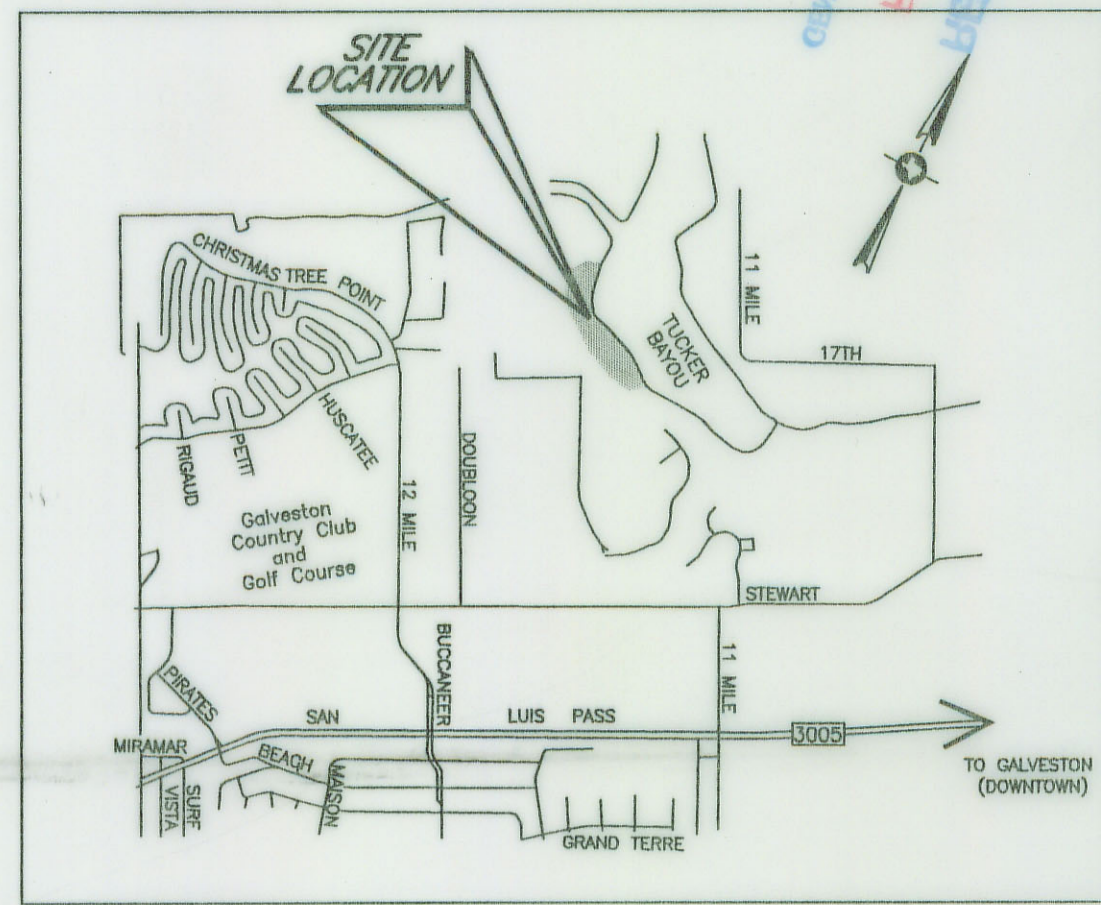


SCALE: 1" = 100 FEET
SCALE: 1" = 36 VARAS



VICINITY MAP
N.T.S.

PROJECT SITE IS South 56° West,
10.5 MILES FROM GALVESTON,
TEXAS.

TRIMBLE & LINDSEY SURVEY OF GALVESTON ISLAND

Survey of the Mean High Water line of part of the Easterly shoreline of Lot 499, Section 2, Lot 5, Section 3 and the intervening 50 foot roadway of the Trimble and Lindsey Survey of Galveston Island, Galveston County, Texas, and said line being more particularly described as follows;

COMMENCING at Monument HGCS D 62
(Y=13,645,727.05, X= 3,264,124.31 feet);
Thence N 00°52'51" W, a distance of 4707.57 feet
(1694.7 V) to the said Mean High Water line and the
POINT OF BEGINNING (Y=13,650,433.44, X=
3,264,051.95 feet);
THENCE along the said Mean High Water line the
following courses and distances:

