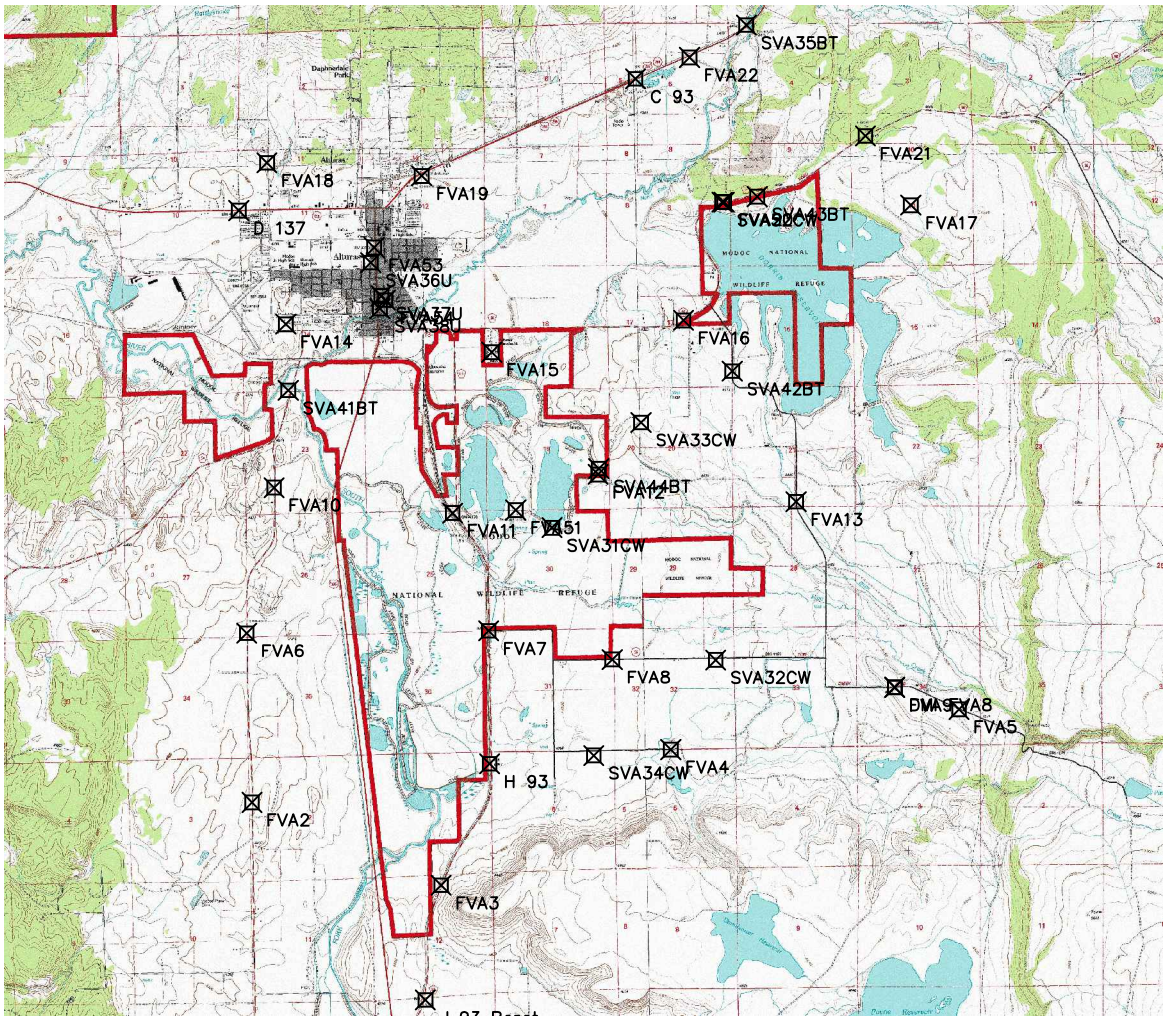
FEMA CHECKPOINT SURVEYS
FOR
MODOC, CALIFORNIA

AUGUST 4, 2011
BY
SUMMIT ENGINEERING CORPORATION
5405 MAE ANNE AVENUE
RENO, NEVADA 89523



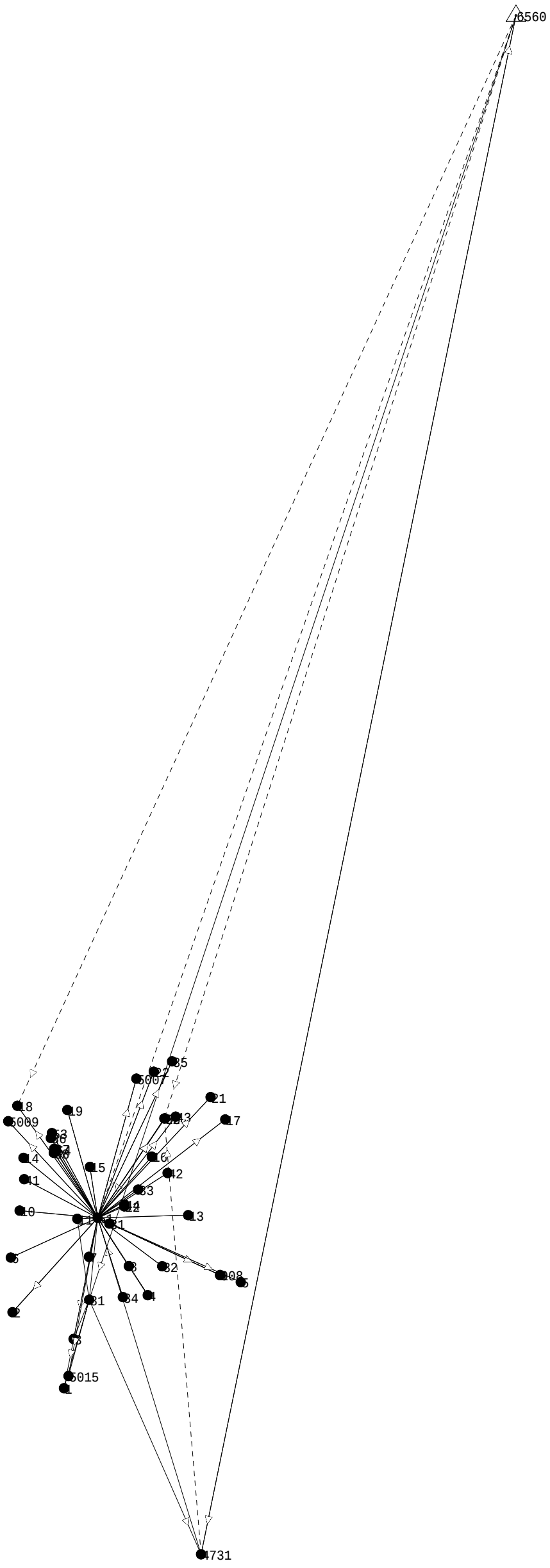
DATE OF SURVEY	MAY 19-24, 2011
SURVEYOR IN RESPONSIBLE CHARGE	RYAN G. COOK, PLS, CFeds
FIELD SUPERVISOR	LARRY GRUBE, PLS
FIELD PERSONNEL	LARRY GRUBE, PLS JACK RABON, LSI
ADJUSTMENT DATUM/PROJECTION	CALIFORNIA ZONE 1, NAD 1983, EPOCH 2007 NAVD 88

SUMMIT ENGINEERING CORPORATION
5405 MAE ANNE AVE. RENO, NV. 89523

MODOC COUNTY, CALIFORNIA FEMA CHECKPOINTS, CALIFORNIA ZONE 1, NAD83, EPOCH 2007, NAVD88

PTNO	Observer	Inst Type	Date1	Meth1	Date2	Meth2	Mon Type	Northing	Easting	Elev	Latitude	Longitude	Height	Desc
1	LG	5800	5/19/2011 20:14	RTK	5/23/11 16:20	RTK	60D Nail	2394869.194	6962504.035	4394.130	41°23'42.39934"N	120°32'20.24282"W	4321.021	FVA1
2	LG	5800	5/23/2011 16:38	RTK	5/24/11 13:39	RTK	PK	2405164.011	6955527.832	4438.292	41°25'25.24254"N	120°33'49.55347"W	4365.229	FVA2
3	LG	5800	5/19/2011 19:53	RTK	5/23/11 15:58	RTK	PK	2401541.641	6963799.493	4375.257	41°24'48.10336"N	120°32'01.78219"W	4302.204	FVA3
4	LG	5800	5/24/2011 8:31	RTK	5/24/11 19:03	Static	Conc Nail	2407476.457	6973843.418	4407.336	41°25'45.05209"N	120°29'48.63943"W	4334.445	FVA4
5	LG	5800	5/24/2011 9:18	RTK	5/24/11 18:30	RTK	60D Nail	2409240.273	6986442.316	4539.888	41°26'00.30858"N	120°27'02.85638"W	4467.324	FVA5
6	LG	5800	5/23/2011 16:48	RTK	5/24/11 13:52	RTK	PK Nail	2412567.914	6955301.844	4380.781	41°26'38.42269"N	120°33'50.92705"W	4307.800	FVA6
7	LG	5800	5/24/2011 8:10	RTK	5/23/11 13:16	RTK	PK Nail	2412665.020	6965881.161	4364.672	41°26'37.64623"N	120°31'32.00776"W	4291.737	FVA7
8	LG	5800	5/23/2011 13:56	RTK	5/24/11 8:57	RTK	PK Nail	2411413.856	6971285.204	4380.491	41°26'24.38166"N	120°30'21.33769"W	4307.601	FVA8
9	LG	5800	5/23/2011 14:19	RTK	5/24/11 9:27	RTK	PK Nail	2410192.767	6983636.773	4533.740	41°26'10.20659"N	120°27'39.46487"W	4461.101	FVA9
10	LG	5800	5/23/2011 16:58	RTK	5/24/11 13:59	RTK	60D Nail	2418927.598	6956496.441	4383.775	41°27'41.05619"N	120°33'33.86998"W	4310.878	FVA10
11	LG	5800	5/19/2011 21:06	RTK	5/20/11 13:08	RTK	60D Nail	2417815.296	6964303.211	4363.103	41°27'28.78727"N	120°31'51.59118"W	4290.222	FVA11
12	LG	5800	5/23/2011 12:31	RTK	5/23/11 19:43	RTK	60D Nail	2419505.813	6970663.785	4383.062	41°27'44.42580"N	120°30'27.68647"W	4310.280	FVA12
13	LG	5800	5/24/2011 9:41	RTK	5/24/11 18:22	RTK	60D Nail	2418311.565	6979320.539	4448.272	41°27'31.15606"N	120°28'34.27258"W	4375.648	FVA13
14	LG	5800	5/23/2011 17:13	RTK	5/24/11 14:07	RTK	60D Nail	2426074.639	6957012.622	4394.915	41°28'51.57726"N	120°33'25.54537"W	4322.112	FVA14
15	LG	5800	5/23/2011 19:29	RTK	5/24/11 17:04	RTK	60D Nail	2424853.463	6966015.747	4372.055	41°28'38.03209"N	120°31'27.54552"W	4299.298	FVA15
16	LG	5800	5/24/2011 10:08	RTK	5/24/11 17:47	RTK	60D Nail	2426241.731	6974400.244	4409.805	41°28'50.33693"N	120°29'37.09555"W	4337.221	FVA16
17	LG	5800	5/24/2011 11:33	RTK	5/24/11 17:18	RTK	60D Nail	2431278.688	6984337.173	4496.751	41°29'38.38726"N	120°27'25.39572"W	4424.573	FVA17
18	LG	5800	5/20/2011 18:13	STATIC	5/23/11 17:40	RTK	60D Nail	2433131.808	6956185.491	4411.353	41°30'01.42834"N	120°33'34.88708"W	4338.655	FVA18
19	LG	5800	5/23/2011 17:51	RTK	5/24/11 14:38	RTK	60D Nail	2432559.873	6962951.544	4384.598	41°29'54.67012"N	120°32'06.10376"W	4311.947	FVA19
20	LG	5800	5/24/2011 10:47	RTK	5/24/11 17:39	RTK	PK Nail	2431414.887	6976172.165	4451.165	41°29'41.13946"N	120°29'12.64526"W	4378.742	FVA20
21	LG	5800	5/24/2011 11:22	RTK	5/24/11 17:24	RTK	60D Nail	2434308.038	6982352.482	4516.138	41°30'08.65755"N	120°27'50.77481"W	4443.973	FVA21
22	LG	5800	5/24/2011 12:00	RTK	5/24/11 14:54	RTK	60D Nail	2437742.370	6974662.413	4411.408	41°30'43.90367"N	120°29'31.05123"W	4339.105	FVA22
31	LG	5800	5/20/2011 12:23	RTK	5/23/11 20:03	RTK	60D Nail	2417175.566	6968652.564	4366.364	41°27'21.74317"N	120°30'54.61808"W	4293.518	SVA31CW
32	LG	5800	5/23/2011 13:39	RTK	5/24/11 9:05	RTK	60D Nail	2411393.563	6975801.648	4395.086	41°26'23.41615"N	120°29'22.04896"W	4322.274	SVA32CW
33	LG	5800	5/24/2011 10:27	RTK	5/24/11 17:56	RTK	Hub & Tack	2421778.933	6972539.789	4444.477	41°28'06.56517"N	120°30'02.53849"W	4371.766	SVA33CW
34	LG	5800	5/24/2011 8:44	RTK	5/24/11 18:44	RTK	60D Nail	2407216.986	6970470.659	4378.976	41°25'43.05808"N	120°30'32.96887"W	4306.033	SVA34CW
35	LG	5800	5/24/2011 12:21	RTK	5/24/11 15:02	RTK	60D Nail	2439151.980	6977142.164	4414.617	41°30'57.40574"N	120°28'58.13988"W	4342.418	SVA35BT
36	LG	5800	5/24/2011 12:41	RTK	5/24/11 15:14	RTK	60D Nail	2428762.546	6960723.745	4371.102	41°29'17.52405"N	120°32'36.20681"W	4298.360	SVA36U
37	LG	5800	5/24/2011 12:53	RTK	5/24/11 15:23	RTK	60D Nail	2427311.068	6961181.735	4366.181	41°29'03.10989"N	120°32'30.50709"W	4293.418	SVA37U
38	LG	5800	5/24/2011 13:04	RTK	5/24/11 15:29	RTK	PK Nail	2426752.556	6961121.145	4366.540	41°28'57.60240"N	120°32'31.42517"W	4293.768	SVA38U
41	LG	5800	5/24/2011 13:21	RTK	5/24/11 16:00	RTK	60D Nail	2423183.538	6957112.007	4357.693	41°28'23.00023"N	120°33'24.86534"W	4284.852	SVA41BT
42	LG	5800	5/24/2011 9:56	RTK	5/24/11 18:11	RTK	60D Nail	2424019.466	6976528.573	4411.120	41°28'28.02131"N	120°29'09.64144"W	4338.541	SVA42BT
43	LG	5800	5/24/2011 11:02	RTK	5/24/11 17:32	RTK	60D Nail	2431656.255	6977619.595	4449.233	41°29'43.27648"N	120°28'53.57224"W	4376.856	SVA43BT
44	LG	5800	5/20/2011 11:41	RTK	5/23/11 19:52	RTK	60D Nail	2419759.647	6970695.202	4382.631	41°27'46.92810"N	120°30'27.21709"W	4309.854	SVA44BT
51	LG	4700	5/20/2011 10:40	Base	5/24/11 19:35	RTK	Rebar & Cap	2417949.448	6967063.878	4367.339	41°27'29.65372"N	120°31'15.30848"W	4294.486	FVA51
52	LG	5800	5/20/2011 16:54	STATIC	5/24/11 10:42	RTK	Rebar & Cap	2431409.397	6976090.867	4450.608	41°29'41.09909"N	120°29'13.71469"W	4378.183	SVA52CW
53	LG	5800	5/23/2011 19:11	RTK	5/24/11 15:43	RTK	Conc Nail	2429431.695	6960867.586	4370.828	41°29'24.11082"N	120°32'34.17080"W	4298.098	FVA53
54	LG	5800	5/23/2011 19:19	RTK	5/24/11 15:35	RTK	PK Nail	2427125.115	6961359.825	4365.663	41°29'01.24360"N	120°32'28.20815"W	4292.898	FVA54
81	LG	5800	5/19/2011 19:20	RTK	5/20/11 13:34	RTK	BM	2406852.177	6965917.258	4361.070	41°25'40.21529"N	120°31'32.81796"W	4288.075	H 93
108	LG	5800	5/23/2011 14:29	RTK	5/24/11 9:31	RTK	60D Nail	2410199.791	6983637.330	4533.625	41°26'10.27588"N	120°27'39.45594"W	4460.986	FND FVA8
4731	LG	5800	5/19/2011 16:59	BASE	5/19/11 16:59	BASE	SOPAC	2372374.126	6981064.405	4639.164	41°19'57.03945"N	120°28'21.88768"W	4566.211	SOPAC P731
5007	LG	5800	5/23/2011 18:06	RTK	5/24/11 14:47	RTK	BM	2436802.198	6972303.374	4414.059	41°30'35.01599"N	120°30'02.26688"W	4341.673	C 93
5009	LG	5800	5/23/2011 17:32	RTK	5/24/11 14:18	RTK	BM	2431043.470	6954952.749	4388.624	41°29'40.99790"N	120°33'51.53563"W	4315.888	D 137
5015	LG	5800	5/19/2011 20:30	RTK	5/23/11 16:09	RTK	BM	2396529.559	6963111.947	4379.534	41°23'58.70208"N	120°32'11.90350"W	4306.440	J 93 Reset
6560		5800	5/20/2011 9:59	BASE	5/19/11 18:59	BASE	CORS	2580824.402	7023701.997	5212.915	41°54'08.35575"N	120°18'10.13770"W	5143.405	MODB CORS

Field surveyor:
L. Grube, J. Rabon
Computer operator:
L. Grube
Reference:
Modoc FEMA Checkpoints



Scale 1" to 16667 ft
0 30000 sft
US survey feet

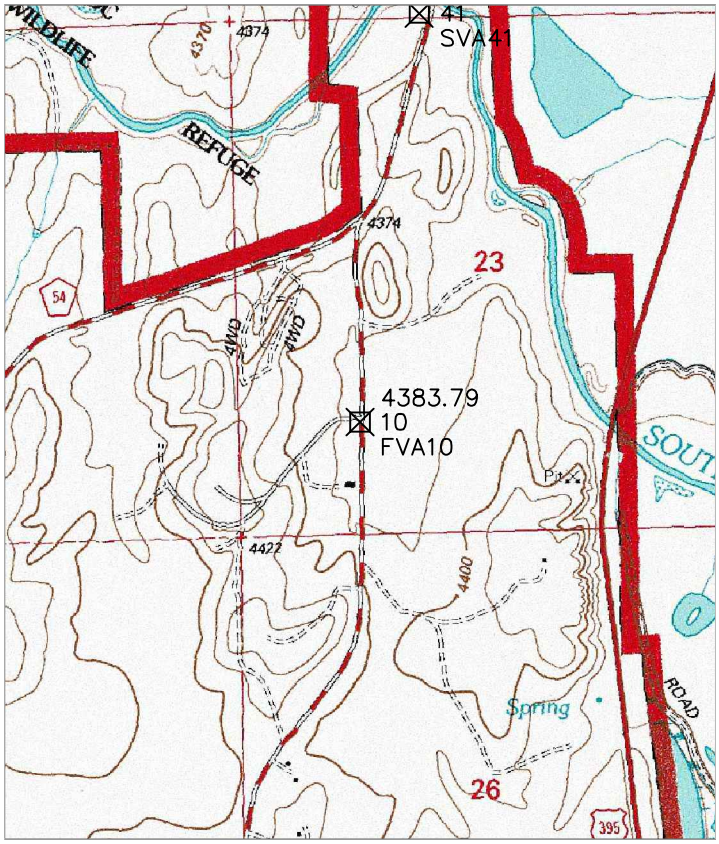
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Plot Scale: 1" to 16667 ft
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Printed from Trimble Geomatics Office

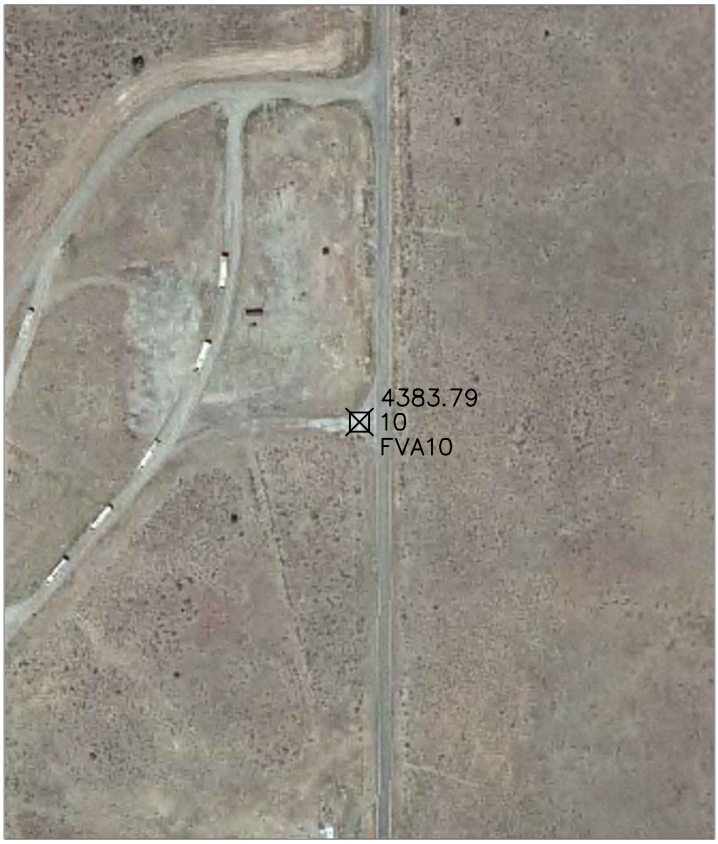
Site: Not selected, System: US State Plane 1983
Zone: California Zone 1 0401, Datum: NAD 1983 (Conus)

Project: 2011_0519-24ModocChkptsFinal
USFeet Template



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	10
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 16:58
First obs method	RTK
Second obs date	5/24/11 13:59
Second obs method	RTK
Northing	2418927.598
Easting	6956496.441
Elevation	4383.775
Latitude	41°27'41.05619"N
Longitude	120°33'33.86998"W
Height	4310.878
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 10
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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5405 MAE ANNE AVE. RENO, NV. 89523

SHEET 1
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA10.DWG ~ 1:47 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA10 is a 60 D Nail on th West side of County Rd 60 in the centerline of a large gravel rd (closed) to West.

Bearing objects: to post of "ROAD CLOSED" sign SW 36.1'; to wooden gate post NW 33.5'; to projection of fogline E 28.0'.

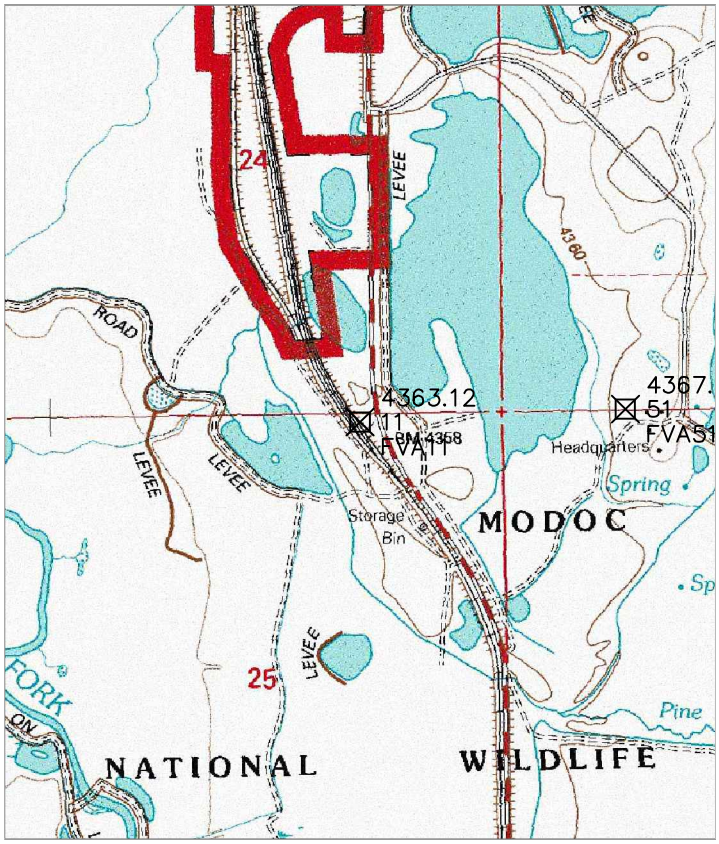
FEMA CHECKPOINTS
FVA 10
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA10.DWG ~ 1:47 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	11
Observer	LG
Instrument Type	5800
First obs date	5/19/2011 21:06
First obs method	RTK
Second obs date	5/20/11 13:08
Second obs method	RTK
Northing	2417815.296
Easting	6964303.211
Elevation	4363.103
Latitude	41°27'28.78727"N
Longitude	120°31'51.59118"W
Height	4290.222
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 11
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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5405 MAE ANNE AVE. RENO, NV. 89523



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 11 is a 60D nail approximately 21.5' NE'ly of the NE'ly rail of the UP tracks where a gravel road from County Road 115 (part way through a curve to the left going Southerly) intersects a dirt road along the tracks.

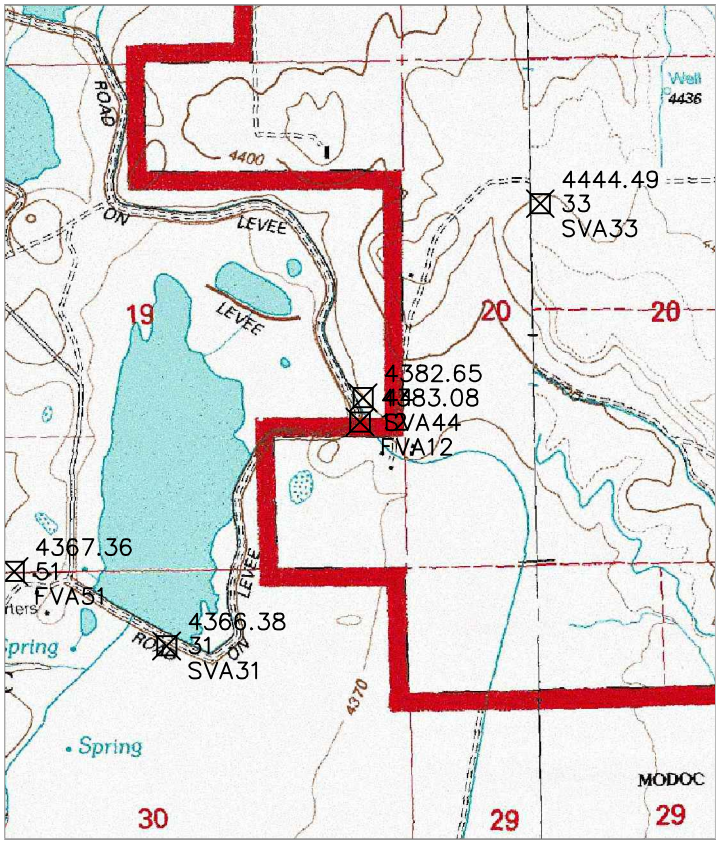
Bearing Objects: to lath SW 12.8'; to old fence post N'ly side of gravel road E 40'; to fence post on S'ly side of road S 40'.

FEMA CHECKPOINTS
FVA 11
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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5405 MAE ANNE AVE. RENO, NV. 89523



N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	12
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 12:31
First obs method	RTK
Second obs date	5/23/11 19:43
Second obs method	RTK
Northing	2419505.813
Easting	6970663.785
Elevation	4383.062
Latitude	41°27'44.42580"N
Longitude	120°30'27.68647"W
Height	4310.280
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 12
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 1 OF 2

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 12 is a 60D nail at service road intersection with refuge auto tour road.

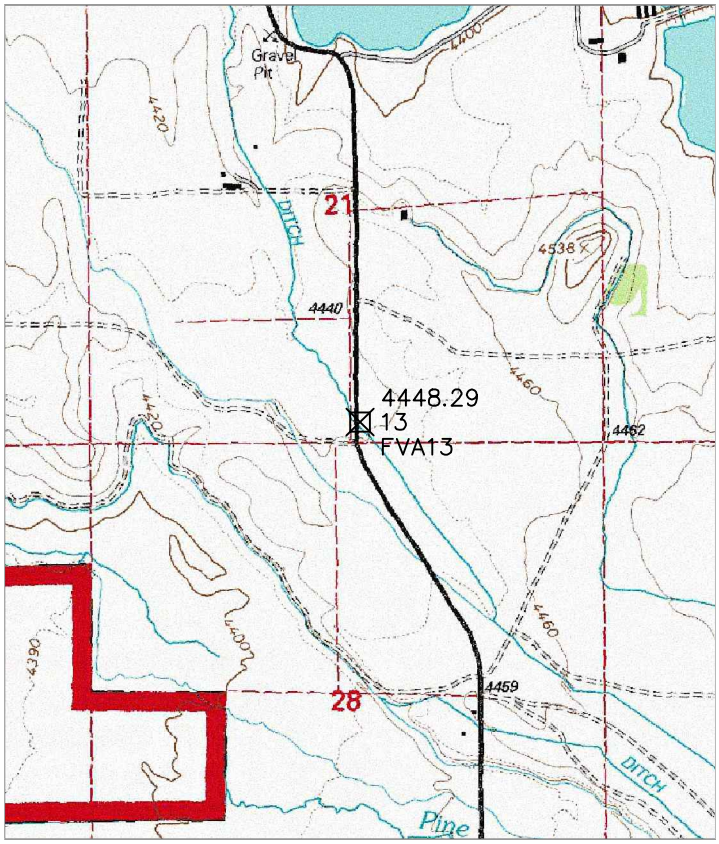
Bearing Objects: to lath E 17.1'; to "Area Closed" sign SE 30'; to red gate valve handle NE 35'.

