

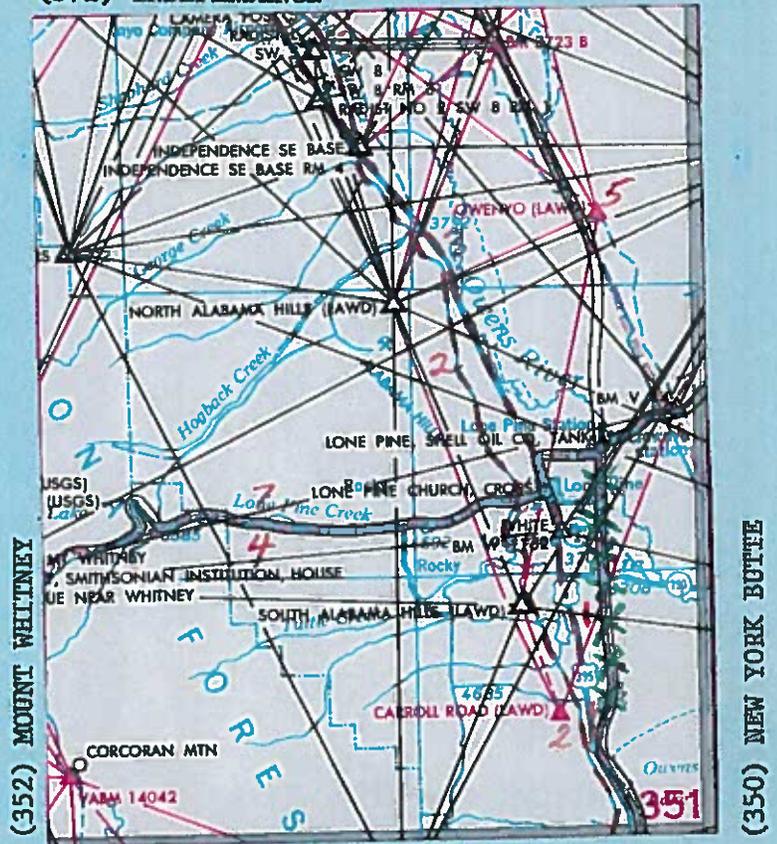
LONE PINE

36°30'
118 00

CALIFORNIA 351

NGS 36 118 12 (86)

(372) INDEPENDENCE



(329) OLANCHA

(1)	L.F. Biggs	1905	6450
(2)	L.A. Aqueduct Comm.	1907	
(3)	L.F. Biggs	1905	6450
(4)	R.A. Farmer	1905	6284
(5)	R.A. Farmer	1905	6133
(6)	L.A. Aqueduct Comm.	1946	
(7)	F.M. Kyle	1974	PV 896
	D.O. Richardson	1975	PV 896
(8)	D.O. Richardson	1978	PV 1024

UNITED STATES GOVERNMENT

Memorandum

TO :

DATE: 1/12/81

FROM :

W.R. Elliott - Geodetic Section

SUBJECT:

Vertical control evaluation: Lone Pine area

This area, as delineated by the east-west Whitney Portal route through Lone Pine (line #7), shows minor subsidence from 5 mi E. of Lone Pine to 3 mi W. of Lone Pine (amplitude = .05-.08 ft), and minor tectonic tilting from 3 mi W. of Lone Pine to 13 mi W. of Lone Pine (amplitude = 0 - .12 ft) between 1962 and 1975.

During the period 1975-1978, the subsidence was zero, and the up-to-the-west tilt trend reversed.

Evidence of tectonic tilting exists in the Coso Jct. - Little Lake area, and the Long Valley area during: 1925-1962, 1962-1974/75.



FILE COPY

LONE PINE (351) California 36 118 12
Tentative L.F. Biggs, 1905
Third Order Adjusted Elevations Based on National
Geodetic Vertical Datum of 1929
Book: 6450
Latitude 36°30' Longitude 118°00'

(1) FROM LONE PINE SOUTH ALONG ROAD 8.0 MILES

Lone Pine, in front of post office; iron post stamped "3728 B
1905" (NGS Quad 36 118 1, line 101) (line 4) (Not found, 1957) 3725.012

Lone Pine, 5.0 mi S. of; 100 ft S. of gulch, 20 ft W. of rd.; iron
post stamped "3711 B" 3708.229

Lone Pine, 8.0 mi S. of; 50 ft W. of rd. at top of hill; in granite
boulder; aluminum tablet stamped "3691 B" (NGS 1962, 36 118 1) 3687.932

*(3667.493 - L1162 - 1962
destroyed 4/3/84 by RR Co. (dismantling)
notified crew in area (USGS))*

FILE COPY

36 118 12

LONE PINE (351)

California

L.F. Biggs, 1905

Third Order

Tentative

Book: 6450

Adjusted Elevations Based on National
Geodetic Vertical Datum of 1929

Latitude 36°30' Longitude 118°00'

- (3) FROM LONE PINE NORTH ALONG ROAD TO INDEPENDENCE, THENCE EAST
TO CITRUS THENCE INTO INDEPENDENCE QUADRANGLE (372)

Lone Pine, 4 mi. N. of; 60 ft. E. of rd.; in granite boulder;
aluminum tablet stamped "B" (Reported Not Found 1957)

3721.892

Lone Pine, 7 mi. N. of; 20 ft. E. of rd.; iron post stamped "B"

3810.505

New Desc. 79

Independence, 5.5 mi. S. of; 80 ft. N. of Shepherd's house, 50
ft. W. of rd.; in boulder; aluminum tablet stamped "3873 B"
(Reported Not Found)

3870.243

FILE COPY

36 118 12

LONE PINE (351)

California

L.F. Biggs, 1905

Third Order

Tentative

Book: 6284

Adjusted Elevations Based on National
Geodetic Vertical Datum of 1929

Latitude 36°30' Longitude 118°00'

- (4) FROM MOUNT WHITNEY STATION WEST ALONG WAGON ROAD AND TRAIL
TOWARD MOUNT WHITNEY THENCE INTO MOUNT WHITNEY QUADRANGLE
(352)

Lone Pine, in front of post office; iron post stamped
"3728 B 1905" (Reported Not Found 1957) (NGS quad 36 118 1
line 101) (line 1)

3725.012

Stone house, 200 ft. S. of; southwest of creek; granite boulder
20 x 8 x 7 ft.; 10 ft. S. of rd.; aluminum tablet stamped
"4519 B 1905" (NGS quad 36 118 1 line 101) [See inactive files]

Disturbed '79

4516.385

Lone Pine Creek Canyon, mouth of; 400 ft. E. of falls, south
of trail, in face of rock 20 x 10 x 6 ft.; aluminum tablet
stamped "6670 B 1905"

Destroyed '79

6665.742

Hunters Campground, 20 ft. S. of trail; at bottom of steep
pitch to lakes, rock 10 x 6 ft. and 5 ft. out of ground;
aluminum tablet stamped "8373 B 1905" (NGS quad 36 118 1 line
101)

8367.529

8/30/55 hme

retyped 10/21/76 trs

FILE COPY

36 118 12

LONE PINE (351)

California

R.A. Farmer, 1905

Third Order

Tentative

Book: 6133

Adjusted Elevations Based on National
Geodetic Vertical Datum of 1929

Latitude 36°30' Longitude 118°00'

