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Geological Consultants Inc. Project No. 2002-185

January 30, 2004

Contract FCD 2002C029



**WITTMANN AREA DRAINAGE
MASTER STUDY UPDATE (ADMSU)**

**LAND SUBSIDENCE AND EARTH FISSURE
INVESTIGATION REPORT**

VOLUME SU

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NOTICE

The geologic and soils observations, findings, conclusions and recommendations presented in this report are based on (1) data from published and unpublished sources available at the time of this study, (2) photo-geological interpretation and (3) geological field reconnaissance of selected portions of the project area. The services provided by Geological Consultants to Entellus were performed according to generally accepted principals and standard practices used by members of the geological profession in this locale at the time of this study.

It must be recognized that subsurface geologic and soil conditions may vary from place to place and from those interpreted at locations where evaluations are made by the investigator. No warranty or representation, either expressed or implied, is or should be construed regarding geological or soil conditions at locations other than those observed by the investigators.

This report was prepared in accordance with the scope of work outlined in the Subconsultant Agreement Between Entellus, Inc. and Geological Consultants, Inc. dated May 8, 2003

Wittmann Area Drainage Master Study Update (ADMSU)

FCD 2002C029

TABLE OF CONTENTS

LAND SUBSIDENCE & EARTH FISSURE INVESTIGATION REPORT (VOLUME SU)

SECTION SU-1: INTRODUCTION	1
1.1 Scope of Work	2
1.2 Report Organization	3
SECTION SU-2: CONCLUSIONS AND RECOMMENDATIONS	4
SECTION SU-3: GEOLOGICAL EVALUATION	6
3.1 Regional Geologic Setting	6
3.2 General Basin Geology	7
3.2.1 Geologic Units	7
3.2.1.1 Late Holocene alluvial fans, low terraces, and active stream channels deposits <3ka (Y2)	7
3.2.1.2 Late to early Holocene alluvial fans and terraces 1-10ka (Y1)	8
3.2.1.3 Undifferentiated Holocene alluvial fans 0-10ka (Y)	8
3.2.1.4 Alluvium and talus, undifferentiated (Q).....	8
3.2.1.5 Latest to late Pleistocene alluvial fans 10-150ka (M2).....	9
3.2.1.6 Middle to late Pleistocene alluvial fans 150-300ka (M1b).....	9
3.2.1.7 Middle or late Pleistocene distal alluvial fans 10-300ka (M12)	10
3.2.1.8 Middle to early Pleistocene alluvial fans 300-1,000ka (M1a)	10
3.2.1.9 Middle Pleistocene alluvial fans 150-1,000ka (M1)	10
3.2.1.10 Early Pleistocene to late Pliocene alluvial fans (O)	11
3.2.1.11 Active channels and low terraces along active drainages <3ka (Y2r)	11
3.2.1.12 Younger sedimentary rocks; conglomerate, sandstone, and lacustrine rocks (Tsy).....	11
3.2.1.13 Tertiary volcanics Undifferentiated (TVu).....	11
3.2.1.14 Tertiary or Cretaceous intrusive and volcanic rocks (TK).....	12
3.2.1.15 Cretaceous to Proterozoic Crystalline Igneous Intrusive and Metamorphic Rocks (KXu).....	12

3.2.2	Wittmann ADMSU Basin Stratigraphy.....	13
3.2.2.1	Upper Alluvial Unit.....	14
3.2.2.2	Middle Alluvial Unit.....	14
3.2.2.3	Lower Alluvial Unit.....	14
3.2.3	Wittmann ADMSU Basin Structure.....	15
SECTION SU-4: LAND SUBSIDENCE.....		16
4.1	Overview.....	16
4.2	Basic Data Assessment.....	17
4.2.1	NGS Level Line Data.....	17
4.2.2	ADWR GWSI Data Base.....	17
4.2	Groundwater.....	17
4.3.1	Historic Groundwater Trends in the Wittmann ADMSU.....	18
4.4	Regional Land Subsidence.....	18
4.4.1	Land Subsidence within Wittmann ADMSU.....	19
4.4.1.1	Historic NGS and USBR Level Line Analysis.....	20
4.4.1.1.1	NGS Level Line L8632.....	20
4.4.1.1.2	NGS Level Line L2455/2 and L21029.....	20
4.4.1.1.3	USBR Level Line Data.....	21
4.4.1.2	INSAR Interferogram Data Analysis.....	22
4.4.2	McMicken Dam Area Subsidence.....	23
4.5	Earth Fissures.....	25
4.5.1	Earth Fissures within the Wittmann ADMSU.....	27
4.5.2	Earth Fissures within the McMicken Dam Area.....	27
SECTION SU-5: BIBLIOGRAPHY.....		28

LIST OF TABLES

Table SU-1 Land Subsidence along the Beardsley Canal 21
 Table SU-2 Land Subsidence along Perryville Road 24
 Table SU-3 Land Subsidence along U.S. 60 25

LIST OF APPENDICES

- APPENDIX SU-A: GWSI DATA SHEETS**
APPENDIX SU-B: NGS LEVEL LINE DATA
APPENDIX SU-C: GLOSSARY OF GEOLOGIC TERMS

LIST OF FIGURES

- Figure SU-1 Location Map
 Figure SU-2 Cross-Section Location Map
 Figure SU-3 Depth to Bedrock Map
 Figure SU-4 Geologic Cross Sections
 Figure SU-5 Water Level Decline Compared to Land Subsidence along Northern Avenue
 Figure SU-6 Level Line Location Maps
 Figure SU-7 Wittmann Area Historic Water Level Decline Map 1900-1991
 Figure SU-8 Wittmann Area Water Level Hydrograph
 Figure SU-9 Selected Index Well Location Map
 Figure SU-10 Wittmann Area Subsidence Contour Map
 Figure SU-11 US 60/Beardsley Canal Area Historical Subsidence
 Figure SU-12 Interferogram Data for 12/30/1996 to 11/30/1998
 Figure SU-13 Interferogram Data for 12/30/1996 to 12/20/1999
 Figure SU-14 Interferogram Data for 03/10/1997 to 10/30/2000
 Figure SU-15 Interferogram Data for 06/08/1998 to 05/08/2000
 Figure SU-16 Typical Earth Fissure Development
 Figure SU-17 McMicken Dam Earth Fissure Location

LIST OF PLATES

- Plate SU-1 Geologic Map: South Project Area
 Plate SU-2 Geologic Map: North Project Area



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SU-1.0 INTRODUCTION

This report presents the results of an evaluation of land subsidence and earth fissures (ground cracks) within the Wittmann Area Drainage Master Study Update (Wittmann ADMSU study area) located in the northern portion of the West Salt River Valley (Figure SU-1). The project site is located within a large alluvial basin bounded by the Wickenburg and Hieroglyphic Mountains to the north and northeast and the White Tank Mountains to the southeast.

Information contained herein completes the land subsidence and earth fissure investigation as outlined in the Subconsultant Agreement between Entellus, Inc. and Geological Consultants Inc. dated May 8, 2003. As part of the existing conditions analysis scope of work for the Wittmann ADMSU, the preliminary evaluation of land subsidence and earth fissuring for the drainage area includes the determination of whether:

- There is an ongoing process land subsidence and earth fissuring.
- There is no credible evidence of the potential for land subsidence and earth fissuring.

To complete this evaluation, objectives of this study require the compilation of land subsidence and earth fissure data to:

1. Assess historic and current land subsidence within and adjacent to the study area.
2. Identify suspect and known earth fissures within and adjacent to the study area.
3. Make appropriate recommendations in regards to the subsidence and earth fissure phenomenon that could potentially impact future development within the Wittmann ADMSU.

SU-1.1 *Scope of Work*

The scope of work for the land subsidence and earth fissure evaluation included the following activities designed to satisfy the objectives of the study:

- Review and summarize available data concerning site surface and subsurface geology, groundwater withdrawal, land subsidence, and earth fissuring within the Wittmann ADMSU.
- Describe past and current land subsidence conditions within the Wittmann ADMSU.
- Identify suspect and known earth fissures within the Wittmann ADMSU. Use available aerial photography provided by the Flood Control District of Maricopa County (FCDMC) for geological photo interpretation to aid in the identification suspect earth fissures that may be present within and adjacent to the study area.
- Acquire and evaluate Interferometric Synthetic Aperture Radar (InSAR) earth imagery to assess ground deformation within the Wittmann ADMSU.
- Acquire and analyze historic level line survey data from the National Geodetic Survey (NGS) and the U.S. Bureau of Reclamation (USBR).
- Evaluate the Maricopa County Department of Transportation (MCDOT) Geodetic Densification and Cadastral Survey (GDACS) database for the Wittmann area relative to future subsidence monitoring.
- Compile a geologic map of the Wittmann ADMSU based on available published geologic maps of the area.
- Preparation of this report detailing the findings and results of this study.

Geological Consultants Inc. used available research reports, data, maps, and aerial photographs from various sources including the Arizona Geological Survey (AGS), Arizona Department of Water Resources (ADWR), FCDMC, Maricopa County Department of Transportation

(MCDOT), U.S. Geological Survey (USGS), National Resource Conservation Service (NRCS), National Geodetic Survey (NGS), Bureau of Land Management (BLM), U.S. Bureau of Reclamation (USBR) and published and unpublished consultant reports as part of its geological research database for this study.

SU-1.2 Report Organization

This report is subdivided into two components. The first, a narrative presentation of findings, conclusions and recommendations, consists of Section 1.0 through 5.0. It contains a summary of the information obtained, conclusions and recommendations relative to land subsidence and earth fissures, and a discussion of the various technical issues that must be addressed to satisfy the objectives of this evaluation. The first section of the report is subdivided into the following sections:

- SU-1.0 Introduction describing the project objectives and scope of work.
- SU-2.0 Conclusions and Recommendations.
- SU-3.0 Geological Evaluation characterizing the regional geologic setting and description of the basin geology, its geologic units, basin stratigraphy and structure.
- SU-4.0 Land Subsidence and earth fissures described in an overview of land subsidence and earth fissures, data sources used to assess historic subsidence and earth fissures within the study area.
- SU-5.0 Bibliography of selected references used to assist with the sub-basin evaluation and preparation of the report.

The second component of the report includes appendices with backup data and support documentation. The Appendices (SU-A through SU-D) are as follows:

Appendix SU-A contains a summary of Arizona Department of Water Resources Groundwater Site Inventory (GWSI) for wells evaluated within the study area.

Appendix SU-B contains a compilation of NGS historic level line data related to the study area.

Appendix SU-C contains the glossary of geologic terms and a geologic time scale chart.

SU-2.0 CONCLUSIONS AND RECOMMENDATIONS

SU-2.1 Based on the review, analysis, and interpretation of available geological, hydrogeological and hydrological data, in our opinion, there is an ongoing process of land subsidence occurring within portions of the Wittmann ADMSU study area. The earth fissuring process appears to be ongoing in the vicinity of McMicken Dam. This earth fissure process could be exacerbated and extend into other areas as the land subsidence process continues to respond to groundwater withdrawal in the basins.

SU-2.2 Because of the ongoing process of land subsidence exists and considering the anticipated urban growth within the Wittmann ADMSU area, in our opinion, there is credible evidence to suggest the potential for future land subsidence and earth fissuring exists.

SU-2.3 The mountainous areas of the Hieroglyphic, Wickenburg, and White Tank Mountains and shallow bedrock pediment adjacent to the mountain front will not be affected by the land subsidence and earth fissuring process.

SU-2.4 Historic land subsidence is documented along the US highway 60 corridor and between the White Tank Mountains and US 60 and between US 60 and the southern end of the Hieroglyphic Mountains. The greatest historical subsidence is documented in the Sun City West area and along the McMicken Dam-Beardsley Canal corridor between Fenne Knoll and US 60 (Figure SU-14).

SU-2.5 An evaluation of recent InSAR imagery and interferograms generated for different time periods between 1996 and 2000 appear to corroborate the level line survey data indicating the land subsidence process is ongoing within portions of the Wittmann ADMSU study area.

SU-2.6 The only documented earth fissure within the study area is located near the south end of McMicken Dam, north of Fenne Knoll (Figure SU-14).

SU-2.7 Groundwater levels within a majority of the Wittmann ADMSU study area northwest of the Beardsley Canal and east of the Circle City area have declined about 75 to 100 feet during the period between 1900 and 1998. Between Circle City and the Hassayampa River, groundwater levels have risen about 25 feet over the same time period. Southeast of the Beardsley Canal, groundwater levels have declined on the order of 125 feet to 275 feet. A

prominent groundwater flow gradient appears to exist between the Wittmann sub-basin area and the deep West Salt River Valley sub-basin to the southeast. Because of anticipated urban development that is expected within the Wittmann ADMSU area, increased groundwater use and resulting water level declines should be expected.

SU-2.8 Because an ongoing process of land subsidence exists within portions of the Wittmann ADMSU area, additional studies should be conducted to evaluate the future potential impacts of the land subsidence and earth fissuring within the Wittmann ADMSU area. The studies should include an evaluation of the following issues:

- Determine if future potential land subsidence and earth fissuring could develop in response to large groundwater withdrawals within the basins.
- Evaluate the potential effects and impacts of the future potential land subsidence and earth fissuring.
- Estimate the rate and magnitude of potential subsidence and the location of potential earth fissure risk zones.
- Evaluation of potential effects on surface water hydrology and drainage facilities such as drainage basin topography, gradient changes in rivers and stream that could affect erosion and deposition, adverse impacts or damage to engineered structures.

Land subsidence should be periodically monitored as development of the area proceeds. Subsidence monitoring should utilize available data including InSAR data, GDACS survey data, and the NGS and USBR level line monuments depicted in Figure SU-6. The existing data should be updated through a subsidence-monitoring program. The subsidence monitoring program at the very least should focus on the CAP canal as it crosses through the area to make sure the canal gradient is not reversed and that 'sag' areas do not develop.

This report and results of recommended future land subsidence and earth fissure evaluations should be utilized as part of future planning efforts for Wittmann ADMP projects.

3.0 GEOLOGICAL EVALUATION

Limits of the Wittmann ADMSU are defined by the Wickenburg Mountains on the northwest and north perimeter of the study area, the Hieroglyphic Mountains on the north and northeast, the Hassayampa River basin on the west, White Tank Mountains and Beardsley Canal on the south and the Aqua Fria River on the east (Figure SU-1). Topographic highlands dominate the terrain in the north, northeast and south portions of the study area. The land surface exhibits typical alluvial fan morphology down slope from the highland terrain with numerous, anastomosing ephemeral drainage channels grading toward the south forming a bar and swale surface. Trilby Wash appears to be the dominant drainage feature within the study area. McMicken Dam, constructed by the U.S. Army Corps of Engineers (USCOE), between highway U.S. 60 and the White Tank Mountains interrupts many of the southerly flowing drainage channels.

SU-3.1 Regional Geologic Setting

The site is located within the Sonoran Desert region in the north-central portion of the Basin and Range Physiographic Province near its boundary with the Transition Zone. The Basin and Range Province is characterized by northwest, north, and northeast trending mountains that rise abruptly from broad, elongated, deep sediment-filled valleys produced by block faulting and folding.

The Wittmann ADMSU includes portions of two structural basins separated by a broad, buried bedrock divide that extends from the southern end of the Hieroglyphic Mountains and the northeast end of the White Tank Mountains.

South of the divide is the West Salt River Valley. This basin is one of a series of structural basins [within the Basin and Range] along a northwestward-southeastward trend characterized by exposed lower-plate crystalline rocks (Spencer and Reynolds, 1989) and deep basins containing 8,000 to 12,000 ft of basin fill sediments (Anderson and others, 1992). The basins were formed by high-angle faulting during the Basin and Range disturbance (15 to 5 million years ago; Menges and Pearthree, 1989) superimposed on the effects of crustal extension and the low-angle detachment faults of the mid-Tertiary disturbance (37 to 15 m.y.a)(Dickenson, 1989).

A shallow basin, estimated to be about 5,000 feet deep, was identified north of the divide based on interpretation of geophysical data. This basin is referred to hereinafter as the Wittmann sub-basin. The formation of this basin is probably contemporaneous with the West Salt River sub-

basin. Both basins appear to have a broad shelf-like buried bedrock surface that separates the deeper part of the basins from the surrounding bedrock highs (Oppenheimer & Sumner, 1980).

SU-3.2 General Basin Geology

Unconsolidated and semi-consolidated alluvial sediments dominate the geology of the Wittmann ADMSU. Older extrusive and intrusive igneous rock and metamorphic rock units underlie this assemblage of sedimentary materials.

The oldest rock units that make up the surrounding mountain ranges and underlie the basin sediments, are Proterozoic age schist, gneiss, metasedimentary and metavolcanic rocks and several generations of plutonic rocks (Capps et al, 1986). Younger granite intrusions and numerous late Cretaceous and Tertiary age dikes intrude the older granitic plutons.

Crystalline basement rocks are overlain by a thin sequence of Tertiary age sandstone and conglomerate and a thick, complex interbedded sequence of extrusive igneous rocks including basalt, andesite, rhyolite, tuff, and volcanoclastic sediments.

The youngest basin fill material that overlie the older basement rock and the volcanic and sedimentary sequences, include unconsolidated sediment to semi-consolidated sandstone, siltstone, conglomerate, and alluvium. The alluvial sediments include moderately well stratified to poorly stratified boulders to fine gravel, sand silt, and clay as well a mixtures of these sediments that are of limited vertical and lateral extent. The younger units range in age from middle Miocene to recent.

SU-3.2.1 Geologic Units

SU-3.2.1.1 Late Holocene Alluvial Fans, Low Terraces, and Active Stream Channel Deposits <3ka (Y2)

The lower piedmont alluvial fan deposits are composed of fine silts and sands. Middle piedmont surfaces and active channels extending into the White Tank Mountains are gravelly sands and silts. Surfaces are typically undissected and display distributary drainage patterns, although five-foot deep arroyo cuts occur locally on the lower piedmont. Surfaces are typically smooth, but bar and swale

topography is present in the middle piedmont. Desert pavement and desert varnish are absent. Minimal to no soil development has occurred. (*Field and Pearthree, 1991*)

SU-3.2.1.2 Late to Early Holocene Alluvial Fans and Terraces, 1 to 10 ka. (Y1)

Deposits on the middle piedmont alluvial fans are a coarse poorly sorted, angular to sub-angular admixture of silt, sand, and gravel. On the lower piedmont, deposits are typically fine silt and sand. Surface relief is typically less than 0.5 m above active channels. Lower piedmont surfaces are smooth and flat with an incipient dendritic drainage pattern. Middle piedmont surfaces have well preserved bar and swale topography with very little tributary drainage development. A poorly developed pebble to granule desert pavement (cobble to granule on middle piedmont) exists over 50 to 85 percent of the surface. Surface cobbles, when present, are lightly and incompletely varnished along the base of the cobble to brownish black (10 YR 2/2). An orange (7.5 YR 7/6) to dull yellowish brown (10 YR 5/4) color is rarely observed on cobble undersides. Minimal soil development has occurred in the underlying deposits – the most strongly developed profiles contain cambic horizons (hue 7.5 YR) above stage I to II calcic horizons. (*Field and Pearthree, 1991*)

SU-3.2.1.3 Undifferentiated Holocene Alluvial Fans, 0 to 10 ka (Y)

In some places this designation is used where the Y1 and Y2 surfaces are too intricately intermingled to map separately at this scale. In other areas on the lower piedmont the designation is used where surface characteristics are not distinctive of either Y1 or Y2 surfaces but are clearly of Holocene age (*Field and Pearthree, 1991*).

SU-3.2.1.4 Alluvium and Talus, Undifferentiated (Q)

This unit is designated to include undifferentiated Holocene age and Pleistocene

age alluvial sediments and talus deposits where individual units are not distinguishable at the scale of the map (Plate 1) and where the contact boundaries are not clearly discernable. Surficial deposits mapped as Q could include geologic units Y2, Y2r, Y1, Y, M2, M1, M1b, M1a, and M12.

SU-3.2.1.5 Latest to Late Pleistocene Alluvial Fans, 10 to 150 ka. (M2)

Deposits are a poorly sorted, angular to sub-angular admixture of silt, sand, and gravel. The surfaces are moderately dissected with typically less than three feet to about ten feet of relief above the active channels. Interfluvial areas are broad and flat with original gravel bar and swale topography typically moderately to well preserved. A poorly to moderately developed cobble to granule desert pavement is found over 50 to 80 percent of the surface. Surface cobbles are incompletely varnished to very dark brown (7.5 YR 2/3) on top and reddish brown (2.5 YR 4/6) to more commonly dull orange (5 YR 6/4) on undersides. M2 surfaces are not widespread and are predominantly restricted to the middle piedmont. Underlying soils typically contain cambic horizons (hue 7.5 YR), above a stage I to II calcic horizon (*Field and Pearthree, 1991*).

SU-3.2.1.6 Middle to Late Pleistocene Alluvial Fans, 150 to 300 ka. (M1b)

Deposits are a poorly sorted, angular to sub-angular admixture of silt, sand, and gravel. The surfaces are moderately dissected on the upper piedmont with three feet to 20 feet of relief above active channels. On the lower and middle piedmont relief may be less than 3 feet. Interfluvial areas are broad and flat with original gravel bar and swale topography poorly preserved. A moderately to well-developed cobble to pebble desert pavement is found over 50 to 75 percent of the surface. Surface cobbles are incompletely varnished to black (5 YR 1.7/1) on top and reddish brown (2.5 YR 4/6) to less commonly dull orange (7.5 YR 7/4) on undersides. Underlying soils are characterized by weakly developed argillic horizons (hue 5 YR), typically above a stage II calcic horizon. (*Field and Pearthree, 1991*)

SU-3.2.1.7 Middle or Late Pleistocene Distal Alluvial Fans, 10 to 300 ka (M12).

This unit includes undifferentiated M1b and M2 surfaces. This designation is used mostly in agricultural areas where surface characteristics are destroyed and available soil descriptions do not enable differentiation of the two surfaces. This designation is locally used elsewhere in areas not field checked (*Field and Pearthree, 1991*).

SU-3.2.1.8 Middle to Early Pleistocene Alluvial Fans, 300 to 1,000 ka (M1a).

Deposits are a poorly sorted, angular to sub angular admixture of silt, sand and gravel. The surfaces are moderately dissected with typically three feet to 20 feet of relief above active channels but less than two feet of relief above Unit M1b. Interfluvial areas are broad, flat, and smooth; bar and swale topography is typically absent or poorly preserved. A well-developed cobble to pebble desert pavement is found over the entire surface. Surface cobbles are completely varnished black (5 YR 1.7/1) on top and reddish brown (2.5 YR 4/8) on undersides. Surfaces are typically well preserved and are the darkest surfaces on the White Tank Mountains piedmont. Underlying soils are characterized by moderately to very strongly developed argillic horizons (hue 5 to 2.5 YR), commonly overlying a stage IV calcic horizon. (May locally be composed of river terraces west of the Hassayampa River). (*Field and Pearthree, 1991*).

SU-3.2.1.9 Middle Pleistocene Alluvial Fans, 150 to 1,000 ka (M1)

This unit includes undifferentiated M1b and M1a surfaces. (May be locally composed of river terraces of the same age immediately north of and adjacent to Wagner Wash and Trilby Wash). On the middle piedmont this designation is used where the two surfaces are too intricately intermingled to map separately at this scale. In other areas this designation is used where surface characteristics are destroyed (agricultural areas) or where extensive field checking was not conducted (north of Wagner Wash and Trilby Wash (*Field and Pearthree, 1991*)).

SU-3.2.1.10 Early Pleistocene to Late Pleistocene Alluvial Fans, Undifferentiated (O)

This unit includes undifferentiated M1, M1b and M1a surfaces. This designation is used where the two surfaces are too intricately intermingled to map separately at this scale. In other areas this designation is used where surface characteristics are destroyed (agricultural areas).

SU-3.2.1.11 Active Channels and Low Terraces along Axial Drainages, < 3 ka (Y2r).

Basin axis river channels and deposits of the Gila River, Hassayampa River, Wagner Wash, and Trilby Wash. Active channels on the present river bottoms were not separately mapped as channel positions frequently shift across the entire surface. Deposits range from silt to coarse sands but well-rounded cobble bars are common along the Gila River and Hassayampa River. (*Field and Pearthree, 1991*)

SU-3.2.1.12 Younger Sedimentary Rocks: Conglomerate, Sandstone, & Lacustrine Rocks (Tsy)

Younger Tertiary age sedimentary rock include red brown, consolidated to partially consolidated rock units dominated by a clast- and matrix-supported conglomerate that unconformably overlies the upper volcanic units (Tvu) and around portions of the bedrock highlands perimeter. Higher in the stratigraphic section, this unit consists of a well-bedded sequence of arkosic sandstone and matrix-supported conglomerate. These old sheet flood deposits contain bed that average about one-half foot to one foot thick (Wahl et al, 1988). These deposits are exposed around the margins of basin and are encountered in deep well borings.

SU-3.2.1.13 Tertiary Volcanics, Undifferentiated (Tvu)

Undifferentiated volcanics include a wide variety of fine-crystalline extrusive rocks and volcanoclastic sediments. The predominant volcanic rocks include basalt,

andesite, rhyolite, and latite. Volcanoclastics include tuff and lahar (volcanic mudflow) deposits. The basalt and andesite are dark gray to black and they are locally porphyritic and vesicular. Where weathered these units are dark brown to dark red brown to black in color. The rhyolite is light gray to gray to reddish and pinkish gray. The rock commonly exhibit blow banding that attests to its lava flow genesis. Tuffaceous rocks are very light gray to cream colored and they are slightly to very well indurated (hard). This rock type also includes numerous, angular lithic (rock) fragments. Volcanoclastic sediments represent mudflow or debris flow deposits (Wahl et al, 1988). The volcanic units are well exposed in the Hieroglyphic Mountains, the Wickenburg Mountains, and locally on the west side of the White Tank Mountains.

SU-3.2.1.14 Tertiary or Cretaceous Intrusive and Volcanic rocks (TK)

Includes granitic rocks (middle Tertiary); fine- to medium-grained granite and the White Tank Granite (Late Cretaceous to early Tertiary); and light-colored biotite granite and two-mica granite, with associated granodiorite, pegmatite, and fine- to medium-grained felsite. The main pluton and sills are locally over printed by Tertiary mylonitic fabric, a granodiorite (Late Cretaceous to early Tertiary) is also present that is medium-grained, biotite-hornblende granodiorite with diorite, granite, and porphyritic rock intrusions. The rock unit appears to be undeformed (Reynolds, S.J., *et al*, 2002).

SU-3.2.1.15 Cretaceous & Proterozoic Crystalline Bedrock, Undifferentiated (KXu)

Crystalline plutonic and metamorphic bedrock units include granite, gneiss, schist, phyllite, quartzite, and metavolcanics. Coarse crystalline granites are exposed in the White Tank Mountains and in the pediment areas in the north portion of the study area. The granite is massive to strongly jointed and fractured. At the surface, the granite decomposes as part of the weathering process to form rounded boulder outcrops. The rock is very hard and unweathered at depth.

The metamorphic rocks are well exposed in the Hieroglyphic Mountains and

portions of the White Tank Mountains. The gneiss, schist, and phyllite are strongly foliated and broken by cross-cutting joints, fractures, and faults. The quartzite is generally massive to blocky and commonly interlayer with the foliated metamorphic.

Both the granitic rock and the metamorphic rocks are locally intruded by younger fine to coarse-grained dikes. Due to the alteration of the rock caused by dike intrusion and by ancient faulting, mineralization zones are formed along the zones of weakness by ore-bearing solution that percolated through the formation.

SU-3.2.2 Wittmann ADMSU Basin Stratigraphy

The study area is situated near the northern half of a broad alluvium-filled valley, referred to by ADWR as the West Salt River Valley Sub-Basin. This Sub-basin is bounded on the north by the Hieroglyphic Mountains and Hedgepeth Hills; on the east by Union Hills, Phoenix Mountains, and Papago Buttes; on the south by South Mountains, the Estrella Mountains, and Buckeye Hills; and on the west by the White Tank Mountains (Figure SU-2). The alluvial deposits range in depth from a few feet near the mountains to more than 11,200 feet in the center of the basin east of Luke AFB (Oppenheimer and Sumner, 1981). The thickness of the alluvial deposits is relatively shallow within the Wittmann ADMSU area when compared to the southern half of the West Salt River Valley Sub-Basin. Northeast of Luke Air Field #1 the basin fill deposits are estimated to be about 5,000 feet thick (Figure SU-3).

The basin stratigraphy under the study area is based upon our interpretation of well drillers logs (ADWR, 2003) combined with our geologic understanding of subsurface geology of the West Salt River Valley sub-basin and Wittmann sub-basin. There appears to be the typical basin stratigraphy consisting of an upper coarse-grained unit, and middle fine-grained unit, and a lower coarse-grained unit. Based on work completed by Oppenheimer and Sumner (1980), the depth to bedrock is relatively shallow compared to areas to the southeast of the Wittmann ADMSU. The maximum depth to bedrock, based on the interpretation of gravity data is in the range of 4,800 feet below ground level to less than 6,400 feet below ground level.

SU-3.2.2.1 Upper Alluvial Unit:

The upper alluvial unit is the major source of groundwater for the basin. The sedimentary deposits in this layer are generally unconsolidated and groundwater is unconfined, although confined or perched conditions may occur locally (USBR, 1977). Based on our interpretations of well drillers' logs, the thickness of the layer may be as much as 1,000 feet in the center of the basin.

This unit contains gravel and sand with lesser amounts of silt and clay. The sediments are mostly unconsolidated with locally strong cementation near the mountain fronts and major stream courses.

SU-3.2.2.2 Middle Alluvial Unit:

The middle alluvial unit generally borders the upper alluvial unit and acts as a partial aquiclude. That is, the sedimentary deposits in this layer are highly impermeable and thus impede the flow of groundwater. Groundwater in this unit generally occurs under confined conditions (USBR, 1977). The unit ranges in thickness from a nil near mountain margins to possible more than 2,000 feet in the deepest portions of the basin.

Soils of the middle alluvial unit include silt and clay with thin interbeds of silty sand and gravel. Most of the sediments are weakly consolidated, but portions of the stratigraphic section are moderately to well-cemented. These units grade to fine-grained mudstone and evaporate deposits in the central part of the West Salt River Valley basin near Luke Air Force Base (Schumann, 1995).

SU-3.2.2.3 Lower Alluvial Unit:

The lower alluvial unit is an additional source of groundwater for the area. It may have already been penetrated by deep wells near the edge of the basin. The top of the unit generally follows the middle fine-grained unit. Groundwater is generally confined, but where the middle fine-grained unit is absent water levels may be

comparable to the overlying upper alluvial unit (USBR, 1977). The thickness of this unit, based on available well drillers' logs, ranges from a few feet near the basin margins to thousands of feet in the deeper portions of the basin.

The lower alluvial unit is composed of a heterogeneous mixture of silt, sand, gravel, and conglomerate. The lower and older part of this unit is moderately to well-consolidated. As with the middle alluvial unit, near the center of the West Salt River Valley basin, the sediments grade to finer-grained sand, silt, and clay with intercalated massive evaporite deposits near Luke Air Force Base.

SU-3.2.3

Wittmann ADMSU Basin Structure

Compared with most basins in south-central Arizona, the Wittmann ADMSU is a relatively shallow basin (Figure SU-4). Most the alluvial sediments within the Wittmann project area are less than 3,200 feet thick. However, in the area around Luke Air Field No. 1, the depth of alluvial sediments is estimated to be about 5,000 feet deep (Oppenheimer, 1981). A structural bedrock high is approximately located along the McMicken Dam alignment parallel to the Beardsley Canal. This bedrock high separates the shallower basin of the Wittmann ADMSU from the deeper alluvial basin underlying the west Phoenix/Luke AFB area. The exact reason the bedrock high exists is unknown, however, we believe a northeast/southwest trending fault may be partially responsible as depicted in Figure SU-4, Cross-Section C-C'. The cross sections in Figure SU-4 depict several wells penetrating the middle fine-grained unit and lower coarse-grained unit.

4.0 LAND SUBSIDENCE

SU-4.1 Overview

Land subsidence is known to occur in alluvium filled valleys of Arizona where agricultural activities and urban development have caused substantial over-drafting or removal of groundwater from thick basin aquifers. The basic cause of land subsidence and the lateral movement of the land surface is an increase in the intergranular pressure of the underground material. As the water table lowers, due to over-drafting, the water located in the space between the soil particles is removed. The particles will then compress under the weight of the overlying soil column. This compression of the soil is expressed as land subsidence at the ground surface. The magnitude of subsidence is directly related to the subsurface geology, the thickness, and compressibility of the alluvial sediments deposited in the valleys, and the net groundwater decline. This effect is clearly illustrated by comparing water level decline to measured subsidence along Northern Avenue (Figure SU-5) in the southern half of the West Salt River Valley Sub-Basin. The calculation of land subsidence due to compression of layers in which the intergranular pressure is increased is based on how the porosity, or void ratio, of the layer is reduced by an increase in intergranular pressure. Generally speaking, a 100-foot drop in water levels in coarse-grained sediments will result in less subsidence than the same water level drop in fine-grained (clayey) sediments. Should the water levels in these wells drop to a point where the middle alluvial unit is tapped, increased rates of land subsidence could occur. According to Bouwer (1977), land subsidence rate range from about one-hundredth to one-half feet per 10-foot drop in groundwater level, depending on the thickness and compressibility of the basin fill sediments.

There are three categories of land subsidence: (1) active subsidence; (2) residual subsidence; and (3) total subsidence. Land subsidence induced by groundwater over-drafting (or over pumping) is referred to as "active subsidence" and it does not immediately stop once pumping is stopped. As groundwater levels stabilize, or begin to rise, the subsidence continues for some time before it gradually diminishes and stops. The land subsidence that continues after groundwater levels stabilize or rise is referred to as "residual subsidence" and generally continues for several years. The entire land subsidence process cannot be considered complete until residual subsidence approach zero, whereas the cumulative drop in the land surface, know as "total subsidence" can be determined (EPA, 2001).

SU-4.2 Basic Data Assessment

In addition to having an understanding of the geology, stratigraphy, and structure of the Wittmann study area, an assessment of the historical impacts of land subsidence also requires a thorough evaluation of historical level line survey data and groundwater conditions. Information regarding level line survey and groundwater data can be obtained from various government agencies.

SU-4.2.1 Level Line Data

National Geodetic Survey (NGS) and United States Bureau of Reclamation (USBR) level line data provides some subsidence data within the Wittmann study area. The level lines generally represent 1st or 2nd order leveling data that, in some areas of Arizona, dates back to 1905. Subsequent level lines may occupy an individual benchmark on several occasions over periods of time. Comparison of these data can give a good account of historic subsidence that has occurred. Monuments that have not been destroyed can be surveyed to integrate current subsidence data into historic subsidence data. An analysis of the NGS and USBR level line data is included in Section 5.2.1.2. The raw NGS and USBR level line data is included in Appendix SU-C. Locations of NGS and USBR level lines are depicted on Figure SU-6.

SU-4.2.2 ADWR GWSI Data Base

The Arizona Department of Water Resources maintains a database of historic water level readings at numerous individual wells in their Ground-Water Site Inventory (GWSI) database. Since land subsidence is related to groundwater withdrawal, understanding historic lowering, or rising water table conditions is important.

SU-4.3 Groundwater

The major human-induced factor contributing to subsidence is the large scale pumping and removal of groundwater. Nearly all of the populated southern Arizona basins from Phoenix to Tucson have experienced at least a 100+ foot drop in groundwater level, and an area surrounding the town of Stanfield, Arizona has dropped more than 500 feet (Schumann, 1986). An overview of groundwater level declines in the area can be summarized as follows. The groundwater levels within the study area northwest of the CAP canal have dropped from 0- to 100-feet (Schumann

1986). Groundwater levels southeast of the CAP canal are reported to have dropped from 100-feet to 300-feet (Schumann, 1986). Although outside of the Wittmann ADMSU, southeast and east of the Beardsley Canal groundwater level have dropped 300- to 500-feet (Schumann, 1986). Overall groundwater declines between 1900 and 1991 are depicted on Figure SU-7.

SU-4.3.1 Historic Groundwater Trends in the Wittmann ADMSU

Based on historic water level data (ADWR, 2003) water levels appear to have remained static at some wells, while other wells have dropped between 25- to 300-feet (Figure SU-8). Data analyzed by ADWR within the alluvial basin fill of the Wittmann ADMSU between 1900 and 1991 showed zero to 300-foot drop in the water table (Figure SU-7). Additionally, ADWR's analysis of water level data between 1992 and 1998 found no significant increase or decrease (± 20 -feet) in water levels within the Wittmann ADMSU (ADWR, 1999).

A prominent groundwater gradient between the Hieroglyphic Mountains and the northeast end of the White Tank Mountains show flow direction trending toward the southeast. The groundwater gradient slope is perpendicular to the buried bedrock divide separating the deep West Salt River Valley sub-basin from the relatively shallow Wittmann Sub-Basin. Water levels changes within a majority of the Wittmann ADMSU northwest of the divide ranges from an increase of about 25 feet near the west boundary of the study area to a decline of about 75 to 100 feet approaching the divide to the southeast.

SU-4.4 Regional Land Subsidence

Prior to the utilization of groundwater resources within the Phoenix area, the water table was higher and hydrogeologic conditions were in equilibrium. Water levels within the aquifer were lowered when pumping was initiated and the basin fill sediments were dewatered. In the arid southwest, the water in the aquifer may be removed by pumping faster than it can be naturally replenished causing a net water table decline. As a result, the weight of the soil column is gradually increased as the buoyant effects and aquifer pressures induced by the water acting on the soil column are decreased. This condition causes increased loading stresses to consolidate portions of the thick compressible sediments that result in the lowering (subsidence) of the land surface over a large area.

Land subsidence was first documented in Arizona in 1934 following the releveling of first-order survey lines by the Coast and Geodetic Survey (now the National Geodetic Survey (NGS)). Subsequent leveling by the NGS, the USGS, the USBR, ADOT, and ADWR has documented substantial land surface subsidence in south central Arizona including the Salt River Valley, the Queen Creek Apache Junction area, and the Eloy-Casa Grande-Stanfield area as overdrafting of the aquifer continues.

Subsidence and earth fissures in urban areas can cause a variety of problems. Structures built across fissures may be damaged, street cracks, flow in gravity water and sewer lines can be reversed and differential subsidence (although rare) as well as earth fissuring can rupture buried utilities (Arizona Geological Survey, 1987). However, design measures can be implemented to mitigate the effects of land subsidence. Some of these measures can include additional structural reinforcement, oversized pipes, surface drainage controls, bridging the subsidence feature, and avoidance.

SU-4.4.1 Land Subsidence within the Wittmann ADMSU Area

Land subsidence has been documented within the Wittmann ADMSU study area, primarily through level line surveys conducted by government agencies, but also through remote sensing techniques such as Interferogrametric Synthetic Aperture Radar (InSAR). The documented subsidence has occurred in the southern portions of the study area including McMicken Dam, Sun City West, and along U.S. Highway 60 (Grand Avenue alignment).

Approximately one-half of the Wittmann ADMSU is presently unaffected by land subsidence. The unaffected areas include bedrock terrain of the Hieroglyphic, Wickenburg, and White Tank Mountains and foothills. Some portion of the alluvium-filled basin are also unaffected including a portion of the study area between the Hassayampa River and U.S. Highway 60, the pediment area north of State Route 74 and between State Route 74 and U.S. Highway 60. Land subsidence ranging from two feet to almost eight feet is concentrated along a portion of the southern boundary of the study area near McMicken Dam and Sun City West. North of the Sun City West, McMicken Dam, and the White Tank Mountains, and long the U.S. Highway 60 to Circle City, estimated land subsidence ranges from nil to about two feet (Figure SU-10). Descriptions of the

survey level lines, obtained from the USBR and the NGS and used to generate the estimated land subsidence map (Figure SU-10) are provided in the following sections.

SU-4.4.1.1 Historic NGS and USBR Level Line Analysis

SU-4.4.1.1.1 Level Line L8632

Level line L8632 crosses through the Wittmann ADMSU project area along the Grand Avenue alignment. Most or all of the survey monuments (that have not been destroyed) are located within the railroad right-of-way. The monuments along level line L8632 were last surveyed by the NGS in 1939. Some individual monuments have been surveyed at later dates as part of the investigation. Other than these few selected locations, no earlier surveys along this level line were documented by the NGS. No other reliable elevation data could be found for the monuments along this level line from other sources. Future subsidence work in this area should include an inventory of benchmarks along level line L8632 that have not been destroyed. These benchmarks should then be surveyed so subsidence values from 1939 to present day can be calculated.

SU-4.4.1.1.2 Level Lines L21029 and L2455/2

Level line L21029 was surveyed in 1967 and level line L2455/2 in 1980-1981. These level lines, which parallels a portion of the southeastern study area boundary, trend in a northerly direction along the Beardsley Canal and then toward the northeast downstream from McMicken Dam (Figure 6a and 6b). The level lines cross U.S. Highway 60 and continue northeast along the Beardsley Canal to its terminus at the Agua Fria River near Calderwood Butte. From the Agua Fria River, the level lines trend southward parallel to the east side of the Agua Fria River flood plain to the ends of the lines north of Sun City.

SU-4.4.1.1.3 USBR Level Line Data

The USBR has conducted subsidence monitoring within the south-central portion of the Wittmann ADMSU for the Central Arizona Project canal (Figure SU-6c). The subsidence monitoring level lines were tied into benchmark monuments founded in bedrock. The level lines were surveyed in 1971, 1974, 1977, 1980, and 1986. No re-leveling of the level lines has been completed since 1986, and the condition of the benchmarks used is unknown. The results of the subsidence monitoring showed that land subsidence has occurred along the level lines. The results of the USBR subsidence monitoring are summarized in Table SU-1. Even though the amount of subsidence measured is relatively small compared with outer areas within the West Salt River Valley sub-basin (over 18 feet Northeast of Luke AFB), it is important to note that very little groundwater has been or is being withdrawn from this area annually, and yet there appears to be a definite subsidence trend developing in the area.

Table SU-1
USBR Land Subsidence Monitoring Data

Benchmark	Subsidence 1971-1986 (ft)	Subsidence Rate 1971-1986 (ft/yr)
HA 106	-0.09	-.006
AFR 109	-0.01	-.0007
AFR 110	-0.03	-.002
AFR 112	-0.05	-.003
AFR 114	-0.09	-.006
AFR 115	-0.10	-.007
AFR 125	-0.07	-.0047
AFRS 3	-0.20	-.013
G 366	-0.35	-.023
H 366	-0.24	-.016
Z 23	-0.18	-.012
A 24	-0.16	-.011
AFR 119	-0.09	-.006

Note: Refer to Figure SU-6c for monument locations.

Integrating the USBR and NGS level line survey data provides a wider historical window to evaluate long-term land subsidence trends within a portion of the Wittmann ADMSU near Sun City West. Four benchmarks are used to generate a historical record for the period 1933 to 2000 (Figure SU-6c). The record periods range from 30 years for benchmark Z23 to 67 years for benchmark A24. The 67-year record for benchmark A24 recorded a total subsidence for the period of 2.37 feet at an average rate of 0.035 feet per year. However, inspection of the records reveals that the rate of subsidence decreased from 0.138 feet per year for 1933 through 1939 to 0.008 feet per year for 1971 through 1977. From 1977 through 1986 the rate increase to 0.012 feet per year and from 1986 through 2000 0.088 feet per year again suggesting the land subsidence progress is ongoing.

SU-4.4.1.2 INSAR Interferogram Data

Interferometric Synthetic Aperture Radar (InSAR) data for the study area depicts no subsidence bowls, or areas of subsidence within the majority of the project area with the exception being near McMicken dam and along portions of the US 60 corridor. Interferometric fringes in these areas appear to correlate well with the level line data for the area. Currently, the INSAR data does not allow for analysis in areas where surface grading constantly changes the surface elevation of the ground (i.e. agricultural areas) and decorrelates the radar data. However, since most of the Wittmann ADMSU has remained native desert to present day, this information is useful in modeling apparent subsidence, or apparent lack of subsidence. The INSAR data represents relatively new technology in that the available data is all post 1996. This will, however, be a powerful tool in monitoring subsidence in the area in the future.

Interferometric fringes (colored bands) are generated obtained from a sequence of radar scans by the ERS-1 satellite. Each cycle of interference colors (red through blue) represents an additional 28 millimeters of ground motion in the direction of the satellite. The radar interference caused by the mountainous relief of the area (black and-white background) was removed to reveal this pattern of ground deformation (CSR, 2003).

Four interferograms covering different time periods were obtained from ADWR for evaluation:

- December 30, 1996 to November 30, 1998; Figure SU-12
- December 30, 1996 to December 20, 1999; Figure SU-13
- March 10, 1997 to October 30, 2000; Figure SU-14
- June 8, 1998 to May 8, 2000; Figure SU-15

Overall the interferograms (Figures SU-12 to SU-15) depict four areas of subsidence within the Wittmann ADMSU. Two are near McMicken Dam near its southern end and where it crosses Bell Road. One is in the Sun City West area. The fourth area is northwest of the Sun City West "fringe" area along US 60 near the Jomax Road and Happy Valley Road alignments. No other recent subsidence (1996 to present day) can be interpreted with the available INSAR data. The amount of subsidence would appear to be less than 28 millimeters over the periods indicated on the individual figures since one full color cycle does not appear in the three areas mentioned above.

SU-4.4.2 McMicken Dam Area Subsidence

Land subsidence is well documented in the west Phoenix, Glendale, Luke AFB Area, particularly between Union Hills Road, south to Interstate 10, and from the Beardsley Canal East to the Agua Fria River. NGS level lines using benchmarks located along the Beardsley canal, which is located east of and downstream from McMicken Dam, was used to record subsidence from 1948 to 1981 (Table SU-2). Figure SU-10 shows an overall view of subsidence within the West Salt River Valley between 1957 and 1991 as compiled by Schumann (1995).

Table SU-2
Subsidence along Beardsley Canal (SHB, 1982)

Location along Beardsley Canal	1948-1967		1967-1981		Total Subsidence 1948-1981 (ft)
	Subsidence (ft)	Subsidence Rate (ft/yr)	Subsidence (ft)	Subsidence Rate (ft/yr)	
Union Hills Road	-1.2	0.062	-1.2	0.088	-2.4
Bell Road	-1.9	0.099	-2.2	0.156	-4.1
Cactus Road	-1.7	0.090	-1.6	0.114	-3.3
Peoria Avenue	-1.6	0.083	-2.5	0.179	-4.1
Olive Avenue	-1.25	0.064	-1.05	0.077	-2.3

Based on the results of a 1982 level survey of the McMicken Dam crest, the southern half of the structure had experienced about 3 feet of land subsidence between 1956 and 1982 with an average rate of about 0.12 feet per year. More recent releveling along the crest of McMicken Dam revealed relatively significant changes in elevation along the crest of the dam between 1985 and 2001 (Table SU-3) (FCDMC, 2001). The total subsidence for the 16-year period through 2001 was about 0.9 feet with an average rate of subsidence of about 0.15 feet per year. FCDMC currently performs annual crest surveys for McMicken Dam as part of its Dam Safety Program.

The available land subsidence data indicate that this has been an area of recorded active subsidence for nearly 55 years. Land subsidence in this area has probably been ongoing as long as farmers have been tapping into the regional aquifer to water crops. Recent data (last 20 years) seem to indicate that subsidence is ongoing even though the trend over the last 10 to 15 years has been one where the water table decline has either leveled out, or reversed and started to rise. Should water levels in the area remain static, or continue to rise, subsidence in this area will eventually cease.

Table SU-3
Subsidence along McMicken Dam Crest (FCDMC, 2001)
1985 Through 2001

Time Period	Subsidence (ft)	Subsidence Rate (ft/yr)
1985-1991	-0.55	0.09
1991-1998	-0.17	0.02
1998-2001	-0.18	0.06

SU-4.5 Earth Fissures

Fissures occur in unconsolidated sediments, typically near the margins of alluvial valleys or near the bedrock pediment edge where land water levels have dropped from about 200 feet to 500 feet below land surface (Schumann, 1986).

Fissures are initiated deep underground when tensile stresses exceed the strength of soils that may be due to non-hydrostatic forces (gravity, changes in surface loads), or hydrological forces (changes in static pore water pressure and dynamic forces associated with changes in groundwater flow). Tensile stresses induced by the subsidence continue to increase until the ground breaks to form earth fissures. The fissures then propagate upwards to intersect the ground surface.

Examples of typical earth fissure characteristics are provided in Figure SU-17. Early signs of earth fissuring are small en echelon hairline cracks and irregular spaced depressions at the surface. As fissures develop, the cracks grow in length to create fissures 1 foot to more than 10 feet deep when subject to erosion caused by surface runoff. The fissures often have vegetation growing in them because the ground is commonly moister along the earth fissure. Other physical features associated with fissures are slump-related escarpments from one inch to a few inches in height, as well as a drainage pattern associated with the fissure that does not conform to the areas local drainage pattern.

Field evidence indicates fissures propagate upward and are exposed after overlying sediments are eroded by surface water runoff from rainfall or irrigation (Pewe, 1982). The surface expressions of the fissures are exaggerated because the initial hairline crack is attacked by water to create wide (10 to 20 feet) and deep (more than 15 feet) erosional gullies that often have vegetation growing in them. The fissures are commonly perpendicular to natural drainage channels. The

length of the fissure at the ground surface varies; usually less than one mile but one fissure near Picacho is more than 9 miles long. These features are easily recognizable on aerial photographs and in the field except where the ground surface is modified by agricultural activities or urban development.

Other indirect investigation techniques, such as gravity surveys, can be used to interpret subsurface conditions that can influence earth fissure development. Gravity studies can be an important tool in predicting the location of potential earth fissure zones. One common use of gravity studies is to indirectly determine the depth to bedrock for an area. This is useful since isolated buried bedrock highs as well as sudden bedrock drop-offs (faults) make for favorable conditions for earth fissure development when combined with land subsidence.

Two separate gravity surveys have been conducted in the study area vicinity. One was at a regional scale (Oppenheimer, 1980), and one was site specific for the McMicken Dam structure analysis (AMEC, 2002). The Oppenheimer map estimated the depth to bedrock under the study area to be from 800 feet to about 5,000 feet below ground surface, with the depth to bedrock increasing to center of the basin near Luke Air Field No. 1. Because of the poor data resolution, no unusual buried bedrock highs were interpreted within the project area from this data. An unpublished report (AMEC, 2002) shows the results of a gravity study in the McMicken Dam portion of the project area. The gravity results in the AMEC report showed a prominent bedrock drop-off to the east along the Beardsley Canal. Earth fissures commonly form at these drop-off locations in response to (lowering of water table, and consolidation of basin fill sediments). To date, however, the only documented earth fissures are at the south end of McMicken Dam. The results of these studies show that the western border of the property is a likely candidate area that could experience future earth fissure activity. However, if the water table in the area continues to rise, there should be a low probability for earth fissures to develop in the future. FCDMC has initiated a project to address earth fissures at the south end of McMicken Dam. The McMicken Dam Fissure Risk Zone Remediation Project is scheduled for construction in 2005.

A prominent groundwater gradient present between the Hieroglyphic Mountains and the northeast end of the White Tank Mountains is another candidate area. The groundwater flow gradient represents a dynamic hydraulic stress field that could be a trigger mechanism for earth fissure development.

SU-4.5.1 Earth Fissure within the Wittmann ADMSU

No earth fissures have been mapped or documented within the Wittmann ADMSU with the exception of the McMicken Dam Area (Section 4.5.2), as of the date of this study.

SU-4.5.2 Earth Fissure within the McMicken Dam Area

Known earth fissures are fissures that have been documented by others or were verified during a field reconnaissance. Documented earth fissures are found at the southern end of McMicken Dam by Fenne Knoll (Figure SU-16). The mapped fissures boundary trends in a north/south direction. The fissure structures project towards, and may be beneath, the dam embankment structure. The earth fissures near McMicken dam are likely related to shallow bedrock high (Fenne Knoll) and a buried bedrock ridge in the area providing a hinge point for earth fissure formation to occur.

Monitoring of existing earth fissure growth or future potential earth fissure development can be accomplished using interferometric images. Careful examination of the interferograms may reveal areas where color bands (or fringes) show closely spaced color cycles. The closely spaced color cycles could indicate relatively steep subsidence gradient at the ground surface. Steep gradient areas are likely candidate sites for earth fissures that would warrant a field inspection and additional monitoring. FCDMC will install an earth fissure monitoring system at the south end of McMicken DAM as part of the McMicken Dam Fissure Risk Zone Remediation Project.

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Staedicke, J.M.; 1995; Settlement Monitoring of Earthen Dams Operated by the Flood Control District of Maricopa County; Flood Control District of Maricopa County report.

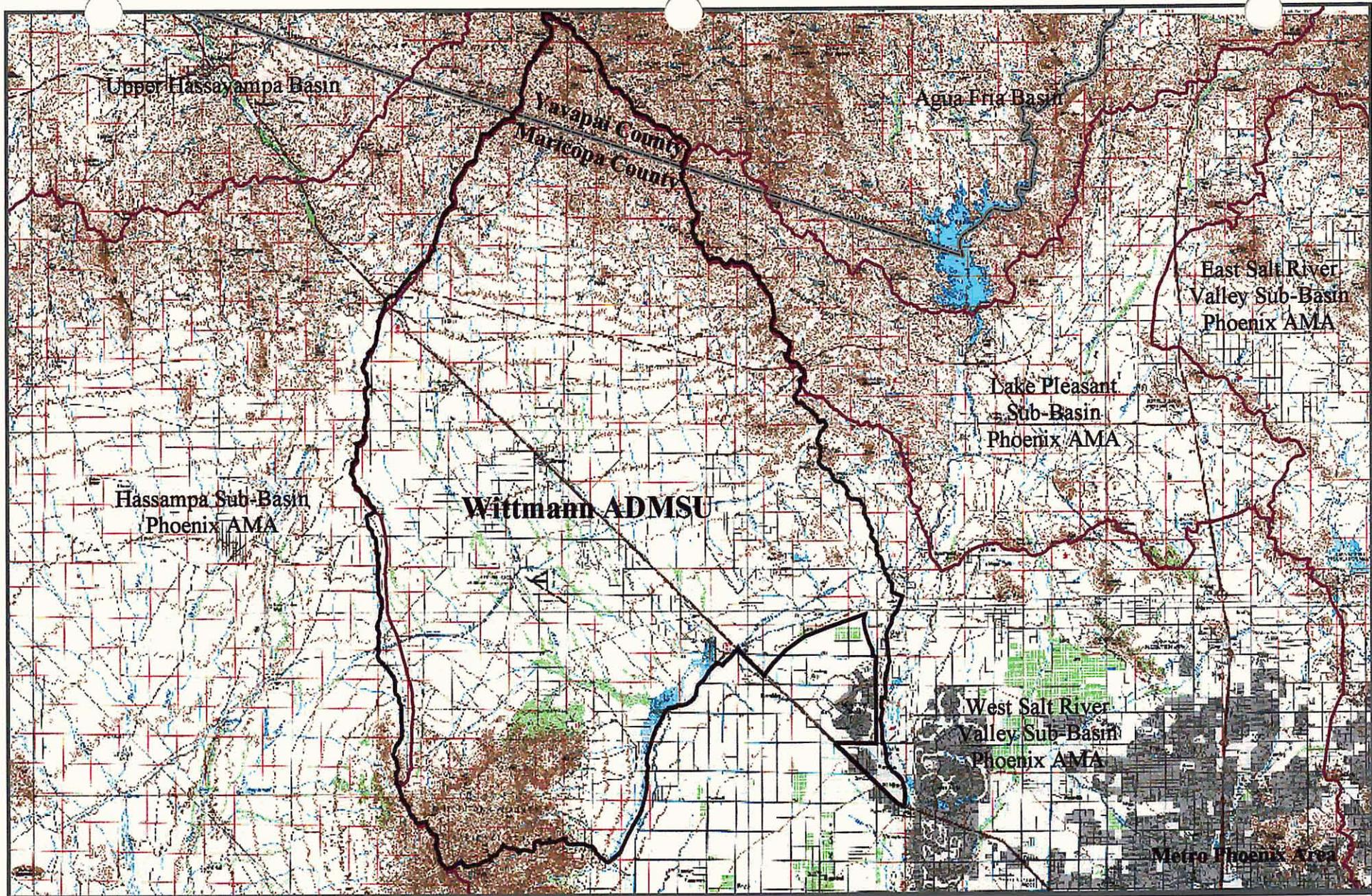
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U.S. Department of the Interior, Bureau of Reclamation; 1977; Central Arizona Project Geology and Groundwater Resources Report, Maricopa and Pinal Counties, Arizona; vol 1; Bureau of Reclamation, Lower Colorado Region, Arizona Projects Office, Phoenix, Arizona, October, 1977.

Wahl, D.E., Reynolds, S.J., Capps, R.C., Kortemeier, C.P., Grubensky, M.J., Scott, E.A., Stimac, J.A., 1988, Geologic Map of the Southern Hieroglyphic Mountains, central Arizona, Arizona Geological Survey Open File Report 88-01, 6 p., Scale 1:24,000.

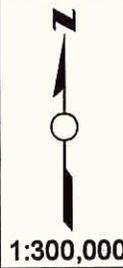
Wood, S.E., 1997, Proterozoic Geology of the Southern White Tank Mountains, Arizona Based on Geologic Mapping and Thermal Imagery, Unpublished Masters Thesis, Arizona State University.