FEMA CHECKPOINTS
FVA 12
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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5405 MAE ANNE AVE. RENO, NV. 89523



N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	13
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 9:41
First obs method	RTK
Second obs date	5/24/11 18:22
Second obs method	RTK
Northing	2418311.565
Easting	6979320.539
Elevation	4448.272
Latitude	41°27'31.15606"N
Longitude	120°28'34.27258"W
Height	4375.648
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 13
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 1 OF 2

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 13 is a 60D nail set in the asphalt at intersection of an asphalt road with County Rd 57. Asphalt road to SE leads to a locked gate.

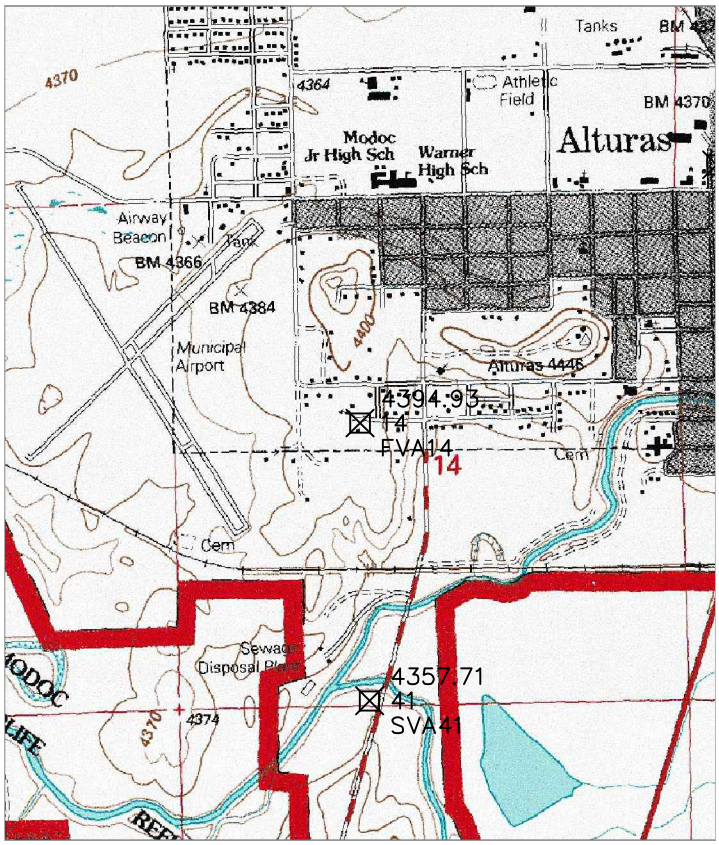
Bearing Objects: to projected edge of E. side County Rd. W 25'; to "Speed Limit" sign E 86.8'.

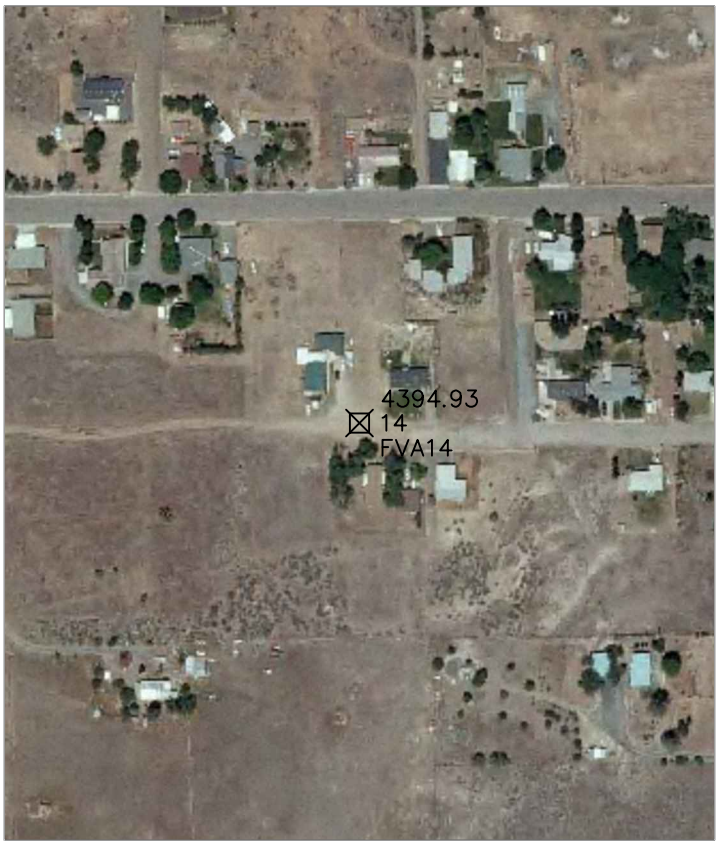
FEMA CHECKPOINTS
FVA 13
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SUMMIT ENGINEERING CORPORATION
5405 MAE ANNE AVE. RENO, NV. 89523





N

LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	14
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 17:13
First obs method	RTK
Second obs date	5/24/11 14:07
Second obs method	RTK
Northing	2426074.639
Easting	6957012.622
Elevation	4394.915
Latitude	41°28'51.57726"N
Longitude	120°33'25.54537"W
Height	4322.112
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 14
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 1
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA14.DWG ~ 2:52 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 14 is a 60D nail set in dirt road at West end of Henderson Rd with church to NW.

Bearing Objects: to SSMH E 17.3'; to mailbox S 42.3'; to mailbox N 37.7'.

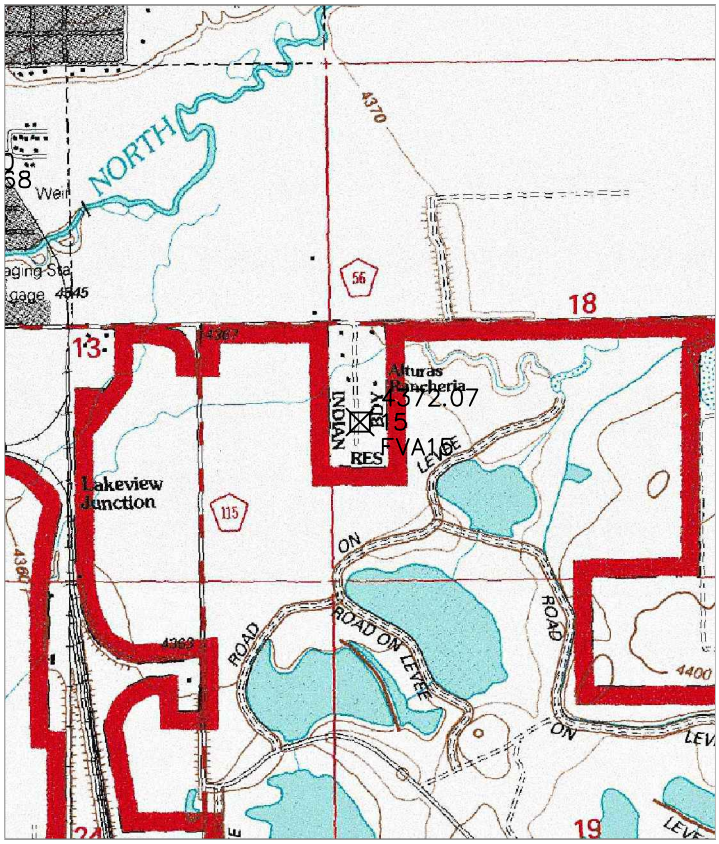
FEMA CHECKPOINTS
FVA 14
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA14.DWG ~ 2:52 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	15
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 19:29
First obs method	RTK
Second obs date	5/24/11 17:04
Second obs method	RTK
Northing	2424853.463
Easting	6966015.747
Elevation	4372.055
Latitude	41°28'38.03209"N
Longitude	120°31'27.54552"W
Height	4299.298
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 15
LOCATION INFORMATION

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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA15.DWG ~ 2:55 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 15 is a 60D nail set in the SW'ly portion of the Desert Rose Alturas Rancheria Casino.

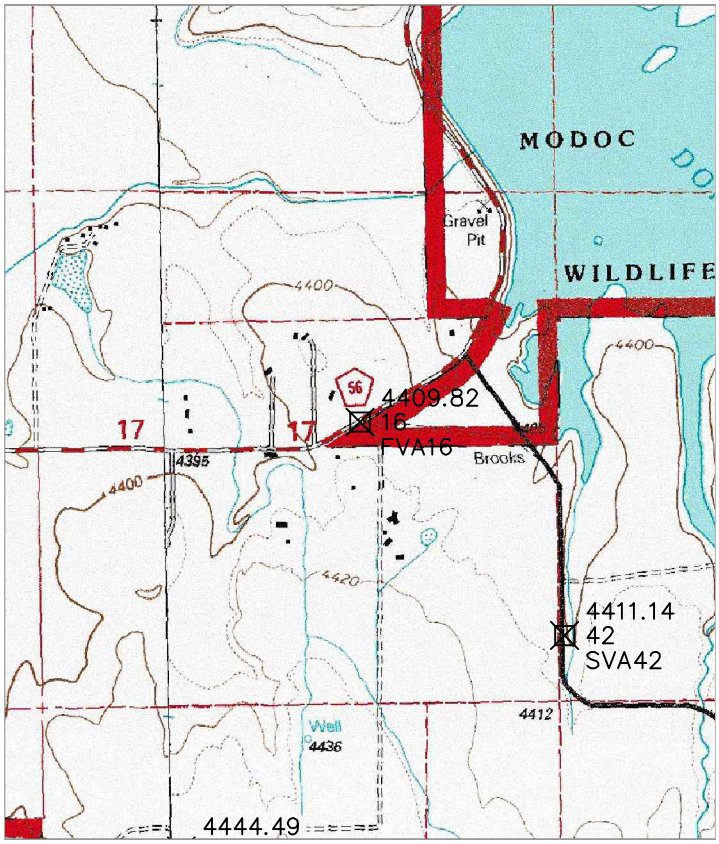
Bearing Objects: to log parking block W 46.5'; to "Dead End" sign SSW 63.5'.

FEMA CHECKPOINTS
FVA 15
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	16
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 10:08
First obs method	RTK
Second obs date	5/24/11 17:47
Second obs method	RTK
Northing	2426241.731
Easting	6974400.244
Elevation	4409.805
Latitude	41°28'50.33693"N
Longitude	120°29'37.09555"W
Height	4337.221
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 16
LOCATION INFORMATION

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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA16.DWG ~ 2:59 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 16 is a 60D nail set on the Southeast edge of pavement of Parker Creek Road at based drive to house.

Bearing Objects: to W. gate post on NW side of road NW 37.7'; to National Wildlife Refuge sign NE 62.2'; to power pole A5032 W 63.8'.

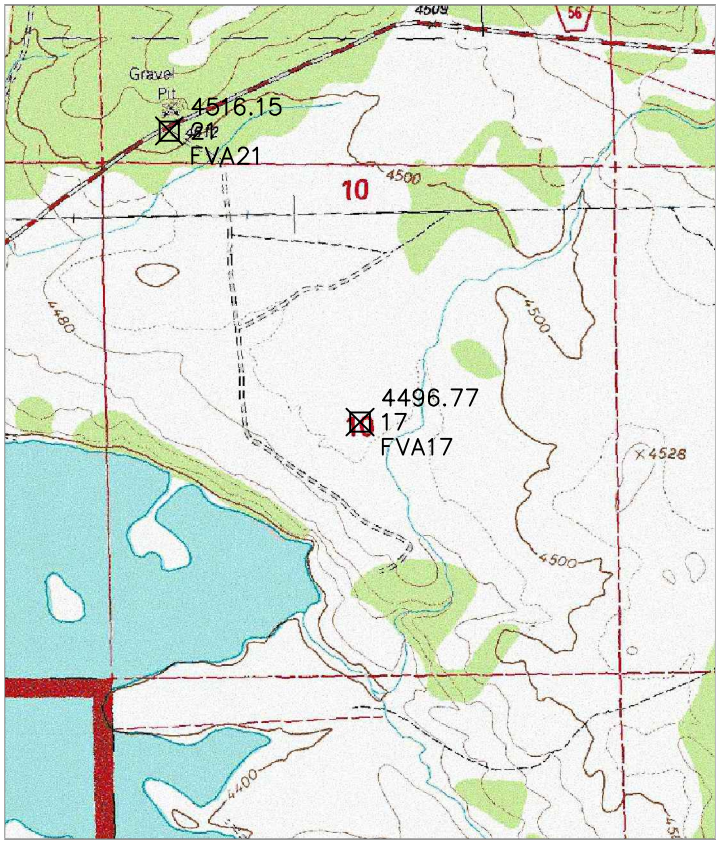
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FEMA CHECKPOINTS
FVA 16
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA16.DWG ~ 2:59 PM * 04-AUG-2011

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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	17
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 11:33
First obs method	RTK
Second obs date	5/24/11 17:18
Second obs method	RTK
Northing	2431278.688
Easting	6984337.173
Elevation	4496.751
Latitude	41°29'38.38726"N
Longitude	120°27'25.39572"W
Height	4424.573
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 17
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA17.DWG ~ 3:04 PM * 04-AUG-2011



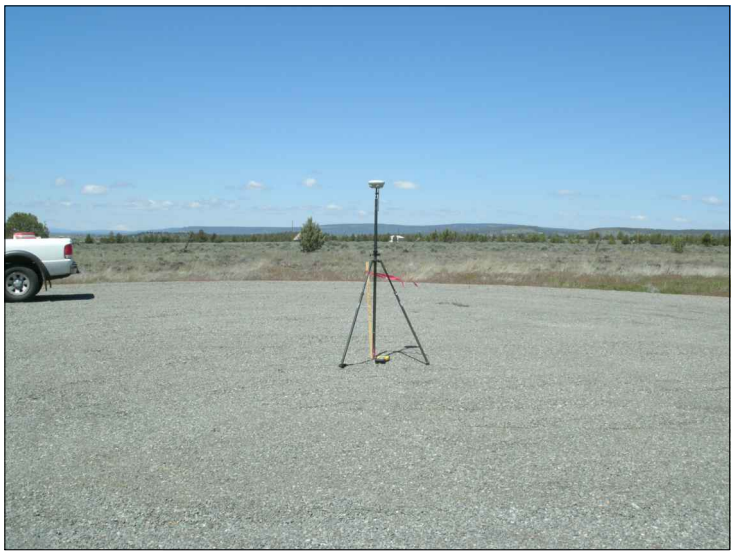
VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 17 is a 60D nail set in center of cul-de-sac at end of based road.

Bearing Objects:to 5/8 inch rebar and aluminum cap "Altec LS 6816" S 71.1'; to 5/8 inch rebar and aluminum cap as before E 49.4'.

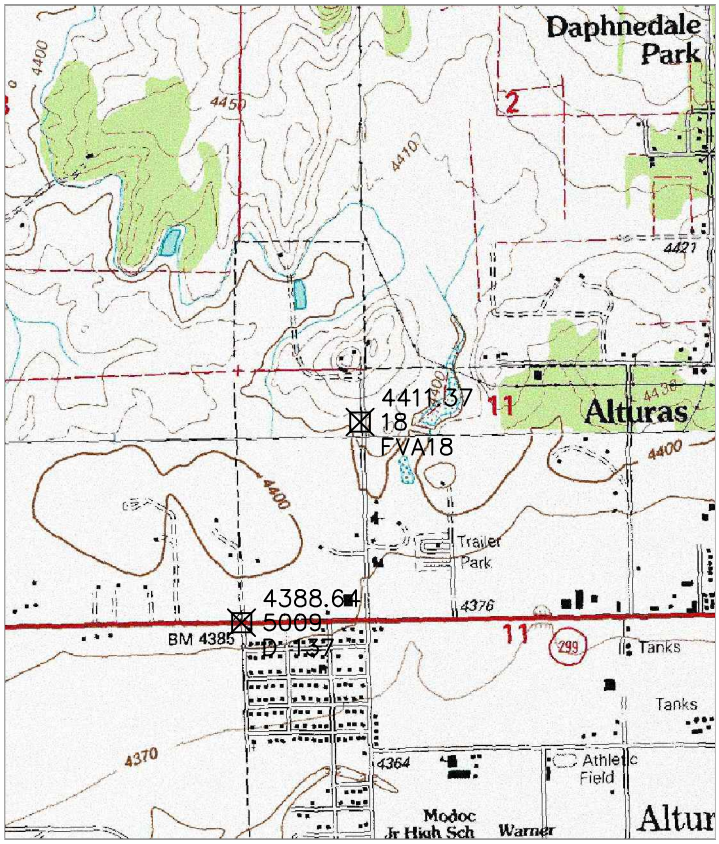
FEMA CHECKPOINTS
FVA 17
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	18
Observer	LG
Instrument Type	5800
First obs date	5/20/2011 18:13
First obs method	STATIC
Second obs date	5/23/11 17:40
Second obs method	RTK
Northing	2433131.808
Easting	6956185.491
Elevation	4411.353
Latitude	41°30'01.42834"N
Longitude	120°33'34.88708"W
Height	4338.655
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 18
LOCATION INFORMATION

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 18 is a 60D nail set in the SE corner of the gravel parking lot of the Muncipal Golf Course driving range.

Bearing Objects: to S gate post NE 22'; to wood tie parking block S 19'; to wood post parking block E 19'.

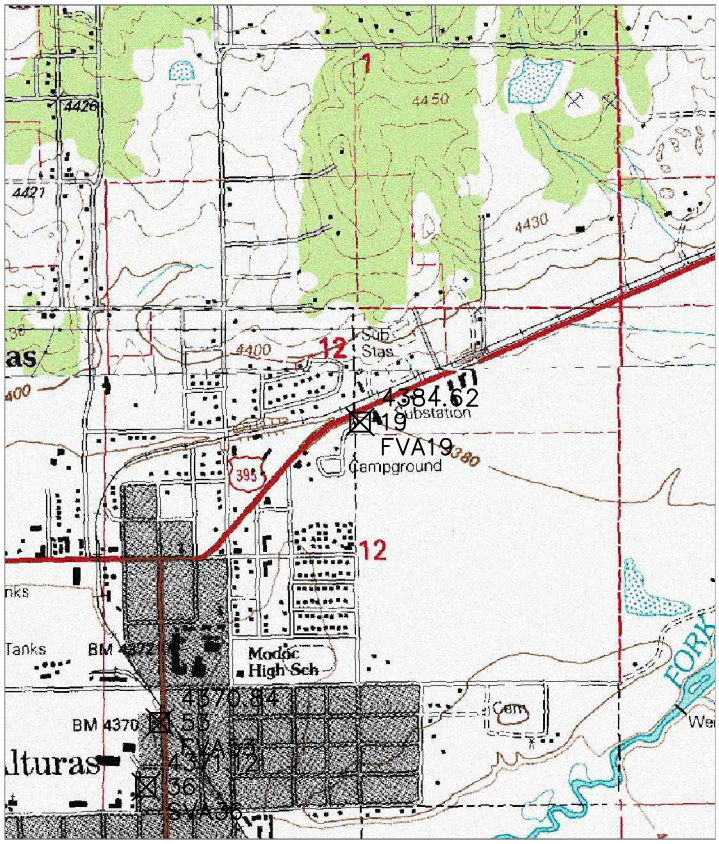
FEMA CHECKPOINTS
FVA 18
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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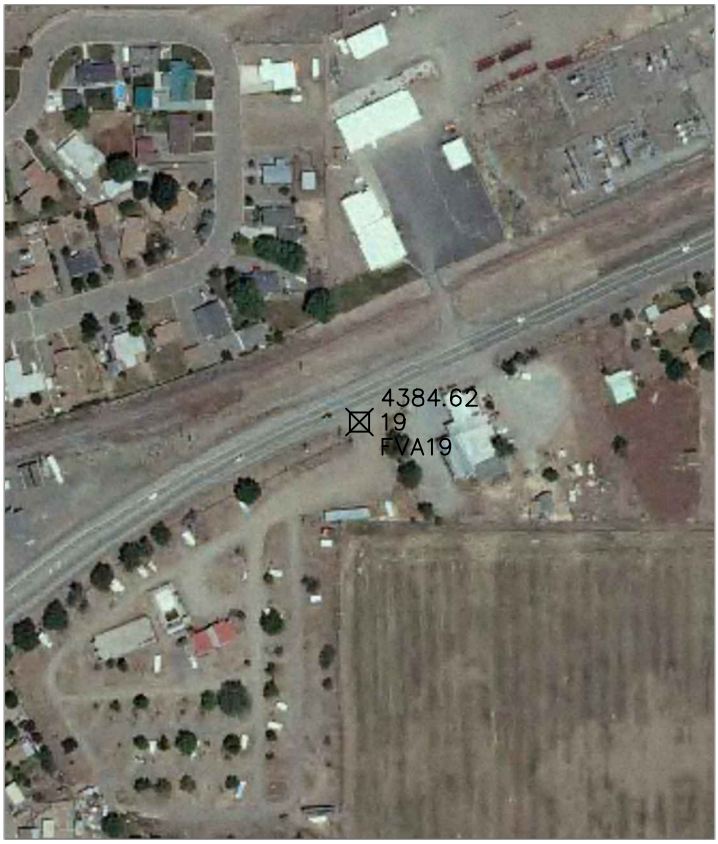
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OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA18.DWG ~ 3:08 PM * 04-AUG-2011



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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	19
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 17:51
First obs method	RTK
Second obs date	5/24/11 14:38
Second obs method	RTK
Northing	2432559.873
Easting	6962951.544
Elevation	4384.598
Latitude	41°29'54.67012"N
Longitude	120°32'06.10376"W
Height	4311.947
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 19
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 19 is a 60D nail set at the E'ly entrance to Brass Rail Campground/RV park on US 395/SR 299 NE'ly of Alturas.

Bearing Objects: to power pole "COPCO" A4108 SSW 40.2'; to power pole "COPCO" A4107 NE 73'; to CL US 395 NE 35'.

.

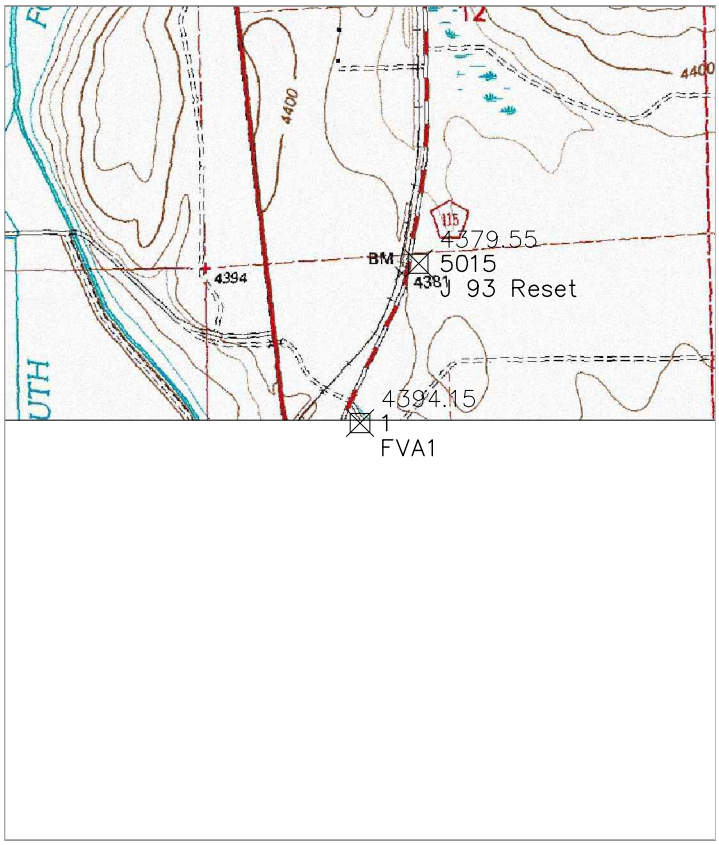
FEMA CHECKPOINTS
FVA 19
VICINITY IMAGERY

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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500

NO IMAGE

Point Number	1
Observer	LG
Instrument Type	5800
First obs date	5/19/2011 20:14
First obs method	RTK
Second obs date	5/23/11 16:20
Second obs method	RTK
Northing	2394869.194
Easting	6962504.035
Elevation	4394.130
Latitude	41°23'42.39934N
Longitude	120°32'20.24282W
Height	4321.021
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 1
LOCATION INFORMATION

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

From Modoc County Courthouse proceed 200 ft Southerly; turn left on E Modoc St and proceed .1 mile East; turn right onto S Estes St and proceed 0.2 mi South; turn left on E McDowell St (becomes County Rd 56) and proceed 0.7 mi East; turn right onto Co Rd 115 and proceed 2.6 miles South; turn left onto Co Rd 59B/Pine Creek Blvd and proceed .4 mi East turning to the South and continuing for 1.2 miles; turn left into ranch road and proceed 1.0 mile East to concrete nail in approximate centerline of road just East of gate.

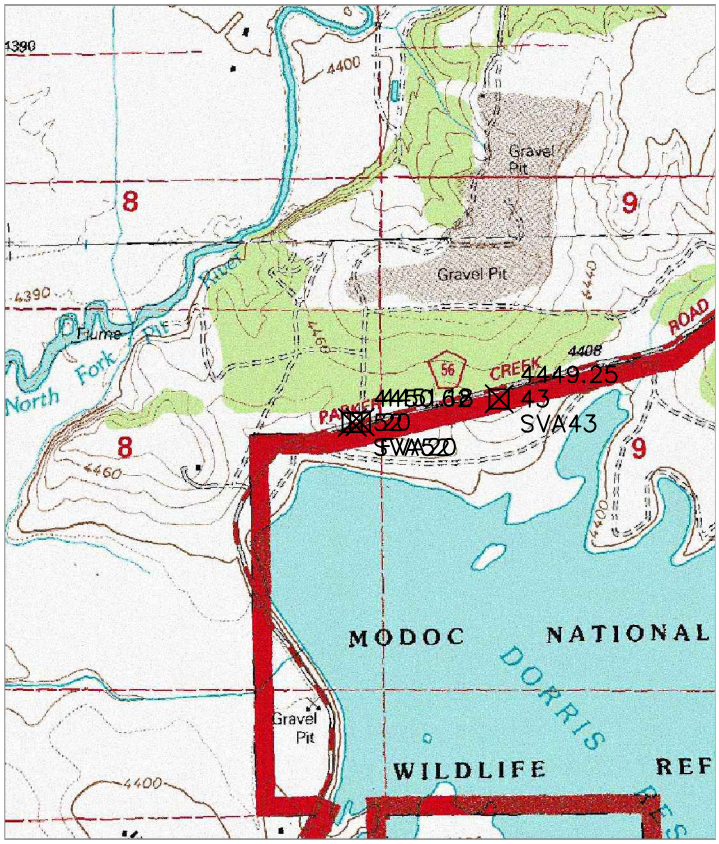
Bearing objects: to South gate post at ranch entrance 35.5 ft West; to East gate post on North side of entry road 19.3 ft North; to East gate post on South side of entry road 35.2 ft South.

FEMA CHECKPOINTS
FVA 1
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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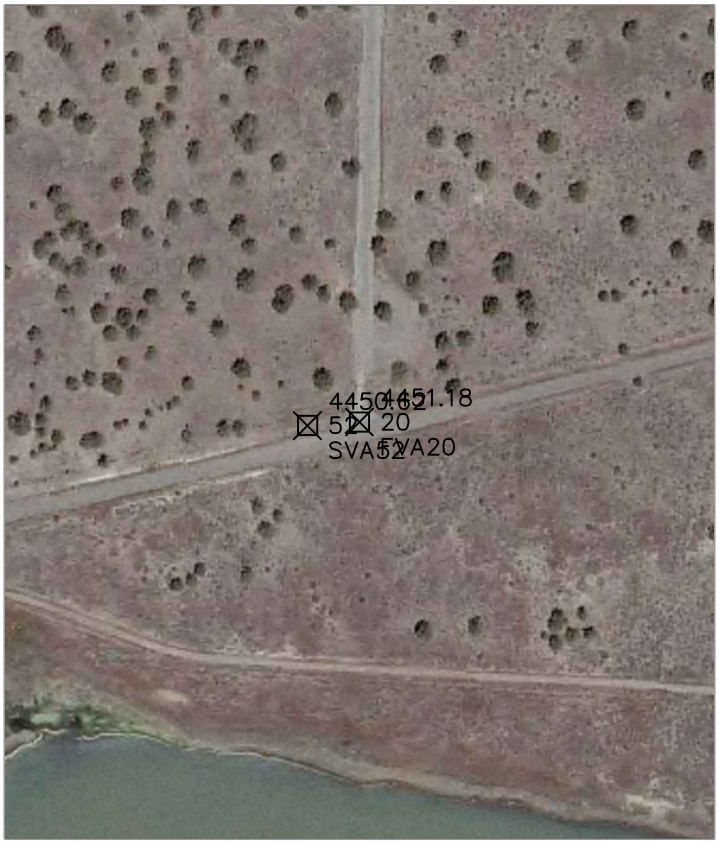
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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	20
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 10:47
First obs method	RTK
Second obs date	5/24/11 17:39
Second obs method	RTK
Northing	2431414.887
Easting	6976172.165
Elevation	4451.165
Latitude	41°29'41.13946"N
Longitude	120°29'12.64526"W
Height	4378.742
Monument Type	PK Nail

FEMA CHECKPOINTS
FVA 20
LOCATION INFORMATION

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 20 is a PK nail set in the asphalt on the N side of Parker Creek Rd near the NE corner of Dorris Reservoir.

Bearing Objects: to fence angle point NW 22.9'; to fence corner NE 32'; to CL Parker Creek Rd SE 20'.

.