(5) NORTH ALONG SOUTHERN PACIFIC RAILROAD THENCE INTO INDEPENDENCE
QUADRANGLE (372)

Mount Whitney Station, 0.5 mi. S. of; 100 ft. S. of milepost
281; iron post stamped "3681" (Reported Destroyed 1957) 3679.766

Mount Whitney Station, 2.5 mi. N. of; 30 ft E. of track;
opposite milepost 278; iron post stamped "3690" 3688.092

Not Found '79

Mount Whitney Station, 5.5 mi. N. of; 10 ft. S. of milepost
275; iron post stamped "3718" (Reported Not Recovered 1948)
(NGS quad 36 118 1 line 102) 3716.144

Francis, 100 ft. NE. of station; east of track; iron post
stamped "3723" (NGS quad 36 118 1 line 102) (Reported Not
Found 1957) 3721.551

Latitude 36°44'22.422" Longitude 118°04'40.810" (Adj. 1955)
NGS California Level Line No. 119

LONE PINE QUADRANGLE(351) CALIFORNIA C. L. Mercer, 1946
Los Angeles Aqueduct

(6) CALIFORNIA
LONE PINE QUADRANGLE
(Latitude 36°30'-36°45'; Longitude 118°00'-118°15')

	<u>Elevation</u>
Los Angeles Aqueduct Bench Marks	
2" I.P. W/BR. cap stamped LAABM 6-G, Elev. 3800.79, 100' W. of L.A.A. & Sta. 877+00, on fence line	3802.083
2" I.P. W/BR. cap stamped LAABM 6-H, Elev. 3798.42, 100' W. of L.A.A. & Sta. 898+30, on fence line	3799.725
Standard L.A.A.B.M. pipe W/cap stamped LAABM 7 Elev. 3800.888, 120' W. of L.A.A. & Sta. 910+30, 300' SE. of Well No 42	3802.238
2" I.P. W/BR. cap stamped LAABM 7-A, Elev. 100' W. of L.A.A. & Sta. 928+40, 50' E. of fence line	3801.890
Standard brass tablet set in concrete stamped U S Engineer Dept., Los Angeles District, Elev. ft. M.S.L., NE. cor. Manzanar Airport. 200' W. of & of L.A.A. Sta. 938+75, 6" below ground surface	Not Found ⁷⁹ 3801.900
2" I.P. W/BR. cap stamped LAABM 7-B, 100' W. of LAA & Sta 947+00, 61' E. of fence line	Not Found ⁷⁹ 3799.643
2" I.P. W/BR. cap stamped LAABM 7-C, 100' W. of LAA & Sta 964+30, 12' E. of fence line	Not Found ⁷⁹ 3799.180
2" I.P. W/BR. cap stamped LAABM 7-D, 90' W. of LAA & Sta 985+40, on fence line	Not Found ⁷⁹ 3799.825
2" I.P. W/BR. cap stamped LAABM 7-E, 90' W. of L.A.A. & Sta. 1007+70 on fence line Reset June '55 same elev. F.B. 1207 pg 78	Not Found ⁷⁹ 3800.243
2" I.P. W/BR. cap stamped LAABM 7-F, 90' W. of L.A.A. & Sta. 1027+37, on fence line, 15' N. of sewer manhole	3800.965

FILE COPY

LONE PINE QUADRANGLE (351) CALIFORNIA C. L. Mercer, 1946
Los Angeles Aqueduct

Los Angeles Aqueduct BMs

2" I.P. W/BR. cap stamped LAABM 7-G, 100' W. of L.A.A. & Sta. 1046+15, on fence line	3796.945
Standard LAABM pipe W/BR. cap stamped LAABM No 8, Elev. 3798.378, 115' W. of L.A.A. & Sta. 1072+75, 800' E. of Well No 86	3799.843
2" I.P. W/BR. cap stamped LAABM 8-A, 145' W. of L.A.A. & Sta. 1092+30	Not Found '79 3798.845
2" I.P. W/BR. cap stamped LAABM 8-B, 90' W. of L.A.A. & Sta. 1113+85, on fence line, 330' S. of Georges Cr.	Not Found '79 3798.370
2" I.P. W/BR cap stamped LAABM 8-C, 100' W. of L.A.A. & Sta. 1131+75 on fence line 200' N. of fence intersection	Not Found '79 3796.078
2" I.P. W/BR. cap stamped LAABM 8-D, 115' W. of L.A.A. & Sta. 1154+10 on fence line	3801.193
Standard U.S.G.S. B.M. pipe W/cap stamped USGSBM 2 Datum B Elev. 3813 ft (1905) - L.A.A.B.M. No 9 Elev 3809.322, 830' W. of L.A.A. & at Sta. 1163+50, 175' SW. of 2" I.P. W/cap stamped SW cor NW 1/4 NE 1/4 S-25 R 35E T14S 150' of pole M1860V	Not Disc. '79 3810.845
2" I.P. W/BR. cap stamped LAABM 9-A, 100' W. of L.A.A. & at Sta. 1174+50 on fence line	3798.083
Std. BR. tablet set in large granite boulder, stamped LAABM 9-B, 90' W. of L.A.A. & at Sta. 1197+90	3798.718
2" I.P. W/BR. cap stamped LAABM 9-C, 100' W. of L.A.A. & at Sta. 1215+80 on fence line at angle point of fence	3797.003
B.M. 9-D hit by motor grader (DESTROYED)	
Std. BR. tablet in granite boulder stamped BM No 10 1945, 50' W. of L.A.A. & at Sta. 1253+38 New BM this circuit. Note: Original BM No 10 was loose and was not included in this circuit.	Not Found '79 3800.685

✓ FILE COPY

LONE PINE QUADRANGLE (351) CALIFORNIA C. L. Mercer, 1946
Los Angeles Aqueduct

Los Angeles Aqueduct BMs

Lead and screw in top of concrete, E. side of L.A.A. at Sta. 1258+65	Not Found '79	3794.358
Top of 3/4" bolt with "X" mark, set in concrete, E. side L.A.A. at Sta. 1261+65, S. side control house over Alabama Gates spillgates	Not Found '79	3793.840
Std. BR. tablet in granite boulder stamped 10-A, 30' E. of L.A.A. & at Sta 1274+13 at E. edge of rd.	Not Found '79	3791.955
Std. BR. triangulation cap stamped LAABM 10-C, on NW. corner of NE. head wall of C.H. 3, & Sta. of C.H. = 1311+13.6, 35' E. of & L.A.A.	Not Found '79	3794.485
Std. BR. triangulation cap stamped LAABM 11-A, on SE. corner of E. concrete abutment of C.H. 4, & Sta. of C.H. = 1337+08, 17' E. of & L.A.A.	Not Found '79	3792.908
2" I.P. W/BR. cap stamped LAABM 11-B, 19' E. of & of L.A.A. at Sta. 1362+48.5	Not Found '79	3791.265
Std. BR. tablet stamped LAABM 11-D, SE. corner of E. concrete abutment of C.H. 5, & Sta. of C.H. = 1400+14.6	Not Found '79	3791.650
B.M. 11-E bent over		Damaged
Lead & screw in top of concrete on E. side of L.A.A. at Sta. 1430+61	Not Found '79	3790.255
1-3/4" brass bolt in granite boulder stamped LAA 3808.173, 135' W. of L.A.A. & Sta. 1451+50	Not Found '79	3804.758
Lead & screw in top of conc. on E. side of L.A.A. at Sta. 1454+70		3789.738
2" I.P. W/BR. cap stamped LAABM 12-B, 90' E. of L.A.A. & Sta. 1482+59, on fence line (also on wing wall at NE. corner, W. of rd.		3779.488
Lead & screw in top of conc. wall at SW. cor. of O.H., & Sta. 1482+30.0		3792.098
Std. BR. tablet stamped LAABM 12-D, at SE. corner of S. wing wall of spillway No 4, & Sta. 1509+75.7		3780.788

