.00	-19.28	-116.60	-110.41
sm16	colind:	48	23.80	-118	36.35	3809.0	wa	980586.01	980925.84	1.91	-129.91	-1.22	0.00	18.26	-110.97	-102.74
sm17	colind:	48	22.91	-118	36.02	3629.0	wa	980593.54	980924.51	2.19	-123.77	-1.19	0.00	10.21	-112.56	-104.75
sm18	colind:	48	22.19	-118	36.23	3581.0	wa	980594.40	980923.43	1.55	-122.14	-1.18	0.00	7.64	-114.13	-106.30
sm19	colind:	48	21.17	-118	36.16	3303.0	wa	980608.47	980921.90	2.41	-112.66	-1.12	0.00	-2.90	-114.26	-107.17
sm20	colind:	48	18.70	-118	37.12	3220.0	wa	980607.77	980918.20	6.97	-109.83	-1.10	0.00	-7.69	-111.64	-105.02
sm21	colind:	48	17.93	-118	38.47	2408.0	wa	980656.21	980917.04	5.28	-82.13	-0.88	0.00	-34.43	-112.16	-107.21
ke21	colind:	48	8.84	-118	34.29	3035.0	wa	980623.11	980903.41	1.24	-103.52	-1.05	0.00	5.05	-98.28	-91.70
ke22	colind:	48	6.91	-118	35.58	3087.0	wa	980614.64	980900.52	1.45	-105.29	-1.06	0.00	4.36	-100.54	-93.86
ke23	colind:	48	7.95	-118	34.89	2763.0	wa	980637.36	980902.08	1.31	-94.24	-0.98	0.00	-4.94	-98.85	-92.87
ke24	colind:	48	5.40	-118	36.99	1967.0	wa	980675.24	980898.25	3.87	-67.09	-0.75	0.00	-38.06	-102.03	-97.95
ke25	colind:	48	5.89	-118	41.62	1500.0	wa	980703.12	980898.98	3.25	-51.16	-0.60	0.00	-54.82	-103.33	-100.24
wc22	colind:	48	7.49	-118	23.39	2050.0	wa	980687.76	980901.38	2.32	-69.92	-0.78	0.00	-20.87	-89.25	-84.90
wc23	colind:	48	6.31	-118	22.04	1891.0	wa	980694.13	980899.62	2.73	-64.50	-0.73	0.00	-27.68	-90.17	-86.19
wc24	colind:	48	7.76	-118	23.85	1941.0	wa	980693.09	980901.79	3.38	-66.20	-0.74	0.00	-26.19	-89.76	-85.71
wc25	colind:	48	7.77	-118	24.61	2081.0	wa	980685.22	980901.80	3.20	-70.98	-0.79	0.00	-20.92	-89.48	-85.12
wc26	colind:	48	8.18	-118	25.60	2201.0	wa	980678.07	980902.42	3.74	-75.07	-0.82	0.00	-17.40	-89.56	-84.96
wc27	colind:	48	8.27	-118	26.33	2290.0	wa	980672.24	980902.55	4.28	-78.11	-0.85	0.00	-15.00	-89.67	-84.92
wc28	colind:	48	8.26	-118	27.58	2644.0	wa	980651.46	980902.54	4.18	-90.18	-0.95	0.00	-2.49	-89.44	-83.90
wc29	colind:	48	8.79	-118	28.22	3085.0	wa	980624.97	980903.34	2.75	-105.22	-1.06	0.00	11.68	-91.85	-85.26
wc30	colind:	48	8.83	-118	29.23	3464.0	wa	980600.94	980903.40	3.31	-118.15	-1.15	0.00	23.21	-92.78	-85.39
wc31	colind:	48	9.53	-118	29.20	3588.0	wa	980593.86	980904.45	3.93	-122.38	-1.18	0.00	26.34	-93.28	-85.67
wc32	colind:	48	12.41	-118	27.64	4194.0	wa	980546.50	980908.77	8.78	-143.05	-1.29	0.00	32.01	-103.54	-94.91