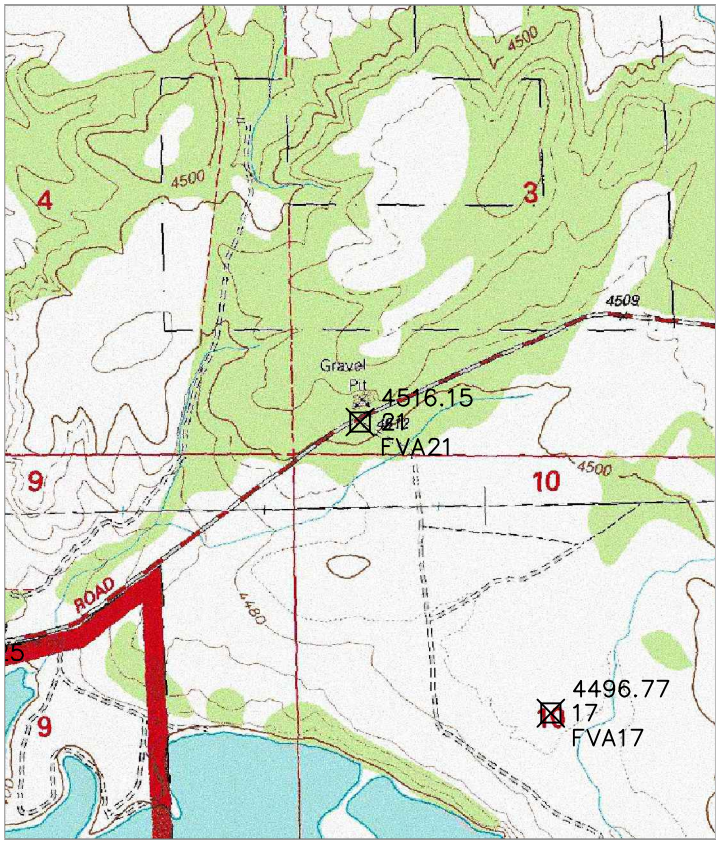
FEMA CHECKPOINTS
FVA 20
VICINITY IMAGERY

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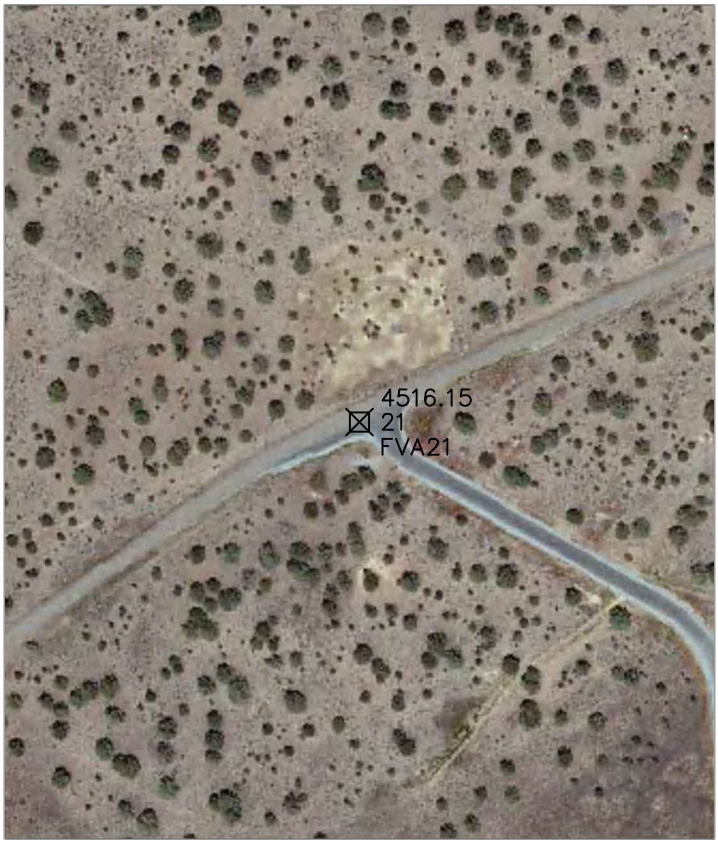
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SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA20.DWG ~ 3:20 PM * 04-AUG-2011



N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	21
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 11:22
First obs method	RTK
Second obs date	5/24/11 17:24
Second obs method	RTK
Northing	2434308.038
Easting	6982352.482
Elevation	4516.138
Latitude	41°30'08.65755"N
Longitude	120°27'50.77481"W
Height	4443.973
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 21
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt FVA21 is a 60D nail and broom set on the SE side of Parker Creek (Co Rd 56), at the match line of AC for side road.

Bearing Objects: 33.9' South to T-post with blue sign numbered 5168, 34.8' NW to yellow underground cable sign.

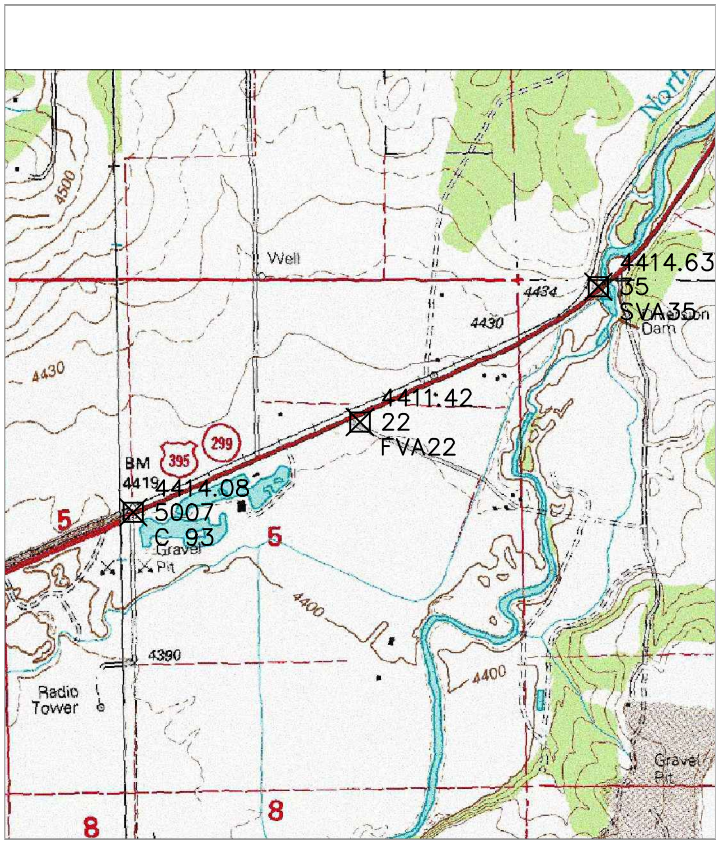
FEMA CHECKPOINTS
FVA 21
VICINITY IMAGERY

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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	22
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 12:00
First obs method	RTK
Second obs date	5/24/11 14:54
Second obs method	RTK
Northing	2437742.370
Easting	6974662.413
Elevation	4411.408
Latitude	41°30'43.90367"N
Longitude	120°29'31.05123"W
Height	4339.105
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 22
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA22.DWG ~ 3:31 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt FVA22 is a 60D nail and broom set South of US395 in the entrance to "Osborne Ranch".

Bearing Objects: 44.9' SW to powerpole, +/-27' NW to EP of US395, 53.6' SE to 6" steel post on East side of "Osborne Ranch" entrance.

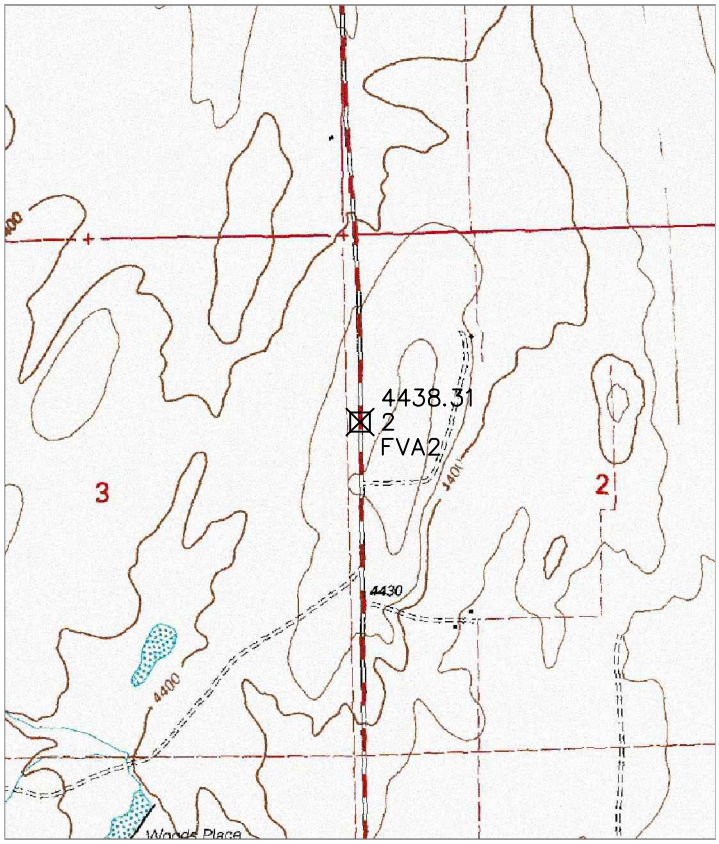
FEMA CHECKPOINTS
FVA 22
VICINITY IMAGERY

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CA ZONE 1
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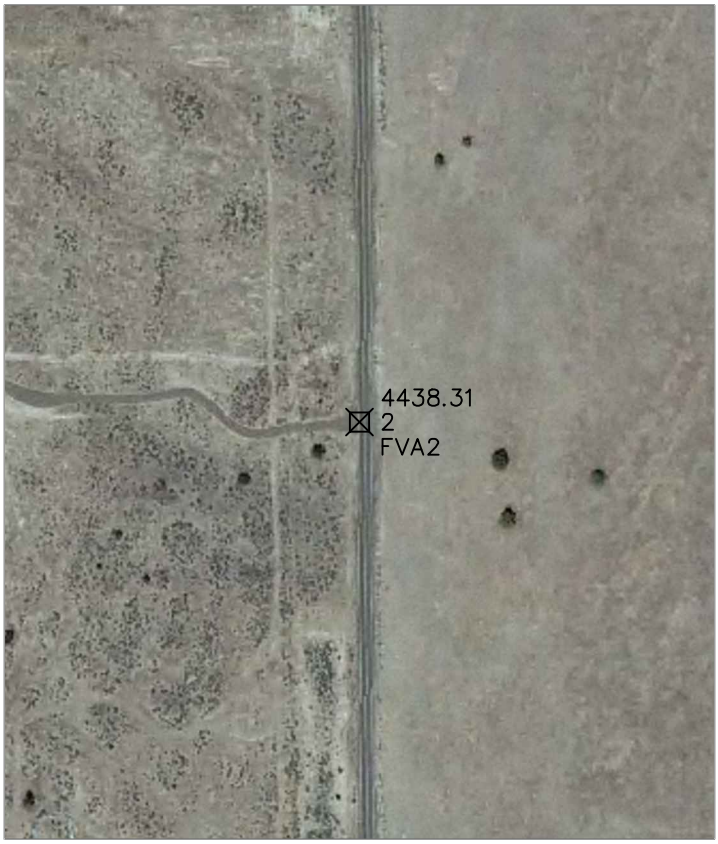
SHEET 2
OF 2



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	2
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 16:38
First obs method	RTK
Second obs date	5/24/11 13:39
Second obs method	RTK
Northing	2405164.011
Easting	6955527.832
Elevation	4438.292
Latitude	41°25'25.24254"N
Longitude	120°33'49.55347"W
Height	4365.229
Monument Type	PK NAIL

FEMA CHECKPOINTS
FVA 2
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

From Modoc County Courthouse proceed .1 mile South on S Court Street; make a right (West) on E Carlos St and proceed 0.7 mile; turn left on N West St heading in a Southerly direction for 1.1 miles; turn left onto County Rd 60 (Westside Rd) heading South and proceed 3.0 miles to point on right at the driveway into 13477 Westside Road. Point is a PK nail in the Westerly fogline of the road.

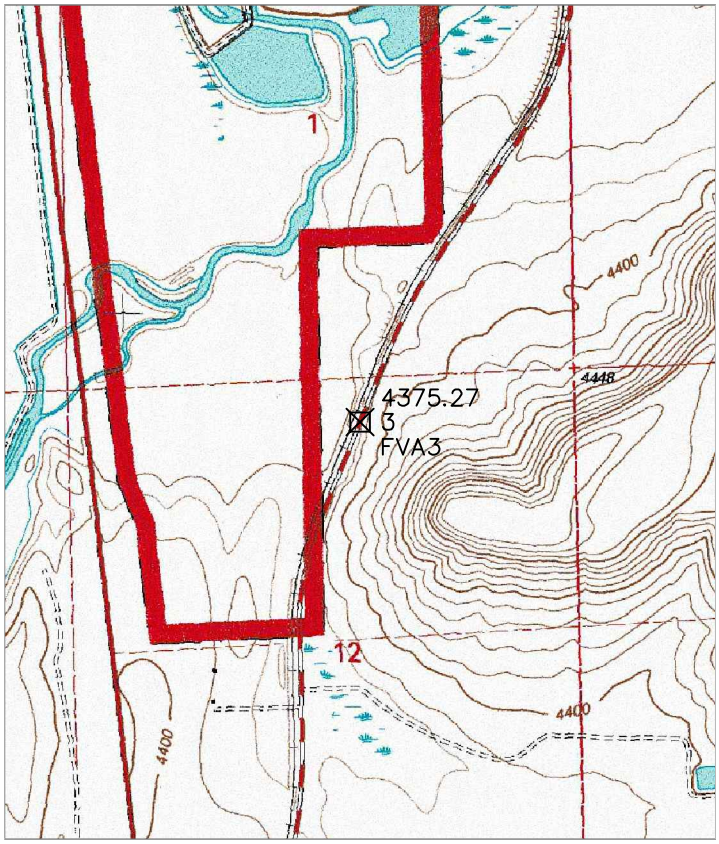
Bearing objects: T Post and address sign 13477 - 41.2 feet WNW

FEMA CHECKPOINTS
FVA 2
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



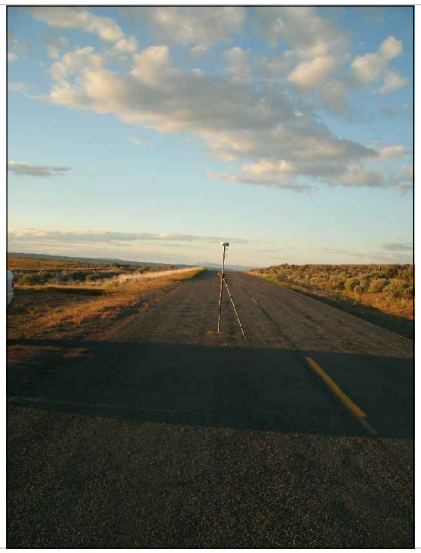
Point Number	3
Observer	LG
Instrument Type	5800
First obs date	5/19/2011 19:53
First obs method	RTK
Second obs date	5/23/11 15:58
Second obs method	RTK
Northing	2401541.641
Easting	6963799.493
Elevation	4375.257
Latitude	41°24'48.10336"N
Longitude	120°32'01.78219"W
Height	4302.204
Monument Type	PK NAIL

FEMA CHECKPOINTS
FVA 3
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
Copyright SUMMIT ENG 2011

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA3.DWG ~ 5:17 PM * 04-AUG-2011

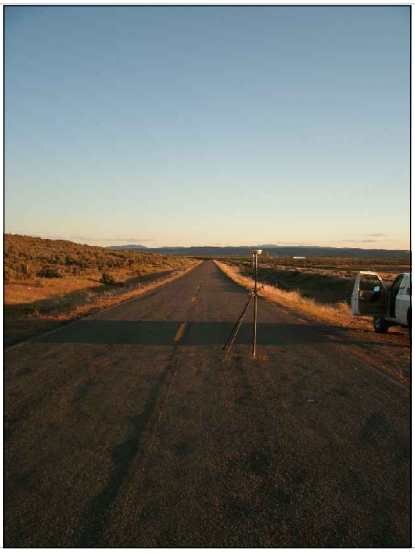
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

From Modoc County Courthouse proceed 200 feet South on S Court St toward; turn right onto E Modoc St and proceed 300 ft: turn left onto US-395 S/S Main St and proceed 6.3 miles; turn left onto Co Rd 115 and proceed 1.5 miles to PK nail on left (West) in approximate center of Southbound lane at turnout on West side of road.

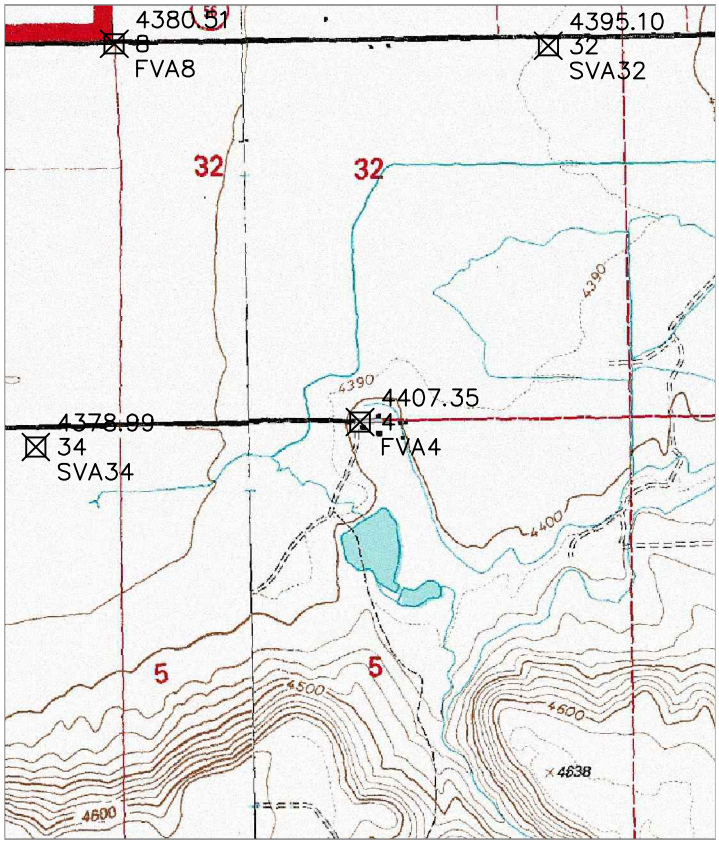
Bearing objects: to West EOP 6.1 ft West; to road marker 47.7 ft NW'ly.

FEMA CHECKPOINTS
FVA 3
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	4
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 8:31
First obs method	RTK
Second obs date	5/24/11 19:03
Second obs method	Static
Northing	2407476.457
Easting	6973843.418
Elevation	4407.336
Latitude	41°25'45.05209"N
Longitude	120°29'48.63943"W
Height	4334.445
Monument Type	Conc Nail

FEMA CHECKPOINTS
FVA 4
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 1 OF 2

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

From Modoc County Courthouse proceed 200 ft Southerly; turn left on E Modoc St and proceed .1 mile East; turn right onto S Estes St and proceed 0.2 mi South; turn left on E McDowell St (becomes County Rd 56) and proceed 0.7 mi East; turn right onto Co Rd 115 and proceed 2.6 miles South; turn left onto Co Rd 59B/Pine Creek Blvd and proceed .4 mi East turning to the South and continuing for 1.2 miles; turn left into ranch road and proceed 1.0 mile East to concrete nail in approximate centerline of road just East of gate.

Bearing objects: to South gate post at ranch entrance 35.5 ft West; to East gate post on North side of entry road 19.3 ft North; to East gate post on South side of entry road 35.2 ft South.

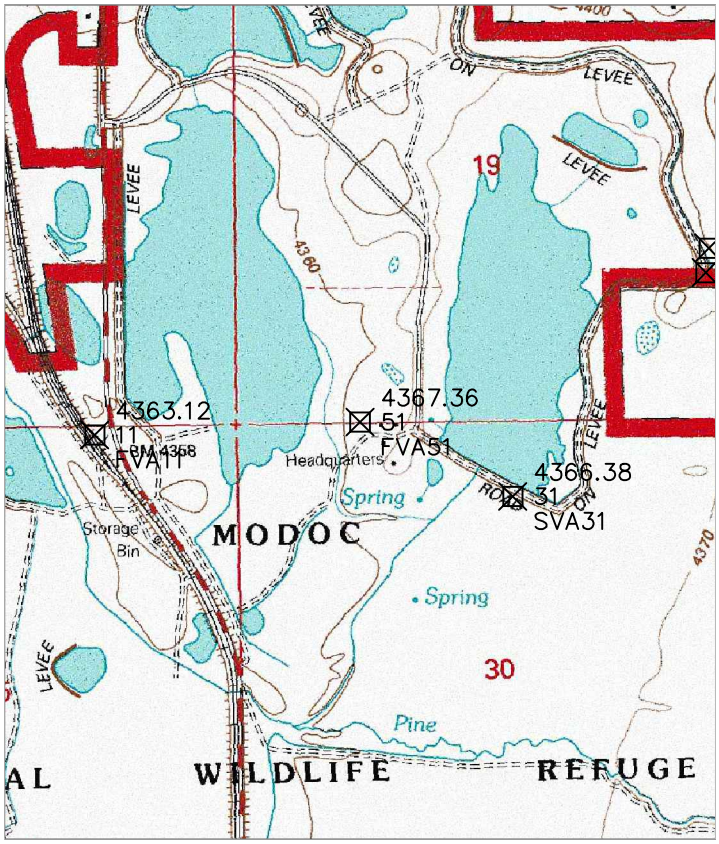
FEMA CHECKPOINTS
FVA 4
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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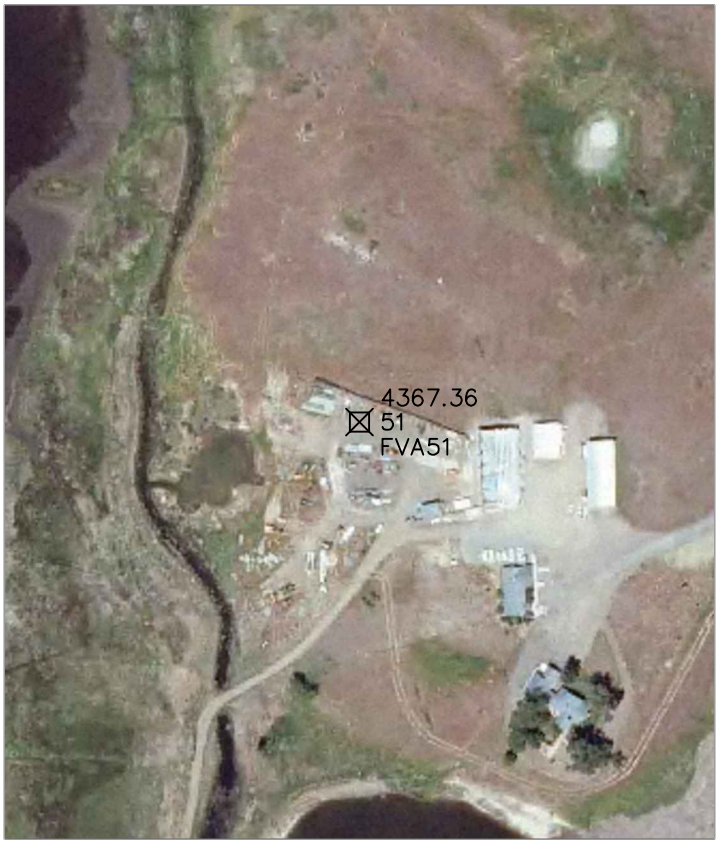
SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA4.DWG ~ 12:36 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	51
Observer	LG
Instrument Type	4700
First obs date	5/20/2011 10:40
First obs method	Base
Second obs date	5/24/11 19:35
Second obs method	RTK
Northing	2417949.448
Easting	6967063.878
Elevation	4367.339
Latitude	41°27'29.65372"N
Longitude	120°31'15.30848"W
Height	4294.486
Monument Type	Rebar & Cap

FEMA CHECKPOINTS
FVA 51
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt FVA51 is a 5/8" rebar with Summit Engineering Control cap set flush in the storage and equipment yard South of Refuge Bldgs.

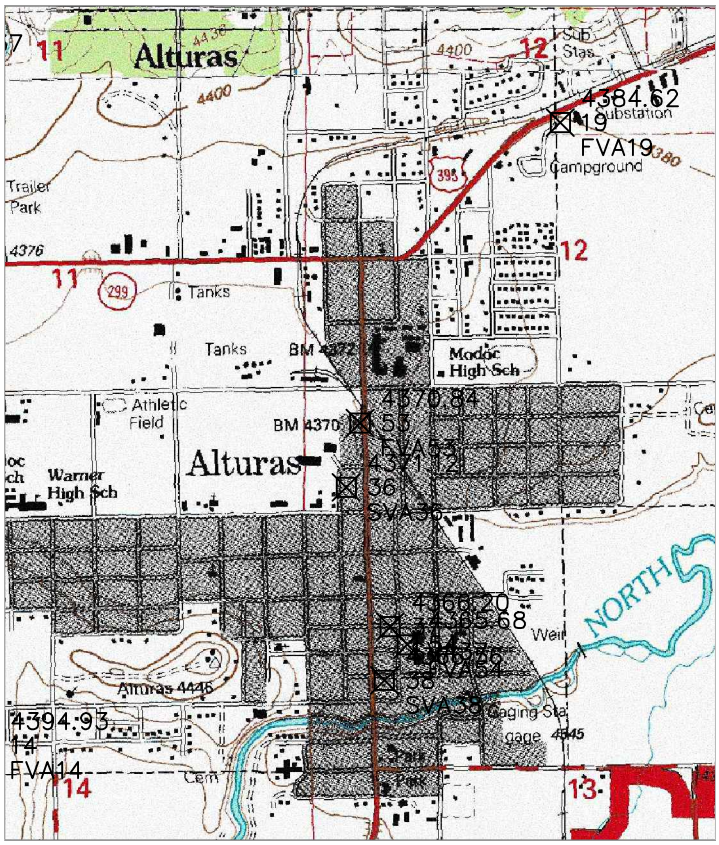
Bearing Objects: 45' NW to yellow blaze on RR tie post, 33.7' East to fenceline.

FEMA CHECKPOINTS
FVA 51
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	53
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 19:11
First obs method	RTK
Second obs date	5/24/11 15:43
Second obs method	RTK
Northing	2429431.695
Easting	6960867.586
Elevation	4370.828
Latitude	41°29'24.11082"N
Longitude	120°32'34.17080"W
Height	4298.098
Monument Type	Conc Nail

FEMA CHECKPOINTS
FVA 53
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt FVA53 is a concrete nail in the Southerly entrace to parking lot with Quiznos and Bear Paw Coffee Company lying Northerly of NGS benchmark E 93.

Bearing Objects: 29.1' South to end of curb that also has a 6" bollard, 38.6' East to back of sidewalk, 60.2' SE to fire hydrant.

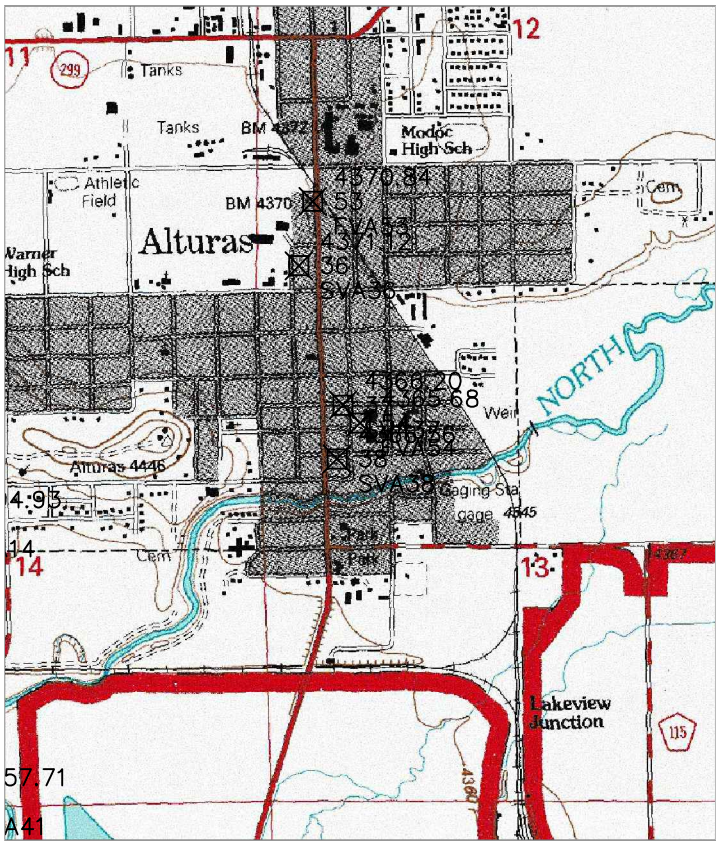
FEMA CHECKPOINTS
FVA 53
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	54
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 19:19
First obs method	RTK
Second obs date	5/24/11 15:35
Second obs method	RTK
Northing	2427125.115
Easting	6961359.825
Elevation	4365.663
Latitude	41°29'01.24360"N
Longitude	120°32'28.20815"W
Height	4292.898
Monument Type	PK Nail

FEMA CHECKPOINTS
FVA 54
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt FVA54 is a PK nail set near the Southerly entrance to the Modoc County Sheriff's Bldg (North of Courthouse and NGS benchmark F 93).

Bearing Objects: 25.0' East to BFC, 28.1' East to BFC on East side of Court St.