LINE	SURVEY FT	VARAS	BEARING
L1	30.52'	11.0	N 85°46'47" W
L2	92.41'	33.3	N 75°18'43" W
L3	11.33'	4.1	N 32°03'44" W
L4	8.65'	3.1	N 65°18'10" W
L5	30.10'	10.8	N 47°55'22" W
L6	16.96'	6.1	N 65°56'08" W
L7	11.38'	4.1	S 83°07'04" W
L8	22.80'	8.2	N 72°55'51" W
L9	63.51'	22.9	N 46°30'04" W
L10	34.14'	12.3	N 11°31'03" W
L11	12.27'	4.4	N 32°36'58" W
L12	14.06'	5.1	N 19°45'22" W
L13	20.47'	7.4	N 16°48'09" W
L14	35.03'	12.6	N 02°00'07" W
L15	4.08'	1.5	N 68°59'39" E
L16	6.64'	2.4	N 12°40'37" E
L17	11.59'	4.2	S 76°10'24" W
L18	18.13'	6.5	N 68°40'19" W
L19	28.01'	10.1	N 47°50'41" W
L20	22.75'	8.2	N 37°25'04" W
L21	22.55'	8.1	N 47°52'41" W
L22	21.38'	7.7	N 49°23'50" W
L23	33.57'	12.1	N 23°43'23" W
L24	47.26'	17.0	N 31°28'31" W
L25	35.02'	12.6	N 14°11'19" W
L26	7.87'	2.8	N 41°51'34" W
L27	19.29'	6.9	N 20°58'58" W
L28	35.79'	12.9	N 08°15'47" W
L29	19.46'	7.0	N 15°09'28" W
L30	17.50'	6.3	N 02°17'19" W
L31	20.22'	7.3	N 23°01'45" W
L32	20.95'	7.5	N 61°12'13" W
L33	20.53'	7.4	N 38°04'55" W
L34	30.92'	11.1	N 14°34'01" W
L35	23.85'	8.6	N 29°45'14" W
L36	15.82'	5.7	N 09°49'42" W
L37	8.34'	3.0	N 46°16'24" E
L38	13.18'	4.7	N 07°54'18" E
L39	8.60'	3.1	N 09°19'43" W
L40	16.00'	5.8	N 17°43'51" W
L41	17.05'	6.1	N 28°52'42" W
L42	9.28'	3.3	N 29°29'41" E
L43	9.39'	3.4	N 43°35'54" W
L44	15.56'	5.6	N 18°30'12" W
L45	9.24'	3.3	N 00°48'40" W
L46	7.34'	2.6	N 29°21'28" E
L47	6.21'	2.2	N 17°08'02" W
L48	14.36'	5.2	N 36°30'46" W
L49	27.20'	9.8	N 08°05'51" W
L50	15.87'	5.6	N 03°26'57" W
L51	8.65'	3.1	N 19°56'28" E
L52	27.03'	9.7	N 07°25'12" E

Levi Jones and Edward Hall
November 28, 1840
Book 104, Page 345 Galveston County
Deed Records (GCDR)

OLY GALVESTON
012-56-0221 (GCDR)

OLY GALVESTON
CALLED 221/4 ACRES



POB
Y = 13,650,433.44
X = 3,264,051.95

POC
HGCS D 62
Y = 13,645,727.05
X = 3,264,124.31

Lines Shown were surveyed on the
ground October 30, 2002.

Field Personnel were:
A. Munroe Kelsay
Samuel Jenkins

Tidal Datum at GALVESTON PIER 21, GALVESTON
CHANNEL, Texas-National Ocean Service Station ID:
8771450 based on:

LENGTH OF SERIES: 5 YEARS
TIME PERIOD: January 1990- December 1994
TIDAL EPOCH: 1960-1978
CONTROL TIDE STATION: N/A

Benchmark 1450-A 1989 1.796m above MLLW or 1.396m above MHW.

NOTE: HGCS D 62 NGS PID-AW5708
Scale Factor: 0.99986567
Convergence: +1 59 24.8

All distances are SURFACE DISTANCES IN FEET.

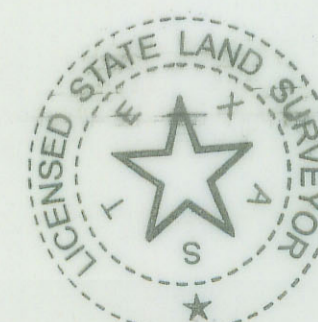
October 30, 2002

I hereby certify that the above described property was surveyed in
the field according to law by me on the above referenced dates,
and that the above map together with dimensions and coordinates
is true and correct as of the above date.

COASTAL SURVEYING OF TEXAS

Sidney Bouse

Sidney Bouse
Licensed State Land Surveyor
Registered Professional Land Surveyor No. 5287
email: sid@surveygalveston.com



THIS MAP RECORDED IN BOOK I, PAGE 221, COUNTY SURVEYORS
RECORDS, GALVESTON COUNTY, TEXAS ON JANUARY 21, 2003.

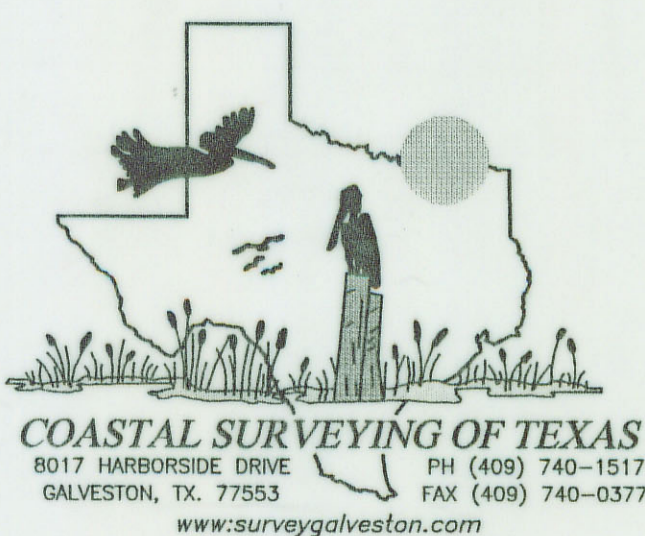
NOTES:

1.) ALL COORDINATES REFER TO THE STATE PLANE
COORDINATE SYSTEM, SOUTH CENTRAL ZONE, AS DEFINED
BY ARTICLE 21.071 OF THE NATURAL RESOURCES CODE OF
THE STATE OF TEXAS, 1983 DATUM (1993 ADJUSTMENT).
SCALE FACTOR = 0.99986567.

2.) PIRATES COVE, SECTION 6 AS SHOWN HEREON IS BASED
ON GALVESTON CAD DRAWINGS, AND IS SHOWN HEREON AS
GRAPHICAL REPRESENTATION ONLY.