col ind res gravity  
stations  
Meter 1U: w-00

Date: 10/23/80

STATION		L U C A T I		N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S					
IDENTIFICATION	prof	LATITUDE	LONGITUDE	ELE	ST	OBSERVED	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE	COMPLETE	ROUGHER	SPEC
sta-id		deg min	deg min	(in ft)								AIR	d1=2.67	d2=2.50	FIELDS
hu43	colind:	48 14.93	-118 14.28	2605.0	w	980656.50	980912.55	1.68	-88.85	-0.94	0.00	-11.12	-99.23	-93.62	
hu44	colind:	48 14.52	-118 14.74	2621.0	w	980654.39	980911.93	2.33	-89.39	-0.94	0.00	-11.11	-99.12	-93.51	
hu46	colind:	48 14.10	-118 13.50	2431.0	w	980667.52	980911.30	2.43	-82.91	-0.89	0.00	-15.21	-96.58	-91.40	
hu47	colind:	48 13.81	-118 13.83	2230.0	w	980679.30	980910.87	1.34	-76.06	-0.83	0.00	-21.90	-97.45	-92.64	
t119	colind:	48 18.76	-118 16.03	1913.0	w	980707.84	980918.29	1.53	-65.25	-0.73	0.00	-30.57	-95.02	-90.92	
t120	colind:	48 23.13	-118 17.69	1983.0	w	980708.20	980924.84	2.92	-67.63	-0.76	0.00	-30.18	-95.65	-91.48	
t121	colind:	48 23.88	-118 17.58	2024.0	w	980707.34	980925.96	2.89	-69.03	-0.77	0.00	-28.31	-95.22	-90.96	
t122	colind:	48 25.53	-118 18.14	2059.0	w	980704.69	980928.44	5.73	-70.23	-0.78	0.00	-30.15	-95.43	-91.27	
t123	colind:	48 27.14	-118 19.23	2094.0	w	980705.49	980930.84	6.30	-71.42	-0.79	0.00	-28.47	-94.38	-90.18	
t124	colind:	48 28.21	-118 19.70	2177.0	w	980697.35	980932.45	6.22	-74.25	-0.82	0.00	-30.41	-99.26	-94.87	
t125	colind:	48 28.49	-118 18.87	2168.0	w	980700.31	980932.87	4.77	-73.94	-0.81	0.00	-28.71	-98.70	-94.24	
t126	colind:	48 28.90	-118 17.07	2196.0	w	980702.17	980933.48	2.72	-74.90	-0.82	0.00	-24.84	-97.84	-93.19	
t127	colind:	48 29.97	-118 15.14	2309.0	w	980695.55	980935.09	5.27	-78.75	-0.86	0.00	-22.44	-96.78	-92.05	
t128	colind:	48 28.14	-118 16.15	2197.0	w	980705.06	980932.34	2.52	-74.93	-0.82	0.00	-20.71	-93.95	-89.28	
t129	colind:	48 27.52	-118 16.16	1979.0	w	980716.12	980931.41	2.74	-67.50	-0.75	0.00	-29.22	-94.74	-90.56	
wh01	colind:	47 59.22	-118 33.18	2168.0	w	980666.01	980888.98	3.18	-73.94	-0.81	0.00	-19.12	-90.70	-86.14	
wh02	colind:	47 56.99	-118 32.90	1517.0	w	980699.72	980885.63	4.22	-51.74	-0.60	0.00	-43.27	-91.39	-88.32	
ln01	colind:	47 54.07	-118 27.60	3270.0	w	980591.00	980881.24	5.79	-111.53	-1.11	0.00	17.20	-89.65	-82.85	
ln02	colind:	47 54.67	-118 26.55	4090.0	w	980533.42	980882.14	14.07	-139.50	-1.28	0.00	35.79	-90.92	-82.85	
ln03	colind:	47 55.25	-118 27.85	3656.0	w	980567.22	980883.02	7.44	-124.70	-1.19	0.00	27.92	-90.53	-82.98	
ln04	colind:	47 52.89	-118 23.77	2076.0	w	980662.66	980879.47	1.56	-70.81	-0.78	0.00	-21.61	-91.64	-87.18	
ln05	colind:	47 53.31	-118 21.58	1481.0	w	980696.85	980880.10	2.02	-50.51	-0.59	0.00	-43.99	-93.07	-89.95	
ln06	colind:	47 56.55	-118 22.06	1351.0	w	980708.83	980884.97	1.74	-46.08	-0.54	0.00	-49.10	-93.99	-91.13	
ln07	colind:	47 57.58	-118 22.06	1358.0	w	980708.82	980886.52	1.68	-46.32	-0.55	0.00	-50.00	-95.18	-92.30	
ne15	colind:	48 3.30	-118 56.32	1901.0	w	980671.65	980895.10	1.45	-64.84	-0.73	0.00	-44.71	-108.82	-104.74	
ne16	colind:	48 3.26	-118 54.77	2404.0	w	980641.82	980895.04	1.02	-81.99	-0.88	0.00	-27.19	-109.04	-103.83	
ne17	colind:	48 3.09	-118 53.79	2913.0	w	980608.11	980894.78	2.55	-100.04	-1.03	0.00	-10.91	-109.43	-103.15	
ne18	colind:	48 2.50	-118 51.71	2808.0	w	980616.03	980893.90	1.29	-95.77	-0.99	0.00	-13.86	-109.33	-103.25	
wh03	colind:	47 59.94	-118 41.31	1380.0	w	980706.07	980890.05	2.13	-47.07	-0.55	0.00	-54.22	-99.72	-96.82	
wh04	colind:	47 59.19	-118 41.55	1385.0	w	980704.15	980888.93	2.35	-47.24	-0.56	0.00	-54.55	-99.99	-97.10	
wh05	colind:	47 58.54	-118 41.36	1354.0	w	980704.61	980887.95	2.18	-46.18	-0.54	0.00	-56.03	-100.57	-97.74	
wh06	colind:	47 58.82	-118 41.38	1295.0	w	980708.68	980885.38	1.53	-44.17	-0.52	0.00	-54.92	-98.08	-95.33	
wh07	colind:	47 57.37	-118 41.62	1377.0	w	980707.41	980886.20	1.48	-46.97	-0.55	0.00	-49.30	-95.34	-92.41	
wh08	colind:	47 57.13	-118 43.09	1930.0	w	980668.93	980885.84	1.17	-65.83	-0.74	0.00	-35.44	-100.83	-96.67	

# BOUGUER GRAVITY DATA

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col ind res gravity  
stations bases  
Meter ID: W-90

Date: 10/23/80

STATION IDENTIFICATION		L O C A T I O N		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S					
proj	sta-id	LATITUDE deg min	LONGITUDE deg min	ELE (in ft)	ST	OBSERVED	THEORETICAL	TERRAIN BOUGUER	CURV	SPECIAL	FREE AIR	COMPLETE-BOUGUER	SPEC d1=2.67 d2=2.50 FIELDS
colind:	wh09	47 56.30	-118 43.80	1693.0	wa	980680.62	980884.59	1.44	-57.74	-0.66	0.00	-44.78	-101.75 -98.12
colind:	ne25	48 9.94	-118 47.21	3659.0	wa	980673.09	980905.06	5.78	-131.62	-1.23	0.00	130.83	3.76 11.85
colind:	ne27	48 7.54	-118 47.94	4110.0	wa	980631.08	980901.46	6.56	-140.18	-1.28	0.00	116.01	-18.89 -10.30
colind:	ne28	48 6.34	-118 48.20	3883.0	wa	980642.68	980899.66	4.17	-132.44	-1.24	0.00	108.07	-21.43 -13.19
colind:	bk01	48 15.15	-118 57.16	1941.0	wa	980678.53	980912.88	2.98	-66.20	-0.74	0.00	-51.84	-115.80 -111.73
colind:	bk02	48 15.81	-118 56.49	1958.0	wa	980676.94	980913.87	4.23	-66.78	-0.75	0.00	-52.82	-116.12 -112.09
colind:	base04	48 17.37	-118 55.82	2006.0	wa	980678.52	980916.20	3.53	-68.42	-0.76	0.00	-49.06	-114.72 -110.54
colind:	bk03	48 20.15	-118 53.69	2727.0	wa	980637.07	980920.37	9.50	-93.01	-0.97	0.00	-26.91	-111.39 -106.01
colind:	bk04	48 21.58	-118 53.20	3181.0	wa	980615.95	980922.52	2.47	-108.49	-1.09	0.00	-7.49	-114.60 -107.78
colind:	bk05	48 23.03	-118 53.13	3011.0	wa	980626.25	980924.69	2.28	-102.70	-1.05	0.00	-15.35	-116.81 -110.35
colind:	bk06	48 26.00	-118 50.45	2301.0	wa	980669.70	980929.14	6.73	-78.48	-0.85	0.00	-43.09	-115.69 -111.07
colind:	bk07	48 27.30	-118 48.02	2078.0	wa	980686.85	980931.09	7.44	-70.87	-0.79	0.00	-48.85	-113.07 -108.98
colind:	bk08	48 28.05	-118 50.06	2193.0	wa	980681.24	980932.21	5.38	-74.80	-0.82	0.00	-44.77	-115.01 -110.54
colind:	bk09	48 28.74	-118 51.99	2236.0	wa	980674.88	980933.24	9.48	-76.26	-0.83	0.00	-48.13	-115.74 -111.44
colind:	bk10	48 27.54	-118 46.66	2020.0	wa	980686.74	980931.45	8.77	-68.90	-0.77	0.00	-54.77	-115.67 -111.79
colind:	df10	48 22.53	-119 11.85	2994.0	wa	980643.83	980923.94	1.65	-102.12	-1.04	0.00	1.38	-100.13 -93.66
colind:	df11	48 23.54	-119 11.59	3497.0	wa	980616.04	980925.45	2.48	-119.27	-1.16	0.00	19.36	-98.59 -91.08
colind:	df12	48 24.22	-119 9.82	4067.0	wa	980583.34	980926.47	2.82	-138.71	-1.27	0.00	39.21	-97.95 -89.22
colind:	df13	48 24.14	-119 6.29	3560.0	wa	980606.39	980926.35	2.07	-121.42	-1.17	0.00	14.73	-105.79 -98.12
colind:	df14	48 23.61	-119 5.13	4037.0	wa	980569.82	980925.55	3.47	-137.69	-1.27	0.00	23.79	-111.70 -103.07