Figures



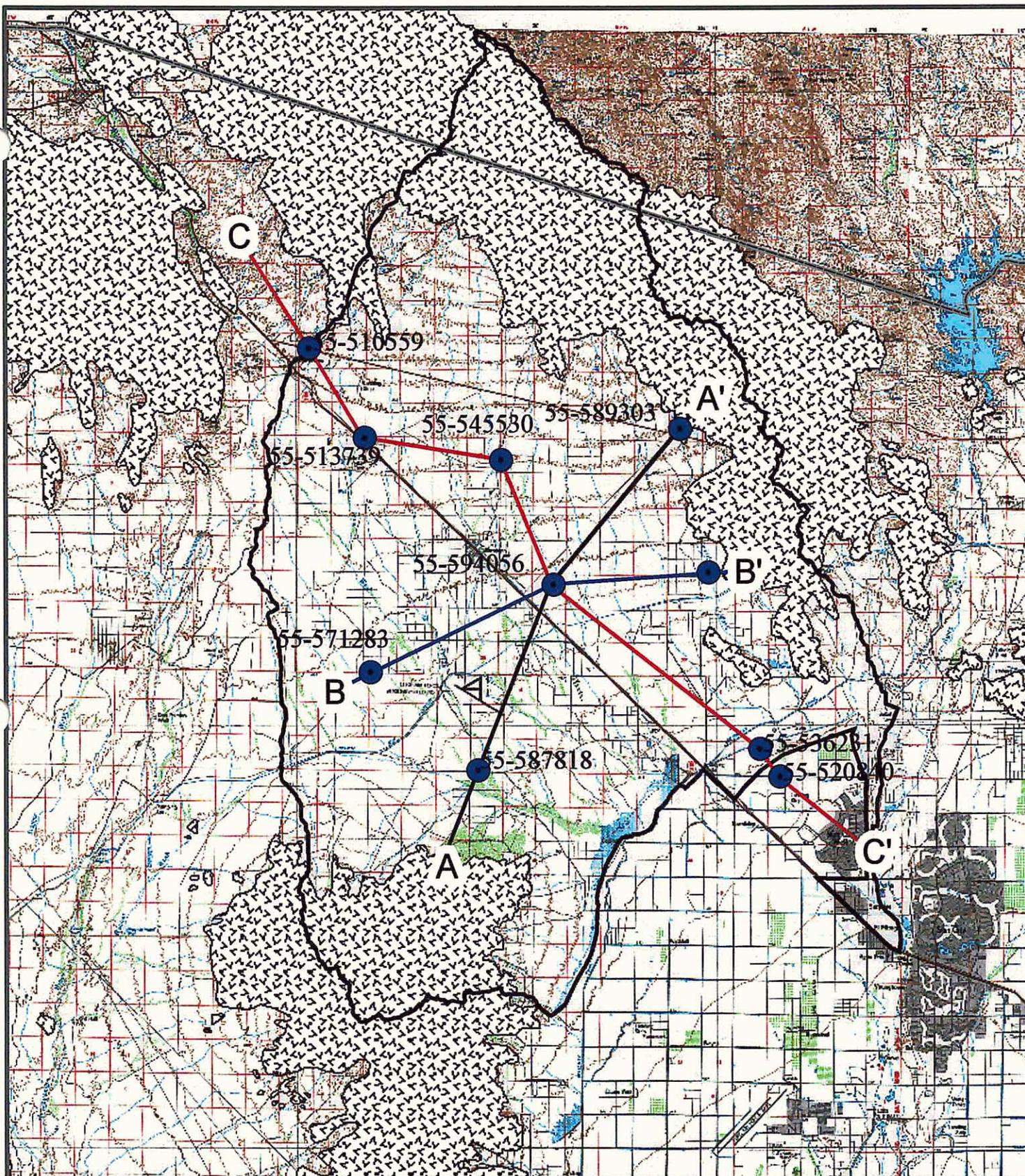
Legend

-  ADWR Sub-basin Boundary
-  Maricopa County Line
-  Wittmann ADMSU Boundary



Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-1
 Location Map





Legend

-  Wittmann ADMSU Boundary
-  Bedrock
-  Maricopa County Line
-  Well location/ADWR Registration No.
-  Cross Section Location - Refer to Figure 4



1:250,000

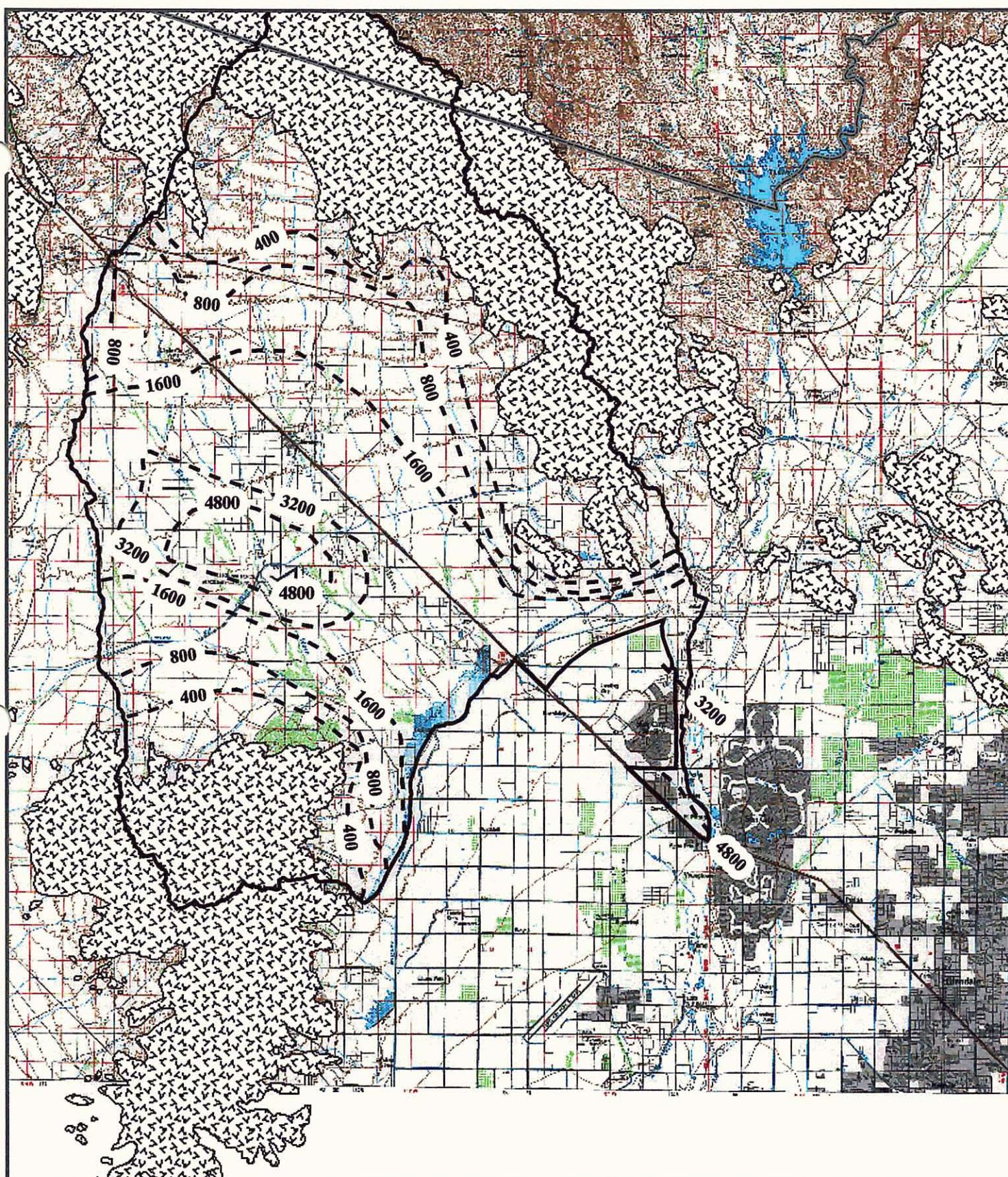
Land Subsidence and Earth Fissure Investigation

Wittmann ADMSU

Figure SU-2

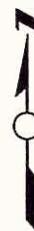
Cross-Section Location Map





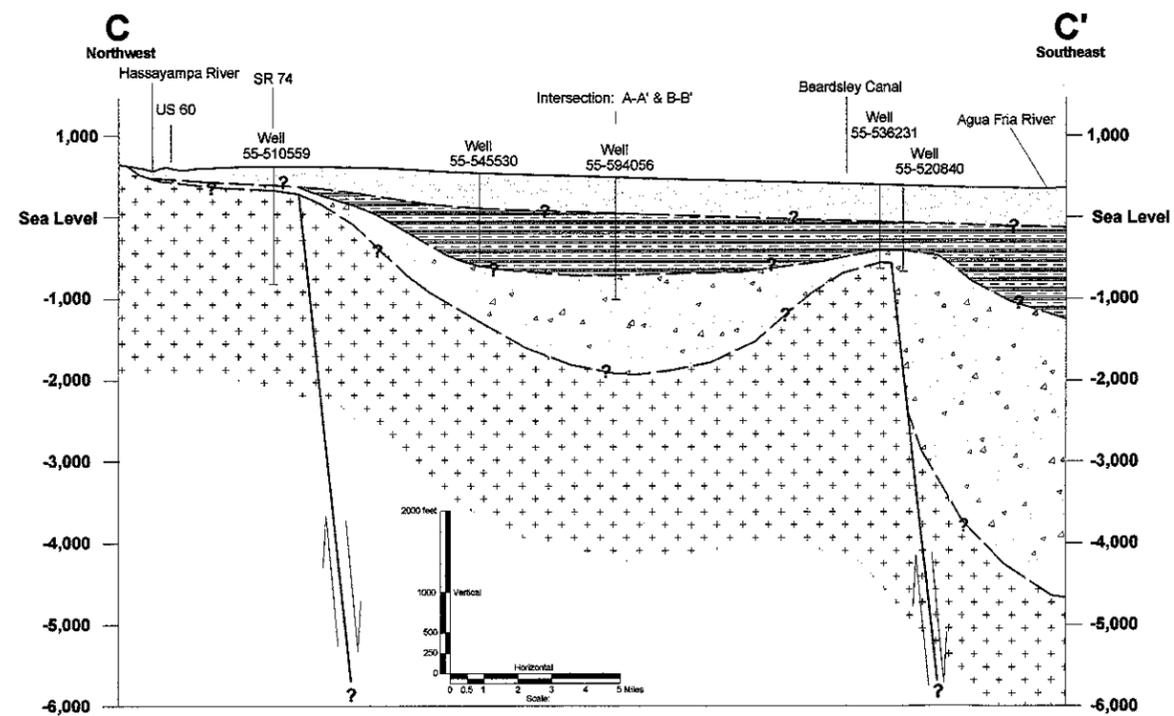
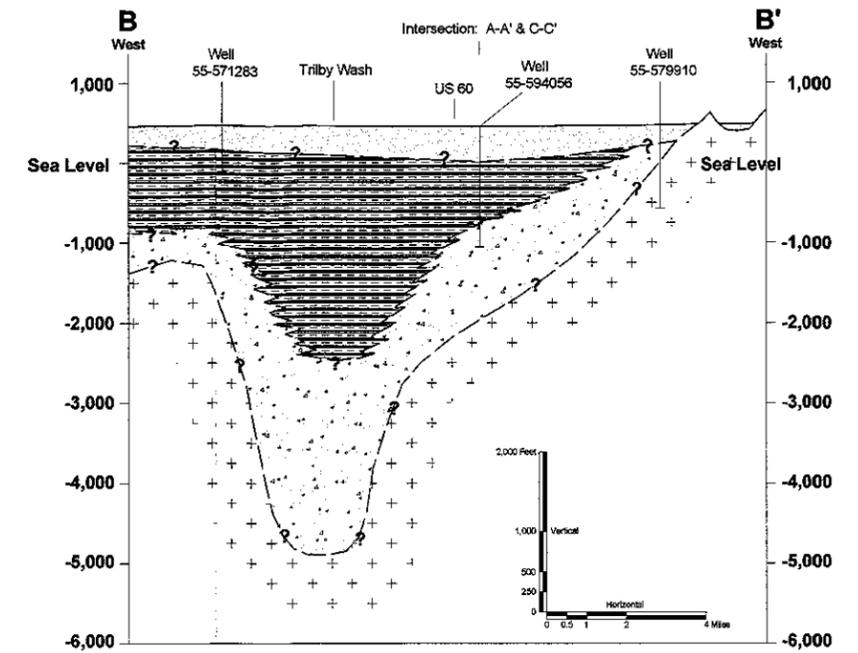
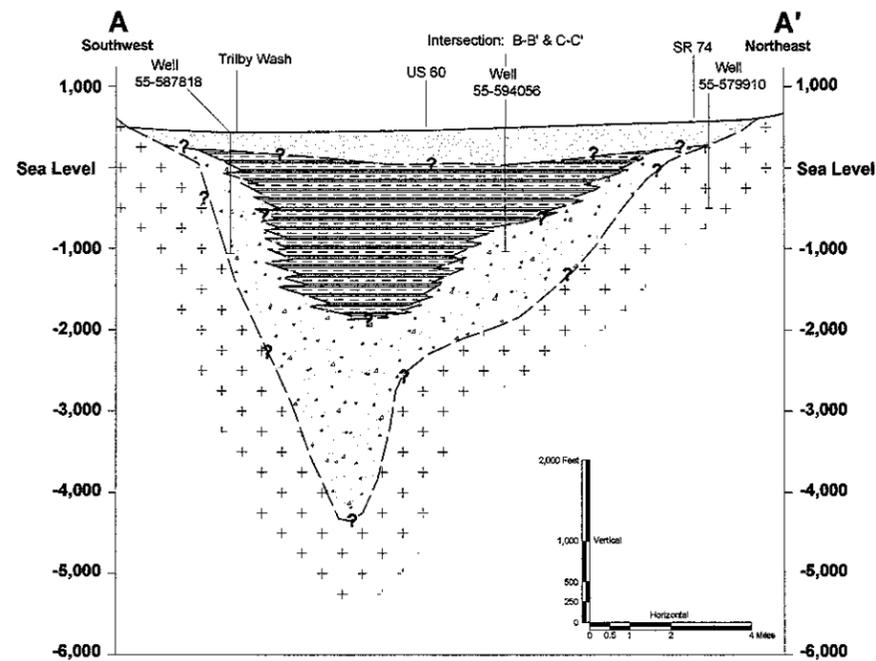
Legend

-  Maricopa County Line
-  Bedrock
-  WittmannBdy
-  Depth to Bedrock Contour (Feet)

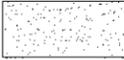
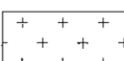

 1:250,000

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-3
 Depth to Bedrock Map





Explanation:

-  Upper Coarse-Grained Unit
-  Middle Fine-Grained Unit
-  Lower Coarse-Grained Unit
-  Bedrock

Data Sources: ADWR (2003 Groundwater Site Inventory (GWSI) well drillers logs and Oppenheimer & Sumner (1980) Depth to Bedrock map, Maricopa County, Arizona.

Note: Refer to Figure SU-2 for Cross-Section Locations.

Land Subsidence and Earth Fissure Investigation
Wittmann ADMSU
Figure SU-4
Geologic Cross-Sections



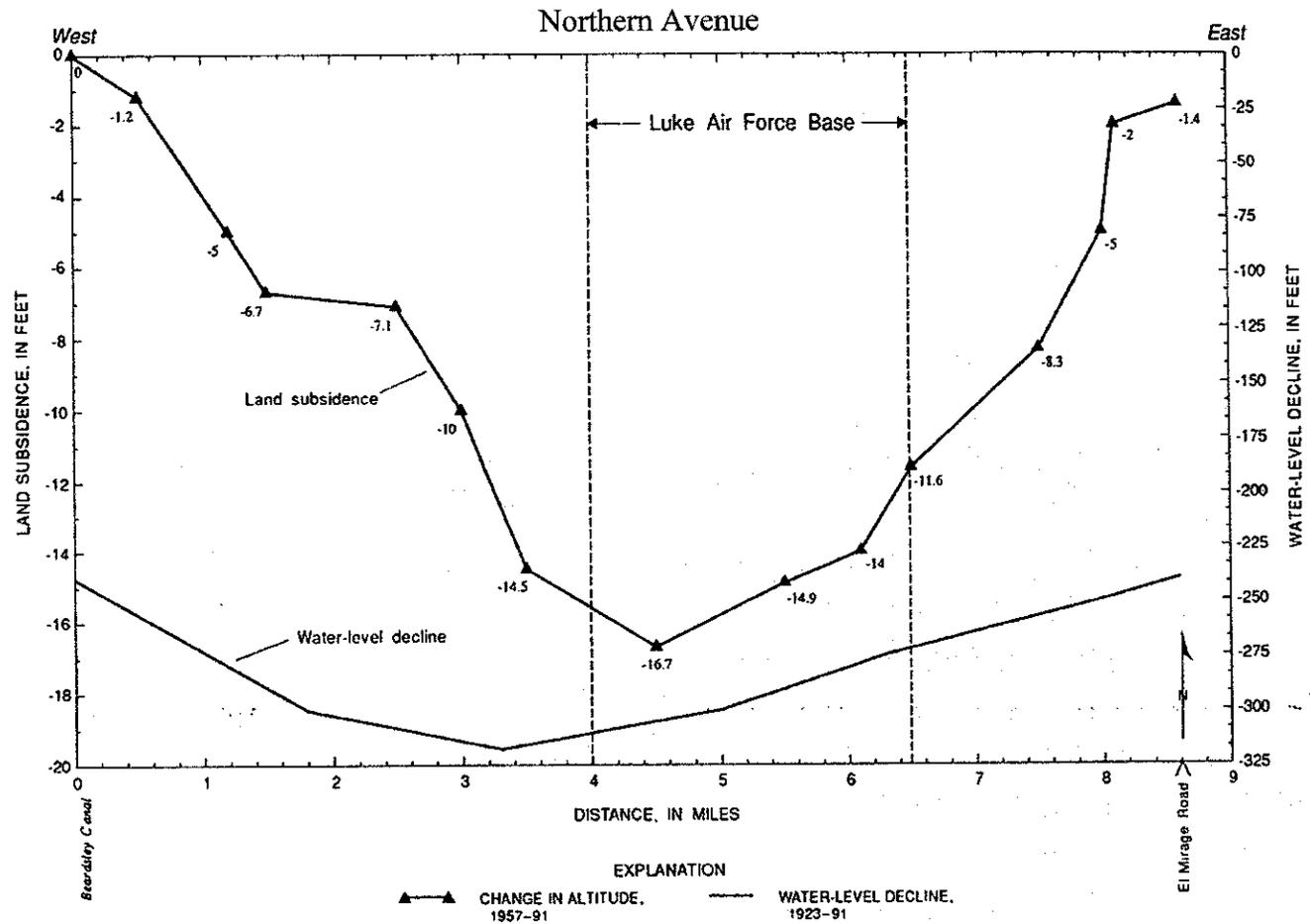
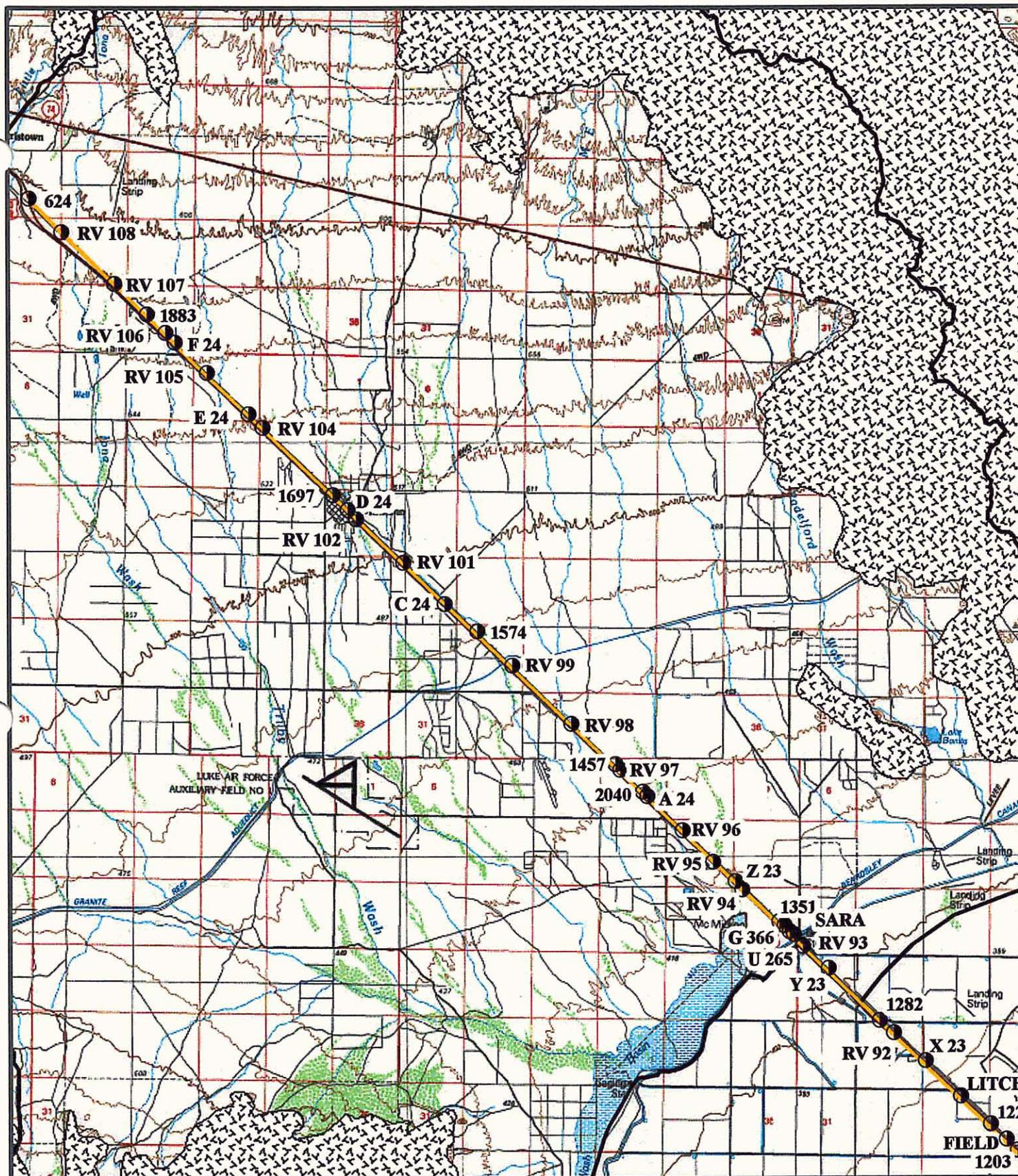


Figure modified from Schumann, 1995

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-5
 Water Level Decline Compared to Land Subsidence





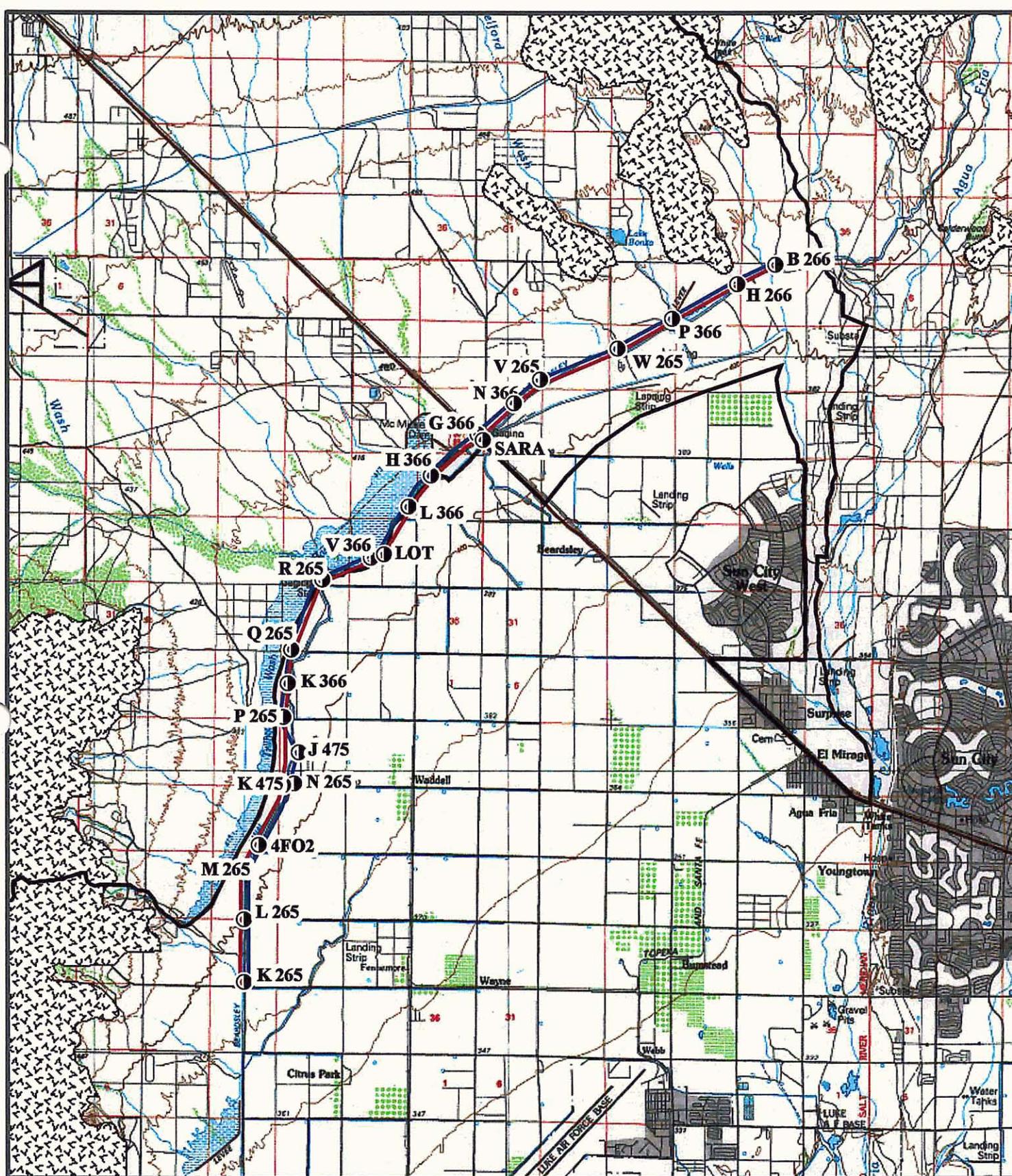
Legend

-  Bedrock
-  Wittmann ADMSU Boundary
-  NGS Benchmark Location and Designation



Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-6a
 Level Line Location Map: NGS Line L8632





Legend



Bedrock



Wittmann ADMSU Boundary



NGS Benchmark Location and Designation

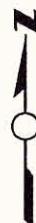


Level Line L21029



Level Line L2455/2

1:125,000



Land Subsidence and Earth Fissure Investigation

Wittmann ADMSU

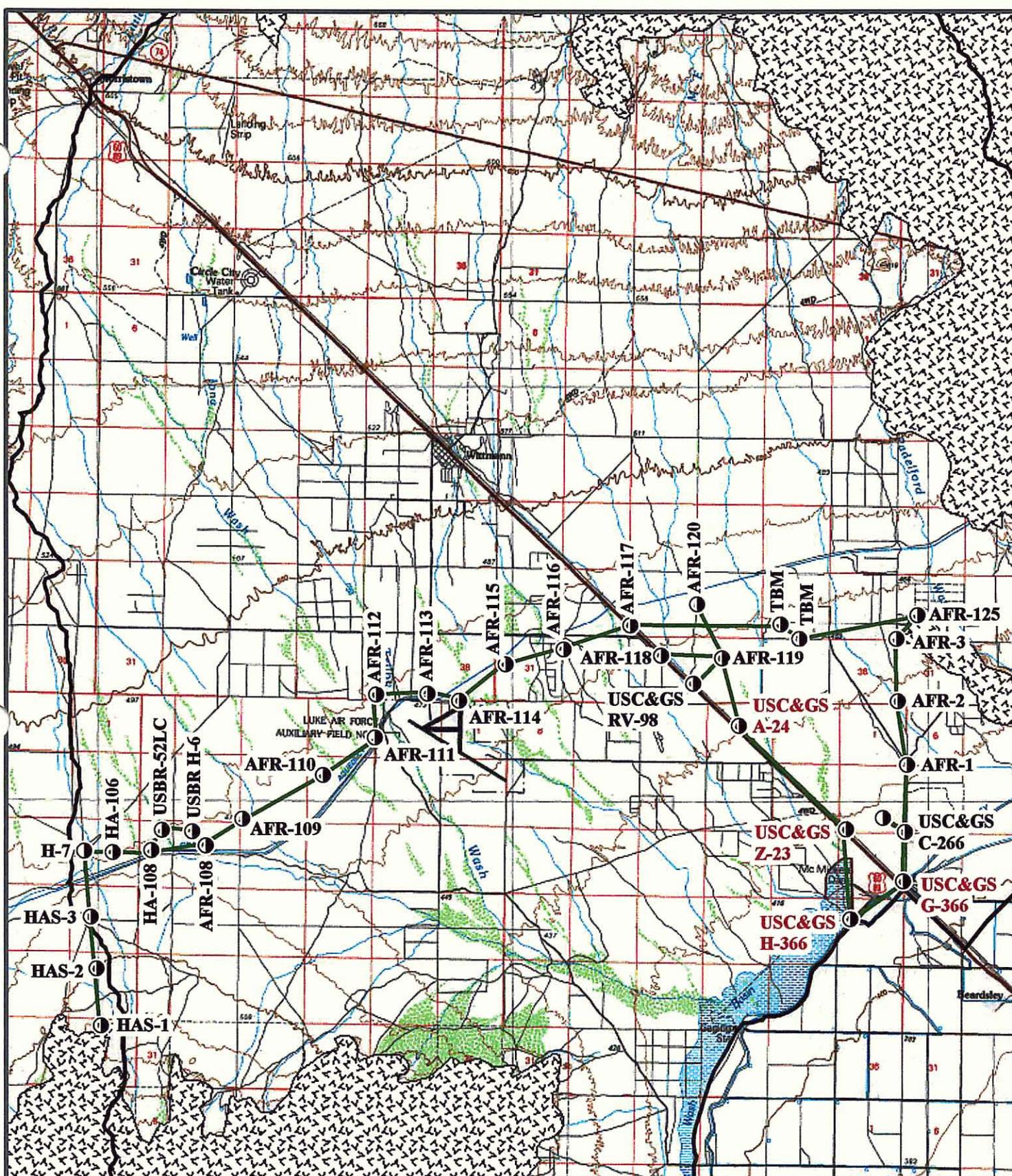
Figure SU-6b

NGS Level Lines L21029 & L2455/2



GEOLOGICAL CONSULTANTS INC.





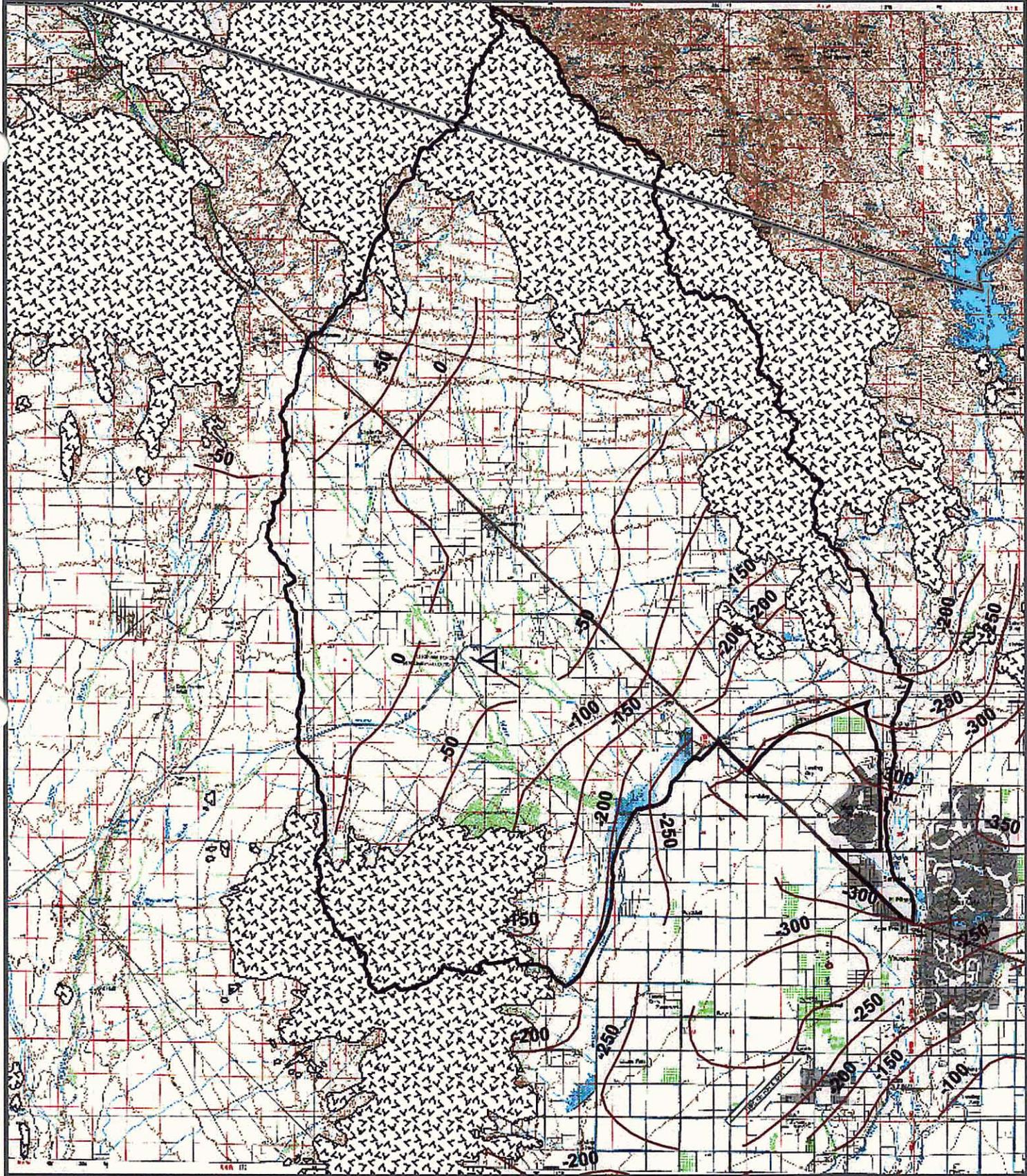
Legend

-  Bedrock
-  WittmannBdy
-  USBR Benchmark Location and Designation
-  Level Line Location

1:125,000

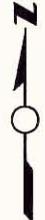
Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-6c
 USBR Reach 8 Level Line





Legend

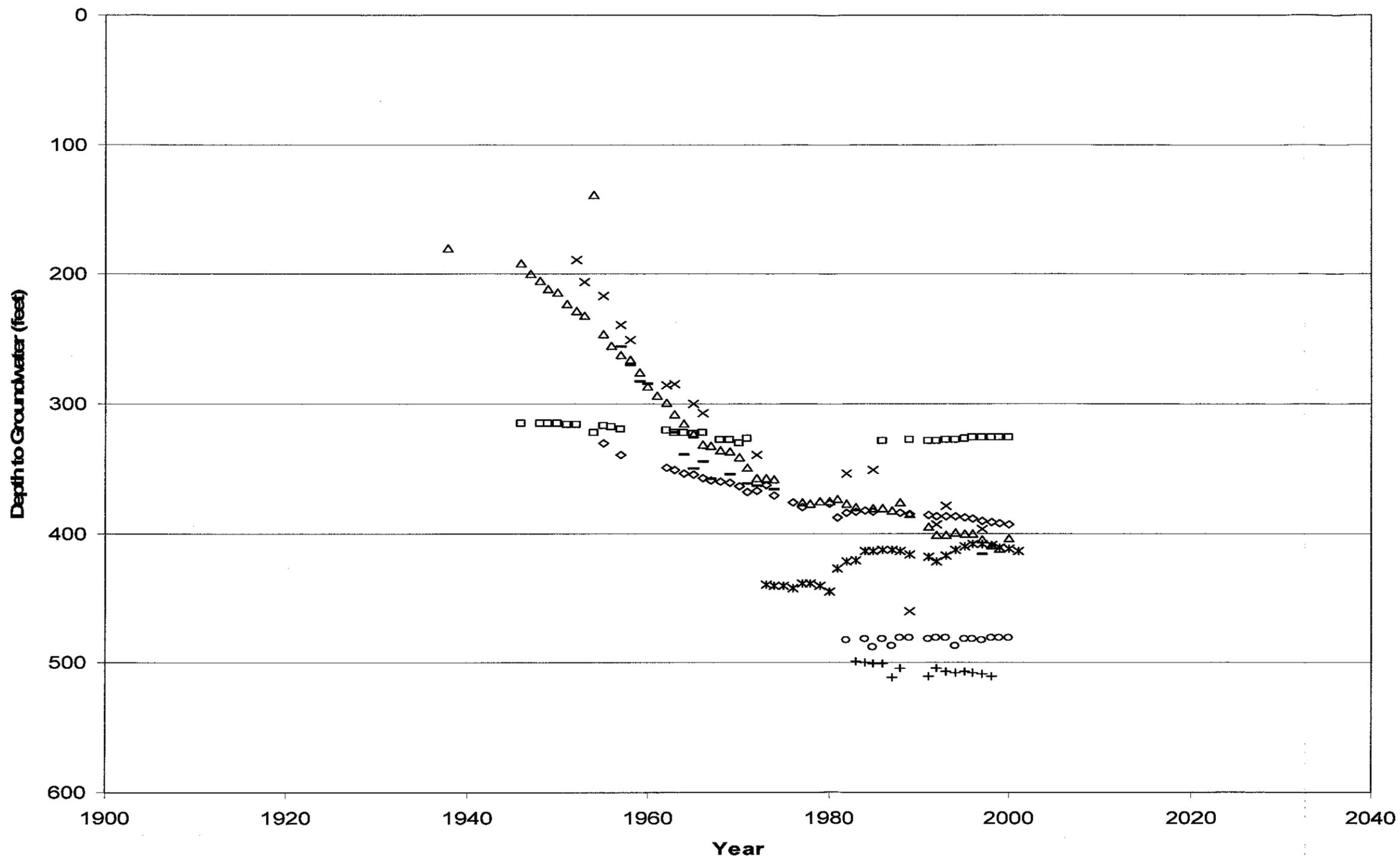
-  Maricopa County Line
-  Bedrock
-  Water Level Change 1900-1991 (ADWR, 2000)
-  Wittmann ADMSU Boundary


 1:250,000

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-7
 Water Level Change 1990-1991


 GEOLOGICAL CONSULTANTS INC.





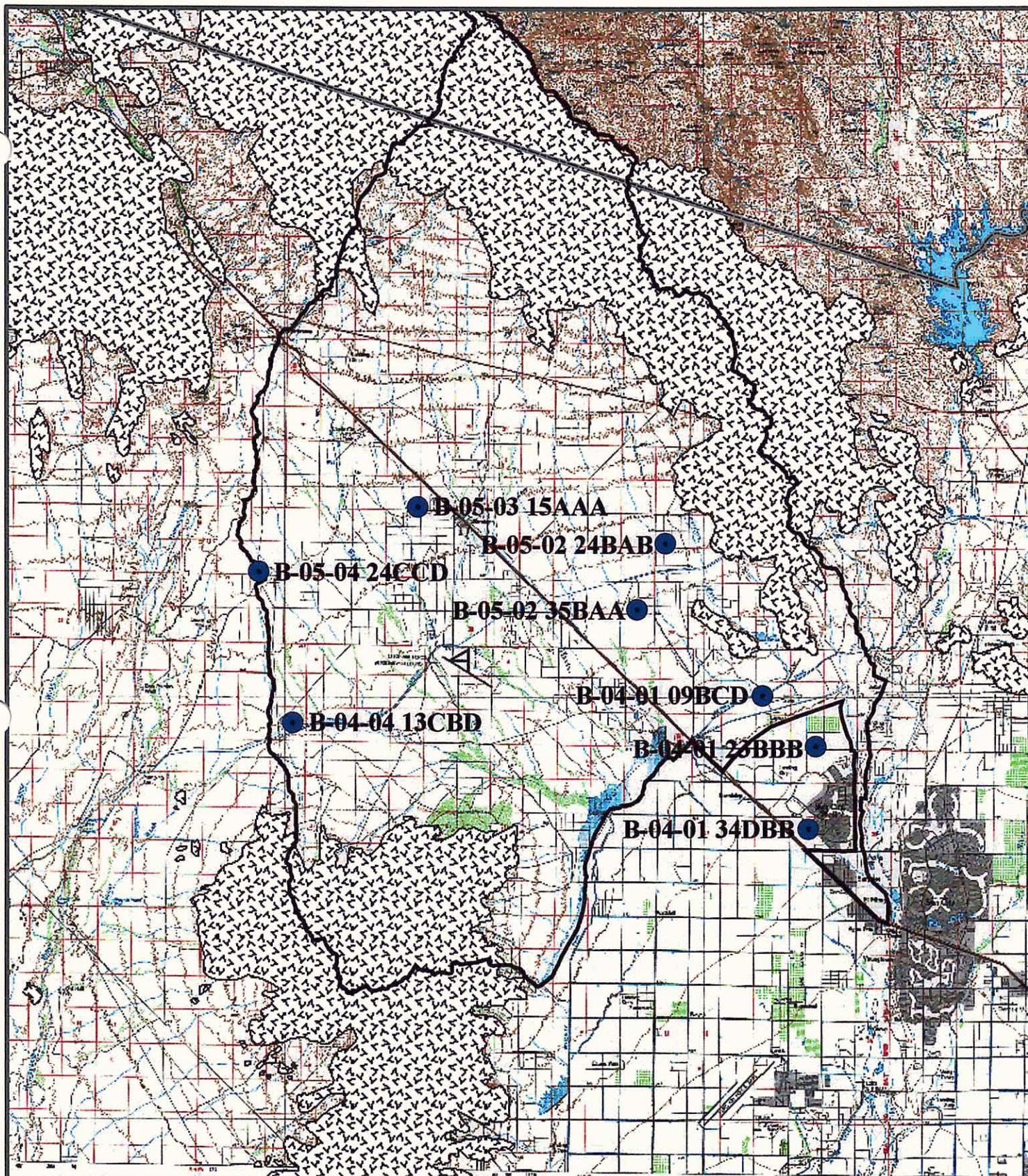
ADWR Local
Well ID No.

- ◇ B-05-02 35BAA
- B-04-04 13CBD
- △ B-04-01 09BCD
- × B-04-01 23BBB
- * B-05-04 24CCD
- B-05-03 15AAA
- + B-05-02 24BAB
- B-04-01 34DBB

Note: Refer to Figure SU-2 for Cross-Section Locations.

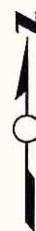
Land Subsidence and Earth Fissure Investigation
Wittmann ADMSU
Figure SU-8
Wittmann Area Water Level Hydrograph





Legend

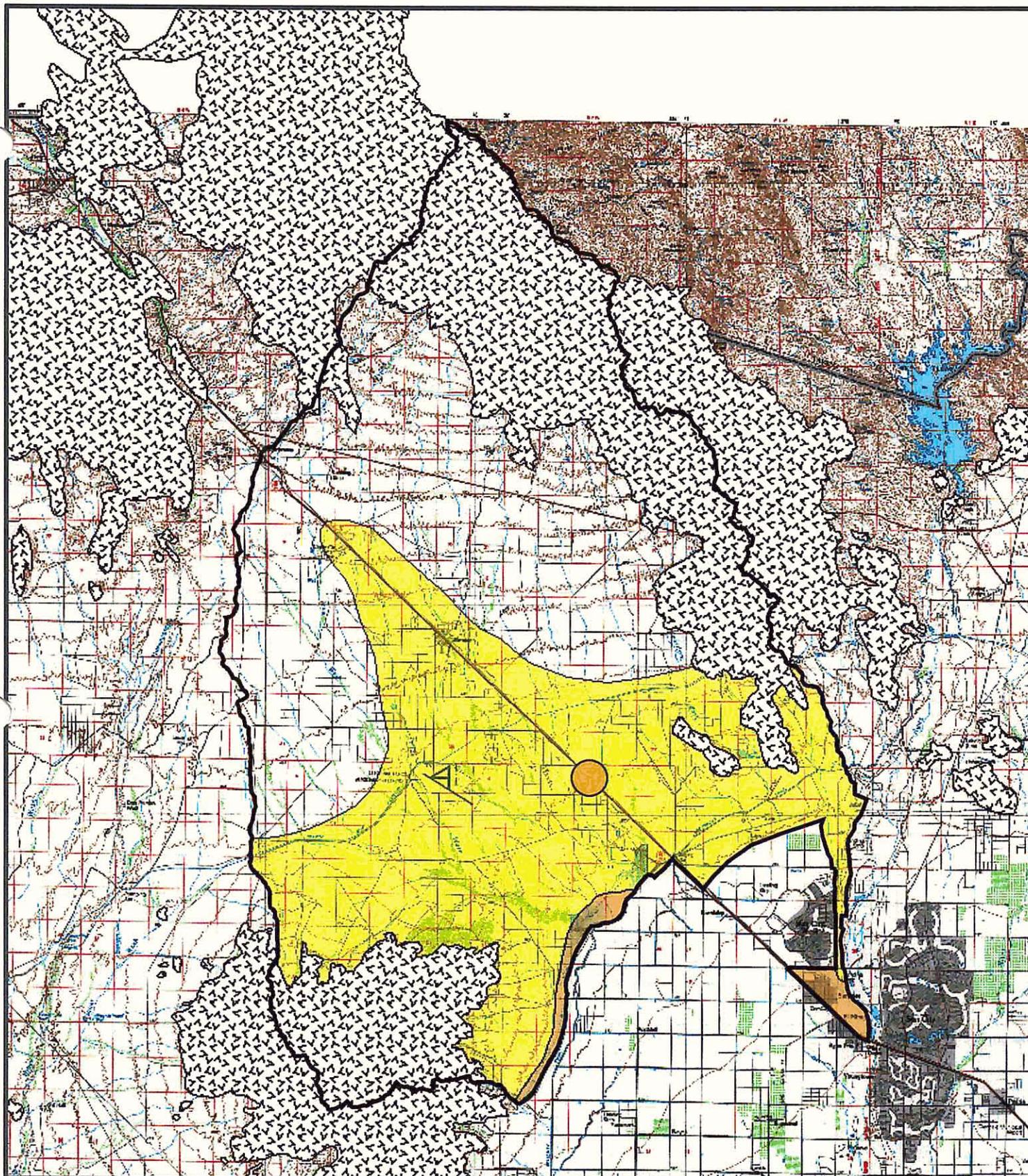
-  Wittmann ADMSU Boundary
-  Maricopa County Line
-  Bedrock
-  Well location/ADWR Local ID No.



1:250,000

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-9
 Selected Index Well Location Map





Legend

-  0-2' Subsidence
-  2-5' Subsidence
-  Bedrock
-  Wittmann ADMSU Boundary
-  Well location/ADWR Local ID No.



1:250,000

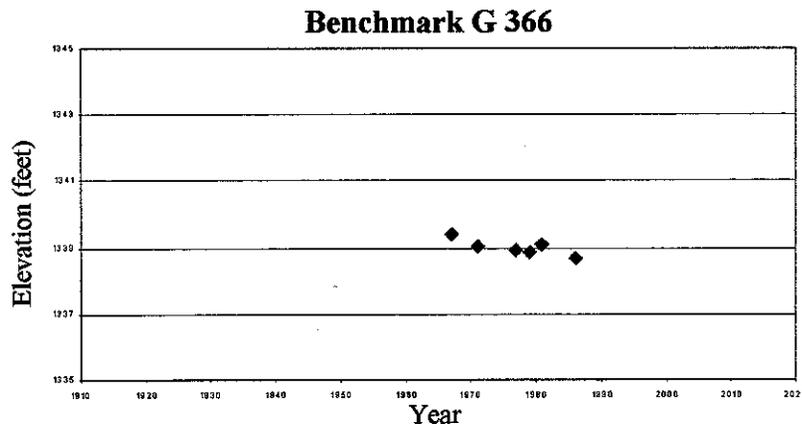
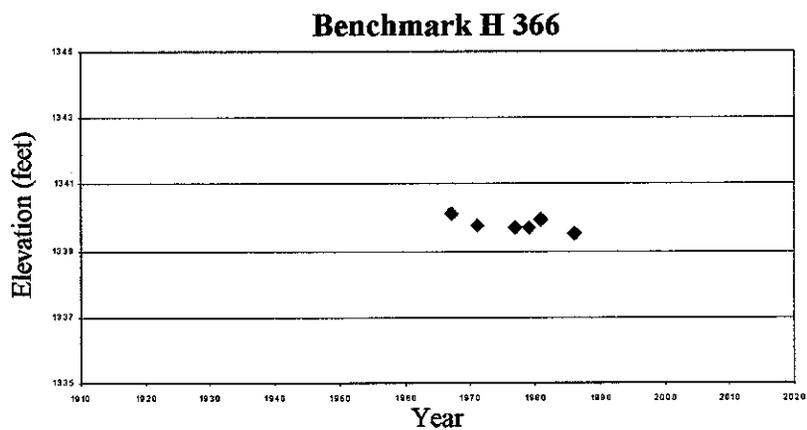
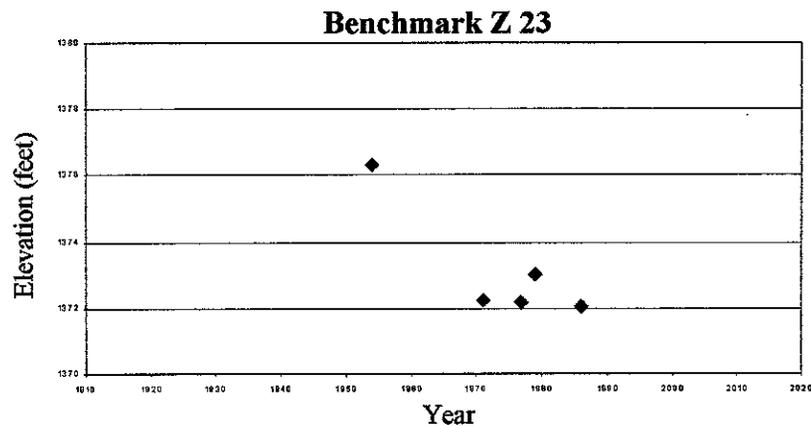
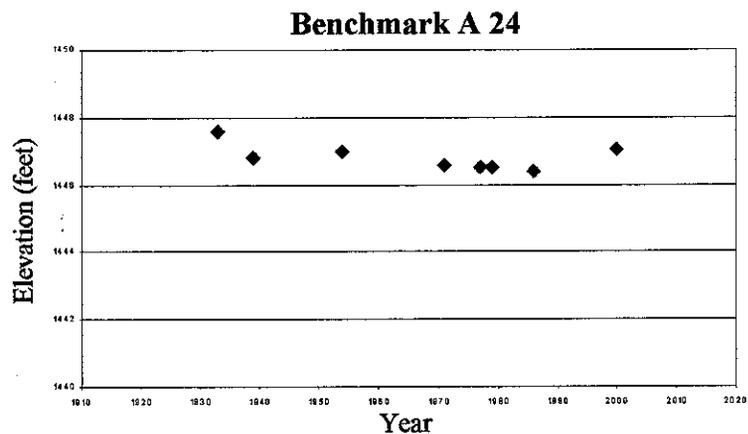
Land Subsidence and Earth Fissure Investigation

Wittmann ADMSU

Figure SU-10

Estimated Subsidence Map through 2002



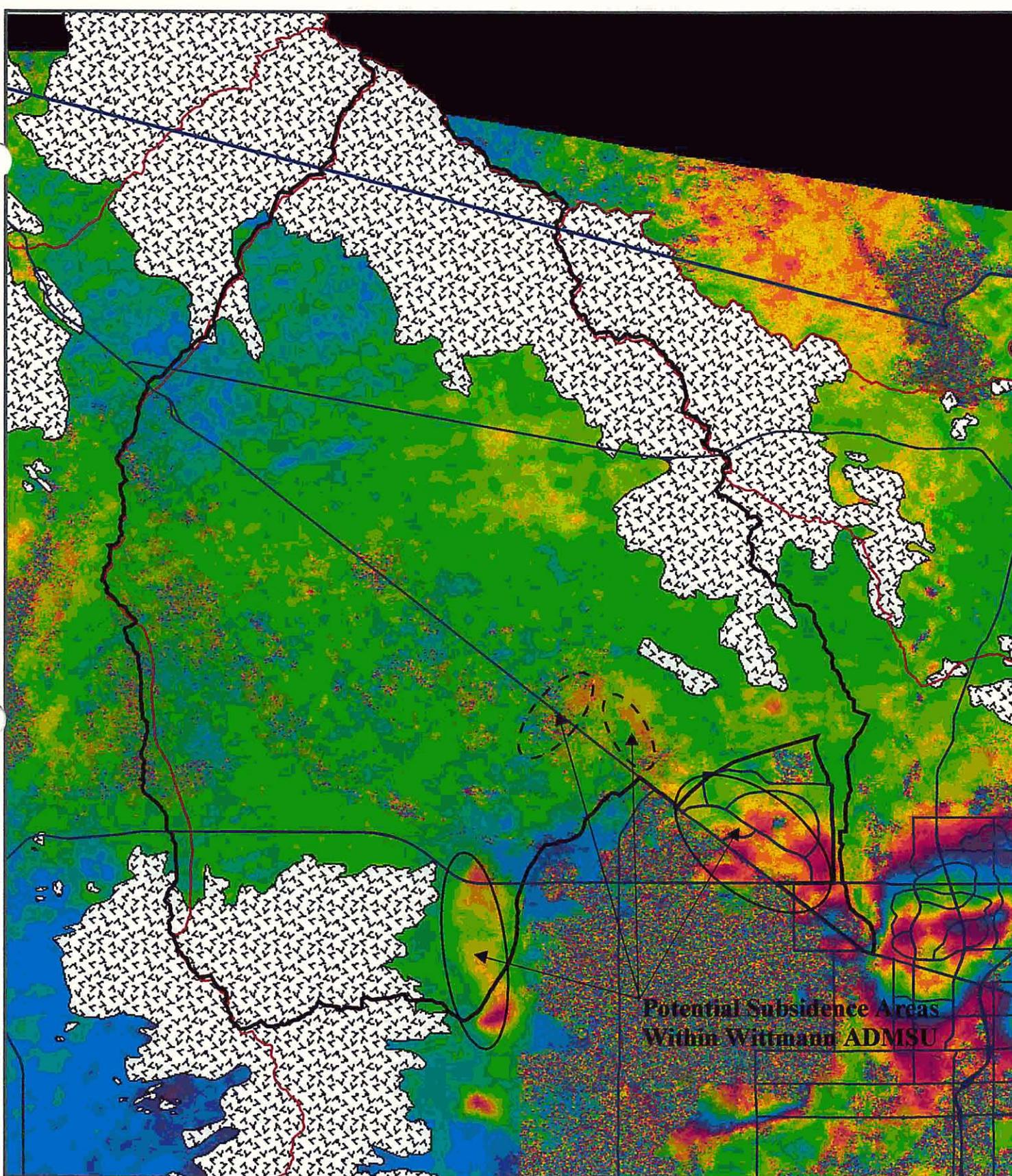


Refer to Figure SU-6c for benchmark locations.

Subsidence data from National Geodetic Survey, U.S. Bureau of Reclamation, and Arizona Department of Water Resources.