✓ FILE COPY

LONE PINE QUADRANGLE (351) CALIFORNIA C. L. Mercer, 1946
Los Angeles Aqueduct

Los Angeles Aqueduct BMs

2" I.P. W/BR. cap stamped LAABM 12-E, 19' E. of L.A.A. & Sta. 1528+87	Not Found '79	3788.523
Lead & screw in top of conc. on E. side of L.A.A. at Sta. 1536+83	Not Found '79	3788.230
Lead & screw in top of conc. wall at NE. end of N. side of O.H. 15 & Sta 1554+06.0. Lone Pine Canyon Bridge	Not Found '79	3793.328
Brass plug in granite boulder stamped LAA Elev. 3793.85, 113' W. of & L.A.A. at Sta. 1555+86, 180' S. of O.H. 15		3795.288
2" I.P. W/BR. cap stamped LAABM 13-A, 100' E. of L.A.A. & Sta. 1574+45 on fence line		3786.905
Lead & screw in top of conc. on SE. wing wall of O. H. 21 & Sta. 1604+18.5, 12' W. of end of wall	Not Found '79	3786.918
2" I.P. W/BR. cap stamped LAABM 13-C, 90' N. of & L.A.A. at Sta. 1619+03 E. side of Tuttle Creek Ri. at O. H. 22	Not Found '79	3782.065
2" I.P. W/BR. cap stamped LAABM 13-D, 80' E. of L.A.A. & Sta. 1634+68, on fence line		3782.525
Std. BR. tablet stamped LAABM 13-E at E. end of N. head wall of C.H 27 & Sta. 1660+68.4	Destroyed '79	3787.105
2" I.P. W/BR. cap stamped LAABM 13-F, 19' E. of & of L.A.A. at Sta. 1692+95	Destroyed '79	3784.720
Std. BR. tablet stamped LAABM 14-A, top of SW. conc. wing wall of O.H. 29 & Sta. 1718+56.8		3790.073
2" I.P. W/BR. cap stamped LAABM 14-B, 20' E. of L.A.A. & Sta. 1743+68	Not Found '79	3783.822
Std. Br. tablet stamped LAABM 14-C, 34' E. of L.A.A. & top of SE. cor. of wing wall of O. H. 30, & Sta 1753+59.1	Destroyed '79	3785.865
Std. Br. tablet stamped LAABM 14-D, 34' E. of L.A.A. & top of SE. cor. of wing wall of O.H. 31, & Sta. 1772+86.4 (Found twisted bold; no tablet)	Destroyed '79	3785.698

FILE COPY

LONE PINE QUADRANGLE (351) CALIFORNIA C. L. Mercer, 1946
Los Angeles Aqueduct

LOS ANGELES AQUEDUCT BMs

Std. BR. tablet stamped LAABM 14-G, top of SE. cor. of wing wall of spillway No. 6 & Sta. 1817+37.8 ^{Not Found '79} 3780.523

Lead & screw in top of concrete on E. side of L.A.A. at Sta. 1837+35 ^{Not Found '79} 3782.348

Lead & screw in top of conc. on E. side of L.A.A. at Sta. 1841+35 3782.293

Lead & screw in top of conc. on E. side of L.A.A. at Sta. 1853+7C 3782.338

FILE COPY

~~OLANCHA QUADRANGLE (329)~~ CALIFORNIA C. L. Mercer, 1946
Los Angeles Aqueduct

CALIFORNIA
OLANCHA QUADRANGLE
(Latitude 36°15'-36°30'; Longitude 118°00'-118°15')

Los Angeles Aqueduct Bench Marks

	<u>Elevation</u>
Std. BR. tablet stamped LAABM 15-B, top of SE. cor. of wing wall of O.H. 34, & Sta. 1864+54.1 E. of rd.	Destroyed '79 3779.998
2" I.P. W/BR. cap stamped LAABM 15-C, 18' E. of L.A.A. & at Sta. 1882+33	3781.433
2" I.P. W/BR. cap stamped LAABM 15-D, 19' E. of L.A.A. & at Sta. 1904+40	3781.010
Std. BR. tablet stamped LAABM 15-E, top SE. corner of conc. wing wall of O.H. 36, & Sta. 1919+80.0	Destroyed '79 3784.045
Lead & screw in top of conc. E. side of L.A.A. at Sta. 1939+90	Not Found '79 3780.880
Std. BR. tablet stamped LAABM 15-G, top of NE. corner of wing wall of O. H. 37 & Sta. 1950+15.1	Destroyed '79 3783.695
Std. BR. tablet stamped 15-H, in granite rock 130' E. of L.A.A. at & Sta. 1971+35	3771.465
Lead and screw in top of conc. at SW. cor. of spillway No. 7 & Sta. 1970+45.4	Not Found '79 3780.533
Std. BR. tablet in granite boulder stamped LAABM 16-A, 95' E. of L.A.A. & at Sta. 1990+50, 5' W. of fence line	Destroyed '79 3775.638
Std. BR. tablet in granite boulder stamped LAABM 16-B, 80' E. of L.A.A. & at Sta. 2012+50, on fence line	3778.653
Std. BR. plate cut off	Destroyed.
3" I.P. W/BR. cap stamped U.S. General Land Office Survey, S34-S35, T16S, R36E, over T17S, dated 1916	3781.650
2" I.P. W/BR. cap stamped LAABM 16-E, 600' S. Carroll Cr. Bridge, Sta. 2051+45, 100' E. of L.A.A. on fence line	3772.430

3771.465
351

FILE COPY

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page	Quadr.	State	By	Altitude by Field Book
Bk. - Page	Miles	Adi.	Date	
		California	F.M. Kyle, 1974	
		LONE PINE (351)		
		Mean Field Elevations		
		Book: PV 896		
		Latitude 36°30' Longitude 118°00'		
ag/10	1.38	Lone Pine, 4.23 mi NE. of; 1.28 mi NE. of transmission line and paved rd. X-ing. along Long John Canyon Rd.; 60 ft SE. of and 3 ft higher than centerline of rd.; set in a granite boulder; standard tablet stamped "195 FMK 1974"		3899.292
	1.57	Lone Pine, 4.04 mi NE. of; 1.09 mi NE. of transmission line and paved rd. X-ing. along Long John Canyon Rd.; 42 ft NW. of centerline of rd., 2 ft W. of cairn; set in granite boulder; standard tablet stamped "196 FMK 1974"		3819.506
	1.70	BM "W 44" (USC&GS Quad 36 118 1 line 102)		3775.787
		W 44 by USC&GS 3775.852		
		W 44 this run 3775.787		
		Closure = - 0.065		
	1.96	Lone Pine, 3.66 mi NE. of; 0.71 mi NE. of transmission line X-ing. paved rd. along Long John Canyon Rd.; 264 ft E. of dirt rd. fork, 24 ft S. of centerline of rd. 4.0 ft W. of cairn; set on 15 ft of copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "197 FMK 1974"		3709.416
	2.24	BM "V 44" (USC&GS Quad 36 118 1 line 102)		3686.097
		V 44 by USC&GS 3686.016		
		V 44 this run 3686.097		
		Closure = + 0.081		
	2.25	Reference mark "V 44 NO 1" (USC&GS Quad 36 118 1 line 102)		3685.606
		RM 1 by USC&GS 3685.672		
		RM 1 this run 3685.606		
		Closure = - 0.066		
		Page 1 of 11		
		3		
		9-27-74 am/10		