NOTICE:

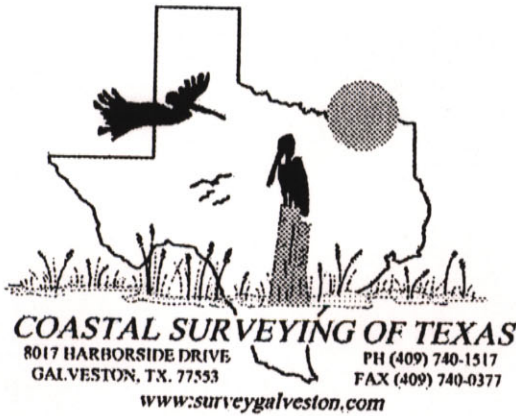
This survey was performed in accordance with Section
33.136, Natural Resources Code, for the purpose of
evidencing the location of the shoreline in the area
depicted in this survey as that shoreline existed before
commencement of erosion response activity, as
required by Chapter 33, Natural Resources Code. The
line depicted on this survey fixes the shoreline for the
purpose of locating a shoreline boundary, subject to
movement landward as provided by Section 33.136,
Natural Resources Code.



TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
County GALVESTON, Sk. No. 19
File Date 5-2-2003 by D. J. H.
See report in 1097

Mean High Water Survey of the
Easterly shoreline of Lot 499,
Section 2, Lot 5, Section 3 and the
intervening 50 foot roadway of the
Trimble and Lindsey Survey of
Galveston Island, Galveston County,
Texas

GALVESTON Co. TNRC Art. 33.136 Sketch 19



"SERVING GALVESTON COUNTY OVER 50 YEARS"

TEXAS GENERAL LAND OFFICE
Art. 33.136, Natural Resources Code
County Galveston REPORT # No. 12 *Sketch 19*
File Date 5-2-2003 by D.J.H.
See Sketch 19, flattened.

February 13, 2003

Ben Thomson
Director of Surveying
General Land Office
1700 N. Congress Avenue
Austin, Texas 78701

Mr. Thomson,

Enclosed are two separate 33.136 surveys with reports. I would prefer to bring them to you in person, but I have been unable to get free. Please review the surveys and if you have any questions, call me, or I can be in Austin the 26th or 28th to bring any additional data you require.

Thank You,

Sidney Bouse
Licensed State Land Surveyor
P.O. Box 877
Galveston, Texas 77553
409-740-1517

Sketch 19
Galveston Co. NRC Art. 33.136 ~~Report 12~~, pg. 1 of 15

counter 78586

Mean High Water Survey of Part of Lot 499, Section 2, Lot 5, Section 3 and the intervening 50 foot roadway of the Trimble and Lindsey Survey of Galveston Island, Galveston County, Texas.

I surveyed the Mean High Water line on part of the Easterly shoreline of Lot 499, Section 2, Lot 5, Section 3 and the intervening 50 foot roadway of the of the Trimble and Lindsey Survey of Galveston Island, Galveston County, Texas as authorized by Robbie Schultz of Oly Galveston in my official capacity as Licensed State Land Surveyor for the State of Texas.

HISTORY

Laws of First Congress of the Republic of Texas authorized and required the Island of Galveston, except the previously granted M. B. Menard Grant, to be surveyed into Lots of between 10 and 40 acres. The Act to dispose of Galveston and other islands of the Republic was approved on June 12, 1837. This remainder of the island of Galveston was surveyed and divided into lots as shown on the survey by R. C. Trimble and Wm. Lindsey dated 1837.

According to this act, the sale was to be held in "November next" in the City of Houston. The Republic of Texas sold the majority of the Lots in the Trimble and Lindsey Survey of Galveston Island to Levi Jones and Edward Hall. Normally, an original grant is considered effective the date the surveyor was on the ground, and at that point the rights of the sovereign are officially severed. The Republic of Texas, however, authorized and required a survey, or subdivision, of this part of Galveston Island without a particular grantee as party to the survey.

An Act to adapt the Common Law of England was approved on January 20, 1840. The Littoral State boundary of land granted prior to this date must be surveyed according to the Spanish and Mexican Civil Laws and is determined to be along the Mean Higher High Water Line. Lands granted after this date are to be located along the Mean High Water Line as required under current Common Law. Mirabeau B. Lamar, President of the Republic signed the grant to Hall and Jones on November 28, 1840 in Austin, Texas. The effective date of the grant is November 28, 1840.

The line surveyed is the line of Mean high Water.

CONSTRUCTION

I had previously performed a GPS Elevation tie from Pier 21 Reference Benchmark 1450-A to NGS Monument K 1186 as outlined and described below. The procedures and results were discussed and approved by Roy Molina in February of 2001. The resulting elevation tie from monument 1450-A to K- 1186 was utilized for this survey.

PROCEDURE

The following tidal information is based on the 5 Year Epoch (1990-1994).

GPS survey performed January 3, 4 and 5, 2001 with the following equipment and references.

STATION	TRIMBLE ANTENNA	OCCUPATION
HGCS D 60	micro-centered L1/L2 W/ Ground Plane	1/03 7Am-12noon
		1/04 1Pm- 5Pm
		1/05 1-2Pm, 4-5Pm
HGCS D 62	micro-centered L1/L2 W/ Ground Plane	1/03 7Am-12noon
		1/04 1Pm- 5Pm
		1/05 1-2Pm, 4-5Pm
HGCS D 63 1450-A	compact L1/L2 W/ Ground Plane micro-centered L1/L2 W/ Ground Plane	1/03 7Am-12noon
		1/04 1Pm- 5Pm
		1/05 1-2Pm, 4-5Pm
K-1186	compact L1/L2 W/ Ground Plane	1/03 7Am-12noon
		1/04 1Pm- 5Pm

All Stations Utilizing fixed height (2 Meter) Poles.