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-11
 US60/Beardsley Canal Historical Subsidence





Legend

-  Maricopa County Line
-  ADWR Subbasin Boundary
-  Bedrock Area
-  Wittmann ADMSU Boundary


 1:250,000

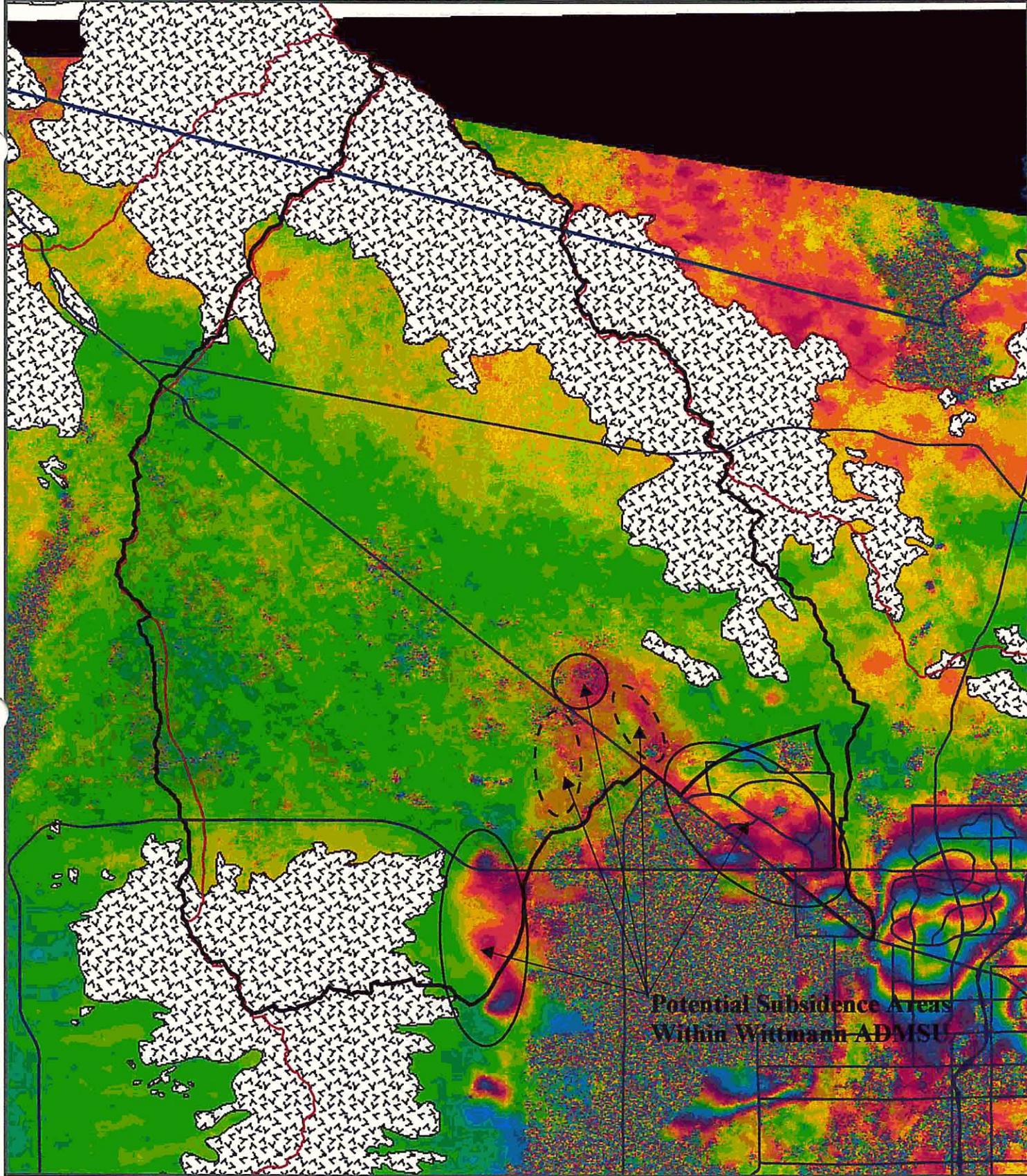
Land Subsidence and Earth Fissure Investigation
Wittmann ADMSU

Figure SU-12

Insar Data from 12/30/1996 to 11/30/1998

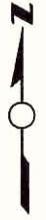


Potential Subsidence Areas
Within Wittmann ADMSU



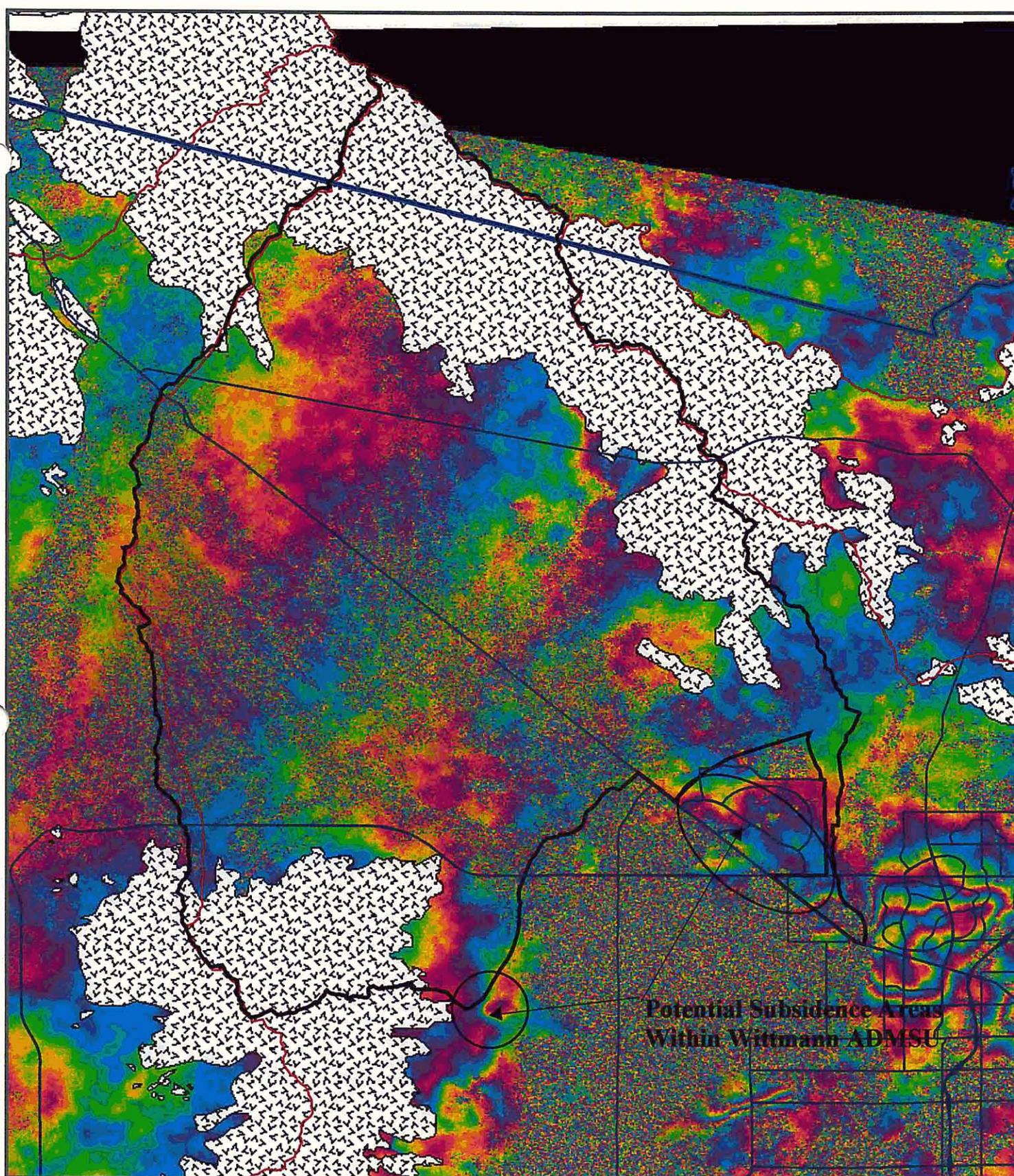
Legend

-  Maricopa County Line
-  ADWR Subbasin Boundary
-  Bedrock Area
-  Wittmann ADMSU Boundary


 1:250,000

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-13
 Insar Data from 12/30/1996 to 12/30/1999





Legend

-  Maricopa County Line
-  ADWR Subbasin Boundary
-  Bedrock Area
-  Wittmann ADMSU Boundary

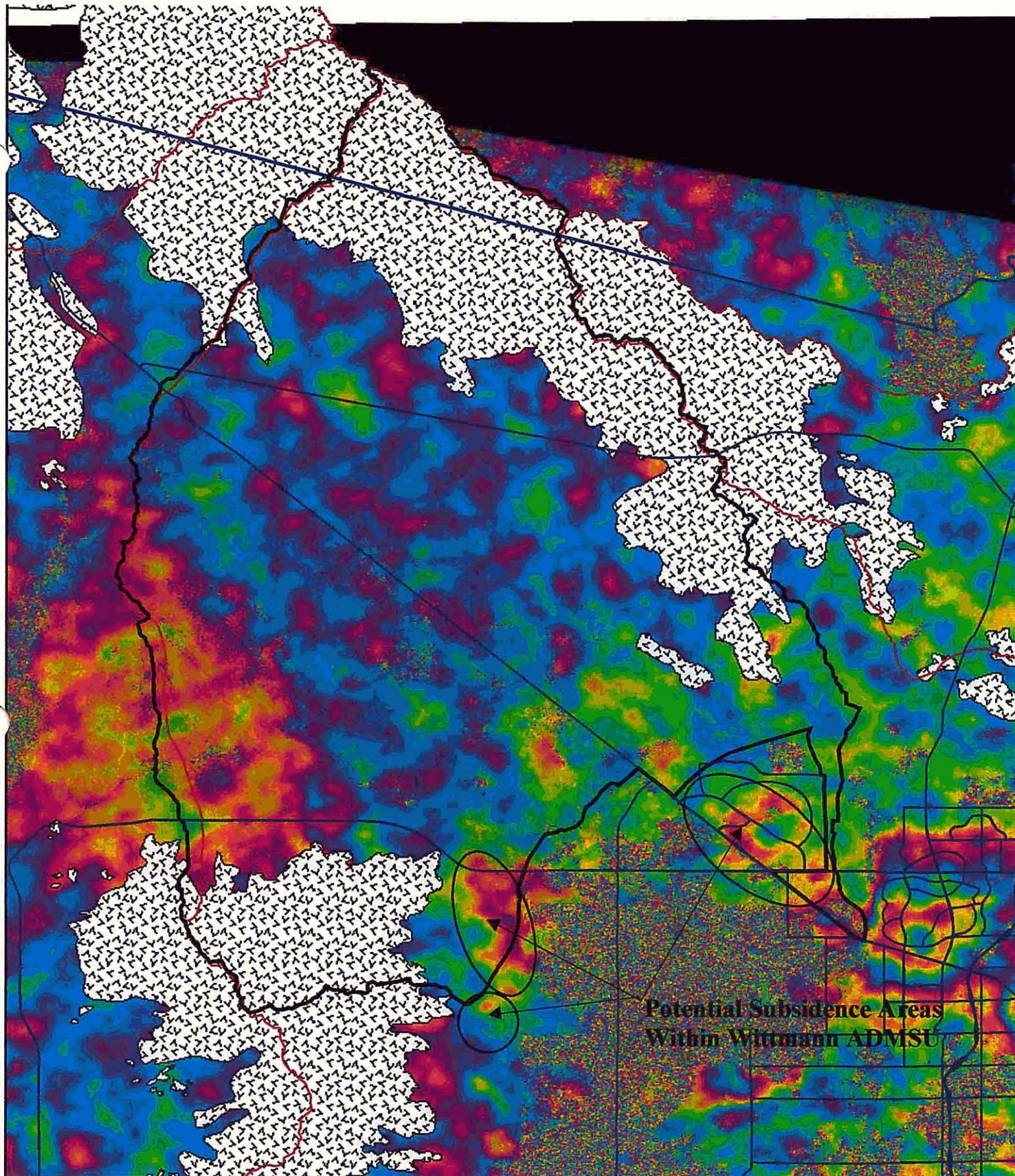

 1:250,000

Land Subsidence and Earth Fissure Investigation
Wittmann ADMSU

Figure SU-14

Insar Data from 03/10/1997 to 10/30/2000

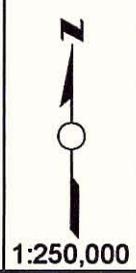




Potential Subsidence Areas
Within Wittmann ADMSU

Legend

-  Maricopa County Line
-  ADWR Subbasin Boundary
-  Bedrock Area
-  Wittmann ADMSU Boundary

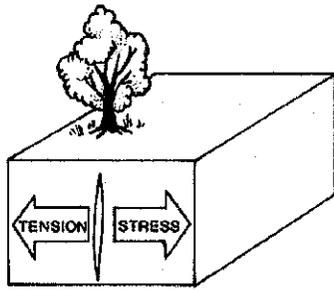


Land Subsidence and Earth Fissure Investigation
Wittmann ADMSU

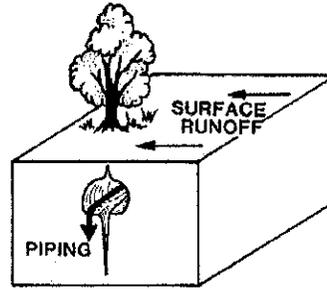
Figure SU-15

Insar Data from 06/08/1998 to 05/08/2000

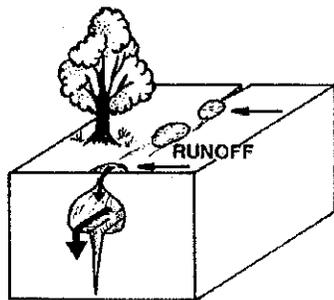




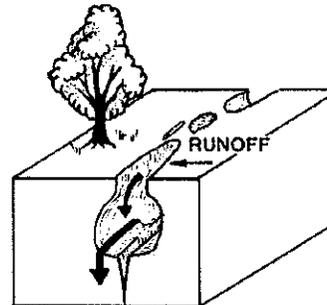
1. Lateral stresses induce tension cracking



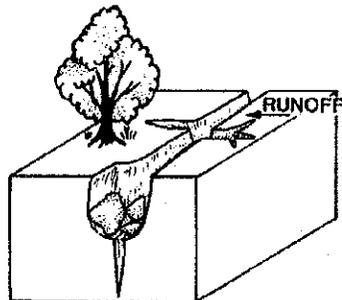
2. Surface runoff and infiltration enlarge crack through subsurface piping



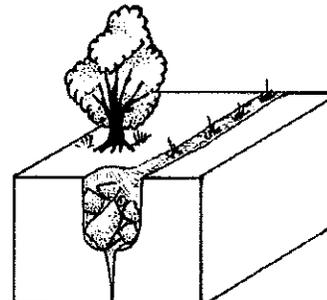
3. As piping continues, fissure begins to appear at surface as series of potholes and small cracks



4. As infiltration and erosion continue, fissure enlarges and completely opens to surface as tunnel roof collapses



5. The entire fissure is opened to the surface and enlargement continues as fissure walls are widened, extensive slumping and side-stream gullying occur

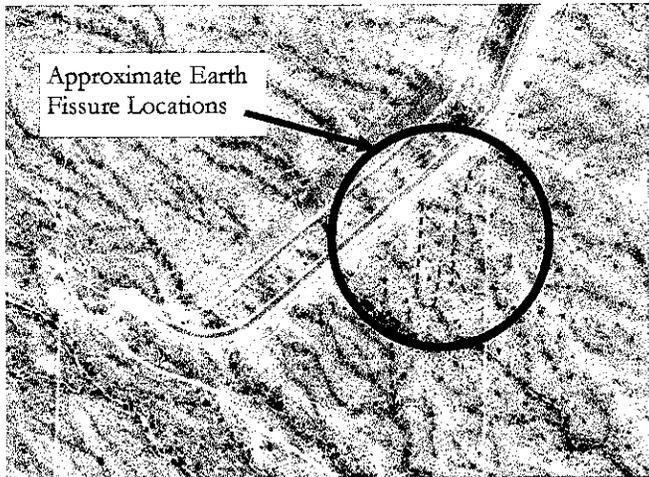


6. Fissure becomes filled with slump and runoff debris and is marked by vegetation lineament and slight surface depression, it may become reactivated upon renewal of tensile stress

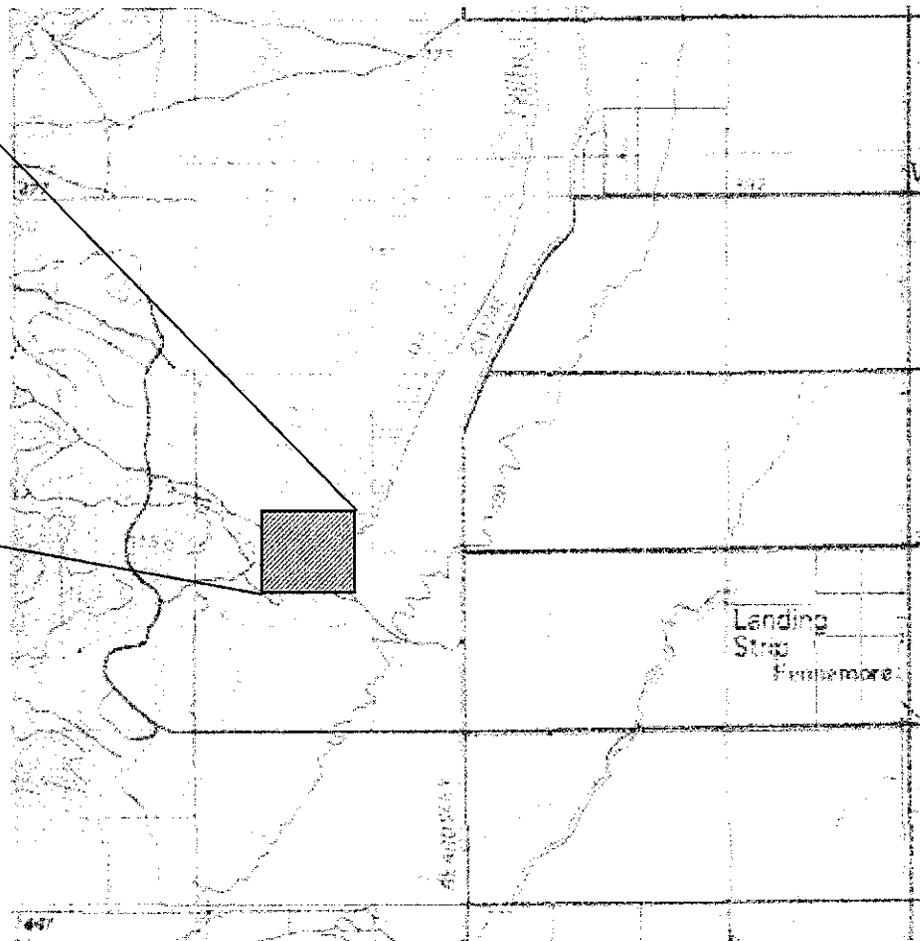
Figure from Pewe, 1982.

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-16
 Generalized States of Earth Fissure Development





Aerial photo from <http://teraserver.-usa.com>



Base Map: USGS Phoenix North 15' Quadrangle.

EXPLANATION:



Generalized locations of previously mapped earth fissures (AMEC, 2002).



Approximate trend of earth fissures.



N.T.S.

Land Subsidence and Earth Fissure Investigation
 Wittmann ADMSU
 Figure SU-17
 McMicken Dam Earth Fissure Location





EXPLANATION

Geologic Units

- Y2** Late Holocene alluvial fans, low terraces, active stream channel deposits
 - Y1** Late to early Holocene alluvial fans and terraces
 - Y** Undifferentiated Holocene alluvial fans
 - Q** Alluvium and talus, undifferentiated
 - M2** Latest to late Pleistocene alluvial fans
 - M1b** Middle to late Pleistocene alluvial fans
 - M12** Middle or Late Pleistocene distal alluvial fans
 - M1a** Middle to early Pleistocene alluvial fans
 - M1** Middle Pleistocene alluvial fans
 - O** Early to late Pleistocene alluvial fans
 - Y2r** Active channels and low terrace deposits along axial drainages
 - Tsy** Younger sedimentary rocks: conglomerate, sandstone, lacustrine rocks
 - Tvu** Tertiary volcanics, undifferentiated
 - TK** Tertiary or Cretaceous intrusive and volcanic rocks
 - KXu** Cretaceous and Proterozoic crystalline bedrock, undifferentiated
- Refer to report Section 3.0 for detailed explanation of geologic units.

Geologic Symbols

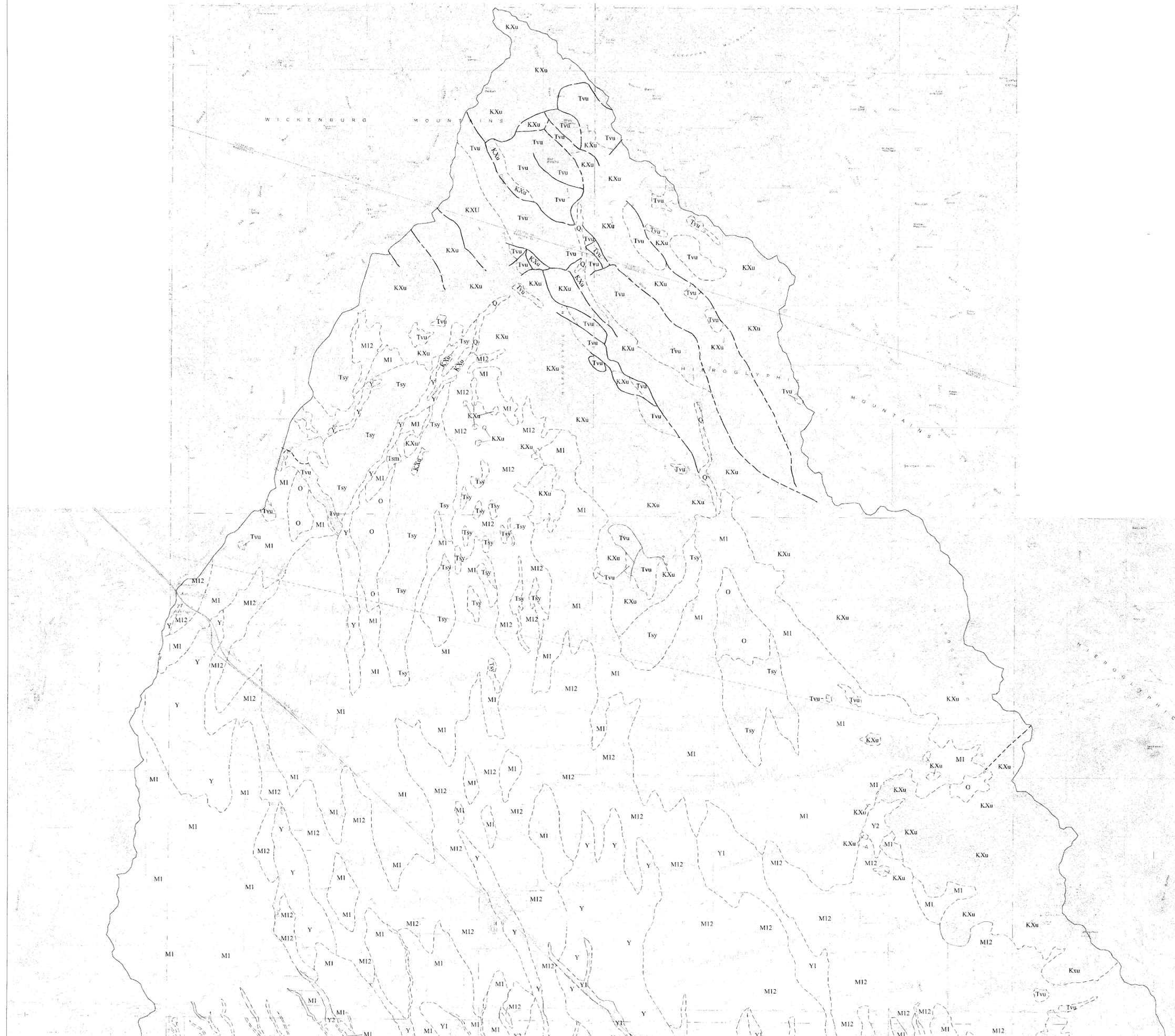
- Geologic contact; dashed where approximate
- Fault; dashed where approximate

Note: Geologic map compiled from the reports listed below. Locations of geologic contacts and overall accuracy of published information not field verified by Geological Consultants Inc.
 Field, J.J., and Paerthree, P.A., 1991, Surficial Geology around the White Tank Mountains, Central Arizona, Arizona Geological Survey Open-File Report OFR-91-8.

Reynolds, S.J., Grubensky, M.J., 1993, Geologic Map of the Phoenix North 30' x 60' Quadrangle, central Arizona, Arizona Geological Survey Open-File Report 93-17, 1 sheet, Scale 1:100,000.

Reynolds, S.J., Wood, S.E., Paerthree, P.A., Field, J.J., 2002, Geologic Map of the White Tank Mountains, central Arizona, Arizona Geological Survey DGM-14, 2 sheets, Scale 1:24,000.

Land Subsidence and Earth Fisure Investigation
 Wittmann ADMSU
 Plate SU-1
 Geologic Map: South Project Area



EXPLANATION

Geologic Units

- Y2** Late Holocene alluvial fans, low terraces, active stream channel deposits
 - Y1** Late to early Holocene alluvial fans and terraces
 - Y** Undifferentiated Holocene alluvial fans
 - Q** Alluvium and talus, undifferentiated
 - M2** Latest to late Pleistocene alluvial fans
 - M1b** Middle to late Pleistocene alluvial fans
 - M12** Middle or Late Pleistocene distal alluvial fans
 - M1a** Middle to early Pleistocene alluvial fans
 - M1** Middle Pleistocene alluvial fans
 - O** Early to late Pleistocene alluvial fans
 - Y2r** Active channels and low terrace deposits along axial drainages
 - Tsy** Younger sedimentary rocks: conglomerate, sandstone, lacustrine rocks
 - Tvu** Tertiary volcanics, undifferentiated
 - TK** Tertiary or Cretaceous intrusive and volcanic rocks
 - KXu** Cretaceous and Proterozoic crystalline bedrock, undifferentiated
- Refer to report Section 3.0 for detailed explanation of geologic units.

Geologic Symbols

- Geologic contact; dashed where approximate
- Fault; dashed where approximate

Note: Geologic map compiled from the reports listed below. Locations of geologic contacts and overall accuracy of published information not field verified by Geological Consultants Inc.
 Field, J.J., and Paerthree, P.A., 1991, Surficial Geology around the White Tank Mountains, Central Arizona, Arizona Geological Survey Open-File Report OFR-91-8.
 Reynolds, S.J., Grubensky, M.J., 1993, Geologic Map of the Phoenix North 30' x 60' Quadrangle, central Arizona, Arizona Geological Survey Open-File Report 93-17, 1 sheet, Scale 1:100,000.
 Reynolds, S.J., Wood, S.E., Paerthree, P.A., Field, J.J., 2002, Geologic Map of the White Tank Mountains, central Arizona, Arizona Geological Survey DGM-14, 2 sheets, Scale 1:24,000.

1"=4000'



Land Subsidence and Earth Fisure Investigation
 Wittmann ADMSU
 Plate SU-2
 Geologic Map: North Project Area



Appendix SU-A

GWSI Data Sheets

PROJECT TITLE: PHOENIX AREA COOPERATIVE SUBSIDENCE PROJECT 8-84 AZ
TOLLESON VIA PEORIA TO THE JUNCTION OF BEARDSLEY ROAD AND 67TH AVENUE
AGENCY: AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983 TOL = 6.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 312.964 METERS FOR: I10 B
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	APPROXIMATE LONGITUDE
0602	DV1309	I10 B	C	0.00	312.96410		33 27 19 N	112 14 29 W
0603	DV1310	I10 C	C	0.99	312.91545	2	33 27 41 N	112 15 00 W
0604	DV1311	I10 D	C	2.25	310.73989	2	33 27 40 N	112 15 43 W
0605	DV1312	I10 E	C	3.03	310.18288	2	33 27 40 N	112 16 18 W
0606	DV1685	FREE	C	3.22	317.12733	2	33 27 41 N	112 16 17 W
0612	DV1691	1043.88	B 1	3.23	318.24603	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0611	DV1690	1043.91	B 1	3.24	318.26322	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0610	DV1689	1042.71	B 1	3.24	317.88645	2	33 27 40 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0609	DV1688	1042.72	B 1	3.24	317.89417	2	33 27 40 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0608	DV1687	FREE RM 2	C 1	3.23	318.24940	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0607	DV1686	FREE RM 1	C 1	3.23	318.27413	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0613	DV1692	T1N R1E SEC 4 NW COR	C	3.66	311.51244	2	33 27 57 N	112 16 18 W
0614	DV1693	8+96.26	C 1	3.71	311.24295	2	33 27 50 N	112 16 18 W
0613	DV1692	T1N R1E SEC 4 NW COR	C *	3.66	311.51244		33 27 57 N	112 16 18 W
0615	DV1694	417 A	C	4.07	312.00225	2	33 28 10 N	112 16 19 W
0616	DV1695	1026.86	B 1	4.11	313.02671	2	33 28 18 N	112 16 19 W
0615	DV1694	417 A	C *	4.07	312.00225		33 28 10 N	112 16 19 W
0617	DV1696	T2N R1E SEC 33 1/4 COR WC	C	4.46	312.84639	2	33 28 19 N	112 16 19 W
0618	DV1697	417 B	D	5.28	313.07723	2	33 28 45 N	112 16 19 W
0620	DV1699	T2N R1E SEC 33 NW COR	D 1	5.30	312.88105	2	33 28 45 N	112 16 19 W
0618	DV1697	417 B	D *	5.28	313.07723		33 28 45 N	112 16 19 W
0619	DV1698	417 B 1	C 1	5.29	313.47769	2	33 28 45 N	112 16 19 W
0618	DV1697	417 B	D *	5.28	313.07723		33 28 45 N	112 16 19 W
0621	DV1700	417 C	D	5.93	313.70898	2	33 29 03 N	112 16 19 W
0622	DV1701	T2N R1E SEC 28 1/4 COR WD	C	6.07	313.95715	2	33 29 10 N	112 16 19 W
0623	DV1702	417 D	D	6.89	314.48969	2	33 29 37 N	112 16 19 W
0624	AJ9407	TBM NW 28	1	6.91	314.42497	2	33 29 37 N	112 16 19 W
0623	DV1702	417 D	D *	6.89	314.48969		33 29 37 N	112 16 19 W

AGENCY:AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

TOL = 6.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 312.964 METERS FOR: I10 B
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0626	DV1703	INDIAN RM 2	C 1	7.09	314.69065	2	33 29 37 N	112 16 10 W
0627	DV1704	INDIAN	C 1	7.10	314.78701	2	33 29 37 N	112 16 10 W
0628	DV1705	INDIAN RM 1	C 1	7.11	314.79651	2	33 29 37 N	112 16 10 W
0629	DV1706	INDIAN AZ MK	C 1	7.80	316.47992	2	33 29 39 N	112 15 44 W
0623	DV1702	417 D	D *	6.89	314.48969		33 29 37 N	112 16 19 W
0625	DV1707	417 D 1	C 1	6.92	314.96457	2	33 29 37 N	112 16 19 W
0623	DV1702	417 D	D *	6.89	314.48969		33 29 37 N	112 16 19 W
0630	DV1708	417 E	D	7.67	315.78415	2	33 30 04 N	112 16 19 W
0631	DV1709	T4N R2E SEC 21 1/4 COR	WD 1	7.70	316.18849	2	33 30 03 N	112 16 19 W
0630	DV1708	417 E	D *	7.67	315.78415		33 30 04 N	112 16 19 W
0632	DV1710	417 F	D	8.54	318.01403	2	33 30 30 N	112 16 19 W
0633	DV1711	T2N R1E SEC 21 NW COR	D 1	8.58	317.73157	2	33 30 29 N	112 16 19 W
0632	DV1710	417 F	D *	8.54	318.01403		33 30 30 N	112 16 19 W
0634	DV1712	T2N R1E SEC 16 1/4 COR	WD	9.30	319.40374	2	33 30 56 N	112 16 19 W
0635	DV1713	417 G	D	10.15	322.01457	2	33 31 20 N	112 16 16 W
0637	DV1714	1062.19	C 1	10.21	323.76532	2	33 31 22 N	112 16 16 W
0638	DV1715	SALT RM 2	C 1	10.62	323.01399	2	33 31 23 N	112 16 01 W
0639	DV1716	SALT	C 1	10.63	323.06260	2	33 31 22 N	112 16 01 W
0640	DV1717	SALT RM 1	C 1	10.64	323.03025	2	33 31 23 N	112 16 01 W
0635	DV1713	417 G	D *	10.15	322.01457		33 31 20 N	112 16 16 W
0636	DV1718	SALT AZ MK	C 1	10.34	322.42575	2	33 31 21 N	112 16 25 W
0635	DV1713	417 G	D *	10.15	322.01457		33 31 20 N	112 16 16 W
0641	DV1719	417 H	D	10.90	322.76822	2	33 31 48 N	112 16 10 W
0642	DV1720	T2N R1E SEC 9 1/4 COR	WED 1	10.92	322.85736	2	33 31 48 N	112 16 12 W
0641	DV1719	417 H	D *	10.90	322.76822		33 31 48 N	112 16 10 W
- 0643	DV1721	T2N R1E SEC 9 NW COR	D	11.70	325.23889	2	33 32 14 N	112 16 12 W
- 0644	DV1722	417 J	D	12.49	327.43509	2	33 32 40 N	112 16 12 W
- 0645	DV1723	417 J 1	D 1	12.53	327.39937	2	33 32 40 N	112 16 12 W
- 0644	DV1722	417 J	D *	12.49	327.43509		33 32 40 N	112 16 12 W
- 0646	DV1724	417 J 2	D	12.88	327.93933	2	33 32 53 N	112 16 12 W
- 0647	DV1725	417 J 3	D	13.27	328.81741	2	33 33 04 N	112 16 16 W
- 0648	DV1726	417 K	C	13.76	330.64545	2	33 33 20 N	112 16 18 W
- 0649	DV1727	OLIVE	C	14.33	332.93536	2	33 33 39 N	112 16 19 W
- 0651	DV1729	OLIVE RM 2	C 1	14.34	333.00186	2	33 33 39 N	112 16 19 W
- 0649	DV1727	OLIVE	C *	14.33	332.93536		33 33 39 N	112 16 19 W
- 0650	DV1728	OLIVE RM 1	C 1	14.34	332.82449	2	33 33 39 N	112 16 19 W

AGENCY:AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

TOL = 6.0 MM X SQRT(KM)

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 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	LATITUDE	LONGITUDE
- 0649	DV1727	OLIVE	C *	14.33	332.93536		33 33 39 N	112 16 19 W
- 0652	DV1730	99 OL	D	14.98	334.84496	2	33 33 30 N	112 16 20 W
- 0653	DV1731	1103.21	C 1	15.02	334.42470	2	33 33 30 N	112 16 18 W
- 0652	DV1730	99 OL	D *	14.98	334.84496		33 33 30 N	112 16 20 W
- 0654	DV1732	417 L	B	15.15	334.23723	2	33 33 45 N	112 16 18 W
- 0655	DV1733	1100.98	B 1	15.24	333.75384	2	33 33 58 N	112 16 18 W
- 0654	DV1732	417 L	B *	15.15	334.23723		33 33 45 N	112 16 18 W
- 0656	DV1734	NW 33 OLIVE AVE	D	15.31	333.22401	2	33 34 01 N	112 16 17 W
- 0657	DV1735	OLIVE AZ MK	C	15.88	334.92498	2	33 33 58 N	112 15 56 W
- 0658	DV1736	417 M	D	16.94	338.45495	3	33 34 00 N	112 15 15 W
- 0659	DV1737	417 M 1	C 1	16.98	338.90871	2	33 34 00 N	112 15 15 W
- 0658	DV1736	417 M	D *	16.94	338.45495		33 34 00 N	112 15 15 W
- 0660	DV1738	T3N R1E SEC 27 1/4 COR	WD	17.73	339.62043	2	33 34 25 N	112 15 15 W
- 0661	DV1739	T3N R1E SEC 27 NW COR	D	18.54	341.50774	2	33 34 50 N	112 15 15 W
- 0662	DV1740	417 M 2	D 1	18.59	342.00130	2	33 34 50 N	112 15 15 W
- 0661	DV1739	T3N R1E SEC 27 NW COR	D *	18.54	341.50774		33 34 50 N	112 15 15 W
- 0663	DV1741	T3N R1E SEC 22 1/4 COR	WD	19.35	343.76676	2	33 35 16 N	112 15 16 W
- 0664	DV1742	417 M 3	D 1	19.36	342.86476	2	33 35 16 N	112 15 17 W
- 0663	DV1741	T3N R1E SEC 22 1/4 COR	WD *	19.35	343.76676		33 35 16 N	112 15 16 W
- 0665	DV1743	GRAND	C	20.38	347.20858	2	33 35 24 N	112 14 48 W
- 0667	DV1745	GRAND RM 2	C 1	20.39	347.79653	2	33 35 24 N	112 14 48 W
- 0665	DV1743	GRAND	C *	20.38	347.20858		33 35 24 N	112 14 48 W
- 0666	DV1744	GRAND RM 1	C 1	20.39	347.14703	2	33 35 24 N	112 14 48 W
- 0665	DV1743	GRAND	C *	20.38	347.20858		33 35 24 N	112 14 48 W
- 0668	DV1746	T3N R1E SEC 22 NW COR	D	21.42	346.61839	2	33 35 43 N	112 15 16 W
- 0669	DV1747	GRAND AZ MK	C	21.88	348.52805	2	33 35 44 N	112 14 58 W
- 0801	DV1753	T3N R1E SEC 22 1/4 COR	ND 1	22.22	348.78931	2	33 35 46 N	112 14 45 W
- 0802	DV1754	417 Q	D 1	23.00	351.49563	2	33 35 44 N	112 14 12 W
- 0803	DV1755	417 QX	C 2	23.01	352.16563	2	33 35 44 N	112 14 12 W
- 0802	DV1754	417 Q	D *	23.00	351.49563		33 35 44 N	112 14 12 W
- 0804	DV1756	T3N R1E SEC 14 1/4 COR	WD 1	23.82	353.98463	2	33 36 10 N	112 14 13 W
- 0673	DV1751	T3N R1E SEC 14 NW COR	D 1	24.62	356.08285	2	33 36 35 N	112 14 12 W
- 0669	DV1747	GRAND AZ MK	C *	21.88	348.52805		33 35 44 N	112 14 58 W
- 0670	DV1748	417 N	C	22.72	350.16092	2	33 36 10 N	112 15 00 W
- 0671	DV1749	417 P	B	23.51	354.01228	2	33 36 35 N	112 15 06 W
- 0672	DV1750	1163.46	B 1	23.60	354.55848	2	33 36 36 N	112 15 07 W

AGENCY:AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0671	DV1749	417 P	B *	23.51	354.01228		33 36 35 N	112 15 06 W
0673	DV1751	T3N R1E SEC 14 NW COR	D	24.81	356.08609	2	33 36 35 N	112 14 12 W
0674	DV1752	417 P 1	D 1	24.86	356.73101	2	33 36 36 N	112 14 13 W
0673	DV1751	T3N R1E SEC 14 NW COR	D *	24.62	356.08285		33 36 35 N	112 14 12 W
0675	DV1757	1080.57	B	26.05	359.41132	2	33 37 23 N	112 14 10 W
0676	DV1758	T3N R1E SEC 11 NW COR	C	26.22	358.93437	2	33 37 29 N	112 14 12 W
0677	DV1759	DYKE AZ MK	C	26.73	361.52662	2	33 37 44 N	112 14 12 W
0678	DV1760	T3N R1E SEC 2 NW COR	D	27.74	366.64650	2	33 38 17 N	112 14 13 W
0901	DV1776	T3N R1E SEC 2 1/4 COR NOD	D 1	28.55	365.96647	2	33 38 17 N	112 13 42 W
0902	DV1777	T3N R1E SEC 1 NW COR	D 1	29.36	368.23842	2	33 38 17 N	112 13 10 W
0903	DV1778	417 Q 2	D 1	29.75	369.91294	2	33 38 16 N	112 13 00 W
0904	DV1779	417 T	B 1	29.96	372.48056	2	33 38 17 N	112 12 47 W
0905	DV1780	417 U	B 1	30.19	371.61318	2	33 38 17 N	112 12 40 W
0906	DV1781	T3N R1E SEC 1 1/4 COR NOD	D 1	30.30	371.68683	2	33 38 18 N	112 12 36 W
0907	DV1782	T3N R2E SEC 6 NW COR	D 1	31.11	375.62281	2	33 38 18 N	112 12 08 W
0908	DV1783	GROVERS	C 1	31.93	376.47773	2	33 38 44 N	112 12 07 W
0911	DV1786	T4N R2E SEC 31 1/4 COR WD	D 2	31.95	376.59280	2	33 38 42 N	112 12 08 W
0908	DV1783	GROVERS	C *	31.93	376.47773		33 38 44 N	112 12 07 W
0910	DV1785	GROVERS RM 2	C 2	31.94	376.35982	2	33 38 44 N	112 12 07 W
0908	DV1783	GROVERS	C *	31.93	376.47773		33 38 44 N	112 12 07 W
0909	DV1784	GROVERS RM 1	C 2	31.94	376.54752	2	33 38 44 N	112 12 07 W
0908	DV1783	GROVERS	C *	31.93	376.47773		33 38 44 N	112 12 07 W
0912	DV1787	GROVERS AZ MK	C 1	32.75	379.92546	2	33 39 11 N	112 12 08 W
0913	DV1788	T4N R2E SEC 31 NW COR	D 2	32.77	379.64076	2	33 39 11 N	112 12 09 W
0912	DV1787	GROVERS AZ MK	C *	32.75	379.92546		33 39 11 N	112 12 08 W
0914	DV1789	T4N R1E SEC 25 1/4 COR ED	D 1	33.54	379.59694	2	33 39 36 N	112 12 08 W
0693	DV1775	T4N R1E SEC 25 NE COR	D 1	34.34	382.09688	1	33 40 07 N	112 12 06 W
0678	DV1760	T3N R1E SEC 2 NW COR	D *	27.74	366.64650		33 38 17 N	112 14 13 W
0680	DV1762	1207.06	B 1	27.92	367.35485	2	33 38 17 N	112 14 11 W
0678	DV1760	T3N R1E SEC 2 NW COR	D *	27.74	366.64650		33 38 17 N	112 14 13 W
0679	DV1761	1206.18	D 1	27.78	367.08475	2	33 38 17 N	112 14 13 W
0678	DV1760	T3N R1E SEC 2 NW COR	D *	27.74	366.64650		33 38 17 N	112 14 13 W
0681	DV1763	417 Q 1	D	28.64	370.41192	2	33 38 44 N	112 14 10 W
0682	DV1764	417 R	D	29.12	373.16916	2	33 38 57 N	112 14 10 W
0683	DV1765	417 S	D	29.61	374.78063	3	33 39 09 N	112 14 10 W
0684	DV1766	T4N R1E SEC 35 1/4 COR ND	D	30.14	374.08030	2	33 39 10 N	112 13 42 W

UNADJUSTED DATA

LINE NO.: L24809/6

ORDER/CLASS = 2/1

AGENCY:AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

TOL = 6.0 MM X SQRT(KM)

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	APPROXIMATE LONGITUDE
0685	DV1767	T4N R1E SEC 36 NW COR	D	30.94	375.43859	2	33 39 09 N	112 13 11 W
0686	DV1768	ORCHARD	C	31.73	379.34175	2	33 39 35 N	112 13 11 W
0689	DV1771	T4N R1E SEC 25 1/4 COR	WD 1	31.76	379.32763	2	33 39 35 N	112 13 11 W
0686	DV1768	ORCHARD	C *	31.73	379.34175		33 39 35 N	112 13 11 W
0688	DV1770	ORCHARD RM 2	C 1	31.74	379.31422	2	33 39 35 N	112 13 11 W
0686	DV1768	ORCHARD	C *	31.73	379.34175		33 39 35 N	112 13 11 W
0687	DV1769	ORCHARD RM 1	C 1	31.74	379.34302	2	33 39 35 N	112 13 11 W
0686	DV1768	ORCHARD	C *	31.73	379.34175		33 39 35 N	112 13 11 W
0690	DV1772	ORCHARD AZ MK	C	32.54	383.86036	2	33 40 01 N	112 13 11 W
0691	DV1773	T4N R1E SEC 25 NW COR	D 1	32.55	383.96034	2	33 40 03 N	112 13 13 W
0690	DV1772	ORCHARD AZ MK	C *	32.54	383.86036		33 40 01 N	112 13 11 W
0692	DV1774	B 71	D	33.33	382.88121	2	33 40 02 N	112 12 39 W
0693	DV1775	T4N R1E SEC 25 NE COR	D	34.13	382.10076	2	33 40 07 N	112 12 06 W
0914	DV1789	T4N R1E SEC 25 1/4 COR	ED 1	34.13	382.10076		33 39 36 N	112 12 08 W
0693	DV1775	T4N R1E SEC 25 NE COR	D *	34.34	382.09688		33 40 07 N	112 12 06 W
0694	DV0060	F 365	D	34.47	382.92461	2	33 40 05 N	112 12 07 W
0695	DV1790	T4N R1E SEC 24 1/4 COR	ED	35.17	387.38117	2	33 40 28 N	112 12 07 W
0696	DV1791	T4N R2E SEC 19 1/4 COR	WD	35.32	388.80130	2	33 40 28 N	112 12 08 W
0697	DV1266	C 475	B	35.99	394.24304	2	33 40 55 N	112 12 09 W
0698	AJ9408	TBM NE 24		36.02	393.87657	2	33 40 55 N	112 12 09 W
0697	DV1266	C 475	B *	35.99	394.24304		33 40 55 N	112 12 09 W
0699	DV1267	D 475	A	37.10	411.70354	2	33 41 30 N	112 12 04 W
0700	DV1268	E 475	A	37.27	415.20421	2	33 41 30 N	112 11 59 W
0701	DV1792	STEM	A	37.61	429.96751	2	33 41 30 N	112 11 48 W

UNADJUSTED DATA

LINE NO.: L24809/6

ORDER/CLASS = 2/1

AGENCY:AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

TOL = 6.0 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 11/09/84
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

0.89 MM STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
0.63 MM STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
37.59 KM MAIN LINE LENGTH
12.11 KM SPUR LINE LENGTH
102.323 KM TOTAL SINGLE-RUN LEVELING
00116 BENCH MARKS
00002 TEMPORARY BENCH MARKS
00119 NUMBER OF SECTIONS
0 NUMBER OF RIVER CROSSINGS
00240 NUMBER OF RUNNINGS
0.8 PERCENT RERUNS

COMMENTS:

THE MARCH 10, 1981, RUNNING FOR THE SECTION FROM K 265 TO L 265 (SPSN 442 TO SPSN 443) HAD A 2-CM ERROR WHICH WAS MANUALLY CORRECTED IN THE HGZ FILE PRIOR TO RUNNING THE FIELD ABSTRACT. THE ERROR WAS CAUSED BY USE OF A 2-CM PLUG ON ONLY THE BACKSIGHT IN THE LAST SETUP OF THE SECTION RUNNING.

PROJECT TITLE: PHOENIX AREA COOPERATIVE SUBSIDENCE PROJECT 1983-84 AZ

TOLLESON VIA PEORIA TO THE JUNCTION OF BEARDSLEY ROAD AND 67TH AVENUE

AGENCY: AZDT

STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

TOL = 6.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0602	DV1309	I10 B	C	0.00	312.96410		33 27 19 N	112 14 29 W
0603	DV1310	I10 C	C	0.99	312.91545	2	33 27 41 N	112 15 00 W
0604	DV1311	I10 D	C	2.25	310.73989	2	33 27 40 N	112 15 43 W
0605	DV1312	I10 E	C	3.03	310.18288	2	33 27 40 N	112 16 18 W
0606	DV1685	FREE	C	3.22	317.12733	2	33 27 41 N	112 16 17 W
0612	DV1691	1043.88	B 1	3.23	318.24603	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0611	DV1690	1043.91	B 1	3.24	318.26322	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0610	DV1689	1042.71	B 1	3.24	317.88645	2	33 27 40 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0609	DV1688	1042.72	B 1	3.24	317.89417	2	33 27 40 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0608	DV1687	FREE RM 2	C 1	3.23	318.24940	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0607	DV1686	FREE RM 1	C 1	3.23	318.27413	2	33 27 41 N	112 16 17 W
0606	DV1685	FREE	C *	3.22	317.12733		33 27 41 N	112 16 17 W
0613	DV1692	T1N R1E SEC 4 NW COR	C	3.66	311.51244	2	33 27 57 N	112 16 18 W
0614	DV1693	8+96.26	C 1	3.71	311.24295	2	33 27 50 N	112 16 18 W
0613	DV1692	T1N R1E SEC 4 NW COR	C *	3.66	311.51244		33 27 57 N	112 16 18 W
0615	DV1694	417 A	C	4.07	312.00225	2	33 28 10 N	112 16 19 W
0616	DV1695	1026.86	B 1	4.11	313.02671	2	33 28 18 N	112 16 19 W
0615	DV1694	417 A	C *	4.07	312.00225		33 28 10 N	112 16 19 W
0617	DV1696	T2N R1E SEC 33 1/4 COR WC		4.46	312.84639	2	33 28 19 N	112 16 19 W
0618	DV1697	417 B	D	5.28	313.07723	2	33 28 45 N	112 16 19 W
0620	DV1699	T2N R1E SEC 33 NW COR	D 1	5.30	312.88105	2	33 28 45 N	112 16 19 W
0618	DV1697	417 B	D *	5.28	313.07723		33 28 45 N	112 16 19 W
0619	DV1698	417 B 1	C 1	5.29	313.47769	2	33 28 45 N	112 16 19 W
0618	DV1697	417 B	D *	5.28	313.07723		33 28 45 N	112 16 19 W
0621	DV1700	417 C	D	5.93	313.70898	2	33 29 03 N	112 16 19 W
0622	DV1701	T2N R1E SEC 28 1/4 COR WD		6.07	313.95715	2	33 29 10 N	112 16 19 W
0623	DV1702	417 D	D	6.89	314.48969	2	33 29 37 N	112 16 19 W
0624	AJ9407	TBM NW 28		6.91	314.42497	2	33 29 37 N	112 16 19 W
0623	DV1702	417 D	D *	6.89	314.48969		33 29 37 N	112 16 19 W

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0626	DV1703	INDIAN RM 2	C 1	7.09	314.69065	2	33 29 37 N	112 16 10 W
0627	DV1704	INDIAN	C 1	7.10	314.78701	2	33 29 37 N	112 16 10 W
0628	DV1705	INDIAN RM 1	C 1	7.11	314.79651	2	33 29 37 N	112 16 10 W
0629	DV1706	INDIAN AZ MK	C 1	7.80	316.47992	2	33 29 39 N	112 15 44 W
0623	DV1702	417 D	D *	6.89	314.48969		33 29 37 N	112 16 19 W
0625	DV1707	417 D 1	C 1	6.92	314.96457	2	33 29 37 N	112 16 19 W
0623	DV1702	417 D	D *	6.89	314.48969		33 29 37 N	112 16 19 W
0630	DV1708	417 E	D	7.67	315.78415	2	33 30 04 N	112 16 19 W
0631	DV1709	T4N R2E SEC 21 1/4 COR	WD 1	7.70	316.18849	2	33 30 03 N	112 16 19 W
0630	DV1708	417 E	D *	7.67	315.78415		33 30 04 N	112 16 19 W
0632	DV1710	417 F	D	8.54	318.01403	2	33 30 30 N	112 16 19 W
0633	DV1711	T2N R1E SEC 21 NW COR	D 1	8.58	317.73157	2	33 30 29 N	112 16 19 W
0632	DV1710	417 F	D *	8.54	318.01403		33 30 30 N	112 16 19 W
0634	DV1712	T2N R1E SEC 16 1/4 COR	WD	9.30	319.40374	2	33 30 56 N	112 16 19 W
0635	DV1713	417 G	D	10.15	322.01457	2	33 31 20 N	112 16 16 W
0637	DV1714	1062.19	C 1	10.21	323.76532	2	33 31 22 N	112 16 16 W
0638	DV1715	SALT RM 2	C 1	10.62	323.01399	2	33 31 23 N	112 16 01 W
0639	DV1716	SALT	C 1	10.63	323.06260	2	33 31 22 N	112 16 01 W
0640	DV1717	SALT RM 1	C 1	10.64	323.03025	2	33 31 23 N	112 16 01 W
0635	DV1713	417 G	D *	10.15	322.01457		33 31 20 N	112 16 16 W
0636	DV1718	SALT AZ MK	C 1	10.34	322.42575	2	33 31 21 N	112 16 25 W
0635	DV1713	417 G	D *	10.15	322.01457		33 31 20 N	112 16 16 W
0641	DV1719	417 H	D	10.90	322.76822	2	33 31 48 N	112 16 10 W
0642	DV1720	T2N R1E SEC 9 1/4 COR	WED 1	10.92	322.85736	2	33 31 48 N	112 16 12 W
0641	DV1719	417 H	D *	10.90	322.76822		33 31 48 N	112 16 10 W
- 0643	DV1721	T2N R1E SEC 9 NW COR	D	11.70	325.23889	2	33 32 14 N	112 16 12 W
- 0644	DV1722	417 J	D	12.49	327.43509	2	33 32 40 N	112 16 12 W
- 0645	DV1723	417 J 1	D 1	12.53	327.39937	2	33 32 40 N	112 16 12 W
- 0644	DV1722	417 J	D *	12.49	327.43509		33 32 40 N	112 16 12 W
- 0646	DV1724	417 J 2	D	12.88	327.93933	2	33 32 53 N	112 16 12 W
- 0647	DV1725	417 J 3	D	13.27	328.81741	2	33 33 04 N	112 16 16 W
- 0648	DV1726	417 K	C	13.76	330.64545	2	33 33 20 N	112 16 18 W
- 0649	DV1727	OLIVE	C	14.33	332.93536	2	33 33 39 N	112 16 19 W
- 0651	DV1729	OLIVE RM 2	C 1	14.34	333.00186	2	33 33 39 N	112 16 19 W
- 0649	DV1727	OLIVE	C *	14.33	332.93536		33 33 39 N	112 16 19 W
- 0650	DV1728	OLIVE RM 1	C 1	14.34	332.82449	2	33 33 39 N	112 16 19 W

AGENCY:AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

TOL = 6.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 312.964 METERS FOR: I10 B
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
-	0649	DV1727	OLIVE	C *	14.33	332.93536	33 33 39 N	112 16 19 W
-	0652	DV1730	99 OL	D	14.98	334.84496	2 33 33 30 N	112 16 20 W
-	0653	DV1731	1103.21	C 1	15.02	334.42470	2 33 33 30 N	112 16 18 W
-	0652	DV1730	99 OL	D *	14.98	334.84496	33 33 30 N	112 16 20 W
-	0654	DV1732	417 L	B	15.15	334.23723	2 33 33 45 N	112 16 18 W
-	0655	DV1733	1100.98	B 1	15.24	333.75384	2 33 33 58 N	112 16 18 W
-	0654	DV1732	417 L	B *	15.15	334.23723	33 33 45 N	112 16 18 W
-	0656	DV1734	NW 33 OLIVE AVE	D	15.31	333.22401	2 33 34 01 N	112 16 17 W
-	0657	DV1735	OLIVE AZ MK	C	15.88	334.92498	2 33 33 58 N	112 15 56 W
-	0658	DV1736	417 M	D	16.94	338.45495	3 33 34 00 N	112 15 15 W
-	0659	DV1737	417 M 1	C 1	16.98	338.90871	2 33 34 00 N	112 15 15 W
-	0658	DV1736	417 M	D *	16.94	338.45495	33 34 00 N	112 15 15 W
-	0660	DV1738	T3N R1E SEC 27 1/4 COR	WD	17.73	339.62043	2 33 34 25 N	112 15 15 W
-	0661	DV1739	T3N R1E SEC 27 NW COR	D	18.54	341.50774	2 33 34 50 N	112 15 15 W
-	0662	DV1740	417 M 2	D 1	18.59	342.00130	2 33 34 50 N	112 15 15 W
-	0661	DV1739	T3N R1E SEC 27 NW COR	D *	18.54	341.50774	33 34 50 N	112 15 15 W
-	0663	DV1741	T3N R1E SEC 22 1/4 COR	WD	19.35	343.76676	2 33 35 16 N	112 15 16 W
-	0664	DV1742	417 M 3	D 1	19.36	342.86476	2 33 35 16 N	112 15 17 W
-	0663	DV1741	T3N R1E SEC 22 1/4 COR	WD *	19.35	343.76676	33 35 16 N	112 15 16 W
-	0665	DV1743	GRAND	C	20.38	347.20858	2 33 35 24 N	112 14 48 W
-	0667	DV1745	GRAND RM 2	C 1	20.39	347.79653	2 33 35 24 N	112 14 48 W
-	0665	DV1743	GRAND	C *	20.38	347.20858	33 35 24 N	112 14 48 W
-	0666	DV1744	GRAND RM 1	C 1	20.39	347.14703	2 33 35 24 N	112 14 48 W
-	0665	DV1743	GRAND	C *	20.38	347.20858	33 35 24 N	112 14 48 W
-	0668	DV1746	T3N R1E SEC 22 NW COR	D	21.42	346.61839	2 33 35 43 N	112 15 16 W
-	0669	DV1747	GRAND AZ MK	C	21.88	348.52805	2 33 35 44 N	112 14 58 W
-	0801	DV1753	T3N R1E SEC 22 1/4 COR	ND 1	22.22	348.78931	2 33 35 46 N	112 14 45 W
-	0802	DV1754	417 Q	D 1	23.00	351.49563	2 33 35 44 N	112 14 12 W
-	0803	DV1755	417 QX	C 2	23.01	352.16563	2 33 35 44 N	112 14 12 W
-	0802	DV1754	417 Q	D *	23.00	351.49563	33 35 44 N	112 14 12 W
-	0804	DV1756	T3N R1E SEC 14 1/4 COR	WD 1	23.82	353.98463	2 33 36 10 N	112 14 13 W
-	0673	DV1751	T3N R1E SEC 14 NW COR	D 1	24.62	356.08285	2 33 36 35 N	112 14 12 W
-	0669	DV1747	GRAND AZ MK	C *	21.88	348.52805	33 35 44 N	112 14 58 W
-	0670	DV1748	417 N	C	22.72	350.16092	2 33 36 10 N	112 15 00 W
-	0671	DV1749	417 P	B	23.51	354.01228	2 33 36 35 N	112 15 06 W
-	0672	DV1750	1163.46	B 1	23.60	354.55848	2 33 36 36 N	112 15 07 W

AGENCY:AZDT STATES: AZ LEVELING BEGAN 12/06/1982 AND ENDED 02/01/1983

TOL = 6.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

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 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0671	DV1749	417 P	B *	23.51	354.01228		33 36 35 N	112 15 06 W
0673	DV1751	T3N R1E SEC 14 NW COR	D	24.81	356.08609	2	33 36 35 N	112 14 12 W
0674	DV1752	417 P 1	D 1	24.86	356.73101	2	33 36 36 N	112 14 13 W
0673	DV1751	T3N R1E SEC 14 NW COR	D *	24.62	356.08285		33 36 35 N	112 14 12 W
0675	DV1757	1080.57	B	26.05	359.41132	2	33 37 23 N	112 14 10 W
0676	DV1758	T3N R1E SEC 11 NW COR	C	26.22	358.93437	2	33 37 29 N	112 14 12 W
0677	DV1759	DYKE AZ MK	C	26.73	361.52662	2	33 37 44 N	112 14 12 W
0678	DV1760	T3N R1E SEC 2 NW COR	D	27.74	366.64650	2	33 38 17 N	112 14 13 W
0901	DV1776	T3N R1E SEC 2 1/4 COR NOD	D 1	28.55	365.96647	2	33 38 17 N	112 13 42 W
0902	DV1777	T3N R1E SEC 1 NW COR	D 1	29.36	368.23842	2	33 38 17 N	112 13 10 W
0903	DV1778	417 Q 2	D 1	29.75	369.91294	2	33 38 16 N	112 13 00 W
0904	DV1779	417 T	B 1	29.96	372.48056	2	33 38 17 N	112 12 47 W
0905	DV1780	417 U	B 1	30.19	371.61318	2	33 38 17 N	112 12 40 W
0906	DV1781	T3N R1E SEC 1 1/4 COR NOD	D 1	30.30	371.68683	2	33 38 18 N	112 12 36 W
0907	DV1782	T3N R2E SEC 6 NW COR	D 1	31.11	375.62281	2	33 38 18 N	112 12 08 W
0908	DV1783	GROVERS	C 1	31.93	376.47773	2	33 38 44 N	112 12 07 W
0911	DV1786	T4N R2E SEC 31 1/4 COR WD	D 2	31.95	376.59280	2	33 38 42 N	112 12 08 W
0908	DV1783	GROVERS	C *	31.93	376.47773		33 38 44 N	112 12 07 W
0910	DV1785	GROVERS RM 2	C 2	31.94	376.35982	2	33 38 44 N	112 12 07 W
0908	DV1783	GROVERS	C *	31.93	376.47773		33 38 44 N	112 12 07 W
0909	DV1784	GROVERS RM 1	C 2	31.94	376.54752	2	33 38 44 N	112 12 07 W
0908	DV1783	GROVERS	C *	31.93	376.47773		33 38 44 N	112 12 07 W
0912	DV1787	GROVERS AZ MK	C 1	32.75	379.92546	2	33 39 11 N	112 12 08 W
0913	DV1788	T4N R2E SEC 31 NW COR	D 2	32.77	379.64076	2	33 39 11 N	112 12 09 W
0912	DV1787	GROVERS AZ MK	C *	32.75	379.92546		33 39 11 N	112 12 08 W
0914	DV1789	T4N R1E SEC 25 1/4 COR ED	D 1	33.54	379.59694	2	33 39 36 N	112 12 08 W
0693	DV1775	T4N R1E SEC 25 NE COR	D 1	34.34	382.09688	1	33 40 07 N	112 12 06 W
0678	DV1760	T3N R1E SEC 2 NW COR	D *	27.74	366.64650		33 38 17 N	112 14 13 W
0680	DV1762	1207.06	B 1	27.92	367.35485	2	33 38 17 N	112 14 11 W
0678	DV1760	T3N R1E SEC 2 NW COR	D *	27.74	366.64650		33 38 17 N	112 14 13 W
0679	DV1761	1206.18	D 1	27.78	367.08475	2	33 38 17 N	112 14 13 W
0678	DV1760	T3N R1E SEC 2 NW COR	D *	27.74	366.64650		33 38 17 N	112 14 13 W
0681	DV1763	417 Q 1	D	28.64	370.41192	2	33 38 44 N	112 14 10 W
0682	DV1764	417 R	D	29.12	373.16916	2	33 38 57 N	112 14 10 W
0683	DV1765	417 S	D	29.61	374.78063	3	33 39 09 N	112 14 10 W
0684	DV1766	T4N R1E SEC 35 1/4 COR ND	D 2	30.14	374.08030	2	33 39 10 N	112 13 42 W

PROJECT TITLE: BOWIE-TUCSON-GILA BEND-PHOENIX-GLOBE AZ AREA
ROOSEVELT VIA MESA AND PHOENIX TO 11.0 KM WEST OF TONOPAH AZ
AGENCY:NGS STATES: AZ LEVELING BEGAN 12/15/1980 AND ENDED 03/26/1981

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 625.852 METERS FOR: U 270
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0201	DU0397	U 270	D	0.00	625.85200		33 40 05 N	111 09 58 W
9005	DU1298	T 403	A 1	1.12	688.46383	1	33 40 07 N	111 09 41 W
9003	DU1297	M 403	A 1	1.65	669.00725	1	33 40 18 N	111 09 28 W
9004	DU1296	N 403	A 1	2.26	656.85496	1	33 40 21 N	111 09 10 W
0201	DU0397	U 270	D *	0.00	625.85200		33 40 05 N	111 09 58 W
0202	DU0398	A 21	C	1.51	599.84792	1	33 39 30 N	111 10 32 W
0203	DU1300	A 473	A	2.59	625.09828	1	33 39 16 N	111 10 52 W
0204	DU0399	T 270	A	3.45	622.61765	1	33 39 03 N	111 11 10 W
0205	DU1301	B 473	A	4.40	597.69611	1	33 38 49 N	111 11 33 W
0206	DU0400	B 21	C	5.06	643.45272	1	33 38 31 N	111 11 45 W
0207	DU0401	S 270	C	5.92	645.21059	1	33 38 11 N	111 11 48 W
0208	DU0402	R 270	C	7.38	628.06919	1	33 37 24 N	111 11 41 W
0209	DU0403	C 21	A	8.75	722.89916	1	33 36 40 N	111 11 44 W
0210	DU0404	Q 270	C	10.14	696.64833	1	33 36 18 N	111 11 54 W
0211	DU0405	D 21	D	11.30	615.37197	1	33 35 53 N	111 12 08 W
0212	DU0406	P 270	C	12.69	743.46267	1	33 35 33 N	111 12 31 W
0213	DU0407	N 270	B	14.12	709.02855	2	33 34 54 N	111 12 42 W
0214	DU0408	E 21	C	14.73	687.02256	1	33 35 01 N	111 13 03 W
0216	DU0409	DAVIS	C	16.01	778.01955	1	33 34 40 N	111 13 41 W
0217	DU0410	DAVIS RM 1	C 1	16.02	778.10921	2	33 34 40 N	111 13 41 W
0216	DU0409	DAVIS	C *	16.01	778.01955		33 34 40 N	111 13 41 W
0215	DU0411	DAVIS RM 2	C 1	16.02	777.22201	2	33 34 40 N	111 13 41 W
0216	DU0409	DAVIS	C *	16.01	778.01955		33 34 40 N	111 13 41 W
0218	DU0412	F 21	C	17.33	804.06326	1	33 34 04 N	111 14 05 W
0219	DU1302	C 473	A	18.04	790.70969	1	33 33 48 N	111 14 23 W
0220	DU0413	G 21	C	19.44	778.07303	1	33 33 19 N	111 14 57 W
0221	DU0414	M 270	D	20.96	798.73490	1	33 32 40 N	111 15 31 W
0222	DU1303	D 473	A	22.06	751.66988	1	33 32 21 N	111 16 03 W
0223	DU0416	L 270	D	23.46	710.95069	1	33 32 19 N	111 16 52 W
0224	DU0417	J 21	A	24.96	666.16190	1	33 32 13 N	111 17 46 W
0225	DU0418	V 270	D	25.64	653.58219	1	33 32 04 N	111 18 11 W
0226	DU0419	K 21	A	26.76	681.14522	1	33 31 30 N	111 18 23 W
0227	DU0420	K 270	D	27.79	773.07414	1	33 31 58 N	111 18 30 W
0228	DU0421	J 270	A	28.45	836.31063	1	33 32 14 N	111 18 31 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/15/1980 AND ENDED 03/26/1981