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page	Quadr.	State	By	Altitude by Field Book
Bk. - Page	Miles	Adi.	Date	
		California	F.M. Kyle, 1974	
		LONE PINE (351)		
		Mean Field Elevations		
		Book: PV 896		
ag/21	3.82	Lone Pine, 1.74 mi NE. of; 43 ft S. of centerline of rd., 29 ft W. of fence corner, 21 ft W. of gate, 1 ft W. of fence; set on 15 ft of copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "202 FMK 1974"		3631.276
	4.11	BM "R 44" (USC&GS Quad 36 118 1 line 102)		3675.328
		R 44 by USC&GS 3675.403		
		R 44 this run 3675.328		
		Closure = - 0.075		
	4.36	Lone Pine, 1.21 mi E. of; 80 ft W. of power pole "CIC 31433", 20 ft S. of centerline of rd., 1 ft W. of 4 x 4 wooden post rd. sign; set on 20 ft of copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "203 FMK 1974"		3674.755
	4.58	BM "P 44" (USC&GS Quad 36 118 1 line 101)		3672.548
		P 44 by USC&GS 3672.624		
		P 44 this run 3672.548		
		Closure = - 0.076		
	4.80	Lone Pine, 0.77 mi E. of; 50 ft W. of T fence corner, 32 ft E. of power pole "CIC 81419", 23 ft S. of centerline of rd., 8 ft N. of fence; set in concrete culvert headwall; standard tablet stamped "204 FMK 1974"		3678.569
	5.04	BM "Q 44" (USC&GS Quad 36 118 1 line 101)		3693.698
		Q 44 by USC&GS 3693.772		
		Q 44 this run 3693.698		
		Closure = - 0.074		
	5.29	Lone Pine, 0.27 mi E. of; 56 ft E. of fence corner, 32 ft N. of centerline of rd., 14 ft E. of centerline of wooden gate; set on 20 ft copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "205 FMK 1974"		3701.839
		Page 3 of 11		
		5		
		9-27-74 am/11		

Page	Quadr.	State	By	Altitude by Field Book
Bk. - Page	Miles	Adi.	Date	
		California	F.M. Kyle, 1974	
		LONE PINE (351)		
		Mean Field Elevations		
		Book: PV 896		
ag/15	2.26	Reference mark "V 44 NO 2" (USC&GS Quad 36 118 1 line 102)		3686.363
		RM 2 by USC&GS 3686.433		
		RM 2 this run 3686.363		
		Closure = - 0.070		
	2.48	BM "U 44" (USC&GS Quad 36 118 1 line 102)		3682.326
		U 44 by USC&GS 3682.391		
		U 44 this run 3682.326		
		Closure = - 0.065		
	2.60	Lone Pine, 2.95 mi NE. of; at transmission line and paved rd. X-ing.; 275 ft W. of jct. Oweyo LP. Rd.; 41 ft E. of centerline of transmission line rd.; 37 ft S. of centerline of rd.; set in northeast concrete base of transmission line steel tower #74-1; standard tablet stamped "198 FMK 1974"		3680.841
	2.86	Lone Pine, 2.70 mi NE. of, along Lone Pine Station Rd.; at west end of small dry lake bed; 46 ft N. of centerline of rd., 3 ft S. of cairn; set on 15 ft of copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "199 FMK 1974"		3676.523
	3.00	Lone Pine, 2.56 mi NE. of, along Lone Pine Station Rd.; 40 ft of centerline of dirt rd. intersection, 3 ft SW. of destroyed concrete post BM; set on 20 ft of copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "200 FMK 1974"		3679.360
	3.36	Lone Pine, 2.20 mi NE. of, along Lone Pine Station Rd.; 47 ft S. of centerline of rd., 27 ft NE. of centerline of dirt rd.; set on 15 ft of copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "201 FMK 1974"		3676.709
	3.58	BM "S 44" (USC&GS Quad 36 118 1 line 102)		3676.660
		S 44 by USC&GS 3676.718		
		S 44 this run 3676.660		
		Closure = - 0.058		
		Page 2 of 11		
		4		
		9-27-74 am/12		

Page	Quadr.	State	By	Altitude by Field Book
Bk. - Page	Miles	Adi.	Date	
		California	F.M. Kyle, 1974	
		LONE PINE (351)		
		Mean Field Elevations		
		Book: PV 896		
ag/28	5.56	BM "P 44" (USC&GS Quad 36 118 1 line 101)		3709.480
		P 44 by USC&GS 3709.566		
		P 44 this run 3709.480		
		Closure = - 0.086		
	5.77	BM "X 1161" (USC&GS Quad 36 118 1 line 101)		3716.409
		X 1161 by USC&GS 3716.498		
		X 1161 this run 3716.409		
		Closure = - 0.089		
	6.01	At Lone Pine; at north end of town at city park; 100 ft E. of southeast corner of tennis courts, 55 ft W. of centerline of Highway 395, 14 ft W. of concrete curb, 6 ft N. of a 2-ft. high block wall; set in concrete curb of parking area; standard tablet stamped "206 FMK 1974"		3725.548
	6.17	At Lone Pine; 42 ft E. of centerline of U.S. Highway 395, 29 ft N. of centerline of Willow St., 1 ft N. of catch drain, 1 ft S. of stop sign; set in concrete curb; standard tablet stamped "207 FMK 1974"		3722.907
	6.29	BM "E 44" (USC&GS Quad 36 118 1 line 101)		3726.275
		E 44 by USC&GS 3726.361		
		E 44 this run 3726.275		
		Closure = - 0.086		
	6.44	At Lone Pine; 0.10 mi W. of intersection of U.S. Highway 395 and Whitney Portal Rd.; 27 ft N. of centerline of Whitney Portal Rd., 20 ft W. of centerline of Brewery St.; set in concrete headwall; standard tablet stamped "208 FMK 1974"		3730.469
	6.67	Lone Pine, 0.33 mi W. of; 64 ft N. of a gravel rd., 52 ft S. of centerline of Whitney Portal Rd., 1 ft E. of power pole "M 24221 V"; set on 40 ft of copper-coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "209 FMK 1974"		3754.451
		Page 4 of 11		
		6		
		9-27-74 am/13		

OCT 4 1974

1974-75 RUN

DESTROYED IN MARCH 2015 DUE TO CONSTRUCTION. FILE COPY
 MARK WAS NOT RESET.