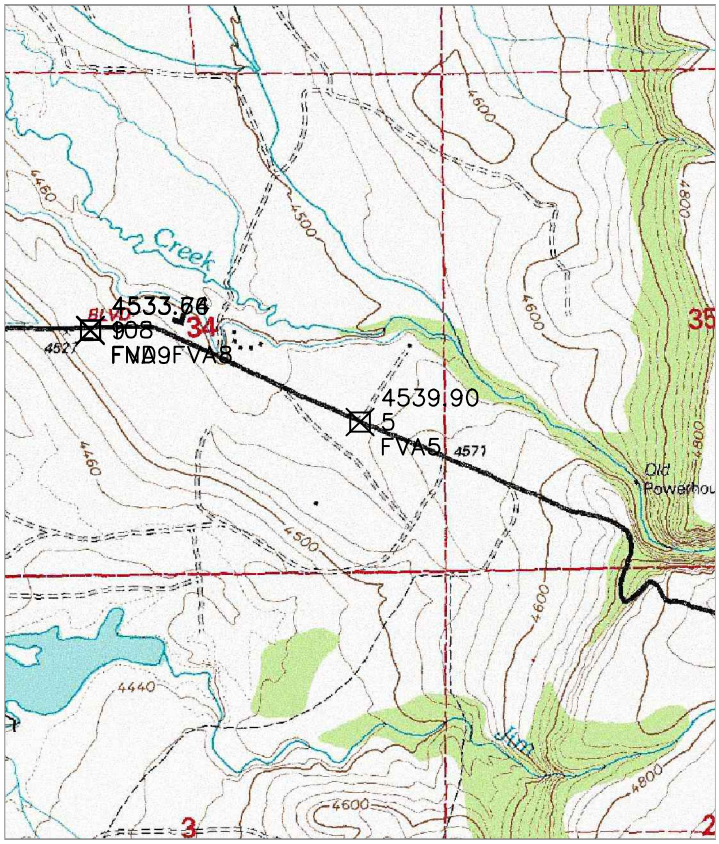
FEMA CHECKPOINTS
FVA 54
VICINITY IMAGERY

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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	5
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 9:18
First obs method	RTK
Second obs date	5/24/11 18:30
Second obs method	RTK
Northing	2409240.273
Easting	6986442.316
Elevation	4539.888
Latitude	41°26'00.30858"N
Longitude	120°27'02.85638"W
Height	4467.324
Monument Type	60D Nail

FEMA CHECKPOINTS
FVA 5
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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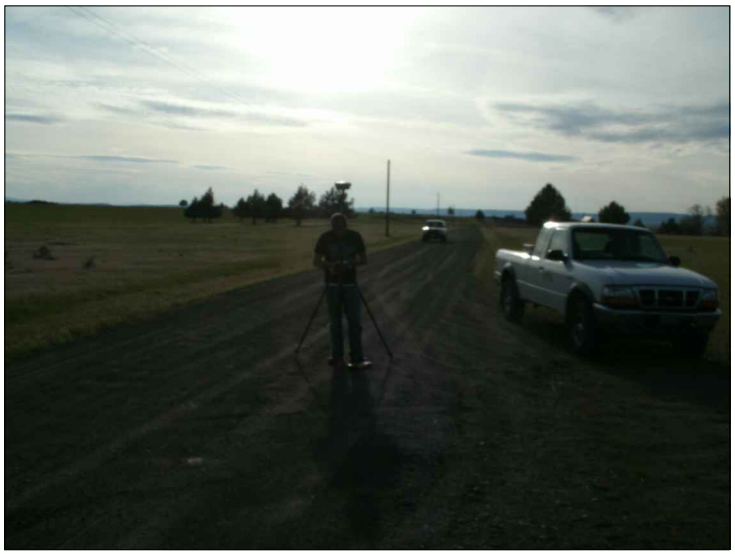
VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

From Modoc County Courthouse proceed 200 ft Southerly on S Court St; make a left (East) onto E Modoc St and proceed 0.1 mi; make a right onto S Estes St and proceed 0.2 mi; make a left onto E McDowell St and proceed 0.2 miles; the road becomes Co Rd 56/Parker Creek Rd and proceed 0.2 mi; turn right onto Co Rd 115 and proceed 2.6 mi; turn left onto Co Rd 59B/Pine Creek Blvd and proceed 0.8 mi; take the 1st left to stay on Co Rd 59B/Pine Creek Blvd and proceed 2.3 mi; turn right to stay on Co Rd 59B/Pine Creek Blvd and proceed 1.4 mi to point on left at a dirt driveway. Point is a 60D nail with feather.

Bearing object: overhead powerline bears South 25'+/-.

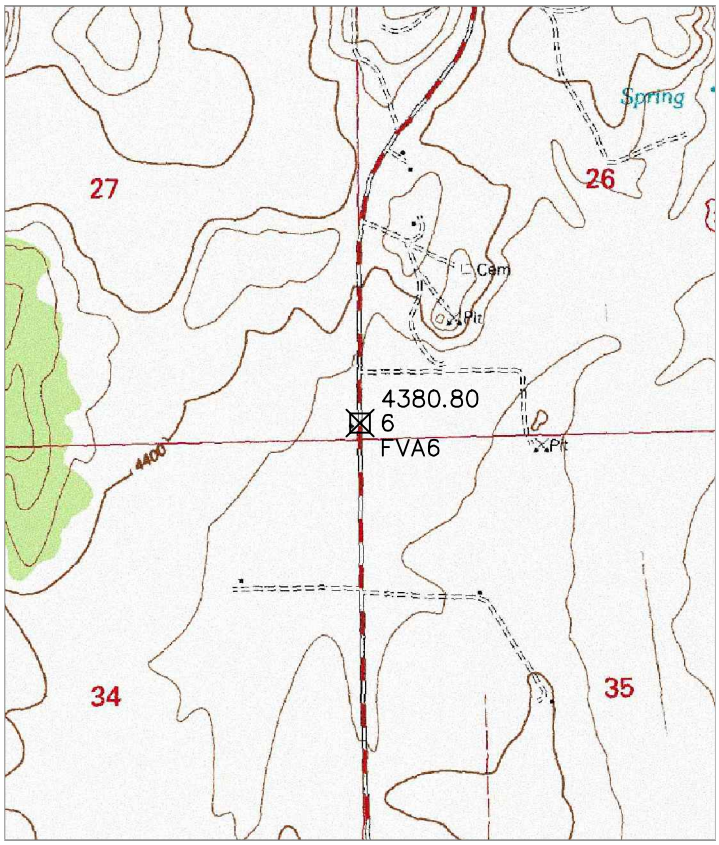
FEMA CHECKPOINTS
FVA 5
VICINITY IMAGERY

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CA ZONE 1
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SHEET 2
OF 2

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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	6
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 16:48
First obs method	RTK
Second obs date	5/24/11 13:52
Second obs method	RTK
Northing	2412567.914
Easting	6955301.844
Elevation	4380.781
Latitude	41°26'38.42269"N
Longitude	120°33'50.92705"W
Height	4307.800
Monument Type	PK Nail

FEMA CHECKPOINTS
FVA 6
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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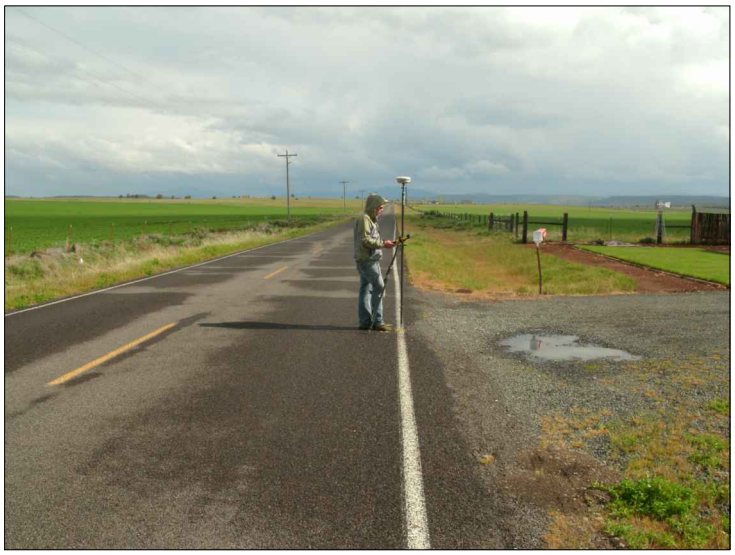
SUMMIT ENGINEERING CORPORATION
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 6 is a PK in the West fogline of County Rd 60 in the center of a gravel driveway West to address 14851.

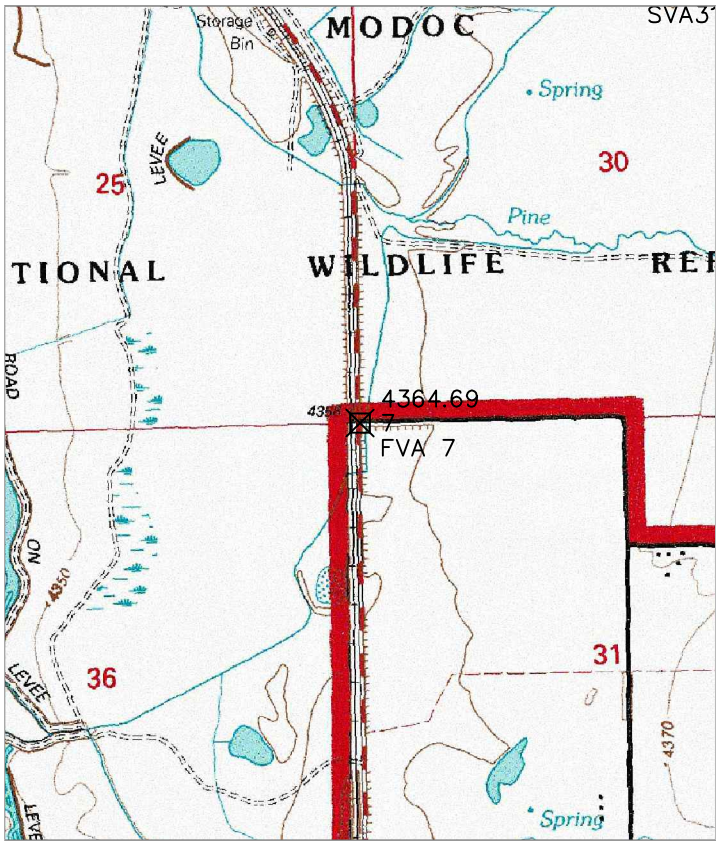
Bearing objects: to red T-post SSW 21.4', to SE fence post of pasture NNW 41.2'.

FEMA CHECKPOINTS
FVA 6
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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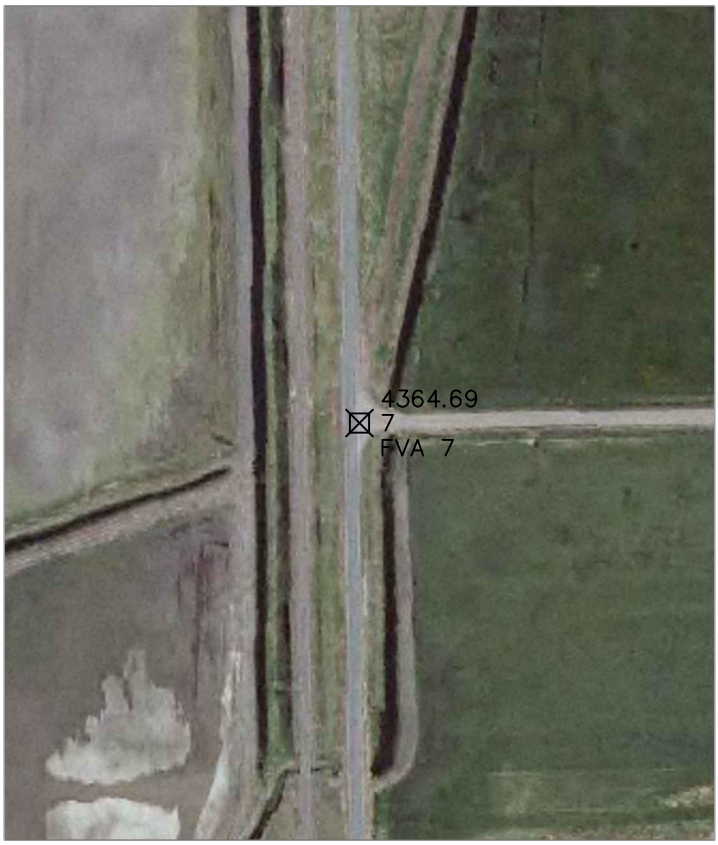
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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	7
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 8:10
First obs method	RTK
Second obs date	5/23/11 13:16
Second obs method	RTK
Northing	2412665.020
Easting	6965881.161
Elevation	4364.672
Latitude	41°26'37.64623"N
Longitude	120°31'32.00776"W
Height	4291.737
Monument Type	PK Nail

FEMA CHECKPOINTS
FVA 7
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 7 is a PK nail on the Easterly side of County Rd 115 at the intersection of County Rd 59 going East.

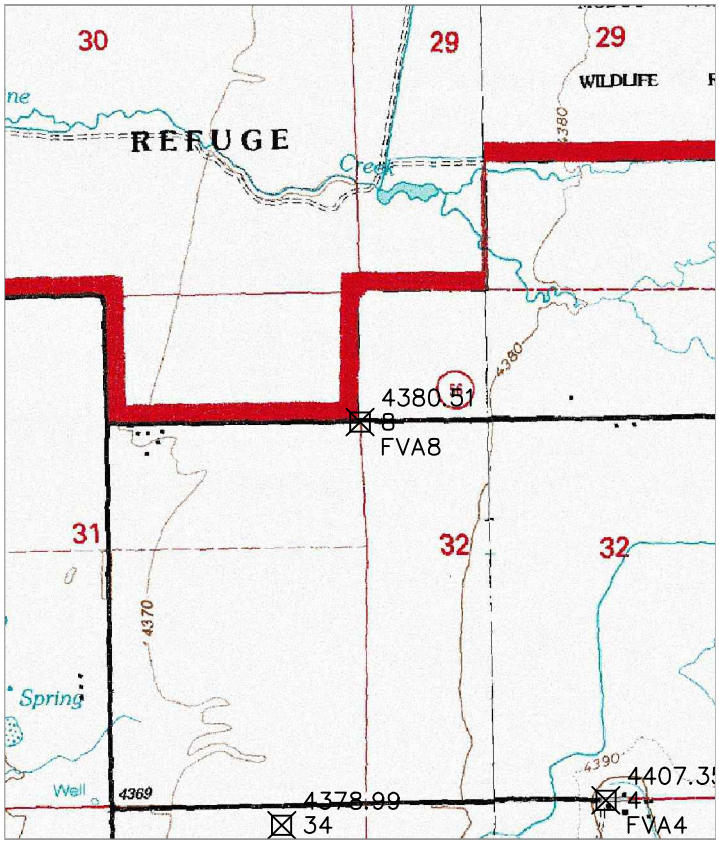
Bearing objects: to lath W 24.1', to West edge of pavement E 22.7', to "STOP" sign NE 44.0', to street sign SE 40.5'.

FEMA CHECKPOINTS
FVA 7
VICINITY IMAGERY

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CA ZONE 1
NAD 83/07 NAVD88
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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	8
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 13:56
First obs method	RTK
Second obs date	5/24/11 8:57
Second obs method	RTK
Northing	2411413.856
Easting	6971285.204
Elevation	4380.491
Latitude	41°26'24.38166"N
Longitude	120°30'21.33769"W
Height	4307.601
Monument Type	PK Nail

FEMA CHECKPOINTS
FVA 8
LOCATION INFORMATION

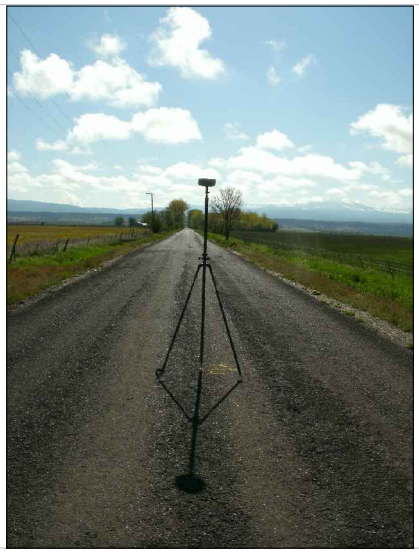
MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 8 is a PK nail in the centerline of Pine Creek Blvd approx 4 miles SE of Alturas.

Bearing objects: to edge of pavement N 10.0', to lath N 11.5', to road marker NE 31.0', to gatepost at entrance to field SSE 31.7'.

FEMA CHECKPOINTS
FVA 8
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

FVA 9 is a PK nail in the center of the Westbound lane of Pine Creek Blvd at centerline of dirt road into pasture on North side approximately 6 miles Southeast of Alturas.

Bearing objects: to S. edge of pavement S 12.5'; to lath S 16.0;, to N edge of pavement and 60D nail with orange ribbon labeled FVA 8 (by others) N 7.0'; to West gatepost NE 22.0'; N. side of road NW 21.0'.

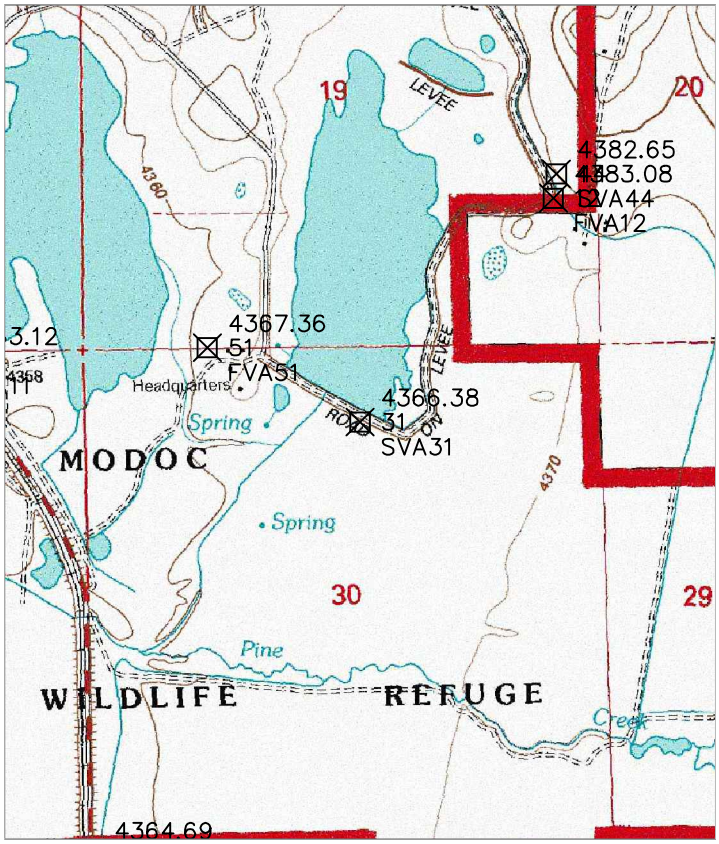
FEMA CHECKPOINTS
FVA 9
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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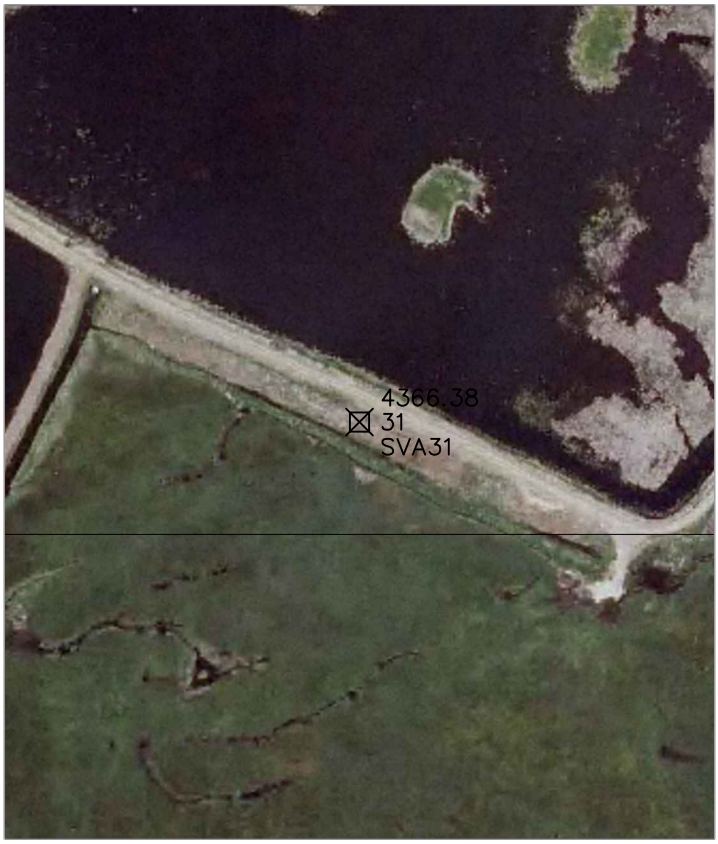
SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\FVA9.DWG ~ 1:27 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	31
Observer	LG
Instrument Type	5800
First obs date	5/20/2011 12:23
First obs method	RTK
Second obs date	5/23/11 20:03
Second obs method	RTK
Northing	2417175.566
Easting	6968652.564
Elevation	4366.364
Latitude	41°27'21.74317"N
Longitude	120°30'54.61808"W
Height	4293.518
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 31 CROPS/WEEDS
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 1 OF 2

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA31 is a 60D nail driven through a Summit Engineering control cap to support point at grade. Point is online between two posts approx. 150' North of Southerly post in 1'-2' high grass and weeds.

No Bearing Objects.

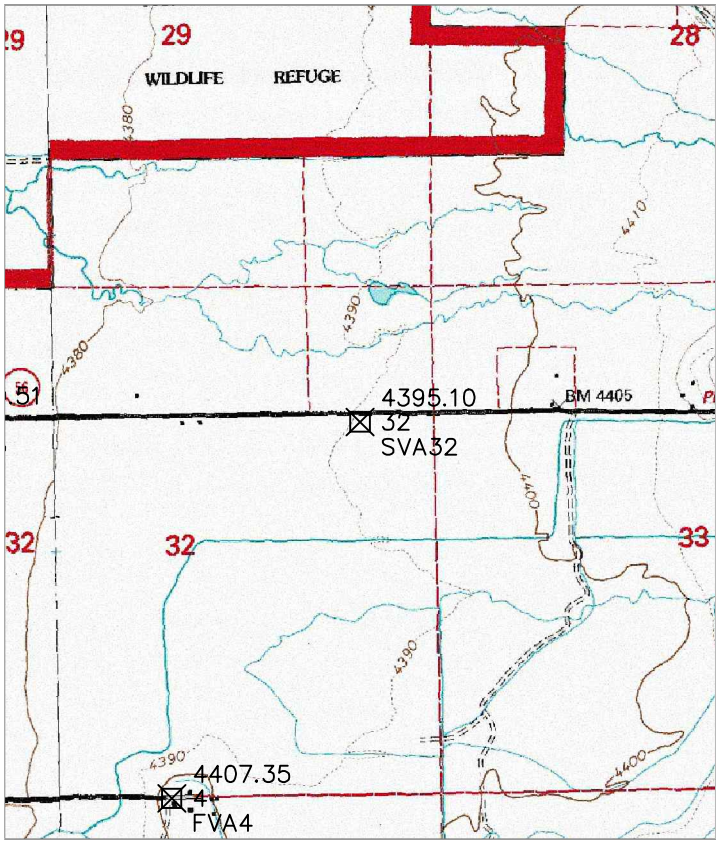
FEMA CHECKPOINTS
SVA 31 CROPS/WEEDS
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA31.DWG ~ 3:42 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	32
Observer	LG
Instrument Type	5800
First obs date	5/23/2011 13:39
First obs method	RTK
Second obs date	5/24/11 9:05
Second obs method	RTK
Northing	2411393.563
Easting	6975801.648
Elevation	4395.086
Latitude	41°26'23.41615"N
Longitude	120°29'22.04896"W
Height	4322.274
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 32 CROPS/WEEDS
LOCATION INFORMATION

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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA32.DWG ~ 3:45 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA32 is a 60D nail and shiner +/-70' South of County Rd, +/-40' West of road in pasture.

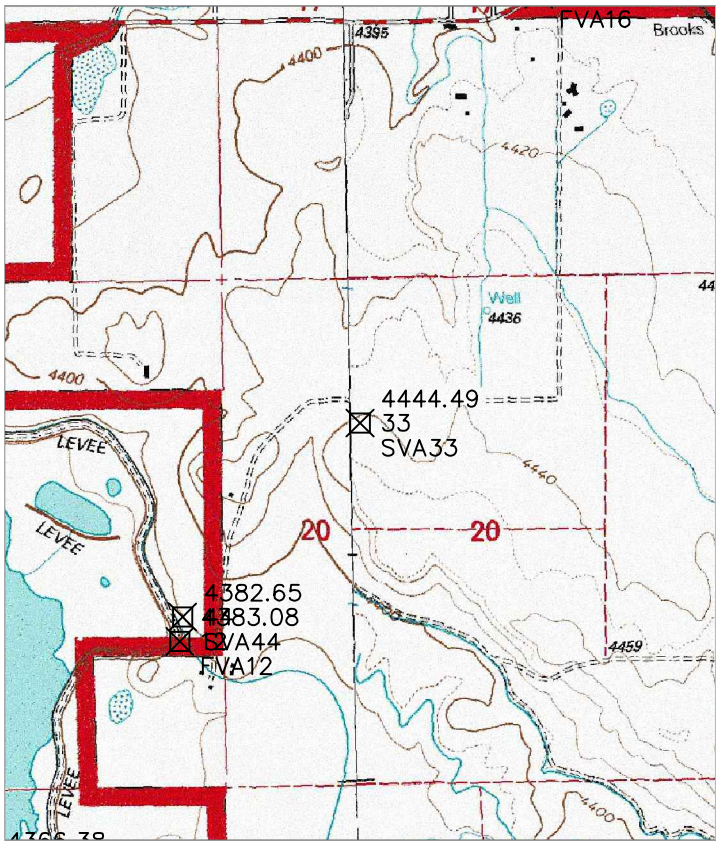
Bearing Objects: 43.3' NE to end of fence, +/-150' North to CL of road.

FEMA CHECKPOINTS
SVA 32 CROPS/WEEDS
VICINITY IMAGERY

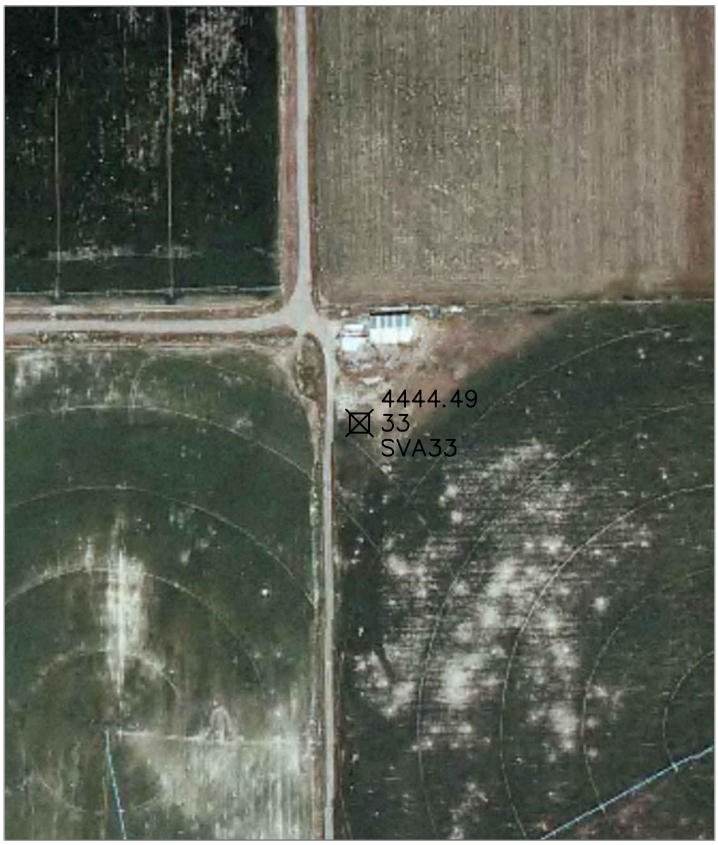
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N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA32.DWG ~ 3:45 PM * 04-AUG-2011



N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	33
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 10:27
First obs method	RTK
Second obs date	5/24/11 17:56
Second obs method	RTK
Northing	2421778.933
Easting	6972539.789
Elevation	4444.477
Latitude	41°28'06.56517"N
Longitude	120°30'02.53849"W
Height	4371.766
Monument Type	Hub & Tack

FEMA CHECKPOINTS
SVA 33 CROPS/WEEDS
LOCATION INFORMATION

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N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA33.DWG ~ 3:47 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA 33 is a hub and tack set in a field East of dirt drive to 2160 Parker Creek, set in +/-1' tall grass/weeds.

Bearing Objects: +/-45' West to CL of dirt road, +/-125' North to pole barn, 64.4' West to yellow underground power cables sign.

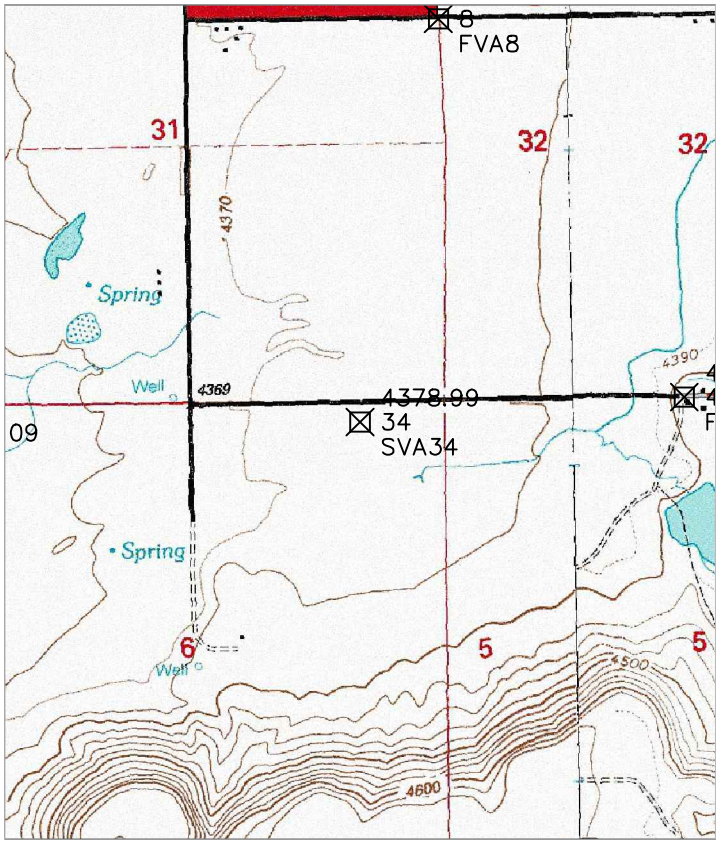
FEMA CHECKPOINTS
SVA 33 CROPS/WEEDS
VICINITY IMAGERY

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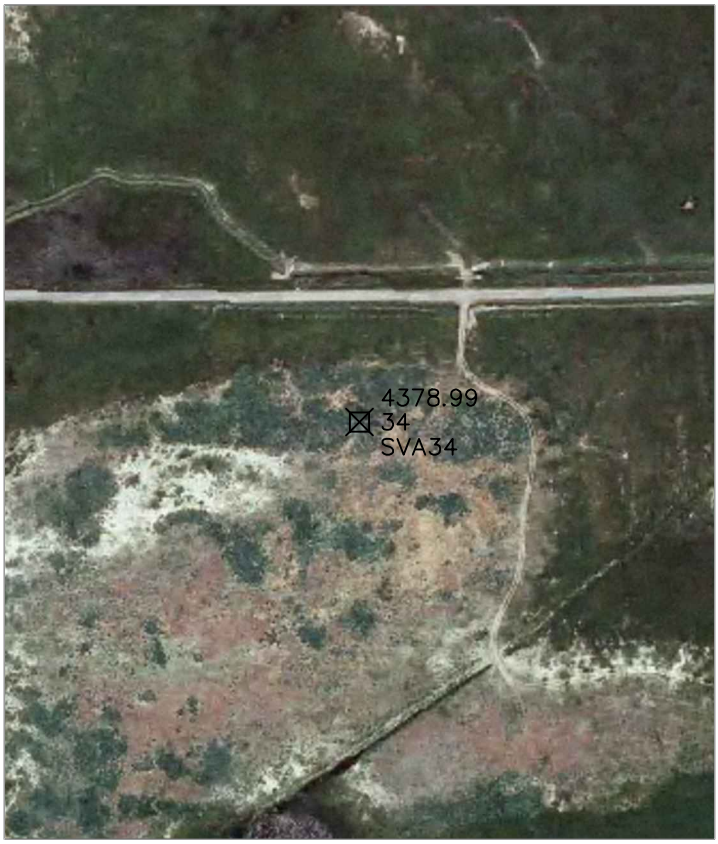
SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA33.DWG ~ 3:47 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	34
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 8:44
First obs method	RTK
Second obs date	5/24/11 18:44
Second obs method	RTK
Northing	2407216.986
Easting	6970470.659
Elevation	4378.976
Latitude	41°25'43.05808"N
Longitude	120°30'32.96887"W
Height	4306.033
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 34 CROPS/WEEDS
LOCATION INFORMATION

MODOC COUNTY, CA
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SHEET 1
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA34.DWG ~ 3:49 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA34 is a 60D nail and shiner set in a field south of road to "Nelson Ranch", set +/-200' south of EP in +/-1.5' tall grass.