# ROUGHER GRAVITY DATA

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col ind res gravity  
stations/bases  
Meter IU: w-90

Date: 10/23/80

STATION	L O C A T I O N	L A T I T U D E	L O N G I T U D E	E L E V A T I O N	G R A V I T Y	C O R R E C T I O N S	A N O M A L I E S
IDENTIFICATION	deg min	deg min	deg min	(in ft)	OBSERVED THEORETICAL	TERRAIN BOUGUER CURV	COMPLETE-BOUGUER SPEC
proj sta-id							d1=2.67 d2=2.50 FIELDS
colind: bk11	48 23.07	-118 59.32	3739.0 wa	980924.75	2.42	-127.53 -1.21	15.58 -110.74 -102.69
colind: bk12	48 21.97	-118 56.17	3034.0 wa	980923.10	1.94	-103.48 -1.05	-12.65 -115.24 -108.71
colind: bk13	48 22.33	-118 55.22	3034.0 wa	980923.64	1.77	-103.48 -1.05	-13.24 -116.00 -109.46
colind: bk14	48 22.77	-118 54.03	3086.0 wa	980924.30	1.91	-105.25 -1.06	-13.03 -117.44 -110.79
colind: wc33	48 14.04	-118 16.97	2879.0 wa	980911.21	1.69	-98.19 -1.01	-6.21 -103.73 -97.52
colind: wc34	48 5.48	-118 16.01	1569.0 wa	980706.10	3.45	-53.51 -0.62	-44.74 -95.42 -92.19
colind: wc35	48 4.36	-118 16.26	1621.0 wa	980701.29	1.58	-55.29 -0.64	-42.98 -97.32 -93.86
colind: wc36	48 3.97	-118 16.78	1626.0 wa	980700.01	1.68	-55.46 -0.64	-43.21 -97.62 -94.16
colind: wc37	48 3.35	-118 17.09	1554.0 wa	980702.55	1.17	-53.17 -0.62	-46.04 -98.65 -95.30
colind: wc38	48 6.22	-118 15.88	1603.0 wa	980706.27	4.99	-54.67 -0.63	-42.48 -92.79 -89.59
colind: wc39	48 7.11	-118 15.54	1591.0 wa	980708.37	5.11	-54.26 -0.63	-42.85 -92.63 -89.46
colind: t136	48 21.98	-118 16.54	1961.0 wa	980709.64	2.29	-66.88 -0.75	-29.09 -94.43 -90.27
colind: t137	48 23.35	-118 19.41	2111.0 wa	980925.16	4.12	-72.00 -0.80	-30.03 -98.71 -94.34
colind: t138	48 23.19	-118 18.52	2032.0 wa	980924.93	2.71	-69.31 -0.77	-28.41 -95.78 -91.49
colind: t139	48 16.19	-118 26.44	2819.0 wa	980914.43	2.74	-96.15 -1.00	-14.51 -108.91 -102.90
colind: t140	48 15.38	-118 28.15	3399.0 wa	980913.22	3.11	-115.93 -1.14	3.20 -110.76 -103.50
colind: ne33	48 11.66	-118 45.71	3204.0 wa	980907.64	1.68	-109.28 -1.09	4.65 -104.04 -97.12
colind: ne34	48 11.94	-118 45.42	3228.0 wa	980908.06	1.89	-110.10 -1.10	5.54 -103.76 -96.80
colind: ne35	48 12.52	-118 45.36	3221.0 wa	980908.93	1.90	-109.86 -1.10	3.63 -105.42 -98.48
colind: ke26	48 12.91	-118 44.90	3169.0 wa	980909.52	1.52	-108.09 -1.08	2.97 -104.68 -97.82
colind: ne36	48 14.40	-118 45.66	3171.0 wa	980911.75	0.95	-108.15 -1.08	-1.23 -109.52 -102.62
colind: ne37	48 14.69	-118 46.72	3272.0 wa	980912.19	0.98	-111.60 -1.11	-1.00 -112.73 -105.61
colind: ne38	48 14.47	-118 47.21	3388.0 wa	980911.85	1.30	-115.55 -1.14	2.14 -113.25 -105.90
colind: ne39	48 14.78	-118 48.88	3520.0 wa	980912.32	1.77	-120.06 -1.16	4.04 -115.41 -107.81
colind: ne40	48 14.77	-118 49.28	3547.0 wa	980912.30	2.03	-120.98 -1.17	3.41 -116.71 -109.06
colind: ne41	48 13.87	-118 50.97	2729.0 wa	980910.95	1.04	-93.08 -0.97	-21.44 -114.45 -108.53
colind: ke27	48 1.41	-118 44.84	1869.0 wa	980675.00	3.70	-63.75 -0.72	-41.53 -102.29 -98.42
colind: ne42	48 0.41	-118 47.87	2849.0 wa	980612.38	2.21	-97.17 -1.00	-10.51 -106.48 -100.37