36 118 12

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page	Quads.	State	By	Altitude by
BM - Page	Miles	Adj.	Date	Field Book
	LORE PINE (351)	California	F.M. Kyle,	1974
	First Order	Mean Field Elevations		
	Book:	PV 896		
ag/35	6.94	Lone Pine, 0.60 mi W. of; 17 ft W. of west end of bridge, 15 ft N. of centerline of Whitney Portal Rd.; set in concrete headwall of bridge over L.A. aqueduct; standard tablet stamped "210 FMK 1974"		3794.755
(1)	7.06	BM "K 44" (USC&GS Quad 36 118 1 line 101)		3809.631
		K 44 by USC&GS 3809.720 K 44 this run 3809.631		
		Closure = - 0.089		
	7.29	Lone Pine, 0.96 mi W. of; 18 ft N. of centerline of Whitney Portal Rd.; set in concrete headwall of culvert; standard tablet stamped "211 FMK 1974";		3871.068
	7.41	BM "C 44" (USC&GS Quad 36 118 1 line 101)		3904.976
		C 44 by USC&GS 3905.045 C 44 this run 3904.976		
		Closure = - 0.069		
	7.52	Lone Pine, 1.19 mi W. of; 51 ft N. of centerline of Whitney Portal Rd.; 10 ft N. of diversion channel; set in concrete base for steel instrument base; standard tablet stamped "212 FMK 1974"		3931.515
	7.74	Lone Pine, 1.41 mi W. of; 150 ft E. of turnout on the inside of a curve, 41 ft S. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "213 FMK 1974"		3994.726
	7.85	Lone Pine, 1.53 mi W. of; at northwest end of a turnout; 69 ft W. of hwy. sign "SLOW TO 30"; 41 ft N. of centerline of Whitney Portal Rd.; 25 ft S. of centerline of Lone Pine Creek; set in boulder; standard tablet stamped "214 FMK 1974"		4022.960
	8.03	Lone Pine, 1.71 mi W. of; 37 ft N. of centerline of Whitney Portal Rd.; set on boulder; standard tablet stamped "215 FMK 1974"		4073.175
		Page 5 of 11		
		7		
		9-27-74		

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7-1131

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page	Quads.	State	By	Altitude by
BM - Page	Miles	Adj.	Date	Field Book
	LORE PINE (351)	California	F.M. Kyle,	1974
	First Order	Mean Field Elevations		
	Book:	PV 896		
		SPUR LINE		
ai/ 8	0.08	BM "A 44" (USC&GS Quad 36 118 1 line 101)		4490.799
		A 44 by USC&GS 4490.811 A 44 this run 4490.799		
		Closure = - 0.012		
		RETURN TO MAIN LINE		
	9.35	BM "221 FMK" (as described on previous page)		4466.330
	9.62	Lone Pine, 3.31 mi W. of; at intersection of Whitney Portal Rd. and Horse Shoe Meadow Rd.; 54 ft W. of centerline of Horse Shoe Meadow Rd.; 45 ft S. of centerline of Whitney Portal Rd.; 3 ft higher than rd.; set in boulder; standard tablet stamped "222 FMK 1974"		4571.631
	9.89	BM "V 1161" (USC&GS Quad 36 118 1 line 101)		4653.177
		V 1161 by USC&GS 4653.170 V 1161 this run 4653.177		
		Closure = + 0.007		
	10.10	Lone Pine, 3.79 mi W. of; near top of small grade; 59 ft S. of centerline of Whitney Portal Rd.; 6 ft higher than rd.; 2.0 ft N. of cairn; set in rock; standard tablet stamped "223 FMK 1974"		4716.897
	10.36	BM "Z 43" (USC&GS Quad 36 118 1 line 101)		4779.330
		Z 43 by USC&GS 4779.315 Z 43 this run 4779.330		
		Closure = + 0.015		
	10.64	Lone Pine, 4.34 mi W. of; 109 ft SW. of driveway to private home; 30 ft N. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "224 FMK 1974"		4855.945
		Page 7 of 11		
		9		
		9-27-74		

36 118 12

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7-1130

Page	Quads.	State	By	Altitude by
BM - Page	Miles	Adj.	Date	Field Book
	LORE PINE (351)	California	F.M. Kyle,	1974
	First Order	Mean Field Elevations		
	Book:	PV 896		
ag/43	8.14	Lone Pine, 1.82 mi W. of; 19 ft N. of centerline of Whitney Portal Rd.; set in concrete headwall of bridge over Lone Pine Creek; standard tablet stamped "216 FMK 1974" DISTURBED 1984		4093.633
	8.19	Lone Pine, 2.06 mi W. of; near top of steep grade; 55 ft S. of centerline of Whitney Portal Rd.; 4 ft higher than rd.; 3 ft S. of cairn; set in boulder; standard tablet stamped "217 FMK 1974"		4208.459
	8.57	BM "B 44" (USC&GS Quad 36 118 1 line 101)		4260.114
		B 44 by USC&GS 4260.142 B 44 this run 4260.114		
		Closure = - 0.028		
ai/1	8.74	Lone Pine, 2.40 mi W. of; 50 ft SE. of south edge of large rock outcrop; 37 ft N. of centerline of Whitney Portal Rd.; 4 ft higher than rd.; set in boulder; standard tablet stamped "218 FMK 1974"		4292.464
	8.87	BM "W 1161" (USC&GS Quad 36 118 1 line 101)		4340.902
		W 1161 by USC&GS 4340.916 W 1161 this run 4340.902		
		Closure = - 0.014		
	9.05	Lone Pine, 2.72 mi W. of; 31 ft S. of centerline of Whitney Portal Rd.; 4 ft higher than rd.; set in large flat rock outcrop; standard tablet stamped "219 FMK 1974"		4414.871
	9.20	Lone Pine, 2.88 mi W. of; at intersection of Whitney Portal Rd. and Movie Rd.; 54 ft W. of centerline of Whitney Portal Rd.; 43 ft S. of centerline of Whitney Portal Rd.; 3 ft S. of cairn; set in boulder; standard tablet stamped "220 FMK 1974"		4467.874
	9.35	Lone Pine, 3.04 mi W. of; at rd. intersection to R.C. Fry residence; 20 ft W. of centerline of rd. to Fry residence; 17 ft N. of centerline of Whitney Portal Rd.; set in north concrete headwall of bridge; standard tablet stamped "221 FMK 1974" RESET 1984		4466.330
		Page 6 of 11 Reset Elev		
		8		
		9-27-74		