No bearing objects.

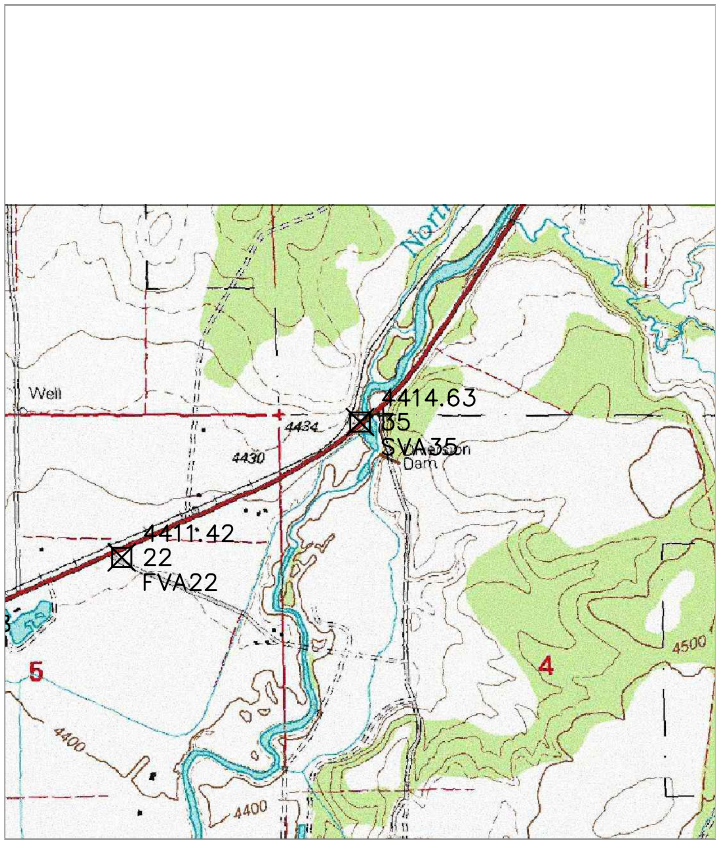
FEMA CHECKPOINTS
SVA 34 CROPS/WEEDS
VICINITY IMAGERY

MODOC COUNTY, CA
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OF 2

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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	35
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 12:21
First obs method	RTK
Second obs date	5/24/11 15:02
Second obs method	RTK
Northing	2439151.980
Easting	6977142.164
Elevation	4414.617
Latitude	41°30'57.40574"N
Longitude	120°28'58.13988"W
Height	4342.418
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 35 BRUSH/TREES
LOCATION INFORMATION

MODOC COUNTY, CA
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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA35.DWG ~ 3:53 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA35 is a 60D nail, shiner and broom set 11.2' NW of guardrail on US395.

Bearing Objects: 28' NW to top of slope that breaks towards river, 17.6' South to road marker on guardrail, 17.2' East to end of guardrail where it meets bridge

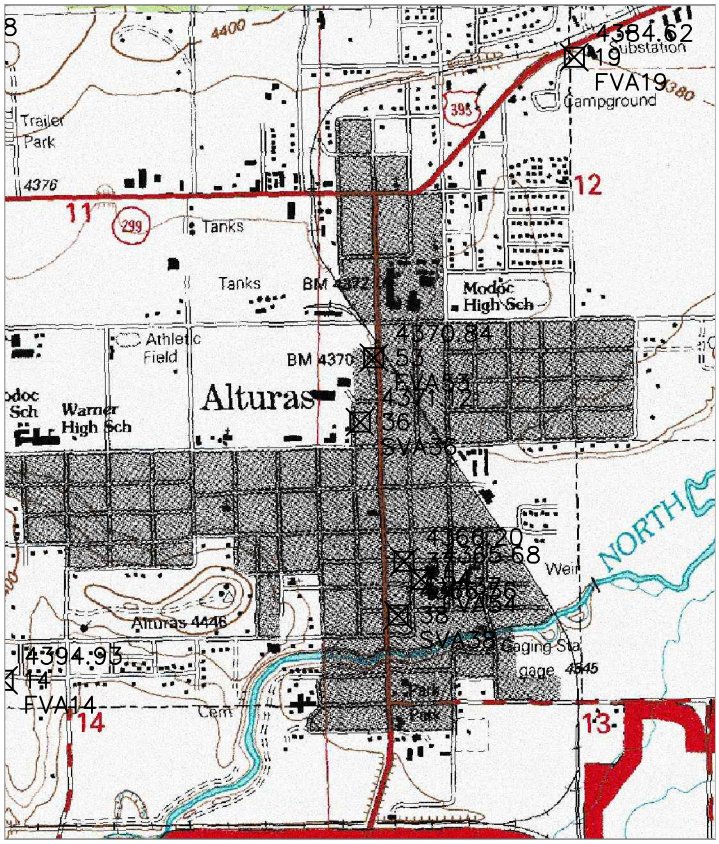
FEMA CHECKPOINTS
SVA 35 BRUSH/TREES
VICINITY IMAGERY

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OF 2

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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	36
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 12:41
First obs method	RTK
Second obs date	5/24/11 15:14
Second obs method	RTK
Northing	2428762.546
Easting	6960723.745
Elevation	4371.102
Latitude	41°29'17.52405"N
Longitude	120°32'36.20681"W
Height	4298.360
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 36 URBAN
LOCATION INFORMATION

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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA36.DWG ~ 4:51 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA36 is a 60D nail and broom in an alley on the East side of N Howard St.

Bearing Objects: 9.2' North to SW building corner of green two story building (motel), 7.2' West to BFC, 22.8' South to NW corner of gray two story building, +/-1.5' North to gate post.

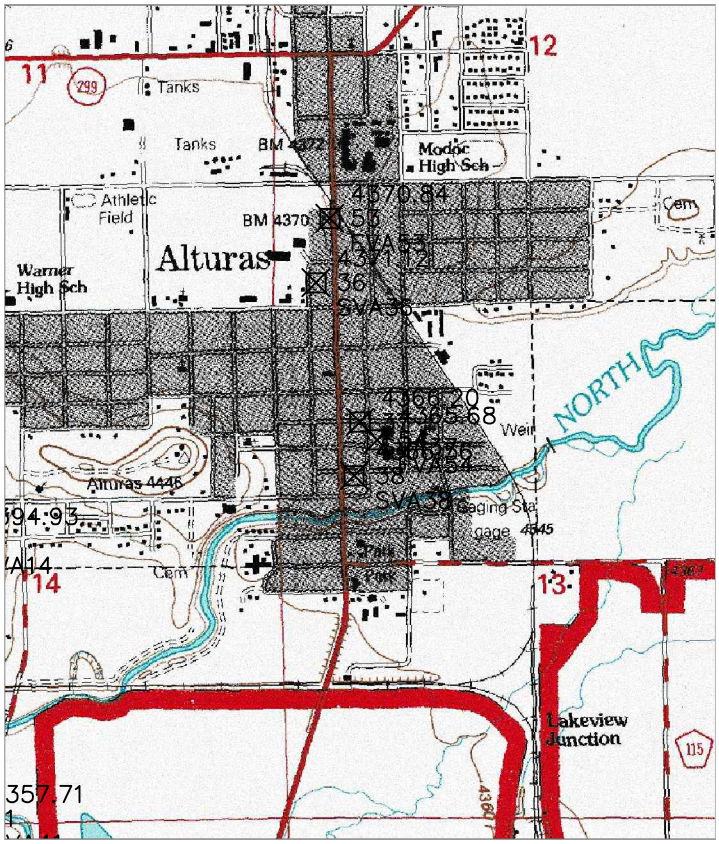
FEMA CHECKPOINTS
SVA 36 URBAN
VICINITY IMAGERY

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SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA36.DWG ~ 4:51 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	37
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 12:53
First obs method	RTK
Second obs date	5/24/11 15:23
Second obs method	RTK
Northing	2427311.068
Easting	6961181.735
Elevation	4366.181
Latitude	41°29'03.10989"N
Longitude	120°32'30.50709"W
Height	4293.418
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 37 URBAN
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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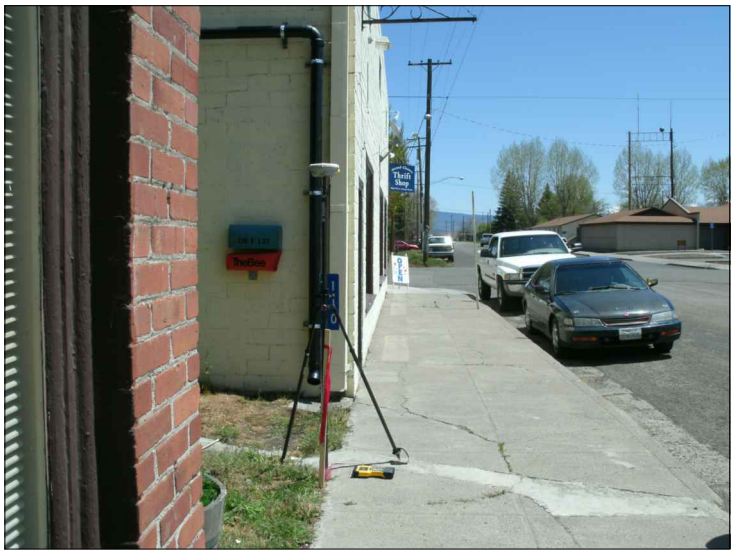
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SHEET 1
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA37.DWG ~ 4:53 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA37 is a 60D nail and broom on the North side of 1st Street at the back of sidewalk.

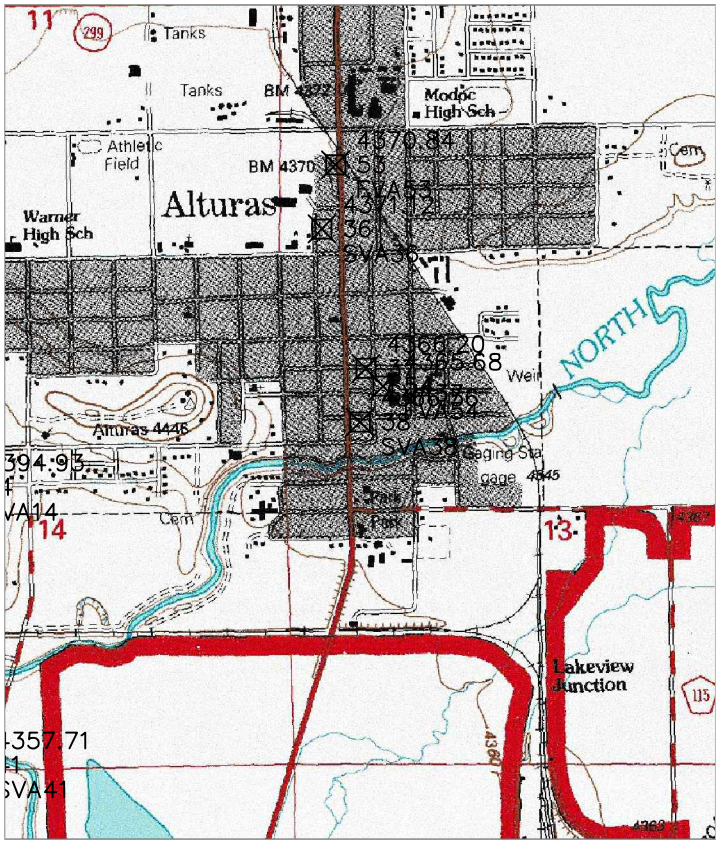
Bearing Objects: 9.7' West to SE corner of 108 1st Street (red brick bldg), 8.1' East to SW corner of 110 1st Street (white brick bldg).

FEMA CHECKPOINTS
SVA 37 URBAN
VICINITY IMAGERY

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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	38
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 13:04
First obs method	RTK
Second obs date	5/24/11 15:29
Second obs method	RTK
Northing	2426752.556
Easting	6961121.145
Elevation	4366.540
Latitude	41°28'57.60240"N
Longitude	120°32'31.42517"W
Height	4293.768
Monument Type	PK Nail

FEMA CHECKPOINTS
SVA 38 URBAN
LOCATION INFORMATION

MODOC COUNTY, CA
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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA38.DWG ~ 4:57 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA38 is a PK nail set near the CL of Modoc Street, +/-110 East of Main St.

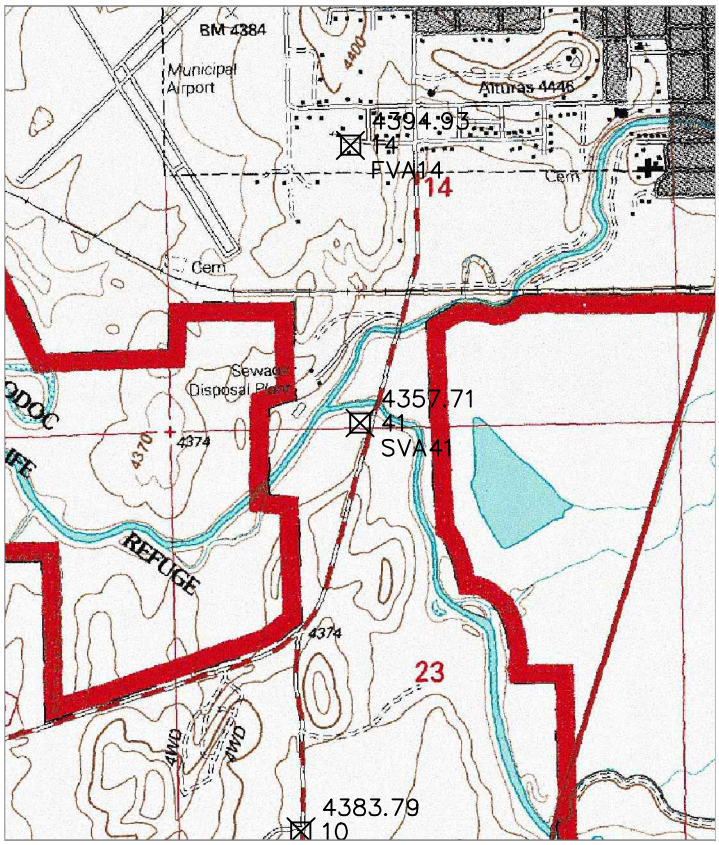
Bearing Objects: 27.5' Soth to BFC, 27.1' North to BFC. 2' East of projection of the separation between a single story and two story brick buildings.

FEMA CHECKPOINTS
SVA 38 URBAN
VICINITY IMAGERY

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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	41
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 13:21
First obs method	RTK
Second obs date	5/24/11 16:00
Second obs method	RTK
Northing	2423183.538
Easting	6957112.007
Elevation	4357.693
Latitude	41°28'23.00023"N
Longitude	120°33'24.86534"W
Height	4284.852
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 41 BRUSH/TREES
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA41.DWG ~ 5:00 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA41 is a 60D nail, shiner and broom set in ground with 3'-6' tall sage brush, +/- 150' South of a stream and +/-100' West of fence.

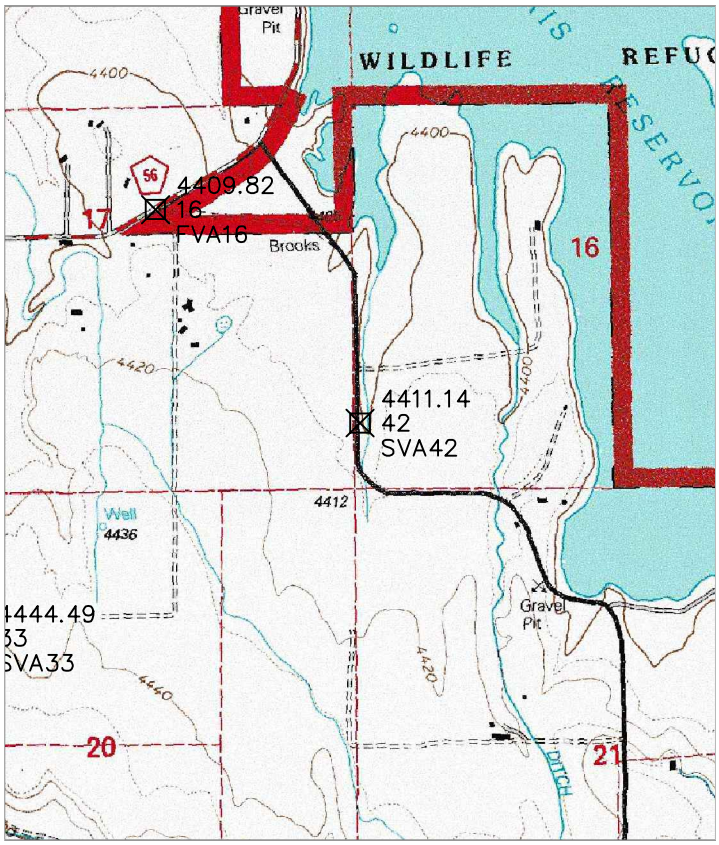
Bearing Objects: None

FEMA CHECKPOINTS
SVA 41 BRUSH/TREES
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	42
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 9:56
First obs method	RTK
Second obs date	5/24/11 18:11
Second obs method	RTK
Northing	2424019.466
Easting	6976528.573
Elevation	4411.120
Latitude	41°28'28.02131"N
Longitude	120°29'09.64144"W
Height	4338.541
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 42 BRUSH/TREES
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA42.DWG ~ 5:02 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA42 is a 60D nail, broom and shiner in ground 17' East of a barb wire fence in 4' to 8' tall sage brush on the East side of County Road 57.

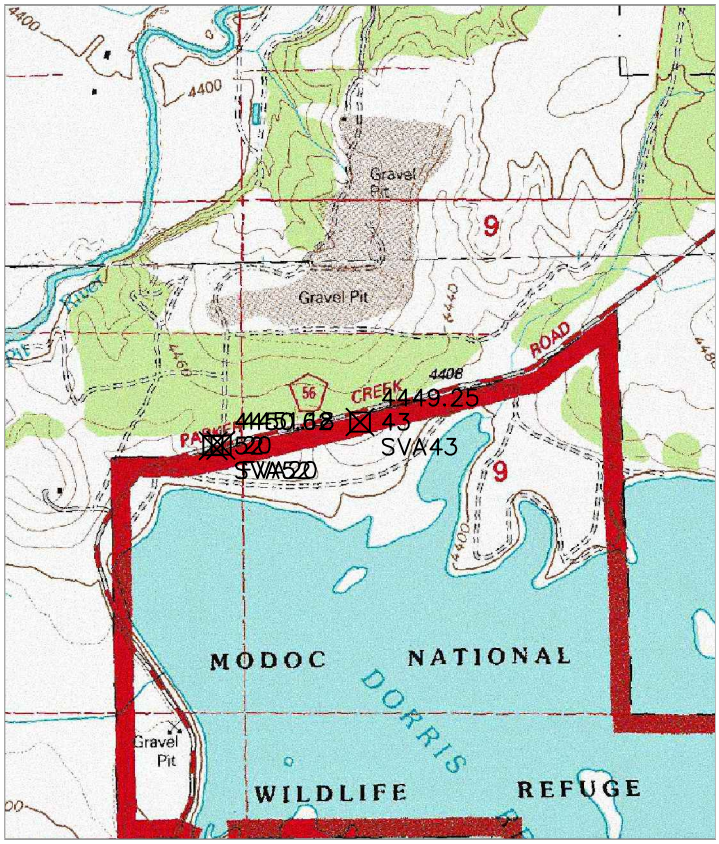
Bearing Objects: None

FEMA CHECKPOINTS
SVA 42 BRUSH/TREES
VICINITY IMAGERY

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	43
Observer	LG
Instrument Type	5800
First obs date	5/24/2011 11:02
First obs method	RTK
Second obs date	5/24/11 17:32
Second obs method	RTK
Northing	2431656.255
Easting	6977619.595
Elevation	4449.233
Latitude	41°29'43.27648"N
Longitude	120°28'53.57224"W
Height	4376.856
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 43 BRUSH/TREES
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA43 is a 60D nail, shiner and broom in 3'-6' tall sage brush.

Bearing Objects: 59.8' North to barb wire fence, +- 86' North to CL of Parker Creek.

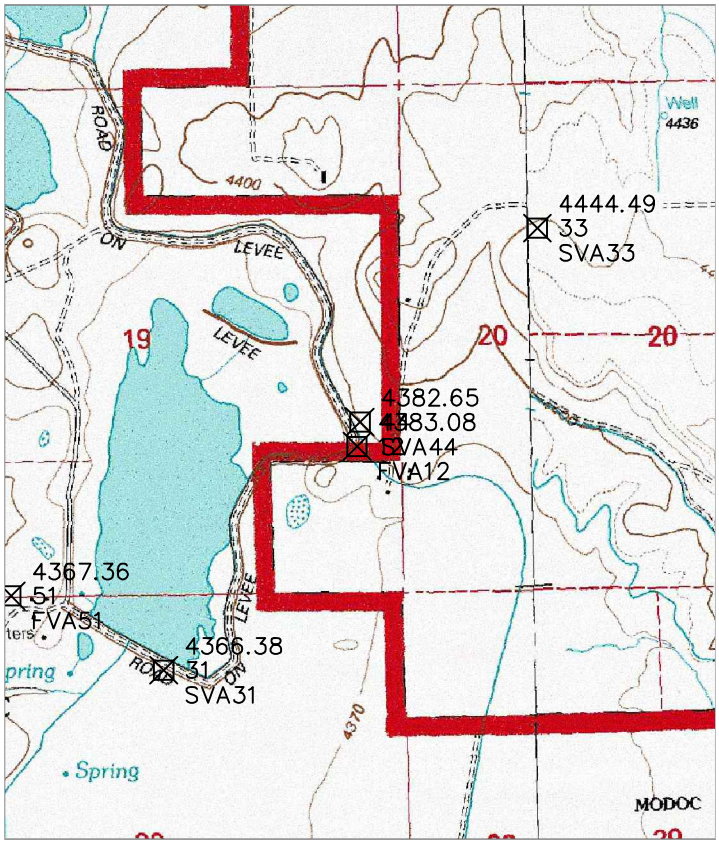
FEMA CHECKPOINTS
SVA 43 BRUSH/TREES
VICINITY IMAGERY

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SHEET 2
OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA43.DWG ~ 5:04 PM * 04-AUG-2011



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

N



LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	44
Observer	LG
Instrument Type	5800
First obs date	5/20/2011 11:41
First obs method	RTK
Second obs date	5/23/11 19:52
Second obs method	RTK
Northing	2419759.647
Easting	6970695.202
Elevation	4382.631
Latitude	41°27'46.92810"N
Longitude	120°30'27.21709"W
Height	4309.854
Monument Type	60D Nail

FEMA CHECKPOINTS
SVA 44 BRUSH/TREES
LOCATION INFORMATION

MODOC COUNTY, CA
CA ZONE 1
NAD 83/07 NAVD88
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SHEET 1 OF 2

N:\DWGS\J29304_MichaelBaker\CA_FEMA\Modoc\PtDataSheets\SVA44.DWG ~ 5:07 PM * 04-AUG-2011



VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA44 is a 60D nail in a semicircle of sage on a gentle slope toward slough to West. Access point from wildlife viewing road by "Y" in road with service road departing Sothwesterly cross eathern dam with headgate, proceeding Northerly on old dirt road. Point lies +/-113' WNW of slough.

Bearing Objects: None

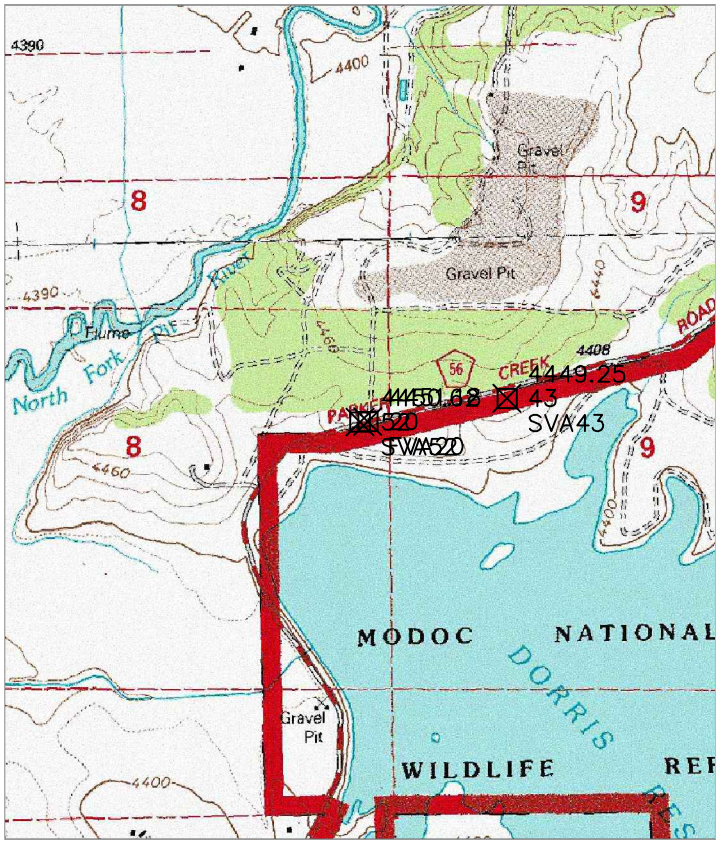
FEMA CHECKPOINTS
SVA 44 BRUSH/TREES
VICINITY IMAGERY

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SHEET 2
OF 2

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N



LOCATION - USGS QUAD

0 1000 2000 3000 4000 5000

LOCATION - 2010 NAIP IMAGERY

0 300 600 900 1200 1500



Point Number	52
Observer	LG
Instrument Type	5800
First obs date	5/20/2011 16:54
First obs method	STATIC
Second obs date	5/24/11 10:42
Second obs method	RTK
Northing	2431409.397
Easting	6976090.867
Elevation	4450.608
Latitude	41°29'41.09909"N
Longitude	120°29'13.71469"W
Height	4378.183
Monument Type	Rebar & Cap

FEMA CHECKPOINTS
SVA 52 CROPS/WEEDS
LOCATION INFORMATION

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SHEET 1 OF 2

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VIEW LOOKING NORTH



VIEW LOOKING EAST



VIEW LOOKING SOUTH



VIEW LOOKING WEST

TO REACH POINT

Pt SVA52 is a Summit Control Point driven flush with the ground on the Westerly side of road overlooking reservoir. Grass and weeds are +/- .67' tall.

Bearing Objects: 7.1' West to T-post in right of way fence, 37.1' South to 35MPH sign, 80' North to CL of gravel road to West, .5' West to lathe.

FEMA CHECKPOINTS
SVA 52 CROPS/WEEDS
VICINITY IMAGERY

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CA ZONE 1
NAD 83/07 NAVD88
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SUMMIT ENGINEERING CORPORATION
5405 MAE ANNE AVE. RENO, NV. 89523

Network Adjustment Report

Project : 2011_0519-24ModocChkptsFinal

User name	lgrube	**Date & Time**	9:53:34 AM 8/4/2011
Coordinate System	US State Plane 1983	**Zone**	California Zone 1 0401
Project Datum	NAD 1983 (Conus)		
Vertical Datum		**Geoid Model**	GEOID09 (Conus)
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

Adjustment Style Settings - 95% Confidence Limits

Residual Tolerances

To End Iterations : 0.000033sft
Final Convergence Cutoff : 0.016404sft

Covariance Display

Horizontal
Propagated Linear Error [E] : U.S.
Constant Term [C] : 0.00000000sft
Scale on Linear Error [S] : 1.96

Three-Dimensional
Propagated Linear Error [E] : U.S.
Constant Term [C] : 0.00000000sft
Scale on Linear Error [S] : 1.96

Elevation Errors were used in the calculations.