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 625.852 METERS FOR: U 270
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0229	DU0422	L 21	A	29.49	911.72085	1	33 31 59 N	111 18 48 W
0230	DU0423	H 270	A	30.87	878.35045	1	33 31 34 N	111 19 05 W
0231	DU0424	M 21	A	32.50	871.41989	1	33 32 19 N	111 19 31 W
0232	DU1304	E 473	A	33.68	851.37751	1	33 32 34 N	111 20 01 W
0233	DU0425	G 270	A	34.24	864.52488	1	33 32 41 N	111 20 14 W
0234	DU0426	N 21	C	35.23	808.38584	1	33 32 27 N	111 20 38 W
0235	DU1305	F 473	A	35.97	769.10800	1	33 32 14 N	111 20 44 W
0236	DU0428	E 270	A	36.60	748.61114	1	33 31 59 N	111 20 58 W
0237	DU1306	G 473	A	37.57	667.88750	1	33 32 00 N	111 21 36 W
0238	DU1307	H 473	A	38.50	608.07353	1	33 32 00 N	111 22 08 W
0239	DU0431	Q 21	C	39.50	565.24215	1	33 32 08 N	111 22 41 W
0240	DU1308	J 473	A	40.11	583.99766	1	33 31 53 N	111 22 48 W
0241	DU0432	C 270	A	41.17	533.93423	1	33 31 38 N	111 23 20 W
0242	DU1309	K 473	A	41.91	565.63756	1	33 32 02 N	111 23 43 W
0243	DU0433	R 21	B	42.69	603.23923	1	33 31 46 N	111 24 07 W
0244	DU0434	B 270	B	43.65	552.57735	1	33 31 45 N	111 24 41 W
0245	DU0435	A 270	B	45.07	508.75068	1	33 31 59 N	111 25 25 W
0246	DU1310	L 473	A	46.45	521.00783	1	33 32 14 N	111 26 03 W
0247	DU0438	T 21	B	47.31	510.76731	1	33 32 19 N	111 26 32 W
0248	DU0439	Y 269	A	48.22	524.29113	1	33 32 36 N	111 26 40 W
0249	DU1311	M 473	A	49.10	577.47339	1	33 32 27 N	111 26 55 W
0251	DU0444	X 269	D	50.02	612.44248	1	33 32 10 N	111 27 11 W
0250	DU0443	CANYON AZ MK	A 1	50.14	615.50733	2	33 32 13 N	111 27 15 W
0251	DU0444	X 269	D *	50.02	612.44248	1	33 32 10 N	111 27 11 W
0252	DU0446	W 269	A	51.36	656.69283	1	33 31 30 N	111 27 13 W
0253	DU1312	N 473	A	52.26	700.51641	1	33 31 09 N	111 27 00 W
0254	DU0447	V 269	A	52.89	702.28618	1	33 31 12 N	111 27 19 W
0255	DU1313	P 473	A	54.22	719.36541	1	33 30 33 N	111 27 19 W
0256	DU1314	Q 473	A	55.47	665.59700	1	33 30 08 N	111 27 34 W
0257	DU0458	2107	D	56.43	642.28201	1	33 29 46 N	111 27 54 W
0258	DU0459	W 21	C	57.96	657.98794	1	33 29 00 N	111 28 12 W
0259	DU0460	2105	D	59.11	641.61117	1	33 28 25 N	111 28 28 W
0260	DU0461	X 21	C	61.16	618.69514	1	33 27 31 N	111 29 12 W
0261	DU0571	1934	D	63.34	589.44167	1	33 26 44 N	111 30 15 W
0262	DU0572	Y 21	C	64.44	577.32126	1	33 26 29 N	111 30 51 W
0263	DU0573	S 269	C	65.78	556.91057	1	33 26 00 N	111 31 31 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/15/1980 AND ENDED 03/26/1981

TOL = 4.0 MM X SQRT(KM)

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0264	DU0574	Z 21	C	66.92	545.68001	1	33 25 37 N	111 32 05 W
0265	DU1315	1716.01	C	68.86	523.09080	1	33 24 52 N	111 32 58 W
0266	DU1316	1721.22	B 1	69.69	524.63468	2	33 24 38 N	111 32 30 W
0267	DU1317	G 474	A 1	70.68	532.22849	2	33 24 34 N	111 31 58 W
0268	DU1318	1262 AB	A 2	70.71	535.50186	2	33 24 34 N	111 31 55 W
0269	DU1319	1262 AA	A 2	70.74	532.01416	2	33 24 34 N	111 31 53 W
0267	DU1317	G 474	A *	70.68	532.22849		33 24 34 N	111 31 58 W
0270	DU1320	HWY 60 MP 1729.39	C 1	71.25	527.31203	2	33 24 16 N	111 31 53 W
0271	DU1321	1706.12	B 1	72.82	520.03857	2	33 23 47 N	111 31 02 W
0272	DU1052	A 107	C 1	74.29	517.52400	2	33 23 18 N	111 30 13 W
0265	DU1315	1716.01	C *	68.86	523.09080		33 24 52 N	111 32 58 W
0273	DU0579	1693.94	B	69.69	516.51953	1	33 24 54 N	111 33 26 W
0274	DU0580	1685.99	B	70.01	514.09747	1	33 24 54 N	111 33 40 W
0275	DU0585	1667.27	B	70.63	508.39323	1	33 24 54 N	111 34 04 W
0276	DU0586	1654.61	B	71.06	504.52179	1	33 24 54 N	111 34 21 W
0277	DU0587	1649.26	B	71.24	502.90258	2	33 24 54 N	111 34 29 W
0278	DU0588	BB 100	D	71.42	501.74516	1	33 24 54 N	111 34 36 W
0279	DU0591	1632.39	B	71.88	497.76170	1	33 24 54 N	111 34 51 W
0280	DU1322	Z 473	B 1	73.72	486.53072	2	33 23 53 N	111 34 48 W
0281	DU1323	SGC 17	C 1	75.16	477.57328	2	33 23 09 N	111 34 52 W
0282	DU1324	Y 473	B 1	76.67	468.12987	2	33 22 16 N	111 34 46 W
0283	DU1325	HAWK	A 1	77.58	470.25079	2	33 21 58 N	111 34 27 W
0284	DU1326	X 473	A 1	77.62	469.30167	2	33 21 57 N	111 34 27 W
0279	DU0591	1632.39	B *	71.88	497.76170		33 24 54 N	111 34 51 W
0285	DU0592	1626.01	B	72.14	495.81152	2	33 24 54 N	111 35 03 W
0286	DU0593	1617.70	B	72.51	493.28288	1	33 24 54 N	111 35 16 W
0287	DU0596	1612.85	B	72.76	491.79827	1	33 24 54 N	111 35 27 W
0288	DU0604	1594.67	B	73.67	486.25432	1	33 24 54 N	111 36 03 W
0289	DU0606	1586.68	B	74.06	483.80829	1	33 24 54 N	111 36 18 W
0290	DU0607	1583.97	B	74.27	482.95582	1	33 24 54 N	111 36 27 W
0291	DU0615	1562.00	B	75.21	476.30069	1	33 24 54 N	111 37 03 W
0292	DU0616	1549.47	B	75.70	472.53405	1	33 24 54 N	111 37 23 W
0293	DU0617	1542.26	B	75.97	470.34036	1	33 24 54 N	111 37 34 W
0294	DU0623	Q 269	D	77.18	459.92289	1	33 24 52 N	111 38 18 W
0295	DU0622	1510.56	B	77.30	460.29812	1	33 24 55 N	111 38 21 W
0296	DU0624	1505.69	B	77.51	458.97523	1	33 24 55 N	111 38 31 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/15/1980 AND ENDED 03/26/1981

TOL = 4.0 MM X SQRT(KM)

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 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

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 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0297	DU1344	1497.24	C	77.82	456.61899	1	33 24 55 N	111 38 43 W
0298	DU0625	1489.18	B	78.10	454.17611	1	33 24 55 N	111 38 51 W
0299	DU1327	1262 AD	A	78.47	453.05759	1	33 24 56 N	111 39 07 W
0300	DU1328	W 473	A	78.49	451.30915	1	33 24 56 N	111 39 08 W
0301	DU1329	1262 AE	A	78.54	451.04910	1	33 24 56 N	111 39 09 W
0302	DU1330	1262 AF	A	78.61	452.61747	1	33 24 56 N	111 39 11 W
0303	DU0628	1472.81	D	78.77	449.16839	1	33 24 55 N	111 39 17 W
0304	DU0631	1465.42	B	79.14	446.92139	1	33 24 55 N	111 39 33 W
0305	DU0632	1455.93	B	79.48	443.37935	1	33 24 55 N	111 39 49 W
0306	DU0633	1451.67	B	79.65	441.78822	1	33 24 55 N	111 39 56 W
0307	DU0637	1436.79	B	80.33	436.81870	1	33 24 55 N	111 40 18 W
0308	DU0639	E 22	C	81.08	431.55226	1	33 24 54 N	111 40 48 W
0309	DU0711	HWY 60 STA 423+36.5	C	81.40	430.79810	1	33 24 56 N	111 41 00 W
0310	DU0709	W 281 RESET	C 1	82.24	424.05785	2	33 24 28 N	111 41 01 W
0311	DU0707	TL AJ 8	C 1	83.78	419.14401	2	33 23 38 N	111 41 03 W
0309	DU0711	HWY 60 STA 423+36.5	C *	81.40	430.79810	1	33 24 56 N	111 41 00 W
0312	DU0640	HWY 60 STA 423+66	D	81.45	430.90411	1	33 24 57 N	111 41 00 W
0313	DU0645	J 269 RESET	D	83.24	444.58734	1	33 25 54 N	111 41 02 W
0314	DU0651	TL AJ 5	C	83.84	450.15735	1	33 26 13 N	111 41 00 W
0316	DU0654	A 365	A	85.81	473.21608	1	33 26 54 N	111 40 24 W
0317	DU0653	B 365	A	86.01	478.50526	1	33 27 04 N	111 40 11 W
0315	DU1331	A 474	B	87.21	462.58670	1	33 27 04 N	111 41 02 W
0318	DU0655	F 269	C	88.16	469.02488	1	33 27 32 N	111 41 01 W
0319	DU0657	TL AJ 3	C	88.89	473.81959	1	33 27 59 N	111 41 01 W
0320	DU0659	C 365	C	90.42	478.13807	1	33 28 50 N	111 40 58 W
0321	DU0660	D 269	C	91.49	479.62510	1	33 29 21 N	111 40 59 W
0322	DU0661	TL AJ 1	C	92.13	469.06037	1	33 29 43 N	111 41 01 W
0324	DU1332	B 474	A	93.62	431.13075	1	33 30 32 N	111 40 58 W
0325	DU1057	1325.21	D	94.72	403.82182	1	33 30 50 N	111 41 25 W
0326	DU1058	1325.24	D	94.73	403.83425	1	33 30 50 N	111 41 25 W
0327	DU1333	GRANITE REEF RESET	B	94.76	403.82907	1	33 30 51 N	111 41 26 W
0328	DU1061	1325.16	D	94.78	403.81239	1	33 30 50 N	111 41 25 W
0329	DU1062	1325.22	D	94.79	403.82684	1	33 30 50 N	111 41 25 W
0330	DU1063	1314.19	D	94.80	400.45814	1	33 30 50 N	111 41 25 W
0331	DU1065	1312.11	B	95.26	399.84944	1	33 30 44 N	111 41 43 W
0332	DU1334	C 474	A	95.59	390.78857	1	33 30 55 N	111 41 45 W

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0333	DU1071	G 269	B	95.83	402.28898	1	33 30 58 N	111 41 46 W
0334	DU1335	D 474	A	96.78	395.76098	1	33 30 40 N	111 42 17 W
0335	DU1072	B 269	C	97.64	400.48476	1	33 30 36 N	111 42 45 W
0336	DU1073	A 269	D	99.30	397.69026	1	33 30 29 N	111 43 49 W
0337	DU1074	Z 268	D	100.04	397.05777	1	33 30 28 N	111 44 18 W
0338	DU1075	X 268	C	101.76	395.90802	1	33 30 52 N	111 45 18 W
0339	DU1076	W 268	C	103.22	395.09958	1	33 30 37 N	111 46 07 W
0340	DU1077	V 268	C	104.85	394.22079	1	33 30 31 N	111 47 00 W
0341	DU1078	B 367	B	105.49	394.92382	1	33 30 21 N	111 47 24 W
0342	DU1079	U 268	C	106.25	394.15577	1	33 30 14 N	111 47 49 W
0343	DU1080	LANDING RM 2	D	107.83	395.39318	1	33 30 10 N	111 48 41 W
0344	DU1336	E 474	B	108.00	393.10785	2	33 30 09 N	111 48 49 W
0345	DU1083	Y 268	D	109.03	394.08719	2	33 30 22 N	111 49 22 W
0346	DU1084	T 268	C	110.62	392.47194	1	33 30 43 N	111 50 19 W
0349	DU1337	F 474	B	112.59	391.90791	1	33 31 16 N	111 51 22 W
0348	DU1085	S 268	C	112.61	392.06276	1	33 31 17 N	111 51 23 W
0347	DU1086	C 367	D	112.66	392.98510	1	33 31 17 N	111 51 24 W
0350	DU1087	R 268	D	114.46	391.20145	1	33 31 37 N	111 52 25 W
0351	DU1088	A 367	B	116.21	390.90324	1	33 31 53 N	111 53 29 W
0352	DU1089	V 365	C	117.00	390.96116	1	33 31 57 N	111 54 01 W
0353	DU1338	R 473	B	117.83	391.86273	1	33 32 07 N	111 54 30 W
0354	DU1339	S 473	B	119.11	386.15223	1	33 31 26 N	111 54 31 W
0355	DU1340	T 473	A	119.70	389.56991	1	33 31 27 N	111 54 52 W
0356	DU1341	H 474	B	121.22	400.92102	1	33 31 25 N	111 55 49 W
0357	DU1098	J 268	C	122.34	414.62894	1	33 31 26 N	111 56 33 W
0358	DU1099	H 268	C	123.93	431.41190	1	33 31 26 N	111 57 35 W
0359	DU1100	U 365	A	124.88	441.30839	1	33 31 23 N	111 58 09 W
0360	DU1342	J 474	A	125.19	444.76671	2	33 31 21 N	111 58 20 W
0359	DU1100	U 365	A	* 124.88	441.30839		33 31 23 N	111 58 09 W
0361	DU1102	W 365	D	126.18	398.01706	1	33 31 26 N	111 58 53 W
0362	DU1343	K 474	B	126.77	393.67564	1	33 31 16 N	111 59 09 W
0363	DV0002	Z 365	C	128.32	385.67048	1	33 31 02 N	111 59 58 W
0364	DV1246	L 474	C	129.42	381.19261	1	33 31 05 N	112 00 43 W
0366	DV0006	Z 267	B	130.50	380.19987	1	33 31 20 N	112 01 18 W
0365	DV0005	1247.88	B	130.57	380.22172	1	33 31 20 N	112 01 15 W
0367	DV1247	M 474	B	131.44	380.43998	1	33 31 27 N	112 01 45 W

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0368	DV1248	N 474	A	132.56	370.72999	1	33 31 24 N	112 02 08 W
0369	DV0011	R 365	B	133.56	379.24091	1	33 31 51 N	112 02 16 W
0370	DV0012	1243.30	B	134.84	378.82415	1	33 32 22 N	112 02 47 W
0371	DV0013	1243.17	B	134.92	378.93039	1	33 32 24 N	112 02 49 W
0372	DV0014	1242.78 RESET	B	136.00	378.82217	1	33 32 43 N	112 03 20 W
0373	DV0018	1238.41	B	137.67	377.45353	1	33 33 27 N	112 03 52 W
0374	DV0027	Q 365	B	139.47	376.79725	1	33 34 03 N	112 04 47 W
0375	DV1249	P 474	A	141.34	376.24239	1	33 34 17 N	112 05 55 W
0376	DV0036	1235.86	D	143.05	376.28989	1	33 34 16 N	112 06 57 W
0377	DV0194	PEORIA RM 2	C	144.05	379.93695	1	33 34 49 N	112 06 54 W
0378	DV0193	PEORIA	C	144.08	379.98524	1	33 34 48 N	112 06 54 W
0379	DV1250	Q 474	B	145.90	384.17061	1	33 35 46 N	112 06 56 W
0380	DV1251	R 474	B 1	147.07	389.97151	2	33 35 49 N	112 06 13 W
0381	DV1252	S 474	A 1	148.15	413.72596	2	33 35 35 N	112 05 39 W
0382	DV1253	T 474	A 1	148.19	413.62052	2	33 35 36 N	112 05 40 W
0383	DV1254	U 474	A 1	148.25	413.67721	2	33 35 35 N	112 05 38 W
0379	DV1250	Q 474	B *	145.90	384.17061		33 35 46 N	112 06 56 W
0384	DV0189	T 343 RESET	B	147.32	393.32111	1	33 36 29 N	112 07 02 W
0385	DV1255	1	B	148.48	397.05241	1	33 37 02 N	112 06 57 W
0386	DV0184	S 343 RESET	C	149.54	397.48397	1	33 37 30 N	112 07 08 W
0387	DV1256	2	B	150.48	403.08118	2	33 37 57 N	112 06 57 W
0388	DV1257	BELL 2	D	151.63	406.62117	1	33 38 30 N	112 06 57 W
0389	DV1258	BELL 2 RM 3	C	151.64	406.69668	1	33 38 30 N	112 06 57 W
0390	DV1259	V 474	B	153.09	409.67417	2	33 39 17 N	112 06 50 W
0391	DV0177	Q 343	C	154.21	419.89642	2	33 39 53 N	112 06 48 W
0392	DV1260	W 474	B	154.72	418.14896	1	33 40 09 N	112 06 46 W
0393	DV1261	X 474	A	155.94	416.08099	1	33 40 08 N	112 07 31 W
0394	DV1262	Y 474	C	156.74	411.88703	1	33 40 08 N	112 08 02 W
0395	DV1263	Z 474	A	158.11	413.67057	2	33 39 58 N	112 08 43 W
0396	DV1264	A 475	D	160.14	399.81383	1	33 40 09 N	112 09 48 W
0397	DV1265	B 475	B	162.20	388.63254	1	33 40 07 N	112 11 06 W
0398	DV0058	E 365	C 1	162.30	388.57756	2	33 40 07 N	112 11 11 W
0397	DV1265	B 475	B *	162.20	388.63254		33 40 07 N	112 11 06 W
0399	DV0060	F 365	D	163.83	382.94124	1	33 40 05 N	112 12 07 W
0400	DV1266	C 475	B	165.32	394.25764	1	33 40 55 N	112 12 09 W
0401	DV1267	D 475	A 1	166.42	411.71463	2	33 41 30 N	112 12 04 W

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0402	DV1268	E 475	A 1	166.63	415.21488	2	33 41 30 N	112 11 59 W
0403	DV1269	F 475	A 1	166.97	429.99383	2	33 41 30 N	112 11 48 W
0400	DV1266	C 475	B *	165.32	394.25764		33 40 55 N	112 12 09 W
0404	DV1270	G 475	B	166.91	391.17843	1	33 40 55 N	112 13 11 W
0405	DV1271	H 475	A	168.53	390.23145	1	33 40 52 N	112 14 14 W
0406	DV0062	G 365	B	170.14	382.46950	1	33 40 00 N	112 14 14 W
- 0407	DV0063	H 365	B	171.75	380.64064	1	33 40 01 N	112 15 16 W
- 0408	DV0064	J 365	B	172.12	380.83559	1	33 40 01 N	112 15 30 W
- 0409	DV0066	R 266	C	173.32	380.41680	1	33 40 01 N	112 16 17 W
- 0410	DV0067	K 365	C	174.95	378.10438	1	33 40 02 N	112 17 20 W
- 0411	DV0069	L 365	C	176.55	380.19412	1	33 40 55 N	112 17 20 W
- 0412	DV0070	M 365	B	177.76	383.49668	1	33 41 31 N	112 17 30 W
- 0413	DV0071	N 266	C	178.83	374.66637	1	33 42 04 N	112 17 31 W
- 0414	DV0072	M 266	C	180.64	382.04955	1	33 43 00 N	112 17 14 W
- 0415	DV0073	T 366	A	181.73	385.98268	1	33 43 35 N	112 17 11 W
- 0416	DV0074	L 266	C	182.29	389.48386	1	33 43 49 N	112 17 23 W
- 0417	DV0076	S 366	B	183.49	401.47486	1	33 44 06 N	112 17 59 W
- 0418	DV0077	R 366	B	184.74	412.55945	1	33 43 32 N	112 18 22 W
- 0419	DV0078	J 266	D	186.05	410.36168	1	33 43 34 N	112 19 04 W
- 0420	DV0079	B 266	D	187.76	409.75074	1	33 43 24 N	112 20 06 W
- 0421	DV0080	Q 366	A 1	188.66	423.86448	2	33 43 31 N	112 20 37 W
- 0420	DV0079	B 266	D *	187.76	409.75074		33 43 24 N	112 20 06 W
- 0422	DV0081	A 266	C	188.88	408.52459	1	33 43 04 N	112 20 42 W
- 0423	DV0083	P 366	B	190.50	408.38622	1	33 42 38 N	112 21 38 W
- 0424	DV0084	W 265	D	191.87	408.71190	1	33 42 19 N	112 22 24 W
- 0425	DV0085	V 265	C	193.99	407.42922	1	33 41 49 N	112 23 36 W
- 0426	DV0086	N 366	D	194.84	407.85646	1	33 41 31 N	112 24 01 W
- 0427	DV0088	U 265	D	195.94	408.79191	1	33 41 07 N	112 24 34 W
- 0429	DV0261	1351	D 1	196.62	411.57669	2	33 41 23 N	112 24 53 W
- 0432	DV0262	RV 94	D 1	197.48	416.98522	2	33 41 45 N	112 25 17 W
- 0427	DV0088	U 265	D *	195.94	408.79191		33 41 07 N	112 24 34 W
- 0430	DV0260	RV 93	D 1	196.42	406.04234	2	33 41 00 N	112 24 22 W
- 0431	DV0259	Y 23	C 1	197.16	400.89043	2	33 40 43 N	112 24 01 W
- 0427	DV0088	U 265	D *	195.94	408.79191		33 41 07 N	112 24 34 W
- 0428	DV0087	G 366	B	195.98	408.16572	1	33 41 08 N	112 24 36 W
- 0433	DV0094	H 366	D	197.47	408.41493	1	33 40 38 N	112 25 19 W

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	LATITUDE	LONGITUDE
0434	DV0095	L 366	B	198.12	406.77802	1	33 40 20 N	112 25 33 W
0435	DV0096	J 366	D	199.78	407.25176	1	33 39 36 N	112 26 05 W
0436	DV0097	R 265	D	201.40	406.30928	1	33 39 12 N	112 27 00 W
0437	DV0098	Q 265	C	203.22	404.58060	1	33 38 19 N	112 27 14 W
0438	DV0099	K 366	B	204.25	404.68408	1	33 37 51 N	112 27 25 W
0439	DV1272	J 475	A	205.95	403.27274	1	33 37 01 N	112 27 21 W
0440	DV1273	K 475	B	206.80	404.70747	1	33 36 34 N	112 27 31 W
0441	DV0102	M 265	B	208.61	404.28197	1	33 35 41 N	112 28 01 W
0442	DV0103	L 265	C	210.29	397.08468	1	33 34 48 N	112 28 09 W
0443	DV0104	K 265	D	211.84	388.80959	2	33 33 57 N	112 28 09 W
0444	DV0105	J 265	C	213.44	374.65312	1	33 33 06 N	112 28 08 W
0445	DV1274	L 475	B 1	214.68	385.39473	2	33 33 06 N	112 28 54 W
0446	DV1275	M 475	B 1	216.46	409.46977	2	33 33 03 N	112 30 01 W
0447	DV1276	N 475	A 1	217.59	449.38033	2	33 33 00 N	112 30 48 W
0448	DV1277	BED ROCK 1	A 2	217.64	461.80513	2	33 33 01 N	112 30 49 W
0447	DV1276	N 475	A *	217.59	449.38033		33 33 00 N	112 30 48 W
0449	DV1278	P 475	A 1	217.77	439.89019	2	33 32 54 N	112 30 48 W
0450	DV1279	Q 475	A 1	217.88	437.33811	2	33 32 52 N	112 30 47 W
0444	DV0105	J 265	C *	213.44	374.65312		33 33 06 N	112 28 08 W
0451	DV0106	M 366	B	214.08	369.64358	1	33 32 47 N	112 28 08 W
0452	DV0107	H 265	B	215.15	364.63819	1	33 32 13 N	112 28 09 W
0453	DV0108	G 265	C	216.84	355.62059	1	33 31 18 N	112 28 08 W
0454	DV0109	F 265	C	218.34	349.47914	1	33 30 30 N	112 28 08 W
0455	DV1280	R 475	A	218.36	350.46003	1	33 30 28 N	112 28 07 W
0456	DV0548	E 265	B	219.95	345.07967	1	33 29 36 N	112 28 09 W
0457	DV0549	D 265	C	220.72	338.48364	1	33 29 37 N	112 27 39 W
0458	DV0551	BROWN AZ MK 3	C	222.34	330.61823	1	33 28 46 N	112 27 37 W
0459	DV0554	F 366	B	223.98	320.37067	1	33 27 52 N	112 27 37 W
0460	DV0552	E 366	C	223.99	320.29885	1	33 27 52 N	112 27 37 W
0461	DV1281	S 475	A	226.02	306.52990	2	33 26 45 N	112 27 40 W
0462	DV0557	265 X 00	D	227.17	298.39997	1	33 26 08 N	112 27 39 W
0463	DV0558	213 X 24	D	228.74	301.49901	1	33 26 08 N	112 28 40 W
0464	DV0559	S 264	C	230.36	306.96998	1	33 26 08 N	112 29 44 W
0465	DV0708	TL ZJ 5	C	231.09	309.74167	1	33 26 08 N	112 30 12 W
0466	DV0709	D 366	B	232.59	316.86393	1	33 26 08 N	112 31 14 W
0467	DV0710	P 264	C	234.31	325.65668	1	33 26 08 N	112 32 18 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/15/1980 AND ENDED 03/26/1981

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 625.852 METERS FOR: U 270
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
✓ 0468	DV1282	T 475	B	235.63	325.62773	1	33 26 06 N	112 33 07 W
✓ 0469	DV0714	M 264	C	237.57	329.01866	1	33 26 09 N	112 34 21 W
✓ 0470	DV0715	L 264	C	239.65	333.25144	1	33 26 08 N	112 35 26 W
✓ 0471	DV0716	K 264	C	241.20	334.39551	1	33 26 15 N	112 36 24 W
✓ 0472	DV0717	C 366	A	241.48	350.26965	1	33 26 09 N	112 36 37 W
✓ 0473	DV1283	U 475	A	242.69	348.52760	1	33 26 43 N	112 36 51 W
✓ 0474	DV0718	J 264	C	243.23	351.44378	1	33 26 50 N	112 37 09 W
✓ 0475	DV0719	W 362	A	243.63	360.14369	1	33 26 40 N	112 37 09 W
0476	DV0720	H 264	C	245.55	350.05950	1	33 27 06 N	112 38 11 W
0477	DV0721	TL ZB 4	C	246.38	346.39729	1	33 27 00 N	112 38 31 W
0478	DV0722	G 264	C	247.76	350.23259	1	33 27 23 N	112 39 11 W
0479	DV0723	A 264	C	249.44	349.33815	1	33 27 40 N	112 40 13 W
0480	DV0724	B 264	C	250.11	348.36563	1	33 27 48 N	112 40 38 W
0481	DV0729	Z 263	C	251.07	346.93167	1	33 27 58 N	112 41 13 W
0482	DV0730	Y 263	C	252.74	344.17613	2	33 28 15 N	112 42 15 W
0484	DV0732	TL YX 2	C	254.13	346.48017	1	33 28 45 N	112 42 42 W
0483	DV1284	N 476	A	254.90	342.26220	1	33 28 25 N	112 42 55 W
0485	DV0733	X 263	C	255.52	340.40977	1	33 28 33 N	112 43 16 W
0486	DV0734	V 362	B	256.24	342.06156	1	33 28 41 N	112 43 43 W
0487	DV0735	W 263	C	257.18	344.04831	1	33 28 51 N	112 44 18 W
0488	DV1285	V 475	B	258.87	326.13008	1	33 29 08 N	112 45 19 W
0489	DV0737	R 263	C	260.30	344.04585	1	33 29 20 N	112 46 13 W
0490	DV0738	U 263	C	261.95	347.70130	1	33 29 26 N	112 47 18 W
0491	DV0739	T 263	C	262.80	342.42717	1	33 29 28 N	112 47 52 W
0492	DV0740	U 362	B	263.41	347.64679	1	33 29 31 N	112 48 18 W
0493	DV0741	S 263	C	264.56	346.70105	1	33 29 36 N	112 48 58 W
0494	DV0742	Q 263	C	266.19	346.03923	1	33 29 37 N	112 50 02 W
0495	DV0743	P 263	C	267.68	342.40322	1	33 29 38 N	112 51 00 W
0496	DV0744	N 263	C	268.47	341.21756	1	33 29 38 N	112 51 30 W
0497	DV0745	T 362	C	269.25	340.04178	1	33 29 37 N	112 52 01 W
0498	DV0747	S 362	B	270.85	337.38679	1	33 29 38 N	112 53 01 W
0499	DV1286	W 475	A	272.02	336.50810	1	33 29 37 N	112 53 49 W
0500	DV0749	K 263	C	272.47	336.72002	1	33 29 37 N	112 54 06 W
0501	DV1287	X 475	A	272.62	336.95937	1	33 29 37 N	112 54 12 W
0502	DV1288	Y 475	B	273.98	336.64273	1	33 29 36 N	112 55 00 W
0503	DV0848	CRACK AZ MK	C	276.57	341.32978	1	33 29 37 N	112 56 13 W

UNADJUSTED DATA RELEVELING

LINE NO.: L24555/2

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/15/1980 AND ENDED 03/26/1981

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 625.852 METERS FOR: U 270
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0504	DV0752	TONOPAH RM 1	C	277.25	343.95269	1	33 29 37 N	112 56 37 W
0505	DV0754	TONOPAH	C	277.26	344.20970	1	33 29 37 N	112 56 37 W
0506	DV0756	TONOPAH AZ MK	C	277.86	346.16966	1	33 29 37 N	112 57 01 W
0507	DV0757	G 263	C	279.54	353.41312	1	33 29 38 N	112 58 06 W
0508	DV0758	R 362	B	281.28	359.14328	1	33 29 37 N	112 59 14 W
0509	DV1070	E 263	C	282.91	365.37088	1	33 29 37 N	113 00 18 W
0510	DV1071	D 263	C	284.55	377.63370	1	33 29 52 N	113 01 16 W
0511	DV1072	SCOT	D	285.23	413.95445	1	33 30 00 N	113 01 34 W
0512	DV1073	SCOT RM 2	A	285.24	413.22711	1	33 30 00 N	113 01 34 W
0513	DV1074	C 263	C	286.76	374.20211	1	33 29 38 N	113 02 20 W
0514	DV1065	A 263	C	288.51	370.08627	1	33 29 37 N	113 03 24 W
9903	DV1289	P 476	A	288.64	370.42775	1	33 29 38 N	113 03 31 W
9904	DV1290	Q 476	A	289.79	370.82474	1	33 29 54 N	113 04 09 W
9905	DV1291	R 476	A	291.36	376.24174	1	33 30 20 N	113 04 13 W

UNADJUSTED DATA RELEVELING

LINE NO.: L24555/2

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/15/1980 AND ENDED 03/26/1981

TOL = 4.0 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 05/27/86
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

0.93 MM STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
0.66 MM STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
291.36 KM MAIN LINE LENGTH
28.57 KM SPUR LINE LENGTH
361.728 KM TOTAL SINGLE-RUN LEVELING
00319 BENCH MARKS
00000 TEMPORARY BENCH MARKS
00318 NUMBER OF SECTIONS
0 NUMBER OF RIVER CROSSINGS
00372 NUMBER OF RUNNINGS
1.3 PERCENT RERUNS

COMMENTS:

THE MARCH 10, 1981, RUNNING FOR THE SECTION FROM K 265 TO L 265 (SPSN 442 TO SPSN 443) HAD A 2-CM ERROR WHICH WAS MANUALLY CORRECTED IN THE HGZ FILE PRIOR TO RUNNING THE FIELD ABSTRACT. THE ERROR WAS CAUSED BY USE OF A 2-CM PLUG ON ONLY THE BACKSIGHT IN THE LAST SETUP OF THE SECTION RUNNING.

PROJECT TITLE: 3.5 MI N OF PICACHO VIA SUNNYSLOPE PERRYVILLE AND HASSAYAMPA TO GILA

BEND AZ

AGENCY:NGS

STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETICTHE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 476.655 METERS FOR: A 364
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0005	CZ1065	A 364	C	0.00	476.65500		32 45 37 N	111 30 37 W
0006	AO5331	TBM 41 L		0.78	476.42260	2	32 46 03 N	111 30 37 W
0007	CZ1066	A 69	C	1.60	473.37018	3	32 46 31 N	111 30 37 W
0008	CZ1068	PEAK 2 RM 2	C	2.83	470.66915	2	32 47 12 N	111 30 38 W
0009	CZ1069	PEAK 2	C	2.84	470.64269	2	32 47 12 N	111 30 38 W
0010	CZ1070	PEAK 2 RM 1	C	2.86	470.70720	2	32 47 12 N	111 30 38 W
0011	CZ1071	B 364	B	3.84	468.77254	2	32 47 44 N	111 30 37 W
0012	CZ1072	Z 68	D	4.80	466.31442	2	32 48 16 N	111 30 37 W
0013	AO5332	TBM 44 L		5.49	465.92250	2	32 48 39 N	111 30 37 W
0014	CZ1073	X 283	C	6.38	462.45954	2	32 49 09 N	111 30 37 W
0015	CZ1074	RV 329	C	7.42	460.78589	2	32 49 43 N	111 30 36 W
0016	CZ1077	Y 68	D	7.97	458.77857	2	32 50 01 N	111 30 36 W
0017	AO5333	TBM 45 L		8.78	457.63697	2	32 50 28 N	111 30 36 W
0018	CZ1078	V 283	C	9.62	455.77702	2	32 50 55 N	111 30 35 W
0019	CZ1079	RV 328	C	9.83	454.47416	2	32 51 02 N	111 30 35 W
0020	CZ1080	RV 327	C	11.01	452.10836	2	32 51 41 N	111 30 35 W
0021	CZ1081	X 68	C	11.51	450.53056	2	32 51 57 N	111 30 36 W
0022	AO5334	TBM 47 L		12.13	450.42813	2	32 51 52 N	111 30 15 W
0023	CZ0376	U 283	B	12.83	451.17035	2	32 51 46 N	111 29 51 W
0024	CZ0377	C 364	B	13.65	451.37840	2	32 51 44 N	111 29 17 W
0025	CZ0378	T 283	C	14.05	449.98634	2	32 51 58 N	111 29 16 W
0026	AO5335	TBM 46 L		14.86	448.97220	2	32 52 21 N	111 29 02 W
0027	CZ0379	S 283	C	15.69	449.81774	2	32 52 45 N	111 28 48 W
0028	AO5336	TBM 48 L		16.49	449.06658	2	32 53 12 N	111 28 48 W
0029	CZ0381	D 364	C	17.27	450.02380	2	32 53 38 N	111 28 48 W
0030	AO5337	TBM 49 L		18.12	448.51498	2	32 54 06 N	111 28 47 W
0031	CZ0382	Q 283	C	18.88	449.38902	2	32 54 30 N	111 28 47 W
0032	AO5338	TBM 54 L		19.61	452.93453	2	32 54 30 N	111 28 18 W
0033	CZ0383	P 283	C	20.46	459.01899	2	32 54 31 N	111 27 45 W
0034	AO5339	TBM 53 L		21.17	457.77347	2	32 54 54 N	111 27 45 W
0035	CZ0384	N 283	C	22.02	458.86780	2	32 55 22 N	111 27 45 W
0036	AO5340	TBM 52 L		22.76	458.29775	2	32 55 42 N	111 27 45 W
0037	CZ0385	E 364	B	23.63	456.06722	3	32 56 06 N	111 27 45 W
0038	AO5341	TBM 51 L		24.22	455.46947	2	32 56 20 N	111 27 34 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 476.655 METERS FOR: A 364
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0039	CZ0387	L 283	C	25.08	459.43458	2	32 56 41 N	111 27 17 W
0040	AO5342	TBM 50 L		25.87	459.18944	2	32 57 07 N	111 27 17 W
0041	CZ0388	K 283	C	26.68	457.00209	2	32 57 33 N	111 27 17 W
0042	AO5343	TBM 55 L		27.52	456.19586	2	32 58 00 N	111 27 17 W
0043	CZ0389	J 283	D	28.27	455.30447	2	32 58 25 N	111 27 17 W
0044	AO5344	TBM 58 L		28.90	456.51421	2	32 58 25 N	111 26 52 W
0045	CZ0390	H 283	C	29.80	460.10863	2	32 58 25 N	111 26 17 W
0046	AO5345	TBM 57 L		30.60	458.15561	2	32 58 51 N	111 26 17 W
0047	CZ0391	G 283	C	31.42	455.32758	2	32 59 18 N	111 26 16 W
0048	AO5346	TBM 56 L		32.31	458.68255	2	32 59 17 N	111 25 41 W
0049	CZ0392	F 283	C	33.17	463.65437	2	32 59 17 N	111 25 08 W
0050	CZ0393	F 364	B	34.11	462.32241	2	32 59 44 N	111 24 57 W
0051	DU0523	E 283	C	35.02	457.38674	2	33 00 06 N	111 24 35 W
0052	DU0524	D 283	C	36.11	464.67774	2	33 00 09 N	111 23 50 W
0053	AO5347	TBM 59 L		36.99	464.72370	2	33 00 30 N	111 23 33 W
0054	DU0525	C 283	C	37.77	466.55932	2	33 00 48 N	111 23 17 W
0055	DU0526	DADAMS RM 1	C	38.31	462.67247	2	33 01 02 N	111 23 46 W
0056	DU0527	DADAMS RM 2	C	38.33	462.84428	2	33 01 02 N	111 23 46 W
0057	DU0528	DADAMS	C	38.34	463.03744	2	33 01 02 N	111 23 46 W
0058	DU0529	1513.65	D	38.82	461.34932	3	33 01 06 N	111 23 14 W
0059	DU0532	DADAMS RM 3 AZIMUTH	C	39.15	463.92113	2	33 01 11 N	111 22 59 W
0060	DU0533	1524.07	D	39.27	464.53115	2	33 01 17 N	111 22 54 W
0061	DU0536	E 59	B	39.55	462.64650	2	33 01 21 N	111 23 14 W
0062	DU0537	1493	A	40.82	455.01634	2	33 01 56 N	111 23 09 W
0063	DU0538	FLORENCE	C	40.85	454.04230	2	33 01 57 N	111 23 07 W
0064	DU0539	G 364	B	41.91	454.47774	2	33 02 14 N	111 22 35 W
0065	DU0540	HWY89 STA 1480.17	C	42.56	450.89427	2	33 02 42 N	111 22 43 W
0066	DU0541	HWY89 STA 1488.83	B	43.49	453.64762	2	33 03 16 N	111 22 42 W
0067	DU0542	HWY89 STA 1488.82	B	43.94	453.65713	4	33 03 16 N	111 22 42 W
0068	DU0543	Y 282	C	44.70	460.06002	2	33 03 31 N	111 22 52 W
0069	AO5348	TBM 60 L		45.56	454.97778	2	33 03 23 N	111 23 24 W
0070	DU0544	X 282	C	46.38	453.14051	2	33 03 15 N	111 23 54 W
0071	AO5349	TBM 61 L		46.70	455.38006	2	33 03 16 N	111 24 06 W
0072	AO5350	TBM 62 L	1	47.05	492.28705	3	33 03 17 N	111 24 19 W
0073	DU0545	POSTEN RM 2	A 1	47.29	531.01445	2	33 03 18 N	111 24 29 W
0074	DU0546	POSTEN	A 1	47.30	532.68686	2	33 03 18 N	111 24 29 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 476.655 METERS FOR: A 364
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0075	DU0547	POSTEN RM 1	A 1	47.31	533.69290	2	33 03 18 N	111 24 29 W
0071	AO5349	TBM 61 L	*	46.70	455.38006		33 03 16 N	111 24 06 W
0076	AO5351	TBM 66 L		47.35	453.37488	2	33 03 18 N	111 24 29 W
0077	DU0548	W 282	C	48.05	455.59727	2	33 03 20 N	111 24 55 W
0078	AO5352	TBM 65 L		48.72	454.59289	2	33 03 28 N	111 25 19 W
0079	DU0549	V 282	C	49.56	460.84254	2	33 03 39 N	111 25 48 W
0080	AO5353	TBM 64 L		50.43	464.88457	2	33 04 02 N	111 26 12 W
0081	DU0550	Q 68	C	51.24	464.34791	2	33 04 24 N	111 26 35 W
0082	AO5354	TBM 63 L		51.99	465.55386	2	33 04 43 N	111 26 53 W
0083	DU0551	P 68	C	52.84	462.26437	2	33 05 05 N	111 27 14 W
0084	AO5355	TBM 67 L		53.67	461.28770	2	33 05 26 N	111 27 33 W
0085	DU0555	H 364	C	54.33	460.65386	2	33 05 43 N	111 27 49 W
0086	DU0556	J 364	A 1	54.66	464.87320	2	33 05 50 N	111 27 57 W
0087	DU0557	K 364	A 1	54.77	471.36553	2	33 05 53 N	111 28 00 W
0085	DU0555	H 364	C *	54.33	460.65386		33 05 43 N	111 27 49 W
0089	AO5356	TBM 69 L		55.24	462.43048	2	33 06 06 N	111 28 11 W
0090	DU0558	N 68	C	56.08	461.12719	2	33 06 27 N	111 28 32 W
0091	AO5357	TBM 68 L		56.75	461.85742	2	33 06 44 N	111 28 48 W
0092	DU0559	117+88.69	C	57.59	462.24070	2	33 07 05 N	111 29 09 W
0093	AO5358	TBM 70 L		58.40	463.25028	2	33 07 26 N	111 29 29 W
0094	DU0560	M 68	C	59.26	461.96823	2	33 07 48 N	111 29 50 W
0095	DU0562	MAGMA	D	59.83	464.48550	2	33 08 03 N	111 30 04 W
0096	DU0564	MAGMA RM 2	D	59.84	463.93332	2	33 08 02 N	111 30 04 W
0097	DU0565	MAGMA RM 3	C	59.85	463.65196	2	33 08 02 N	111 30 04 W
0098	DU0668	T 282	C	60.79	462.37837	2	33 08 27 N	111 30 28 W
0099	AO5359	TBM 71 L		61.57	463.10899	2	33 08 47 N	111 30 47 W
0100	DU0669	L 68	C	62.41	460.48041	2	33 09 09 N	111 31 07 W
0101	AO5360	TBM 72 L		63.28	459.93448	2	33 09 30 N	111 31 27 W
0102	DU0670	L 364	B	64.07	458.92178	2	33 09 50 N	111 31 45 W
0103	AO5361	TBM 73 L		64.92	458.20512	2	33 10 13 N	111 32 08 W
0104	DU0671	M 364	C	65.57	455.54951	2	33 10 30 N	111 32 25 W
0105	AO5362	TBM 181 C		66.41	455.23657	3	33 10 51 N	111 32 45 W
0106	DU0672	Q 282	C	67.21	454.37059	2	33 11 12 N	111 33 05 W
0107	AO5363	TBM 180 C		67.99	452.74321	2	33 11 30 N	111 33 23 W
0108	DU0673	J 68	C	68.79	451.53850	3	33 11 50 N	111 33 41 W
0109	AO5364	TBM 179 C		69.40	450.12952	3	33 12 05 N	111 33 55 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 476.655 METERS FOR: A 364
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0110	DU0675	N 364	C	70.33	448.64076	2	33 12 28 N	111 34 17 W
0111	AO5365	TBM 178 C		71.12	446.99886	2	33 12 48 N	111 34 36 W
0112	DU0676	P 364	B	71.91	444.24540	2	33 13 08 N	111 34 55 W
0113	AO5366	TBM 177 C		72.83	442.30522	2	33 13 31 N	111 35 17 W
0114	DU0678	Q 364	C	73.64	440.70838	2	33 13 52 N	111 35 37 W
0115	AO5367	TBM 176 C		74.32	438.24587	2	33 14 06 N	111 36 00 W
0116	DU1573	G 68	C	75.14	435.09878	2	33 14 25 N	111 36 29 W
0117	AO5368	TBM 175 C		75.74	432.64439	2	33 14 34 N	111 36 45 W
0118	DU1572	R 364	C	76.42	431.14089	3	33 14 47 N	111 37 05 W
0119	AO5369	TBM 174 C		77.30	429.43745	2	33 15 06 N	111 37 34 W
0120	DU0681	S 364	C	78.13	426.93434	2	33 15 23 N	111 38 01 W
0121	DU0683	K 282	B	78.86	425.84540	2	33 15 45 N	111 38 01 W
0122	AO5370	TBM 173 C		79.68	425.35287	3	33 16 12 N	111 38 02 W
0123	DU0685	T 364	B	80.50	425.27911	4	33 16 38 N	111 38 02 W
0124	AO5371	TBM 172 C		81.29	424.57803	2	33 17 04 N	111 38 02 W
0125	DU0687	U 364	C	82.13	423.09064	2	33 17 32 N	111 38 03 W
0126	AO5372	TBM 171 C		82.88	421.78332	2	33 17 56 N	111 38 04 W
0127	DU0689	V 364	C	83.71	421.61746	3	33 18 23 N	111 38 05 W
0128	AO5373	TBM 170 C		84.49	421.88516	2	33 18 49 N	111 38 05 W
0129	DU0692	W 364	C	85.31	422.87878	2	33 19 16 N	111 38 04 W
0130	AO5374	TBM 169 C		86.06	423.47620	2	33 19 41 N	111 38 04 W
0131	DU0694	1394	D	86.89	425.12369	2	33 20 08 N	111 38 05 W
0132	AO5375	TBM 168 C		87.57	420.64551	2	33 20 08 N	111 38 31 W
0133	DU0695	D 282	C	88.38	417.78176	2	33 20 07 N	111 39 03 W
0134	AO5376	TBM 167 C		89.30	411.88935	2	33 20 08 N	111 39 39 W
0135	DU0699	X 364	C	90.08	409.93451	2	33 20 09 N	111 40 10 W
0136	AO5377	TBM 166 C		90.87	409.60029	2	33 20 34 N	111 40 11 W
0137	DU0700	ROAD ELLIOT STA 1355	C	91.70	411.41003	2	33 21 00 N	111 40 12 W
0138	AO5378	TBM 165 C		92.42	411.68924	2	33 21 24 N	111 40 12 W
0139	DU0701	A 282	C	93.25	413.77140	2	33 21 52 N	111 40 11 W
0140	AO5379	TBM 164 C		93.98	416.53890	2	33 22 17 N	111 40 12 W
0141	DU0702	Y 364	D	94.81	420.73291	2	33 22 46 N	111 40 13 W
0142	DU0703	Z 281	D	94.82	420.98960	2	33 22 47 N	111 40 14 W
0143	AO5380	TBM 163 C		95.41	416.80970	2	33 22 47 N	111 40 36 W
0144	DU0706	TL AJ 9	C	96.09	414.15544	2	33 22 46 N	111 41 02 W
0145	AO5381	TBM 162 C		96.87	415.79190	4	33 23 11 N	111 41 02 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

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 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0146	DU0707	TL AJ 8	C	97.69	419.34465	2	33 23 38 N	111 41 03 W
0147	DU0708	Z 364	B	98.47	421.32720	2	33 24 03 N	111 41 01 W
0148	DU0710	W 281	C	99.23	425.29542	2	33 24 29 N	111 41 01 W
0149	DU0711	HWY 60 STA 423+36.5	C	100.05	431.36434	2	33 24 56 N	111 41 00 W
0150	DU0640	HWY 60 STA 423+66	D	100.08	431.45594	2	33 24 57 N	111 41 00 W
0151	AO5382	TBM 161 C		100.89	437.50218	2	33 25 23 N	111 41 00 W
0152	DU0644	J 269	C	101.85	444.99355	2	33 25 54 N	111 41 01 W
0153	DU0651	TL AJ 5	C	102.44	450.32141	2	33 26 13 N	111 41 00 W
0154	AO5383	TBM 160 C		103.17	456.64639	2	33 26 38 N	111 41 00 W
0155	DU0652	H 269	C	104.00	463.74122	2	33 27 06 N	111 41 01 W
0156	AO5384	TBM 158 C	1	104.81	473.10110	4	33 27 05 N	111 40 28 W
0157	DU0653	B 365	A 1	105.21	478.48872	2	33 27 04 N	111 40 11 W
0158	DU0654	A 365	A 1	105.42	473.19875	2	33 26 54 N	111 40 24 W
0155	DU0652	H 269	C *	104.00	463.74122		33 27 06 N	111 41 01 W
0159	DU0655	F 269	C	104.90	469.01386	2	33 27 32 N	111 41 01 W
0160	DU0657	TL AJ 3	C	105.63	473.80429	4	33 27 59 N	111 41 01 W
0161	AO5385	TBM 159 C		106.47	478.00844	2	33 28 27 N	111 41 00 W
0162	DU0658	TL AJ 2	C	107.22	477.11756	2	33 28 52 N	111 41 00 W
0163	DU0659	C 365	C 1	107.35	478.12876	3	33 28 50 N	111 40 58 W
0162	DU0658	TL AJ 2	C *	107.22	477.11756		33 28 52 N	111 41 00 W
0164	DU0660	D 269	C	108.23	479.61734	2	33 29 21 N	111 40 59 W
0165	DU0661	TL AJ 1	C	108.86	469.05046	3	33 29 43 N	111 41 01 W
0166	AO5386	TBM 157 C		109.25	463.19937	2	33 29 54 N	111 41 05 W
0167	AO5387	TBM 156 C		109.82	460.01706	2	33 30 09 N	111 41 10 W
0168	DU1056	C 269	A 1	109.94	467.47484	2	33 30 17 N	111 41 01 W
0167	AO5387	TBM 156 C	*	109.82	460.01706		33 30 09 N	111 41 10 W
0169	AO5388	TBM 155 C		110.62	411.11495	2	33 30 30 N	111 41 18 W
0170	DU1057	1325.21	D	111.34	403.80697	2	33 30 50 N	111 41 25 W
0171	DU1058	1325.24	D	111.35	403.81896	2	33 30 50 N	111 41 25 W
0172	DU1060	GRANITE REEF RM 1	D	111.36	403.80516	2	33 30 50 N	111 41 25 W
0173	DU1061	1325.16	D	111.37	403.79714	2	33 30 50 N	111 41 25 W
0174	DU1062	1325.22	D	111.38	403.81177	2	33 30 50 N	111 41 25 W
0175	DU1063	1314.19	D	111.40	400.44382	3	33 30 50 N	111 41 25 W
0176	DU1064	1314.14	D	111.42	400.41894	3	33 30 50 N	111 41 25 W
0177	DU1065	1312.11	B	111.86	399.83406	2	33 30 44 N	111 41 43 W
0178	DU1071	G 269	B	112.45	402.27334	2	33 30 58 N	111 41 46 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0179	AO5389	TBM 154 C		113.69	398.85815	2	33 30 43 N	111 42 26 W
0180	DU1072	B 269	C	114.29	400.46860	2	33 30 36 N	111 42 45 W
0181	AO5390	TBM 153 C		115.16	399.92046	2	33 30 32 N	111 43 18 W
0182	DU1073	A 269	D	115.95	397.67901	2	33 30 29 N	111 43 49 W
0183	DU1074	Z 268	D	116.69	397.06005	2	33 30 28 N	111 44 18 W
0184	AO5391	TBM 152 C		117.62	397.51993	2	33 30 41 N	111 44 51 W
0185	DU1075	X 268	C	118.39	395.89638	2	33 30 52 N	111 45 18 W
0186	AO5392	TBM 151 C		119.16	397.08443	2	33 30 45 N	111 45 41 W
0187	DU1076	W 268	C	120.03	395.08934	2	33 30 37 N	111 46 07 W
0188	AO5393	TBM 150 C		120.75	397.08955	2	33 30 34 N	111 46 31 W
0189	DU1077	V 268	C	121.65	394.21470	2	33 30 31 N	111 47 00 W
0190	DU1078	B 367	B	122.34	394.92193	2	33 30 21 N	111 47 24 W
0191	DU1079	U 268	C	123.10	394.17189	2	33 30 14 N	111 47 49 W
0192	AO5394	TBM 149 C		123.91	396.25802	2	33 30 12 N	111 48 16 W
0193	DU1080	LANDING RM 2	D	124.67	395.48205	2	33 30 10 N	111 48 41 W
0194	DU1081	LANDING RM 1	D	124.69	397.14884	2	33 30 10 N	111 48 41 W
0195	DU1082	LANDING	D	124.70	398.17400	2	33 30 10 N	111 48 41 W
0193	DU1080	LANDING RM 2	D	*	124.67	395.48205	33 30 10 N	111 48 41 W
0197	AO5395	TBM 148 C		125.12	394.42725	2	33 30 15 N	111 48 57 W
0198	DU1083	Y 268	D	125.79	394.19549	2	33 30 22 N	111 49 22 W
0199	AO5396	TBM 147 C		126.58	394.21345	3	33 30 32 N	111 49 50 W
0200	DU1084	T 268	C	127.37	392.49549	4	33 30 43 N	111 50 19 W
0201	AO5397	TBM 146 C		128.35	393.27066	2	33 31 00 N	111 50 51 W
0202	DU1085	S 268	C	129.29	392.11678	4	33 31 17 N	111 51 23 W
0203	DU1086	C 367	D	129.34	393.03569	2	33 31 17 N	111 51 24 W
0204	AO5398	TBM 145 C		130.31	392.14570	2	33 31 28 N	111 51 57 W
0205	DU1087	R 268	D	131.09	391.28118	2	33 31 37 N	111 52 25 W
0206	AO5399	TBM 144 C		131.88	391.87875	2	33 31 44 N	111 52 53 W
0207	DU1088	A 367	B	132.82	391.01030	2	33 31 53 N	111 53 29 W
0208	DU1089	V 365	C	133.61	391.10848	2	33 31 57 N	111 54 01 W
0209	AO5400	TBM 143 C		134.34	390.71129	2	33 32 03 N	111 54 26 W
0210	DU1091	M 268	D	134.98	390.91870	2	33 32 09 N	111 54 49 W
0211	DU1092	L 268	D	135.55	389.83102	2	33 31 52 N	111 54 54 W
0212	DU1096	Y 365	D	136.35	389.85371	2	33 31 26 N	111 54 52 W
0213	DU1097	159+15	D	137.31	396.36032	2	33 31 26 N	111 55 30 W
0214	AO5401	TBM 142 C		138.13	404.49984	3	33 31 26 N	111 56 02 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0215	DU1098	J 268	C	138.91	414.61924	2	33 31 26 N	111 56 33 W
0216	AO5402	TBM 141 C		139.64	425.45642	2	33 31 26 N	111 57 02 W
0217	DU1099	H 268	C	140.49	431.41332	2	33 31 26 N	111 57 35 W
0218	AO5403	TBM 140 C		141.33	426.98514	2	33 31 26 N	111 58 08 W
0219	DU1100	U 365	A 1	141.44	441.31480	2	33 31 23 N	111 58 09 W
0218	AO5403	TBM 140 C	*	141.33	426.98514		33 31 26 N	111 58 08 W
0220	DU1102	W 365	D	142.49	398.01986	2	33 31 26 N	111 58 53 W
0221	DU1103	X 365	B	143.57	391.03216	2	33 31 01 N	111 59 09 W
0222	AO5404	TBM 139 C		144.04	388.02886	2	33 31 01 N	111 59 27 W
0223	DV0002	Z 365	C	144.88	385.67383	2	33 31 02 N	111 59 58 W
0224	DV0004	S 365	B	146.06	380.82448	3	33 31 05 N	112 00 43 W
0225	DV0005	1247.88	B	146.99	380.22642	3	33 31 20 N	112 01 15 W
0226	DV0006	Z 267	B	147.06	380.20433	2	33 31 20 N	112 01 18 W
0227	DV0008	T 365	D	147.76	379.90059	2	33 31 25 N	112 01 40 W
0228	DV0009	1244.84	B	148.50	379.30618	2	33 31 37 N	112 02 01 W
0229	DV0011	R 365	B	149.06	379.24821	2	33 31 51 N	112 02 16 W
0230	DV0012	1243.30	B	150.33	378.82472	2	33 32 22 N	112 02 47 W
0231	DV0013	1243.17	B	150.37	378.93164	2	33 32 24 N	112 02 49 W
0232	DV0014	1242.78 RESET	B	151.44	378.83179	2	33 32 43 N	112 03 20 W
0233	DV0015	P 365	B	152.42	378.12054	2	33 33 09 N	112 03 40 W
0234	DV0017	1239.79	B	153.08	377.72638	2	33 33 26 N	112 03 51 W
0235	DV0018	1238.41	B	153.11	377.48759	2	33 33 27 N	112 03 52 W
0236	DV0026	1237.40	B	154.09	377.20513	2	33 33 43 N	112 04 22 W
0237	DV0027	Q 365	B	154.91	376.82372	2	33 34 03 N	112 04 47 W
0238	DV0028	S 267	D	155.15	376.56133	2	33 34 05 N	112 04 54 W
0239	DV0031	R 267	B	155.96	375.87039	2	33 34 09 N	112 05 25 W
0240	DV0032	1234.73	B	156.78	376.34701	3	33 34 17 N	112 05 56 W
0241	AO5405	TBM 138 C		157.54	375.62814	2	33 34 17 N	112 06 24 W
0242	DV0036	1235.86	D	158.43	376.36476	2	33 34 16 N	112 06 57 W
0243	DV0037	K 267	B	159.24	375.08994	2	33 34 12 N	112 07 29 W
0244	DV0042	N 365	B	160.07	374.82127	2	33 34 19 N	112 08 01 W
0245	AO5406	TBM 137 C		161.16	373.54677	2	33 34 40 N	112 08 36 W
0246	DV0043	U 366	B	161.97	373.84592	3	33 34 55 N	112 09 02 W
0247	AO5407	TBM 136 C		162.74	375.31240	2	33 35 20 N	112 09 02 W
0248	DV0044	Z 366	C	163.57	377.76146	3	33 35 48 N	112 09 02 W
0249	AO5408	TBM 135 C		164.30	379.64549	3	33 36 11 N	112 09 02 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0250	DV0045	V 366	B	165.14	383.27657	2	33 36 37 N	112 09 02 W
0251	AO5409	TBM 134 C		165.89	385.73267	2	33 37 02 N	112 09 02 W
0252	DV0046	W 366	C	166.72	388.71114	2	33 37 30 N	112 09 02 W
0253	AO5410	TBM 133 C		167.42	390.62544	2	33 37 53 N	112 09 02 W
0254	DV0047	X 366	C	168.26	392.77117	2	33 38 20 N	112 09 03 W
0255	AO5411	TBM 132 C		169.01	390.92134	2	33 38 20 N	112 09 32 W
0256	DV0051	Y 366	C	169.85	387.09080	4	33 38 19 N	112 10 05 W
0257	AO5412	TBM 131 C		170.59	383.24035	4	33 38 19 N	112 10 35 W
0258	DV0053	D 365	B	171.43	381.82738	2	33 38 18 N	112 11 08 W
0259	AO5413	TBM 130 C		172.40	384.99382	2	33 38 50 N	112 11 07 W
0260	DV0055	X 266	C	173.24	385.71016	3	33 39 18 N	112 11 07 W
0261	DV0057	BM	B	173.25	386.89822	2	33 39 18 N	112 11 07 W
0262	AO5414	TBM 129 C		173.61	386.33656	2	33 39 30 N	112 11 08 W
0263	DV0058	E 365	C	174.72	388.57824	2	33 40 07 N	112 11 11 W
0264	AO5415	TBM 128 C		175.37	385.05889	2	33 40 06 N	112 11 36 W
0265	DV0060	F 365	D	176.19	383.02791	2	33 40 05 N	112 12 07 W
0266	AO5416	TBM 127 C		177.07	382.27435	2	33 40 03 N	112 12 39 W
0267	DV0061	U 266	C	177.93	383.72595	2	33 40 01 N	112 13 11 W
0268	AO5417	TBM 126 C		178.63	382.82684	2	33 40 01 N	112 13 38 W
0269	DV0062	G 365	B	179.55	382.61155	2	33 40 00 N	112 14 14 W
0270	AO5418	TBM 125 C		180.35	381.47947	3	33 40 01 N	112 14 45 W
0271	DV0063	H 365	B	181.13	380.70684	2	33 40 01 N	112 15 16 W
0272	DV0064	J 365	B	181.50	380.89165	2	33 40 01 N	112 15 30 W
0273	AO5419	TBM 124 C		182.00	380.49531	2	33 40 01 N	112 15 50 W
0274	DV0066	R 266	C	182.69	380.45459	2	33 40 01 N	112 16 17 W
0275	AO5420	TBM 123 C		183.52	378.23749	2	33 40 02 N	112 16 49 W
0276	DV0067	K 365	C	184.31	378.12361	2	33 40 02 N	112 17 20 W
0277	AO5421	TBM 122 C		185.07	377.50130	2	33 40 27 N	112 17 20 W
0278	DV0069	L 365	C	185.90	380.21530	2	33 40 55 N	112 17 20 W
0279	DV0070	M 365	B	187.18	383.51656	2	33 41 31 N	112 17 30 W
0280	DV0071	N 266	C	188.27	374.68098	2	33 42 04 N	112 17 31 W
0281	AO5422	TBM 121 C		189.23	380.98978	2	33 42 34 N	112 17 22 W
0282	DV0072	M 266	C	190.07	382.05614	2	33 43 00 N	112 17 14 W
0283	DV0073	T 366	A	191.20	385.99363	2	33 43 35 N	112 17 11 W
0284	DV0074	L 266	C	191.74	389.49031	2	33 43 49 N	112 17 23 W
0285	AO5423	TBM 120 C		192.15	395.17873	2	33 43 55 N	112 17 36 W