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7-1131

Page	Quads.	State	By	Altitude by
BM - Page	Miles	Adj.	Date	Field Book
	LORE PINE (351)	California	F.M. Kyle,	1974
	First Order	Mean Field Elevations		
	Book:	PV 896		
ai/12	10.81	BM "U 1161" (USC&GS Quad 36 118 1 line 101)		4900.782
		U 1161 by USC&GS 4900.758 U 1161 this run 4900.782		
		Closure = + 0.024		
	11.07	Lone Pine, 4.76 mi W. of; 46 ft W. of fence corner and metal gate; 35 ft N. of centerline of Whitney Portal Rd.; 5 ft N. of fence; 3 ft higher than rd.; set in boulder; standard tablet stamped "225 FMK 1974"		4966.856
	11.32	Lone Pine, 5.01 mi W. of; 81 ft S. of fence; 53 ft S. of centerline of Whitney Portal Rd.; 3 ft higher than rd.; set in boulder; standard tablet stamped "226 FMK 1974"		5043.885
	11.52	BM "Y 43" (USC&GS Quad 36 118 1 line 101)		5113.155
		Y 43 by USC&GS 5113.107 Y 43 this run 5113.155		
		Closure = + 0.048		
	11.75	Lone Pine, 5.45 mi W. of; at a jog in fence line; 180 ft N. of centerline of Whitney Portal Rd.; 24 ft N. of fence; 10 ft higher than rd.; set in boulder; standard tablet stamped "227 FMK 1974"		5184.431
	11.90	Lone Pine, 5.61 mi W. of; on top of small ridge; 170 ft N. of centerline of Whitney Portal Rd.; 81 ft SE. of large lone rock outcrop; 78 ft SE. of jog in fence line; 62 ft S. of fence; 8 ft higher than rd.; set in boulder; standard tablet stamped "228 FMK 1974"		5245.306
	12.14	BM "T 1161" (USC&GS Quad 36 118 1 line 101)		5313.709
		T 1161 by USC&GS 5313.664 T 1161 this run 5313.709		
		Closure = + 0.045		
		Page 8 of 11		
		10		
		9-27-74		

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 7-1130

OCT 4 1974

1974-75 RUN

FILE COPY

BENCH MARK DESCRIPTIONS, FIELD SUMMARY				36 118 12
Page	Quads	State	By	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 9-118
SA - Page	Miles	Adj.	Date	Altitude by Field Book
		California	F.M. Kyle, 1974	
		First Order Mean Field Elevations		
		Book: PV 896		
ai/19	12.22	Lone Pine, 5.93 mi W. of; 180 ft E. of intersection of graded rd. S. and track N. 32 ft N. of centerline of Whitney Portal Rd.; set in flat-topped boulder; standard tablet stamped "229 FPK 1974"		ai/36 5340.719 9-1165 5341.136
(7)	12.46	Lone Pine, 6.18 mi W. of; 63 ft S. of centerline of rd. set in flat-topped boulder; standard tablet stamped "230 FPK 1974"		5429.483
	12.66	BM "X 43" (USC&GS Quad 36 118 1 line 101)		5501.621
		X 43 by USC&GS	5501.574	
		X 43 this run	5501.621	
		Closure =	+ 0.047	
	12.92	Lone Pine, 6.63 mi W. of; 180 ft SW. of centerline of intersection of track rd. NE., 129 ft S. of centerline of Whitney Portal Rd., 11 ft SE. of cairn, 4 ft lower than rd.; set in boulder; standard tablet stamped "231 FPK 1974"		5590.647
	13.07	Lone Pine, 6.79 mi W. of; 93 ft E. of X-rd., 53 ft S. of centerline of Whitney Portal Rd., 5 ft S. of cairn; set in boulder; standard tablet stamped "232 FPK 1974"		5641.913
	13.22	Lone Pine, 6.94 mi W. of; at intersection of paved rd. W.; 83 ft SW. of centerline of intersection, 45 ft S. of centerline of Whitney Portal Rd., 33 ft N. of centerline of rd. to Lone Pine Campground; set in north end of rock and concrete base for USFS sign; standard tablet stamped "233 FPK 1974"		5701.045
	13.38	BM "P 600" (USC&GS Quad 36 118 1 line 101)		5771.098
		P 600 by USC&GS	5771.025	
		P 600 this run	5771.098	
		Closure =	+ 0.073	
	13.60	Lone Pine, 7.36 mi W. of; 264 ft NW. of bridge over Lone Pine Creek, at northeast end of a turnout, 58 ft N. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "234 FPK 1974"		5782.560
		Page 9 of 11		
		11 9-27-74 am J.B.		

BENCH MARK DESCRIPTIONS, FIELD SUMMARY				36 118 12
Page	Quads	State	By	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 9-118
SA - Page	Miles	Adj.	Date	Altitude by Field Book
		California	F.M. Kyle, 1974	
		First Order Mean Field Elevations		
		Book: PV 896		
	15.00	BM "241 FPK" (as described on previous page)		6474.532
	15.17	Lone Pine, 8.96 mi W. of; opposite turnout; 49 ft S. of centerline of Whitney Portal Rd., 26 ft S. of a pine tree; set in boulder; standard tablet stamped "242 FPK 1974"		6572.027
	15.38	Lone Pine, 9.16 mi W. of; 57 ft E. of Whitney Portal Rd., 10 ft higher than rd.; set in boulder; standard tablet stamped "243 FPK 1974"		6686.069
	15.59	Lone Pine, 9.31 mi W. of; at southeast end of cut; 34 ft E. of centerline of Whitney Portal Rd., 8 ft SW. of a pine tree; set in boulder; standard tablet stamped "244 FPK 1974"		6804.491
	15.81	Lone Pine, 9.59 mi W. of; 200 ft NW. of the northwest end of turnout, 17 ft S. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "245 FPK 1974"		6924.380
	15.97	Lone Pine, 9.76 mi W. of; 24 ft E. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "246 FPK 1974"		7011.196
	16.16	Lone Pine, 9.95 mi W. of; at northernmost edge of hair-pin curve, at east end of concrete-rock retaining wall; 31 ft N. of centerline of Whitney Portal Rd., 5 ft higher than rd.; (approximate location of USC&GS BM K 600); set in boulder; standard tablet stamped "247 FPK 1974"		7095.671
		Page 11 of 11		
		13		
		9-30-74 am J.B.		

BENCH MARK DESCRIPTIONS, FIELD SUMMARY				36 118 12
Page	Quads	State	By	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 9-118
SA - Page	Miles	Adj.	Date	Altitude by Field Book
		California	F.M. Kyle, 1974	
		First Order Mean Field Elevations		
		Book: PV 896		
ai/27	13.82	Lone Pine, 7.59 mi W. of; 22 ft N. of centerline of Whitney Portal Rd., 15 ft W. of USFS sign "INNO NATIONAL FOREST", 3 ft higher than rd.; set in boulder; standard tablet stamped "235 FPK 1974"		5898.638
	14.06	Lone Pine, 7.83 mi W. of; 40 ft W. of west end of turnout, 22 ft N. of centerline of Whitney Portal Rd., 5 ft higher than rd.; set in boulder; standard tablet stamped "236 FPK 1974"		5995.504
	14.27	Lone Pine, 8.05 mi W. of; 47 ft N. of centerline of Whitney Portal Rd., 11 ft W. of a lone pine tree, 3 ft higher than rd.; set in boulder; standard tablet stamped "237 FPK 1974"		6078.941
	14.50	Lone Pine, 8.28 mi W. of; 100 ft E. of top of small grade, 49 ft N. of centerline of Whitney Portal Rd., 18 ft SW. of a pine tree, 6 ft higher than rd., 2 ft S. of cairn; set in boulder; standard tablet stamped "238 FPK 1974"		6195.206
	14.72	Lone Pine, 8.50 mi W. of; 68 ft NE. of turnout, 34 ft N. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "239 FPK 1974"		6321.204
	14.86	Lone Pine, 8.65 mi W. of; 60 ft S. of centerline of Whitney Portal Rd., 28 ft S. of turnout, 15 ft W. of a pine tree, 2 ft N. of cairn; set in boulder; standard tablet stamped "240 FPK 1974"		6397.028
	15.00	Lone Pine, 8.79 mi W. of; 67 ft E. of old paved rd., 46 ft S. of Whitney Portal Rd., 25 ft NW. of a pine tree, 6 ft higher than rd.; set in flat-topped rock; standard tablet stamped "241 FPK 1974"		6474.532
		SPUR LINE		
0.22		BM "M 600" (USC&GS Quad 36 118 1 line 101)		6418.755
		M 600 by USC&GS	6418.629	1940 Elev.
		M 600 this run	6418.755	
		Closure =	+ 0.126	
		RETURN TO MAIN LINE		
		Page 10 of 11		
		12 9-30-74 am J.B.		