Adjustment Controls

Compute Correlations for Geoid : False

Horizontal and Vertical adjustment performed

Set-up Errors

GPS

Error in Height of Antenna : 0.000sft

Centering Error : 0.000sft

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Statistical Summary

Successful Adjustment in 1 iteration(s)

Network Reference Factor : 1.04

Chi Square Test (α=95%) : PASS

Degrees of Freedom : 138.00

GPS Observation Statistics

Reference Factor : 1.04

Redundancy Number (r) : 138.00

Individual GPS Observation Statistics

Observation ID	Reference Factor	Redundancy Number
B1	1.26	0.96
B2	0.80	1.24
B3	0.73	0.79
B4	1.31	1.82
B5	0.06	2.14
B6	1.25	1.59
B7	0.91	1.02
B8	0.85	2.17
B9	0.80	1.94
B10	0.40	0.27

B11	1.24	1.09
B13	0.78	0.98
B14	0.78	0.44
B23	0.75	0.00
B24	0.85	1.68
B25	0.38	1.91
B26	1.55	1.32
B27	1.09	2.19
B28	0.72	2.07
B29	1.15	2.13
B30	1.99	1.89
B31	1.14	1.93
B32	0.46	2.04
B33	0.70	1.61
B34	1.29	2.52
B35	1.19	1.56
B36	0.82	1.88
B37	1.15	1.94
B38	0.69	1.59
B39	0.96	1.91
B40	1.48	1.44
B41	0.62	1.50
B42	1.37	1.48
B43	0.73	1.49
B44	0.83	1.43
B45	0.71	1.32
B46	0.43	1.95
B47	0.62	1.41
B48	1.54	1.68
B49	1.98	1.96
B50	0.31	0.76

B51	0.73	0.93
B52	0.77	0.81
B53	1.21	1.31
B54	1.13	0.87
B55	1.76	1.11
B56	0.42	1.67
B57	0.70	1.07
B58	0.41	1.26
B59	0.85	1.61
B60	0.57	2.73
B61	1.73	1.13
B62	0.41	1.51
B63	1.46	1.37
B64	0.47	1.11
B65	1.00	2.24
B66	1.09	1.15
B67	0.93	1.02
B68	1.63	1.19
B69	0.67	0.30
B70	0.74	0.94
B71	0.94	1.54
B72	1.00	1.44
B73	0.71	1.12
B74	0.96	1.06
B75	0.83	1.41
B76	1.65	1.56
B77	0.71	1.50
B78	1.38	0.76
B79	1.28	1.85
B80	1.27	1.98
B81	1.48	1.81

B82	1.05	2.70
B83	0.82	1.51
B84	1.39	1.52
B85	0.67	2.06
B86	0.84	1.57
B87	0.63	1.89
B88	1.30	1.63
B89	0.34	1.49
B90	0.86	1.87
B91	0.50	1.74
B92	1.02	1.39
B93	0.40	1.93
B94	0.46	1.33
B95	1.04	1.69
B96	0.55	2.24
B97	1.07	2.75
B98	0.84	2.71
B99	1.86	1.58

Geoid Model Statistics

Reference Factor : 1.00

Redundancy Number (r) : 0.00

The GPS height errors exceed the geoid errors. Further scaling of the geoid errors is not recommended.

Weighting Strategies

GPS Observations

User-defined Scalar Applied to All Observations

Scalar : 4.14

Geoid Observations

User-defined Scalar Applied to All Observations

Scalar : 0.01

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Adjusted Coordinates

Adjustment performed in WGS-84

Number of Points : 45
Number of Constrained Points : 1
Horizontal and Height Only : 1

Adjusted Grid Coordinates

Errors are reported using 1.96σ.

Point Name	Northing	N error	Easting	E error	Elevation	e error	Fix
81	2406852.177sft	0.019sft	6965917.258sft	0.014sft	4361.070sft	0.096sft	
3	2401541.641sft	0.047sft	6963799.493sft	0.041sft	4375.257sft	0.108sft	
1	2394869.194sft	0.049sft	6962504.035sft	0.041sft	4394.130sft	0.109sft	
5015	2396529.559sft	0.039sft	6963111.947sft	0.030sft	4379.534sft	0.109sft	
11	2417815.296sft	0.037sft	6964303.211sft	0.031sft	4363.103sft	0.106sft	
51	2417949.448sft	0.017sft	6967063.878sft	0.012sft	4367.339sft	0.093sft	
44	2419759.647sft	0.039sft	6970695.202sft	0.034sft	4382.631sft	0.103sft	
31	2417175.566sft	0.040sft	6968652.564sft	0.036sft	4366.364sft	0.104sft	
2	2405164.011sft	0.044sft	6955527.832sft	0.030sft	4438.292sft	0.107sft	
52	2431409.397sft	0.026sft	6976090.867sft	0.018sft	4450.608sft	0.099sft	
18	2433131.808sft	0.040sft	6956185.491sft	0.029sft	4411.353sft	0.110sft	
4731	2372374.126sft	0.014sft	6981064.405sft	0.010sft	4639.164sft	0.081sft	
6560	2580824.402sft	0.000sft	7023701.997sft	0.000sft	5212.915sft	0.011sft	N E h
12	2419505.813sft	0.044sft	6970663.785sft	0.040sft	4383.062sft	0.106sft	
7	2412665.020sft	0.035sft	6965881.161sft	0.031sft	4364.672sft	0.107sft	

32	2411393.563sft	0.025sft	6975801.648sft	0.015sft	4395.086sft	0.107sft
8	2411413.856sft	0.025sft	6971285.204sft	0.016sft	4380.491sft	0.106sft
9	2410192.767sft	0.036sft	6983636.773sft	0.025sft	4533.740sft	0.106sft
108	2410199.791sft	0.038sft	6983637.330sft	0.024sft	4533.625sft	0.104sft
6	2412567.914sft	0.055sft	6955301.844sft	0.034sft	4380.781sft	0.115sft
10	2418927.598sft	0.061sft	6956496.441sft	0.037sft	4383.775sft	0.117sft
14	2426074.639sft	0.067sft	6957012.622sft	0.030sft	4394.915sft	0.108sft
5009	2431043.470sft	0.053sft	6954952.749sft	0.033sft	4388.624sft	0.108sft
19	2432559.873sft	0.065sft	6962951.544sft	0.040sft	4384.598sft	0.110sft
5007	2436802.198sft	0.051sft	6972303.374sft	0.033sft	4414.059sft	0.104sft
53	2429431.695sft	0.039sft	6960867.586sft	0.035sft	4370.828sft	0.106sft
54	2427125.115sft	0.036sft	6961359.825sft	0.032sft	4365.663sft	0.103sft
15	2424853.463sft	0.042sft	6966015.747sft	0.034sft	4372.055sft	0.103sft
4	2407476.457sft	0.026sft	6973843.418sft	0.019sft	4407.336sft	0.100sft
34	2407216.986sft	0.030sft	6970470.659sft	0.020sft	4378.976sft	0.113sft
5	2409240.273sft	0.033sft	6986442.316sft	0.025sft	4539.888sft	0.105sft
13	2418311.565sft	0.059sft	6979320.539sft	0.039sft	4448.272sft	0.116sft
42	2424019.466sft	0.039sft	6976528.573sft	0.022sft	4411.120sft	0.104sft
16	2426241.731sft	0.041sft	6974400.244sft	0.022sft	4409.805sft	0.103sft
33	2421778.933sft	0.047sft	6972539.789sft	0.032sft	4444.477sft	0.107sft
20	2431414.887sft	0.041sft	6976172.165sft	0.027sft	4451.165sft	0.105sft
43	2431656.255sft	0.050sft	6977619.595sft	0.039sft	4449.233sft	0.111sft
21	2434308.038sft	0.045sft	6982352.482sft	0.035sft	4516.138sft	0.106sft
17	2431278.688sft	0.050sft	6984337.173sft	0.041sft	4496.751sft	0.111sft
22	2437742.370sft	0.056sft	6974662.413sft	0.033sft	4411.408sft	0.107sft
35	2439151.980sft	0.044sft	6977142.164sft	0.028sft	4414.617sft	0.110sft
36	2428762.546sft	0.051sft	6960723.745sft	0.048sft	4371.102sft	0.126sft
37	2427311.068sft	0.051sft	6961181.735sft	0.032sft	4366.181sft	0.136sft
38	2426752.556sft	0.041sft	6961121.145sft	0.033sft	4366.540sft	0.124sft
41	2423183.538sft	0.038sft	6957112.007sft	0.035sft	4357.693sft	0.112sft

Adjusted Geodetic Coordinates

Errors are reported using 1.96σ.

Point Name	Latitude	N error	Longitude	E error	Height	h error	Fix
81	41°25'40.21529"N	0.019sft	120°31'32.81796"W	0.014sft	4288.075sft	0.095sft	
3	41°24'48.10336"N	0.047sft	120°32'01.78219"W	0.041sft	4302.204sft	0.107sft	
1	41°23'42.39934"N	0.049sft	120°32'20.24282"W	0.041sft	4321.021sft	0.109sft	
5015	41°23'58.70208"N	0.039sft	120°32'11.90350"W	0.030sft	4306.440sft	0.108sft	
11	41°27'28.78727"N	0.037sft	120°31'51.59118"W	0.031sft	4290.222sft	0.106sft	
51	41°27'29.65372"N	0.017sft	120°31'15.30848"W	0.012sft	4294.486sft	0.093sft	
44	41°27'46.92810"N	0.039sft	120°30'27.21709"W	0.034sft	4309.854sft	0.103sft	
31	41°27'21.74317"N	0.040sft	120°30'54.61808"W	0.036sft	4293.518sft	0.104sft	
2	41°25'25.24254"N	0.044sft	120°33'49.55347"W	0.030sft	4365.229sft	0.106sft	
52	41°29'41.09909"N	0.026sft	120°29'13.71469"W	0.018sft	4378.183sft	0.098sft	
18	41°30'01.42834"N	0.040sft	120°33'34.88708"W	0.029sft	4338.655sft	0.110sft	
4731	41°19'57.03945"N	0.014sft	120°28'21.88768"W	0.010sft	4566.211sft	0.080sft	
6560	41°54'08.35575"N	0.000sft	120°18'10.13770"W	0.000sft	5143.405sft	0.000sft	Lat Long h
12	41°27'44.42580"N	0.044sft	120°30'27.68647"W	0.040sft	4310.280sft	0.105sft	
7	41°26'37.64623"N	0.035sft	120°31'32.00776"W	0.031sft	4291.737sft	0.106sft	
32	41°26'23.41615"N	0.025sft	120°29'22.04896"W	0.015sft	4322.274sft	0.107sft	
8	41°26'24.38166"N	0.025sft	120°30'21.33769"W	0.016sft	4307.601sft	0.106sft	
9	41°26'10.20659"N	0.036sft	120°27'39.46487"W	0.025sft	4461.101sft	0.106sft	
108	41°26'10.27588"N	0.038sft	120°27'39.45594"W	0.024sft	4460.986sft	0.104sft	
6	41°26'38.42269"N	0.055sft	120°33'50.92705"W	0.034sft	4307.800sft	0.114sft	
10	41°27'41.05619"N	0.061sft	120°33'33.86998"W	0.037sft	4310.878sft	0.116sft	
14	41°28'51.57726"N	0.067sft	120°33'25.54537"W	0.030sft	4322.112sft	0.107sft	
5009	41°29'40.99790"N	0.053sft	120°33'51.53563"W	0.033sft	4315.888sft	0.108sft	
19	41°29'54.67012"N	0.065sft	120°32'06.10376"W	0.040sft	4311.947sft	0.110sft	
5007	41°30'35.01599"N	0.051sft	120°30'02.26688"W	0.033sft	4341.673sft	0.104sft	
53	41°29'24.11082"N	0.039sft	120°32'34.17080"W	0.035sft	4298.098sft	0.105sft	

54	41°29'01.24360"N	0.036sft	120°32'28.20815"W	0.032sft	4292.898sft	0.102sft
15	41°28'38.03209"N	0.042sft	120°31'27.54552"W	0.034sft	4299.298sft	0.102sft
4	41°25'45.05209"N	0.026sft	120°29'48.63943"W	0.019sft	4334.445sft	0.100sft
34	41°25'43.05808"N	0.030sft	120°30'32.96887"W	0.020sft	4306.033sft	0.113sft
5	41°26'00.30858"N	0.033sft	120°27'02.85638"W	0.025sft	4467.324sft	0.105sft
13	41°27'31.15606"N	0.059sft	120°28'34.27258"W	0.039sft	4375.648sft	0.115sft
42	41°28'28.02131"N	0.039sft	120°29'09.64144"W	0.022sft	4338.541sft	0.103sft
16	41°28'50.33693"N	0.041sft	120°29'37.09555"W	0.022sft	4337.221sft	0.103sft
33	41°28'06.56517"N	0.047sft	120°30'02.53849"W	0.032sft	4371.766sft	0.107sft
20	41°29'41.13946"N	0.041sft	120°29'12.64526"W	0.027sft	4378.742sft	0.104sft
43	41°29'43.27648"N	0.050sft	120°28'53.57224"W	0.039sft	4376.856sft	0.110sft
21	41°30'08.65755"N	0.045sft	120°27'50.77481"W	0.035sft	4443.973sft	0.105sft
17	41°29'38.38726"N	0.050sft	120°27'25.39572"W	0.041sft	4424.573sft	0.110sft
22	41°30'43.90367"N	0.056sft	120°29'31.05123"W	0.033sft	4339.105sft	0.106sft
35	41°30'57.40574"N	0.044sft	120°28'58.13988"W	0.028sft	4342.418sft	0.109sft
36	41°29'17.52405"N	0.051sft	120°32'36.20681"W	0.048sft	4298.360sft	0.126sft
37	41°29'03.10989"N	0.051sft	120°32'30.50709"W	0.032sft	4293.418sft	0.136sft
38	41°28'57.60240"N	0.041sft	120°32'31.42517"W	0.033sft	4293.768sft	0.124sft
41	41°28'23.00023"N	0.038sft	120°33'24.86534"W	0.035sft	4284.852sft	0.112sft

Coordinate Deltas

Point Name	ΔNorthing	ΔEasting	ΔElevation	ΔHeight	ΔGeoid Separation
81	0.142sft	-0.038sft	-0.018sft	-0.018sft	0.000sft
3	0.142sft	-0.038sft	-0.017sft	-0.017sft	0.000sft
1	0.142sft	-0.039sft	-0.017sft	-0.017sft	0.000sft
5015	0.142sft	-0.038sft	-0.016sft	-0.016sft	0.000sft
11	0.141sft	-0.039sft	-0.017sft	-0.017sft	0.000sft
51	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
44	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
31	0.141sft	-0.040sft	-0.017sft	-0.017sft	0.000sft

2	0.141sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
52	0.142sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
18	0.142sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
4731	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
6560	0.000sft	0.000sft	-0.016sft	0.000sft	-0.016sft
12	0.142sft	-0.040sft	-0.017sft	-0.017sft	0.000sft
7	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
32	0.142sft	-0.041sft	-0.016sft	-0.016sft	0.000sft
8	0.141sft	-0.041sft	-0.016sft	-0.016sft	0.000sft
9	0.142sft	-0.041sft	-0.017sft	-0.017sft	0.000sft
108	0.143sft	-0.041sft	-0.017sft	-0.017sft	0.000sft
6	0.142sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
10	0.142sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
14	0.142sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
5009	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
19	0.141sft	-0.039sft	-0.017sft	-0.017sft	0.000sft
5007	0.141sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
53	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
54	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
15	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
4	0.143sft	-0.039sft	-0.014sft	-0.014sft	0.000sft
34	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
5	0.141sft	-0.039sft	-0.014sft	-0.014sft	0.000sft
13	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
42	0.141sft	-0.040sft	-0.017sft	-0.017sft	0.000sft
16	0.142sft	-0.040sft	-0.017sft	-0.017sft	0.000sft
33	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
20	0.141sft	-0.040sft	-0.015sft	-0.015sft	0.000sft
43	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
21	0.142sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
17	0.141sft	-0.039sft	-0.016sft	-0.016sft	0.000sft

22	0.142sft	-0.040sft	-0.016sft	-0.016sft	0.000sft
35	0.141sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
36	0.141sft	-0.039sft	-0.017sft	-0.017sft	0.000sft
37	0.141sft	-0.039sft	-0.014sft	-0.014sft	0.000sft
38	0.142sft	-0.039sft	-0.016sft	-0.016sft	0.000sft
41	0.142sft	-0.039sft	-0.015sft	-0.015sft	0.000sft

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Control Coordinate Comparisons

Values shown are control coord minus adjusted coord.

Point Name	ΔNorthing	ΔEasting	ΔElevation	ΔHeight
51	-0.146sft	0.039sft	N/A	0.017sft
6560	N/A	N/A	N/A	N/A

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Adjusted Observations

Adjustment performed in WGS-84

GPS Observations

Number of Observations : 90
Number of Outliers : 0

Observation Adjustment (Critical Tau = 3.69). Any outliers are in red.

Obs. ID	From Pt.	To Pt.		Observation	A-posteriori Error (1.96σ)	Residual	Stand. Residual
B99	51	4	**Az.**	148°03'02.2550"	0°00'00.2670"	-0°00'00.1516"	-1.20

			ΔHt.	39.960sft	0.036sft	0.059sft	2.67
			Dist.	12476.415sft	0.019sft	-0.015sft	-1.37
B49	51	4	**Az.**	148°03'02.2550"	0°00'00.2670"	-0°00'00.9543"	-1.78
			ΔHt.	39.960sft	0.036sft	-0.184sft	-2.33
			Dist.	12476.415sft	0.019sft	-0.012sft	-0.86
B55	51	108	**Az.**	116°01'38.7861"	0°00'00.4090"	-0°00'00.2678"	-1.30
			ΔHt.	166.500sft	0.046sft	-0.016sft	-0.45
			Dist.	18296.689sft	0.017sft	0.014sft	2.28
B76	51	19	**Az.**	345°14'49.6256"	0°00'00.5841"	0°00'00.3266"	1.27
			ΔHt.	17.462sft	0.059sft	-0.057sft	-2.16
			Dist.	15178.779sft	0.060sft	-0.010sft	-0.22
B63	51	21	**Az.**	44°01'49.7533"	0°00'00.3355"	-0°00'00.1664"	-1.11
			ΔHt.	149.488sft	0.050sft	0.057sft	2.15
			Dist.	22391.672sft	0.039sft	-0.006sft	-0.29
B79	51	35	**Az.**	26°23'25.1546"	0°00'00.2127"	0°00'00.3267"	2.00
			ΔHt.	47.933sft	0.057sft	-0.017sft	-0.67
			Dist.	23476.882sft	0.041sft	-0.032sft	-1.03
B4	81	11	**Az.**	352°35'19.5919"	0°00'00.5621"	-0°00'00.2399"	-0.79
			ΔHt.	2.147sft	0.056sft	0.032sft	0.79
			Dist.	11081.840sft	0.034sft	-0.060sft	-1.94
B88	51	21	**Az.**	44°01'49.7533"	0°00'00.3355"	-0°00'00.0543"	-0.22
			ΔHt.	149.488sft	0.050sft	-0.060sft	-1.92
			Dist.	22391.672sft	0.039sft	-0.002sft	-0.13
B61	51	20	**Az.**	35°02'31.9112"	0°00'00.4089"	-0°00'00.3557"	-1.77
			ΔHt.	84.257sft	0.048sft	0.055sft	1.87
			Dist.	16257.353sft	0.031sft	-0.020sft	-1.34
B68	51	37	**Az.**	328°49'30.1808"	0°00'00.7515"	-0°00'00.8635"	-1.87
			ΔHt.	-1.067sft	0.099sft	0.051sft	1.02
			Dist.	11056.682sft	0.040sft	0.006sft	0.54
B66	51	35	**Az.**	26°23'25.1546"	0°00'00.2127"	-0°00'00.1523"	-1.84

			ΔHt.	47.933sft	0.057sft	0.018sft	0.54
			Dist.	23476.882sft	0.041sft	0.009sft	0.46
B53	51	5	**Az.**	115°10'02.1238"	0°00'00.3048"	-0°00'00.0054"	-0.03
			ΔHt.	172.838sft	0.048sft	0.052sft	1.15
			Dist.	21246.588sft	0.017sft	-0.012sft	-1.83
B54	51	9	**Az.**	116°02'53.1694"	0°00'00.3922"	0°00'00.0840"	0.47
			ΔHt.	166.616sft	0.051sft	-0.035sft	-1.12
			Dist.	18299.162sft	0.017sft	0.008sft	1.78
B30	51	108	**Az.**	116°01'38.7861"	0°00'00.4090"	0°00'00.2998"	0.76
			ΔHt.	166.500sft	0.046sft	0.004sft	0.16
			Dist.	18296.689sft	0.017sft	-0.046sft	-1.78
B80	51	36	**Az.**	330°34'57.0530"	0°00'00.9284"	-0°00'00.2778"	-0.43
			ΔHt.	3.875sft	0.085sft	-0.098sft	-1.73
			Dist.	12535.310sft	0.035sft	-0.030sft	-0.77
B78	51	22	**Az.**	21°58'08.0560"	0°00'00.3209"	0°00'00.1172"	1.35
			ΔHt.	44.619sft	0.052sft	-0.026sft	-1.61
			Dist.	21202.226sft	0.052sft	-0.037sft	-1.67
B34	51	2	**Az.**	223°01'35.8700"	0°00'00.3875"	0°00'00.2973"	0.56
			ΔHt.	70.744sft	0.052sft	0.073sft	1.29
			Dist.	17221.414sft	0.037sft	0.062sft	1.66
B6	51	31	**Az.**	116°56'19.5818"	0°00'04.2551"	0°00'05.5420"	1.63
			ΔHt.	-0.968sft	0.046sft	-0.063sft	-1.59
			Dist.	1767.231sft	0.034sft	0.002sft	0.15
B11	51	18	**Az.**	325°20'42.5405"	0°00'00.3633"	-0°00'00.0468"	-0.40
			ΔHt.	44.170sft	0.058sft	0.054sft	1.62
			Dist.	18678.136sft	0.031sft	-0.012sft	-1.14
B39	51	18	**Az.**	325°20'42.5405"	0°00'00.3633"	-0°00'00.1361"	-0.41
			ΔHt.	44.170sft	0.058sft	-0.052sft	-1.55
			Dist.	18678.136sft	0.031sft	0.020sft	0.78
B7	51	11	**Az.**	268°11'06.5149"	0°00'02.4805"	0°00'01.2930"	1.53

			ΔHt.	-4.264sft	0.054sft	-0.015sft	-0.46
			Dist.	2764.052sft	0.030sft	-0.006sft	-0.29
B48	51	7	**Az.**	193°34'57.8233"	0°00'01.0016"	-0°00'00.6731"	-1.48
			ΔHt.	-2.748sft	0.052sft	0.034sft	1.44
			Dist.	5415.421sft	0.033sft	0.004sft	0.16
B37	51	14	**Az.**	309°55'06.7151"	0°00'00.8339"	-0°00'00.1767"	-0.38
			ΔHt.	27.627sft	0.054sft	0.054sft	1.47
			Dist.	12925.216sft	0.047sft	0.020sft	0.65
B84	51	53	**Az.**	332°36'50.8298"	0°00'00.5299"	0°00'00.4481"	1.44
			ΔHt.	3.613sft	0.050sft	0.010sft	0.24
			Dist.	13048.017sft	0.034sft	-0.028sft	-1.11
B35	51	6	**Az.**	246°22'53.7673"	0°00'00.7757"	0°00'00.1936"	0.55
			ΔHt.	13.314sft	0.067sft	0.020sft	0.64
			Dist.	12935.311sft	0.037sft	0.031sft	1.42
B29	51	9	**Az.**	116°02'53.1694"	0°00'00.3922"	-0°00'00.1007"	-0.21
			ΔHt.	166.616sft	0.051sft	0.001sft	0.03
			Dist.	18299.162sft	0.017sft	-0.046sft	-1.39
B65	51	22	**Az.**	21°58'08.0560"	0°00'00.3209"	-0°00'00.2194"	-0.62
			ΔHt.	44.619sft	0.052sft	0.048sft	0.97
			Dist.	21202.226sft	0.052sft	0.046sft	1.37
B44	51	15	**Az.**	352°20'05.0773"	0°00'00.9507"	-0°00'00.6294"	-1.35
			ΔHt.	4.813sft	0.043sft	-0.001sft	-0.04
			Dist.	6983.433sft	0.038sft	0.004sft	0.13
B1	81	3	**Az.**	202°42'19.4267"	0°00'01.4133"	0°00'00.3109"	0.61
			ΔHt.	14.129sft	0.054sft	-0.021sft	-1.31
			Dist.	5717.535sft	0.044sft	0.025sft	1.34
B71	51	2	**Az.**	223°01'35.8700"	0°00'00.3875"	0°00'00.1574"	0.98
			ΔHt.	70.744sft	0.052sft	-0.040sft	-1.12
			Dist.	17221.414sft	0.037sft	-0.031sft	-1.33
B81	51	37	**Az.**	328°49'30.1808"	0°00'00.7515"	0°00'00.6523"	1.32

			ΔHt.	-1.067sft	0.099sft	0.042sft	0.53
			Dist.	11056.682sft	0.040sft	-0.021sft	-0.55
B92	51	33	**Az.**	56°00'02.5245"	0°00'01.2451"	-0°00'00.0755"	-0.20
			ΔHt.	77.281sft	0.053sft	-0.002sft	-0.09
			Dist.	6682.411sft	0.034sft	0.034sft	1.30
B86	51	15	**Az.**	352°20'05.0773"	0°00'00.9507"	0°00'00.6674"	1.28
			ΔHt.	4.813sft	0.043sft	0.006sft	0.19
			Dist.	6983.433sft	0.038sft	-0.007sft	-0.26
B36	51	10	**Az.**	276°15'20.4671"	0°00'01.1302"	-0°00'00.0190"	-0.03
			ΔHt.	16.393sft	0.070sft	0.005sft	0.11
			Dist.	10613.098sft	0.035sft	0.033sft	1.27
B75	51	5009	**Az.**	318°12'01.7580"	0°00'00.4286"	-0°00'00.2370"	-0.86
			ΔHt.	21.402sft	0.054sft	0.017sft	0.72
			Dist.	17837.042sft	0.045sft	-0.033sft	-1.25
B59	51	33	**Az.**	56°00'02.5245"	0°00'01.2451"	-0°00'00.5577"	-0.48
			ΔHt.	77.281sft	0.053sft	0.010sft	0.33
			Dist.	6682.411sft	0.034sft	-0.016sft	-1.24
B83	51	54	**Az.**	329°06'00.3102"	0°00'00.5948"	0°00'00.4506"	1.24
			ΔHt.	-1.588sft	0.043sft	-0.017sft	-0.44
			Dist.	10804.597sft	0.030sft	0.005sft	0.21
B73	51	10	**Az.**	276°15'20.4671"	0°00'01.1302"	-0°00'00.0741"	-0.14
			ΔHt.	16.393sft	0.070sft	0.003sft	0.11
			Dist.	10613.098sft	0.035sft	-0.015sft	-1.21
B27	51	32	**Az.**	127°50'51.5197"	0°00'00.3017"	0°00'00.3128"	0.52
			ΔHt.	27.788sft	0.053sft	0.021sft	0.69
			Dist.	10924.272sft	0.013sft	-0.029sft	-1.21
B98	51	4	**Az.**	148°03'02.2550"	0°00'00.2670"	-0°00'00.7863"	-1.20
			ΔHt.	39.960sft	0.036sft	-0.022sft	-0.55
			Dist.	12476.415sft	0.019sft	-0.024sft	-0.69
B42	51	53	**Az.**	332°36'50.8298"	0°00'00.5299"	-0°00'00.4155"	-1.20

			ΔHt.	3.613sft	0.050sft	0.005sft	0.12
			Dist.	13048.017sft	0.034sft	0.027sft	1.08
B8	51	81	**Az.**	186°51'58.6477"	0°00'00.2101"	0°00'00.0265"	0.08
			ΔHt.	-6.410sft	0.036sft	0.026sft	0.75
			Dist.	11156.898sft	0.015sft	0.022sft	1.20
B31	51	3	**Az.**	192°13'10.0095"	0°00'00.4872"	-0°00'00.3874"	-1.11
			ΔHt.	7.719sft	0.060sft	0.065sft	1.17
			Dist.	16730.229sft	0.045sft	0.002sft	0.05
B40	51	19	**Az.**	345°14'49.6256"	0°00'00.5841"	-0°00'00.2521"	-0.64
			ΔHt.	17.462sft	0.059sft	0.045sft	1.15
			Dist.	15178.779sft	0.060sft	-0.007sft	-0.32
B74	51	14	**Az.**	309°55'06.7151"	0°00'00.8339"	0°00'00.0587"	0.15
			ΔHt.	27.627sft	0.054sft	-0.025sft	-1.15
			Dist.	12925.216sft	0.047sft	-0.004sft	-0.17
B38	51	5009	**Az.**	318°12'01.7580"	0°00'00.4286"	0°00'00.0587"	0.25
			ΔHt.	21.402sft	0.054sft	-0.024sft	-0.50
			Dist.	17837.042sft	0.045sft	0.028sft	1.14
B97	51	4	**Az.**	148°03'02.2550"	0°00'00.2670"	-0°00'00.4006"	-0.73
			ΔHt.	39.960sft	0.036sft	0.056sft	1.12
			Dist.	12476.415sft	0.019sft	0.035sft	0.98
B24	51	12	**Az.**	67°35'11.6843"	0°00'01.9782"	-0°00'00.7131"	-0.66
			ΔHt.	15.794sft	0.050sft	-0.037sft	-1.11
			Dist.	3922.119sft	0.041sft	-0.010sft	-0.42
B72	51	6	**Az.**	246°22'53.7673"	0°00'00.7757"	-0°00'00.1423"	-0.32
			ΔHt.	13.314sft	0.067sft	-0.012sft	-0.33
			Dist.	12935.311sft	0.037sft	-0.019sft	-1.10
B9	51	2	**Az.**	223°01'35.8700"	0°00'00.3875"	-0°00'00.3667"	-1.08
			ΔHt.	70.744sft	0.052sft	0.000sft	-0.01
			Dist.	17221.414sft	0.037sft	0.007sft	0.24
B67	51	36	**Az.**	330°34'57.0530"	0°00'00.9284"	-0°00'00.1812"	-0.37