Downloaded Three(3) extensometer sites for processing: Lake Houston (LKHU), Addicks (ADKS) and Northeast 2250 (NETP) together with CORS Site GAL 1 all from NGS website.

Data Processed using Trimble Geomatics Office Software Version 1.01 Build 73 as registered to Hall, Johnson & Bouse Surveyors.

Data Processed by Mike McGuinness of Global Positioning Solutions, 4422 FM 1960 West, Suite 220, Houston, Texas 77068.

Network Adjustment Reports Included.

Results

1450-A 1989 has a Published height of (1.396M) 4.58 feet above Mean High Water as referenced to Pier 21 Tide Gauge as per NOAA NOS Tidal Benchmark VM# 853.

K 1186 has a published height of 3.44 feet NAVD 88

page 3

Two (2) Minimally constrained projects were created to act as independent checks.

Project 2529-5 found the elevation of K 1186 to be 3.103' (0.337 feet below published elevation based on GAL 1).

Project 2529-5A found the elevation of K 1186 to be 3.132 (0.308 feet below published elevation based on HGCS D 60).

The apparent difference in elevations is due to be the result of subsidence at K 1186 and a rise in the ground at both GAL 1 and HGCS D 60 based on the said extensometer sites and confirmed by the Harris Galveston Coastal Subsidence District.

As a result, Fully Constrained Adjustments to the extensometer sites were not possible due to the extreme difference between published heights for all of the Galveston County monuments and their found heights on 01/03-05/2001.

The critical numbers we are interested in are the differences in elevation between 1450-A 1989 and K 1186

Adjusted Grid Coordinates	Project 2529-5	1450-A	5.499'
		<u>K 1186</u>	<u>3.103'</u>
		Elevation difference	2.396'
	Project 2529-5a	1450-A	5.529'
		<u>K 1186</u>	<u>3.132'</u>
		Elevation difference	2.397'

TIDAL DATUM

GALVESTON PIER 21, GALVESTON CHANNEL, Texas- National Ocean Service Station ID: 8771450:
LENGTH OF SERIES: 5Years
TIME PERIOD: January 1990-December 1994
TIDAL EPOCH: 1960-1978
CONTROL TIDE STATION: N/A

BENCHMARK: 1450-A 1989 1.797m above MLLW or 1.396m (4.580') above MHW

Published Mean High Water elevation of 1450-A 1989	4.580'
Found Difference in Elevation 1450-A to K 1186	2.396'
<u>Mean High Water Elevation of K 1186</u>	<u>2.184'</u>

The above elevations were transferred to the project site on October 30, 2002 and the resulting MHW shoreline positions were secured by RTK GPS survey the same day.

I hereby certify that the attached survey was surveyed according to law in the field on above date, and the survey is recorded in Volume I, Page 221 County Surveyors Records, Galveston County, Texas.

Sidney Bouse
Registered Professional land Surveyor No. 5287 LSLS
P.O. Box 877
Galveston, Texas 77553
(409) 740- 1517
sid@surveygalveston.com

GLO HARBOR REPORT.wps

Network Adjustment Report

Project 2529-5

Project name 2529-5
Coordinate Units US survey feet
Distance Units US survey feet
Height Units US survey feet
Date printed 1/9/01 10:51:01 AM
Coordinate System US State Plane 1983 **Zone** Texas South Central 4204
Datum NAD 1983 (Conus) **Geoid model** GEOID99 (Conus)

Contents

- ✚ Statistical Summary
 - ✚ Number of Iterations
 - ✚ Global Statistics
 - ✚ Statistics for Observation Types
 - ✚ Weighting Strategies
 - ✚ Set-up Errors
 - ✚ Individual GPS Observation Statistics
- ✚ Adjusted Coordinates
 - ✚ Grid Coordinates
 - ✚ Geodetic Coordinates
 - ✚ Coordinate Deltas
- ✚ Adjusted Observations
- ✚ Histograms of Standardized Residuals
- ✚ Point Error Ellipses
- ✚ Covariant Terms

[Back to top](#)

Statistical Summary

Number of Iterations

Successful Adjustment in 1 iteration(s)

file://C:\Trimble Geomatics Office\Projects\2529-5\Reports\NetAdjust\AdjustReport.html

1/9/01

Global Statistics

Network Reference Factor : 1.00
 Chi Square Test ($\alpha=95\%$) : PASS
 Degrees of Freedom : 51.00

GPS Observation Statistics

Reference Factor : 1.00
 Redundancy Number (r) : 51.00

Geoid Model Statistics

Reference Factor : 1.00
 Redundancy Number (r) : 0.00

Weighting Strategies

GPS Observations

User-Defined Scalar Set Applied to All Observations
 Scalar : 2.34

Geoid Observations

User-Defined Scalar Set Applied to All Observations
 Scalar : 0.00

Set-up Errors

Error in Height of Antenna : 0.007sft
 Centering Error : 0.007sft

Individual GPS Observation Statistics

Observation ID	Reference Factor	Redundancy Number
B4	1.42	2.36
B5	0.92	2.40
B6	1.02	2.30
B10	0.66	2.00
B15	1.07	2.12
B17	1.05	1.95
B25	1.31	1.82
B28	0.77	2.29
B29	1.06	2.37
B32	0.46	1.70
B33	0.53	1.72

B34	1.34	1.63
B48	1.49	2.44
B65	1.16	1.70
B66	1.58	1.90
B67	0.45	1.78
B68	0.87	1.97
B69	0.52	2.12
B70	1.44	1.36
B72	1.08	2.17
B73	0.77	2.45
B77	0.23	2.32
B85	0.74	2.37
B88	1.04	1.97
B89	0.61	1.78

[Back to top](#)

Adjusted Coordinates

Adjustment performed in WGS-84

Number of Points : 9
 Number of Constrained Points : 1
 Horizontal and Elevation Only : 1

Adjusted Grid Coordinates

Errors are reported using 1.96σ.