BENCH MARK DESCRIPTIONS, FIELD SUMMARY				36 118 12
Page	Quads	State	By	UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY 9-118
SA - Page	Miles	Adj.	Date	Altitude by Field Book
		California	F.M. Kyle, 1974	
		First Order Mean Field Elevations		
		Book: PV 896		
	15.00	BM "241 FPK" (as described on previous page)		6474.532
	15.17	Lone Pine, 8.96 mi W. of; opposite turnout; 49 ft S. of centerline of Whitney Portal Rd., 26 ft S. of a pine tree; set in boulder; standard tablet stamped "242 FPK 1974"		6572.027
	15.38	Lone Pine, 9.16 mi W. of; 57 ft E. of Whitney Portal Rd., 10 ft higher than rd.; set in boulder; standard tablet stamped "243 FPK 1974"		6686.069
	15.59	Lone Pine, 9.31 mi W. of; at southeast end of cut; 34 ft E. of centerline of Whitney Portal Rd., 8 ft SW. of a pine tree; set in boulder; standard tablet stamped "244 FPK 1974"		6804.491
	15.81	Lone Pine, 9.59 mi W. of; 200 ft NW. of the northwest end of turnout, 17 ft S. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "245 FPK 1974"		6924.380
	15.97	Lone Pine, 9.76 mi W. of; 24 ft E. of centerline of Whitney Portal Rd.; set in boulder; standard tablet stamped "246 FPK 1974"		7011.196
	16.16	Lone Pine, 9.95 mi W. of; at northernmost edge of hair-pin curve, at east end of concrete-rock retaining wall; 31 ft N. of centerline of Whitney Portal Rd., 5 ft higher than rd.; (approximate location of USC&GS BM K 600); set in boulder; standard tablet stamped "247 FPK 1974"		7095.671
		Page 11 of 11		
		13		
		9-30-74 am J.B.		

FOR CONTINUATION
OF THIS LINE SEE
D.O. RICHARDSON 1975

1974-75 Run

1974-75 Run

OCT 4 1974

FILE COPY

36 11A 12

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1978

Page	Quads	State	By	Altitude by
Bk - Page	Miles	Adj	Date	Field Book
8 (X)	LONE PINE (351)	California	D.O. Richardson, 1978	
	First Order	Mean Field Elevations	HAZARDOUS AREA	USE WITH CAUTION
	Book: PV 1024			
b/204	8.91	BH "Z 43 1925" (NGS Quad 36 11B 1, line 101)(line 7)	4779.349	
	9.16	BH "223 FMK 1974" (line 7)	4716.918	
	9.38	BH "V 1161 1962" (NGS Quad 36 11B 1, line 101)(line 7)	4653.198	
	9.64	BH "222 FMK 1974" (line 7)	4571.655	
	9.91	BH "221 FMK 1974" (line 7)	4466.371	
	<u>SPUR LINE TO "A 44 1925"</u>			
	0.09	BH "A 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	4490.836	
	<u>RETURN TO MAIN LINE</u>			
	9.91	BH "221 FMK 1974" (line 7)(as above)	4466.371	
	10.07	BH "220 FMK 1974" (line 7)	4467.910	
	10.23	BH "219 FMK 1974" (line 7)	4414.904	
	10.41	BH "W 1161 1962" (NGS Quad 36 11B 1, line 101)(line 7)	4340.932	
	10.54	BH "218 FMK 1974" (line 7)	4293.086	
	10.72	BH "B 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	4260.149	
	10.90	BH "217 FMK 1974" (line 7)	4208.494	
	11.15	BH "216 FMK 1974" (line 7)	4093.672	
	11.26	BH "215 FMK 1974" (line 7)	4073.199	
	11.47	BH "214 FMK 1974" (line 7)	4022.972	
	11.59	BH "213 FMK 1974" (line 7)	3994.759	
	11.80	BH "212 FMK 1974" (line 7)	3931.557	
	11.92	BH "C 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3905.018	
	12.02	BH "211 FMK 1974" (line 7)	3871.108	
	12.26	BH "K 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3909.672	
	Page 3 of 5 3			

NOV 24 1978 dlh

36 11A 12

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1978

Page	Quads	State	By	Altitude by
Bk - Page	Miles	Adj	Date	Field Book
	LONE PINE (351)	California	D.O. Richardson, 1978	
	First Order	Mean Field Elevations	HAZARDOUS AREA	USE WITH CAUTION
	Book: PV 1024			
b/214	12.38	BH "210 FMK 1974" (line 7)	3794.803	
	<u>SPUR LINE TO L.A. AQUADUCT</u>			
	0.03	Lone Pine, 0.60 mi W. of; 148 ft S. of centerline of Whitney Portal Rd., 0.5 ft W. of concrete wall with painted number "1555"; In east concrete bank of L.A. Aquaduct; small disk (unstamped)	3788.154	
	<u>RETURN TO MAIN LINE</u>			
	12.38	BH "210 FMK 1974" (line 7)	3794.803	
	12.65	BH "209 FMK 1974" (line 7)	3754.498	
	12.87	BH "208 FMK 1974" (line 7)	3770.517	
	13.02	BH "E 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3726.329	
	13.15	BH "207 FMK 1974" (line 7)	3722.950	
	13.30	BH "206 FMK 1974" (line 7)	3725.601	
	13.55	BH "X 1161 1962" (NGS Quad 36 11B 1, line 101)(line 7)	3716.463	
	13.75	BH "P 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3709.535	
	14.02	BH "205 FMK 1974" (line 7)	3701.900	
	14.26	BH "Q 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3693.764	
	14.50	BH "204 FMK 1974" (line 7)	3678.627	
	14.73	BH "F 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3672.616	
	14.95	BH "203 FMK 1974" (line 7)	3674.819	
	15.22	BH "R 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3675.189	
	15.51	BH "202 FMK 1974" (line 7)	3631.341	
	15.71	BH "S 44 1925" (NGS Quad 36 11B 1, line 101)(line 7)	3676.716	
	15.94	BH "201 FMK 1974" (line 7)	3676.767	
	Page 4 of 5 4			