			ΔHt.	3.875sft	0.085sft	0.041sft	1.06
			Dist.	12535.310sft	0.035sft	-0.003sft	-0.29
B69	51	38	**Az.**	326°56'42.1732"	0°00'00.7118"	-0°00'00.0645"	-0.36
			ΔHt.	-0.717sft	0.082sft	0.002sft	0.07
			Dist.	10621.709sft	0.032sft	0.004sft	1.00
B43	51	54	**Az.**	329°06'00.3102"	0°00'00.5948"	-0°00'00.3696"	-0.97
			ΔHt.	-1.588sft	0.043sft	-0.005sft	-0.12
			Dist.	10804.597sft	0.030sft	0.001sft	0.02
B95	51	5	**Az.**	115°10'02.1238"	0°00'00.3048"	-0°00'00.1420"	-0.75
			ΔHt.	172.838sft	0.048sft	-0.010sft	-0.36
			Dist.	21246.588sft	0.017sft	0.019sft	0.97
B87	51	17	**Az.**	53°18'38.4467"	0°00'00.3948"	0°00'00.3349"	0.96
			ΔHt.	130.088sft	0.059sft	0.024sft	0.56
			Dist.	21819.169sft	0.045sft	-0.002sft	-0.08
B77	51	5007	**Az.**	16°29'54.8473"	0°00'00.3018"	0°00'00.1521"	0.95
			ΔHt.	47.188sft	0.047sft	-0.014sft	-0.62
			Dist.	19568.088sft	0.049sft	-0.012sft	-0.38
B45	51	12	**Az.**	67°35'11.6843"	0°00'01.9782"	0°00'00.2799"	0.28
			ΔHt.	15.794sft	0.050sft	0.019sft	0.95
			Dist.	3922.119sft	0.041sft	0.008sft	0.43
B26	51	7	**Az.**	193°34'57.8233"	0°00'01.0016"	0°00'00.4992"	0.83
			ΔHt.	-2.748sft	0.052sft	-0.030sft	-0.94
			Dist.	5415.421sft	0.033sft	-0.005sft	-0.40
B82	51	38	**Az.**	326°56'42.1732"	0°00'00.7118"	0°00'01.1888"	0.93
			ΔHt.	-0.717sft	0.082sft	0.090sft	0.92
			Dist.	10621.709sft	0.032sft	-0.048sft	-0.66
B70	51	41	**Az.**	298°42'32.3621"	0°00'00.6703"	-0°00'00.2563"	-0.80
			ΔHt.	-9.633sft	0.062sft	0.017sft	0.53
			Dist.	11244.855sft	0.030sft	0.010sft	0.93
B13	81	4731	**Az.**	157°14'47.6825"	0°00'00.0617"	-0°00'00.0064"	-0.47

			ΔHt.	278.135sft	0.051sft	0.029sft	0.90
			Dist.	37660.887sft	0.012sft	0.000sft	-0.07
B14	4731	51	**Az.**	343°55'19.5681"	0°00'00.0318"	0°00'00.0016"	0.37
			ΔHt.	-271.725sft	0.047sft	0.013sft	0.90
			Dist.	47680.034sft	0.009sft	0.000sft	-0.16
B60	51	52	**Az.**	34°48'54.0288"	0°00'00.2152"	-0°00'00.1821"	-0.36
			ΔHt.	83.698sft	0.032sft	0.064sft	0.90
			Dist.	16207.382sft	0.017sft	-0.025sft	-0.63
B3	81	5015	**Az.**	196°10'03.7874"	0°00'00.5235"	0°00'00.1139"	0.76
			ΔHt.	18.364sft	0.058sft	0.023sft	0.78
			Dist.	10697.600sft	0.036sft	0.014sft	0.84
B2	81	1	**Az.**	196°51'46.9755"	0°00'00.6736"	-0°00'00.2445"	-0.83
			ΔHt.	32.946sft	0.059sft	0.013sft	0.60
			Dist.	12460.297sft	0.045sft	-0.010sft	-0.45
B64	51	17	**Az.**	53°18'38.4467"	0°00'00.3948"	-0°00'00.1188"	-0.78
			ΔHt.	130.088sft	0.059sft	0.002sft	0.06
			Dist.	21819.169sft	0.045sft	0.003sft	0.16
B57	51	42	**Az.**	58°17'37.0496"	0°00'00.5486"	0°00'00.2469"	0.78
			ΔHt.	44.055sft	0.045sft	-0.024sft	-0.76
			Dist.	11244.416sft	0.027sft	0.000sft	0.00
B28	51	8	**Az.**	148°06'31.4837"	0°00'00.3458"	0°00'00.4359"	0.77
			ΔHt.	13.116sft	0.051sft	-0.010sft	-0.33
			Dist.	7780.704sft	0.017sft	-0.001sft	-0.04
B91	51	16	**Az.**	42°28'00.9538"	0°00'00.5127"	-0°00'00.1086"	-0.39
			ΔHt.	42.736sft	0.044sft	-0.019sft	-0.75
			Dist.	11072.265sft	0.031sft	-0.009sft	-0.33
B51	51	8	**Az.**	148°06'31.4837"	0°00'00.3458"	0°00'00.0421"	0.34
			ΔHt.	13.116sft	0.051sft	0.030sft	0.72
			Dist.	7780.704sft	0.017sft	0.002sft	0.48
B52	51	32	**Az.**	127°50'51.5197"	0°00'00.3017"	0°00'00.0527"	0.68

			ΔHt.	27.788sft	0.053sft	-0.028sft	-0.71
			Dist.	10924.272sft	0.013sft	0.001sft	0.69
B96	51	34	**Az.**	163°21'22.3711"	0°00'00.3508"	-0°00'00.3235"	-0.70
			ΔHt.	11.547sft	0.064sft	0.015sft	0.54
			Dist.	11260.742sft	0.023sft	-0.001sft	-0.02
B41	51	5007	**Az.**	16°29'54.8473"	0°00'00.3018"	-0°00'00.1234"	-0.69
			ΔHt.	47.188sft	0.047sft	0.008sft	0.26
			Dist.	19568.088sft	0.049sft	-0.007sft	-0.32
B23	6560	4731	**Az.**	192°40'15.1820"	0°00'00.0094"	0°00'00.0000"	-0.60
			ΔHt.	-577.194sft	0.080sft	0.000sft	0.00
			Dist.	212767.957sft	0.014sft	0.000sft	0.67
B85	51	41	**Az.**	298°42'32.3621"	0°00'00.6703"	0°00'00.2013"	0.42
			ΔHt.	-9.633sft	0.062sft	0.004sft	0.11
			Dist.	11244.855sft	0.030sft	-0.020sft	-0.66
B94	51	13	**Az.**	89°16'28.8496"	0°00'00.9509"	0°00'00.2677"	0.65
			ΔHt.	81.162sft	0.068sft	0.016sft	0.42
			Dist.	12262.576sft	0.037sft	0.007sft	0.28
B46	51	44	**Az.**	64°28'15.7478"	0°00'01.6612"	-0°00'00.4192"	-0.34
			ΔHt.	15.368sft	0.044sft	-0.006sft	-0.23
			Dist.	4057.690sft	0.034sft	0.016sft	0.65
B33	51	1	**Az.**	192°08'34.5221"	0°00'00.3551"	0°00'00.0871"	0.39
			ΔHt.	26.536sft	0.062sft	-0.023sft	-0.63
			Dist.	23527.599sft	0.046sft	0.005sft	0.19
B25	51	44	**Az.**	64°28'15.7478"	0°00'01.6612"	0°00'00.3059"	0.29
			ΔHt.	15.368sft	0.044sft	0.008sft	0.24
			Dist.	4057.690sft	0.034sft	-0.014sft	-0.59
B56	51	13	**Az.**	89°16'28.8496"	0°00'00.9509"	-0°00'00.4150"	-0.58
			ΔHt.	81.162sft	0.068sft	0.011sft	0.19
			Dist.	12262.576sft	0.037sft	0.000sft	-0.01
B10	52	51	**Az.**	214°50'14.5619"	0°00'00.2153"	0°00'00.0031"	0.13

			ΔHt.	-83.698sft	0.032sft	0.003sft	0.56
			Dist.	16207.382sft	0.017sft	0.000sft	0.02
B47	51	31	**Az.**	116°56'19.5818"	0°00'04.2551"	-0°00'01.4143"	-0.55
			ΔHt.	-0.968sft	0.046sft	0.011sft	0.45
			Dist.	1767.231sft	0.034sft	0.001sft	0.04
B90	51	20	**Az.**	35°02'31.9112"	0°00'00.4089"	0°00'00.1528"	0.46
			ΔHt.	84.257sft	0.048sft	-0.025sft	-0.51
			Dist.	16257.353sft	0.031sft	-0.001sft	-0.02
B58	51	16	**Az.**	42°28'00.9538"	0°00'00.5127"	-0°00'00.0714"	-0.20
			ΔHt.	42.736sft	0.044sft	0.016sft	0.51
			Dist.	11072.265sft	0.031sft	0.001sft	0.06
B62	51	43	**Az.**	38°34'01.6615"	0°00'00.5337"	-0°00'00.0864"	-0.29
			ΔHt.	82.370sft	0.059sft	0.017sft	0.45
			Dist.	17301.019sft	0.040sft	-0.012sft	-0.51
B89	51	43	**Az.**	38°34'01.6615"	0°00'00.5337"	0°00'00.0648"	0.24
			ΔHt.	82.370sft	0.059sft	-0.002sft	-0.08
			Dist.	17301.019sft	0.040sft	0.009sft	0.43
B93	51	42	**Az.**	58°17'37.0496"	0°00'00.5486"	-0°00'00.1776"	-0.42
			ΔHt.	44.055sft	0.045sft	-0.001sft	-0.02
			Dist.	11244.416sft	0.027sft	-0.006sft	-0.21
B32	51	5015	**Az.**	191°25'14.2529"	0°00'00.2694"	-0°00'00.1004"	-0.33
			ΔHt.	11.954sft	0.060sft	-0.010sft	-0.30
			Dist.	21782.525sft	0.037sft	-0.012sft	-0.41
B50	51	34	**Az.**	163°21'22.3711"	0°00'00.3508"	-0°00'00.0295"	-0.16
			ΔHt.	11.547sft	0.064sft	-0.011sft	-0.26
			Dist.	11260.742sft	0.023sft	-0.002sft	-0.26
B5	51	44	**Az.**	64°28'15.7478"	0°00'01.6612"	0°00'00.1173"	0.08
			ΔHt.	15.368sft	0.044sft	-0.001sft	-0.03
			Dist.	4057.690sft	0.034sft	-0.002sft	-0.06

Geoid Observations

Number of Observations : 45
Number of Outliers : 0

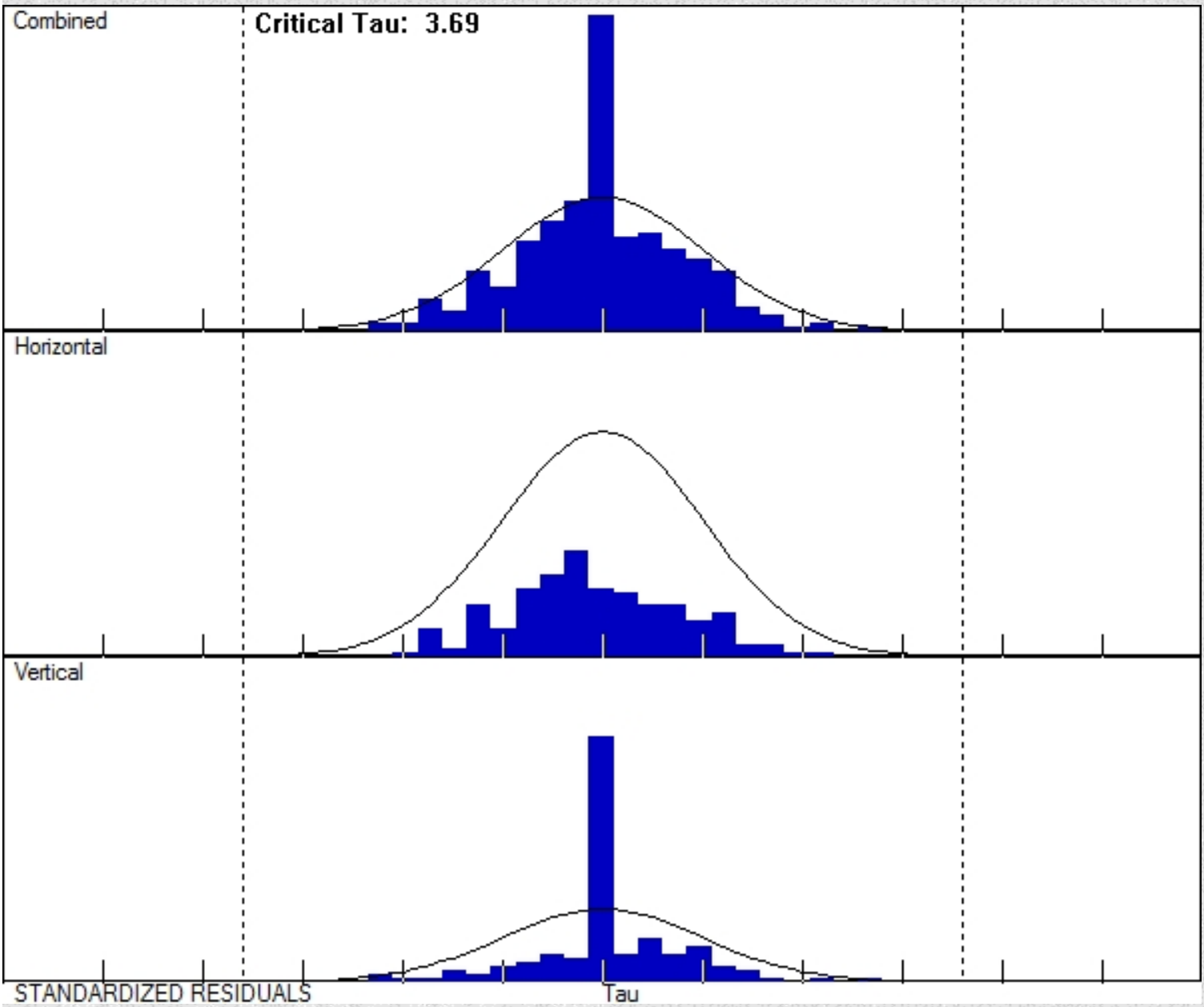
Observation Adjustment (Critical Tau = 3.69). Any outliers are in red.

Observation ID	Point Name	Separation	A-posteriori Error (1.96σ)	Residual	Standardized Residual
G67	19	-72.650sft	0.011sft	0.000sft	0.00
G87	38	-72.772sft	0.011sft	0.000sft	0.00
G85	36	-72.742sft	0.011sft	0.000sft	0.00
G69	53	-72.730sft	0.011sft	0.000sft	0.00
G83	22	-72.304sft	0.011sft	0.000sft	0.00
G52	2	-73.063sft	0.011sft	0.000sft	0.00
G80	43	-72.378sft	0.011sft	0.000sft	0.00
G79	20	-72.422sft	0.011sft	0.000sft	0.00
G75	13	-72.624sft	0.011sft	0.000sft	0.00
G59	32	-72.812sft	0.011sft	0.000sft	0.00
G68	5007	-72.386sft	0.011sft	0.000sft	0.00
G70	54	-72.765sft	0.011sft	0.000sft	0.00
G71	15	-72.757sft	0.011sft	0.000sft	0.00
G72	4	-72.891sft	0.011sft	0.000sft	0.00
G73	34	-72.944sft	0.011sft	0.000sft	0.00
G74	5	-72.564sft	0.011sft	0.000sft	0.00
G76	42	-72.580sft	0.011sft	0.000sft	0.00
G77	16	-72.584sft	0.011sft	0.000sft	0.00
G78	33	-72.711sft	0.011sft	0.000sft	0.00
G81	21	-72.165sft	0.011sft	0.000sft	0.00
G82	17	-72.177sft	0.011sft	0.000sft	0.00
G84	35	-72.198sft	0.011sft	0.000sft	0.00
G86	37	-72.763sft	0.011sft	0.000sft	0.00
G88	41	-72.840sft	0.011sft	0.000sft	0.00
G44	81	-72.995sft	0.011sft	0.000sft	0.00

G45	3	-73.053sft	0.011sft	0.000sft	0.00
G46	1	-73.109sft	0.011sft	0.000sft	0.00
G47	5015	-73.094sft	0.011sft	0.000sft	0.00
G48	11	-72.881sft	0.011sft	0.000sft	0.00
G49	51	-72.854sft	0.011sft	0.000sft	0.00
G50	44	-72.778sft	0.011sft	0.000sft	0.00
G51	31	-72.847sft	0.011sft	0.000sft	0.00
G53	52	-72.425sft	0.011sft	0.000sft	0.00
G54	18	-72.697sft	0.011sft	0.000sft	0.00
G55	4731	-72.953sft	0.011sft	0.000sft	0.00
G56	6560	-69.510sft	0.011sft	0.000sft	0.00
G57	12	-72.782sft	0.011sft	0.000sft	0.00
G58	7	-72.935sft	0.011sft	0.000sft	0.00
G60	8	-72.890sft	0.011sft	0.000sft	0.00
G61	9	-72.639sft	0.011sft	0.000sft	0.00
G62	108	-72.639sft	0.011sft	0.000sft	0.00
G63	6	-72.981sft	0.011sft	0.000sft	0.00
G64	10	-72.897sft	0.011sft	0.000sft	0.00
G65	14	-72.803sft	0.011sft	0.000sft	0.00
G66	5009	-72.736sft	0.011sft	0.000sft	0.00

Back to top

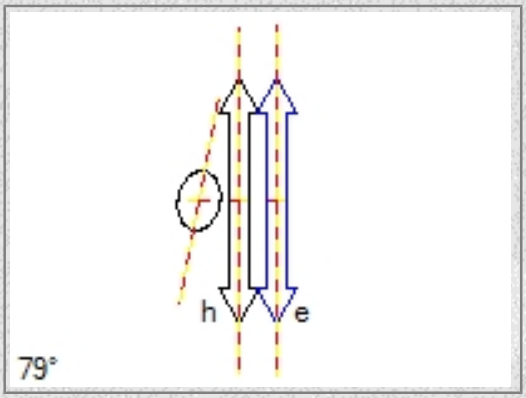
Histograms of Standardized Residuals

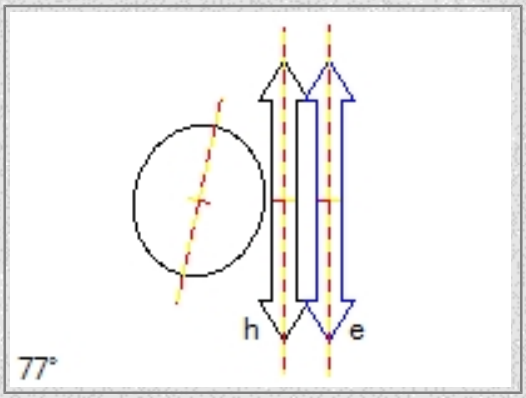


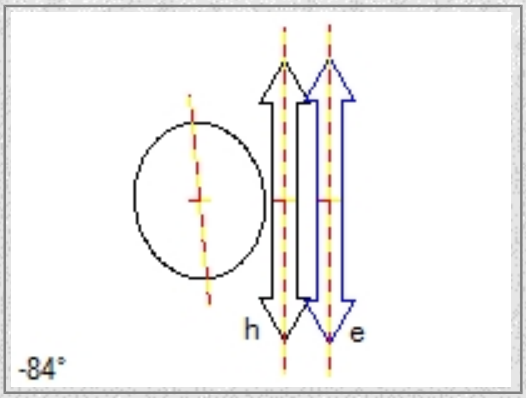
Back to top

Point Error Ellipses

81	3	1

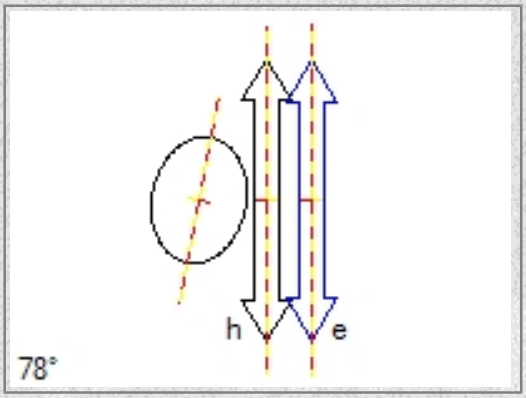


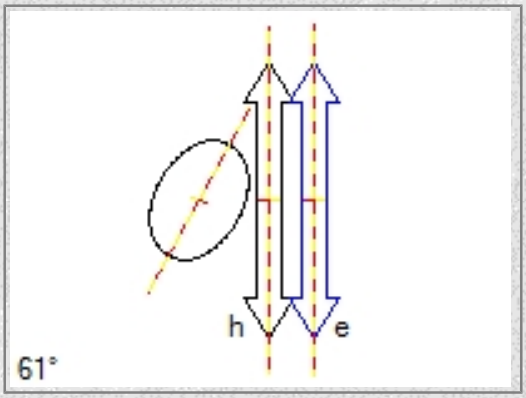


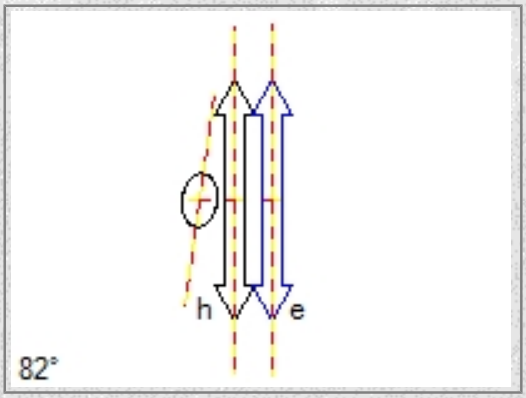


Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

5015	11	51

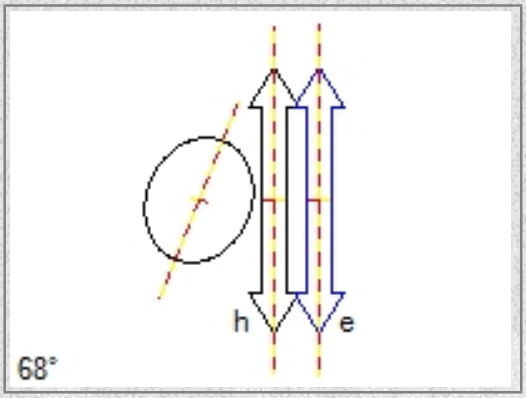


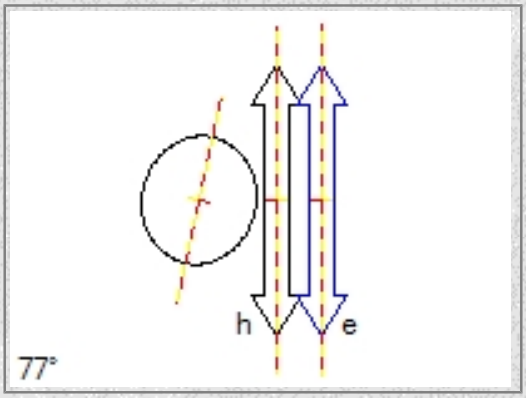


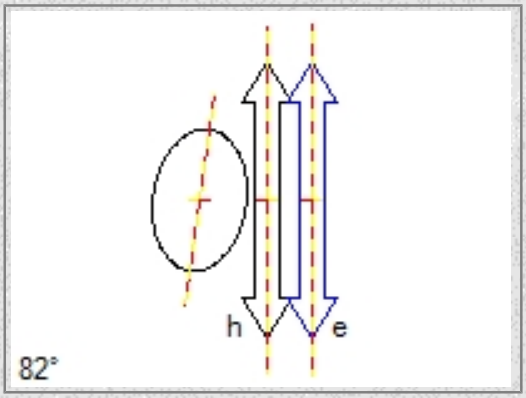


Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

44	31	2

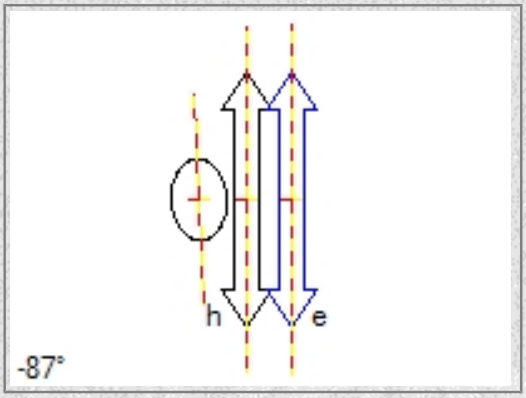


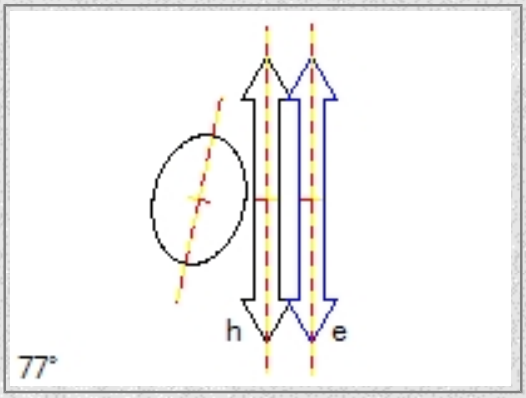


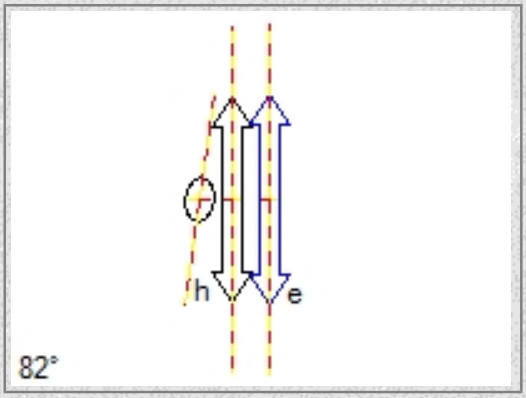


Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

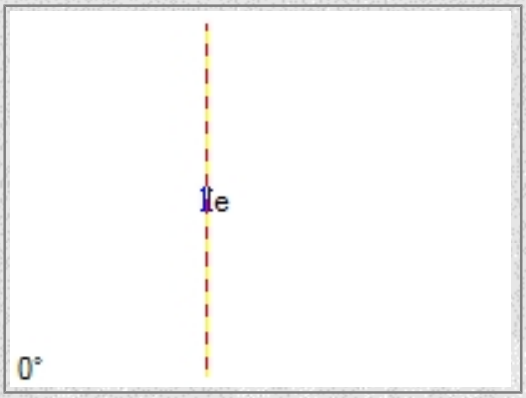
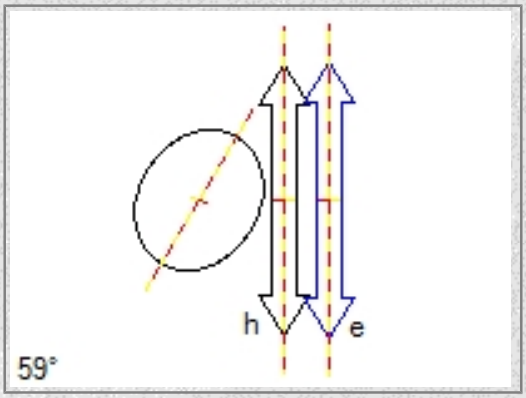
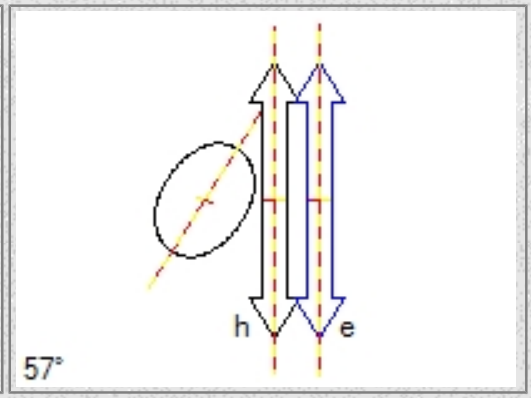
52	18	4731



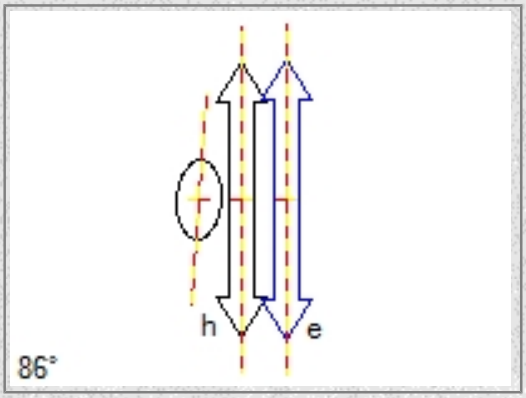
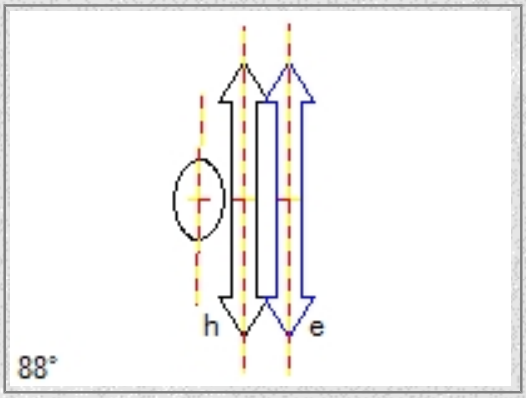
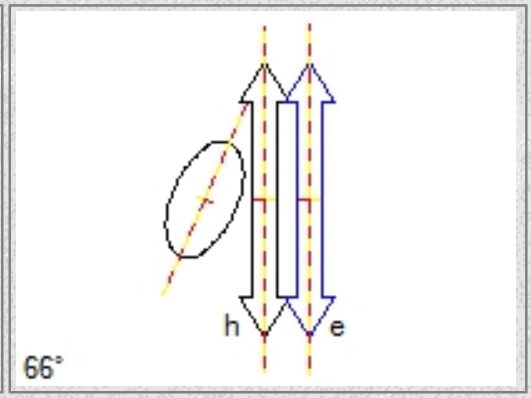




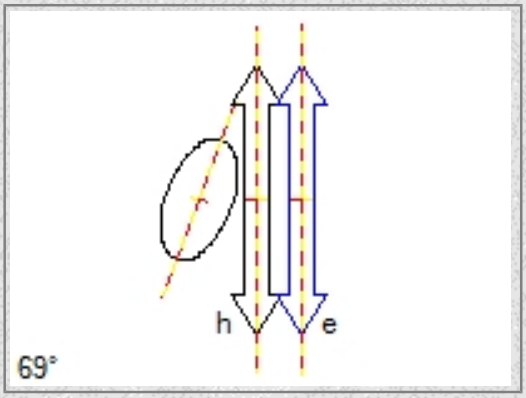
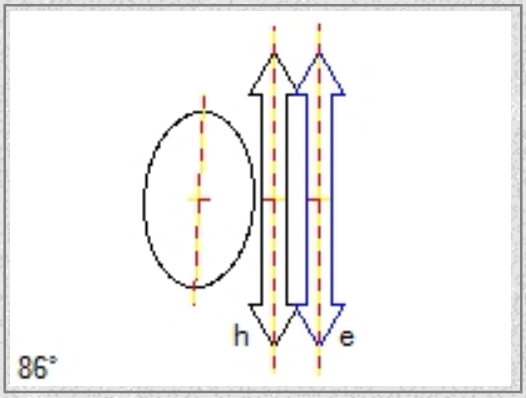
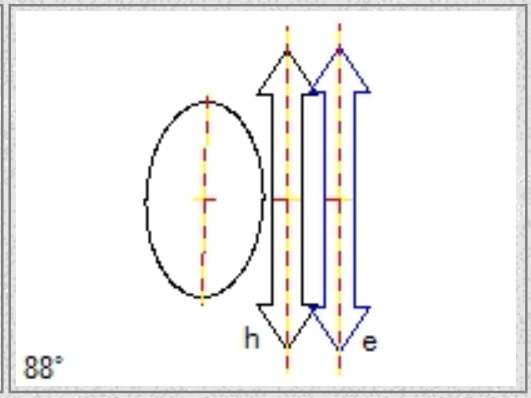
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