Point Name	Northing	N error	Easting	E error	Elevation	e error	Fix
HGCSD 60	13700349.945sft	0.000sft	3258210.643sft	0.000sft	5.233sft	0.000sft	N E e
1450-A	13684032.392sft	0.010sft	3309407.358sft	0.010sft	5.527sft	0.025sft	
HGCSD 62	13645727.078sft	0.014sft	3264124.359sft	0.014sft	6.207sft	0.041sft	
HGCSD 63	13693607.818sft	0.015sft	3321588.026sft	0.016sft	2.362sft	0.027sft	
K 1186	13647143.295sft	0.015sft	3263937.314sft	0.015sft	3.134sft	0.042sft	
NETP	13853429.614sft	0.014sft	3131034.294sft	0.014sft	59.662sft	0.036sft	
ADKS	13850941.236sft	0.017sft	3051083.201sft	0.017sft	103.662sft	0.039sft	
GAL1	13692235.182sft	0.013sft	3326526.550sft	0.013sft	34.377sft	0.028sft	

LKHU	13899802.597sft	0.016sft	3189315.955sft	0.016sft	65.966sft	0.036sft
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Adjusted Geodetic Coordinates

Errors are reported using 1.96σ.

Point Name	Latitude	N error	Longitude	E error	Height	h error	Fix
HGCSD 60	29° 21'31.87943"N	0.000sft	94° 57'00.73855"W	0.000sft	- 82.213sft	0.002sft	Lat Long e
1450-A	29° 18'32.52785"N	0.010sft	94° 47'29.12133"W	0.010sft	- 81.411sft	0.025sft	
HGCSD 62	29° 12'29.35329"N	0.014sft	94° 56'15.38173"W	0.014sft	- 80.501sft	0.041sft	
HGCSD 63	29° 20'02.91253"N	0.015sft	94° 45'07.68469"W	0.016sft	- 84.641sft	0.027sft	
K 1186	29° 12'43.43124"N	0.015sft	94° 56'16.93633"W	0.015sft	- 83.596sft	0.042sft	
NETP	29° 47'28.14265"N	0.014sft	95° 20'03.16506"W	0.014sft	- 29.619sft	0.036sft	
ADKS	29° 47'27.47172"N	0.017sft	95° 35'11.04218"W	0.017sft	- 14.069sft	0.039sft	
GAL1	29° 19'47.55235"N	0.013sft	94° 44'12.48513"W	0.013sft	- 52.574sft	0.028sft	
LKHU	29° 54'48.43999"N	0.016sft	95° 08'44.68896"W	0.016sft	- 23.413sft	0.036sft	

Coordinate Deltas

Point Name	ΔNorthing	ΔEasting	ΔElevation	ΔHeight	ΔGeoid Separation
HGCSD 60	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
1450-A	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
HGCSD 62	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
HGCSD 63	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
K 1186	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
NETP	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
ADKS	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
GAL1	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft
LKHU	0.000sft	0.000sft	0.000sft	0.000sft	0.000sft

Back to top

Adjusted Observations

Adjustment performed in WGS-84

GPS Observations

Number of Observations : 25

Number of Outliers : 0

Observation Adjustment (Critical Tau = 3.28). Any outliers are in red.

Observation ID	From Point	To Point		Observations	A-posteriori Error (1.96σ)	Residual	Std. Residual
B4	HGCS D 60	1450-A	Az.	S70° 20'15.7351"E	0° 00'00.0398"	0° 00'00.0000"	-0.54
			ΔHt.	0.803sft	0.025sft	0.069sft	2.32
			Dist.	53741.565sft	0.010sft	0.000sft	0.01
B5	HGCS D 60	1450-A	Az.	S70° 20'15.7351"E	0° 00'00.0398"	0° 00'00.0000"	-0.25
			ΔHt.	0.803sft	0.025sft	-0.032sft	-1.54
			Dist.	53741.565sft	0.010sft	-0.007sft	-0.63
B6	HGCS D 60	1450-A	Az.	S70° 20'15.7351"E	0° 00'00.0398"	-0° 00'00.0528"	-1.50
			ΔHt.	0.803sft	0.025sft	0.010sft	0.39
			Dist.	53741.565sft	0.010sft	0.008sft	0.91
B10	HGCS D 62	1450-A	Az.	N51° 45'43.6580"E	0° 00'00.0422"	0° 00'00.0000"	-0.65
			ΔHt.	-0.910sft	0.038sft	-0.011sft	-0.40
			Dist.	59319.493sft	0.012sft	-0.008sft	-0.85
B15	HGCS D 63	1450-A	Az.	S53° 54'34.5591"W	0° 00'00.2011"	0° 00'00.0477"	0.25
			ΔHt.	3.231sft	0.023sft	0.003sft	0.18
			Dist.	15495.907sft	0.013sft	0.018sft	1.83
B17	HGCS D 63	HGCS D 60	Az.	N81° 50'47.6949"W	0° 00'00.0479"	0° 00'00.0612"	1.73
			ΔHt.	2.428sft	0.027sft	0.004sft	0.22
			Dist.	63743.705sft	0.016sft	0.003sft	0.22
B25	HGCS D 60	K 1186	Az.	S4° 09'32.7245"E	0° 00'00.0561"	0° 00'00.0008"	0.02