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							LATITUDE	LONGITUDE
0286	DV0076	S 366	B	192.91	401.48557	2	33 44 06 N	112 17 59 W
0287	DV0077	R 366	B	194.16	412.57441	2	33 43 32 N	112 18 22 W
0288	AO5424	TBM 119 C		194.93	409.98193	2	33 43 33 N	112 18 47 W
0289	DV0078	J 266	D	195.46	410.38305	2	33 43 34 N	112 19 04 W
0290	AO5425	TBM 118 C		196.28	407.37926	2	33 43 29 N	112 19 35 W
0291	DV0079	B 266	D	197.12	409.77296	2	33 43 24 N	112 20 06 W
0292	DV0080	Q 366	A 1	198.02	423.88468	2	33 43 31 N	112 20 37 W
0291	DV0079	B 266	D *	197.12	409.77296		33 43 24 N	112 20 06 W
0293	DV0081	A 266	C	198.23	408.54387	2	33 43 04 N	112 20 42 W
0294	AO5426	TBM 117 C		198.99	408.35802	2	33 42 52 N	112 21 09 W
0295	DV0083	P 366	B	199.83	408.40231	2	33 42 38 N	112 21 38 W
0296	AO5427	TBM 116 C		200.39	407.61149	2	33 42 30 N	112 21 57 W
0297	DV0084	W 265	D	201.20	408.73765	2	33 42 19 N	112 22 24 W
0298	AO5428	TBM 115 C		202.35	409.54679	2	33 42 03 N	112 23 03 W
0299	DV0085	V 265	C	203.31	407.48018	3	33 41 49 N	112 23 36 W
0300	DV0086	N 366	D	204.16	407.91231	2	33 41 31 N	112 24 01 W
0301	DV0087	G 366	B	205.30	408.24958	2	33 41 08 N	112 24 36 W
0302	DV0088	U 265	D	205.39	408.87973	2	33 41 07 N	112 24 34 W
0303	AO5429	TBM 114 C		206.05	407.38571	2	33 40 54 N	112 24 54 W
0304	DV0094	H 366	D	206.88	408.48272	2	33 40 38 N	112 25 19 W
0305	DV0095	L 366	B	207.52	406.86288	2	33 40 20 N	112 25 33 W
0306	AO5430	TBM 113 C		208.19	406.89337	2	33 40 02 N	112 25 46 W
0307	DV0096	J 366	D	209.17	407.46205	2	33 39 36 N	112 26 05 W
0308	AO5431	TBM 112 C		209.94	405.96920	2	33 39 24 N	112 26 31 W
0309	DV0097	R 265	D	210.78	406.71122	2	33 39 12 N	112 27 00 W
0310	AO5432	TBM 111 C		211.73	405.86393	4	33 38 44 N	112 27 07 W
0311	DV0098	Q 265	C	212.58	405.27188	2	33 38 19 N	112 27 14 W
0312	DV0099	K 366	B	213.61	405.34920	2	33 37 51 N	112 27 25 W
0313	DV0100	P 265	B	214.50	405.38632	2	33 37 25 N	112 27 26 W
0314	AO5433	TBM 110 C		215.34	404.76727	2	33 36 59 N	112 27 28 W
0315	DV0101	N 265	C	216.12	404.39802	2	33 36 35 N	112 27 29 W
0316	AO5434	TBM 109 C		217.27	404.47903	2	33 36 01 N	112 27 49 W
0317	DV0102	M 265	B	217.94	404.79670	2	33 35 41 N	112 28 01 W
0318	AO5435	TBM 108 C		218.80	403.91216	2	33 35 14 N	112 28 05 W
0319	DV0103	L 265	C	219.61	397.87677	2	33 34 48 N	112 28 09 W
0320	AO5436	TBM 107 C		220.31	392.65198	2	33 34 25 N	112 28 09 W

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE	
-	0321	DV0104	K 265	D	221.15	389.16465	2	33 33 57 N	112 28 09 W
-	0322	AO5437	TBM 106 C		221.88	380.57367	2	33 33 33 N	112 28 09 W
-	0323	DV0105	J 265	C	222.72	375.03490	2	33 33 06 N	112 28 08 W
-	0324	DV0106	M 366	B	223.31	370.05565	2	33 32 47 N	112 28 08 W
-	0325	DV0107	H 265	B	224.35	365.02499	2	33 32 13 N	112 28 09 W
-	0326	AO5438	TBM 105 C		225.19	360.76224	2	33 31 45 N	112 28 08 W
-	0327	DV0108	G 265	C	226.03	355.78708	2	33 31 18 N	112 28 08 W
-	0328	AO5439	TBM 104 C		226.67	353.55158	2	33 30 57 N	112 28 08 W
-	0329	DV0109	F 265	C	227.51	349.69480	2	33 30 30 N	112 28 08 W
-	0330	AO5440	TBM 103 C		228.27	348.78357	2	33 30 04 N	112 28 08 W
-	0331	DV0548	E 265	B	229.11	345.27970	2	33 29 36 N	112 28 09 W
-	0332	DV0549	D 265	C	229.88	338.60353	3	33 29 37 N	112 27 39 W
-	0333	AO5441	TBM 102 C		230.63	335.27804	2	33 29 12 N	112 27 39 W
-	0334	DV0550	C 265	C	231.46	330.49250	2	33 28 45 N	112 27 38 W
-	0335	DV0551	BROWN AZ MK 3	C	231.48	330.71178	2	33 28 46 N	112 27 37 W
-	0336	AO5442	TBM 101 C		232.31	326.10328	2	33 28 19 N	112 27 37 W
-	0337	DV0552	E 366	C	233.12	320.30902	2	33 27 52 N	112 27 37 W
-	0338	DV0554	F 366	B	233.14	320.39037	2	33 27 52 N	112 27 37 W
-	0339	AO5443	TBM 100 C		234.04	312.00739	2	33 27 22 N	112 27 37 W
-	0340	DV0555	A 265	D	235.15	306.61172	2	33 26 46 N	112 27 38 W
-	0341	DV0557	265 X 00	D	236.30	298.38759	3	33 26 08 N	112 27 39 W
-	0342	AO5444	TBM 99 C		237.03	299.39717	2	33 26 08 N	112 28 07 W
-	0343	DV0558	213 X 24	D	237.87	301.49055	2	33 26 08 N	112 28 40 W
-	0344	AO5445	TBM 96 C		238.68	304.51692	2	33 26 08 N	112 29 12 W
-	0345	DV0559	S 264	C	239.49	306.96024	2	33 26 08 N	112 29 44 W
-	0346	DV0708	TL ZJ 5	C	240.23	309.73755	2	33 26 08 N	112 30 12 W
-	0347	AO5446	TBM 97 C		241.07	312.73669	2	33 26 08 N	112 30 45 W
-	0348	DV0709	D 366	B	241.82	316.86871	2	33 26 08 N	112 31 14 W
-	0349	AO5447	TBM 98 C		242.80	322.74638	2	33 26 08 N	112 31 51 W
-	0350	DV0710	P 264	C	243.52	325.66998	3	33 26 08 N	112 32 18 W
-	0351	AO5448	TBM 92 C		244.34	326.72370	2	33 26 08 N	112 32 49 W
-	0352	DV0713	N 264	C	244.95	327.82135	1	33 26 08 N	112 33 13 W
-	0353	AO5449	TBM 93 C		245.78	327.28331	2	33 26 08 N	112 33 46 W
-	0354	DV0714	M 264	C	246.67	329.03708	2	33 26 09 N	112 34 21 W
-	0355	AO5450	TBM 94 C		247.52	331.80829	2	33 26 08 N	112 34 55 W
-	0356	DV0715	L 264	C	248.31	333.26914	2	33 26 08 N	112 35 26 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

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 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
✓ 0357	AO5451	TBM 95 C		249.16	331.67216	2	33 26 12 N	112 35 58 W
✓ 0358	DV0716	K 264	C	249.84	334.41151	3	33 26 15 N	112 36 24 W
✓ 0359	DV0717	C 366	A 1	250.16	350.28836	2	33 26 09 N	112 36 37 W
✓ 0358	DV0716	K 264	C *	249.84	334.41151		33 26 15 N	112 36 24 W
✓ 0360	AO5452	TBM 91 C		250.66	345.39720	4	33 26 33 N	112 36 47 W
0361	DV0718	J 264	C	251.45	351.46003	2	33 26 50 N	112 37 09 W
0362	DV0719	W 362	A 1	251.76	360.16014	2	33 26 40 N	112 37 09 W
0361	DV0718	J 264	C *	251.45	351.46003		33 26 50 N	112 37 09 W
0363	AO5453	TBM 90 C		252.26	352.11490	4	33 26 57 N	112 37 39 W
0364	DV0720	H 264	C	253.15	350.07917	2	33 27 06 N	112 38 11 W
0365	AO5454	TBM 87 C		253.98	349.72200	2	33 27 14 N	112 38 42 W
0366	DV0721	TL ZB 4	C 1	254.69	346.42065	2	33 27 00 N	112 38 31 W
0365	AO5454	TBM 87 C	C *	253.98	349.72200		33 27 14 N	112 38 42 W
0367	DV0722	G 264	C	254.76	350.25183	2	33 27 23 N	112 39 11 W
0368	AO5455	TBM 88 C		255.59	349.22575	2	33 27 32 N	112 39 42 W
0369	DV0723	A 264	C	256.42	349.36019	3	33 27 40 N	112 40 13 W
0370	DV0724	B 264	C	257.08	348.38636	3	33 27 48 N	112 40 38 W
0371	DV0729	Z 263	C	258.04	346.95164	2	33 27 58 N	112 41 13 W
0372	AO5456	TBM 89 C		258.87	345.36968	2	33 28 06 N	112 41 44 W
0373	DV0730	Y 263	C	259.70	344.19535	2	33 28 15 N	112 42 15 W
0374	AO5457	TBM 83 C		260.52	342.36041	2	33 28 24 N	112 42 45 W
0376	DV0732	TL YX 2	C 1	261.29	346.50344	2	33 28 45 N	112 42 42 W
0374	AO5457	TBM 83 C	C *	260.52	342.36041		33 28 24 N	112 42 45 W
0375	DV0731	TL YX 3	C 1	261.54	336.87583	2	33 27 53 N	112 42 42 W
0374	AO5457	TBM 83 C	C *	260.52	342.36041		33 28 24 N	112 42 45 W
0377	DV0733	X 263	C	261.37	340.43260	2	33 28 33 N	112 43 16 W
0378	DV0734	V 362	B	262.10	342.08507	2	33 28 41 N	112 43 43 W
0379	DV0735	W 263	C	263.04	344.07371	2	33 28 51 N	112 44 18 W
0380	AO5458	TBM 84 C		263.80	339.06153	4	33 28 58 N	112 44 45 W
0381	DV0736	V 263	C	264.72	326.13485	2	33 29 07 N	112 45 18 W
0382	AO5459	TBM 85 C		265.42	331.20167	2	33 29 13 N	112 45 45 W
0383	DV0737	R 263	C	266.13	344.06589	2	33 29 20 N	112 46 13 W
0384	AO5460	TBM 86 C		266.89	343.46417	2	33 29 23 N	112 46 43 W
0385	DV0738	U 263	C	267.77	347.72643	2	33 29 26 N	112 47 18 W
0386	DV0739	T 263	C	268.62	342.45836	2	33 29 28 N	112 47 52 W
0387	DV0740	U 362	B	269.22	347.68366	2	33 29 31 N	112 48 18 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0388	DV0741	S 263	C	270.37	346.74375	2	33 29 36 N	112 48 58 W
0389	AO5461	TBM 81 C		271.23	345.76319	2	33 29 37 N	112 49 32 W
0390	DV0742	Q 263	C	271.99	346.09241	2	33 29 37 N	112 50 02 W
0391	AO5462	TBM 82 C		272.83	345.14442	2	33 29 38 N	112 50 35 W
0392	DV0743	P 263	C	273.47	342.46559	2	33 29 38 N	112 51 00 W
0393	DV0744	N 263	C	274.26	341.27607	2	33 29 38 N	112 51 30 W
0394	DV0745	T 362	C	275.04	340.09550	2	33 29 37 N	112 52 01 W
0395	AO5463	TBM 80 C		275.77	339.04836	2	33 29 37 N	112 52 29 W
0396	DV0747	S 362	B	276.62	337.43997	2	33 29 38 N	112 53 01 W
0397	AO5464	TBM 79 C		277.41	335.69999	3	33 29 38 N	112 53 33 W
0398	DV0749	K 263	C	278.24	336.77997	2	33 29 37 N	112 54 06 W
0399	AO5465	TBM 78 C		278.91	334.30430	2	33 29 36 N	112 54 32 W
0400	DV0750	J 263	C	279.76	335.82723	2	33 29 35 N	112 55 04 W
0401	DV0852	P 415 64	C	279.85	335.82735	2	33 29 35 N	112 55 01 W
0402	AO5466	TBM 77 C		280.63	338.55330	2	33 29 36 N	112 55 37 W
0403	DV0848	CRACK AZ MK	C	281.42	341.36051	2	33 29 37 N	112 56 13 W
0404	DV0752	TONOPAH RM 1	C	282.10	343.98140	2	33 29 37 N	112 56 37 W
0405	DV0753	TONOPAH RM 3	C	282.12	344.07825	2	33 29 37 N	112 56 37 W
0406	DV0754	TONOPAH	C	282.14	344.23480	2	33 29 37 N	112 56 37 W
0407	DV0756	TONOPAH AZ MK	C	282.73	346.20396	2	33 29 37 N	112 57 01 W
0408	AO5467	TBM 73 C		283.56	350.26102	2	33 29 37 N	112 57 33 W
0409	DV0757	G 263	C	284.39	353.44437	2	33 29 38 N	112 58 06 W
0410	AO5468	TBM 74 C		285.23	354.86955	2	33 29 38 N	112 58 39 W
0411	DV0758	R 362	B	286.12	359.15573	2	33 29 37 N	112 59 14 W
0412	AO5469	TBM 75 C		286.96	362.18633	2	33 29 37 N	112 59 47 W
0413	DV1070	E 263	C	287.74	365.40216	2	33 29 37 N	113 00 18 W
0414	AO5470	TBM 76 C		288.53	368.93944	2	33 29 44 N	113 00 46 W
0415	DV1071	D 263	C	289.36	377.65893	2	33 29 52 N	113 01 16 W
0416	AO5471	TBM 72 C		289.89	390.07910	2	33 29 48 N	113 01 34 W
0417	DV1072	SCOT	D 1	290.10	413.98156	3	33 30 00 N	113 01 34 W
0418	DV1073	SCOT RM 2	A 1	290.11	413.25401	2	33 30 00 N	113 01 34 W
0416	AO5471	TBM 72 C	*	289.89	390.07910		33 29 48 N	113 01 34 W
0420	AO5472	TBM 71 C		290.50	377.45691	2	33 29 43 N	113 01 55 W
0421	DV1074	C 263	C	291.22	374.22672	2	33 29 38 N	113 02 20 W
0422	AO5473	TBM 70 C		292.12	371.98936	2	33 29 37 N	113 02 53 W
0423	DV1065	A 263	C	292.96	370.11753	2	33 29 37 N	113 03 24 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

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SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0424	DV1066	B 263	C	294.21	366.92818	2	33 29 07 N	113 02 50 W
0425	AO5474	TBM 69 C		294.92	365.83293	2	33 28 50 N	113 02 34 W
0426	DV1067	D 13	C	295.75	368.57525	2	33 28 31 N	113 02 16 W
0427	AO5475	TBM 68 C		296.49	373.89539	2	33 28 19 N	113 01 54 W
0428	DV1068	Q 362	C	297.31	380.62989	2	33 28 05 N	113 01 30 W
0429	AO5476	TBM 67 C		297.92	380.86367	2	33 28 04 N	113 01 06 W
0430	DV1069	P 362	C	298.58	371.06856	2	33 28 03 N	113 00 39 W
0431	AO5477	TBM 66 C		299.08	364.11252	2	33 28 04 N	113 00 20 W
0432	DV0760	N 362	C	299.94	356.11343	2	33 28 07 N	112 59 47 W
0433	AO5478	TBM 65 C		300.64	351.38580	2	33 28 04 N	112 59 20 W
0434	DV0761	M 362	B	301.48	346.09714	2	33 28 01 N	112 58 48 W
0435	AO5479	TBM 64 C		302.27	341.97163	2	33 27 56 N	112 58 17 W
0436	DV0762	F 13	C	303.11	338.57358	2	33 27 50 N	112 57 44 W
0437	AO5480	TBM 63 C		304.08	333.43810	2	33 27 43 N	112 57 09 W
0438	DV0763	L 362	C	304.92	329.72267	2	33 27 37 N	112 56 38 W
0439	AO5481	TBM 62 C		305.49	327.06661	2	33 27 27 N	112 56 19 W
0440	DV0764	K 362	C	306.08	325.12802	2	33 27 16 N	112 55 59 W
0441	AO5482	TBM 61 C		306.80	319.98395	3	33 27 06 N	112 55 34 W
0442	DV0765	J 362	C	307.64	315.61549	2	33 26 55 N	112 55 06 W
0443	AO5483	TBM 60 C		308.45	312.31849	2	33 26 47 N	112 54 35 W
0444	DV0767	H 362	B	309.28	310.89604	2	33 26 39 N	112 54 04 W
0445	AO5484	TBM 59 C		309.98	310.22820	2	33 26 26 N	112 53 42 W
0446	DV0768	G 13	C	310.82	307.55516	2	33 26 10 N	112 53 15 W
0447	DV0769	G 362	C	312.03	305.78872	3	33 25 49 N	112 52 37 W
0448	DV0770	F 362	C	313.25	305.84884	2	33 25 27 N	112 51 58 W
0449	AO5485	TBM 58 C		314.13	303.00396	2	33 25 11 N	112 51 28 W
0450	DV0771	E 362	C	314.95	304.26854	2	33 24 57 N	112 51 00 W
0451	AO5486	TBM 57 C		315.71	300.36617	2	33 24 43 N	112 50 33 W
0452	DV0773	D 362	C	316.54	302.07020	2	33 24 28 N	112 50 03 W
0453	AO5487	TBM 56 C		317.23	295.49860	2	33 24 16 N	112 49 40 W
0454	DV0774	C 362	B	318.05	290.11155	2	33 24 03 N	112 49 16 W
0455	AO5488	TBM 55 C		318.84	291.86496	2	33 23 48 N	112 48 47 W
0456	DV0775	B 362	C	319.62	289.07911	2	33 23 35 N	112 48 21 W
0457	AO5489	TBM 54 C		320.29	284.94360	2	33 23 27 N	112 47 59 W
0458	DV0776	J 13	C	321.07	291.40644	2	33 23 18 N	112 47 33 W
0459	AO5490	TBM 53 C		321.86	288.96525	2	33 23 05 N	112 47 06 W

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0460	DV0777	A 362	C	322.70	281.85067	2	33 22 51 N	112 46 38 W
0461	AO5491	TBM 52 C		323.74	278.21401	2	33 22 31 N	112 46 09 W
0462	DV0778	H 322	C	324.56	279.78799	2	33 22 15 N	112 45 46 W
0463	AO5492	TBM 51 C		325.34	278.82684	2	33 22 07 N	112 45 23 W
0464	DV0780	Z 360	B	326.15	279.95000	2	33 21 59 N	112 44 59 W
0465	AO5493	TBM 50 C		327.10	271.95983	3	33 21 39 N	112 44 32 W
0466	DV0781	K 13	C	327.90	267.50441	2	33 21 23 N	112 44 09 W
0467	AO5494	TBM 49 C		328.55	261.68947	2	33 21 09 N	112 43 53 W
0468	DV0782	Q 10	C	329.34	258.92496	2	33 20 52 N	112 43 33 W
0469	AO5495	TBM 48 C		329.92	268.54287	2	33 20 41 N	112 43 52 W
0470	DV0783	Y 360	A	330.61	284.20917	2	33 20 28 N	112 44 15 W
0471	AO5496	TBM 47 C		331.28	277.22158	2	33 20 15 N	112 44 36 W
0472	DV0784	X 360	C	332.02	272.44268	2	33 20 00 N	112 45 00 W
0473	AO5497	TBM 46 C		332.90	259.00964	2	33 19 44 N	112 45 27 W
0474	DV0785	Z 361	C	333.49	244.84234	2	33 19 34 N	112 45 45 W
0475	DV0787	452+32.92	D	333.64	245.07508	2	33 19 30 N	112 45 51 W
0476	AO5498	TBM 45 C		334.49	243.77634	2	33 19 14 N	112 46 18 W
0477	DV0788	Y 361	C	335.29	241.97521	2	33 19 00 N	112 46 44 W
0478	AO5499	TBM 44 C		336.08	244.05339	2	33 18 42 N	112 47 07 W
0479	DV0789	X 361	B	336.86	245.03858	2	33 18 24 N	112 47 30 W
0480	DV0790	M 13	C	338.06	244.10631	2	33 17 46 N	112 47 46 W
0481	AO5500	TBM 43 C		338.95	242.35733	2	33 17 18 N	112 47 49 W
0482	DV0791	248+31.7	D	339.78	239.25624	2	33 16 52 N	112 47 52 W
0483	DV0792	W 361	C	340.97	236.66672	4	33 16 11 N	112 47 51 W
0484	DV0793	N 13	C	342.09	239.45193	2	33 15 35 N	112 47 49 W
0485	DV0794	V 360	C	343.13	237.73541	2	33 15 04 N	112 47 32 W
0486	AO5501	TBM 42 C		343.95	233.36727	3	33 14 42 N	112 47 15 W
0487	DV0795	W 360	D	344.59	232.74243	3	33 14 25 N	112 47 02 W
0488	DV0796	V 361	A	345.29	254.57292	2	33 14 06 N	112 46 49 W
0489	DV0797	U 361	A	345.85	262.11417	2	33 13 53 N	112 46 32 W
0490	DV0798	P 13	B	346.58	227.57662	2	33 13 37 N	112 46 17 W
0491	DV0799	Q 13	B	347.15	227.57918	3	33 13 39 N	112 45 56 W
0492	DV0800	T 361	B	347.46	229.04394	3	33 13 32 N	112 45 49 W
0493	AO5502	TBM 41 C		348.21	228.91328	2	33 13 26 N	112 45 22 W
0494	DV0803	S 361	C	349.01	228.49108	2	33 13 20 N	112 44 53 W
0495	AO5503	TBM 40 C		349.81	228.61328	2	33 13 07 N	112 44 26 W

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							LATITUDE	LONGITUDE
0496	DV0804	R 361	C	350.60	227.96617	3	33 12 55 N	112 44 00 W
0497	AO5504	TBM 39 C		351.44	227.91769	2	33 12 37 N	112 43 34 W
0498	DV0805	R 13	C	352.11	228.13660	2	33 12 23 N	112 43 14 W
0499	AO5505	TBM 38 C		352.78	227.84626	3	33 12 05 N	112 43 00 W
0500	DV0806	Q 361	B	353.44	227.93965	3	33 11 47 N	112 42 46 W
0501	AO5506	TBM 37 C		354.39	228.65354	2	33 11 24 N	112 42 22 W
0502	DV0807	P 361	D	355.20	228.05837	2	33 11 04 N	112 42 02 W
0503	AO5507	TBM 36 C		355.99	227.72274	2	33 10 45 N	112 41 43 W
0504	DV0808	N 361	C	356.95	227.10660	2	33 10 22 N	112 41 19 W
0505	AO5508	TBM 35 C		357.70	227.49170	2	33 10 00 N	112 41 07 W
0506	DV0810	M 361	C	358.52	227.22942	3	33 09 36 N	112 40 53 W
0507	AO5509	TBM 34 C		359.33	227.22660	2	33 09 10 N	112 40 44 W
0508	DV0811	L 361	C	360.15	226.18104	2	33 08 44 N	112 40 34 W
0509	AO5510	TBM 33 C		361.11	227.08919	2	33 08 14 N	112 40 25 W
0510	DV0812	T 13	D	361.91	226.35726	2	33 07 49 N	112 40 17 W
0511	DV0813	K 361	B	362.90	224.46304	3	33 07 19 N	112 40 08 W
0512	AO5511	TBM 32 C		363.99	226.73614	2	33 06 44 N	112 40 02 W
0513	DV0814	643+00	D	364.79	223.77483	3	33 06 18 N	112 39 57 W
0514	DV0815	U 13	C	365.95	216.23794	2	33 05 40 N	112 40 01 W
0515	DV0816	J 361	C	366.78	217.21609	4	33 05 11 N	112 39 58 W
0516	AO5512	TBM 31 C		367.56	213.46407	2	33 04 47 N	112 39 57 W
0517	DV0817	H 361	D	368.37	213.01435	5	33 04 21 N	112 39 56 W
0518	AO5513	TBM 30 C		369.18	210.79194	2	33 03 55 N	112 39 56 W
0519	DV0818	G 361	C	369.99	209.73172	2	33 03 28 N	112 39 55 W
0520	AO5514	TBM 29 C		370.76	210.20517	2	33 03 02 N	112 39 55 W
0521	DV0821	F 361	B	371.55	208.97890	3	33 02 36 N	112 39 54 W
0522	AO5515	TBM 28 C		372.36	213.55174	2	33 02 10 N	112 39 54 W
0523	DV0822	E 361	C	373.14	214.74973	2	33 01 44 N	112 39 54 W
0524	AO5516	TBM 27 C		373.70	216.85162	2	33 01 26 N	112 39 54 W
0525	DV0823	D 361	D	374.37	219.10517	2	33 01 04 N	112 39 53 W
0526	AO5517	TBM 26 C		375.04	220.07694	3	33 00 42 N	112 39 54 W
0527	DV0824	C 361	C	375.86	224.36191	2	33 00 15 N	112 39 55 W
0528	AO5518	TBM 25 C		376.67	224.61410	2	32 59 52 N	112 40 08 W
0529	DA0694	B 361	C	377.46	223.70545	2	32 59 29 N	112 40 21 W
0530	AO5519	TBM 24 C		378.22	222.11062	2	32 59 07 N	112 40 36 W
0531	DA0695	X 13	C	379.03	223.75103	2	32 58 44 N	112 40 52 W

UNADJUSTED DATA RELEVELING

LINE NO.: L21029

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 476.655 METERS FOR: A 364
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0532	AO5520	TBM 23	C	379.88	222.01434	3	32 58 19 N	112 41 05 W
0533	DA0696	A 361	B	380.69	224.66041	2	32 57 55 N	112 41 18 W
0534	DA0697	75+19	D	381.90	225.09105	2	32 57 24 N	112 41 48 W
0535	DA0679	B 84	C	382.74	226.11340	2	32 56 58 N	112 42 01 W

UNADJUSTED DATA RELEVELING

LINE NO.: L21029

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 02/08/1967 AND ENDED 04/21/1967

TOL = 4.0 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 09/21/84
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

1.80	MM	STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
1.27	MM	STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
382.74	KM	MAIN LINE LENGTH
7.11	KM	SPUR LINE LENGTH
848.919	KM	TOTAL SINGLE-RUN LEVELING
00338		BENCH MARKS
00190		TEMPORARY BENCH MARKS
00527		NUMBER OF SECTIONS
0		NUMBER OF RIVER CROSSINGS
01138		NUMBER OF RUNNINGS
7.5		PERCENT RERUNS

COMMENTS:

THE OBSERVATIONS FOR THIS PROJECT ARE FILED UNDER HG L21027

PROJECT FILE: 22 MI NW OF HASSAYAMPA TO ROOSEVELT AZ

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETICTHE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0004	DV0984	C 13	C	0.00	362.24200		33 30 13 N	113 05 28 W
0005	DV1064	Z 262	C	1.51	369.89231	2	33 30 07 N	113 04 37 W
0006	DV1065	A 263	C	3.59	370.02208	3	33 29 37 N	113 03 24 W
0007	DV1066	B 263	C 1	4.83	366.83025	3	33 29 07 N	113 02 50 W
0008	DV1067	D 13	C 1	6.39	368.47663	2	33 28 31 N	113 02 16 W
0006	DV1065	A 263	C *	3.59	370.02208		33 29 37 N	113 03 24 W
0010	DV1074	C 263	C	5.34	374.13056	2	33 29 38 N	113 02 20 W
0011	DV1071	D 263	C	7.21	377.55924	2	33 29 52 N	113 01 16 W
0012	DV1070	E 263	C	8.85	365.30480	2	33 29 37 N	113 00 18 W
0013	DV0759	F 263	C	10.54	358.95985	2	33 29 36 N	112 59 13 W
0014	DV0757	G 263	C	12.21	353.34569	2	33 29 38 N	112 58 06 W
0015	DV0756	TONOPAH AZ MK	C	13.88	346.09449	2	33 29 37 N	112 57 01 W
0016	DV0755	TONOPAH RM 2	C	14.47	343.96619	2	33 29 37 N	112 56 37 W
0017	DV0754	TONOPAH	C	14.49	344.12539	2	33 29 37 N	112 56 37 W
0018	DV0752	TONOPAH RM 1	C	14.50	343.86960	2	33 29 37 N	112 56 37 W
0019	DV0751	H 263	C	15.19	340.99606	3	33 29 36 N	112 56 08 W
0020	DV0750	J 263	C	16.84	335.73699	3	33 29 35 N	112 55 04 W
0021	DV0749	K 263	C	18.35	336.66417	2	33 29 37 N	112 54 06 W
0022	DV0748	L 263	C	20.10	338.82160	2	33 29 38 N	112 53 00 W
0023	DV0746	M 263	C	21.56	339.98196	2	33 29 37 N	112 51 58 W
0024	DV0744	N 263	C	22.34	341.20745	2	33 29 38 N	112 51 30 W
0025	DV0743	P 263	C	23.12	342.39169	2	33 29 38 N	112 51 00 W
0026	AX3532	TBM HIGH POINT	C 1	23.51	344.62596	2	33 29 38 N	112 51 00 W
0025	DV0743	P 263	C *	23.12	342.39169		33 29 38 N	112 51 00 W
0027	DV0742	Q 263	C	24.61	346.01928	2	33 29 37 N	112 50 02 W
0028	DV0741	S 263	C	26.23	346.66164	2	33 29 36 N	112 48 58 W
0029	DV0739	T 263	C	27.96	342.36665	2	33 29 28 N	112 47 52 W
0030	DV0738	U 263	C	28.81	347.63347	2	33 29 26 N	112 47 18 W
0031	AX3533	TBM 1		29.96	339.18950	3	33 29 22 N	112 46 33 W
0032	DV0737	R 263	C	30.48	343.96868	4	33 29 20 N	112 46 13 W
0033	DV0736	V 263	C	31.89	326.03667	2	33 29 07 N	112 45 18 W
0034	DV0735	W 263	C	33.57	343.97142	2	33 28 51 N	112 44 18 W
0035	DV0733	X 263	C	35.23	340.33137	2	33 28 33 N	112 43 16 W
0036	DV0730	Y 263	C	36.91	344.09128	2	33 28 15 N	112 42 15 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0037	DV0729	Z 263	C	38.58	346.85188	3	33 27 58 N	112 41 13 W
0038	DV0724	B 264	C	39.54	348.28403	2	33 27 48 N	112 40 38 W
0039	DV0725	C 264	C 1	41.51	330.36970	2	33 26 44 N	112 40 36 W
0040	DV0726	D 264	C 1	43.44	314.56032	2	33 25 41 N	112 40 36 W
0043	DV0728	F 264	C 2	44.99	302.81666	2	33 24 49 N	112 40 36 W
0040	DV0726	D 264	C *	43.44	314.56032		33 25 41 N	112 40 36 W
0041	DV0727	E 264	C 1	43.72	313.70330	2	33 25 42 N	112 40 47 W
0042	AX3534	TBM HIGH POINT	1	43.90	312.37170	2	33 25 42 N	112 40 47 W
0038	DV0724	B 264	C *	39.54	348.28403		33 27 48 N	112 40 38 W
0044	DV0723	A 264	C	40.20	349.25961	2	33 27 40 N	112 40 13 W
0045	DV0722	G 264	C	41.87	350.14616	3	33 27 23 N	112 39 11 W
0046	DV0720	H 264	C	43.48	349.97548	3	33 27 06 N	112 38 11 W
0047	DV0718	J 264	C	45.19	351.35073	4	33 26 50 N	112 37 09 W
- 0048	DV0716	K 264	C	46.82	334.30519	2	33 26 15 N	112 36 24 W
- 0049	DV0715	L 264	C	48.35	333.16143	2	33 26 08 N	112 35 26 W
- 0050	DV0714	M 264	C	49.99	328.93018	2	33 26 09 N	112 34 21 W
- 0051	DV0713	N 264	C	51.73	327.71779	2	33 26 08 N	112 33 13 W
- 0052	DV0710	P 264	C	53.16	325.56730	2	33 26 08 N	112 32 18 W
- 0053	DV0711	T 264	C 1	54.82	305.58880	2	33 25 13 N	112 32 17 W
- 0054	DV0712	U 264	C 1	57.08	291.89556	2	33 24 24 N	112 32 48 W
- 0055	DV1508	V 264	1	57.47	288.54463	2	33 24 12 N	112 32 47 W
- 0056	DV1507	W 264	1	58.22	290.93530	2	33 24 15 N	112 33 15 W
- 0057	AX3535	TBM HIGH POINT	1	58.23	290.69262	2	33 24 15 N	112 33 15 W
- 0052	DV0710	P 264	C *	53.16	325.56730		33 26 08 N	112 32 18 W
- 0058	DV1509	Q 264		54.76	317.87069	2	33 26 08 N	112 31 14 W
- 0059	AX3536	TBM HIGH POINT	1	55.09	318.16793	2	33 26 08 N	112 31 14 W
- 0058	DV1509	Q 264	*	54.76	317.87069		33 26 08 N	112 31 14 W
- 0060	DV0707	R 264	C	56.36	309.41951	2	33 26 08 N	112 30 12 W
- 0061	DV0559	S 264	C	57.07	306.92409	2	33 26 08 N	112 29 44 W
- 0062	DV0556	H 24	D	58.69	301.78229	2	33 26 08 N	112 28 40 W
- 0063	AX3537	TBM 2		59.16	306.11525	2	33 26 16 N	112 28 27 W
- 0064	DV0555	A 265	D	60.89	306.63376	2	33 26 46 N	112 27 38 W
- 0065	DV0553	B 265	C	62.91	320.66716	2	33 27 52 N	112 27 37 W
- 0066	DV0550	C 265	C	64.51	330.78544	4	33 28 45 N	112 27 38 W
- 0067	DV0549	D 265	C	66.09	338.94928	4	33 29 37 N	112 27 39 W
- 0068	DV0548	E 265	B	66.86	345.74738	2	33 29 36 N	112 28 09 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE		
							LATITUDE	LONGITUDE	
-	0069	DV0113	POK AZ MK	C 1	68.62	363.07427	2	33 29 57 N	112 29 13 W
-	0070	DV0111	POK RM 1	D 1	68.99	369.51045	2	33 30 00 N	112 29 23 W
-	0071	DV0112	POK	D 1	69.00	370.10226	2	33 30 00 N	112 29 23 W
-	0072	DV0110	POK RM 2	D 1	69.01	369.95948	2	33 30 00 N	112 29 23 W
-	0068	DV0548	E 265	B *	66.86	345.74738		33 29 36 N	112 28 09 W
-	0073	DV0109	F 265	C	68.47	350.25083	2	33 30 30 N	112 28 08 W
-	0074	DV0108	G 265	C	69.95	356.12412	2	33 31 18 N	112 28 08 W
-	0075	DV0107	H 265	B	71.63	365.55462	2	33 32 13 N	112 28 09 W
-	0076	DV0105	J 265	C	73.25	375.35335	4	33 33 06 N	112 28 08 W
-	0077	DV0104	K 265	D	74.84	389.43271	4	33 33 57 N	112 28 09 W
-	0078	DV0103	L 265	C	76.39	398.25835	2	33 34 48 N	112 28 09 W
-	0079	DV0102	M 265	B	78.06	405.21703	2	33 35 41 N	112 28 01 W
-	0080	DV0101	N 265	C	79.88	404.88476	2	33 36 35 N	112 27 29 W
-	0081	DV0100	P 265	B	81.50	405.87719	2	33 37 25 N	112 27 26 W
-	0082	DV0098	Q 265	C	83.40	405.75052	2	33 38 19 N	112 27 14 W
-	0083	DV0097	R 265	D	85.21	406.97154	3	33 39 12 N	112 27 00 W
-	0084	DV0093	S 265	C	86.79	405.82556	2	33 39 33 N	112 26 05 W
-	0085	DV0092	T 265	C	88.49	406.70861	2	33 40 20 N	112 25 34 W
-	0086	DV0088	U 265	D	90.61	408.93444	2	33 41 07 N	112 24 34 W
-	0090	DV0089	C 266	C 1	91.90	413.98298	2	33 41 48 N	112 24 30 W
-	0091	DV0090	D 266	C 1	92.33	416.81096	2	33 41 55 N	112 24 46 W
-	0092	DV0091	E 266	B 1	93.12	421.73644	2	33 42 19 N	112 24 57 W
-	0093	AX3538	TBM HIGH POINT	1	93.87	423.06792	2	33 42 19 N	112 24 57 W
-	0086	DV0088	U 265	D *	90.61	408.93444		33 41 07 N	112 24 34 W
-	0087	DV0260	RV 93	D 1	91.06	406.18072	1	33 41 00 N	112 24 22 W
-	0088	DV0259	Y 23	C 1	91.80	401.02163	1	33 40 43 N	112 24 01 W
-	0086	DV0088	U 265	D *	90.61	408.93444		33 41 07 N	112 24 34 W
-	0094	DV0085	V 265	C	92.56	407.50318	2	33 41 49 N	112 23 36 W
-	0095	DV0084	W 265	D	94.67	408.72116	2	33 42 19 N	112 22 24 W
-	0096	DV0082	X 265	C	95.97	408.07449	3	33 42 37 N	112 21 37 W
-	0097	DV0081	A 266	C	97.64	408.52745	3	33 43 04 N	112 20 42 W
-	0098	DV0079	B 266	D	98.75	409.75432	2	33 43 24 N	112 20 06 W
-	0099	DV0078	J 266	D	100.44	410.37503	4	33 43 34 N	112 19 04 W
-	0100	DV0075	K 266	C	102.59	407.38372	2	33 43 57 N	112 18 04 W
-	0101	DV0074	L 266	C	104.00	389.47128	2	33 43 49 N	112 17 23 W
-	0102	DV0072	M 266	C	105.62	382.04190	2	33 43 00 N	112 17 14 W

AGENCY:NGS

STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	APPROXIMATE LONGITUDE
0103	DV0071	N 266	C	107.42	374.67673	2	33 42 04 N	112 17 31 W
0104	DV0068	P 266	C	109.15	381.96510	2	33 41 10 N	112 17 20 W
0105	DV1519	Q 266		110.92	379.96854	2	33 40 13 N	112 17 21 W
0106	DV0066	R 266	C	112.84	380.46331	2	33 40 01 N	112 16 17 W
0107	DV1520	S 266		114.43	380.41010	2	33 40 01 N	112 15 15 W
0108	DV0065	T 266	C	115.98	382.58516	3	33 40 01 N	112 14 12 W
0109	DV0061	U 266	C	117.58	383.81757	2	33 40 01 N	112 13 11 W
0110	DV0059	V 266	C	119.30	383.04178	2	33 40 06 N	112 12 09 W
0111	DV0056	W 266	C	120.78	388.23891	2	33 40 06 N	112 11 11 W
0112	DV0055	X 266	C	122.28	385.79525	2	33 39 18 N	112 11 07 W
0113	DV0050	Y 266	C	124.11	381.79937	2	33 38 18 N	112 11 07 W
0114	DV0214	L 258	C	125.67	375.71808	2	33 37 30 N	112 11 04 W
0115	DV0216	J 258	C 1	126.04	375.97562	2	33 37 20 N	112 10 55 W
0116	DV0215	K 258	C 1	126.32	374.74244	2	33 37 16 N	112 11 02 W
0117	DV0213	M 258	D 1	127.84	371.67133	1	33 36 27 N	112 11 06 W
0114	DV0214	L 258	C *	125.67	375.71808		33 37 30 N	112 11 04 W
0119	DV0049	Z 266	C	127.21	381.50338	2	33 37 30 N	112 10 04 W
0120	DV1533	A 267		128.80	388.95197	4	33 37 30 N	112 09 02 W
0121	DV0048	D 267	C 1	130.37	392.61393	2	33 38 20 N	112 09 03 W
0122	DV0114	E 267	C 1	132.07	399.67620	3	33 39 16 N	112 09 05 W
0123	DV0115	F 267	A 1	133.57	407.38005	2	33 39 43 N	112 08 35 W
0124	DV0118	HEDGPETH RM 2	C 2	134.05	448.01348	2	33 39 55 N	112 08 43 W
0125	DV0116	HEDGPETH	C 2	134.06	449.16430	2	33 39 55 N	112 08 43 W
0126	DV0117	HEDGPETH RM 1	C 2	134.07	448.22604	2	33 39 55 N	112 08 43 W
0123	DV0115	F 267	A *	133.57	407.38005		33 39 43 N	112 08 35 W
0127	DV0119	G 267	C 1	135.26	411.15099	2	33 40 09 N	112 08 03 W
0128	DV1530	H 267	1	136.88	418.64687	2	33 41 02 N	112 08 02 W
0129	DV0120	P 56	C 1	138.72	429.86413	2	33 41 59 N	112 07 37 W
0130	DV0121	SKUNK AZ MK	C 1	141.17	444.33644	2	33 43 15 N	112 07 13 W
0131	DV0122	SKUNK	C 1	141.71	447.66862	2	33 43 32 N	112 07 05 W
0132	DV0123	SKUNK RM 1	D 1	141.73	447.62648	2	33 43 32 N	112 07 05 W
0133	DV0124	SKUNK RM 2	D 1	141.76	447.69332	2	33 43 32 N	112 07 05 W
0134	DV0125	Q 56	C 1	141.91	448.44803	2	33 43 37 N	112 07 07 W
0135	DV0126	1476.06	B 1	142.17	449.70611	2	33 43 42 N	112 07 13 W
0136	DV0127	Q 267	C 1	143.03	454.75572	2	33 44 11 N	112 07 15 W
0137	DV0130	R 56	D 1	145.21	472.10296	2	33 45 21 N	112 07 35 W

UNADJUSTED DATA

LINE NO.: L12530

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0120	DV1533	A 267	*	128.80	388.95197		33 37 30 N	112 09 02 W
0139	DV0041	B 267	C	130.38	383.44075	4	33 36 37 N	112 09 02 W
0140	DV0040	K 56	C	131.89	378.47084	5	33 35 48 N	112 09 02 W
0141	DV0206	C 267	D	133.53	373.93861	3	33 34 54 N	112 09 02 W
0142	DV0038	J 267	D	135.45	374.35165	2	33 34 19 N	112 08 00 W
0143	DV0037	K 267	B	136.28	375.15277	2	33 34 12 N	112 07 29 W
0144	DV0036	1235.86	D	137.09	376.38910	2	33 34 16 N	112 06 57 W
0145	DV1516	L 267		138.77	376.40784	2	33 34 16 N	112 05 55 W
0146	DV0033	M 267	C 1	139.14	376.83624	2	33 34 29 N	112 05 56 W
0147	DV0034	N 267	B 1	139.51	380.35338	2	33 34 41 N	112 05 56 W
0148	DV0035	P 267	C 1	139.78	379.43078	2	33 34 42 N	112 06 06 W
0149	AX3539	TBM HIGH POINT	1	139.88	379.48973	2	33 34 42 N	112 06 06 W
0145	DV1516	L 267	*	138.77	376.40784		33 34 16 N	112 05 55 W
0150	DV0031	R 267	B	139.57	375.84336	2	33 34 09 N	112 05 25 W
0151	DV0028	S 267	D	140.37	376.51667	2	33 34 05 N	112 04 54 W
0152	DV0026	1237.40	B	141.44	377.17684	2	33 33 43 N	112 04 22 W
0153	DV0019	1238.27	B	142.43	377.41162	2	33 33 26 N	112 03 51 W
0154	DV0020	E 268	C 1	144.18	391.32975	2	33 34 17 N	112 03 33 W
0155	DV0021	D 268	C 1	146.09	413.99631	2	33 35 08 N	112 02 53 W
0156	DV0024	A 268	C 1	147.97	440.74902	2	33 35 48 N	112 02 04 W
0157	AX3540	TBM HIGH POINT	2	148.08	441.81584	2	33 35 48 N	112 02 04 W
0156	DV0024	A 268	C *	147.97	440.74902		33 35 48 N	112 02 04 W
0158	DV0025	B 268	C 1	148.32	438.88706	2	33 35 51 N	112 01 51 W
0159	DV1515	C 268	1	148.87	443.43431	2	33 36 06 N	112 02 02 W
0153	DV0019	1238.27	B *	142.43	377.41162		33 33 26 N	112 03 51 W
0160	DV0017	1239.79	B	142.44	377.69513	2	33 33 26 N	112 03 51 W
0161	DV0016	1241.81	D	143.10	378.30335	2	33 33 09 N	112 03 42 W
0162	DV1638	1242.78		144.08	378.61443	3	33 32 43 N	112 03 20 W
0163	DV0012	1243.30	B	145.18	378.77523	2	33 32 22 N	112 02 47 W
0164	DV0010	1245.29	D	146.44	379.39787	3	33 31 52 N	112 02 16 W
0165	DV0009	1244.84	B	147.01	379.25056	2	33 31 37 N	112 02 01 W
0166	DV0007	1246.78	D	147.76	379.84309	2	33 31 25 N	112 01 40 W
0167	DV0006	Z 267	B	148.42	380.15208	2	33 31 20 N	112 01 18 W
0168	DV0005	1247.88	B	148.49	380.17406	2	33 31 20 N	112 01 15 W
0169	DV0003	1249.07	D	149.44	380.53126	2	33 31 04 N	112 00 42 W
0170	DU1547	F 268	C	151.09	385.13621	3	33 31 01 N	111 59 39 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0171	DU1101	G 268	C	152.83	397.64283	2	33 31 26 N	111 58 51 W
0172	DU1099	H 268	C	154.81	431.36167	2	33 31 26 N	111 57 35 W
0173	DU1098	J 268	C	156.40	414.56167	2	33 31 26 N	111 56 33 W
0174	DU1095	Q 268	C	157.61	409.58090	2	33 30 59 N	111 56 17 W
0175	AX3541	TBM HIGH POINT	2	157.64	409.23103	2	33 30 59 N	111 56 17 W
0174	DU1095	Q 268	C	* 157.61	409.58090		33 30 59 N	111 56 17 W
0176	DU1094	P 268	C	158.02	404.13831	2	33 30 46 N	111 56 10 W
0177	DU1093	N 268	C	158.52	399.48683	2	33 30 33 N	111 56 03 W
0173	DU1098	J 268	C	* 156.40	414.56167		33 31 26 N	111 56 33 W
0178	DU1548	K 268		158.01	397.01213	2	33 31 25 N	111 55 30 W
0179	DU1092	L 268	D	159.70	389.88689	2	33 31 52 N	111 54 54 W
0180	DU1091	M 268	D	160.27	390.97797	2	33 32 09 N	111 54 49 W
0181	DU1090	1283.99	D	162.45	391.17182	2	33 31 52 N	111 53 28 W
0182	DU1087	R 268	D	164.17	391.42167	2	33 31 37 N	111 52 25 W
0183	DU1085	S 268	C	166.00	392.18129	2	33 31 17 N	111 51 23 W
0184	DU1084	T 268	C	167.92	392.54539	3	33 30 43 N	111 50 19 W
0185	DU1083	Y 268	D	169.51	394.30764	2	33 30 22 N	111 49 22 W
0186	DU1080	LANDING RM 2	D	170.64	395.57747	2	33 30 10 N	111 48 41 W
0187	DU1081	LANDING RM 1	D	170.66	397.24415	2	33 30 10 N	111 48 41 W
0188	DU1082	LANDING	D	170.67	398.26902	2	33 30 10 N	111 48 41 W
0186	DU1080	LANDING RM 2	D	* 170.64	395.57747		33 30 10 N	111 48 41 W
0189	DU1079	U 268	C	172.21	394.23474	2	33 30 14 N	111 47 49 W
0190	DU1077	V 268	C	173.62	394.23344	3	33 30 31 N	111 47 00 W
0191	DU1076	W 268	C	175.25	395.11430	2	33 30 37 N	111 46 07 W
0192	DU1075	X 268	C	176.89	395.91246	2	33 30 52 N	111 45 18 W
0193	DU1074	Z 268	D	178.60	397.07273	2	33 30 28 N	111 44 18 W
0194	DU1073	A 269	D	179.35	397.68495	2	33 30 29 N	111 43 49 W
0195	DU1072	B 269	C	181.03	400.43887	3	33 30 36 N	111 42 45 W
0196	DU1071	G 269	B	182.80	402.24048	2	33 30 58 N	111 41 46 W
0197	DU1070	1314.04	D	183.24	400.35828	2	33 31 02 N	111 41 28 W
0198	DU1069	1314.14 5	D	183.26	400.40549	2	33 31 02 N	111 41 28 W
0199	DU1068	1325.18	D	183.27	403.76260	3	33 31 02 N	111 41 28 W
0200	DU1067	1325.17 1	D	183.32	403.77493	2	33 31 02 N	111 41 28 W
0201	DU1066	1325.17 2	D	183.33	403.77309	2	33 31 02 N	111 41 28 W
0196	DU1071	G 269	B	* 182.80	402.24048		33 30 58 N	111 41 46 W
0202	DU1065	1312.11	B	183.32	399.80033	2	33 30 44 N	111 41 43 W

UNADJUSTED DATA

LINE NO.: L12530

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0203	DU1057	1325.21	D	183.92	403.77260	2	33 30 50 N	111 41 25 W
0204	DU1058	1325.24	D 1	183.93	403.78358	2	33 30 50 N	111 41 25 W
0205	DU1060	GRANITE REEF RM 1	D 1	183.94	403.76871	2	33 30 50 N	111 41 25 W
0206	DU1059	GRANITE REEF	D 1	183.95	403.77971	2	33 30 51 N	111 41 26 W
0207	DU1061	1325.16	D 1	183.96	403.76077	2	33 30 50 N	111 41 25 W
0208	DU1062	1325.22	D 1	183.97	403.77742	2	33 30 50 N	111 41 25 W
0209	DU1063	1314.19	D 1	183.98	400.41102	3	33 30 50 N	111 41 25 W
0210	DU1064	1314.14	D 1	184.00	400.39062	2	33 30 50 N	111 41 25 W
0203	DU1057	1325.21	D *	183.92	403.77260		33 30 50 N	111 41 25 W
0211	DU1056	C 269	A	185.65	467.43577	2	33 30 17 N	111 41 01 W
0212	DU0660	D 269	C	187.39	479.57559	2	33 29 21 N	111 40 59 W
0213	DU0656	E 269	C	189.09	477.62385	2	33 28 27 N	111 41 01 W
0214	DU0655	F 269	C	190.68	468.96852	2	33 27 32 N	111 41 01 W
0215	DU0652	H 269	C	191.57	463.71208	2	33 27 06 N	111 41 01 W
0216	DU0646	K 269	C 1	193.18	442.89251	4	33 27 08 N	111 42 03 W
0217	DU0647	L 269	C 1	194.76	426.29915	2	33 27 07 N	111 43 05 W
0218	DU0648	M 269	C 1	195.78	417.27012	2	33 27 18 N	111 43 54 W
0219	DU0649	P 269	D 1	196.17	416.86302	3	33 27 24 N	111 43 50 W
0220	DU0650	N 269	D 1	196.38	417.40107	2	33 27 25 N	111 43 51 W
0221	AX3542	TBM HIGH POINT		197.12	422.77451	2	33 27 25 N	111 43 49 W
0215	DU0652	H 269	C *	191.57	463.71208		33 27 06 N	111 41 01 W
0222	DU0644	J 269	C	193.74	445.08329	2	33 25 54 N	111 41 01 W
0223	DU0643	1415.46	C	195.54	431.59814	2	33 24 58 N	111 41 06 W
0224	DU0642	1415.02	C	195.57	431.45829	2	33 24 59 N	111 41 03 W
0225	DU0641	1416.59	D	195.59	431.94014	2	33 24 58 N	111 41 01 W
0226	DU0639	E 22	C	195.91	433.04060	2	33 24 54 N	111 40 48 W
0227	DU0638	1422.94	B	196.02	433.89152	2	33 24 58 N	111 40 43 W
0228	DU0637	1436.79	B	196.66	438.12306	2	33 24 55 N	111 40 18 W
0229	DU0636	1443.55	B	196.98	440.17225	2	33 24 55 N	111 40 06 W
0230	DU0635	1447.11	C	197.20	441.28874	2	33 24 57 N	111 40 02 W
0231	DU0634	1448.28	C	197.23	441.64117	2	33 24 57 N	111 40 02 W
0232	DU0633	1451.67	B	197.37	442.68194	2	33 24 55 N	111 39 56 W
0233	DU0632	1455.93	B	197.55	443.97856	2	33 24 55 N	111 39 49 W
0234	DU0631	1465.42	B	197.90	446.87319	2	33 24 55 N	111 39 33 W
0235	DU0630	1467.96	C	198.01	447.64721	2	33 24 57 N	111 39 34 W
0236	DU0629	1468.58	C	198.04	447.83340	2	33 24 57 N	111 39 29 W

UNADJUSTED DATA

LINE NO.: L12530

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0237	DU0628	1472.81	D	198.27	449.10696	2	33 24 55 N	111 39 17 W
0238	DU0627	1484.77	C	198.83	452.75834	2	33 24 57 N	111 39 02 W
0239	DU0626	D 22	C	198.87	453.33640	2	33 24 55 N	111 38 58 W
0240	DU0625	1489.18	B	198.95	454.10675	2	33 24 55 N	111 38 51 W
0241	DU1344	1497.24	C	199.23	456.53942	2	33 24 55 N	111 38 43 W
0242	DU0624	1505.69	B	199.54	459.12241	2	33 24 55 N	111 38 31 W
0243	DU0622	1510.56	B	199.76	460.60108	2	33 24 55 N	111 38 21 W
0244	DU0623	Q 269	D 1	199.88	460.26521	2	33 24 52 N	111 38 18 W
0243	DU0622	1510.56	B *	199.76	460.60108		33 24 55 N	111 38 21 W
0245	DU0621	1521.38	B	200.23	463.91333	2	33 24 54 N	111 38 02 W
0246	AX3543	TBM HI POINT	1	200.51	460.89293	2	33 24 54 N	111 38 02 W
0245	DU0621	1521.38	B *	200.23	463.91333		33 24 54 N	111 38 02 W
0247	DU0620	1524.56	C	200.42	464.88923	2	33 24 57 N	111 37 55 W
0248	DU0619	1525.98	B	200.45	465.32386	2	33 24 57 N	111 37 55 W
0249	DU0617	1542.26	B	200.99	470.27916	4	33 24 54 N	111 37 34 W
0250	DU0616	1549.47	B	201.26	472.47586	2	33 24 54 N	111 37 23 W
0251	DU0615	1562.00	B	201.76	476.29036	3	33 24 54 N	111 37 03 W
0252	DU0614	C 22	C	202.02	478.50402	2	33 24 55 N	111 36 56 W
0253	DU0613	1567.92	C	202.03	478.09090	2	33 24 55 N	111 36 57 W
0254	DU0612	1567.65	C	202.06	478.00989	2	33 24 55 N	111 36 53 W
0255	DU0611	1568.53	C	202.09	478.27043	2	33 24 55 N	111 36 52 W
0256	DU0610	1568.73	C	202.12	478.34208	2	33 24 55 N	111 36 53 W
0257	DU0609	1571.05	B	202.17	479.04759	2	33 24 55 N	111 36 53 W
0258	DU0608	1577.60	B	202.42	481.04185	2	33 24 54 N	111 36 41 W
0259	DU0607	1583.97	B	202.77	482.97685	2	33 24 54 N	111 36 27 W
0260	DU0606	1586.68	B	202.98	483.80333	2	33 24 54 N	111 36 18 W
0261	DU0604	1594.67	B	203.37	486.23229	2	33 24 54 N	111 36 03 W
0262	DU0603	1601.74	C	203.67	488.38179	2	33 24 54 N	111 35 59 W
0263	DU0602	1600.56	C	203.69	488.01819	2	33 24 54 N	111 35 59 W
0264	DU0601	1601.52	C	203.72	488.31434	2	33 24 55 N	111 35 55 W
0265	DU0600	1601.88	B	203.74	488.42601	2	33 24 55 N	111 35 55 W
0266	DU0599	1602.47	C	203.75	488.60398	2	33 24 55 N	111 35 55 W
0267	DU0598	1606.89	B	203.99	489.94683	2	33 24 54 N	111 35 41 W
0268	DU0596	1612.85	B	204.33	491.75844	2	33 24 54 N	111 35 27 W
0269	DU0595	1615.63	C	204.51	492.60588	2	33 24 55 N	111 35 23 W
0270	DU0594	1616.04	C	204.54	492.72989	2	33 24 55 N	111 35 23 W