BOUGUER GRAVITY DATA

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gravity stations  
Meter ID: W-147

Date: 10/30/80

STATION		I U C A T I		O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S	
IDENTIFICATION		LATITUDE		LONGITUDE		THEORETICAL		TERRAIN BOUGUER CURV		FREE AIR	
proj	sta-id	deg	min	deg	min	observed	theoretical			d1=2.67	d2=2.50
											FIELDS
colind:	dh001	48	3.07	-118	42.05	980608.03	980894.75	7.85	-102.11	-5.25	-100.55
colind:	dh019	48	3.08	-118	42.11	980604.08	980894.77	8.42	-103.84	-4.44	-100.92
colind:	dh028	48	3.12	-118	42.16	980593.08	980894.83	11.90	-106.70	-2.11	-100.00
colind:	dh144	48	3.24	-118	42.39	980581.00	980895.01	13.34	-113.56	-0.99	-102.33
colind:	dh002	48	3.25	-118	42.23	980579.83	980895.02	14.06	-113.78	-1.55	-102.39
colind:	dh106	48	3.16	-118	42.16	980584.59	980894.89	15.40	-112.47	-0.27	-98.45
colind:	dh094	48	3.18	-118	42.21	980578.54	980894.91	16.60	-115.05	0.75	-98.83
colind:	dh142	48	3.23	-118	42.33	980573.72	980894.99	16.81	-116.89	0.92	-100.30
colind:	dh089	48	3.22	-118	42.33	980570.58	980894.98	18.15	-118.03	0.94	-100.09
colind:	dh035	48	3.27	-118	42.22	980590.58	980895.05	10.54	-108.92	-4.23	-103.70
colind:	dh099	48	3.24	-118	42.45	980591.04	980895.01	9.41	-109.36	-2.50	-103.55
colind:	dh016	48	3.22	-118	42.59	980605.69	980894.98	6.42	-102.99	-5.40	-103.02
colind:	dh022	48	3.27	-118	42.45	980601.83	980895.05	6.58	-104.28	-5.76	-104.52
colind:	dh026	48	3.29	-118	42.39	980601.78	980895.09	7.20	-104.23	-5.97	-104.06
colind:	dh039	48	3.28	-118	42.27	980599.47	980895.07	7.62	-105.18	-5.67	-104.29
colind:	dh007	48	3.24	-118	42.16	980596.75	980895.01	9.72	-106.48	-4.73	-102.57
colind:	dh004	48	3.19	-118	42.10	980593.65	980894.93	12.65	-108.64	-1.82	-98.90
colind:	dh024	48	3.15	-118	42.09	980603.30	980894.88	8.97	-104.19	-4.38	-100.65
colind:	dh006	48	3.24	-118	42.11	980606.72	980895.01	7.42	-102.34	-6.19	-102.15
colind:	dh003	48	3.28	-118	42.16	980605.25	980895.07	7.28	-102.29	-7.83	-103.89
colind:	dh056	48	3.29	-118	42.28	980605.94	980895.09	6.53	-102.19	-7.46	-104.16
colind:	dh060	48	3.14	-118	42.22	980593.74	980894.86	10.92	-108.58	-1.82	-100.56
colind:	dh053	48	3.16	-118	42.33	980594.05	980894.89	10.01	-108.45	-1.89	-101.42
colind:	dh047	48	3.20	-118	42.46	980594.03	980894.95	9.22	-108.37	-2.19	-102.43
colind:	dh042	48	3.22	-118	42.50	980592.22	980894.98	9.26	-108.83	-2.77	-103.43
colind:	dh005	48	3.32	-118	42.21	980611.30	980895.13	6.37	-99.22	-10.33	-104.20
colind:	dh015	48	3.32	-118	42.33	980615.72	980895.13	6.69	-97.66	-10.21	-102.19
colind:	dh023	48	3.32	-118	42.16	980617.68	980895.13	5.75	-96.01	-12.78	-104.04
colind:	dh009	48	3.31	-118	42.10	980628.38	980895.11	5.79	-90.82	-16.38	-102.36
colind:	dh151	48	3.15	-118	41.40	980630.95	980894.88	7.05	-85.23	-28.98	-108.06
colind:	dh147	48	3.27	-118	41.52	980625.68	980895.05	6.79	-85.46	-33.78	-113.37
colind:	dh091	48	3.16	-118	41.59	980601.13	980894.89	11.27	-94.47	-33.35	-117.53

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gravity stations  
Meter ID: W-147

Date: 10/30/80

STATION		L O C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S								
IDNTIFICATION	sta-id	LATITUDE	LONGITUDE	ELE	ST	OBSERVED	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE	COMPLETE-BOUGUER	SPEC		
prof		deg	min	deg	min	(in ft)						AIR	d1=2.67	d2=2.50	FIELDS	
colind:	dh014	48	3.39	-118	42.21	2522.2	wa	980617.50	980895.23	8.57	-86.03	-0.92	0.00	-40.59	-118.96	-113.97
colind:	dh036	48	3.39	-118	42.43	2506.6	wa	980622.89	980895.23	9.36	-85.49	-0.91	0.00	-36.67	-113.71	-108.81
colind:	dh041	48	3.49	-118	42.44	2273.6	wa	980641.97	980895.38	8.53	-77.55	-0.84	0.00	-39.64	-109.50	-105.06
colind:	dh046	48	3.54	-118	42.38	2163.2	wa	980650.71	980895.46	9.17	-73.78	-0.81	0.00	-41.35	-106.78	-102.61
colind:	dh048	48	3.56	-118	42.33	2182.6	wa	980651.11	980895.48	7.50	-74.44	-0.82	0.00	-39.16	-106.92	-102.61
colind:	dh052	48	3.56	-118	42.26	2021.5	wa	980663.74	980895.48	8.98	-68.95	-0.77	0.00	-41.67	-102.41	-98.54
colind:	dh021	48	3.35	-118	41.57	2192.4	wa	980658.76	980895.17	3.32	-74.78	-0.82	0.00	-30.28	-102.55	-97.95
colind:	dh027	48	3.35	-118	41.45	2149.0	wa	980663.30	980895.17	3.15	-73.30	-0.81	0.00	-29.81	-100.77	-96.25
colind:	dh049	48	3.31	-118	41.04	2052.8	wa	980668.76	980895.11	2.25	-70.01	-0.78	0.00	-33.34	-101.88	-97.52