			Δ Ht.	-1.382sft	0.042sft	0.058sft	1.75
			Dist.	53521.230sft	0.015sft	0.010sft	1.19
B28	HGCSD 62	K 1186	Az.	N5° 32'00.5642"W	0° 00'01.3751"	-0° 00'00.3043"	-0.24
			Δ Ht.	-3.095sft	0.018sft	-0.016sft	-1.01
			Dist.	1428.707sft	0.010sft	-0.008sft	-0.85
B29	HGCSD 62	K 1186	Az.	N5° 32'00.5642"W	0° 00'01.3751"	0° 00'00.5818"	0.44
			Δ Ht.	-3.095sft	0.018sft	-0.026sft	-1.34
			Dist.	1428.707sft	0.010sft	0.010sft	1.09
B32	NETP	ADKS	Az.	N90° 00'50.7775"W	0° 00'00.0323"	0° 00'00.0151"	0.76
			Δ Ht.	43.688sft	0.019sft	0.000sft	-0.03
			Dist.	79998.220sft	0.013sft	0.001sft	0.13
B33	ADKS	NETP	Az.	N89° 53'19.7086"E	0° 00'00.0323"	0° 00'00.0094"	0.47
			Δ Ht.	-43.688sft	0.019sft	0.008sft	0.79
			Dist.	79998.220sft	0.013sft	0.001sft	0.10
B34	HGCSD 60	NETP	Az.	N37° 44'05.1804"W	0° 00'00.0149"	0° 00'00.0000"	-0.41
			Δ Ht.	52.595sft	0.036sft	-0.044sft	-1.94
			Dist.	199040.607sft	0.014sft	0.008sft	1.00
B48	GAL1	1450-A	Az.	S66° 29'12.5725"W	0° 00'00.1214"	-0° 00'00.1775"	-1.33
			Δ Ht.	-28.837sft	0.022sft	-0.059sft	-2.46
			Dist.	18985.549sft	0.011sft	0.009sft	0.69
B65	NETP	LKHU	Az.	N53° 17'13.1411"E	0° 00'00.0343"	0° 00'00.0032"	0.15
			Δ Ht.	6.206sft	0.024sft	0.026sft	2.17
			Dist.	74486.710sft	0.012sft	-0.001sft	-0.08
B66	NETP	LKHU	Az.	N53° 17'13.1411"E	0° 00'00.0343"	0° 00'00.0009"	0.04
			Δ Ht.	6.206sft	0.024sft	-0.044sft	-2.55
			Dist.	74486.710sft	0.012sft	-0.006sft	-0.79
B67	LKHU	GAL1	Az.	S31° 34'45.4616"E	0° 00'00.0105"	0° 00'00.0000"	-0.45
			Δ Ht.	-29.160sft	0.031sft	-0.009sft	-0.48
			Dist.	248849.020sft	0.013sft	-0.004sft	-0.45
B68	GAL1	LKHU	Az.	N31°	0°	0°	1.25

	GAL1	LNTO	Az.	22'37.7827"W	00'00.0104"	00'00.0094"	1.00
			ΔHt.	29.160sft	0.031sft	-0.003sft	-0.12
			Dist.	248849.020sft	0.013sft	0.006sft	0.72
B69	HGCSD 62	1450-A	Az.	N51° 45'43.6580"E	0° 00'00.0422"	0° 00'00.0137"	0.44
			ΔHt.	-0.910sft	0.038sft	0.010sft	0.29
			Dist.	59319.493sft	0.012sft	0.007sft	0.73
B70	HGCSD 62	ADKS	Az.	N44° 04'53.5003"W	0° 00'00.0112"	0° 00'00.0000"	-0.87
			ΔHt.	94.570sft	0.044sft	0.043sft	1.81
			Dist.	295840.916sft	0.016sft	-0.008sft	-1.22
B72	HGCSD 62	K 1186	Az.	N5° 32'00.5642"W	0° 00'01.3751"	-0° 00'00.7436"	-0.55
			ΔHt.	-3.095sft	0.018sft	0.023sft	1.97
			Dist.	1428.707sft	0.010sft	0.000sft	-0.04
B73	HGCSD 62	K 1186	Az.	N5° 32'00.5642"W	0° 00'01.3751"	0° 00'00.4274"	0.32
			ΔHt.	-3.095sft	0.018sft	-0.029sft	-1.09
			Dist.	1428.707sft	0.010sft	0.005sft	0.54
B77	GAL1	1450-A	Az.	S66° 29'12.5725"W	0° 00'00.1214"	0° 00'00.0095"	0.10
			ΔHt.	-28.837sft	0.022sft	0.005sft	0.18
			Dist.	18985.549sft	0.011sft	0.003sft	0.34
B85	GAL1	1450-A	Az.	S66° 29'12.5725"W	0° 00'00.1214"	-0° 00'00.0973"	-0.78
			ΔHt.	-28.837sft	0.022sft	0.019sft	0.93
			Dist.	18985.549sft	0.011sft	-0.005sft	-0.46
B88	GAL1	HGCSD 63	Az.	N72° 22'42.3332"W	0° 00'00.4858"	0° 00'00.2804"	0.80
			ΔHt.	-32.068sft	0.016sft	0.012sft	1.17
			Dist.	5126.436sft	0.013sft	0.010sft	0.98
B89	GAL1	HGCSD 63	Az.	N72° 22'42.3332"W	0° 00'00.4858"	-0° 00'00.1935"	-0.57
			ΔHt.	-32.068sft	0.016sft	-0.008sft	-0.88
			Dist.	5126.436sft	0.013sft	0.001sft	0.11