UNADJUSTED DATA

LINE NO.: L12530

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0271	DU0593	1617.70	B	204.58	493.23788	2	33 24 54 N	111 35 16 W
0272	DU0592	1626.01	B	204.95	495.76946	3	33 24 54 N	111 35 03 W
0273	DU0591	1632.39	B	205.21	497.70354	2	33 24 54 N	111 34 51 W
0274	DU0590	1635.61	C	205.33	498.68829	2	33 24 53 N	111 34 54 W
0275	DU0589	B 22	C	205.36	498.67713	2	33 24 53 N	111 34 49 W
0276	DU0588	BB 100	D	205.65	501.70430	2	33 24 54 N	111 34 36 W
0277	DU0587	1649.26	B	205.83	502.85483	2	33 24 54 N	111 34 29 W
0278	DU0586	1654.61	B	206.02	504.47454	2	33 24 54 N	111 34 21 W
0279	DU0585	1667.27	B	206.46	508.34669	2	33 24 54 N	111 34 04 W
0280	DU0584	1681.74	C	206.92	512.74897	2	33 24 54 N	111 33 52 W
0281	DU0583	1681.16	C	206.94	512.56754	2	33 24 54 N	111 33 52 W
0282	DU0582	1680.92	C	206.97	512.49790	2	33 24 54 N	111 33 47 W
0283	DU0581	1682.05	C	206.99	512.83804	2	33 24 54 N	111 33 46 W
0284	DU0580	1685.99	B	207.13	514.04588	2	33 24 54 N	111 33 40 W
0285	DU0579	1693.94	B	207.45	516.46941	3	33 24 54 N	111 33 26 W
0286	DU0578	1710.51	B	207.93	521.49181	2	33 24 54 N	111 33 04 W
0287	DU0575	A 22	C	208.21	523.98568	2	33 24 53 N	111 32 56 W
0288	DU0576	1714.50	B 1	208.30	522.71030	2	33 24 50 N	111 33 00 W
0289	DU0577	R 269	C 1	208.35	522.81870	2	33 24 47 N	111 33 03 W
0290	AX3544	TBM HI POINT	1	208.39	522.69143	2	33 24 47 N	111 33 03 W
0287	DU0575	A 22	C *	208.21	523.98568		33 24 53 N	111 32 56 W
0291	DU1055	869.03	D 1	209.29	524.94531	1	33 24 31 N	111 32 18 W
0292	DU1054	B 107	B 1	210.22	527.16587	1	33 24 13 N	111 31 50 W
0287	DU0575	A 22	C *	208.21	523.98568		33 24 53 N	111 32 56 W
0294	DU0574	Z 21	C	210.06	545.62544	2	33 25 37 N	111 32 05 W
0295	DU0573	S 269	C	211.21	556.85802	2	33 26 00 N	111 31 31 W
0296	DU0572	Y 21	C	212.54	577.27046	3	33 26 29 N	111 30 51 W
0297	DU0571	1934	D	213.64	589.38972	3	33 26 44 N	111 30 15 W
0298	DU0462	T 269	D	215.33	609.36604	2	33 27 19 N	111 29 26 W
0299	DU0461	X 21	C	215.83	618.39321	2	33 27 31 N	111 29 12 W
0300	DU0460	2105	D	217.92	641.55417	2	33 28 25 N	111 28 28 W
0301	DU0459	W 21	C	219.07	657.93543	2	33 29 00 N	111 28 12 W
0302	DU0458	2107	D	220.58	642.22838	2	33 29 46 N	111 27 54 W
0303	AX3545	TBM 3		221.38	665.80779	3	33 29 58 N	111 27 38 W
0304	DU0449	U 269	B	221.57	651.06209	2	33 30 01 N	111 27 34 W
0305	AX3546	TBM 4		222.48	686.02814	2	33 30 19 N	111 27 26 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0306	DU0448	V 21	A	223.01	718.53346	3	33 30 30 N	111 27 21 W
0307	DU0447	V 269	A	224.42	702.23449	2	33 31 12 N	111 27 19 W
0308	AX3547	TBM 5		225.29	687.07426	2	33 31 22 N	111 27 16 W
0309	DU0446	W 269	A	225.95	656.64507	3	33 31 30 N	111 27 13 W
0310	AX3548	TBM 6		226.79	617.73218	2	33 31 54 N	111 27 12 W
0311	DU0444	X 269	D	227.32	612.39598	2	33 32 10 N	111 27 11 W
0312	DU0443	CANYON AZ MK	A	227.44	615.46113	2	33 32 13 N	111 27 15 W
0313	AX3549	TBM 7		227.93	597.46393	2	33 32 19 N	111 27 06 W
0314	DU0440	CANYON	A 1	228.34	659.35684	2	33 32 18 N	111 26 54 W
0315	DU0441	CANYON RM 1	C 1	228.35	656.98671	2	33 32 18 N	111 26 54 W
0316	DU0442	CANYON RM 2	A 1	228.36	658.85565	2	33 32 18 N	111 26 54 W
0313	AX3549	TBM 7	*	227.93	597.46393		33 32 19 N	111 27 06 W
0317	AX3550	TBM 8		228.21	582.31765	2	33 32 23 N	111 27 00 W
0318	DU0439	Y 269	A	229.26	524.27867	2	33 32 36 N	111 26 40 W
0319	DU0438	T 21	B	230.15	510.72750	2	33 32 19 N	111 26 32 W
0320	DU0437	Z 269	A	231.39	518.78153	2	33 32 08 N	111 25 52 W
0321	DU0435	A 270	B	232.30	508.70189	2	33 31 59 N	111 25 25 W
0322	AX3551	TBM 9		232.56	515.14763	2	33 31 56 N	111 25 17 W
0323	AX3552	TBM 10		233.37	538.78030	2	33 31 48 N	111 24 51 W
0324	DU0434	B 270	B	233.70	552.53515	2	33 31 45 N	111 24 41 W
0325	AX3553	TBM 11		234.33	582.22658	3	33 31 46 N	111 24 19 W
0326	DU0433	R 21	B	234.67	603.19390	2	33 31 46 N	111 24 07 W
0327	AX3554	TBM 12		234.92	593.04947	2	33 31 45 N	111 23 59 W
0328	AX3555	TBM 13		235.51	559.58315	2	33 31 42 N	111 23 41 W
0329	DU0432	C 270	A	236.18	533.89020	2	33 31 38 N	111 23 20 W
0330	AX3556	TBM 14		236.73	559.67757	2	33 31 48 N	111 23 07 W
0331	DU0431	Q 21	C	237.87	565.19866	2	33 32 08 N	111 22 41 W
0332	AX3557	TBM 15		238.64	604.50958	2	33 31 55 N	111 22 23 W
0406	DU0430	D 270	C	239.19	626.41961	2	33 31 45 N	111 22 10 W
0333	AX3558	TBM 16		239.96	617.77230	2	33 31 49 N	111 22 03 W
0334	DU0429	P 21	A	240.60	653.27012	2	33 31 52 N	111 21 57 W
0335	AX3559	TBM 17		241.85	709.60324	2	33 31 57 N	111 21 17 W
0336	DU0428	E 270	A	242.46	748.57131	2	33 31 59 N	111 20 58 W
0337	DU0427	F 270	D	243.02	766.24630	2	33 32 12 N	111 20 45 W
0338	DU0426	N 21	C	243.48	808.34649	2	33 32 27 N	111 20 38 W
0339	AX3560	TBM 19		243.87	826.68442	2	33 32 33 N	111 20 28 W

UNADJUSTED DATA

LINE NO.: L12530

ORDER/CLASS = 1/2

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0340	DU0425	G 270	A	244.46	864.48317	2	33 32 41 N	111 20 14 W
0341	AX3561	TBM 18		245.35	850.79507	3	33 32 30 N	111 19 52 W
0342	DU0424	M 21	A	246.22	871.37870	2	33 32 19 N	111 19 31 W
0343	AX3562	TBM 21		246.98	871.27447	2	33 31 58 N	111 19 19 W
0344	DU0423	H 270	A	247.87	878.29939	2	33 31 34 N	111 19 05 W
0345	AX3563	TBM 20		248.49	889.43004	3	33 31 45 N	111 18 57 W
0346	DU0422	L 21	A	249.27	911.67918	2	33 31 59 N	111 18 48 W
0347	AX3564	TBM 22		249.82	869.09014	2	33 32 08 N	111 18 37 W
0348	DU0421	J 270	A	250.15	836.26302	2	33 32 14 N	111 18 31 W
0349	AX3565	TBM 23		250.67	786.16311	4	33 32 01 N	111 18 30 W
0350	DU0420	K 270	D	250.80	773.02741	4	33 31 58 N	111 18 30 W
0351	AX3566	TBM 24		251.37	717.14728	4	33 31 42 N	111 18 26 W
0352	DU0419	K 21	A	251.82	681.09775	2	33 31 30 N	111 18 23 W
0353	AX3567	TBM 25		252.59	660.17543	3	33 31 54 N	111 18 15 W
0354	DU0418	V 270	D	252.93	653.54276	2	33 32 04 N	111 18 11 W
0355	DU0417	J 21	A	253.62	666.11765	2	33 32 13 N	111 17 46 W
0356	DU0416	L 270	D	255.12	710.90600	3	33 32 19 N	111 16 52 W
0357	AX3568	TBM 26		255.91	733.08614	3	33 32 20 N	111 16 25 W
0358	DU0415	H 21	C	256.39	745.11455	2	33 32 20 N	111 16 08 W
0359	AX3569	TBM 27		257.09	770.79291	2	33 32 32 N	111 15 47 W
0360	DU0414	M 270	D	257.61	798.69519	2	33 32 40 N	111 15 31 W
0361	AX3570	TBM 28		258.31	789.68584	3	33 32 58 N	111 15 15 W
0362	DU0413	G 21	C	259.11	778.03226	2	33 33 19 N	111 14 57 W
0363	AX3571	TBM 29		259.93	783.29526	2	33 33 37 N	111 14 36 W
0364	DU0412	F 21	C	261.18	804.02184	2	33 34 04 N	111 14 05 W
0365	AX3572	TBM 30		262.01	795.79957	2	33 34 27 N	111 13 50 W
0366	DU0410	DAVIS RM 1	C	262.50	778.06876	2	33 34 40 N	111 13 41 W
0367	DU0409	DAVIS	C	262.51	777.98262	2	33 34 40 N	111 13 41 W
0368	DU0411	DAVIS RM 2	C	262.52	777.18413	2	33 34 40 N	111 13 41 W
0369	AX3573	TBM 31		263.20	722.83902	2	33 34 51 N	111 13 21 W
0370	DU0408	E 21	C	263.82	686.98240	2	33 35 01 N	111 13 03 W
0371	DU0407	N 270	B	264.44	708.99280	2	33 34 54 N	111 12 42 W
0372	AX3574	TBM 33		264.74	732.36534	2	33 35 02 N	111 12 40 W
0373	DU0406	P 270	C	265.86	743.42979	2	33 35 33 N	111 12 31 W
0374	AX3575	TBM 32		266.69	672.76751	2	33 35 45 N	111 12 17 W
0375	DU0405	D 21	D	267.25	615.33838	4	33 35 53 N	111 12 08 W

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

TOL = 4.0 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.242 METERS FOR: C 13
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0376	AX3576	TBM 35		267.75	651.17034	4	33 36 04 N	111 12 02 W
0377	DU0404	Q 270	C	268.42	696.61599	2	33 36 18 N	111 11 54 W
0378	AX3577	TBM 34		269.31	756.78980	3	33 36 33 N	111 11 47 W
0379	DU0403	C 21	A	269.76	722.86419	2	33 36 40 N	111 11 44 W
0380	AX3578	TBM 36		270.17	682.23807	2	33 36 53 N	111 11 43 W
0381	AX3579	TBM 37		270.56	646.10256	2	33 37 05 N	111 11 42 W
0382	DU0402	R 270	C	271.16	628.03383	2	33 37 24 N	111 11 41 W
0383	AX3580	TBM 38		272.34	626.38142	2	33 38 02 N	111 11 47 W
0384	DU0401	S 270	C	272.63	645.17455	2	33 38 11 N	111 11 48 W
0385	AX3581	TBM 39		273.12	673.09298	3	33 38 23 N	111 11 46 W
0386	DU0400	B 21	C	273.48	643.41773	2	33 38 31 N	111 11 45 W
0387	AX3582	TBM 40		274.03	599.34290	2	33 38 42 N	111 11 33 W
0388	AX3583	TBM 41		274.84	602.44115	2	33 38 59 N	111 11 15 W
0389	DU0399	T 270	A	275.06	622.58147	2	33 39 03 N	111 11 10 W
0390	AX3584	TBM 42		275.72	612.57955	3	33 39 12 N	111 10 57 W
0391	AX3585	TBM 45		275.95	625.93229	2	33 39 16 N	111 10 52 W
0392	AX3586	TBM 44		276.58	632.83643	2	33 39 25 N	111 10 39 W
0393	DU0398	A 21	C	276.95	599.81248	2	33 39 30 N	111 10 32 W
0394	AX3587	TBM 43		277.98	591.77442	2	33 39 53 N	111 10 09 W
0395	DU0397	U 270	D	278.48	625.81741	2	33 40 05 N	111 09 58 W
0398	AX3588	TBM 47		278.72	638.13900	2	33 40 07 N	111 09 55 W
0397	AX3589	TBM 46		279.24	670.07560	2	33 40 10 N	111 09 47 W
0396	DU0396	Q 17	A	280.00	674.19635	3	33 40 16 N	111 09 36 W
0404	DU0393	W 19	D 1	280.37	653.86018	2	33 40 17 N	111 09 38 W
0405	DU0367	2141	D 1	280.44	652.53660	2	33 40 18 N	111 09 39 W
0396	DU0396	Q 17	A *	280.00	674.19635		33 40 16 N	111 09 36 W
0399	DU0394	W 270	D	281.14	656.43014	1	33 40 27 N	111 08 55 W
0400	AX3590	TBM 48		281.84	670.85436	1	33 40 19 N	111 08 36 W
0401	AX3591	TBM 49		282.48	661.63038	1	33 40 11 N	111 08 19 W
0402	DU0365	P 17	C	283.16	676.33746	1	33 40 03 N	111 08 01 W

UNADJUSTED DATA

AGENCY:NGS STATES: AZ LEVELING BEGAN 12/17/1947 AND ENDED 04/23/1948

LINE NO.: L12530
ORDER/CLASS = 1/2
TOL = 4.0 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 09/27/84
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

2.22	MM	STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
1.57	MM	STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
283.16	KM	MAIN LINE LENGTH
59.64	KM	SPUR LINE LENGTH
769.982	KM	TOTAL SINGLE-RUN LEVELING
00337		BENCH MARKS
00060		TEMPORARY BENCH MARKS
00396		NUMBER OF SECTIONS
0		NUMBER OF RIVER CROSSINGS
00861		NUMBER OF RUNNINGS
9.1		PERCENT RERUNS

COMMENTS:

THE OBSERVATIONS FOR THIS PROJECT ARE FILED UNDER HG L12528

UNADJUSTED DATA

LINE NO.: L11301/26
ORDER/CLASS = 2/0

PROJECT TITLE: AIRPORTS IN ARIZONA

2 MI SE OF BEARDSLEY TO LUKE 3 AIRPORT

AGENCY:NGS

STATES: AZ LEVELING BEGAN 01/22/1948 AND ENDED 01/23/1948

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:

ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 362.324 METERS FOR: 1189
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0005	DV0251	1189	D	0.00	362.32400		33 38 06 N	112 20 41 W
0006	DV1518	W 23		0.52	364.63637	1	33 38 18 N	112 20 56 W
0007	DV0252	1203.86	D	0.89	367.04824	2	33 38 26 N	112 21 06 W
0008	DV0253	1221.10	D	1.86	371.89292	2	33 38 47 N	112 21 33 W
0009	DV0254	F 266	C	2.80	367.48986	2	33 38 16 N	112 21 32 W
0010	DV0255	G 266	C	3.57	366.76979	2	33 37 56 N	112 21 49 W
0012	AX4990	TBM HIGH POINT	1	4.29	369.92755	2	33 37 56 N	112 21 49 W
0010	DV0255	G 266	C *	3.57	366.76979		33 37 56 N	112 21 49 W
0011	DV1645	H 266		4.63	362.45418	2	33 37 27 N	112 21 31 W

UNADJUSTED DATA

LINE NO.: L11301/26

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 01/22/1948 AND ENDED 01/23/1948

TOL = 8.4 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 09/21/84
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

1.68	MM	STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
1.19	MM	STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
4.63	KM	MAIN LINE LENGTH
0.72	KM	SPUR LINE LENGTH
10.244	KM	TOTAL SINGLE-RUN LEVELING
00007		BENCH MARKS
00001		TEMPORARY BENCH MARKS
00007		NUMBER OF SECTIONS
0		NUMBER OF RIVER CROSSINGS
00013		NUMBER OF RUNNINGS
0.0		PERCENT RERUNS

COMMENTS:

THIS PROJECT CONSISTS OF 27 PARTS

UNADJUSTED DATA

LINE NO.: L11301/14

ORDER/CLASS = 2/0

PROJECT TITLE: AIRPORTS IN ARIZONA

16 MI W OF PHOENIX TO LUKE FIELD

AGENCY:NGS

STATES: AZ LEVELING BEGAN 03/19/1945 AND ENDED 03/21/1945

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:

ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 294.260 METERS FOR: 802+15

AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY LEVEL	SPUR	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0005	DV0499	802+15	D	0.00	294.26000		33 25 28 N	112 21 26 W
0006	ZZ3785	TBM 32 W		0.08	293.55396	1	33 25 29 N	112 21 28 W
0007	AY4189	TBM 36 W		0.89	293.54580	2	33 25 58 N	112 21 27 W
0008	DV1500	S 258		1.75	296.00429	2	33 26 26 N	112 21 27 W
0009	AY4190	TBM 37 W		2.60	298.87307	2	33 26 54 N	112 21 27 W
0010	DV0500	W 258	C	3.13	300.13733	2	33 27 12 N	112 21 27 W
0011	AY4191	TBM 38 W		4.09	301.63850	2	33 27 43 N	112 21 26 W
0012	DV0501	U 258	C	4.71	302.99310	2	33 28 03 N	112 21 26 W
0013	AY4192	TBM 39 W		5.46	304.46833	2	33 28 28 N	112 21 26 W
0014	AY4193	TBM 40 W		6.21	306.61298	2	33 28 53 N	112 21 26 W
0015	DV1496	V 258		6.64	309.41885	2	33 29 07 N	112 21 26 W
0016	ZZ3784	TBM 59 W		7.87	315.87851	2	33 29 56 N	112 21 42 W
0017	ZZ3783	TBM 58 W		8.01	317.20698	2	33 29 56 N	112 21 42 W
0018	DV0506	T 258	C	8.29	319.04050	2	33 30 02 N	112 21 27 W
0019	AY4194	TBM 57 W		9.12	324.38194	2	33 30 30 N	112 21 26 W
0020	DV0273	X 258	C	9.99	332.23936	2	33 30 59 N	112 21 25 W
0021	AY4195	TBM 56 W		10.75	328.27219	2	33 31 24 N	112 21 25 W
0022	DV0274	Y 258	C	11.57	329.25493	2	33 31 51 N	112 21 26 W
0023	DV0275	1 LUKE FIELD	D	12.57	330.74181	2	33 32 24 N	112 21 27 W
0024	DV0277	Z 258	D	12.64	331.26993	2	33 32 24 N	112 21 30 W
0025	DV0276	14 LUKE FIELD	D	12.68	331.75080	2	33 32 23 N	112 21 27 W
0024	DV0277	Z 258	D	*	12.64	331.26993	33 32 24 N	112 21 30 W
0047	DV0287	11 LUKE FIELD	D	1	12.87	330.42870	33 32 16 N	112 21 29 W
0023	DV0275	1 LUKE FIELD	D	*	12.57	330.74181	33 32 24 N	112 21 27 W
0026	DV0278	2 LUKE FIELD	D		12.95	331.63943	33 32 35 N	112 21 27 W
0027	DV0279	3 LUKE FIELD	B		13.10	333.25860	33 32 40 N	112 21 28 W
0028	DV0280	4 LUKE FIELD	D		13.37	333.09166	33 32 41 N	112 21 39 W

0029	DV0281	5 LUKE FIELD	D		13.71	333.45658	2	33 32 40 N	112 21 53 W
0052	DV0290	6 LUKE FIELD	D	1	13.95	332.96513	2	33 32 39 N	112 21 56 W
0053	DV0291	A 259	B	1	14.50	331.79420	2	33 32 23 N	112 21 52 W
0054	AY4208	TBM 42 W		2	14.51	331.36536	2	33 32 23 N	112 21 52 W
0053	DV0291	A 259	B	*	14.50	331.79420		33 32 23 N	112 21 52 W
0050	DV0289	X	D	1	14.52	331.45120	2	33 32 23 N	112 21 53 W
0056	DV0292	7 LUKE FIELD	D	1	14.81	331.93670	2	33 32 30 N	112 21 56 W

UNADJUSTED DATA

LINE NO.: L11301/14

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/19/1945 AND ENDED 03/21/1945

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 294.260 METERS FOR: 802+15
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
- 0057	AY4209	TBM 55 W	1	14.93	331.62872	2	33 32 30 N	112 21 56 W
- 0058	AY4210	TBM 54 W	1	14.94	333.22484	2	33 32 30 N	112 21 56 W
- 0029	DV0281	5 LUKE FIELD	D *	13.71	333.45658		33 32 40 N	112 21 53 W
- 0030	AY4196	TBM 41 W		13.99	335.03618	2	33 32 38 N	112 21 53 W
- 0031	DV0282	B 259	C 1	14.47	336.74358	2	33 33 02 N	112 22 07 W
- 0030	AY4196	TBM 41 W	*	13.99	335.03618		33 32 38 N	112 21 53 W
- 0032	AY4197	TBM 43 W		14.11	335.29686	1	33 32 38 N	112 21 53 W
- 0033	AY4198	TBM 44 W		14.19	335.08027	1	33 32 37 N	112 21 53 W
- 0034	AY4199	TBM 45 W		14.74	333.71888	1	33 32 34 N	112 21 53 W
- 0035	AY4200	TBM 46 W		15.15	335.56923	1	33 32 32 N	112 21 53 W
- 0036	AY4201	TBM 47 W		16.10	337.03032	1	33 32 26 N	112 21 53 W
- 0037	AY4202	TBM 48 W		16.81	333.75636	1	33 32 22 N	112 21 52 W
- 0038	AY4203	TBM 49 W		17.12	332.51421	1	33 32 21 N	112 21 52 W
- 0039	AY4204	TBM 50 W		17.43	331.73612	1	33 32 19 N	112 21 52 W
- 0040	AY4205	TBM 51 W		18.04	330.74753	1	33 32 15 N	112 21 52 W
- 0041	AY4206	TBM 52 W		18.24	330.00242	1	33 32 14 N	112 21 52 W
- 0042	DV0283	9 LUKE FIELD	D 1	19.23	328.48473	2	33 31 53 N	112 22 42 W
- 0041	AY4206	TBM 52 W	*	18.24	330.00242		33 32 14 N	112 21 52 W
- 0043	AY4207	TBM 53 W		18.67	329.35081	1	33 32 12 N	112 21 52 W
- 0044	DV0284	8 LUKE FIELD	D	19.00	330.27270	1	33 32 10 N	112 21 52 W
- 0049	DV0288	10 LUKE FIELD	D 1	19.23	330.40900	1	33 32 15 N	112 21 55 W
- 0050	DV0289	X	D 1	19.55	331.45548	1	33 32 23 N	112 21 53 W
- 0044	DV0284	8 LUKE FIELD	D *	19.00	330.27270		33 32 10 N	112 21 52 W
- 0045	DV0285	13 LUKE FIELD	D	19.32	330.12994	1	33 32 09 N	112 21 40 W
- 0046	DV0286	12 LUKE FIELD	D	19.62	329.89663	1	33 32 09 N	112 21 28 W
- 0047	DV0287	11 LUKE FIELD	D 1	19.81	330.43535	1	33 32 16 N	112 21 29 W

UNADJUSTED DATA

LINE NO.: L11301/14

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/19/1945 AND ENDED 03/21/1945

TOL = 8.4 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 09/21/84
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

2.20	MM	STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
1.56	MM	STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
19.62	KM	MAIN LINE LENGTH
3.79	KM	SPUR LINE LENGTH
40.693	KM	TOTAL SINGLE-RUN LEVELING
00026		BENCH MARKS
00025		TEMPORARY BENCH MARKS
00052		NUMBER OF SECTIONS
0		NUMBER OF RIVER CROSSINGS
00085		NUMBER OF RUNNINGS
0.0		PERCENT RERUNS

COMMENTS:

THIS PROJECT CONSISTS OF 27 PARTS

UNADJUSTED DATA RELEVELING

LINE NO.: L8632
ORDER/CLASS = 2/0

PROJECT TITLE: 3.3 MI SW OF GLENDALE TO MATTHIE AZ

AGENCY:NGS STATES: AZ LEVELING BEGAN 05/08/1939 AND ENDED 05/15/1939

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETICTHE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 335.131 METERS FOR: RV 73
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0006	DV0541	RV 73	D	0.00	335.13100		33 28 49 N	112 07 00 W
0007	DV0220	RV 74	B	1.35	339.44993	1	33 29 21 N	112 07 38 W
0008	DV0229	1131.86	D	3.59	344.79412	1	33 30 07 N	112 08 33 W
0009	BA3483	TBM 1		5.39	349.55586	1	33 30 49 N	112 09 23 W
0010	BA3484	TBM 2		7.02	350.93364	1	33 31 27 N	112 10 07 W
0011	DV1554	P 23		7.34	350.42245	1	33 31 34 N	112 10 16 W
0012	DV0234	1152	D	8.95	351.11312	1	33 32 11 N	112 11 00 W
0013	DV0233	RV 79	D	9.13	350.74430	2	33 32 17 N	112 11 07 W
0014	DV0237	R 23	D	11.72	349.01370	1	33 33 16 N	112 12 16 W
0015	DV0239	RV 80	D	11.92	348.81689	1	33 33 16 N	112 12 16 W
0016	DV1501	S 23		15.55	347.95929	1	33 34 40 N	112 13 56 W
0017	DV0240	RV 83	D	16.59	346.95146	1	33 35 04 N	112 14 26 W
0018	DV0241	1136	D	18.17	346.12434	1	33 35 33 N	112 15 15 W
0019	DV0242	T 23	B	18.87	347.03903	1	33 35 41 N	112 15 40 W
0020	DV0243	RV 84	D	19.11	347.35802	1	33 35 42 N	112 15 44 W
0021	DV0244	RV 85	D	20.57	349.88715	1	33 35 58 N	112 16 37 W
0022	DV0245	RV 86	D	21.74	350.19649	1	33 36 10 N	112 17 20 W
0023	DV0246	U 23	B	22.59	351.18906	1	33 36 20 N	112 17 52 W
0024	DV1542	1151 PHNX		23.05	350.68386	1	33 36 24 N	112 18 08 W
0025	DV0247	RV 87	B	23.23	346.98314	1	33 36 25 N	112 18 12 W
0026	DV0249	RV 88	D	25.56	349.60041	1	33 37 08 N	112 19 25 W
0027	DV0248	V 23	C	25.64	349.66335	1	33 37 09 N	112 19 27 W
0028	DV0250	RV 89	D	27.41	358.98755	1	33 37 47 N	112 20 17 W
0029	DV0251	1189	D	28.24	362.24261	1	33 38 06 N	112 20 41 W
0030	DV1518	W 23		28.77	364.55744	1	33 38 18 N	112 20 56 W
0031	DV0256	X 23	C	32.04	382.26541	1	33 39 30 N	112 22 27 W
0032	DV0258	RV 92	D	33.06	388.54043	1	33 39 53 N	112 22 55 W
0033	DV0257	1282	D	33.40	390.67764	1	33 40 01 N	112 23 05 W
0034	DV0259	Y 23	C	35.32	400.97714	1	33 40 43 N	112 24 01 W
0035	DV0260	RV 93	D	36.05	406.13484	1	33 41 00 N	112 24 22 W
0036	DV0261	1351	D	37.11	411.62479	1	33 41 23 N	112 24 53 W
0037	DV0262	RV 94	D	37.98	417.02851	1	33 41 45 N	112 25 17 W
0038	DV0263	Z 23	C	38.39	419.44339	1	33 41 50 N	112 25 26 W
0039	DV0265	RV 95	D	38.98	421.00374	1	33 42 04 N	112 25 43 W

UNADJUSTED DATA RELEVELING

LINE NO.: L8632

AGENCY:NGS STATES: AZ LEVELING BEGAN 05/08/1939 AND ENDED 05/15/1939

ORDER/CLASS = 2/0

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 335.131 METERS FOR: RV 73
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0040	DV0266	RV 96	D	40.27	430.42187	1	33 42 32 N	112 26 19 W
0041	DV0268	A 24	C	41.83	440.98714	1	33 43 07 N	112 27 05 W
0042	DV0267	1451	D	42.06	442.14733	1	33 43 12 N	112 27 11 W
0043	DV0269	RV 97	D	42.58	446.34168	1	33 43 24 N	112 27 25 W
0044	DV0270	RV 98	D	43.80	454.57654	1	33 43 51 N	112 28 00 W
0045	DV0271	RV 99	D	46.02	470.71677	1	33 44 42 N	112 29 04 W
0046	DV0272	1574	D	46.84	479.43556	1	33 44 59 N	112 29 28 W
0047	DV0916	C 24	C	48.21	489.60270	1	33 45 29 N	112 30 06 W
0048	DV0917	RV 101	D	49.34	498.48364	1	33 45 55 N	112 30 38 W
0049	DV0918	RV 102	B	51.07	511.56621	1	33 46 33 N	112 31 28 W
0050	DV0920	1697	D	51.81	516.86548	1	33 46 49 N	112 31 47 W
0051	DV0921	RV 104	D	54.35	538.73926	1	33 47 44 N	112 33 00 W
0052	DV0922	E 24	D	54.86	542.95968	1	33 47 55 N	112 33 14 W
0053	DV0923	RV 105	D	56.17	555.62436	1	33 48 22 N	112 33 48 W
0054	DV0924	F 24	D	57.58	568.56959	1	33 48 53 N	112 34 28 W
0055	DV0925	RV 106	D	57.78	570.90281	1	33 48 54 N	112 34 27 W
0056	DV0926	1883	D	58.24	573.85314	1	33 49 08 N	112 34 47 W
0057	DV0927	RV 107	D	59.33	580.28356	1	33 49 33 N	112 35 18 W
0058	DV0928	RV 108	D	61.07	592.00173	1	33 50 11 N	112 36 08 W
0059	DV0929	G 24	B	62.40	597.78401	1	33 50 41 N	112 36 46 W
0060	DV0931	RV 109	D	63.16	598.45735	1	33 50 58 N	112 37 07 W
0061	DV0930	1971	D	63.63	600.61423	1	33 51 08 N	112 37 20 W
0062	DV0932	H 24	C	64.64	596.10801	1	33 51 30 N	112 37 48 W
0063	DV0933	RV 111	D	66.23	589.82547	1	33 51 56 N	112 38 40 W
0064	DV0934	J 24	A	67.70	571.36829	1	33 52 26 N	112 39 17 W
0065	DV0935	RV 112	D	67.89	570.14610	1	33 52 32 N	112 39 22 W
0066	DV0936	1865	D	68.44	568.30781	1	33 52 46 N	112 39 35 W
0067	DV0937	RV 113	D	68.96	565.99448	1	33 52 57 N	112 39 38 W
0068	DV0938	RV 114	D	70.97	571.00474	1	33 53 52 N	112 40 19 W
0069	DV0939	K 24	D	71.37	572.06738	1	33 54 04 N	112 40 24 W
0070	DV0941	RV 115	D	72.33	576.97971	1	33 54 31 N	112 40 33 W
0071	DV0940	1935	D	73.34	589.64728	1	33 54 57 N	112 40 42 W
0072	DV0943	RV 116	D	74.16	585.09032	1	33 55 17 N	112 41 00 W
0073	DV0942	L 24	D	74.83	591.66176	1	33 55 31 N	112 41 17 W
0074	DV0944	RV 117	D	75.86	597.36561	1	33 55 53 N	112 41 46 W
0075	DV0946	RV 118	D	77.56	606.25609	1	33 56 35 N	112 42 24 W

UNADJUSTED DATA RELEVELING

LINE NO.: L8632

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 05/08/1939 AND ENDED 05/15/1939

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 335.131 METERS FOR: RV 73
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0076	DV0945	M 24	D	77.71	607.62459	1	33 56 39 N	112 42 29 W
0077	DV0947	2004	D	78.56	610.70801	1	33 57 01 N	112 42 46 W
0078	DV0948	RV 119	D	78.87	612.76516	1	33 57 09 N	112 42 52 W
0079	DV0949	RV 120	D	80.41	620.70855	1	33 57 48 N	112 43 32 W
0080	DV0950	N 24	C	80.85	627.75594	1	33 57 59 N	112 43 42 W
0081	DV1540	P 24		81.31	635.71142	1	33 58 11 N	112 43 58 W
0082	DV0951	RV 122	D	83.63	646.89547	1	33 58 34 N	112 45 19 W
0083	DV0952	Q 24	D	84.03	650.64390	1	33 58 37 N	112 45 32 W
0084	DV0953	RV 123	D	85.56	664.30100	1	33 58 57 N	112 46 25 W
0085	DV0954	2171	D	85.62	664.09498	1	33 58 58 N	112 46 30 W
0086	DV0955	RV 124	D	87.05	677.28073	1	33 59 11 N	112 47 22 W
0087	DV0956	R 24	D	88.12	691.80208	1	33 59 20 N	112 48 03 W
0088	DV0957	RV 125	D	88.60	694.95579	1	33 59 27 N	112 48 17 W
0089	DV0958	S 24	D	88.96	697.58667	1	33 59 35 N	112 48 29 W
0090	DV0959	RV 127	D	89.85	701.55517	1	33 59 22 N	112 49 12 W

UNADJUSTED DATA RELEVELING

LINE NO.: L8632

AGENCY:NGS STATES: AZ LEVELING BEGAN 05/08/1939 AND ENDED 05/15/1939

ORDER/CLASS = 2/0
TOL = 8.4 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 09/21/84
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

0.04 MM STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
0.03 MM STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
89.85 KM MAIN LINE LENGTH
0.00 KM SPUR LINE LENGTH
90.398 KM TOTAL SINGLE-RUN LEVELING
00083 BENCH MARKS
00002 TEMPORARY BENCH MARKS
00084 NUMBER OF SECTIONS
0 NUMBER OF RIVER CROSSINGS
00085 NUMBER OF RUNNINGS
0.0 PERCENT RERUNS

COMMENTS:

THE OBSERVATIONS FOR THIS PROJECT ARE FILED UNDER HG L8630

HGZ FILE PRIOR TO RUNNING THE FIELD ABSTRACT. THE ERROR WAS CAUSED BY
USE OF A 2-CM PLUG ON ONLY THE BACKSIGHT IN THE LAST SETUP OF THE
SECTION RUNNING.

UNADJUSTED DATA

LINE NO.: L701
ORDER/CLASS = 2/0

PROJECT TITLE: TEMPE TO WENDEN AZ

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/17/1933 AND ENDED 03/30/1933

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETICTHE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 355.080 METERS FOR: P 22
AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	APPROXIMATE LONGITUDE
0004	DU0789	P 22	D	0.00	355.08000		33 25 46 N	111 56 22 W
0005	DU0792	E 23	D	1.26	358.24957	1	33 26 05 N	111 56 32 W
0006	DU0939	RV 59	D	1.67	356.31329	1	33 26 14 N	111 56 45 W
0007	DU1601	RV 60		2.46	353.61809	1	33 26 24 N	111 57 12 W
0008	DU0940	RV 61	D	3.47	351.83923	1	33 26 27 N	111 57 53 W
0009	DU0941	RV 62	D	4.22	351.76587	1	33 26 32 N	111 58 22 W
0010	DU0942	F 23	B	4.49	353.36096	1	33 26 33 N	111 58 30 W
0011	DU0943	RV 63	D	4.80	351.58506	1	33 26 37 N	111 58 44 W
0012	DU0944	RV 64	D	5.58	347.70360	1	33 26 37 N	111 59 12 W
0013	DU0945	RV 65	D	6.48	344.86625	1	33 26 38 N	111 59 46 W
0014	DV0521	RV 66	D	7.45	342.01326	1	33 26 39 N	112 00 23 W
0015	DV1627	G 23		7.98	340.73570	1	33 26 38 N	112 00 43 W
0016	DV0522	RV 67	D	8.50	339.93316	1	33 26 39 N	112 01 04 W
0017	BR9358	TBM 1		9.42	337.70743	1	33 26 39 N	112 01 40 W
0018	DV0528	RV 68	D	10.07	336.29379	1	33 26 39 N	112 02 05 W
0019	DV0529	RV 69	D	10.98	334.22756	1	33 26 39 N	112 02 41 W
0020	DV0530	H 23	C	11.33	332.79004	1	33 26 43 N	112 02 49 W
0021	BR9359	TBM 2		11.92	332.48334	1	33 26 45 N	112 03 10 W
0022	BR9360	TBM 3		13.13	329.94484	1	33 26 48 N	112 03 54 W
0023	DV0531	K 23	C	14.12	331.06792	1	33 26 51 N	112 04 30 W
0024	DV0532	J 23	D	14.81	328.91670	1	33 26 38 N	112 04 42 W
0025	DV0533	RV 70	D	15.96	327.16125	1	33 26 39 N	112 05 27 W
0026	BR9361	TBM 4		16.99	326.75278	1	33 27 00 N	112 05 43 W
0027	DV0535	RV 71	D	18.10	328.47494	1	33 27 22 N	112 06 01 W
0028	DV1631	L 23		19.25	329.90981	1	33 28 00 N	112 06 02 W
0029	DV0537	RV 72	D	19.67	330.60958	1	33 28 09 N	112 06 13 W
0030	BR9362	TBM 5		20.78	334.37338	1	33 28 35 N	112 06 43 W
0031	DV0541	RV 73	D	21.39	335.32009	1	33 28 49 N	112 07 00 W
0032	DV0217	M 23	C	22.36	336.77533	1	33 29 13 N	112 07 28 W
0033	DV0220	RV 74	B	22.74	339.63507	1	33 29 21 N	112 07 38 W
0034	BR9363	TBM 6		23.99	340.86264	1	33 29 50 N	112 08 12 W
0035	DV1521	RV 75		24.92	344.90718	1	33 30 11 N	112 08 37 W
0036	DV1523	N 23		25.59	346.17498	1	33 30 26 N	112 08 55 W
0037	DV1522	RV 76		26.46	348.05259	1	33 30 43 N	112 09 15 W

UNADJUSTED DATA

LINE NO.: L701

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/17/1933 AND ENDED 03/30/1933

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 355.080 METERS FOR: P 22
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0038	BR9364	TBM 7		27.44	350.62902	1	33 31 05 N	112 09 41 W
0039	DV1555	RV 77		28.22	350.52617	1	33 31 22 N	112 10 02 W
0040	DV1554	P 23		28.72	350.60181	1	33 31 34 N	112 10 16 W
0041	DV1552	RV 78		29.34	351.66409	1	33 31 48 N	112 10 33 W
0042	BR9365	TBM 8		30.19	351.30589	1	33 32 07 N	112 10 56 W
0043	DV1551	Q 23		30.50	351.15614	1	33 32 14 N	112 11 04 W
0044	DV0233	RV 79	D	30.66	350.93757	1	33 32 17 N	112 11 07 W
0045	DV0234	1152	D 1	30.84	351.29633	2	33 32 11 N	112 11 00 W
0044	DV0233	RV 79	D *	30.66	350.93757	1	33 32 17 N	112 11 07 W
0046	BR9366	TBM 9		31.59	350.73183	1	33 32 38 N	112 11 32 W
0047	BR9367	TBM 10		32.26	349.80593	1	33 32 54 N	112 11 50 W
0048	DV0237	R 23	D	33.23	349.20426	1	33 33 16 N	112 12 16 W
0050	DV1549	RV 81		34.52	347.95628	1	33 33 47 N	112 12 53 W
0051	DV1548	RV 82		36.19	348.30496	1	33 34 25 N	112 13 38 W
0052	DV1501	S 23		36.85	348.15579	1	33 34 40 N	112 13 56 W
0053	DV0240	RV 83	D	37.90	347.14356	1	33 35 04 N	112 14 26 W
0054	DV0241	1136	D	39.49	346.32473	1	33 35 33 N	112 15 15 W
0055	DV0242	T 23	B	40.19	347.23692	1	33 35 41 N	112 15 40 W
0057	BR9368	TBM 11		40.84	348.09524	1	33 35 48 N	112 16 04 W
0058	BR9369	TBM 12		41.52	349.90734	1	33 35 56 N	112 16 29 W
0060	BR9370	TBM 13		42.38	350.39331	1	33 36 05 N	112 17 01 W
0062	DV0246	U 23	B	43.76	351.38220	1	33 36 20 N	112 17 52 W
0063	DV1542	1151 PHNX		44.21	350.87476	1	33 36 24 N	112 18 08 W
0065	BR9371	TBM 14		45.75	345.97294	1	33 36 51 N	112 18 56 W
0066	DV0248	V 23	C	46.76	349.86380	1	33 37 09 N	112 19 27 W
0068	BR9372	TBM 15		47.52	355.76106	1	33 37 25 N	112 19 49 W
0069	DV0250	RV 89	D	48.51	359.19123	1	33 37 47 N	112 20 17 W
0070	DV0251	1189	D	49.34	362.45431	1	33 38 06 N	112 20 41 W
0071	DV1518	W 23		49.87	364.76827	1	33 38 18 N	112 20 56 W
0072	BR9373	TBM 16		50.09	367.25067	1	33 38 23 N	112 21 02 W
0073	DV1517	RV 90		51.23	371.93791	1	33 38 47 N	112 21 31 W
0074	BR9374	TBM 17		51.80	375.77273	1	33 39 00 N	112 21 47 W
0075	DV0256	X 23	C	53.17	382.47135	1	33 39 30 N	112 22 27 W
0077	DV0257	1282	D	54.54	390.88661	1	33 40 01 N	112 23 05 W
0079	BR9375	TBM 18		55.49	396.71548	1	33 40 22 N	112 23 33 W
0080	DV0259	Y 23	C	56.47	401.19194	1	33 40 43 N	112 24 01 W

UNADJUSTED DATA

LINE NO.: L701

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/17/1933 AND ENDED 03/30/1933

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 355.080 METERS FOR: P 22
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
- 0081	DV0260	RV 93	D	57.20	406.35317	1	33 41 00 N	112 24 22 W
- 0082	DV0261	1351	D	58.26	411.84711	1	33 41 23 N	112 24 53 W
- 0083	DV0262	RV 94	D	59.13	417.25327	1	33 41 45 N	112 25 17 W
- 0084	DV0263	Z 23	C	59.54	419.66492	1	33 41 50 N	112 25 26 W
- 0085	DV0265	RV 95	D	60.14	421.22909	1	33 42 04 N	112 25 43 W
- 0086	BR9376	TBM 19		60.50	424.32592	1	33 42 12 N	112 25 53 W
- 0087	DV0266	RV 96	D	61.43	430.64799	1	33 42 32 N	112 26 19 W
- 0088	BR9377	TBM 20		61.85	433.43236	1	33 42 41 N	112 26 31 W
- 0089	DV0268	A 24	C	62.99	441.22037	1	33 43 07 N	112 27 05 W
- 0090	DV0267	1451	D	63.22	442.37819	1	33 43 12 N	112 27 11 W
- 0091	DV0269	RV 97	D	63.74	446.57043	1	33 43 24 N	112 27 25 W
- 0092	BR9378	TBM 21		64.69	453.52537	1	33 43 45 N	112 27 52 W
- 0094	BR9379	TBM 22		65.67	461.18527	1	33 44 07 N	112 28 20 W
- 0095	DV1546	B 24		66.33	466.04110	1	33 44 22 N	112 28 39 W
- 0096	BR9380	TBM 23		67.09	470.94030	1	33 44 39 N	112 29 01 W
- 0098	DV1547	RV 100		67.75	474.08446	1	33 44 53 N	112 29 20 W
- 0099	DV0272	1574	D	68.09	479.67865	1	33 44 59 N	112 29 28 W
- 0100	BR9381	TBM 24		68.71	485.60426	1	33 45 13 N	112 29 45 W
- 0101	DV0916	C 24	C	69.45	489.84490	1	33 45 29 N	112 30 06 W
- 0102	BR9382	TBM 25		70.40	498.30211	1	33 45 49 N	112 30 32 W
- 0104	BR9383	TBM 26		71.52	505.08603	1	33 46 13 N	112 31 03 W
- 0105	BR9384	TBM 27		72.15	511.13540	1	33 46 27 N	112 31 21 W
- 0106	DV0919	D 24	B	72.43	511.97946	1	33 46 33 N	112 31 29 W
- 0108	DV0920	1697	D	73.08	517.10804	1	33 46 49 N	112 31 47 W
- 0109	BR9385	TBM 28		73.83	523.90957	1	33 47 05 N	112 32 08 W
- 0110	BR9386	TBM 29		74.66	529.98320	1	33 47 22 N	112 32 30 W
- 0112	DV0921	RV 104	D	75.73	538.98841	1	33 47 44 N	112 33 00 W
- 0113	DV0922	E 24	D	76.24	543.21561	1	33 47 55 N	112 33 14 W
- 0114	DV0923	RV 105	D	77.44	555.88371	1	33 48 22 N	112 33 48 W
- 0115	DV0924	F 24	D	78.86	568.83686	1	33 48 53 N	112 34 28 W
- 0117	DV0926	1883	D	79.40	574.11541	1	33 49 08 N	112 34 47 W
- 0118	DV0927	RV 107	D	80.50	580.56811	1	33 49 33 N	112 35 18 W
- 0119	DV0928	RV 108	D	82.25	592.29388	1	33 50 11 N	112 36 08 W
- 0120	DV0929	G 24	B	83.59	598.07033	1	33 50 41 N	112 36 46 W
- 0121	DV0930	1971	D	84.82	600.90847	1	33 51 08 N	112 37 20 W
- 0123	DV0932	H 24	C	85.84	596.40056	1	33 51 30 N	112 37 48 W

UNADJUSTED DATA

LINE NO.: L701

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/17/1933 AND ENDED 03/30/1933

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 355.080 METERS FOR: P 22
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE LATITUDE	LONGITUDE
0125	DV0933	RV 111	D	87.42	590.11127	1	33 51 56 N	112 38 40 W
0126	DV0934	J 24	A	88.89	571.65621	1	33 52 26 N	112 39 17 W
0128	DV0936	1865	D	89.64	568.59915	1	33 52 46 N	112 39 35 W
0129	DV0937	RV 113	D	89.99	566.28481	1	33 52 57 N	112 39 38 W
0130	BR9387	TBM 30		91.53	568.35472	1	33 53 40 N	112 40 07 W
0131	DV0939	K 24	D	92.40	572.37328	1	33 54 04 N	112 40 24 W
0133	DV0941	RV 115	D	93.24	577.28124	1	33 54 31 N	112 40 33 W
0134	DV0940	1935	D	94.16	589.95383	1	33 54 57 N	112 40 42 W
0135	DV0942	L 24	D	95.66	591.97601	1	33 55 31 N	112 41 17 W
0137	BR9388	TBM 31		96.47	597.22196	1	33 55 50 N	112 41 37 W
0139	BR9389	TBM 32		97.29	600.77702	1	33 56 09 N	112 41 57 W
0140	DV0945	M 24	D	98.57	607.95601	1	33 56 39 N	112 42 29 W
0142	DV0947	2004	D	99.41	611.03760	1	33 57 01 N	112 42 46 W
0143	DV0948	RV 119	D	99.70	613.09660	1	33 57 09 N	112 42 52 W
0144	BR9390	TBM 33		100.92	619.64410	1	33 57 39 N	112 43 22 W
0146	DV0950	N 24	C	101.72	628.08223	1	33 57 59 N	112 43 42 W
0147	DV1540	P 24		102.25	636.04206	1	33 58 11 N	112 43 58 W
0148	DV1541	RV 121		103.19	633.49192	1	33 58 26 N	112 44 31 W
0149	DV0951	RV 122	D	104.56	647.23094	1	33 58 34 N	112 45 19 W
0150	DV0952	Q 24	D	104.97	650.98053	1	33 58 37 N	112 45 32 W
0151	BR9391	TBM 34		106.10	659.81920	1	33 58 52 N	112 46 11 W
0152	DV0953	RV 123	D	106.50	664.63686	1	33 58 57 N	112 46 25 W
0153	DV0954	2171	D	106.56	664.42790	1	33 58 58 N	112 46 30 W
0154	DV0955	RV 124	D	108.00	677.61337	1	33 59 11 N	112 47 22 W
0155	DV0956	R 24	D	109.07	692.14168	1	33 59 20 N	112 48 03 W
0156	DV0957	RV 125	D	109.55	695.29706	1	33 59 27 N	112 48 17 W
0157	DV0958	S 24	D	109.91	697.92377	1	33 59 35 N	112 48 29 W
0158	DV1615	RV 126		110.17	700.13228	1	33 59 38 N	112 48 40 W
0159	BR9392	TBM 35		110.96	704.66124	1	33 59 44 N	112 49 01 W
0161	BR9393	TBM 36		111.92	710.51643	1	33 59 52 N	112 49 27 W
0162	ET0846	T 24	B	112.93	716.48146	1	34 00 00 N	112 49 54 W
0165	ET0431	RV 130	D	113.95	724.41975	1	34 00 07 N	112 50 29 W
0166	ET0432	RV 131	B	114.84	729.07673	1	34 00 05 N	112 51 04 W
0167	ET0433	U 24	C	115.83	737.18929	1	34 00 06 N	112 51 43 W
0168	ET0434	RV 132	D	116.33	739.21166	1	34 00 07 N	112 52 02 W
0169	BR9394	TBM 37		117.88	746.76640	1	34 00 10 N	112 53 02 W

UNADJUSTED DATA

LINE NO.: L701

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/17/1933 AND ENDED 03/30/1933

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 355.080 METERS FOR: P 22
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0170	ET0435	V 24	C	119.41	751.81434	1	34 00 12 N	112 54 02 W
0171	BR9395	TBM 38		120.03	753.83915	1	34 00 07 N	112 54 25 W
0173	DV1616	DIVIDE	D	121.17	748.93510	1	33 59 57 N	112 55 09 W
0175	BR9396	TBM 39		121.52	748.63201	1	33 59 54 N	112 55 22 W
0176	DV0962	W 24	C	122.64	744.39094	1	33 59 46 N	112 56 04 W
0177	BR9397	TBM 40		123.73	743.44191	1	33 59 37 N	112 56 45 W
0178	BR9398	TBM 41		124.75	740.91299	1	33 59 28 N	112 57 24 W
0179	DV0963	X 24	C	125.86	735.73186	1	33 59 19 N	112 58 06 W
0180	BR9399	TBM 42		127.08	731.93319	1	33 59 09 N	112 58 52 W
0181	BR9400	TBM 43		128.53	725.54651	1	33 58 57 N	112 59 47 W
0182	DV0964	Y 24	C	129.11	721.38562	1	33 58 52 N	113 00 09 W
0183	BR9401	TBM 44		130.37	716.55199	1	33 58 41 N	113 00 56 W
0184	DV0985	RV 135	D	131.11	712.95840	1	33 58 35 N	113 01 24 W
0185	DV0986	Z 24	C	132.34	705.39352	1	33 58 26 N	113 02 09 W
0186	BR9402	TBM 45		133.08	703.64939	1	33 58 20 N	113 02 36 W
0187	BR9403	TBM 46		133.76	700.54679	1	33 58 14 N	113 03 01 W
0188	BR9404	TBM 47		134.40	698.21951	1	33 58 08 N	113 03 25 W
0189	BR9405	TBM 48		135.08	695.77793	1	33 58 02 N	113 03 50 W
0190	DV0987	A 25	C	135.64	692.97885	1	33 57 57 N	113 04 11 W
0191	BR9406	TBM 49		136.40	692.13648	1	33 57 51 N	113 04 40 W
0192	BR9407	TBM 50		137.24	688.80297	1	33 57 44 N	113 05 11 W
0193	DV0988	B 25	C	138.84	682.02973	1	33 57 32 N	113 06 11 W
0194	BR9408	TBM 51		140.45	677.70238	1	33 57 18 N	113 07 11 W
0195	DV0989	C 25	C	142.11	670.95660	1	33 57 04 N	113 08 13 W
0196	BR9409	TBM 52		143.41	668.01965	1	33 56 54 N	113 09 02 W
0197	BR9410	TBM 53		144.69	663.79863	1	33 56 44 N	113 09 50 W
0198	DV0990	D 25	C	145.78	659.45379	1	33 56 35 N	113 10 31 W
0199	BR9411	TBM 54		146.92	658.16668	1	33 56 26 N	113 11 14 W
0200	BR9412	TBM 55		148.04	659.00795	1	33 56 17 N	113 11 56 W
0201	DV0991	E 25	C	148.46	658.42197	1	33 56 13 N	113 12 12 W
0202	BR9413	TBM 56		149.44	660.78512	1	33 56 06 N	113 12 49 W
0203	BR9414	TBM 57		150.40	661.36865	1	33 55 58 N	113 13 25 W
0204	DV0992	F 25	C	151.74	659.94510	1	33 55 47 N	113 14 16 W
0205	BR9415	TBM 58		152.70	659.96029	1	33 55 39 N	113 14 53 W
0206	BR9416	TBM 59		153.74	657.93662	1	33 55 30 N	113 15 32 W
0207	DV0993	G 25	C	154.95	656.87772	1	33 55 19 N	113 16 18 W

UNADJUSTED DATA

LINE NO.: L701

ORDER/CLASS = 2/0

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/17/1933 AND ENDED 03/30/1933

TOL = 8.4 MM X SQRT(KM)

THE FOLLOWING CORRECTIONS WERE APPLIED TO THE OBSERVATIONS:
 ORTHOMETRIC; ROD; LEVEL; TEMPERATURE; ASTRO; REFRACTION; MAGNETIC

THE DERIVED UNADJUSTED HEIGHTS ARE BASED ON A STARTING HEIGHT OF: 355.080 METERS FOR: P 22
 AND MUST NOT BE USED AS OFFICIAL HEIGHTS!!!

SPSN	ACRN	DESIGNATION AND STABILITY	SPUR LEVEL	DIST (Km)	UNADJUSTED HEIGHT (m)	NO. OF RUNS	APPROXIMATE	
							LATITUDE	LONGITUDE
0208	DV0994	RV 136	D	156.30	658.41096	1	33 55 07 N	113 17 08 W
0209	BR9417	TBM 60		157.03	658.40201	1	33 54 58 N	113 17 34 W
0210	DV0997	H 25	C	158.16	657.00140	1	33 54 44 N	113 18 15 W
0211	BR9418	TBM 61		159.26	653.88935	1	33 54 30 N	113 18 54 W
0212	BR9419	TBM 62		160.26	650.43864	1	33 54 16 N	113 19 30 W
0214	DV0995	J 25	C	161.36	645.55548	1	33 54 02 N	113 20 09 W
0215	BR9420	TBM 63		162.07	643.18449	1	33 53 53 N	113 20 34 W
0216	BR9421	TBM 64		163.03	638.67821	1	33 53 40 N	113 21 08 W
0217	BR9422	TBM 65		163.45	637.92087	1	33 53 35 N	113 21 23 W
0218	DV0996	K 25	C	164.57	633.99204	1	33 53 20 N	113 22 03 W
0219	BR9423	TBM 66		165.41	634.81439	1	33 53 09 N	113 22 33 W
0220	BR9424	TBM 67		166.53	634.69658	1	33 52 53 N	113 23 13 W
0221	DV0999	L 25	C	167.81	630.21928	1	33 52 36 N	113 23 59 W
0222	BR9425	TBM 68		169.58	624.37711	1	33 52 12 N	113 25 01 W
0223	DV1000	M 25	C	171.03	615.75469	1	33 51 53 N	113 25 52 W
0224	BR9426	TBM 69		171.94	613.46369	1	33 51 42 N	113 26 24 W
0225	BR9427	TBM 70		173.04	607.09102	1	33 51 28 N	113 27 04 W
0226	DV1001	N 25	C	174.29	600.98031	1	33 51 11 N	113 27 49 W
0227	BR9428	TBM 71		174.99	598.70024	1	33 51 02 N	113 28 13 W
0228	BR9429	TBM 72		176.29	592.39853	1	33 50 45 N	113 29 00 W
0229	DV1002	P 25	C	177.47	586.17485	1	33 50 29 N	113 29 42 W
0230	BR9430	TBM 73		177.81	585.44877	1	33 50 24 N	113 29 54 W
0231	BR9431	TBM 74		179.08	579.93067	1	33 50 07 N	113 30 39 W
0232	BR9432	TBM 75		180.09	574.45028	1	33 49 54 N	113 31 15 W
0233	DV1087	Q 25	B	180.95	570.06818	1	33 49 42 N	113 31 46 W
0235	DV1079	M 12	C	182.39	570.05394	1	33 49 18 N	113 32 29 W
0237	BR9433	TBM 76		183.61	568.25137	1	33 48 56 N	113 33 08 W
0238	BR9434	TBM 77		184.57	569.23341	1	33 48 39 N	113 33 40 W
0239	BR9435	TBM 78		185.53	568.58830	1	33 48 22 N	113 34 11 W
0240	DV1080	N 12	C	186.46	566.13748	1	33 48 05 N	113 34 41 W

UNADJUSTED DATA

AGENCY:NGS STATES: AZ LEVELING BEGAN 03/17/1933 AND ENDED 03/30/1933

LINE NO.: L701
ORDER/CLASS = 2/0
TOL = 8.4 MM X SQRT(KM)

DATA PROCESSED THROUGH REDUC4 ON 10/05/84
THIS LISTING WAS GENERATED FROM THE NGS DATA BASE

2.12 MM STANDARD DEVIATION FOR A 1 KM SINGLE RUN SECTION
1.50 MM STANDARD DEVIATION FOR A 1 KM DOUBLE RUN SECTION
186.46 KM MAIN LINE LENGTH
0.18 KM SPUR LINE LENGTH
187.751 KM TOTAL SINGLE-RUN LEVELING
00129 BENCH MARKS
00078 TEMPORARY BENCH MARKS
00206 NUMBER OF SECTIONS
0 NUMBER OF RIVER CROSSINGS
00207 NUMBER OF RUNNINGS
0.0 PERCENT RERUNS

COMMENTS:

THE OBSERVATIONS FOR THIS PROJECT ARE FILED UNDER HG L700

HGZ FILE PRIOR TO RUNNING THE FIELD ABSTRACT. THE ERROR WAS CAUSED BY
USE OF A 2-CM PLUG ON ONLY THE BACKSIGHT IN THE LAST SETUP OF THE
SECTION RUNNING.