Date: 08/18/81

STATION IDENTIFICATION	L U C A T I O N S		C R A V I T Y OBSERVED THEORETICAL	C O R R E C T I O N S		FREE AIR	A N D M A L I E S			
	LATITUDE			TERRAIN BOUGUER CURV	SPECIAL		COMPLETE-BOUGUER d1=2.67 d2=2.50	SPEC FIELDS		
	deg min	deg min								
base02 Colind:	48 8.01	-118 58.09	980902.16	1.16	-60.95	-0.69	0.00	-48.78	-109.27	-105.42
a092 Colind:	48 20.40	-118 52.47	980920.74	10.06	-157.27	-1.36	0.00	34.55	-114.02	-104.56
a106 Colind:	48 22.93	-118 50.34	980924.54	9.14	-147.82	-1.32	0.00	25.65	-114.35	-105.44
a093 Colind:	48 22.14	-118 50.60	980923.35	12.57	-163.07	-1.38	0.00	36.83	-115.05	-105.38
sm15 Colind:	48 23.98	-118 39.78	980926.11	2.58	-110.88	-1.10	0.00	-2.22	-111.63	-104.66
r001 Colind:	48 23.98	-118 39.85	980926.11	2.45	-111.65	-1.11	0.00	-0.58	-110.89	-103.87
r002 Colind:	48 23.92	-118 39.40	980926.02	2.46	-113.68	-1.12	0.00	2.39	-109.95	-102.80
r003 Colind:	48 23.93	-118 39.18	980926.04	2.50	-116.23	-1.14	0.00	5.82	-109.05	-101.74
r005 Colind:	48 23.83	-118 38.56	980925.88	3.01	-118.03	-1.15	0.00	8.22	-107.95	-100.56
r006 Colind:	48 23.82	-118 38.31	980925.88	2.80	-119.09	-1.16	0.00	9.30	-108.15	-100.67
r007 Colind:	48 23.75	-118 38.14	980925.77	2.84	-119.77	-1.16	0.00	9.18	-108.92	-101.40
r008 Colind:	48 23.71	-118 38.01	980925.70	3.16	-120.30	-1.17	0.00	7.81	-110.49	-102.96
r009 Colind:	48 23.68	-118 37.77	980925.66	4.62	-120.71	-1.17	0.00	6.13	-111.13	-103.66
r010 Colind:	48 23.78	-118 37.61	980925.81	4.23	-122.04	-1.18	0.00	7.70	-111.29	-103.71
r011 Colind:	48 23.88	-118 37.24	980925.96	4.54	-122.47	-1.18	0.00	8.19	-110.92	-103.34
r013 Colind:	48 24.07	-118 40.34	980926.25	3.78	-108.86	-1.09	0.00	-6.56	-112.73	-105.97
r014 Colind:	48 24.07	-118 40.59	980926.25	3.57	-107.85	-1.08	0.00	-9.07	-114.43	-107.73
r015 Colind:	48 24.10	-118 40.89	980926.25	3.02	-106.29	-1.07	0.00	-10.65	-114.99	-108.35



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Meter ID: G-113

Date: 08/18/81

STATION IDENTIFICATION proj sta-id	L U C A T I O N S		GRA V I T Y		TERRAIN BOUGUER CURV	C O R R E C T I O N S		FREE AIR	A N O M A L I E S						
	LATITUDE deg min	LONGITUDE deg min	THEORETICAL	EL E (in ft)		SPECIAL	COMPLETE-ROUGHER d1=2.67 d2=2.50 FIELDS								
Colind: ra16 ra17 ra18 ra19 ra20	48	23.99	-118	41.06	3031.2	wa	980626.00	980926.13	4.24	-103.39	-1.05	0.00	-15.14	-115.34	-108.96
	48	23.94	-118	41.22	2998.6	wa	980628.29	980926.05	4.01	-102.27	-1.04	0.00	-15.84	-115.15	-108.82
	48	23.92	-118	41.44	2956.3	wa	980631.11	980926.02	3.59	-100.83	-1.03	0.00	-16.96	-115.24	-108.98
	48	23.84	-118	41.59	2951.2	wa	980631.19	980925.90	3.18	-100.66	-1.03	0.00	-17.25	-115.75	-109.48
	48	23.80	-118	41.84	2909.2	wa	980632.68	980925.84	3.33	-99.22	-1.02	0.00	-19.64	-116.56	-110.39
Colind: ra21 ra22 ra23 ra24 ra25	48	23.83	-118	42.20	2887.6	wa	980633.67	980925.88	3.27	-98.49	-1.01	0.00	-20.73	-116.96	-110.83
	48	23.88	-118	42.46	2914.0	wa	980632.31	980925.96	2.80	-99.39	-1.02	0.00	-19.68	-117.29	-111.07
	48	23.79	-118	42.69	2845.3	wa	980636.40	980925.83	2.93	-97.05	-1.00	0.00	-21.91	-117.03	-110.98
	48	23.72	-118	42.94	2819.5	wa	980637.17	980925.72	2.96	-96.16	-1.00	0.00	-23.46	-117.66	-111.67
	48	23.76	-118	43.18	2688.4	wa	980644.15	980925.78	3.92	-91.69	-0.96	0.00	-28.87	-117.61	-111.96
Colind: sm05 ra27	48	23.79	-118	43.49	2587.5	wa	980648.29	980925.83	4.67	-88.25	-0.93	0.00	-34.26	-118.78	-113.39
	48	24.10	-116	43.83	1888.0	wa	980689.06	980926.29	8.08	-64.39	-0.73	0.00	-59.71	-116.75	-113.12
	48	24.53	-118	44.05	1883.2	wa	980688.70	980926.94	8.56	-64.23	-0.72	0.00	-61.16	-117.56	-113.97
Colind: ra28 ra29 ra30 ra31 ra32	48	25.09	-118	44.21	2125.6	wa	980678.01	980927.77	4.97	-72.50	-0.80	0.00	-49.91	-118.24	-113.89
	48	25.13	-118	44.44	2130.8	wa	980677.58	980927.84	5.99	-72.68	-0.80	0.00	-49.91	-117.40	-113.10
	48	25.12	-118	44.80	2211.6	wa	980672.94	980927.82	6.44	-75.43	-0.83	0.00	-46.94	-116.76	-112.31
	48	25.14	-118	45.07	2288.1	wa	980668.51	980927.85	5.98	-78.04	-0.85	0.00	-44.21	-117.12	-112.48
	48	25.16	-118	45.25	2440.0	wa	980660.24	980927.88	4.53	-83.22	-0.89	0.00	-38.22	-117.81	-112.74
Colind: ra33 ra34 ra35 ra36	48	25.19	-118	45.53	2542.7	wa	980655.08	980927.92	3.90	-86.72	-0.92	0.00	-33.78	-117.53	-112.19
	48	25.16	-118	45.84	2648.0	wa	980649.64	980927.88	3.60	-90.32	-0.95	0.00	-29.27	-116.94	-111.36
	48	25.30	-118	45.94	2731.3	wa	980646.20	980928.09	2.49	-93.16	-0.97	0.00	-25.09	-116.73	-110.90
	48	25.56	-118	45.73	2857.2	wa	980639.62	980928.48	3.47	-97.45	-1.01	0.00	-20.23	-115.22	-109.17
	48	25.32	-118	46.14	2935.4	wa	980636.41	980928.12	1.53	-100.12	-1.03	0.00	-15.72	-115.34	-109.00
Colind: ra38 ra39 ra40	48	25.36	-118	46.54	2913.2	wa	980637.89	980928.18	1.24	-99.36	-1.02	0.00	-16.39	-115.54	-109.22
	48	25.47	-118	46.10	2992.6	wa	980633.62	980928.34	1.88	-102.07	-1.04	0.00	-13.37	-114.60	-108.15
	48	25.57	-118	47.09	3039.1	wa	980631.34	980928.49	0.98	-103.66	-1.05	0.00	-11.42	-115.15	-108.54
	48	25.68	-118	47.24	3142.6	wa	980625.29	980928.66	1.07	-107.18	-1.08	0.00	-7.91	-115.11	-108.28
Colind: ra42 ra43	48	25.83	-118	47.28	3269.2	wa	980617.55	980928.88	1.43	-111.50	-1.11	0.00	-3.98	-115.16	-108.08
	48	25.94	-118	47.29	3413.0	wa	980608.57	980929.05	2.83	-116.41	-1.14	0.00	0.40	-114.32	-107.02
	48	26.26	-118	47.00	3745.5	wa	980585.02	980929.53	7.05	-127.75	-1.21	0.00	7.62	-114.29	-106.53
Colind: ra45 ra46	48	26.44	-118	47.47	3723.6	wa	980586.55	980929.80	5.19	-127.00	-1.21	0.00	6.82	-116.20	-108.37
	48	26.47	-118	47.70	3533.4	wa	980600.07	980929.84	2.92	-120.51	-1.17	0.00	2.42	-116.34	-108.78