Geoid Observations

Number of Observations : 9

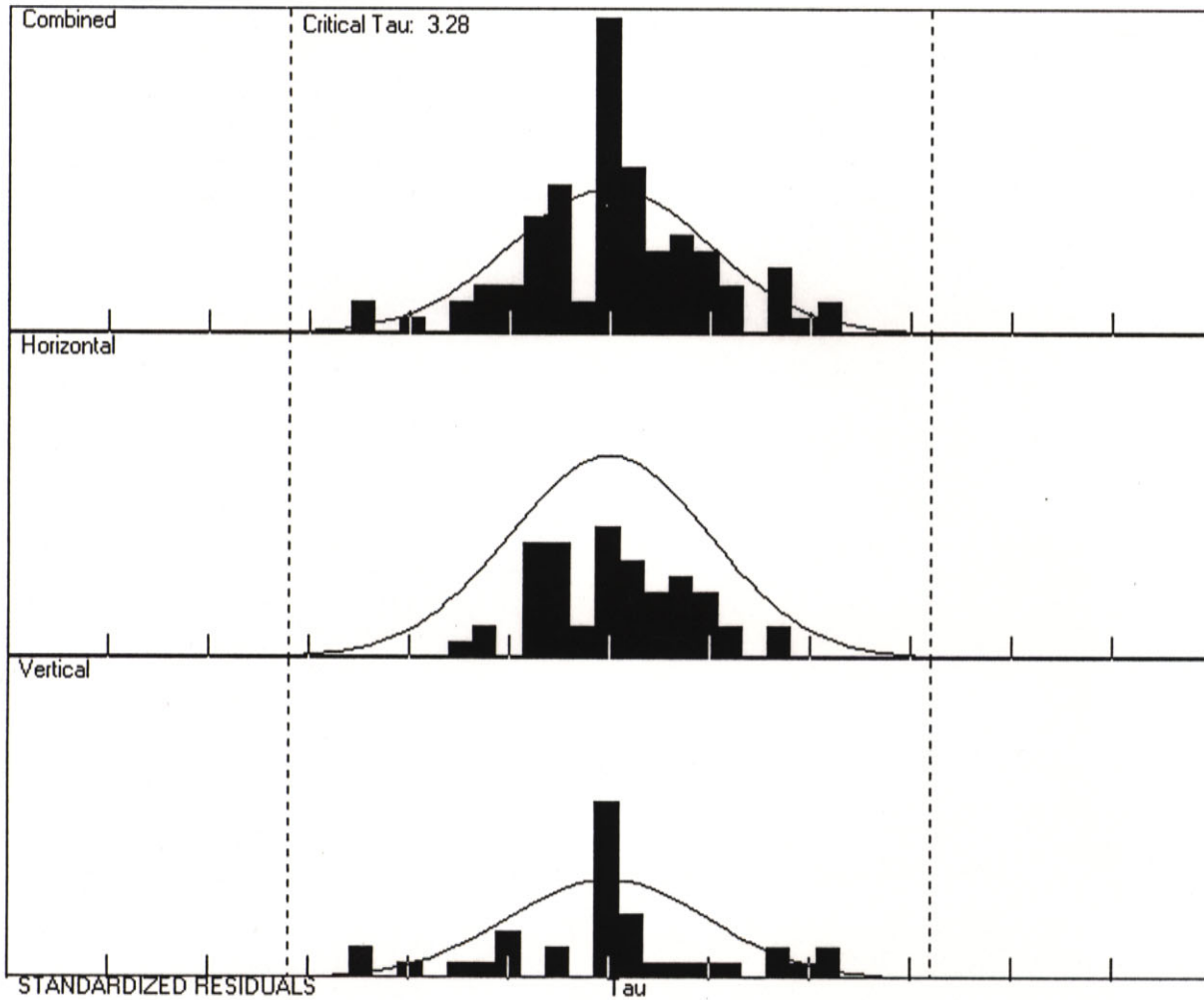
Number of Outliers : 0

Observation Adjustment (Critical Tau = 3.28). Any outliers are in red.

Observation ID	Point Name	Separation	A-posteriori Error (1.96σ)	Residual	Std. Residual
G1	HGCSD 60	-87.446sft	0.002sft	0.000sft	0.00
G2	1450-A	-86.938sft	0.002sft	0.000sft	0.00
G3	HGCSD 62	-86.708sft	0.002sft	0.000sft	0.00
G4	HGCSD 63	-87.003sft	0.002sft	0.000sft	0.00
G5	K 1186	-86.730sft	0.002sft	0.000sft	0.00
G6	NETP	-89.281sft	0.002sft	0.000sft	0.00
G7	ADKS	-89.593sft	0.002sft	0.000sft	0.00
G8	GAL1	-86.950sft	0.002sft	0.000sft	0.00
G9	LKHU	-89.379sft	0.002sft	0.000sft	0.00

[Back to top](#)