Appendix SU-B

NGS Level Line Data

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 07 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-03 10DAB	335742112330901	No Match	33° 57' 42.5"	112° 33' 8.69"	0	STOCK	HASSAYAMPA

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/2/2003	0	2998	OTHER	FLOWING	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-03 10DAC	335740112331301	801520	33° 57' 40"	112° 33' 13"	12	UNUSED	HASSAYAMPA

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/17/1986	10	2950	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/21/1991			UNDETERMINED	DRY	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-03 11BBA	335811112324901	No Match	33° 58' 11"	112° 32' 48.9"	0	UNUSED	HASSAYAMPA

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
8/19/1982	10.48	3069.52	STEEL TAPE		ADWR
10/24/1997	12.3	3068	ELECTRIC SOUNDER		ADWR
1/2/2003	13.5	3066.5	STEEL TAPE		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-03 17BCC	335658112360801	No Match	33° 56' 58.9"	112° 36' 7.69"	0	STOCK	HASSAYAMPA

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/2/2003	0	2517	OTHER	FLOWING	ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 07 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-03 23CDA	335550112323701	No Match	33° 55' 52"	112° 32' 37.2"	58	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
6/9/1977	24.9	2755	STEEL TAPE	UNDETERMINED	USGS
1/6/2003	20.7	2759.3	REPORTED		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-03 24CCA	335546112314701	804225	33° 55' 46.09"	112° 31' 46.5"	180	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/6/2003	24.39	2655.61	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-03 29DDC	335447112352001	801550	33° 54' 47"	112° 35' 20"		STOCK	HASSAYAMPA

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
6/9/1977	214.3	2106	ELECTRIC SOUNDER	UNDETERMINED	USGS
8/19/1982	260.2	2060	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/17/1986	262.6	2057	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/24/1997	254	2066	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 2 of 2

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 07 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-02 13BAB	335517112252101	No Match	33° 55' 17"	112° 25' 21"		UNUSED	AGUA FRIA

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/10/1985	43.8	2596	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-02 25DBD	335504112245701	632962	33° 55' 1"	112° 24' 57"	0	STOCK	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/10/1985	6.3	2514	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/20/1997	22.3	2498	ELECTRIC SOUNDER		ADWR
12/16/2002	17	2503	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-07-02 33DBB	335415112281301	614508	33° 54' 14.8"	112° 28' 11.6"	235	STOCK	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/21/1997	74.3	2446	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
12/6/2002	75.4	2444.6	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 1 of 1

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 05ABB	335356112353501	614486	33° 53' 53.79"	112° 35' 34.5"	0	UNUSED	HASSAYAMPA

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
6/9/1977	52.3	2162.7	STEEL TAPE		USGS
11/21/1991	42.3	2172.7	ELECTRIC SOUNDER		ADWR
10/24/1997	43.6	2171.4	ELECTRIC SOUNDER		ADWR
1/2/2003	49.4	2165.6	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 1 of 5

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 05ADD	335331112351501	804224	33° 53' 30.6"	112° 35' 14"	0	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/19/1984	171.9	2048	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/26/1986	171.5	2049	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
6/15/1987	172.7	2047	ELECTRIC SOUNDER	PUMPING	ADWR
6/2/1988	173.2	2047	ELECTRIC SOUNDER	PUMPING	ADWR
12/7/1988	170.1	2050	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/29/1989	170.5	2050	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/2/1991	171	2049	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/21/1991	172.3	2048	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1992	170.2	2050	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1993	159.7	2060	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1994	161.5	2059	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
11/22/1995	160.3	2060	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
12/10/1996	160.6	2059	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/1/1999	162	2058	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
11/9/2000	162.1	2058	ELECTRIC SOUNDER		ADWR
1/6/2003	164.1	2055.9	ELECTRIC SOUNDER		ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Page 2 of 5

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 20ABA	335116112352301	607360	33° 51' 14"	112° 35' 1.1"	1000	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/10/2003	0	0	ELECTRIC SOUNDER	OBSTRUCTION	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 29CBC	334953112360401	No Match	33° 49' 53.5"	112° 36' 4.5"	0	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/7/2003	587.1	1330.9	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 30DAD	334952112360701	No Match	33° 49' 49"	112° 36' 12.6"	0	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/11/1983	588.5	1330	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1984	579.6	1338	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/19/2003			ELECTRIC SOUNDER	OBSTRUCTION	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 33CCC	334841112350401	625088	33° 48' 41.2"	112° 35' 2.4"	790	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/25/1991	583	1262	ELECTRIC SOUNDER	PUMPING	ADWR
2/20/2003	575	1270	ELECTRIC SOUNDER		ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Page 3 of 5

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 33DCB	334848112342901	634832	33° 48' 48.4"	112° 34' 28.89"	660	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/11/1983	603.9	1246	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/19/1984	600.6	1249	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/27/1985	600	1250	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/26/1986	599.3	1251	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1986	599	1251	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1986	598.2	1252	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	597.6	1252	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1987	601.2	1249	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1988	569.9	1280	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1988	595.5	1255	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/29/1989	595.6	1254	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	595.2	1255	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1992	596.3	1254	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1993	597.2	1253	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1994	598.1	1252	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1995	598	1252	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/10/1996	596.8	1253	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/23/1997	596.4	1254	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1998	595.6	1254	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/2/1999	595.4	1255	ELECTRIC SOUNDER	UNDETERMINED	ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 03 between sections 01 and 36

11/9/2000	595.4	1255	ELECTRIC SOUNDER	ADWR
1/24/2003	596.79	1253.21	ELECTRIC SOUNDER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-03 36DDD	334847112310201	614488	33° 48' 46.29"	112° 31' 2.59"	667	STOCK	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/21/1983				OBSTRUCTION	ADWR
10/21/1997	618.4	1205	ELECTRIC SOUNDER		ADWR
1/22/2003	616.4	1206.6	ELECTRIC SOUNDER		ADWR
2/7/2003	617.09	1205.91	ELECTRIC SOUNDER		ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 01DDB	335309112245401	636025	33° 53' 8.69"	112° 24' 53.9"	0	STOCK	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/10/1985	16.4	2379	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/18/1991	16.2	2379	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/20/1997	38	2357	ELECTRIC SOUNDER		ADWR
12/16/2002	17.2	2377.8	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 10BDA	335244112272001	636023	33° 52' 43.29"	112° 27' 19.1"	70	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
8/1/1983	4.7	2300	STEEL TAPE	UNDETERMINED	ADWR
1/7/1985	6.1	2299	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/18/1991	8.6	2296	STEEL TAPE	UNDETERMINED	ADWR
10/21/1997	10.2	2295	ELECTRIC SOUNDER		ADWR
12/6/2002	0	0	ELECTRIC SOUNDER	OBSTRUCTION	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 18AAD1	335202112295701	No Match	33° 52' 2"	112° 29' 27"		UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/12/1983				WELL DESTROYED	ADWR

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Tuesday, January 20, 2004

Page 1 of 5

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 18AAD2	335202112295801	614470	33° 52' 2.2"	112° 29' 57.79"	167	STOCK	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/12/1983	42.2	2100	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1984	44.8	2097	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	45.7	2096	STEEL TAPE	UNDETERMINED	ADWR
1/13/2003	46.29	2095.71	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 2 of 5

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 18DBB	335138112302001	651280	33° 51' 41.8"	112° 30' 26.5"	702	INSTITUTION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/11/1983	516.3	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1984	517.5	1588	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/27/1985	516.8	1588	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1985	519.7	1585	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1986	516.7	1588	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1986	516.2	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	517.1	1588	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1987	517	1588	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1988	517	1588	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1988	516	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/29/1989	516.7	1588	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	516.4	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1991	516.1	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1992	516	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1993	516.3	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1994	514.8	1590	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1995	516.2	1589	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1997	515.1	1590	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 3 of 5

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 24CCD	335030112253201	No Match	33° 50' 30.29"	112° 25' 32.29"	0	COMMERCIAL	

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/6/2002	29.5	1920.5	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 28ABA	335019112280301	614483	33° 50' 19"	112° 28' 1.39"	0	STOCK	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/12/1983	353.9	1666	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1984	331.1	1689	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	349.9	1670	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/21/1997	396.7	1623	ELECTRIC SOUNDER		ADWR
12/6/2002	344.7	1675.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 30ADE	335008112300401	501716	33° 50' 8"	112° 30' 4"	800	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/21/1984	620.4	1318	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1991	621.6	1316	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 4 of 5

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-02 31BDD	334908112303001	500607	33° 49' 9.6"	112° 30' 35.29"	910	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/3/1982	650.9	1211	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1984	650.8	1211	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1985	655.7	1206	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1986	652.7	1209	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1986			UNDETERMINED	OBSTRUCTION	ADWR
6/4/1987	652.6	1209	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/9/1988	654.3	1208	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
12/14/1988	652.1	1210	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/29/1989	651.9	1210	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	652	1210	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/28/1993	652.7	1209	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1995	655.2	1207	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/7/2003	655.79	1206.21	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-01 05BBB	335315112233901	632957	33° 53' 15"	112° 23' 39"	60	UNUSED	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/10/1985	23.7	2251	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-01 09ADA	335243112214101	No Match	33° 52' 43"	112° 21' 41"		UNUSED	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/2/1982	4.6	1992	STEEL TAPE	UNDETERMINED	ADWR
11/8/1991	5.5	1992	STEEL TAPE	UNDETERMINED	ADWR
10/20/1997				DRY	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-01 18CBC	335136112243301	632958	33° 51' 36"	112° 24' 33"	0	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/26/1984	14.6	2125	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/5/1991	17.6	2122	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/21/1997	15.6	2124	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 1 of 3

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-01 23BDB	335103112201401	No Match	33° 50' 58.59"	112° 20' 4.5"	0	UNUSED	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/2/1982	12.3	1748	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/7/1985	9.04	1751	STEEL TAPE	UNDETERMINED	ADWR
11/8/1991			UNDETERMINED	OBSTRUCTION	ADWR
10/20/1997	23.6	1736	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-01 28ABB	335017112195501	632959	33° 50' 19.5"	112° 19' 56.59"	300	STOCK	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/1/1968	50	1700	ESTIMATED		USGS
12/3/2002	0	0	ELECTRIC SOUNDER	OBSTRUCTION	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-01 27CAC	334948112211301	636024	33° 49' 47.7"	112° 21' 12.69"	60	STOCK	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/2/1982	44.22	1755	STEEL TAPE	UNDETERMINED	ADWR
1/7/1984	43.1	1756	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/8/1991	41.8	1757	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/20/1997	34.6	1764	ELECTRIC SOUNDER		ADWR
12/3/2002	36.9	1762.1	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 06 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-06-01 31CCC	334844112243501	636026	33° 48' 43.9"	112° 24' 34.4"	120	STOCK	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/12/1983	84.7	1680	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/4/1984	80.4	1685	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/18/1991	81.4	1684	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/21/1997	80.7	1684	ELECTRIC SOUNDER		ADWR
12/6/2002	82.5	1682.5	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 3 of 3

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 05BAA	334840112354501	No Match	33° 48' 39.9"	112° 35' 44.59"	1000	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/7/1977	553.2	1280	ELECTRIC TAPE	UNDETERMINED	USGS

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 05DBB	334813112353701	804699	33° 48' 12.5"	112° 35' 36.5"	1510	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/15/1955	519.83	1288.17	ELECTRIC TAPE		USGS
1/27/1958	522.65	1285.35			USGS
2/16/1970	533.6	1274.4			USGS
1/12/1971	533.7	1274.3			USGS
3/10/1972	534.6	1273.4			USGS
1/26/1973	541.3	1266.7			USGS

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 11CAD2	334713112323501	618978	33° 47' 13.39"	112° 32' 34.2"	730	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/31/1970	340	1387	REPORTED		

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Tuesday, January 20, 2004

Page 1 of 7

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 13BCA	334642112314401	626340	33° 46' 42"	112° 31' 44"	561	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
8/16/1990	519.8	1167	ELECTRIC SOUNDER	PUMPING	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 13BCA2	334638112314501	No Match	33° 46' 38.59"	112° 31' 45.9"	800	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/10/2003	477.79	1202.21	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 2 of 7

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 03 between sections 01 and 36

<i>Local ID</i> B-05-03 15AAA	<i>Site ID</i> 334654112330401	<i>ADWR Reg. No.</i> 640010	<i>Latitude</i> 33° 46' 54.4"	<i>Longitude</i> 112° 33' 2.79"	<i>Well Depth</i> 600	<i>Water Use</i> DOMESTIC	<i>Sub-Basin</i> WEST SALT RIVER
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<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measuremnt Method</i>	<i>Remark</i>	<i>Measurement Source</i>
11/4/1982	483.7	1226	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/19/1984	482.6	1227	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/27/1985	488.1	1222	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1985	482	1228	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1986	482	1228	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1986	481.9	1228	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	487	1223	ELECTRIC SOUNDER	PUMPING	ADWR
12/21/1987	481.6	1228	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1988	481.4	1229	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1988	480.3	1230	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	481.1	1229	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	482.9	1227	ELECTRIC SOUNDER	PUMPING	ADWR
12/3/1991	481.2	1229	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1992	481.4	1229	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1993	481.7	1228	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1994	487	1223	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1995	482.5	1228	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1996	482.1	1228	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/2/1997	483.6	1226	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1998	481.4	1229	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 03 between sections 01 and 36

11/2/1999	481.6	1228	ELECTRIC SOUNDER	ADWR
11/9/2000	481.7	1228	ELECTRIC SOUNDER	ADWR
1/24/2003	482.39	1227.61	ELECTRIC SOUNDER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 15AAD	334648112330401	629029	33° 46' 48"	112° 33' 4"	600	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/14/1970	487.2	1235	ELECTRIC SOUNDER	UNDETERMINED	USGS
3/7/1977	473.8	1228	ELECTRIC SOUNDER	UNDETERMINED	USGS

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 21DDA	334522112340701	087479	33° 45' 22"	112° 34' 4.9"	520	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/5/1982	444.2	1213	STEEL TAPE	UNDETERMINED	ADWR
12/5/1991	411.6	1245	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 22ADD	333038112330101	087570	33° 45' 42.4"	112° 33' 6.59"	540	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
11/4/1982	424.9	1224.1	ELECTRIC SOUNDER		ADWR
12/19/1984	423.8	1225.2	ELECTRIC SOUNDER		ADWR
6/27/1985	424	1225	ELECTRIC SOUNDER		ADWR
12/6/1985	423.1	1225.9	ELECTRIC SOUNDER		ADWR
6/4/1986	423	1226	ELECTRIC SOUNDER		ADWR
12/9/1986	423.6	1225.4	ELECTRIC SOUNDER		ADWR
6/4/1987	423.1	1225.9	ELECTRIC SOUNDER		ADWR
12/22/1987	423.1	1225.9	ELECTRIC SOUNDER		ADWR
6/6/1988	422.8	1226.2	ELECTRIC SOUNDER		ADWR
12/7/1988	422.2	1226.8	ELECTRIC SOUNDER		ADWR
11/28/1989	422.6	1226.4	ELECTRIC SOUNDER		ADWR
1/3/1991	424.8	1224.2	ELECTRIC SOUNDER		ADWR
12/3/1991	428	1221	ELECTRIC SOUNDER		ADWR
11/17/1992	423.2	1225.8	ELECTRIC SOUNDER		ADWR
11/17/1993	423.3	1225.7	ELECTRIC SOUNDER		ADWR
11/22/1994	427.5	1221.5	ELECTRIC SOUNDER		ADWR
11/16/1995	423.5	1225.5	ELECTRIC SOUNDER		ADWR
12/10/1996	423.2	1225.8	ELECTRIC SOUNDER		ADWR
12/2/1997	425.3	1224	ELECTRIC SOUNDER		ADWR
12/8/1998	423.2	1226	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 5 of 7

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 03 between sections 01 and 36

11/2/1999	423.1	1226	ELECTRIC SOUNDER	ADWR
11/9/2000	423.2	1226	ELECTRIC SOUNDER	ADWR
1/22/2003	424.1	1224.9	ELECTRIC SOUNDER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 23ABB	334800112322501	801157	33° 46' 1.39"	112° 32' 27"	635	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/4/1982	437.3	1220	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/19/1984	437	1220	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1991	437.5	1220	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/22/2003	439	1218	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 30BAA	334510112364001	586838	33° 45' 10.9"	112° 36' 40.3"	600	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/20/2003	397	1295	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 33ACD	333354112342101	629696	33° 43' 54"	112° 34' 21"	550	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/10/1974	380	1230	REPORTED		

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-03 33BCB	334401112350401	636643	33° 44' 1"	112° 35' 4"		UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/19/1984	383.4	1246	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	380.5	1249	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/27/1997	380	1249	ELECTRIC SOUNDER		ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Page 7 of 7

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 08CCB	334708112295301	060001	33° 47' 8"	112° 29' 53"	1000	INDUSTRIAL	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/14/1988	519.3	1188	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	519.8	1187	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	545.5	1162	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
11/17/1992	520.7	1186	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1993	521.4	1186	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1994	521.6	1185	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1995	524.4	1183	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1996	522.2	1185	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/21/1997	522.4	1185	ELECTRIC SOUNDER		ADWR
12/7/1998	523.4	1184	ELECTRIC SOUNDER		ADWR
11/2/1999	523.3	1184	ELECTRIC SOUNDER		ADWR
11/15/2000	523.9	1183	ELECTRIC SOUNDER		ADWR
1/13/2003	524.7	1182.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 19CAA	334626112251701	804319	33° 46' 27"	112° 25' 16.5"	600	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/22/1995	0	0	ELECTRIC SOUNDER	DRY	ADWR
12/5/2002	543.2	1066.8	ELECTRIC SOUNDER	CASCADING WATER	ADWR

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Tuesday, January 20, 2004

Page 1 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 13CDB	334610112252401	552175	33° 46' 11.1"	112° 25' 22.7"	740	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/23/1997	523	1069	ELECTRIC SOUNDER		ADWR
12/5/2002	528.9	1063.1	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 15CCB	334612112274501	603873	33° 46' 12.1"	112° 27' 43.4"	610	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/23/1997	499	1120	ELECTRIC SOUNDER		ADWR
12/5/2002	504.5	1114.5	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 17ABD	334644112291201	800994	33° 46' 47.29"	112° 29' 12.39"	704	INDUSTRIAL	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/23/1997	503.2	1158	ELECTRIC SOUNDER		ADWR
1/8/2003	506.79	1154.21	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 19DDD	334513112295701	626341	33° 45' 13.8"	112° 29' 58.59"	700	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/9/1970	396	1194	REPORTED		

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 23DCA	334520112260601	592382	33° 45' 19.5"	112° 26' 5.8"	610	OBSERVATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/14/2002	465.1	1077.9	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24ACC	334539112250801	No Match	33° 45' 39.59"	112° 25' 8.8"	0	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/5/2002	493.89	1066.11	ELECTRIC SOUNDER		ADWR

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24BAB	334803112252701	No Match	33° 48' 3"	112° 25' 27"	600	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/12/1983	499.7	1080	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/26/1984	500.2	1080	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/26/1986	501	1079	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1986	501.6	1078	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	501.9	1078	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/16/1987	502.1	1078	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1988	511.6	1068	ELECTRIC SOUNDER	PUMPING	ADWR
12/7/1988	502.4	1078	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	504.3	1076	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	510.3	1070	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/5/1991	506	1074	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1992	504.8	1075	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1993	507.9	1072	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1994	508	1072	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1995	507.8	1072	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1996	508.4	1072	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/23/1997	509.2	1071	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1998	510.8	1069	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/5/2002	514.2	1065.8	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 4 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24BAD	334554112251501	No Match	33° 45' 54.79"	112° 25' 13.5"	0	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/23/1997	504.8	1067	ELECTRIC SOUNDER		ADWR
12/5/2002	509.7	1062.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24CAD1	334522112251801	638545	33° 45' 23.7"	112° 25' 20.1"	600	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/5/2002	471.2	1066.8	ELECTRIC SOUNDER		ADWR
5/16/2003	221.1	1316.9	ELECTRIC SOUNDER		ADWR
6/3/2003	234	1304	ELECTRIC SOUNDER		ADWR
8/15/2003	172.3	1365.7	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24CAD2	334525112251401	550309	33° 45' 24.6"	112° 25' 14.2"	590	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
5/16/2003	481.2	1060.8	ELECTRIC SOUNDER		ADWR
6/3/2003	481.7	1060.3	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 5 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24CAD3	334528112251801	592381	33° 45' 27.6"	112° 25' 17.6"	620	OBSERVATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/14/2002	479.9	1062.1	ELECTRIC SOUNDER		ADWR
5/16/2003	480.3	1061.7	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24CCB	334524112362701	635127	33° 45' 22.8"	112° 25' 37.2"	600	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
5/16/2003	475.2	1064.8	ELECTRIC SOUNDER		ADWR
6/3/2003	475.4	1064.6	ELECTRIC SOUNDER		ADWR
8/15/2003	474.8	1065.2	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24CDA	334519112252001	636327	33° 45' 19.2"	112° 25' 20.2"	630	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
6/3/2003	473.4	1061.6	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24CDB1	334522112252301	563562	33° 45' 22.5"	112° 25' 22.9"	660	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
5/16/2003	195.4	1343.6	ELECTRIC SOUNDER		ADWR
6/3/2003	207.3	1331.7	ELECTRIC SOUNDER		ADWR
8/4/2003	291	1248	ELECTRIC SOUNDER		ADWR
8/15/2003	178.3	1360.7	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 24DCD	334513112245901	627460	33° 45' 11.6"	112° 24' 58.79"	592	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/5/2002	464.2	1060.8	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 26BAA	334508112261601	623976	33° 45' 9.69"	112° 26' 16.89"	640	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/6/2002	429.5	1104.5	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 7 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 2688A	334508112263101	623975	33° 45' 10"	112° 26' 29.6"	621	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/6/2002	415.39	1121.61	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 26DDD	334424112254701	800937	33° 44' 24.7"	112° 25' 52.5"	620	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
10/14/1982	418.9	1072	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1984	416.8	1074	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/2/1991	426.7	1064	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/31/1997	451.6	1039	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
11/20/2002	450.7	1040.3	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR

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Tuesday, January 20, 2004

Page 8 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 30ADD	334451112495601	No Match	33° 44' 48"	112° 29' 56"	684	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/2/1982	385.9	1185	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/12/1984	387.5	1184	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/27/1985	390.5	1181	ELECTRIC SOUNDER	PUMPING	ADWR
6/4/1986	388.3	1183	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
12/9/1986	389.6	1181	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	389.8	1181	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1987	396.1	1175	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1988	390.5	1181	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1988	390.2	1181	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	391.6	1179	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	394.9	1176	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
11/19/1991	393.1	1178	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1992	392.8	1178	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1993	393.4	1178	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1994	394.6	1176	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/10/1996	395.1	1176	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/27/1997	395.7	1175	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
12/7/1998	396.1	1175	ELECTRIC SOUNDER		ADWR
11/1/1999	396.3	1175	ELECTRIC SOUNDER		ADWR
11/9/2000	396.7	1174	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 9 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 33CBA	334344112283601	No Match	33° 43' 51"	112° 28' 36"	550	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/2/1982	333.5	1165	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/12/1984	337.9	1160	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 33DDD	334333112274701	No Match	33° 43' 33"	112° 27' 47"		UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/2/1982	328.4	1148	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/12/1984	330.5	1146	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-02 35BAA	334418112261701	617007	33° 44' 18.79"	112° 26' 19.6"	1155	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
2/15/1955	330.41	1160.59	STEEL TAPE		USGS
1/23/1957	339.11	1151.89	STEEL TAPE		USGS
1/23/1962	349.42	1141.58	STEEL TAPE		USGS
1/23/1963	351.13	1139.87	STEEL TAPE		USGS
2/3/1964	354.46	1136.54	STEEL TAPE		USGS
1/23/1965	355.83	1135.17	STEEL TAPE		USGS
1/25/1966	357.52	1133.48	STEEL TAPE		USGS
1/24/1967	359.25	1131.75	STEEL TAPE		USGS
1/17/1968	360.6	1130.4	STEEL TAPE		USGS
3/17/1969	361.6	1129.4			USGS
1/26/1970	364.2	1126.8			USGS
1/26/1971	368.4	1122.6			USGS
1/20/1972	367	1124			USGS
1/26/1973	363.5	1127.5	ELECTRIC SOUNDER		USBR
1/10/1974	371.1	1119.9			USGS
2/2/1976	376.5	1114.5	ELECTRIC TAPE		USGS
1/10/1977	380	1111	ELECTRIC TAPE		USGS
1/15/1980	377.6	1113.4			USGS
1/29/1981	388.4	1102.6			USGS
1/13/1982	384.4	1106.6	ELECTRIC SOUNDER		USGS

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Tuesday, January 20, 2004

Page 11 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

1/5/1983	383.4	1107.6	ELECTRIC SOUNDER	ADWR
9/7/1983	382.7	1108.3	ELECTRIC SOUNDER	ADWR
12/6/1983	382.5	1108.5	STEEL TAPE	ADWR
12/7/1984	382	1109	ELECTRIC SOUNDER	ADWR
6/26/1985	383.1	1107.9	ELECTRIC SOUNDER	ADWR
12/10/1985	382.3	1108.7	ELECTRIC SOUNDER	ADWR
6/6/1986	383.1	1107.9	ELECTRIC SOUNDER	ADWR
12/9/1986	385.5	1105.5	ELECTRIC SOUNDER	ADWR
6/7/1988	384.4	1106.6	ELECTRIC SOUNDER	ADWR
12/7/1988	383.8	1107.2	ELECTRIC SOUNDER	ADWR
11/28/1989	385.4	1105.6	ELECTRIC SOUNDER	ADWR
1/4/1991	386.5	1104.5	ELECTRIC SOUNDER	ADWR
12/2/1991	386.7	1104.3	ELECTRIC SOUNDER	ADWR
11/16/1992	387.2	1103.8	ELECTRIC SOUNDER	ADWR
11/19/1993	387.5	1103.5	ELECTRIC SOUNDER	ADWR
11/23/1994	387.8	1103.2	ELECTRIC SOUNDER	ADWR
11/22/1995	388.9	1102.1	ELECTRIC SOUNDER	ADWR
12/11/1996	389.9	1101.1	ELECTRIC SOUNDER	ADWR
10/31/1997	390.9	1100.1	ELECTRIC SOUNDER	ADWR
12/7/1998	391.7	1099.3	ELECTRIC SOUNDER	ADWR
11/2/1999	392.5	1098.5	ELECTRIC SOUNDER	ADWR
11/8/2000	393.5	1097.5	ELECTRIC SOUNDER	ADWR
11/20/2002	399.2	1091.8	ELECTRIC SOUNDER	ADWR

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Tuesday, January 20, 2004

Page 12 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 02 between sections 01 and 36

<i>Local ID</i>	<i>Site ID</i>	<i>ADWR Reg. No.</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Well Depth</i>	<i>Water Use</i>	<i>Sub-Basin</i>
B-05-02 35BCB	334402112264301	617009	33° 44' 2"	112° 26' 46"	1708	IRRIGATION	WEST SALT RIVER
<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measuremnt Method</i>		<i>Remark</i>	<i>Measurement Source</i>	
1/14/1970	361.2	1124.8	ELECTRIC SOUNDER			USGS	

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Tuesday, January 20, 2004

Page 13 of 13

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-01 01BAB	334837112190501	501814	33° 48' 37"	112° 19' 5"	300	UNUSED	LAKE PLEASANT

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
9/2/1982	116.5	1439	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/4/1985	117.2	1438	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/2002	0	0	ELECTRIC SOUNDER	OBSTRUCTION	ADWR

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Tuesday, January 20, 2004

Page 1 of 3

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-01 14CAB	334625112201101	085598	33° 46' 24.39"	112° 20' 10.8"	1222	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/1/1982	564.7	938.3	ELECTRIC SOUNDER		ADWR
1/4/1985	442.6	1060.4	ELECTRIC SOUNDER		ADWR
6/27/1985	439.7	1063.3	ELECTRIC SOUNDER		ADWR
2/26/1986	438.7	1064.3	ELECTRIC SOUNDER		ADWR
6/9/1986	438.1	1064.9	ELECTRIC SOUNDER		ADWR
12/8/1986	437.4	1065.6	ELECTRIC SOUNDER		ADWR
6/5/1987	437.1	1065.9	ELECTRIC SOUNDER		ADWR
12/16/1987	440.2	1062.8	ELECTRIC SOUNDER		ADWR
6/2/1988	439.7	1063.3	ELECTRIC SOUNDER		ADWR
12/7/1988	438.5	1064.5	ELECTRIC SOUNDER		ADWR
11/27/1989	439.5	1063.5	ELECTRIC SOUNDER		ADWR
1/4/1991	445.3	1057.7	ELECTRIC SOUNDER		ADWR
11/8/1991	442.8	1060.2	ELECTRIC SOUNDER		ADWR
11/18/1992	442	1061	ELECTRIC SOUNDER		ADWR
11/23/1993	431.6	1071.4	ELECTRIC SOUNDER		ADWR
12/16/1994	436.7	1066.3	ELECTRIC SOUNDER		ADWR
11/22/1996	465.4	1037.6	ELECTRIC SOUNDER		ADWR
4/16/1998	462.6	1040.4	ELECTRIC SOUNDER		ADWR
12/7/1998	459	1044	ELECTRIC SOUNDER		ADWR
11/3/1999	457.6	1045.4	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 05 01 between sections 01 and 36

11/13/2000	458.4	1044.6	ELECTRIC SOUNDER	ADWR
12/4/2002	452.39	1050.61	ELECTRIC SOUNDER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-01 30BBA	334509112242701	801021	33° 45' 9"	112° 24' 27"	620	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/12/1983	441.7	1073	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/26/1984	441.2	1074	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/5/1991	447.1	1068	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/23/1997	450.1	1065	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-01 30CBB	334441112243401	No Match	33° 44' 41"	112° 24' 34"		UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/12/1983			UNDETERMINED	DRY	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-05-01 31DDD	334334112234001	No Match	33° 43' 34"	112° 23' 40"		DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/7/1983	384.9	1027	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1984	394.9	1017	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 3 of 3

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 04BDB	334314112343701	804655	33° 43' 14"	112° 34' 37"	562	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
10/8/1982	369.57	1225	STEEL TAPE	UNDETERMINED	ADWR
12/19/1984	360.5	1235	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1985	360.3	1235	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1986	360.2	1235	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	359	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/21/1987	360	1235	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1988	359.7	1235	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1988	358.7	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	360.4	1235	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	362	1233	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	359.3	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1992	359	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1993	359.3	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/16/1994	359.6	1235	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/10/1996	359	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/31/1997	359.2	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/14/1998	358.6	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/3/1999	358.9	1236	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/15/2000	358.4	1237	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 1 of 6

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 05AAC	334321112350401	No Match	33° 43' 21"	112° 35' 4"	0	UNDETERMINED	

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/6/2002	360.39	1244.61	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 05ACA	334321112351601	504200	33° 43' 21"	112° 35' 16"	558	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/19/1984			ELECTRIC SOUNDER	OBSTRUCTION	ADWR

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 14ABA	334147112320301	505327	33° 41' 47"	112° 32' 3"	605	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/19/1984	300.6	1199	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/27/1985	305.3	1195	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/26/1986	309.5	1191	ELECTRIC SOUNDER	PUMPING	ADWR
6/4/1986	305.7	1194	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	306.2	1194	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/28/1987	306.3	1194	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/18/1988	310.2	1190	ELECTRIC SOUNDER	PUMPING	ADWR
12/7/1988	306	1194	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	306.8	1193	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	309.7	1190	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	307.6	1192	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1992	309.1	1191	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1993	307.5	1193	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/1994	307.9	1192	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1995	308.9	1191	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/10/1996	308.4	1192	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/27/1997	309.2	1191	ELECTRIC SOUNDER		ADWR
12/7/1998	309.4	1191	ELECTRIC SOUNDER		ADWR
11/1/1999	313.4	1187	ELECTRIC SOUNDER	PUMPING	ADWR
11/9/2000	309.4	1191	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 15DAC	334113112330101	635872	33° 41' 13"	112° 33' 1"	352	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
10/1/1969	292.3	1213	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/19/1984	304.3	1201	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	305.9	1199	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/31/1997	306.6	1198	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 03 between sections 01 and 36

<i>Local ID</i>	<i>Site ID</i>	<i>ADWR Reg. No.</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Well Depth</i>	<i>Water Use</i>	<i>Sub-Basin</i>
B-04-03 19DBA	334028112361401	621513	33° 40' 17.89"	112° 36' 17.79"	565	DOMESTIC	WEST SALT RIVER

<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measuremnt Method</i>	<i>Remark</i>	<i>Measurement Source</i>
10/8/1982	398.16	1209	STEEL TAPE	UNDETERMINED	ADWR
12/5/1989	381.5	1226	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	385.8	1221	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	384.3	1223	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1992	382.4	1225	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1993	382.2	1225	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1994	381.8	1225	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1995	381.7	1225	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/10/1996	380.9	1226	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/27/1997	381.5	1226	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1998	381	1226	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/1/1999	380.5	1227	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/9/2000	380	1227	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/4/2002	381.7	1225.3	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 03 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 23BAA1	334053112322201	No Match	33° 40' 53"	112° 32' 22"		UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/19/1984				OBSTRUCTION	ADWR
10/31/1997				OBSTRUCTION	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 23BAA2	334054112322101	No Match	33° 40' 54"	112° 32' 21"		UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/19/1984				OBSTRUCTION	ADWR
10/31/1997				OBSTRUCTION	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-03 28DDD	333912112335301	614445	33° 39' 13.69"	112° 33' 54.9"	0	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/19/1984	411.7	1216	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1991	412.5	1216	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/31/1997	406.1	1222	ELECTRIC SOUNDER		ADWR
12/4/2002	411.79	1216.21	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 04BCD	334307112283001	614443	33° 43' 10"	112° 28' 30"	740	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
	305	1160	REPORTED		

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 05AAC	334324112284801	627441	33° 43' 24"	112° 28' 48"	556	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/1/1972	309	1176	REPORTED		

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Tuesday, January 20, 2004

Page 1 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 05DBB	334307112290901	800036	33° 43' 7"	112° 29' 9"	600	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
11/2/1982	313.4	1165	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/12/1984	315.3	1163	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/27/1985	316.2	1162	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1985	316.3	1162	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/6/1986	317.3	1161	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1986	317.6	1160	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	318	1160	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/22/1987	318.4	1160	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1988	318.9	1159	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1988	318.7	1159	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	320.1	1158	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1991	323.8	1154	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1992	322.8	1155	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1993	323.7	1154	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1994	324.5	1154	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1995	325.4	1153	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/10/1996	326	1152	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/4/1997	327	1151	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1998	327.5	1151	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/1/1999	328	1150	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 2 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

11/9/2000 328.8 1149 ELECTRIC SOUNDER ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 09CAA	334214112281801	645679	33° 42' 14"	112° 28' 15"	550	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/9/1977	335.7	1103.3	ELECTRIC SOUNDER		USGS
11/2/1982	302.4	1136.6	ELECTRIC SOUNDER		ADWR
12/12/1984	304.8	1134.2	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 10ABC	334231112264901	618472	33° 42' 27"	112° 26' 57"	693	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/25/1969	309.6	1105	ELECTRIC SOUNDER	UNDETERMINED	USGS

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Tuesday, January 20, 2004

Page 3 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 10BCA	334226112272301	618473	33° 42' 27.2"	112° 27' 25.6"	693	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
7/22/1977	338.7	1088.3			USGS
10/11/1979	340	1087			USGS
11/2/1982	308.2	1118.8	ELECTRIC SOUNDER		ADWR
12/12/1984	309.9	1117.1	ELECTRIC SOUNDER		ADWR
11/19/1991	318	1109	ELECTRIC SOUNDER		ADWR
11/10/1997	322.8	1104.2	ELECTRIC SOUNDER		ADWR
11/20/2002	355.5	1071.5	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 11BDB	334225112261701	618474	33° 42' 24"	112° 26' 19.6"	359	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/12/1984	318.1	1087	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	326.7	1078	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1997	333.8	1071	ELECTRIC SOUNDER		ADWR
11/19/2002	339	1066	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 4 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 11CAB	334212112261001	No Match	33° 42' 12"	112° 28' 13"	656	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
9/13/1983	321.4	1079	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 13DCD	334058112245001	612955	33° 40' 58"	112° 24' 50"	500	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
2/26/1962	377.39	955	STEEL TAPE	UNDETERMINED	USGS

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 14CCA	334108112262701	618517	33° 41' 9.1"	112° 26' 29.6"	700	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
9/13/1983	328.7	1038	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/12/1984	327.8	1039	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	342	1025	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/5/1997	351.1	1016	ELECTRIC SOUNDER		ADWR
11/19/2002	387.7	979.3	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR

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Tuesday, January 20, 2004

Page 5 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 15ADA	334131112263801	603352	33° 41' 31"	112° 26' 38"	510	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
7/6/1971	280	1107	REPORTED		

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Tuesday, January 20, 2004

Page 6 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 16AAD	334136112273901	614444	33° 41' 35.7"	112° 27' 40.7"	500	STOCK	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
9/13/1983	311.2	1100	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/12/1984	312.5	1099	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/26/1986	313.3	1098	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/6/1986	314.3	1097	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1986	314.9	1096	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1987	315	1096	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/16/1987	315.8	1095	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/6/1988	316.4	1095	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1988	315.9	1095	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/5/1989	318	1093	ELECTRIC SOUNDER	PUMPING	ADWR
1/3/1991	321.1	1090	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1991	319.6	1091	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/17/1992	320	1091	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1993	321	1090	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1994	321.4	1090	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1995	322.2	1089	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1996	323.1	1088	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/7/1997	324.4	1087	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1998	325.1	1086	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/1/1999	326.3	1085	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 7 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

11/9/2000	327.1	1084	ELECTRIC SOUNDER	ADWR
11/19/2002	328.89	1082.11	ELECTRIC SOUNDER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 24BCD	334033112252101	612956	33° 40' 30.39"	112° 25' 28.79"	1050	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	460	869	ELECTRIC SOUNDER	UNDETERMINED	USBR
12/6/1982	489.4	840	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/6/1984	479.7	849	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	476.9	852	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1997	482.7	846	ELECTRIC SOUNDER		ADWR
11/21/2002	484.6	844.4	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 25ADD	333941112243601	No Match	33° 39' 41"	112° 24' 36"	500		WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/26/1962	350.66	949	STEEL TAPE	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 8 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 25BAA	334003112250201	612968	33° 40' 3.9"	112° 25' 5.5"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/26/1962	262.84	1057.16	STEEL TAPE		USGS
1/19/1972	468	852	ELECTRIC SOUNDER		USBR
1/12/1976	499.7	820.3			USGS
2/4/1981	492.3	827.7	ELECTRIC TAPE		USGS
12/3/1982	494.9	825.1	ELECTRIC SOUNDER		ADWR
12/6/1984	482.6	837.4	ELECTRIC SOUNDER		ADWR
11/20/1991	478	842	ELECTRIC SOUNDER		ADWR
12/9/1997	490	830	ELECTRIC SOUNDER		ADWR
12/3/2002	493.89	826.11	ELECTRIC SOUNDER	CASCADING WATER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 26ABA	334003112255001	612969	33° 40' 3.9"	112° 25' 53.29"	550	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	468	865	ELECTRIC SOUNDER	UNDETERMINED	USBR
12/2/1982	492.8	840	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/6/1984	483.6	849	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	524.7	808	ELECTRIC SOUNDER	PUMPING	ADWR
12/3/1997	490.3	843	ELECTRIC SOUNDER		ADWR
11/21/2002	483.6	849.4	ELECTRIC SOUNDER	OTHER	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 26DBB	333936112260201	612972	33° 39' 34.9"	112° 26' 7"	857	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/19/1972	451	879	ELECTRIC SOUNDER	UNDETERMINED	USBR
1/12/1977	477.3	853	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/2/1982	465.2	865	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1984	484.4	846	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	465.4	865	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/2002	474.5	855.5	ELECTRIC SOUNDER	CASCADING WATER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 26DCB	333921112260101	612974	33° 39' 21"	112° 26' 4"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
5/1/1947	247	1081	REPORTED		
11/25/1997	496.6	831	ELECTRIC SOUNDER	CASCADING WATER	ADWR

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Tuesday, January 20, 2004

Page 10 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

<i>Local ID</i>	<i>Site ID</i>	<i>ADWR Reg. No.</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Well Depth</i>	<i>Water Use</i>	<i>Sub-Basin</i>
B-04-02 26DDD	333913112253501	612973	33° 39' 12.3"	112° 25' 37.4"	1000	IRRIGATION	WEST SALT RIVER
<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measuremnt Method</i>		<i>Remark</i>	<i>Measurement Source</i>	
2/26/1962	412.22	901.78	STEEL TAPE			USGS	
2/4/1981	490.2	823.8	ELECTRIC TAPE		NEARBY PUMPING	USGS	
11/25/1997	482.4	832	ELECTRIC SOUNDER		CASCADING WATER	ADWR	
11/19/2002	481.2	832.8	ELECTRIC SOUNDER			ADWR	

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Tuesday, January 20, 2004

Page 11 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 27DCD	333915112265501	612967	33° 39' 13.6"	112° 26' 55"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/1/1938	203	1129	REPORTED		
2/26/1962	424.41	907.59			USGS
1/1/1972	445	887	ELECTRIC SOUNDER		USBR
1/13/1977	461.3	870.7			USGS
12/2/1982	474	858	ELECTRIC SOUNDER		ADWR
12/3/1984	478.8	853.2	ELECTRIC SOUNDER		ADWR
6/26/1985	465.9	866.1	ELECTRIC SOUNDER		ADWR
12/6/1985	456.9	875.1	ELECTRIC SOUNDER		ADWR
6/4/1986	466.6	865.4	ELECTRIC SOUNDER		ADWR
6/6/1986	443.2	888.8	ELECTRIC SOUNDER		ADWR
12/10/1986	458.1	873.9	ELECTRIC SOUNDER		ADWR
12/21/1987	473.7	858.3	ELECTRIC SOUNDER		ADWR
6/6/1988	550.2	782	ELECTRIC SOUNDER	PUMPING	ADWR
12/5/1988	469.3	862.7	ELECTRIC SOUNDER		ADWR
11/28/1989	473.9	858.1	ELECTRIC SOUNDER		ADWR
1/4/1991	480.8	851.2	ELECTRIC SOUNDER		ADWR
11/20/1991	471.9	860.1	ELECTRIC SOUNDER		ADWR
11/16/1992	458.2	873.8	ELECTRIC SOUNDER		ADWR
11/19/1993	439.4	892.6	ELECTRIC SOUNDER		ADWR
11/23/1994	443.7	888.3	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 12 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

7/6/1995	486.9	845	ELECTRIC SOUNDER	PUMPING	ADWR
11/17/1995	543	789	ELECTRIC SOUNDER	PUMPING	ADWR
12/4/1996	587.5	745	ELECTRIC SOUNDER	PUMPING	ADWR
11/10/1997	465	867	ELECTRIC SOUNDER		ADWR
12/9/1998	461.8	870	ELECTRIC SOUNDER		ADWR
11/1/1999	452.3	880	ELECTRIC SOUNDER		ADWR
11/8/2000	451.4	881	ELECTRIC SOUNDER		ADWR
11/19/2002	457.5	874.5	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 34BBA	333910112272301	564528	33° 39' 10"	112° 27' 23"	475	OBSERVATION	WEST SALT RIVER
Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source		
2/24/1998	378	967	ELECTRIC SOUNDER		ADWR		
12/3/2002	387.2	957.8	ELECTRIC SOUNDER		ADWR		

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Tuesday, January 20, 2004

Page 13 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 34DBA	333845112265301	612980	33° 38' 45.7"	112° 26' 56.5"	1002	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/19/1972	450	879	ELECTRIC SOUNDER	UNDETERMINED	USBR
1/13/1977	466.8	862	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/2/1982	479	850	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1984	497.3	832	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	453.8	875	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1997	483.6	845	ELECTRIC SOUNDER	CASCADING WATER	ADWR
11/22/2002	457.7	871.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 35BDD	333846112261101	555779	33° 38' 46.79"	112° 26' 11.6"	1150	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
2/5/2003	530.4	781.6	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 35CBB	333845112263501	604498	33° 38' 45.5"	112° 26' 35.2"	910	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/19/1972	463	859	ELECTRIC SOUNDER	UNDETERMINED	USBR
1/15/2003	498.5	823.5	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 14 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 35CCC	333821112263501	612981	33° 38' 20.39"	112° 26' 38.29"	1005	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
6/1/1947	232	1080	REPORTED		
1/18/1972	460	852	ELECTRIC SOUNDER		USBR
12/3/1997	483.4	829	ELECTRIC SOUNDER		ADWR
11/22/2002	453	859	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-02 36BAA	333910112250401	612975	33° 39' 11.39"	112° 25' 5.5"	1106	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/1/1939	193	1107	REPORTED		
1/19/1972	468	832	ELECTRIC SOUNDER		USBR
12/8/1997	481.9	818	ELECTRIC SOUNDER		ADWR
11/22/2002	481.89	818.11	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

<i>Local ID</i> B-04-02 36BCB	<i>Site ID</i> 333858112253201	<i>ADWR Reg. No.</i> 604499	<i>Latitude</i> 33° 38' 58"	<i>Longitude</i> 112° 25' 32"	<i>Well Depth</i> 1030	<i>Water Use</i> IRRIGATION	<i>Sub-Basin</i> WEST SALT RIVER
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<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measuremnt Method</i>	<i>Remark</i>	<i>Measurement Source</i>
1/29/1957	354.45	951.55	STEEL TAPE	UNDETERMINED	USGS
1/23/1958	382.1	923.9	STEEL TAPE	UNDETERMINED	USGS
2/8/1960	382.48	923.52	STEEL TAPE	UNDETERMINED	USGS
1/24/1962	404.79	901.21	STEEL TAPE	UNDETERMINED	USGS
1/24/1963	428.47	877.53	STEEL TAPE	UNDETERMINED	USGS
1/23/1965	410.8	895.2	UNDETERMINED	UNDETERMINED	USGS
1/29/1966	409.43	896.57	STEEL TAPE	UNDETERMINED	USGS
1/24/1967	426.98	879.02	STEEL TAPE	UNDETERMINED	USGS
1/18/1968	425.27	880.73	STEEL TAPE	UNDETERMINED	USGS
3/17/1969	463.7	842.3	UNDETERMINED	UNDETERMINED	USGS
1/26/1971	444.3	861.7	UNDETERMINED	UNDETERMINED	USGS
1/19/1972	467	839	UNDETERMINED	UNDETERMINED	USGS
1/26/1973	458.9	847.1	UNDETERMINED	UNDETERMINED	USGS
1/10/1974	458	848	UNDETERMINED	UNDETERMINED	USGS
1/10/1977	478.5	827.5	ELECTRIC TAPE	UNDETERMINED	USGS
3/4/1978	469.7	836.3	ELECTRIC TAPE	UNDETERMINED	USGS
1/29/1981	459.9	846.1	UNDETERMINED	UNDETERMINED	USGS
1/12/1982	490.8	815	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/2/1982	481.5	825	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1983	470.4	836	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 02 between sections 01 and 36

12/6/1984	471.7	834	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/26/1985	476.6	829	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/6/1985	457.7	848	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/11/1986	455.3	851	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/8/1987	472.9	833	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/29/1987	457.2	849	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/6/1988	465.2	841	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/5/1988	463.7	842	ELECTRIC SOUNDER	CASCADING WATER	ADWR
11/27/1989	474.6	831	ELECTRIC SOUNDER	CASCADING WATER	ADWR
1/4/1991	466.5	840	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	460.3	846	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/16/1992	459	847	ELECTRIC SOUNDER	CASCADING WATER	ADWR
1/4/1994	453.1	853	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1994	448.5	858	ELECTRIC SOUNDER	CASCADING WATER	ADWR
11/17/1995	455.9	850	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/4/1996	456.2	850	ELECTRIC SOUNDER	CASCADING WATER	ADWR
4/16/1998	448.6	857	ELECTRIC SOUNDER		ADWR
12/9/1998	478	828	ELECTRIC SOUNDER	CASCADING WATER	ADWR
11/1/1999	464.4	842	ELECTRIC SOUNDER	CASCADING WATER	ADWR

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Tuesday, January 20, 2004

Page 17 of 17

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 05ABD	334319112225701	635966	33° 43' 19"	112° 22' 57"	600	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/13/1982	400.8	989	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/7/1984	409.8	980	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 06AAB	334327112235301	630755	33° 43' 26.6"	112° 23' 55.59"	600	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/14/1982	401.4	1010.6	ELECTRIC SOUNDER		ADWR
11/27/1991	412.5	999.5	ELECTRIC SOUNDER		ADWR
12/4/1997	417.4	995	ELECTRIC SOUNDER		ADWR
12/3/2002	427.6	984.4	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 06BBB	334235112233401	638756	33° 42' 35"	112° 23' 34"	610	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/14/1982	454.67	911	STEEL TAPE	UNDETERMINED	ADWR
12/7/1984	454.4	912	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 1 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 09BCD	334218112222701	612953	33° 42' 18"	112° 22' 27"	500	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/1/1938	180	1161	REPORTED		
2/6/1946	192.04	1148.96	STEEL TAPE		USGS
4/9/1946	194.97	1146.03	STEEL TAPE		USGS
6/6/1946	196.85	1144.15	STEEL TAPE		USGS
10/16/1946	199.6	1141.4	STEEL TAPE		USGS
12/20/1946	200.41	1140.59	STEEL TAPE		USGS
3/7/1947	200.91	1140.09	STEEL TAPE		USGS
11/4/1947	205.22	1135.78	STEEL TAPE		USGS
3/4/1948	205.1	1135.9	STEEL TAPE		USGS
10/1/1948	211.16	1129.84	STEEL TAPE		USGS
2/17/1949	211.51	1129.49	STEEL TAPE		USGS
4/25/1949	214.6	1126.4	STEEL TAPE		USGS
6/16/1949	214.62	1126.38	STEEL TAPE		USGS
11/3/1949	214.04	1126.96	STEEL TAPE		USGS
3/21/1950	214.75	1126.25	STEEL TAPE		USGS
12/20/1950	220.58	1120.42	STEEL TAPE		USGS
2/13/1951	223.63	1117.37	STEEL TAPE		USGS
11/14/1951	227.27	1113.73	STEEL TAPE		USGS
1/28/1952	228	1113	STEEL TAPE		USGS
11/19/1952	227.7	1113.3	STEEL TAPE		USGS

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Tuesday, January 20, 2004

Page 2 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

2/24/1953	232.25	1108.75	STEEL TAPE	USGS
11/16/1953	236.87	1104.13	STEEL TAPE	USGS
2/4/1954	239.19	1101.81	STEEL TAPE	USGS
2/3/1955	246.6	1094.4	STEEL TAPE	USGS
2/21/1956	255.5	1085.5		USGS
5/4/1956	250.15	1090.85	STEEL TAPE	USGS
10/31/1956	253.27	1087.73	STEEL TAPE	USGS
1/23/1957	262.4	1078.6	STEEL TAPE	USGS
1/23/1958	266.18	1074.82	STEEL TAPE	USGS
1/16/1959	276.52	1064.48		USGS
2/5/1960	287.24	1053.76	STEEL TAPE	USGS
3/14/1961	294.4	1046.6	STEEL TAPE	USGS
11/28/1961	297.25	1043.75	STEEL TAPE	USGS
12/15/1961	298.52	1042.48	STEEL TAPE	USGS
1/17/1962	299.17	1041.83	STEEL TAPE	USGS
2/17/1962	299.57	1041.43	STEEL TAPE	USGS
3/16/1962	301.29	1039.71	STEEL TAPE	USGS
4/13/1962	301.69	1039.31	STEEL TAPE	USGS
5/11/1962	302.17	1038.83	STEEL TAPE	USGS
6/11/1962	301.1	1039.9	STEEL TAPE	USGS
7/12/1962	303.36	1037.64	STEEL TAPE	USGS
8/9/1962	303.92	1037.08	STEEL TAPE	USGS
9/7/1962	304.66	1036.34	STEEL TAPE	USGS

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Tuesday, January 20, 2004

Page 3 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

10/11/1962	305.69	1035.31	STEEL TAPE	USGS
11/5/1962	306.66	1034.34	STEEL TAPE	USGS
11/21/1962	306.52	1034.48	STEEL TAPE	USGS
12/3/1962	307.21	1033.79	STEEL TAPE	USGS
12/26/1962	307.69	1033.31	STEEL TAPE	USGS
12/31/1962	307.7	1033.3		USGS
1/31/1963	308.53	1032.47	STEEL TAPE	USGS
2/4/1963	308.55	1032.45	STEEL TAPE	USGS
2/15/1963	308.81	1032.19	STEEL TAPE	USGS
2/25/1963	309.04	1031.96	STEEL TAPE	USGS
2/26/1963	308.9	1032.1	STEEL TAPE	USGS
3/4/1963	309.15	1031.85	STEEL TAPE	USGS
4/1/1963	309.3	1031.7	STEEL TAPE	USGS
4/24/1963	309.9	1031.1	STEEL TAPE	USGS
5/27/1963	310.37	1030.63	STEEL TAPE	USGS
6/26/1963	310.85	1030.15	STEEL TAPE	USGS
7/25/1963	311.53	1029.47	STEEL TAPE	USGS
8/19/1963	312.14	1028.86	STEEL TAPE	USGS
9/20/1963	313.1	1027.9	STEEL TAPE	USGS
10/18/1963	313.83	1027.17	STEEL TAPE	USGS
11/14/1963	314.44	1026.56	STEEL TAPE	USGS
12/13/1963	315.23	1025.77	STEEL TAPE	USGS
1/10/1964	315.63	1025.37	STEEL TAPE	USGS

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Tuesday, January 20, 2004

Page 4 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

2/7/1964	316.39	1024.61	STEEL TAPE	USGS
2/25/1964	315.9	1025.1		USGS
3/6/1964	316.76	1024.24	STEEL TAPE	USGS
4/3/1964	317.4	1023.6	STEEL TAPE	USGS
5/1/1964	318.01	1022.99	STEEL TAPE	USGS
5/29/1964	318.54	1022.46	STEEL TAPE	USGS
6/26/1964	319.35	1021.65	STEEL TAPE	USGS
7/23/1964	319.94	1021.06	STEEL TAPE	USGS
8/21/1964	320.56	1020.44	STEEL TAPE	USGS
9/17/1964	321.11	1019.89	STEEL TAPE	USGS
9/18/1964	321.19	1019.81	STEEL TAPE	USGS
10/16/1964	321.79	1019.21	STEEL TAPE	USGS
11/11/1964	322.39	1018.61	STEEL TAPE	USGS
12/11/1964	322.9	1018.1	STEEL TAPE	USGS
1/13/1965	323.98	1017.02	STEEL TAPE	USGS
1/23/1965	323.95	1017.05	STEEL TAPE	USGS
2/12/1965	324.48	1016.52	STEEL TAPE	USGS
3/22/1965	324.75	1016.25	STEEL TAPE	USGS
4/23/1965	325.34	1015.66	STEEL TAPE	USGS
5/17/1965	325.83	1015.17	STEEL TAPE	USGS
6/18/1965	326.68	1014.32	STEEL TAPE	USGS
7/14/1965	327.18	1013.82	STEEL TAPE	USGS
8/13/1965	327.88	1013.12	STEEL TAPE	USGS

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Tuesday, January 20, 2004

Page 5 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

9/15/1965	328.65	1012.35	STEEL TAPE	USGS
10/16/1965	329.13	1011.87	STEEL TAPE	USGS
11/27/1965	330.05	1010.95	STEEL TAPE	USGS
1/25/1966	331.28	1009.72	STEEL TAPE	USGS
3/22/1966	331.76	1009.24	STEEL TAPE	USGS
6/21/1966	330.8	1010.2		USGS
8/17/1966	329.5	1011.5		USGS
9/21/1966	330.3	1010.7		USGS
10/25/1966	330.45	1010.55	STEEL TAPE	USGS
11/23/1966	330.57	1010.43	STEEL TAPE	USGS
12/27/1966	329.93	1011.07	STEEL TAPE	USGS
1/19/1967	332.54	1008.46	STEEL TAPE	USGS
2/23/1967	331.67	1009.33	STEEL TAPE	USGS
3/21/1967	332.89	1008.11	STEEL TAPE	USGS
4/20/1967	332.5	1008.5	STEEL TAPE	USGS
5/22/1967	334.5	1006.5	STEEL TAPE	USGS
6/23/1967	334	1007	STEEL TAPE	USGS
7/24/1967	333.6	1007.4	STEEL TAPE	USGS
8/14/1967	334.1	1006.9	STEEL TAPE	USGS
9/25/1967	333.8	1007.2	STEEL TAPE	USGS
10/25/1967	336.4	1004.6		USGS
11/27/1967	335.8	1005.2	STEEL TAPE	USGS
12/26/1967	336.4	1004.6		USGS

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Tuesday, January 20, 2004

Page 6 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

1/29/1968	336.2	1004.8	USGS
2/26/1968	336.4	1004.6	USGS
3/26/1968	336.3	1004.7	USGS
4/24/1968	336.6	1004.4	USGS
5/27/1968	336	1005	USGS
6/28/1968	336.7	1004.3	USGS
7/26/1968	337.2	1003.8	USGS
8/27/1968	337	1004	USGS
9/26/1968	336.5	1004.5	USGS
10/24/1968	335.8	1005.2	USGS
11/27/1968	337	1004	USGS
12/23/1968	336.7	1004.3	USGS
1/29/1969	337.9	1003.1	USGS
2/25/1969	336.8	1004.2	USGS
3/25/1969	337	1004	USGS
3/29/1969	336.8	1004.2	USGS
4/25/1969	337.7	1003.3	USGS
5/26/1969	338.2	1002.8	USGS
6/25/1969	338.6	1002.4	USGS
7/25/1969	338.9	1002.1	USGS
8/22/1969	339.2	1001.8	USGS
12/26/1969	340.9	1000.1	USGS
1/26/1970	341.4	999.6	USGS

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Tuesday, January 20, 2004

Page 7 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

2/23/1970	340.7	1000.3		USGS
2/26/1970	340.7	1000.3		USGS
3/27/1970	341.5	999.5		USGS
5/26/1970	343.1	997.9		USGS
6/24/1970	343.8	997.2		USGS
7/27/1970	345	996		USGS
8/28/1970	345.5	995.5		USGS
9/25/1970	345.3	995.7		USGS
10/27/1970	345.1	995.9		USGS
11/27/1970	346	995		USGS
12/22/1970	347.9	993.1		USGS
1/26/1971	349.3	991.7		USGS
2/26/1971	348.6	992.4		USGS
3/25/1971	349.1	991.9		USGS
4/26/1971	348.8	992.2		USGS
5/25/1971	349.2	991.8		USGS
1/28/1972	357.7	983.3		USGS
1/25/1973	357.1	983.9		USGS
1/10/1974	358.6	982.4		USGS
3/7/1977	376.7	964.3	ELECTRIC TAPE	USGS
3/9/1978	377.5	963.5		USGS
1/29/1979	375.8	965.2	ELECTRIC TAPE	USGS
1/15/1980	375.3	965.7		USGS

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Tuesday, January 20, 2004

Page 8 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

1/29/1981	373.6	967.4		USGS
1/13/1982	377	964	ELECTRIC SOUNDER	USGS
10/12/1982	379	962	ELECTRIC SOUNDER	ADWR
11/29/1982	378.7	962.3	ELECTRIC SOUNDER	ADWR
12/5/1983	380.2	960.8	ELECTRIC SOUNDER	ADWR
1/2/1985	381.4	959.6	ELECTRIC SOUNDER	ADWR
6/26/1985	381.2	959.8	ELECTRIC SOUNDER	ADWR
12/6/1985	381.9	959.1	ELECTRIC SOUNDER	ADWR
6/6/1986	381.7	959.3	ELECTRIC SOUNDER	ADWR
12/9/1986	380.5	960.5	ELECTRIC SOUNDER	ADWR
6/5/1987	382.9	958.1	ELECTRIC SOUNDER	ADWR
12/16/1987	377	964	ELECTRIC SOUNDER	ADWR
12/7/1988	376.8	964.2	ELECTRIC SOUNDER	ADWR
12/4/1989	385.9	955.1	ELECTRIC SOUNDER	ADWR
1/4/1991	395.5	945.5	ELECTRIC SOUNDER	ADWR
11/18/1991	399.5	941.5	ELECTRIC SOUNDER	ADWR
11/18/1992	401.3	939.7	ELECTRIC SOUNDER	ADWR
11/23/1993	401.3	939.7	ELECTRIC SOUNDER	ADWR
12/16/1994	399.5	941.5	ELECTRIC SOUNDER	ADWR
11/22/1995	400.9	940.1	ELECTRIC SOUNDER	ADWR
12/12/1996	400.9	940.1	ELECTRIC SOUNDER	ADWR
12/9/1997	405.4	935.6	ELECTRIC SOUNDER	ADWR
12/7/1998	409.5	931.5	ELECTRIC SOUNDER	ADWR

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Tuesday, January 20, 2004

Page 9 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

11/3/1999	412.6	928.4	ELECTRIC SOUNDER	ADWR
11/8/2000	404.9	936.1	ELECTRIC SOUNDER	ADWR
12/3/2002	418.89	922.11	ELECTRIC SOUNDER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 12BCB	334222112192401	613100	33° 42' 19.89"	112° 19' 26.2"	850	INDUSTRIAL	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/22/2002	382.25	926.75	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 13DDA	334108112183801	803469	33° 41' 8"	112° 18' 32"	850	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/21/1962	187.63	1020	UNDETERMINED	UNDETERMINED	USGS
1/8/1963	227.3	981	UNDETERMINED	UNDETERMINED	USGS
10/22/1982	291.3	917	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1985	254.7	953	ELECTRIC SOUNDER	UNDETERMINED	ADWR
7/22/1991	355.4	853	ELECTRIC SOUNDER	PUMPING	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 14BBB	334147112202901	611447	33° 41' 47.29"	112° 20' 30.39"	1075	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
10/29/1964	209.15	1080	STEEL TAPE	UNDETERMINED	USGS
1/18/1972	331	958	ELECTRIC SOUNDER	UNDETERMINED	USBR
12/3/1982	345.4	944	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/2/1985	341.3	948	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/18/1991	378.9	910	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/2002	400.6	888.4	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 15ABB	334147112210101	611448	33° 41' 47.2"	112° 21' 1.29"	1070	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/14/1977	359.5	936.5	ELECTRIC SOUNDER		USGS
1/2/1985	349.2	946.8	ELECTRIC SOUNDER		ADWR
11/18/1991				OBSTRUCTION	ADWR
11/21/2002	0	0	ELECTRIC SOUNDER	OBSTRUCTION	ADWR

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Tuesday, January 20, 2004

Page 11 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 18ACB	334133112240201	612954	33° 41' 33"	112° 24' 2"	525	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/26/1962	400.1	943	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/31/1962	401.8	941	ELECTRIC SOUNDER	UNDETERMINED	USGS

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 18BAA	334147112241501	502079	33° 41' 45.79"	112° 24' 18.29"	0	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/13/1983	477.6	872	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1984	475.3	875	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/27/1991	473.1	877	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/7/1997	478.9	871	ELECTRIC SOUNDER		ADWR
12/3/2002	488.7	861.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 18CBD	334114112243001	No Match	33° 41' 14"	112° 24' 30"		IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/13/1983	483.6	856	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1984	478.2	862	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/27/1991	474.5	866	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/24/1997	480.1	860	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 19BAA	334054112240901	612960	33° 40' 54"	112° 24' 9"	1080	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/1/1939	204	1118	REPORTED		
1/18/1972	450	872	ELECTRIC SOUNDER		USBR
1/13/1977	490.8	831.2	ELECTRIC SOUNDER		USGS
12/3/1982	492.4	829.6	ELECTRIC SOUNDER		ADWR
12/6/1984	479.7	842.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 19BBA	334055112242901	604493	33° 40' 55.59"	112° 24' 32.79"	1146	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/18/1972	461	869	ELECTRIC SOUNDER		USBR
2/4/1981	489.8	840.2	ELECTRIC TAPE	NEARBY PUMPING	USGS
12/2/1982	494.3	835.7	ELECTRIC SOUNDER		ADWR
12/6/1984	481.9	848.1	ELECTRIC SOUNDER		ADWR
11/27/1991	428.1	901.9	ELECTRIC SOUNDER		ADWR
11/24/1997	486.2	843.8	ELECTRIC SOUNDER		ADWR
12/2/2002	493.5	836.5	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 13 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID B-04-01 19BDC	Site ID 334033112242801	ADWR Reg. No. 612965	Latitude 33° 40' 30.5"	Longitude 112° 24' 24.29"	Well Depth 1000	Water Use IRRIGATION	Sub-Basin WEST SALT RIVER
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Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
4/1/1947	230	1090	REPORTED		
12/26/1967	336.4	983.6	ELECTRIC SOUNDER		USGS
1/29/1968	336.2	983.8			USGS
4/24/1968	336.6	983.4	ELECTRIC SOUNDER		USGS
5/27/1968	336	984	ELECTRIC SOUNDER		USGS
6/28/1968	336.7	983.3	ELECTRIC SOUNDER		USGS
7/24/1968	337.2	982.8	ELECTRIC SOUNDER		USGS
8/27/1968	337	983	ELECTRIC SOUNDER		USGS
9/25/1968	336.5	983.5	ELECTRIC SOUNDER		USGS
10/24/1968	335.8	984.2	ELECTRIC SOUNDER		USGS
11/27/1968	337	983	ELECTRIC SOUNDER		USGS
12/23/1968	336.7	983.3	ELECTRIC SOUNDER		USGS
1/24/1969	337.9	982.1	ELECTRIC SOUNDER		USGS
2/25/1969	336.8	983.2	ELECTRIC SOUNDER		USGS
3/25/1969	337	983	ELECTRIC SOUNDER		USGS
4/25/1969	337.7	982.3	ELECTRIC SOUNDER		USGS
5/26/1969	338.2	981.8	ELECTRIC SOUNDER		USGS
6/25/1969	338.6	981.4	ELECTRIC SOUNDER		USGS
7/25/1969	338.9	981.1	ELECTRIC SOUNDER		USGS
8/22/1969	339.2	980.8	ELECTRIC SOUNDER		USGS