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STATION		L U C A T I O N S		G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S							
IDEN	sta-id	lat	long	ele	th	terr	curv	free	complete	spec					
Colind:	ic13	48	9.69	-118 36.12	3486.3	980592.77	980904.69	2.80	-118.91	-1.16	0.00	0.00	15.85	-101.41	-93.94
Colind:	ic14	48	9.57	-118 36.12	3595.9	980586.67	980904.51	2.81	-122.65	-1.18	0.00	0.00	20.23	-100.78	-93.08
Colind:	ic15	48	9.42	-118 36.23	3737.2	980577.00	980904.28	3.41	-127.47	-1.21	0.00	0.00	24.07	-101.20	-93.22
Colind:	ic16	48	9.47	-118 36.40	3732.2	980577.50	980904.35	3.15	-127.29	-1.21	0.00	0.00	24.02	-101.33	-93.35
Colind:	ic17	48	9.27	-118 36.71	3587.2	980586.74	980904.05	2.70	-122.35	-1.18	0.00	0.00	19.94	-100.89	-93.20
Colind:	ic18	48	9.17	-118 36.57	3494.9	980592.37	980903.91	3.17	-119.20	-1.16	0.00	0.00	17.04	-100.15	-92.69
Colind:	ic19	48	9.02	-118 36.92	3398.0	980599.22	980903.68	2.16	-115.90	-1.14	0.00	0.00	15.01	-99.87	-92.55
Colind:	ic20	48	8.79	-118 36.93	3336.9	980601.38	980903.34	2.07	-113.81	-1.12	0.00	0.00	11.77	-101.09	-93.91
Colind:	ic21	48	8.52	-118 37.06	3215.7	980607.95	980902.93	2.07	-109.68	-1.10	0.00	0.00	7.36	-101.35	-94.43
Colind:	ic22	48	8.59	-118 37.42	2955.4	980623.94	980903.03	1.96	-100.80	-1.03	0.00	0.00	-1.23	-101.10	-94.75
Colind:	ic23	48	8.53	-118 37.58	2777.7	980633.15	980902.95	3.48	-94.74	-0.99	0.00	0.00	-8.64	-100.88	-95.01
Colind:	ic24	48	8.33	-118 37.54	2649.1	980639.37	980902.65	4.23	-90.35	-0.95	0.00	0.00	-14.21	-101.28	-95.74
Colind:	ic25	48	8.17	-118 37.62	2494.8	980646.60	980902.41	4.96	-85.09	-0.91	0.00	0.00	-21.24	-102.27	-97.12
Colind:	ic26	48	8.07	-118 37.81	2372.6	980652.66	980902.26	5.46	-80.92	-0.87	0.00	0.00	-26.51	-102.85	-97.99
Colind:	ic27	48	7.94	-118 37.98	2274.4	980657.51	980902.06	5.39	-77.57	-0.85	0.00	0.00	-30.70	-103.73	-99.08
Colind:	ic28	48	7.89	-118 38.17	2215.0	980659.82	980901.98	6.45	-75.55	-0.83	0.00	0.00	-33.90	-103.83	-99.37
Colind:	ic29	48	7.91	-118 38.43	2154.3	980662.61	980902.02	8.25	-73.48	-0.81	0.00	0.00	-36.85	-102.88	-98.68
Colind:	ic30	48	7.97	-118 38.76	2080.3	980666.17	980902.10	8.35	-70.95	-0.79	0.00	0.00	-40.33	-103.72	-99.69
Colind:	ic31	48	8.04	-118 39.06	2019.5	980669.91	980902.21	7.91	-68.88	-0.77	0.00	0.00	-42.41	-104.15	-100.22
Colind:	ic32	48	8.08	-118 39.26	1941.6	980673.96	980902.27	8.71	-66.22	-0.74	0.00	0.00	-45.75	-104.00	-100.29
Colind:	ic33	48	8.11	-118 39.59	1874.2	980677.85	980902.31	7.64	-63.92	-0.72	0.00	0.00	-48.24	-105.24	-101.61
Colind:	ic34	48	8.21	-118 39.88	1808.2	980681.48	980902.46	7.50	-61.67	-0.70	0.00	0.00	-50.96	-105.83	-102.34
Colind:	ic35	48	8.31	-118 40.20	1753.5	980685.58	980902.62	6.41	-59.81	-0.68	0.00	0.00	-52.16	-106.24	-102.79
Colind:	ic36	48	8.37	-118 40.48	1689.7	980689.08	980902.70	7.17	-57.63	-0.66	0.00	0.00	-54.75	-105.87	-102.61
Colind:	ic37	48	8.25	-118 40.68	1627.3	980692.83	980902.52	7.93	-55.50	-0.64	0.00	0.00	-56.69	-104.90	-101.83
Colind:	ic38	48	8.18	-118 40.97	1578.6	980696.47	980902.42	6.98	-53.84	-0.62	0.00	0.00	-57.52	-105.00	-101.98
Colind:	ic39	48	8.32	-118 41.29	1548.0	980698.95	980902.63	5.46	-52.80	-0.61	0.00	0.00	-58.12	-106.07	-103.02
Colind:	ic41	48	8.72	-118 41.39	1526.1	980699.85	980903.23	8.21	-52.05	-0.60	0.00	0.00	-59.88	-104.33	-101.50
Colind:	ic40	48	8.45	-118 41.35	1533.2	980699.18	980902.83	6.02	-52.29	-0.61	0.00	0.00	-59.48	-106.36	-103.38
Colind:	ic42	48	8.79	-118 41.48	1560.1	980698.32	980903.34	6.17	-53.21	-0.62	0.00	0.00	-58.32	-105.98	-102.94
Colind:	ic43	48	8.57	-118 41.39	1569.0	980697.68	980903.01	6.65	-53.51	-0.62	0.00	0.00	-57.80	-105.28	-102.26
Colind:	ic44	48	8.15	-118 41.52	1599.8	980695.14	980902.38	3.99	-54.56	-0.63	0.00	0.00	-56.81	-108.01	-104.75
Colind:	ic45	48	7.82	-118 41.48	1600.0	980696.26	980901.88	3.71	-54.57	-0.63	0.00	0.00	-55.18	-106.67	-103.39
Colind:	ic46	48	7.52	-118 41.46	1561.5	980698.17	980901.43	3.80	-53.26	-0.62	0.00	0.00	-56.43	-106.51	-103.32