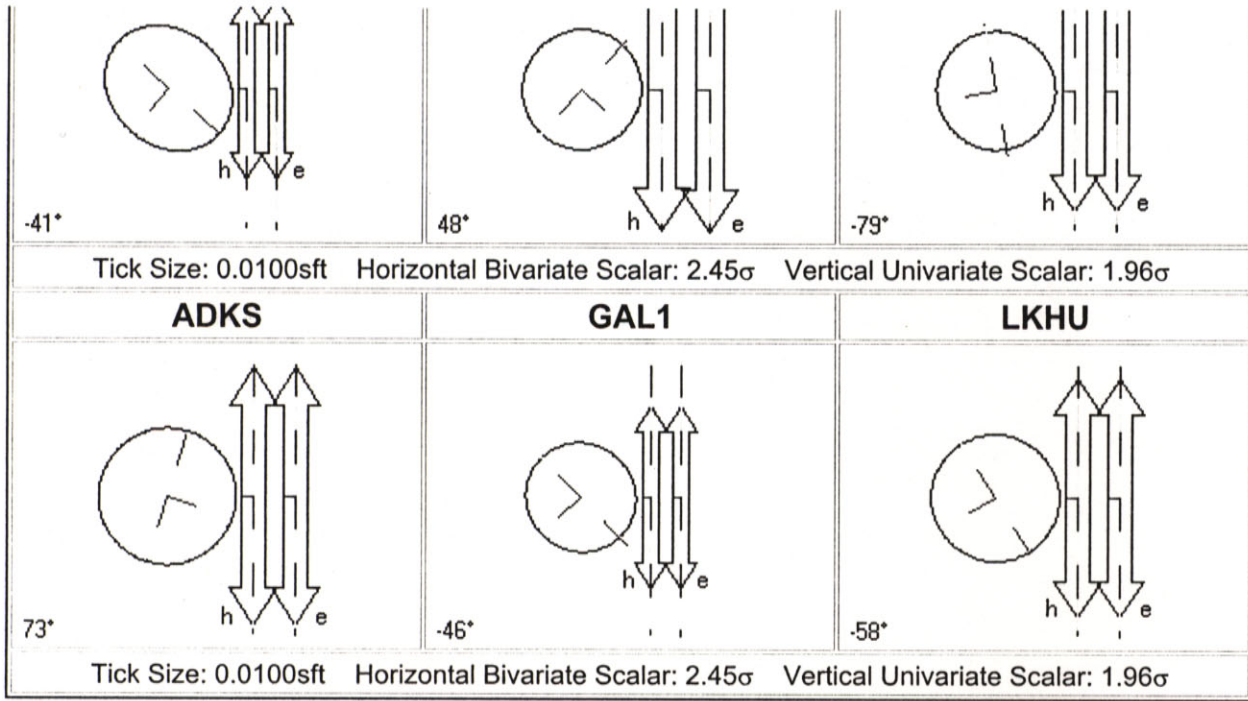
Histograms of Standardized Residuals



[Back to top](#)

Point Error Ellipses

HGCSD 60	1450-A	HGCSD 62
0°	-63°	49°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
HGCSD 63	K 1186	NETP



[Back to top](#)

Covariant Terms

Adjustment performed in WGS-84

From Point	To Point	Components	A-posteriori Error (1.96σ)	Horiz. Precision (PPM)	3D Precision (PPM)
HGCS D 60	1450-A	Az. S70° 20'15.7351"E	0°00'00.0398"	0.192849	0.192849
		ΔHt.	0.803sft		
		Dist.	53741.565sft		
HGCS D 60	HGCS D 63	Az. S81° 56'37.1558"E	0°00'00.0479"	0.248737	0.248737
		ΔHt.	-2.428sft		
		Dist.	63743.705sft		
HGCS D 60	K 1186	Az. S4°09'32.7245"E	0°00'00.0561"	0.271685	0.271685
		ΔHt.	-1.382sft		
		Dist.	53521.230sft		
HGCS D 60	NETP	Az. N37° 44'05.1804"W	0°00'00.0149"	0.072455	0.072455

		ΔHt.	52.595sft	0.036sft		
		Dist.	199040.607sft	0.014sft		
1450-A	HGCSD 62	Az.	S51° 50'00.8691"W	0°00'00.0422"	0.209776	0.209776
		ΔHt.	0.910sft	0.038sft		
		Dist.	59319.493sft	0.012sft		
1450-A	HGCSD 63	Az.	N53° 53'25.2960"E	0°00'00.2010"	0.836928	0.836928
		ΔHt.	-3.231sft	0.023sft		
		Dist.	15495.907sft	0.013sft		
1450-A	GAL1	Az.	N66° 27'36.2839"E	0°00'00.1214"	0.578903	0.578903
		ΔHt.	28.837sft	0.022sft		
		Dist.	18985.549sft	0.011sft		
HGCSD 62	K 1186	Az.	N5° 32'00.5642"W	0°00'01.3751"	6.667004	6.667004
		ΔHt.	-3.095sft	0.018sft		
		Dist.	1428.707sft	0.010sft		
HGCSD 62	ADKS	Az.	N44° 04'53.5003"W	0°00'00.0112"	0.053355	0.053355
		ΔHt.	94.570sft	0.044sft		
		Dist.	295840.916sft	0.016sft		
HGCSD 63	GAL1	Az.	S72° 23'09.3737"E	0°00'00.4858"	2.554054	2.554054
		ΔHt.	32.068sft	0.016sft		
		Dist.	5126.436sft	0.013sft		
NETP	ADKS	Az.	N90° 00'50.7775"W	0°00'00.0323"	0.156465	0.156465
		ΔHt.	43.688sft	0.019sft		
		Dist.	79998.220sft	0.013sft		
NETP	LKHU	Az.	N53° 17'13.1411"E	0°00'00.0343"	0.166203	0.166203
		ΔHt.	6.206sft	0.024sft		
		Dist.	74486.710sft	0.012sft		
GAL1	LKHU	Az.	N31° 22'37.7827"W	0°00'00.0104"	0.050708	0.050708
		ΔHt.	29.160sft	0.031sft		
		Dist.	248849.020sft	0.013sft		

Back to top

[Back to top](#)

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Galveston Co. NRC Art. 33.136 ^{Serial 19} Report 12. pg. 15 of 15 counter 78600

15