6560	12	7
		

Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

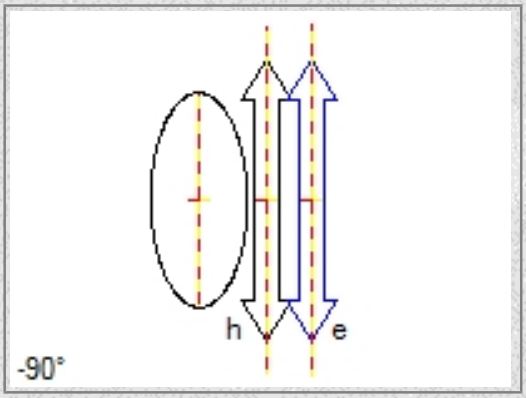
32	8	9
		

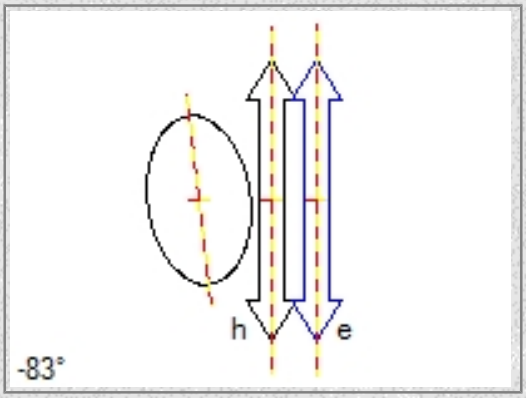
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

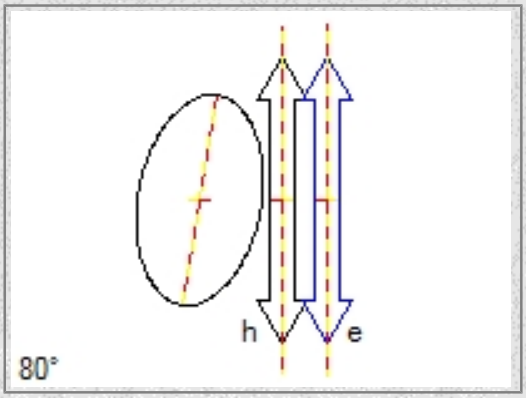
108	6	10
		

Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

14	5009	19

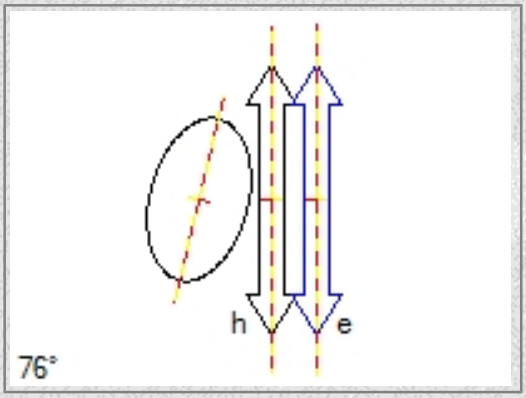


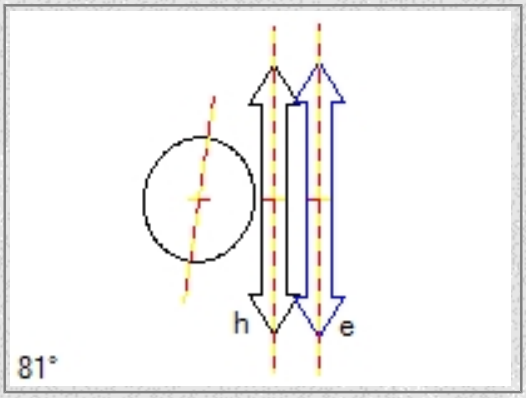


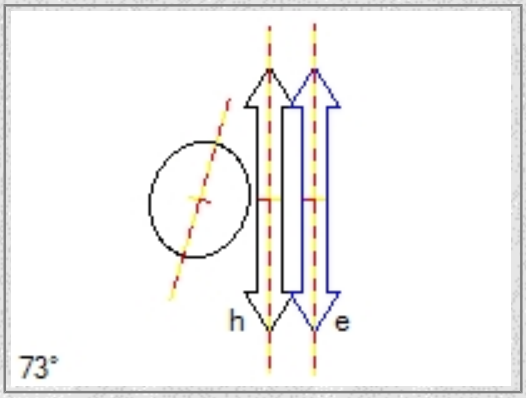


Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

5007	53	54

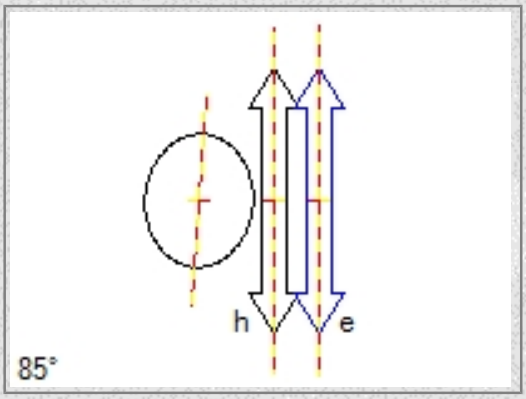


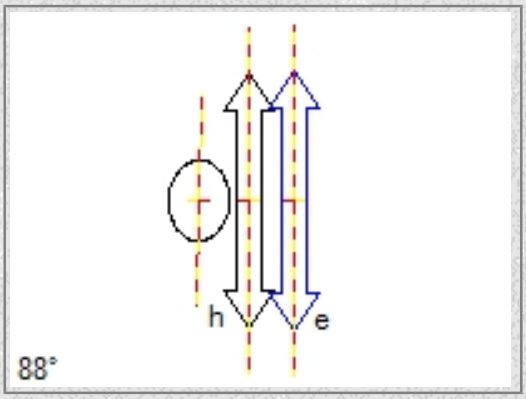


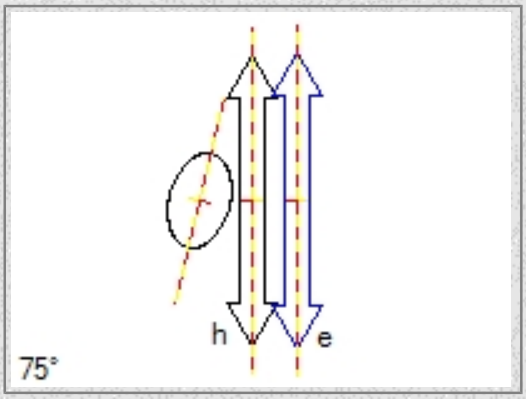


Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

15	4	34

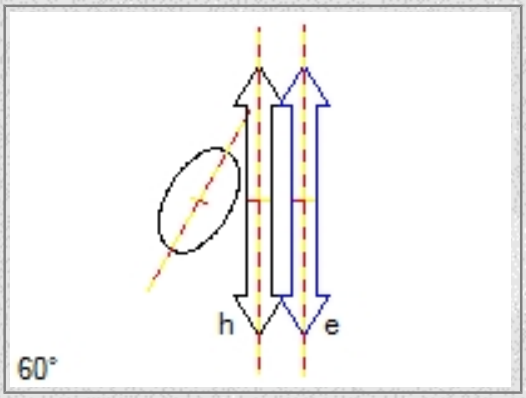


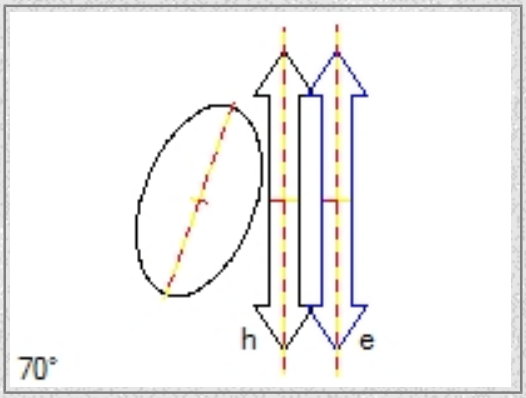


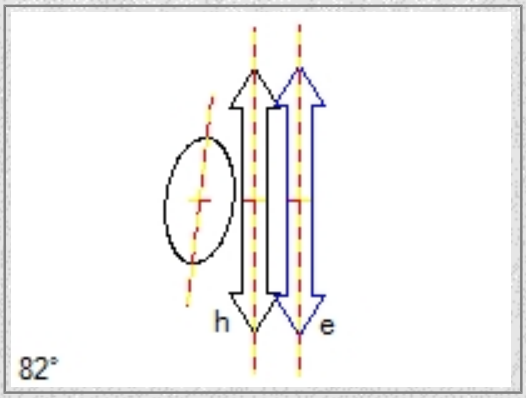


Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

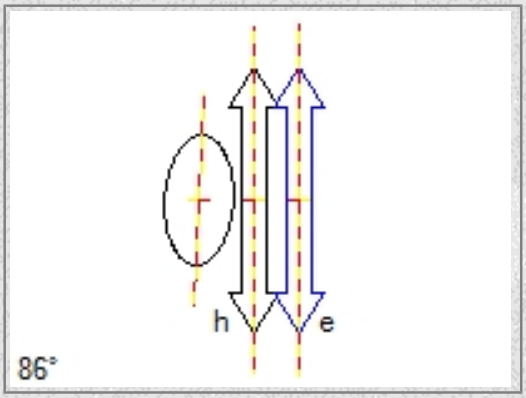
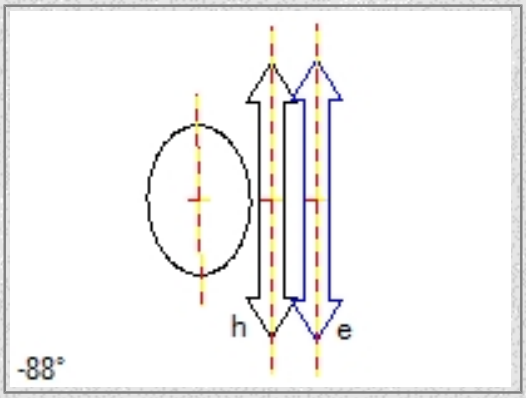
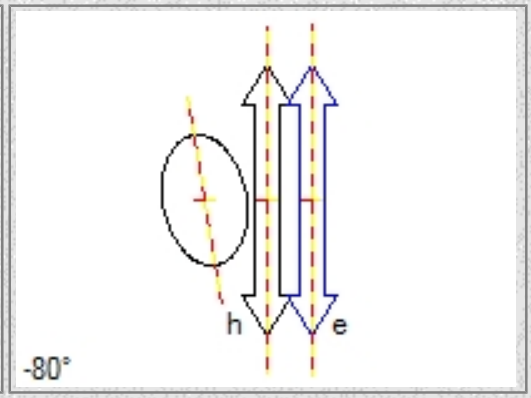
5	13	42



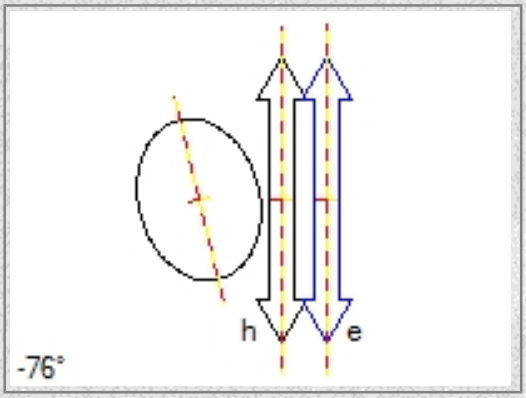
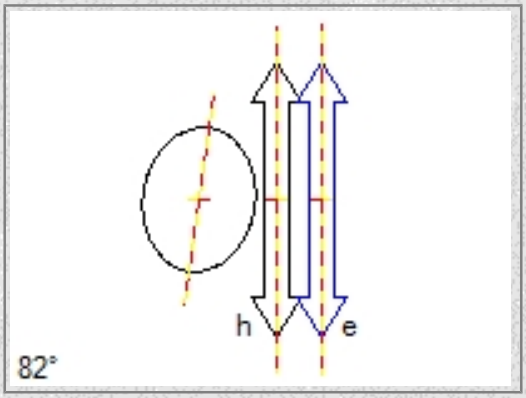
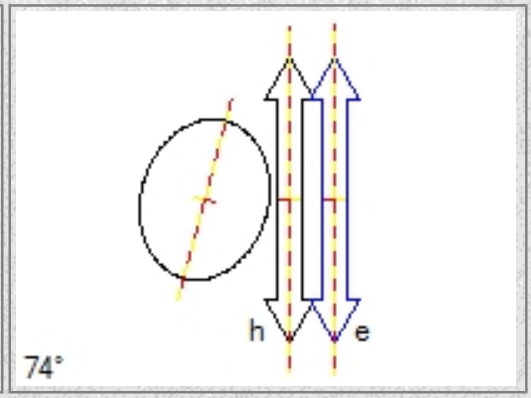




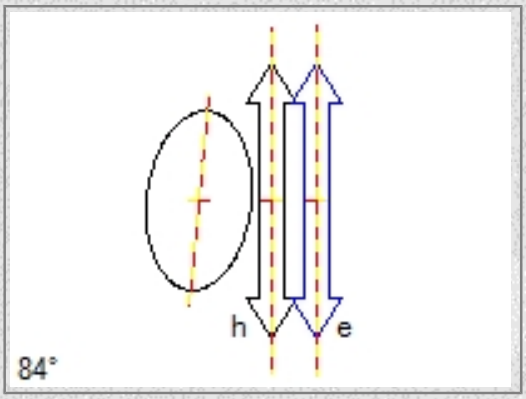
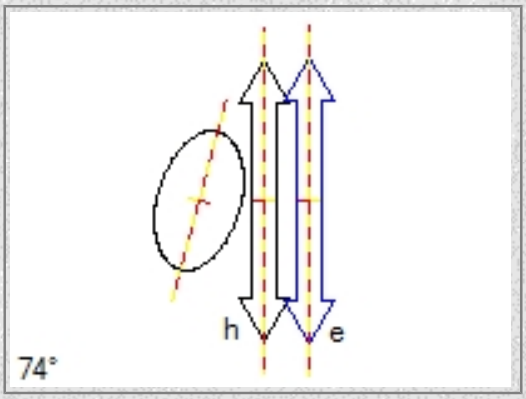
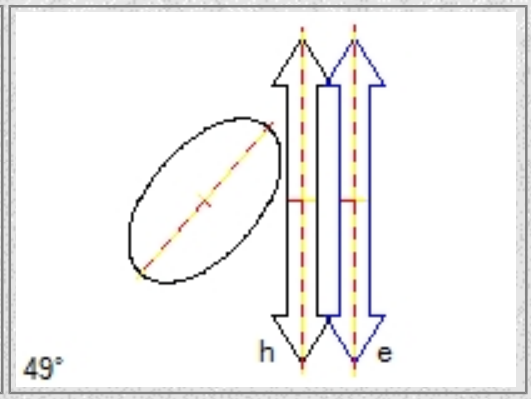
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

16	33	20
		

Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

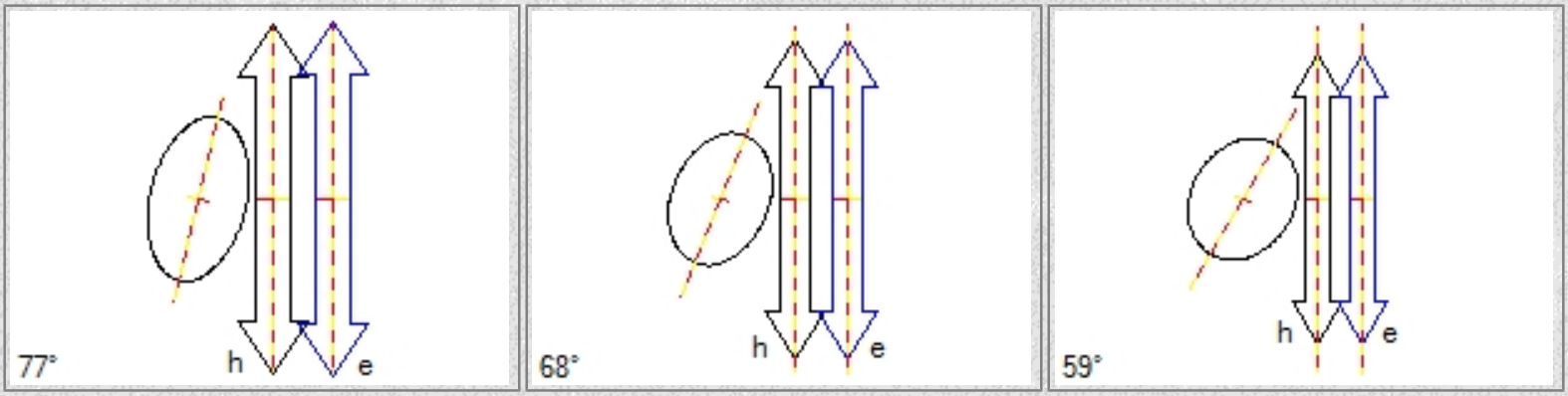
43	21	17
		

Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

22	35	36
		

Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

37	38	41



Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ

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Covariant Terms

Adjustment performed in WGS-84

From Point	To Point		Components	A-posteriori Error (1.96σ)	Horiz. Precision (Ratio)	3D Precision (Ratio)
81	3	**Az.**	202°42'19.4267"	0°00'01.4133"	1:129284	1:129284
		ΔHt.	14.129sft	0.054sft		
		ΔElev.	14.187sft	0.144sft		
		Dist.	5717.535sft	0.044sft		
81	1	**Az.**	196°51'46.9755"	0°00'00.6736"	1:274454	1:274454
		ΔHt.	32.946sft	0.059sft		
		ΔElev.	33.060sft	0.145sft		
		Dist.	12460.297sft	0.045sft		
81	5015	**Az.**	196°10'03.7874"	0°00'00.5235"	1:293326	1:293326
		ΔHt.	18.364sft	0.058sft		
		ΔElev.	18.464sft	0.145sft		
		Dist.	10697.600sft	0.036sft		
81	11	**Az.**	352°35'19.5919"	0°00'00.5621"	1:325159	1:325159
		ΔHt.	2.147sft	0.056sft		
		ΔElev.	2.033sft	0.143sft		

		Dist.	11081.840sft	0.034sft		
81	51	**Az.**	6°51'47.0587"	0°00'00.2100"	1:735988	1:735988
		ΔHt.	6.410sft	0.036sft		
		ΔElev.	6.269sft	0.134sft		
		Dist.	11156.898sft	0.015sft		
81	4731	**Az.**	157°14'47.6825"	0°00'00.0617"	1:3072668	1:3072668
		ΔHt.	278.135sft	0.051sft		
		ΔElev.	278.094sft	0.125sft		
		Dist.	37660.887sft	0.012sft		
3	51	**Az.**	12°12'39.2541"	0°00'00.4869"	1:368650	1:368650
		ΔHt.	-7.719sft	0.060sft		
		ΔElev.	-7.918sft	0.143sft		
		Dist.	16730.229sft	0.045sft		
1	51	**Az.**	12°07'51.5576"	0°00'00.3547"	1:512688	1:512688
		ΔHt.	-26.536sft	0.062sft		
		ΔElev.	-26.791sft	0.144sft		
		Dist.	23527.599sft	0.046sft		
5015	51	**Az.**	11°24'36.8045"	0°00'00.2691"	1:587289	1:587289
		ΔHt.	-11.954sft	0.060sft		
		ΔElev.	-12.195sft	0.143sft		
		Dist.	21782.525sft	0.037sft		
11	51	**Az.**	88°10'42.4931"	0°00'02.4805"	1:92631	1:92631
		ΔHt.	4.264sft	0.054sft		
		ΔElev.	4.236sft	0.141sft		
		Dist.	2764.052sft	0.030sft		
51	44	**Az.**	64°28'15.7478"	0°00'01.6612"	1:118119	1:118119
		ΔHt.	15.368sft	0.044sft		
		ΔElev.	15.292sft	0.139sft		
		Dist.	4057.690sft	0.034sft		
51	31	**Az.**	116°56'19.5818"	0°00'04.2551"	1:52104	1:52104

		ΔHt.	-0.968sft	0.046sft		
		ΔElev.	-0.975sft	0.140sft		
		Dist.	1767.231sft	0.034sft		
51	2	**Az.**	223°01'35.8700"	0°00'00.3875"	1:462872	1:462872
		ΔHt.	70.744sft	0.052sft		
		ΔElev.	70.953sft	0.142sft		
		Dist.	17221.414sft	0.037sft		
51	52	**Az.**	34°48'54.0288"	0°00'00.2152"	1:979103	1:979103
		ΔHt.	83.698sft	0.032sft		
		ΔElev.	83.269sft	0.136sft		
		Dist.	16207.382sft	0.017sft		
51	18	**Az.**	325°20'42.5405"	0°00'00.3633"	1:594679	1:594679
		ΔHt.	44.170sft	0.058sft		
		ΔElev.	44.013sft	0.144sft		
		Dist.	18678.136sft	0.031sft		
51	4731	**Az.**	163°53'24.8933"	0°00'00.0319"	1:5127326	1:5127326
		ΔHt.	271.725sft	0.047sft		
		ΔElev.	271.825sft	0.123sft		
		Dist.	47680.034sft	0.009sft		
51	12	**Az.**	67°35'11.6843"	0°00'01.9782"	1:95026	1:95026
		ΔHt.	15.794sft	0.050sft		
		ΔElev.	15.723sft	0.141sft		
		Dist.	3922.119sft	0.041sft		
51	7	**Az.**	193°34'57.8233"	0°00'01.0016"	1:163491	1:163491
		ΔHt.	-2.748sft	0.052sft		
		ΔElev.	-2.667sft	0.142sft		
		Dist.	5415.421sft	0.033sft		
51	32	**Az.**	127°50'51.5197"	0°00'00.3017"	1:850947	1:850947
		ΔHt.	27.788sft	0.053sft		
		ΔElev.	27.747sft	0.142sft		

		Dist.	10924.272sft	0.013sft		
51	8	**Az.**	148°06'31.4837"	0°00'00.3458"	1:455860	1:455860
		ΔHt.	13.116sft	0.051sft		
		ΔElev.	13.152sft	0.142sft		
		Dist.	7780.704sft	0.017sft		
51	9	**Az.**	116°02'53.1694"	0°00'00.3922"	1:1100960	1:1100960
		ΔHt.	166.616sft	0.051sft		
		ΔElev.	166.401sft	0.141sft		
		Dist.	18299.162sft	0.017sft		
51	108	**Az.**	116°01'38.7861"	0°00'00.4090"	1:1050195	1:1050195
		ΔHt.	166.500sft	0.046sft		
		ΔElev.	166.286sft	0.140sft		
		Dist.	18296.689sft	0.017sft		
51	6	**Az.**	246°22'53.7673"	0°00'00.7757"	1:348111	1:348111
		ΔHt.	13.314sft	0.067sft		
		ΔElev.	13.442sft	0.148sft		
		Dist.	12935.311sft	0.037sft		
51	10	**Az.**	276°15'20.4671"	0°00'01.1302"	1:303247	1:303247
		ΔHt.	16.393sft	0.070sft		
		ΔElev.	16.436sft	0.150sft		
		Dist.	10613.098sft	0.035sft		
51	14	**Az.**	309°55'06.7151"	0°00'00.8339"	1:274766	1:274766
		ΔHt.	27.627sft	0.054sft		
		ΔElev.	27.576sft	0.143sft		
		Dist.	12925.216sft	0.047sft		
51	5009	**Az.**	318°12'01.7580"	0°00'00.4286"	1:396595	1:396595
		ΔHt.	21.402sft	0.054sft		
		ΔElev.	21.285sft	0.143sft		
		Dist.	17837.042sft	0.045sft		
51	19	**Az.**	345°14'49.6256"	0°00'00.5841"	1:254174	1:254174

		ΔHt.	17.462sft	0.059sft		
		ΔElev.	17.259sft	0.145sft		
		Dist.	15178.779sft	0.060sft		
51	5007	**Az.**	16°29'54.8473"	0°00'00.3018"	1:400823	1:400823
		ΔHt.	47.188sft	0.047sft		
		ΔElev.	46.720sft	0.140sft		
		Dist.	19568.088sft	0.049sft		
51	53	**Az.**	332°36'50.8298"	0°00'00.5299"	1:381792	1:381792
		ΔHt.	3.613sft	0.050sft		
		ΔElev.	3.488sft	0.141sft		
		Dist.	13048.017sft	0.034sft		
51	54	**Az.**	329°06'00.3102"	0°00'00.5948"	1:359561	1:359561
		ΔHt.	-1.588sft	0.043sft		
		ΔElev.	-1.676sft	0.139sft		
		Dist.	10804.597sft	0.030sft		
51	15	**Az.**	352°20'05.0773"	0°00'00.9507"	1:184010	1:184010
		ΔHt.	4.813sft	0.043sft		
		ΔElev.	4.716sft	0.139sft		
		Dist.	6983.433sft	0.038sft		
51	4	**Az.**	148°03'02.2550"	0°00'00.2670"	1:669958	1:669958
		ΔHt.	39.960sft	0.036sft		
		ΔElev.	39.997sft	0.137sft		
		Dist.	12476.415sft	0.019sft		
51	34	**Az.**	163°21'22.3711"	0°00'00.3508"	1:492746	1:492746
		ΔHt.	11.547sft	0.064sft		
		ΔElev.	11.637sft	0.147sft		
		Dist.	11260.742sft	0.023sft		
51	5	**Az.**	115°10'02.1238"	0°00'00.3048"	1:1264590	1:1264590
		ΔHt.	172.838sft	0.048sft		
		ΔElev.	172.549sft	0.141sft		

		Dist.	21246.588sft	0.017sft		
51	13	**Az.**	89°16'28.8496"	0°00'00.9509"	1:327603	1:327603
		ΔHt.	81.162sft	0.068sft		
		ΔElev.	80.933sft	0.149sft		
		Dist.	12262.576sft	0.037sft		
51	42	**Az.**	58°17'37.0496"	0°00'00.5486"	1:422887	1:422887
		ΔHt.	44.055sft	0.045sft		
		ΔElev.	43.781sft	0.140sft		
		Dist.	11244.416sft	0.027sft		
51	16	**Az.**	42°28'00.9538"	0°00'00.5127"	1:359076	1:359076
		ΔHt.	42.736sft	0.044sft		
		ΔElev.	42.466sft	0.139sft		
		Dist.	11072.265sft	0.031sft		
51	33	**Az.**	56°00'02.5245"	0°00'01.2451"	1:196549	1:196549
		ΔHt.	77.281sft	0.053sft		
		ΔElev.	77.138sft	0.142sft		
		Dist.	6682.411sft	0.034sft		
51	20	**Az.**	35°02'31.9112"	0°00'00.4089"	1:531663	1:531663
		ΔHt.	84.257sft	0.048sft		
		ΔElev.	83.826sft	0.141sft		
		Dist.	16257.353sft	0.031sft		
51	43	**Az.**	38°34'01.6615"	0°00'00.5337"	1:429868	1:429868
		ΔHt.	82.370sft	0.059sft		
		ΔElev.	81.894sft	0.145sft		
		Dist.	17301.019sft	0.040sft		
51	21	**Az.**	44°01'49.7533"	0°00'00.3355"	1:570857	1:570857
		ΔHt.	149.488sft	0.050sft		
		ΔElev.	148.799sft	0.141sft		
		Dist.	22391.672sft	0.039sft		
51	17	**Az.**	53°18'38.4467"	0°00'00.3948"	1:488258	1:488258

		ΔHt.	130.088sft	0.059sft		
		ΔElev.	129.411sft	0.145sft		
		Dist.	21819.169sft	0.045sft		
51	22	**Az.**	21°58'08.0560"	0°00'00.3209"	1:407482	1:407482
		ΔHt.	44.619sft	0.052sft		
		ΔElev.	44.069sft	0.142sft		
		Dist.	21202.226sft	0.052sft		
51	35	**Az.**	26°23'25.1546"	0°00'00.2127"	1:575047	1:575047
		ΔHt.	47.933sft	0.057sft		
		ΔElev.	47.278sft	0.144sft		
		Dist.	23476.882sft	0.041sft		
51	36	**Az.**	330°34'57.0530"	0°00'00.9284"	1:357557	1:357557
		ΔHt.	3.875sft	0.085sft		
		ΔElev.	3.763sft	0.157sft		
		Dist.	12535.310sft	0.035sft		
51	37	**Az.**	328°49'30.1808"	0°00'00.7515"	1:275092	1:275092
		ΔHt.	-1.067sft	0.099sft		
		ΔElev.	-1.158sft	0.165sft		
		Dist.	11056.682sft	0.040sft		
51	38	**Az.**	326°56'42.1732"	0°00'00.7118"	1:333886	1:333886
		ΔHt.	-0.717sft	0.082sft		
		ΔElev.	-0.799sft	0.155sft		
		Dist.	10621.709sft	0.032sft		
51	41	**Az.**	298°42'32.3621"	0°00'00.6703"	1:373771	1:373771
		ΔHt.	-9.633sft	0.062sft		
		ΔElev.	-9.646sft	0.146sft		
		Dist.	11244.855sft	0.030sft		
4731	6560	**Az.**	12°33'28.8810"	0°00'00.0093"	1:14870175	1:14870175
		ΔHt.	577.194sft	0.080sft		
		ΔElev.	573.751sft	0.081sft		

Dist.	212767.957sft	0.014sft

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