Date: 08/18/81

ROUGHNER GRAVITY DATA

STATION IDENTIFICATION		LATITUDE		LONGITUDE		ELEVATION		GRAVITY		CORRECTIONS		ANOMALIES				
proj	sta-id	deg	min	deg	min	ft	ST	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE AIR	COMPLETE-BOUGUER	SPEC FIELDS	
Colind:	ic47	48	7.54	-118	41.75	1643.9	wa	980693.54	980901.46	3.12	-56.07	-0.64	0.00	-53.35	-106.94	-103.53
Colind:	ic48	48	7.56	-118	42.06	1699.9	wa	980690.95	980901.49	3.34	-57.98	-0.66	0.00	-50.70	-106.00	-102.48
Colind:	ic49	48	7.64	-118	42.29	1748.6	wa	980689.24	980901.61	3.25	-59.64	-0.68	0.00	-47.95	-105.02	-101.39
Colind:	ic50	48	7.73	-118	42.50	1812.6	wa	980685.32	980901.74	3.30	-61.82	-0.70	0.00	-45.99	-105.21	-101.44
Colind:	ic51	48	7.78	-118	42.82	1830.0	wa	980684.46	980901.82	4.16	-62.42	-0.71	0.00	-45.29	-104.25	-100.50
Colind:	ic52	48	7.74	-118	43.07	1874.9	wa	980681.88	980901.76	4.40	-63.95	-0.72	0.00	-43.59	-103.86	-100.02
Colind:	ic53	48	7.81	-118	43.41	1925.4	wa	980678.70	980901.87	4.94	-65.67	-0.74	0.00	-42.12	-103.59	-99.68
Colind:	ic54	48	7.87	-118	43.70	1978.7	wa	980675.08	980901.95	5.74	-67.49	-0.75	0.00	-40.83	-103.33	-99.35
Colind:	ic55	48	7.93	-118	43.93	2081.8	wa	980669.27	980902.05	6.60	-71.00	-0.79	0.00	-37.03	-102.22	-98.07
Colind:	ic56	48	7.79	-118	44.04	2162.8	wa	980664.47	980901.84	5.97	-73.77	-0.81	0.00	-34.01	-102.62	-98.25
Colind:	ic57	48	7.84	-118	44.23	2286.5	wa	980658.53	980901.91	5.57	-77.99	-0.85	0.00	-28.39	-101.66	-96.99
Colind:	ic58	48	7.72	-118	44.43	2394.9	wa	980651.87	980901.73	6.59	-81.68	-0.88	0.00	-24.69	-100.66	-95.82
Colind:	ic59	48	7.71	-118	44.67	2538.7	wa	980643.96	980901.71	4.62	-86.59	-0.92	0.00	-19.06	-101.95	-96.67
Colind:	ic60	48	7.66	-118	44.92	2622.7	wa	980639.62	980901.64	3.86	-89.45	-0.94	0.00	-15.43	-101.97	-96.46
Colind:	ic61	48	8.52	-118	47.35	4111.0	wa	980543.46	980902.93	8.44	-140.21	-1.28	0.00	27.01	-106.04	-97.57
Colind:	ic62	48	8.48	-118	47.15	3844.9	wa	980562.25	980902.87	6.82	-131.14	-1.23	0.00	20.85	-104.70	-96.70
Colind:	ic63	48	8.31	-118	46.87	3467.7	wa	980588.57	980902.62	2.82	-118.27	-1.15	0.00	11.97	-104.63	-97.21
Colind:	ic64	48	8.20	-118	46.92	3384.4	wa	980593.85	980902.45	2.49	-115.43	-1.13	0.00	9.59	-104.49	-97.22
Colind:	ic65	48	8.26	-118	46.70	3409.6	wa	980593.08	980902.54	2.42	-116.29	-1.14	0.00	11.10	-103.92	-96.59
Colind:	ic66	48	8.21	-118	46.48	3330.9	wa	980598.31	980902.46	2.03	-113.61	-1.12	0.00	9.01	-103.69	-96.52
Colind:	ic67	48	8.16	-118	46.30	3270.3	wa	980602.54	980902.39	1.76	-111.54	-1.11	0.00	7.61	-103.28	-96.22
Colind:	ic68	48	8.10	-118	46.10	3227.4	wa	980605.03	980902.30	1.64	-110.08	-1.10	0.00	6.16	-103.37	-96.40
Colind:	ic69	48	8.03	-118	45.90	3101.1	wa	980612.46	980902.20	1.48	-105.77	-1.07	0.00	1.83	-103.53	-96.82
Colind:	ic70	48	7.91	-118	45.60	2961.4	wa	980620.11	980902.02	1.70	-101.00	-1.03	0.00	-3.48	-103.82	-97.43
Colind:	ic71	48	7.90	-118	45.35	2900.1	wa	980623.15	980902.00	1.78	-98.91	-1.02	0.00	-6.19	-104.34	-98.09
Colind:	ic72	48	7.82	-118	45.20	2809.0	wa	980627.57	980901.88	2.06	-95.81	-0.99	0.00	-10.21	-104.95	-98.92
Colind:	ic73	48	7.69	-118	45.10	2742.8	wa	980631.54	980901.69	2.58	-93.55	-0.98	0.00	-12.26	-104.21	-98.36
Colind:	ic74	48	7.56	-118	45.02	2665.2	wa	980635.87	980901.49	3.57	-90.90	-0.96	0.00	-15.04	-103.33	-97.71
Colind:	ic75	48	7.57	-118	44.99	2675.2	wa	980637.05	980901.51	3.39	-91.24	-0.96	0.00	-12.93	-101.74	-96.09
Colind:	ic76	48	8.54	-118	47.55	4348.0	wa	980525.78	980902.96	10.88	-148.30	-1.32	0.00	31.58	-107.16	-98.33
Colind:	ic77	48	8.77	-118	48.60	3750.0	wa	980565.51	980903.30	5.77	-127.90	-1.21	0.00	14.75	-108.59	-100.74
Colind:	ic78	48	8.74	-118	49.35	3341.0	wa	980592.54	980903.26	2.92	-113.95	-1.12	0.00	3.39	-108.77	-101.63
Colind:	ic79	48	8.79	-118	50.42	3144.0	wa	980603.69	980903.34	2.96	-107.23	-1.08	0.00	-4.06	-109.41	-102.70
Colind:	ic80	48	8.15	-118	57.12	1823.3	wa	980683.43	980902.38	1.16	-62.19	-0.70	0.00	-47.51	-109.24	-105.31