NOV 24 1978 dlh

1978 RUN

36 118 12

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
W-1128

BENCH MARK DESCRIPTIONS, FIELD SUMMARY

Page	Quads	State	By	Altitude by
Bk - Page	Miles	Abb.	Date	Field Book
(8) (7)	LONE PINE (351)	California	D.O. Richardson, 1978	
	First Order	Mean Field Elevations		
	Book: PV 1024			
b/223	16.30	BH "200 FMK 1974" (line 7)		3679.418
	16.44	BH "199 FMK 1974" (line 7) (Disturbed, 1978: Rod in bent 90° at 3 inches below tablet, tablet is bent nearly horizontal)		3676.330
	16.70	BH "198 FMK 1974" (line 7)		3680.899
	16.83	BH "U 44 1925" (NGS Quad 36 118 1, line 102) (line 7)		3682.385
	17.07	BH "v 44 NO 2 BENCHMARK 1950" (NGS Quad 36 118 1, line 102) (line 7)		3686.427
	17.08	BH "v 44 NO 1 BENCHMARK 1950" (NGS Quad 36 118 1, line 102) (line 7)		3685.672
	17.09	BH "BENCHMARK v 44 1925" (NGS Quad 36 118 1, line 102) (line 7)		3686.162
	17.36	BH "197 FMK 1974" (line 7)		3709.478
	17.62	BH "W 44 1925" (NGS Quad 36 118 1, line 102) (line 7)		3775.846
	17.75	BH "196 FMK 1974" (line 7)		3819.567
	17.93	BH "195 FMK 1974" (line 7)		3899.353

FILE COPY

1978 RUN

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

CALIFORNIA 351

STATE Calif COUNTY Inyo QUADRANGLE Lone Pine NE
QUOTE PRIMARY REFERENCE Lone Pine, 2.70 mi NE. of
(Direction and distance)

DESIGNATION { LISTED 199 FMK 1974
STAMPED 199 FMK 1974 TYPE OF MARK: BM TT _____ TRIANG. _____

Lat. _____ ° _____ ' _____ " CONDITION ESTABLISHED BY
Disturbed USGS USBR
Long. _____ ° _____ ' _____ " Destroyed USC&GS State GS
Elev. 3676.523 feet Not Found USNPS USNFS
USGLO (Other)
USBLM

REMARKS OR REVISED DESCRIPTION:

Lone Pine, 2.70 mi NE. of along Lone Pine Station Rd.; at east end of small dry lake bed; 46 ft N. of centerline of rd. 3 ft S. of cairn; set on 15 ft of copper coated steel rod encased in 6-inch black plastic pipe; standard tablet stamped "199 FMK 1974"

SUBMITTED BY Harry S. Campbell
TITLE Carto Tech
AGENCY US Geological Survey

DATE 10-16-79

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

(OVER)

16-54252-4

REPORT ON PERMANENT SURVEY MARK

AREA OFFICE

STATE Calif COUNTY Inyo QUADRANGLE Lone Pine NE 351
QUOTE PRIMARY REFERENCE Lone Pine, 7 mi. N. of
(Direction and distance)

DESIGNATION { LISTED "B" Line 3 L.F. Biggs 1905
STAMPED 2, B, 38113, 1905 TYPE OF MARK: BM TT _____ TRIANG. _____
L.S.A.B.M. No 9 Elev 3809.322

Lat. _____ ° _____ ' _____ " CONDITION ESTABLISHED BY
Disturbed USGS USBR
Long. _____ ° _____ ' _____ " Destroyed USC&GS State GS
Elev. 3810.845 feet Not Found USNPS USNFS
USGLO (Other)
USBLM

REMARKS OR REVISED DESCRIPTION:

Lone Pine, 5.5 mi. N of, thence 1.6 mi NW along old Hwy 395, 185 ft SW of old Hwy 395, 175 ft SW of 2" IP w/cap stamped SW Cor NW 1/4 NE 1/4 S-25 R35E T14S, 150 ft S of pole M1860V, 20 ft NE of old track rd, iron pipe stamped 2, B, 3813, 1905, L.S.A.B.M. No 9 Elev 3809.322

SUBMITTED BY Harry S. Campbell
TITLE Carto Tech
AGENCY US Geological Survey

DATE 10-19-79

Marks found in good condition need not be reported.

FILL IN ALL AVAILABLE INFORMATION

GPO 16-54252-6

FILE COPY
JAN 13 1980

Please prepare in triplicate and send to nearest (or indicated) address shown on reverse side.

Please prepare in triplicate.

REPORT ON CONDITION OF SURVEY MARK

QUADRANGLE REPORT

NGS Quad 361181

STATE California COUNTY Inyo QUAD NAME Lone Pine

STATION NAME and/or NUMBER 216 FMK 1974 QUAD NUMBER 351, line 7

LATITUDE _____ TYPE of MARK: BM TRAV. TRIANG. DOPPLER

LONGITUDE _____ YEAR ESTABLISHED 1974

ELEVATION 4093.633 ft/meter By: USGS NGS OTHER _____

CONDITION Disturbed MARK STAMPED: 216 FMK 1974 (Name of agency)

REMARKS ~~REVISED DESCRIPTION~~

Inyo county surveyor Miles Clair states that the elevation does not agree with the other BM's on this line. The headwall is cracked through on each side of the mark and leans to the north.

SUBMITTED BY: W. R. Odum AGENCY National Geodetic Survey DATE 4/30/84

Marks found in good condition need not be reported unless description is inadequate. Please prepare in triplicate. GSC-178

REPORT ON CONDITION OF SURVEY MARK

QUADRANGLE REPORT

NGS Quad 361181

STATE California COUNTY Inyo QUAD NAME Lone Pine

STATION NAME and/or NUMBER 221 FMK RESET 1984 QUAD NUMBER 351, line 7

LATITUDE _____ TYPE of MARK: BM TRAV. TRIANG. DOPPLER

LONGITUDE _____ YEAR ESTABLISHED 1974

ELEVATION 4466.330(old) 4470.375(new) ft/meter By: USGS NGS OTHER _____

CONDITION RESET MARK STAMPED: 221 FMK RESET 1984 (Name of agency)

~~REMARKS~~ REVISED DESCRIPTION:

Lone Pine, 3.04 mi W of; 94 ft S of centerline of road, about 100 ft W of center of creek, 5 ft S of tree; set in top of 3 ft by 4 ft boulder projecting 2.5 ft above ground; standard tablet stamped "221 FMK RESET 1984"

DE from original to reset is +4.045 ft.

SUBMITTED BY: W. R. ODUM AGENCY National Geodetic Survey DATE 4/30/84

Marks found in good condition need not be reported unless description is inadequate. Please prepare in triplicate. GSC-178

REPORT ON CONDITION OF SURVEY MARK

QUADRANGLE REPORT

NGS Quad 361181

STATE California COUNTY Inyo QUAD NAME Lone Pine

STATION NAME and/or NUMBER 229 FMK RESET 1984 QUAD NUMBER 351, line 7

LATITUDE _____ " "

TYPE of MARK: BM TRAV. TRIANG. DOPPLER

LONGITUDE _____ " "

YEAR ESTABLISHED 1974

ELEVATION 5340.719(old) 5341.136 (new)
ft/meter

By: USGS NGS OTHER _____
(Name of agency)

CONDITION RESET

MARK STAMPED: 229 FMK RESET 1984

~~XXXXXXXX~~ REVISED DESCRIPTION:

Lone Pine, 5.93 mi W of;
175 ft E of projected centerline of ranger station road,
58 ft N of centerline of Whitney-Portal road,
1.8 ft NW of witness post; set in top of 3 ft x 4 ft boulder
projecting 2.5 ft above ground; standard tablet stamped
"229 FMK RESET 1984"

DE from original to reset is +0.417 ft

SUBMITTED BY: W. R. ODUM AGENCY National Geodetic Survey DATE 4/30/84

Marks found in good condition need not be reported unless description is inadequate.

Please prepare in triplicate.

GSC-178