BOUGUER GRAVITY DATA

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Date: 0A/18/81

STATION IDENTIFICATION proj	sta-id	L U C		A T I LONGITUDE deg min	I ELE (in ft)	O N S ST	G R A V I T Y		C O R R E C T I O N S		A N O M A L I E S				
		LATITUDE deg min	deg min				OBSERVED	THEORETICAL	TERRAIN BOUGUER CURV	SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67 d2=2.50	SPEC FIELDS		
Colind:	ic81	48	8.35	-118 56.68	1841.8	wa	980683.19	980902.67	1.31	-62.82	-0.71	0.00	-46.31	-108.53	-104.57
Colind:	ic82	48	8.50	-118 56.25	1862.7	wa	980679.61	980902.90	1.26	-63.53	-0.72	0.00	-48.15	-111.14	-107.13
Colind:	ic83	48	8.41	-118 55.82	1915.8	wa	980675.98	980902.77	1.07	-65.34	-0.73	0.00	-46.64	-111.65	-107.51
Colind:	ic84	48	8.16	-118 55.29	1958.7	wa	980672.55	980902.39	0.85	-66.81	-0.75	0.00	-45.68	-112.38	-108.13
Colind:	ic85	48	8.15	-118 54.73	2076.8	wa	980665.11	980902.38	0.78	-70.83	-0.79	0.00	-41.99	-112.83	-108.32
Colind:	ic86	48	8.14	-118 54.09	2083.9	wa	980666.23	980902.36	1.70	-71.08	-0.79	0.00	-40.19	-110.35	-105.88
Colind:	ic87	48	8.51	-118 53.64	2173.4	wa	980660.41	980902.91	1.41	-74.13	-0.81	0.00	-38.15	-111.68	-107.00
Colind:	ic88	48	8.62	-118 53.25	2214.3	wa	980658.62	980903.08	1.29	-75.52	-0.83	0.00	-36.26	-111.33	-106.55
Colind:	ic89	48	8.54	-118 52.62	2267.6	wa	980656.65	980902.96	1.88	-77.34	-0.84	0.00	-33.10	-109.41	-104.55
Colind:	ic90	48	8.56	-118 52.01	2364.4	wa	980650.23	980902.99	1.41	-80.64	-0.87	0.00	-30.45	-110.55	-105.45
Colind:	ic91	48	8.75	-118 51.62	2466.4	wa	980644.77	980903.27	1.81	-84.12	-0.90	0.00	-26.60	-109.82	-104.52
Colind:	ic92	48	8.90	-118 51.08	2812.9	wa	980624.89	980903.50	0.84	-95.94	-1.00	0.00	-14.14	-110.24	-104.12
Colind:	ic93	48	8.05	-118 50.48	1782.4	wa	980685.22	980902.23	0.82	-60.79	-0.69	0.00	-49.41	-110.08	-106.21
Colind:	ic94	48	8.48	-118 59.06	1772.3	wa	980683.78	980902.87	0.69	-60.45	-0.69	0.00	-52.44	-112.89	-109.04
Colind:	ic95	48	8.46	-119 0.08	1779.9	wa	980687.49	980902.84	0.96	-60.71	-0.69	0.00	-47.99	-108.43	-104.58
Colind:	ic96	48	8.76	-119 0.58	1981.2	wa	980679.75	980903.29	1.45	-67.57	-0.76	0.00	-37.26	-104.13	-99.88
Colind:	ic97	48	8.57	-119 0.89	1829.2	wa	980688.59	980903.01	1.20	-62.39	-0.71	0.00	-42.42	-104.31	-100.37
Colind:	ic98	48	8.60	-119 1.74	1845.4	wa	980686.70	980903.05	2.24	-62.94	-0.71	0.00	-42.83	-104.24	-100.33