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Tuesday, January 20, 2004

Page 14 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

12/26/1969	340.9	979.1	ELECTRIC SOUNDER	USGS
1/26/1970	341.4	978.6	ELECTRIC SOUNDER	USGS
2/26/1970	340.7	979.3	ELECTRIC SOUNDER	USGS
3/27/1970	341.5	978.5	ELECTRIC SOUNDER	USGS
5/26/1970	343.1	976.9	ELECTRIC SOUNDER	USGS
6/24/1970	343.8	976.2	ELECTRIC SOUNDER	USGS
7/27/1970	345	975	ELECTRIC SOUNDER	USGS
8/28/1970	345.5	974.5	ELECTRIC SOUNDER	USGS
9/25/1970	345.3	974.7	ELECTRIC SOUNDER	USGS
10/27/1970	345.1	974.9	ELECTRIC SOUNDER	USGS
11/24/1970	346	974	ELECTRIC SOUNDER	USGS
12/22/1970	347.9	972.1	ELECTRIC SOUNDER	USGS
1/26/1971	349.3	970.7	ELECTRIC SOUNDER	USGS
2/26/1971	348.6	971.4	ELECTRIC SOUNDER	USGS
3/25/1971	349.2	970.8	ELECTRIC SOUNDER	USGS
4/26/1971	348.8	971.2	ELECTRIC SOUNDER	USGS
5/25/1971	349.25	970.75		USGS
6/24/1971	349.4	970.6	ELECTRIC SOUNDER	USGS
7/26/1971	350.6	969.4	ELECTRIC SOUNDER	USGS
9/23/1971	350.8	969.2	ELECTRIC SOUNDER	USGS
11/15/1971	352.2	967.8	ELECTRIC SOUNDER	USGS
12/17/1971	352.3	967.7	ELECTRIC SOUNDER	USGS
1/19/1972	353.2	966.8	ELECTRIC SOUNDER	USGS

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Tuesday, January 20, 2004

Page 15 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

2/16/1972	352.4	967.6	ELECTRIC SOUNDER	USGS
5/16/1972	354.4	965.6	ELECTRIC SOUNDER	USGS
7/14/1972	354.8	965.2	ELECTRIC SOUNDER	USGS
8/24/1972	354.3	965.7	ELECTRIC SOUNDER	USGS
9/19/1972	353.8	966.2	ELECTRIC SOUNDER	USGS
1/25/1973	357.1	962.9	ELECTRIC SOUNDER	USGS
2/28/1973	355.7	964.3	ELECTRIC SOUNDER	USGS
3/21/1973	356.2	963.8	ELECTRIC SOUNDER	USGS
4/19/1973	355.9	964.1	ELECTRIC SOUNDER	USGS
5/18/1973	356.4	963.6	ELECTRIC SOUNDER	USGS
6/20/1973	357	963	ELECTRIC SOUNDER	USGS
7/17/1973	356.8	963.2	ELECTRIC SOUNDER	USGS
11/19/1973	357.1	962.9	ELECTRIC SOUNDER	USGS
1/10/1974	354.4	965.6	ELECTRIC SOUNDER	USGS
2/4/1981	483.8	836.2	ELECTRIC TAPE	USGS
1/13/1982	488.8	831.2	ELECTRIC SOUNDER	USGS
12/3/1982	489.6	830.4	ELECTRIC SOUNDER	ADWR
12/6/1984	475.8	844.2	ELECTRIC SOUNDER	ADWR
6/26/1985	474.2	845.8	ELECTRIC SOUNDER	ADWR
12/6/1985	468.6	851.4	ELECTRIC SOUNDER	ADWR
12/11/1986	466.1	853.9	ELECTRIC SOUNDER	ADWR
6/5/1987	468.9	851.1	ELECTRIC SOUNDER	ADWR
12/16/1987	468.9	851.1	ELECTRIC SOUNDER	ADWR

CASCADING WATER

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Tuesday, January 20, 2004

Page 16 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

6/6/1988	498.1	821.9	ELECTRIC SOUNDER	PUMPING	ADWR
12/5/1988	469.1	850.9	ELECTRIC SOUNDER		ADWR
11/28/1989	474.6	845.4	ELECTRIC SOUNDER		ADWR
1/4/1991	477.4	842.6	ELECTRIC SOUNDER		ADWR
11/16/1992	506.9	813.1	ELECTRIC SOUNDER	PUMPING	ADWR
11/19/1993	464.4	855.6	ELECTRIC SOUNDER		ADWR
11/23/1994	468.3	851.7	ELECTRIC SOUNDER	CASCADING WATER	ADWR
11/17/1995	467.8	852.2	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/4/1996	512.8	807.2	ELECTRIC SOUNDER	PUMPING	ADWR
11/20/1997	480.7	839.3	ELECTRIC SOUNDER		ADWR
12/9/1998	481.3	838.7	ELECTRIC SOUNDER		ADWR
11/1/1999	481.2	838.8	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/18/2000	487.3	832.7	ELECTRIC SOUNDER		ADWR
11/21/2002	491.29	828.71	ELECTRIC SOUNDER	CASCADING WATER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 20BCB	334041112233401	612962	33° 40' 41"	112° 23' 34"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/3/1982	483.5	824	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1984	470	837	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1991	469.3	838	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 17 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 20CCD	334007112232401	612966	33° 40' 4"	112° 23' 27"	1195	IRRIGATION	WEST SALT RIVER
Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source		
2/27/1964	424.71	863.29	STEEL TAPE		USGS		

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 21AAA	334053112213401	612961	33° 40' 53"	112° 21' 34"	998	IRRIGATION	WEST SALT RIVER
Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source		
1/18/1972	368	904	ELECTRIC SOUNDER	UNDETERMINED	USBR		
11/29/1982	395.5	877	ELECTRIC SOUNDER	UNDETERMINED	ADWR		
1/2/1985	391.9	880	ELECTRIC SOUNDER	UNDETERMINED	ADWR		

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 21BAA	334054112220301	520840	33° 40' 54.59"	112° 21' 58.7"	0	PUBLIC SUPPLY	WEST SALT RIVER
Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source		
12/5/1997	450	832	ELECTRIC SOUNDER		ADWR		
1/14/2003	460.2	821.8	ELECTRIC SOUNDER		ADWR		

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Tuesday, January 20, 2004

Page 18 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 21BBB	334054112223201	612959	33° 40' 54.9"	112° 22' 34.2"	1000	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/1/1940	171	1122	REPORTED		
1/18/1972	415	878	ELECTRIC SOUNDER		USBR
1/13/1977	456.3	836.7	ELECTRIC SOUNDER		USGS
10/12/1982	462.7	830.3	ELECTRIC SOUNDER		ADWR
12/3/1982	455.8	837.2	ELECTRIC SOUNDER		ADWR
12/6/1984	446.7	846.3	ELECTRIC SOUNDER		ADWR
12/9/1997	470.8	822.2	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
1/15/2003	485	808	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 22ABB	334050112210101	610214	33° 40' 54.9"	112° 21' 1.1"	900	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/23/1994	397.2	872	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/1/1997	381.7	887	ELECTRIC SOUNDER		ADWR
1/10/2003	422.54	846.46	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 19 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

<i>Local ID</i>	<i>Site ID</i>	<i>ADWR Reg. No.</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Well Depth</i>	<i>Water Use</i>	<i>Sub-Basin</i>
B-04-01 22DBA	334025112205201	610213	33° 40' 25"	112° 20' 52"	1005	UNUSED	WEST SALT RIVER

<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measuremnt Method</i>	<i>Remark</i>	<i>Measurement Source</i>
3/26/1986	427.7	821	ELECTRIC SOUNDER	PUMPING	ADWR
7/27/1989	460	789	ELECTRIC SOUNDER	PUMPING	ADWR
10/16/1989	453.8	795	ELECTRIC SOUNDER	PUMPING	ADWR
12/13/1989	387.7	861	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/2/2003	0	0	ELECTRIC SOUNDER	WELL DESTROYED	ADWR

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Tuesday, January 20, 2004

Page 20 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01-23888	334055112202801	610215	33° 40' 54.9"	112° 20' 30.5"	950	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/28/1952	189.56	1072	STEEL TAPE	UNDETERMINED	USGS
11/19/1952	198.22	1064	UNDETERMINED	UNDETERMINED	USGS
5/5/1953	206.28	1056	UNDETERMINED	UNDETERMINED	USGS
11/16/1953	209.74	1052	UNDETERMINED	UNDETERMINED	USGS
2/3/1955	217.3	1045	UNDETERMINED	UNDETERMINED	USGS
1/23/1957	239.81	1022	UNDETERMINED	UNDETERMINED	USGS
1/23/1958	251.5	1011	UNDETERMINED	UNDETERMINED	USGS
1/24/1962	286.35	976	UNDETERMINED	UNDETERMINED	USGS
1/7/1963	285.3	977	UNDETERMINED	UNDETERMINED	USGS
1/23/1965	300.75	961	UNDETERMINED	UNDETERMINED	USGS
1/25/1966	307.2	955	UNDETERMINED	UNDETERMINED	USGS
1/18/1972	339	923	ELECTRIC SOUNDER	UNDETERMINED	USBR
11/29/1982	354.7	907	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/2/1985	351.5	911	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/4/1989	460.3	802	ELECTRIC SOUNDER	PUMPING	ADWR
11/18/1992	393	869	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/19/1993	379.2	883	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/1/1997	397.6	864	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/13/2003	411.75	850.25	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 23CAB	334027112201301	547408	33° 40' 28"	112° 20' 14.3"	1240	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/5/1997	400.7	844	ELECTRIC SOUNDER		ADWR
1/10/2003	402.04	842.96	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 23DBA	334026112194301	610211	33° 40' 26"	112° 19' 43"	985	RECREATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
7/22/1986	450.3	792	ELECTRIC SOUNDER	PUMPING	ADWR
11/11/1987	462.7	779	ELECTRIC SOUNDER	PUMPING	ADWR
12/3/1991	381.1	861	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 24DBB	334026112185501	800909	33° 40' 26.2"	112° 18' 55.79"	500	DOMESTIC	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/3/1982	288	903	ELECTRIC SOUNDER	UNDETERMINED	ADWR
1/3/1985	284.1	907	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/8/1991	321.3	870	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/18/2002	351.64	839.36	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 22 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 25CCC	333918112192601	No Match	33° 39' 18.2"	112° 19' 25.2"	1990	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
4/13/1965	304.1	903.9			USBR
4/16/1965	303.1	904.9	STEEL TAPE		USBR
4/30/1965	303.1	904.9	STEEL TAPE		USBR
5/26/1965	305.3	902.7	STEEL TAPE		USBR
6/30/1965	306.2	901.8	STEEL TAPE		USBR
7/29/1965	307.6	900.4	STEEL TAPE		USBR
8/30/1965	310	898	STEEL TAPE		USBR
9/27/1965	309.6	898.4	STEEL TAPE		USBR
10/27/1965	309.9	898.1	STEEL TAPE		USBR
11/30/1965	309.4	898.6	STEEL TAPE		USBR
12/29/1965	308.5	899.5	STEEL TAPE		USBR
1/12/1966	308.9	899.1	STEEL TAPE		USBR
1/18/1966	308.8	899.2	STEEL TAPE		USBR
2/9/1966	308.4	899.6	STEEL TAPE		USBR
2/24/1966	308.3	899.7	STEEL TAPE		USBR
3/29/1966	308.1	899.9	STEEL TAPE		USBR
4/25/1966	308.2	899.8	STEEL TAPE		USBR
5/24/1966	308.9	899.1	STEEL TAPE		USBR
6/27/1966	310.3	897.7	STEEL TAPE		USBR
7/27/1966	311.6	896.4	STEEL TAPE		USBR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

8/26/1966	311.9	896.1	STEEL TAPE	USBR
9/28/1966	312.4	895.6	STEEL TAPE	USBR
10/27/1966	312	896	STEEL TAPE	USBR
12/1/1966	308.7	899.3	STEEL TAPE	USBR
12/27/1966	312.2	895.8	STEEL TAPE	USBR
1/25/1967	312.1	895.9	STEEL TAPE	USBR
2/27/1967	313.2	894.8	STEEL TAPE	USBR
3/29/1967	313.5	894.5	STEEL TAPE	USBR
4/27/1967	313.5	894.5	STEEL TAPE	USBR
5/27/1967	314.1	893.9	STEEL TAPE	USBR
6/28/1967	314.4	893.6	STEEL TAPE	USBR
7/27/1967	315.5	892.5	STEEL TAPE	USBR
8/30/1967	317.3	890.7	STEEL TAPE	USBR
9/26/1967	317.4	890.6	STEEL TAPE	USBR
10/25/1967	317.1	890.9	STEEL TAPE	USBR
11/30/1967	316.4	891.6	STEEL TAPE	USBR
12/27/1967	314.3	893.7	STEEL TAPE	USBR
1/30/1968	316.2	891.8	STEEL TAPE	USBR
2/28/1968	316.2	891.8	STEEL TAPE	USBR
3/27/1968	316.3	891.7	STEEL TAPE	USBR
4/25/1968	314.4	893.6	STEEL TAPE	USBR
5/29/1968	316.6	891.4	STEEL TAPE	USBR
7/1/1968	318.4	889.6	STEEL TAPE	USBR

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Tuesday, January 20, 2004

Page 24 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

7/29/1968	319.1	888.9	STEEL TAPE		USBR
8/28/1968	320.2	887.8	STEEL TAPE		USBR
9/24/1968	320.7	887.3	STEEL TAPE		USBR
10/21/1968	319.9	888.1	STEEL TAPE		USBR
11/27/1968				OBSTRUCTION	USBR
1/2/2003	0	0	ELECTRIC SOUNDER	OBSTRUCTION	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 27888	334002112213101	610216	33° 40' 2"	112° 21' 31"	2175	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
1/18/1972	327	920	ELECTRIC SOUNDER		USBR
1/14/1977	361.6	885.4	ELECTRIC SOUNDER		USGS
1/2/1985	344.7	902.3	ELECTRIC SOUNDER		ADWR
1/2/2003	0	0	ELECTRIC SOUNDER	WELL DESTROYED	ADWR

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Tuesday, January 20, 2004

Page 25 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 27CBB	333937112213101	610217	33° 39' 36.4"	112° 21' 31.6"	722	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/18/1972	380	858	ELECTRIC SOUNDER		USBR
1/14/1977	410.4	827.6	ELECTRIC SOUNDER		USGS
12/3/1982	417.4	820.6	ELECTRIC SOUNDER		ADWR
1/2/1985	407.8	830.2	ELECTRIC SOUNDER		ADWR
12/9/1997	429.9	808	ELECTRIC SOUNDER		ADWR
1/14/2003	444.95	793.05	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 27CBC	333924112213001	610218	33° 39' 24"	112° 21' 30"	1752	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/2/2003	0	0	ELECTRIC SOUNDER	WELL DESTROYED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 28BAA	334001112220701	612963	33° 40' 3.2"	112° 22' 4.4"	1032	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
8/1/1939	144	1113	REPORTED		
1/18/1972	406	851	ELECTRIC SOUNDER		USBR
12/4/1997	448.6	808.4	ELECTRIC SOUNDER		ADWR
1/10/2003	456.1	800.9	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 28DBD	333929112214701	547409	33° 39' 29.29"	112° 21' 47.9"	1240	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/10/2003	446.89	794.11	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 29AAA	334000112224001	612964	33° 40' 3"	112° 22' 35"	1080	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
4/1/1939	161	1107	REPORTED		
1/18/1972	420	848	ELECTRIC SOUNDER		USBR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 29ABB	334002112230101	604494	33° 40' 2"	112° 23' 1"	900	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/3/1982	471.1	809	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/6/1984	457.8	822	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1991	459.9	820	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 27 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 29ADC	333941112225301	612967	33° 39' 42.5"	112° 22' 50.9"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/1/1939	166	1102	REPORTED		
12/3/1997	463.8	804	ELECTRIC SOUNDER		ADWR
11/21/2002	472.6	795.4	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 29BCA	333947112232301	573654	33° 39' 47.09"	112° 23' 23.89"	1170	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/15/2003	478.64	809.36	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 29DBB	333934112225701	553671	33° 39' 34.79"	112° 22' 57.79"	1060	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/14/2003	465.04	798.96	ELECTRIC SOUNDER		ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Page 28 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 30ABB	334003112240601	612970	33° 40' 3"	112° 24' 6"	1500	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
5/1/1964	427.66	868.34	STEEL TAPE		USGS
1/19/1972	459	837	ELECTRIC SOUNDER		USBR
12/6/1982	480.7	815.3	ELECTRIC SOUNDER	CASCADING WATER	ADWR
11/20/1991	467.6	828.4	ELECTRIC SOUNDER		ADWR
11/7/1997	384.5	911.5	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 30BCD	333943112243001	604496	33° 39' 43"	112° 24' 30"	800	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
10/1/1962	238	1063	STEEL TAPE		USGS
10/13/1982	305.6	995.4	ELECTRIC SOUNDER		ADWR
12/3/1982	302.7	998.3	ELECTRIC SOUNDER		ADWR
11/20/1991	304.9	996.1	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 29 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

<i>Local ID</i>	<i>Site ID</i>	<i>ADWR Reg. No.</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Well Depth</i>	<i>Water Use</i>	<i>Sub-Basin</i>
B-04-01 30DCD	333914112235501	612971	33° 39' 12.6"	112° 23' 57.29"	1025	IRRIGATION	WEST SALT RIVER

<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measuremnt Method</i>	<i>Remark</i>	<i>Measurement Source</i>
8/1/1939	179	1096	REPORTED		
8/14/1995	502.5	772.5	ELECTRIC SOUNDER	PUMPING	ADWR
11/10/1997	472.8	802.2	ELECTRIC SOUNDER		ADWR
11/20/1997	470.7	804.3	ELECTRIC SOUNDER		ADWR
11/21/2002	476.3	798.7	ELECTRIC SOUNDER		ADWR
12/3/2002	475.79	799.21	ELECTRIC SOUNDER		ADWR

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 32BBC	333858112233401	604497	33° 38' 58.2"	112° 23' 37.9"	1200	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/29/1957	323.9	937.1			USGS
2/8/1960	348.58	912.42			USGS
1/24/1962	345.19	915.81			USBR
12/18/1962	396.2	864.8	ELECTRIC TAPE		USBR
1/23/1965	405.9	855.1			USGS
1/25/1966	403.2	857.8			USGS
1/24/1967	412.55	848.45			USGS
1/18/1968	413.22	847.78			USGS
3/17/1969	420.5	840.5			USGS
2/16/1970	426.5	834.5			USGS
1/26/1971	431.9	829.1			USGS
1/18/1972	432	829			USBR
1/26/1973	443	818			USGS
1/10/1974	439.8	821.2			USGS
1/14/1977	465.2	795.8			USGS
3/9/1978	461.3	799.7	ELECTRIC TAPE		USGS
12/3/1982	467.5	793.5	ELECTRIC SOUNDER		ADWR
12/6/1984	451.3	809.7	ELECTRIC SOUNDER		ADWR
12/3/1997	462.6	798	ELECTRIC SOUNDER		ADWR
11/21/2002	467.5	793.5	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

12/3/2002 464.5 796.5 ELECTRIC SOUNDER ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 32BDA	333851112230601	554002	33° 38' 51.79"	112° 23' 6.59"	1110	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/14/2003	452.54	797.46	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 33ACC	333848112220201	623682	33° 38' 47.59"	112° 22' 1.89"	700	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/21/1962	361.8	865.2	ELECTRIC SOUNDER		USBR
1/14/1977	434.8	792.2	ELECTRIC SOUNDER		USGS
9/4/1991	500.1	727	ELECTRIC SOUNDER	PUMPING	ADWR
1/14/2003	442.64	784.36	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 33BAB	333906112220901	587293	33° 39' 6.3"	112° 22' 9.89"	970	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/15/2003	448.89	788.11	ELECTRIC SOUNDER		ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 338DB	333857112220901	575445	33° 38' 57.5"	112° 22' 9"	1200	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/14/2003	445.45	787.55	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 33CBB	333845112223401	623683	33° 38' 45"	112° 22' 34"	1042	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
4/28/1989	477	759	ELECTRIC SOUNDER	PUMPING	ADWR
12/13/1989	439.1	797	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	436.3	800	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 34ACB	333858112210001	610219	33° 38' 57.59"	112° 21' 0"	1200	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/22/1971	427	784	ELECTRIC SOUNDER	PUMPING	USGS
7/22/1991	473.8	737	ELECTRIC SOUNDER	PUMPING	ADWR
12/3/1997	412.5	799	ELECTRIC SOUNDER		ADWR
1/13/2003	423.45	787.55	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 33 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 34CBB	333843112213101	605760	33° 38' 42.2"	112° 21' 30.7"	500	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/2/1985	414	803	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/8/1991	438.8	778	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/17/1997	433.2	784	ELECTRIC SOUNDER		ADWR
11/18/2002	439.64	777.36	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 34 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 04 01 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-04-01 34DBB	333844112205901	610220	33° 38' 44.5"	112° 20' 59.9"	1000	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/29/1957	256.4	953	STEEL TAPE	UNDETERMINED	USGS
1/23/1958	270.2	939	STEEL TAPE	UNDETERMINED	USGS
1/16/1959	283.22	926	STEEL TAPE	UNDETERMINED	USGS
2/3/1960	285.04	924	STEEL TAPE	UNDETERMINED	USGS
1/7/1963	322.7	886	ELECTRIC SOUNDER	UNDETERMINED	USGS
2/4/1964	339.55	869	STEEL TAPE	UNDETERMINED	USGS
1/23/1965	350.4	859	STEEL TAPE	UNDETERMINED	USGS
1/25/1966	345.21	864	STEEL TAPE	UNDETERMINED	USGS
1/24/1967	358.6	850	STEEL TAPE	UNDETERMINED	USGS
3/17/1969	355.6	853	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/26/1971	362.5	847	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/18/1972	364	845	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/26/1973	361.9	847	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/10/1974	366.2	843	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/3/1997	416.5	793	ELECTRIC SOUNDER		ADWR
1/13/2003	428.54	780.46	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 35 of 35

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 03 between sections 01 and 36

<i>Local ID</i>	<i>Site ID</i>	<i>ADWR Reg. No.</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Well Depth</i>	<i>Water Use</i>	<i>Sub-Basin</i>
B-03-03 05ADB	333803112350701	623549	33° 38' 3.9"	112° 35' 10.19"	0	UNUSED	WEST SALT RIVER
<i>Meas. Date</i>	<i>WL Depth</i>	<i>WL Elevation</i>	<i>Measurement Method</i>		<i>Remark</i>	<i>Measurement Source</i>	
10/31/1997			ELECTRIC SOUNDER		OBSTRUCTION	ADWR	
12/4/2002	292.39	1504.61	ELECTRIC SOUNDER			ADWR	

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Tuesday, January 20, 2004

Page 1 of 1

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 01AAA	333818112243301	612976	33° 38' 19.2"	112° 24' 35.59"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/1/1939	190	1079	REPORTED		
1/18/1972	458	811	ELECTRIC SOUNDER		USBR
11/20/1997				OBSTRUCTION	ADWR
11/21/2002	465.29	803.71	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 01BBB	333819112253401	604500	33° 38' 18.5"	112° 25' 33"	1000	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/2/1982	483.2	809	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1984	478.4	814	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	459.5	833	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/7/1997	564.1	728	ELECTRIC SOUNDER		ADWR
11/18/2002	481.7	810.3	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
2/5/2003	503.89	788.11	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 1 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 02BAA	333819112260601	516893	33° 36' 18.89"	112° 26' 8.1"	1005	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/22/1963	397.8	904	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/18/1972	469	833	ELECTRIC SOUNDER	UNDETERMINED	USBR
8/14/1995	529.3	773	ELECTRIC SOUNDER	PUMPING	ADWR
11/20/1997	442.6	859	ELECTRIC SOUNDER		ADWR
11/22/2002	459	843	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 02CBC	333746112263501	613017	33° 37' 46.09"	112° 26' 38.29"	1000	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/2/1982	493	810	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1984	660.1	643	ELECTRIC SOUNDER	PUMPING	ADWR
11/20/1991	454.3	849	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1997	449.7	853	ELECTRIC SOUNDER		ADWR
11/27/2002	475.89	827.11	ELECTRIC SOUNDER	CASCADING WATER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 02CCC	333732112263201	612982	33° 37' 32"	112° 26' 32"	500	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/13/1949	267.9	1027	STEEL TAPE	UNDETERMINED	USGS

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 03BAA	333818112271401	612978	33° 38' 19.2"	112° 27' 17.29"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/11/1977	464.3	867	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/2/1982	477.1	854	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1984	486.1	845	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	455.5	876	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1997	463.2	868	ELECTRIC SOUNDER		ADWR
11/22/2002	445.6	885.4	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 03BDD	333756112271101	No Match	33° 37' 56"	112° 27' 11"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/22/1963	408.1	911.9	STEEL TAPE		USGS

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 03CBA	333753112272501	612983	33° 37' 53.09"	112° 27' 28.6"	0	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/2/1982	475.8	855	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1984	476.6	854	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/2002	442.29	888.71	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 10BBA	333725112272301	612984	33° 37' 25"	112° 27' 23"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/2/1982	493.8	836	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	490.1	840	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1997	480.9	849	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 10BDC	333701112272301	610101	33° 37' 1"	112° 27' 23"	800	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/13/1962	539.8	792	ELECTRIC SOUNDER	PUMPING	USGS
1/19/1972	490	842	ELECTRIC SOUNDER	UNDETERMINED	USBR
12/2/1982	504.1	828	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	496.6	835	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/21/1991	481.4	851	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1997	482.5	850	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 10CAA	333701112270801	612988	33° 37' 1"	112° 27' 8"	1000	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/1/1947	257	1051	REPORTED		
1/19/1972	485	823	ELECTRIC SOUNDER		USBR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 10DCC	333636112270701	612989	33° 36' 36"	112° 27' 7"	1533	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/7/1963	449.9	860	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/1/1964	430	880	STEEL TAPE	UNDETERMINED	USGS
1/11/1977	475.9	834	ELECTRIC SOUNDER	UNDETERMINED	USGS

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 11BAA	333725112260601	612985	33° 37' 26.89"	112° 26' 8.19"	996	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/2/1982	482.1	804	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	468.2	818	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/20/1991	448.3	838	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/3/1997	460.1	826	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/27/2002	471.39	814.61	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 5 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 12AAA	333725112243201	612987	33° 37' 27"	112° 24' 34.9"	736	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
8/1/1938	183	1069	REPORTED		
7/6/1995	487.7	764.3	ELECTRIC SOUNDER	PUMPING	ADWR
12/8/1997	442.5	809.5	ELECTRIC SOUNDER		ADWR
11/25/2002	406.7	845.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 12BAA	333725112250301	612986	33° 37' 26.79"	112° 25' 5.8"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/2/1982	475.5	782	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	477.4	780	ELECTRIC SOUNDER	UNDETERMINED	ADWR
7/10/1995	474.8	782	ELECTRIC SOUNDER	PUMPING	ADWR
12/8/1997	457.1	800	ELECTRIC SOUNDER		ADWR
11/25/2002	411.7	845.3	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 12BCB	333713112253201	604502	33° 37' 13"	112° 25' 32"	1100	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
9/18/1956	361	904	REPORTED		
1/20/1972	481	784	ELECTRIC SOUNDER		USBR

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Tuesday, January 20, 2004

Page 6 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 13BAA	333634112250401	612990	33° 36' 34.58"	112° 25' 6"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/29/1966	412.2	823	STEEL TAPE	UNDETERMINED	USGS
1/25/1967	419.18	816	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/18/1968	419.65	815	UNDETERMINED	UNDETERMINED	USGS
1/20/1972	447	788	UNDETERMINED	UNDETERMINED	USBR
1/10/1974	433.5	802	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/2/1982	430.8	804	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	427.2	808	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1997	397.5	838	ELECTRIC SOUNDER		ADWR
11/27/2002	454.79	780.21	ELECTRIC SOUNDER	PUMPING	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 14BAA	333633112260601	612991	33° 36' 34.58"	112° 26' 8.69"	1050	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/2/1982	496.4	770	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	478.1	788	ELECTRIC SOUNDER	UNDETERMINED	ADWR
8/15/1995	515.4	751	ELECTRIC SOUNDER	PUMPING	ADWR
12/8/1997	457.1	809	ELECTRIC SOUNDER		ADWR
11/25/2002	440.89	825.11	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 14BCB1	333621112263401	No Match	33° 36' 21"	112° 26' 34"	1400	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/14/1956	375.5	904.5	STEEL TAPE		USGS
1/25/1957	387.7	892.3	STEEL TAPE		USGS
1/23/1958	420.5	859.5	STEEL TAPE	NEARBY PUMPING	USGS
1/19/1959	423.28	856.72	STEEL TAPE		USGS
1/24/1962	427.95	852.05	STEEL TAPE		USGS
2/4/1964	458.31	821.69	STEEL TAPE		USGS
1/19/1965	448.85	831.15	STEEL TAPE		USGS
1/29/1966	450.4	829.6			USGS
1/24/1967	469.23	810.77	STEEL TAPE		USGS
1/18/1968	472.1	807.9	STEEL TAPE		USGS
2/11/1969	463.1	816.9			USGS
1/29/1970	479.9	800.1			USGS
1/26/1971	491.5	788.5			USGS
1/19/1972	501	779			USGS
1/26/1973	498.9	781.1			USGS
1/10/1974	488.2	791.8			USGS
2/21/1975	512.1	767.9	ELECTRIC SOUNDER		USGS
2/2/1976	530.5	749.5	ELECTRIC TAPE		USGS
12/16/1976	534	746	ELECTRIC TAPE	NEARBY PUMPING	USGS
3/9/1978	470.9	809.1	ELECTRIC TAPE		USGS

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Tuesday, January 20, 2004

Page 8 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

1/27/1981	491	789		USGS
1/12/1982	497.9	782.1	ELECTRIC SOUNDER	ADWR
12/1/1982	487.8	792.2	ELECTRIC SOUNDER	ADWR
12/6/1983	471	809	ELECTRIC SOUNDER	ADWR

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Tuesday, January 20, 2004

Page 9 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 145CB2	333619112263501	610100	33° 36' 17.89"	112° 28' 38.79"	1607	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
7/27/1981	489.5	791	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/1/1982	486.3	794	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	473.5	807	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/24/1985	606.5	674	ELECTRIC SOUNDER	PUMPING	ADWR
7/17/1985	614	666	ELECTRIC SOUNDER	PUMPING	ADWR
12/9/1985	464	816	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/4/1986	455.3	825	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1986	464.6	815	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1987	460.2	820	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/14/1987	475.2	805	ELECTRIC SOUNDER	UNDETERMINED	ADWR
5/31/1988	472.3	808	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/5/1988	472.9	807	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/28/1989	481.8	798	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/26/1991	460.8	819	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1992	475.5	805	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1993	427.5	853	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/23/1994	430.3	850	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/8/1995	444	836	ELECTRIC SOUNDER	UNDETERMINED	ADWR
10/31/1996	468.2	812	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/26/1997	458	822	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Page 10 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

12/3/1998	439	841	ELECTRIC SOUNDER	RECENTLY PUMPED	ADWR
3/9/2000	445.1	835	ELECTRIC SOUNDER		ADWR
11/6/2000	427.5	853	ELECTRIC SOUNDER		ADWR
11/26/2002	426.29	853.71	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 14BDD	333609112260601	612993	33° 36' 9"	112° 26' 6"	1008	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/1/1947	285	973	REPORTED		

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 15AAA	333633112263601	612992	33° 36' 34.4"	112° 26' 39.9"	1007	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
8/15/1995	518.9	768	ELECTRIC SOUNDER	PUMPING	ADWR
12/8/1997	471.3	816	ELECTRIC SOUNDER		ADWR
11/25/2002	444.2	842.8	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 15DBB	333612112270701	604503	33° 36' 12"	112° 27' 7"	2425	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/13/1962	375.9	924	STEEL TAPE	UNDETERMINED	USGS
11/19/1962	530.6	769	ELECTRIC SOUNDER	PUMPING	USGS
1/24/1963	378.49	922	STEEL TAPE	NEARBY PUMPING	USGS
3/7/1963	544.8	755	ELECTRIC SOUNDER	PUMPING	USGS
1/13/1964	435.3	865	STEEL TAPE	UNDETERMINED	USGS
2/11/1964	552.25	748	UNDETERMINED	PUMPING	USGS
2/25/1964	428.52	871	STEEL TAPE	UNDETERMINED	USGS
1/19/1965	419.36	881	STEEL TAPE	UNDETERMINED	USGS
1/29/1966	420.42	880	STEEL TAPE	UNDETERMINED	USGS
1/24/1967	436.03	864	STEEL TAPE	UNDETERMINED	USGS
1/18/1968	435.36	865	STEEL TAPE	UNDETERMINED	USGS
1/26/1973	460.5	840	UNDETERMINED	UNDETERMINED	USGS
1/10/1974	455.9	844	UNDETERMINED	UNDETERMINED	USGS

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Tuesday, January 20, 2004

Page 12 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 21ABA	333541112280101	612994	33° 35' 42"	112° 28' 3.9"	534	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/21/1950	298.72	1033.28	STEEL TAPE		USGS
2/14/1951	304.25	1027.75	STEEL TAPE		USGS
11/15/1951	312.46	1019.54	STEEL TAPE		USGS
1/29/1952	310.83	1021.17	STEEL TAPE		USGS
11/20/1952	309.6	1022.4	STEEL TAPE		USGS
2/25/1953	323.15	1008.85	STEEL TAPE		USGS
11/17/1953	320.88	1011.12	STEEL TAPE		USGS
2/5/1954	326.19	1005.81	STEEL TAPE		USGS
2/16/1955	330.65	1001.35	STEEL TAPE		USGS
3/6/1956	338.64	993.36	STEEL TAPE		USGS
1/21/1958	354.6	977.4	STEEL TAPE		USGS
1/20/1959	390.21	941.79	STEEL TAPE		USGS
2/9/1960	403.47	928.53	STEEL TAPE		USGS
3/1/1961	392.8	939.2	STEEL TAPE		USGS
11/29/1961	425.1	906.9	STEEL TAPE		USGS
12/18/1961	422.35	909.65	STEEL TAPE		USGS
1/17/1962	418.12	913.88	STEEL TAPE		USGS
1/29/1962	422.54	909.46			USGS
2/16/1962	423.26	908.74	STEEL TAPE		USGS
3/16/1962	411.37	920.63	STEEL TAPE		USGS

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

3/20/1962	403.86	928.14	STEEL TAPE	USGS
3/23/1962	426.33	905.67	STEEL TAPE	USGS
4/13/1962	424.34	907.66	STEEL TAPE	USGS
5/11/1962	426.45	905.55	STEEL TAPE	USGS
6/11/1962	431.14	900.86	STEEL TAPE	USGS
7/13/1962	433.13	898.87	STEEL TAPE	USGS
8/9/1962	435.43	896.57	STEEL TAPE	USGS
9/7/1962	436.69	895.31	STEEL TAPE	USGS
9/17/1962	437.8	894.2	STEEL TAPE	USGS
9/19/1962	437.98	894.02	STEEL TAPE	USGS
9/21/1962	438.08	893.92	STEEL TAPE	USGS
9/24/1962	438.36	893.64	STEEL TAPE	USGS
9/26/1962	438.08	893.92	STEEL TAPE	USGS
9/28/1962	438.1	893.9	STEEL TAPE	USGS
9/30/1962	438.51	893.49	STEEL TAPE	USGS
10/2/1962	437.82	894.18	STEEL TAPE	USGS
10/4/1962	437.34	894.66	STEEL TAPE	USGS
10/5/1962	438.34	893.66	STEEL TAPE	USGS
10/8/1962	438.65	893.35	STEEL TAPE	USGS
10/15/1962	438.22	893.78	STEEL TAPE	USGS
10/22/1962	438.39	893.61	STEEL TAPE	USGS
10/27/1962	438.98	893.02	STEEL TAPE	USGS
11/5/1962	438.55	893.45	STEEL TAPE	USGS

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Tuesday, January 20, 2004

Page 14 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

11/13/1962	438.36	893.64	STEEL TAPE	USGS
11/19/1962	438.68	893.32	STEEL TAPE	USGS
11/26/1962	438.33	893.67	STEEL TAPE	USGS
12/3/1962	437.63	894.37	STEEL TAPE	USGS
12/10/1962	436.66	895.34	STEEL TAPE	USGS
12/17/1962	435.31	896.69	STEEL TAPE	USGS
12/24/1962	434.05	897.95	STEEL TAPE	USGS
12/31/1962	434.54	897.46	STEEL TAPE	USGS
1/7/1963	434.73	897.27	STEEL TAPE	USGS
1/14/1963	435.28	896.72	STEEL TAPE	USGS
1/20/1963	435.35	896.65	STEEL TAPE	USGS
1/23/1963	434.6	897.4	STEEL TAPE	USGS
1/28/1963	433.17	898.83		USGS
2/4/1963	433.72	898.28	STEEL TAPE	USGS
2/11/1963	433.73	898.27	STEEL TAPE	USGS
2/18/1963	435.25	896.75	STEEL TAPE	USGS
2/25/1963	435.45	896.55	STEEL TAPE	USGS
3/4/1963	436.35	895.65	STEEL TAPE	USGS
3/11/1963	433.95	898.05	STEEL TAPE	USGS
3/17/1963	435.36	896.64	STEEL TAPE	USGS
3/25/1963	437.63	894.37	STEEL TAPE	USGS
4/1/1963	435.88	896.12	STEEL TAPE	USGS
4/8/1963	436.99	895.01	STEEL TAPE	USGS

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Tuesday, January 20, 2004

Page 15 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

4/15/1963	438.7	893.3	STEEL TAPE	USGS
4/22/1963	440.42	891.58	STEEL TAPE	USGS
4/29/1963	440.55	891.45	STEEL TAPE	USGS
5/6/1963	440.56	891.44	STEEL TAPE	USGS
5/13/1963	441.49	890.51	STEEL TAPE	USGS
5/20/1963	441.53	890.47	STEEL TAPE	USGS
5/27/1963	442.53	889.47	STEEL TAPE	USGS
6/3/1963	442.67	889.33	STEEL TAPE	USGS
6/10/1963	443.05	888.95	STEEL TAPE	USGS
6/17/1963	443.19	888.81	STEEL TAPE	USGS
6/24/1963	444.18	887.82	STEEL TAPE	USGS
6/26/1963	446.14	885.86	STEEL TAPE	USGS
7/1/1963	444.2	887.8	STEEL TAPE	USGS
7/3/1963	445.43	886.57	STEEL TAPE	USGS
7/8/1963	444.52	887.48	STEEL TAPE	USGS
7/15/1963	444.75	887.25	STEEL TAPE	USGS
7/22/1963	445	887	STEEL TAPE	USGS
7/29/1963	445.47	886.53	STEEL TAPE	USGS
8/5/1963	445.87	886.13	STEEL TAPE	USGS
8/6/1963	446.09	885.91	STEEL TAPE	USGS
8/12/1963	445.8	886.2	STEEL TAPE	USGS
8/13/1963	445.96	886.04	STEEL TAPE	USGS
8/19/1963	446.03	885.97	STEEL TAPE	USGS

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Tuesday, January 20, 2004

Page 16 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

9/9/1963	446.18	885.82	STEEL TAPE	USGS
9/24/1963	447.05	884.95	STEEL TAPE	USGS
9/30/1963	447.62	884.38	STEEL TAPE	USGS
10/7/1963	447.97	884.03	STEEL TAPE	USGS
10/14/1963	448.08	883.92	STEEL TAPE	USGS
10/21/1963	447.53	884.47	STEEL TAPE	USGS
11/14/1963	446.98	885.02	STEEL TAPE	USGS
11/19/1963	447.4	884.6	STEEL TAPE	USGS
12/4/1963	447.23	884.77	STEEL TAPE	USGS
12/9/1963	446.55	885.45	STEEL TAPE	USGS
12/16/1963	447.53	884.47	STEEL TAPE	USGS
2/11/1964	447.79	884.21	STEEL TAPE	USGS
3/11/1964	449.06	882.94	STEEL TAPE	USGS
4/7/1964	449	883		USGS
5/7/1964	452.06	879.94	STEEL TAPE	USGS
6/5/1964	453.5	878.5	STEEL TAPE	USGS
7/2/1964	454.96	877.04	STEEL TAPE	USGS
7/31/1964	455.35	876.65	STEEL TAPE	USGS
9/1/1964	455.65	876.35	STEEL TAPE	USGS
9/30/1964	456.49	875.51	STEEL TAPE	USGS
10/29/1964	456.62	875.38	STEEL TAPE	USGS
11/24/1964	456.49	875.51	STEEL TAPE	USGS
1/19/1965	454.75	877.25		USGS

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Tuesday, January 20, 2004

Page 17 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

2/22/1965	455.55	876.45	STEEL TAPE	USGS
3/22/1965	457	875	STEEL TAPE	USGS
4/23/1965	457.49	874.51	STEEL TAPE	USGS
5/20/1965	458.79	873.21	STEEL TAPE	USGS
6/21/1965	461.34	870.66	STEEL TAPE	USGS
7/21/1965	462.3	869.7	STEEL TAPE	USGS
8/20/1965	464.34	867.66	STEEL TAPE	USGS
9/21/1965	466.11	865.89	STEEL TAPE	USGS
11/20/1965	466.4	865.6		USGS
12/21/1965	455.25	876.75	STEEL TAPE	USGS
1/21/1966	456.76	875.24		USGS
3/22/1966	449	883	STEEL TAPE	USGS
4/21/1966	444.4	887.6		USGS
6/21/1966	419.6	912.4		USGS
8/17/1966	392.15	939.85	STEEL TAPE	USGS
9/21/1966	399.8	932.2		USGS
10/25/1966	410.8	921.2	STEEL TAPE	USGS
11/22/1966	410.93	921.07	STEEL TAPE	USGS
12/28/1966	410.72	921.28	STEEL TAPE	USGS
1/19/1967	412	920	STEEL TAPE	USGS
2/23/1967	412.6	919.4	STEEL TAPE	USGS
3/21/1967	415.17	916.83	STEEL TAPE	USGS
4/20/1967	404.7	927.3		USGS

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Tuesday, January 20, 2004

Page 18 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

5/22/1967	404.3	927.7	USGS
6/22/1967	406.7	925.3	USGS
7/24/1967	402.9	929.1	USGS
8/24/1967	398.6	933.4	USGS
9/25/1967	396.8	935.2	USGS
11/27/1967	402.9	929.1	USGS
12/26/1967	404.9	927.1	USGS
1/29/1968	403.4	928.6	USGS
2/26/1968	400.8	931.2	USGS
3/26/1968	397.1	934.9	USGS
4/24/1968	398.2	933.8	USGS
5/27/1968	398.5	933.5	USGS
6/28/1968	390.6	941.4	USGS
7/24/1968	382.3	949.7	USGS
8/27/1968	399.1	932.9	USGS
9/25/1968	384	948	USGS
10/24/1968	385.8	946.2	USGS
11/29/1968	388.2	943.8	USGS
12/23/1968	387.5	944.5	USGS
1/24/1969	396.2	935.8	USGS
1/29/1969	396.2	935.8	USGS
2/25/1969	400.2	931.8	USGS
3/25/1969	400	932	USGS

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Tuesday, January 20, 2004

Page 19 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

4/25/1969	389.1	942.9		USGS
5/26/1969	385.4	946.6		USGS
6/25/1969	381	951		USGS
7/25/1969	384.2	947.8		USGS
8/22/1969	379.2	952.8		USGS
12/24/1969	456.46	875.54	STEEL TAPE	USGS
12/26/1969	386.9	945.1		USGS
1/26/1970	391.9	940.1		USGS
2/26/1970	389.2	942.8		USGS
3/27/1970	391.2	940.8		USGS
5/28/1970	406.7	925.3		USGS
6/24/1970	408.9	923.1		USGS
7/27/1970	411.2	920.8		USGS
8/28/1970	404.8	927.2		USGS
9/25/1970	404.4	927.6		USGS
10/27/1970	405	927		USGS
11/24/1970	403.8	928.2		USGS
12/22/1970	402.4	929.6		USGS
1/26/1971	403.3	928.7		USGS
2/26/1971	299.5	1032.5		USGS
3/25/1971	407.8	924.2		USGS
4/26/1971	405.8	926.2		USGS
5/25/1971	406.7	925.3		USGS

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Tuesday, January 20, 2004

Page 20 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

1/19/1972	396	936			USGS
1/25/1973	393.6	938.4			USGS
1/10/1974	401	931			USGS
2/21/1975	401.3	930.7	ELECTRIC SOUNDER		USGS
2/2/1976	395.3	936.7	ELECTRIC SOUNDER		USGS
12/16/1976	383.7	948	ELECTRIC SOUNDER	CASCADING WATER	USGS
3/9/1978	387.9	944.1	ELECTRIC SOUNDER		USGS
1/15/1980	379	953	ELECTRIC SOUNDER		USGS
1/27/1981	382.9	949	ELECTRIC SOUNDER	CASCADING WATER	USGS
1/12/1982	375.7	956.3	ELECTRIC SOUNDER		USGS
12/1/1982	375.4	957	ELECTRIC SOUNDER	CASCADING WATER	ADWR
12/5/1983	391.2	941	ELECTRIC SOUNDER		ADWR
11/30/1984	401.6	930.4	ELECTRIC SOUNDER		ADWR
6/24/1985	409.1	922.9	ELECTRIC SOUNDER		ADWR
12/9/1985	396.2	935.8	ELECTRIC SOUNDER		ADWR
6/4/1986	406.6	925.4	ELECTRIC SOUNDER		ADWR
12/8/1986	385.6	946.4	ELECTRIC SOUNDER		ADWR
6/2/1987	389.8	942.2	ELECTRIC SOUNDER		ADWR
12/14/1987	389.5	942.5	ELECTRIC SOUNDER		ADWR
5/31/1988	399.4	932.6	ELECTRIC SOUNDER		ADWR
12/5/1988	395.1	936.9	ELECTRIC SOUNDER		ADWR
11/28/1989	410.6	921.4	ELECTRIC SOUNDER		ADWR
12/6/1990	406.8	925.2	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 21 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

11/20/1992	410.1	921.9	ELECTRIC SOUNDER	ADWR
11/24/1994	413.1	918.9	ELECTRIC SOUNDER	ADWR
11/10/1997	417.3	915	ELECTRIC SOUNDER	ADWR
12/1/1998	423.2	909	ELECTRIC SOUNDER	ADWR
11/4/1999	414.7	917	ELECTRIC SOUNDER	ADWR
11/6/2000	407.8	924	ELECTRIC SOUNDER	ADWR
11/22/2002	407	925	ELECTRIC SOUNDER	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 22AAA	333541112263801	612995	33° 35' 42.2"	112° 26' 39.9"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
3/1/1939	197	1071	REPORTED		
8/15/1995	495.8	772	ELECTRIC SOUNDER	PUMPING	ADWR
12/3/1997	458.8	809	ELECTRIC SOUNDER		ADWR
11/25/2002	431.79	836.21	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 22 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 22ABB	333543112270701	604504	33° 35' 43"	112° 27' 7"	1100	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
9/10/1962	497.7	787	ELECTRIC SOUNDER	PUMPING	USGS
1/19/1972	480	805	ELECTRIC SOUNDER	UNDETERMINED	USBR
12/1/1982	501.3	784	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	492.5	793	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 23AAA	333541112253601	612987	33° 35' 42.4"	112° 25' 38.09"	1032	PUBLIC SUPPLY	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
6/7/1954	326	905	REPORTED		
1/19/1972	475	756	ELECTRIC SOUNDER		USBR
11/26/1997				OBSTRUCTION	ADWR
11/25/2002	483.29	747.71	ELECTRIC SOUNDER	PUMPING	ADWR
12/2/2002	412.2	818.8	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 23BAA	333541112260601	612996	33° 35' 42.29"	112° 28' 8.5"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/1/1982	485	762	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/26/1997	448.8	798	ELECTRIC SOUNDER		ADWR
11/26/2002	547.2	699.8	ELECTRIC SOUNDER	PUMPING	ADWR
12/3/2002	450.79	796.21	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 24ABB	333541112250101	500768	33° 35' 41"	112° 25' 1"	900	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
12/2/1982	465.3	750	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	443.7	771	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 25BAA	333450112250501	612998	33° 34' 50.29"	112° 25' 6.3"	1002	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measuremnt Method	Remark	Measurement Source
11/29/1982	479.4	719	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	470.2	728	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/21/1991	452.2	746	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/26/1997	447.8	750	ELECTRIC SOUNDER		ADWR
12/2/2002	417.79	780.21	ELECTRIC SOUNDER		ADWR

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Tuesday, January 20, 2004

Page 24 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 26BAA	333450112250502	No Match	33° 34' 50"	112° 25' 5"	221	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	454	744	ELECTRIC SOUNDER	UNDETERMINED	USBR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 26BBB	333448112253001	606609	33° 34' 50.29"	112° 25' 35"	2567	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
11/1/1964	393	817	REPORTED		
11/22/2002	373.1	836.9	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 26CBB	333422112253301	606607	33° 34' 22"	112° 25' 33"	1927	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
5/1/1974	427	773	STEEL TAPE		USGS

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Tuesday, January 20, 2004

Page 25 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 25DBB	333424112250001	606608	33° 34' 24"	112° 25' 0"	1200	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/13/1949	240.95	946	STEEL TAPE	UNDETERMINED	USGS
3/21/1950	244.27	943	STEEL TAPE	UNDETERMINED	USGS
12/21/1950	265.94	921	STEEL TAPE	UNDETERMINED	USGS
2/14/1951	270.57	916	STEEL TAPE	UNDETERMINED	USGS
11/15/1951	264.53	922	STEEL TAPE	UNDETERMINED	USGS
1/29/1952	261.49	926	STEEL TAPE	UNDETERMINED	USGS
11/20/1952	280.09	907	STEEL TAPE	UNDETERMINED	USGS
2/25/1953	274.65	912	STEEL TAPE	UNDETERMINED	USGS
11/17/1953	296.14	891	STEEL TAPE	UNDETERMINED	USGS
2/6/1956	319.27	868	STEEL TAPE	UNDETERMINED	USGS
1/25/1957	329.3	858	STEEL TAPE	UNDETERMINED	USGS
1/21/1958	346.7	840	STEEL TAPE	UNDETERMINED	USGS
12/30/1960	380.7	806	STEEL TAPE	UNDETERMINED	USGS
1/29/1962	421.81	765	STEEL TAPE	UNDETERMINED	USGS
1/24/1963	407.8	779	STEEL TAPE	UNDETERMINED	USGS
2/6/1964	405.35	782	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/21/1965	416.5	771	STEEL TAPE	UNDETERMINED	USGS
1/29/1966	415.35	772	STEEL TAPE	UNDETERMINED	USGS
1/30/1967	424.5	763	ELECTRIC SOUNDER	UNDETERMINED	USGS
1/19/1972	442	745	UNDETERMINED	UNDETERMINED	USBR

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Tuesday, January 20, 2004

Page 26 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

1/12/1977	488.2	699	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/2/1982	489.6	697	ELECTRIC SOUNDER	UNDETERMINED	ADWR
6/2/1987	361.3	826	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 28BAA	333449112260601	612999	33° 34' 50.09"	112° 26' 8.19"	1000	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	467	759	ELECTRIC SOUNDER	UNDETERMINED	USBR
1/12/1977	487.3	739	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/1/1982	485.3	741	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	467.6	758	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/14/1990	458.3	768	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1991	454.2	772	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1997	438.7	787	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/2002	413.29	812.71	ELECTRIC SOUNDER	UNDETERMINED	ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 28CDD	333403112261301	624892	33° 34' 3.5"	112° 26' 13.3"	1308	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/23/1990	440.5	772	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1991	434.9	777	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/4/2003	412.79	799.21	ELECTRIC SOUNDER	UNDETERMINED	ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 27AAA	333449112263801	613001	33° 34' 50"	112° 26' 40"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
2/1/1947	243	1006	REPORTED		
1/19/1972	479	770	ELECTRIC SOUNDER		USBR
11/26/1997	456.4	793	ELECTRIC SOUNDER		ADWR
11/26/2002	434.2	814.8	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 27ABB	333448112270101	613000	33° 34' 50"	112° 27' 8"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	482	787	ELECTRIC SOUNDER	UNDETERMINED	USBR
1/12/1977	501.4	768	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/1/1982	505.4	764	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	489.6	779	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/26/1997	467.3	802	ELECTRIC SOUNDER		ADWR
11/26/2002	444.89	824.11	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 34BAA	333357112270901	606792	33° 33' 57.29"	112° 27' 11.3"	1320	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	464	777	ELECTRIC SOUNDER	UNDETERMINED	USBR
12/1/1982	491.3	750	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/30/1984	481.7	759	ELECTRIC SOUNDER	UNDETERMINED	ADWR
2/23/1990	467.8	773	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1991	460.7	780	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/22/2002	422.2	818.8	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 35AAA	333357112253501	613002	33° 33' 57"	112° 25' 35"	1050	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	449	742	ELECTRIC SOUNDER	UNDETERMINED	USBR
2/23/1990	460	731	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1991	455.4	736	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/1/1997	440.6	750	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 35BBB1	333357112263601	613003	33° 33' 57.59"	112° 26' 39.29"	1000	UNUSED	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	452	768	ELECTRIC SOUNDER	UNDETERMINED	USBR
2/23/1990	455.4	765	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1991	451.5	769	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1997	445	775	ELECTRIC SOUNDER		ADWR
11/22/2002	414.1	805.9	ELECTRIC SOUNDER		ADWR
11/26/2002	414.2	805.8	ELECTRIC SOUNDER		ADWR

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 35CBB	333329112263301	624691	33° 33' 31.2"	112° 26' 39"	1367	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
1/19/1972	439	764	ELECTRIC SOUNDER	UNDETERMINED	USBR
1/12/1977	463.4	740	ELECTRIC SOUNDER	UNDETERMINED	USGS
12/1/1982	471.7	731	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/29/1984	403.3	800	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/25/1991	425.3	778	ELECTRIC SOUNDER	UNDETERMINED	ADWR
11/10/1997	418.9	784	ELECTRIC SOUNDER		ADWR

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Tuesday, January 20, 2004

Page 30 of 31

Groundwater Site Inventory Water Level Report

AZ Dept of Water Resources

Search Criteria: Where Cadastral = B 03 02 between sections 01 and 36

Local ID	Site ID	ADWR Reg. No.	Latitude	Longitude	Well Depth	Water Use	Sub-Basin
B-03-02 36ABB	333357112250201	613004	33° 33' 58"	112° 25' 5.4"	1000	IRRIGATION	WEST SALT RIVER

Meas. Date	WL Depth	WL Elevation	Measurement Method	Remark	Measurement Source
12/2/1982	486	689	ELECTRIC SOUNDER	UNDETERMINED	ADWR
12/9/1997	442.5	733	ELECTRIC SOUNDER		ADWR
11/22/2002	403.39	771.61	ELECTRIC SOUNDER		ADWR
11/26/2002	476.5	698.5	ELECTRIC SOUNDER	PUMPING	ADWR

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Tuesday, January 20, 2004

Appendix SU-C

Glossary of Geologic Terms

GLOSSARY OF GEOLOGIC TERMS

Alluvium - A deposit of sediment left by a stream on the stream's channel or floodplain.¹

Alluvial fan - A triangular deposit of sediment left by a stream that has lost velocity upon entering a broad, relatively flat valley.¹

Anatomosing - Said of a channel pattern of a braided stream. A stream that divides into or follows an intercalating or tangled network of several small branching and reuniting shallow channels separated from each other by branch islands or channel bars, resembling in plan the strands of a complex braid.³

Andesite - The dark, *aphanitic*, *extrusive* rock that has a silica content of about 60% and is the second most abundant volcanic rock.¹

Aphanitic - Said of the texture of an *igneous rock* when the crystalline component is not distinguishable with the unaided eye.³

Argillic - Pertaining to clay or clay minerals.³

Arkose - A feldspar-rich sandstone, typically coarse-grained and pink or reddish, that is composed of angular to sub-angular grains that may be poorly or moderately well sorted, is usually derived from the rapid disintegration of granite or granitic rocks, and often closely resembles granite.³

Arroyo - A small, deep, usually dry channel eroded by a short-lived or intermittent desert stream.¹

Basalt - The dark, dense, *aphanitic*, *extrusive rock* that has a silica content of 40% to 50% and makes up most of the ocean floor. Basalt is the most abundant volcanic rock in the Earth's crust.¹

Basement Rock - The undifferentiated complex of rocks that underlies the rocks of interest in an area.³

Basin - A round or oval depression in the Earth's surface, containing the youngest section of rock in its lowest, central part.¹

Basin and Range - Said of topography, landscape, or physiographic province characterized by a series of tilted fault blocks forming longitudinal, asymmetrical ridges or mountains and broad, intervening basins; specifically the Basin and Range province in the Southwestern U.S.³

Clastic - Being or pertaining to a *sedimentary rock* composed primarily from fragments of preexisting rocks or fossils.¹

Conglomerate - A *clastic rock* composed of particles more than 2 millimeters in diameter and marked by the roundness of its component grains and rock fragments.¹

Cretaceous - The final period of the Mesozoic Era thought to have covered the span of time between 135 and 65 million years ago.³

Crystalline - Said of rocks consisting wholly of crystals or fragments of crystals.³

Debris Flow - 1. The rapid, downward mass movement of particles coarser than sand, often including boulders one meter or more in diameter, at a rate ranging from 2 to 40 kilometers per hour. Debris flows occur along fairly steep slopes. 2. The material that descends in such a flow.¹

Deflation - The process by which wind erodes bedrock by picking up and transporting loose rock particles.¹

Desert Pavement - A closely packed layer of rock fragments concentrated in a layer along the Earth's surface by the *deflation* of finer particles.¹

Desert Varnish - A thin, shiny red-brown or black layer, principally composed of iron manganese oxides, that coats the surfaces of many exposed desert rocks.¹

Detachment fault - A low angle thrust fault forming at the base of a thrust nappe.³

Dike - A discordant *pluton* that is substantially wider than it is thick. Dikes are often steeply inclined or nearly vertical. See also *sill*.¹

Diorite - Any of a group of dark, *phaneritic*, *intrusive* rocks that are the *plutonic* equivalents of *andesite*.¹

Distributary - One of a network of small streams carrying water and sediment from a trunk stream into an ocean.¹

Ephemeral Stream - A stream or reach of a stream that flows briefly only in direct response to precipitation in the immediate locality and whose channel is at all times above the water table.³

Extrusive Rock - An *igneous* rock formed from *lava* that has flowed out onto the Earth's surface, characterized by rapid solidification and grains that are so small as to be barely visible to the naked eye.¹

Fault - A *fracture* dividing a rock into two sections that have visibly moved relative to each other.¹

Felsic – A mnemonic adjective derived from *fe* ldspar + *l* enad (feldspathoid) + *si* lica + *c*, and applied to an *igneous rock* having abundant light colored minerals.³

Fine-Grained – (a) Said of crystalline or glassy rock, and of its texture, in which the individual minerals are relatively small; specifically said of an igneous rock whose particles have an average diameter of less than 0.04 in. Syn: *aphanitic*. (b) Said of a sediment or sedimentary rock, and of its texture, in which the individual constituents are too small to distinguish with the unaided eye.³

Foliation – A general term for planar arrangement of textural or structural features in any type of rock; esp. the planar structure that results from flattening of the constituent grains of a metamorphic rock. Adj: *foliate, foliated*.³

Fracture - (*n*) A crack or break in a rock. (*v*) To break in random places instead of *cleaving*. Said of minerals.¹

Gneiss - A coarse-grained, *foliated metamorphic rock* marked by bands of light-colored minerals such as quartz and feldspar that alternate with bands of dark-colored minerals. This alternation develops through *metamorphic differentiation*.¹

Granite - A pink-colored, *felsic, plutonic* rock that contains potassium and usually sodium feldspars, and has a quartz content of about 10%. Granite is commonly found on continents but virtually absent from the ocean basins.¹

Granodiorite – A group of coarse-grained plutonic rocks intermediate in composition between quartz diorite and quartz monzonite containing quartz, plagioclase, and potassium feldspar, with biotite, hornblende, or, more rarely pyroxene.³

Holocene - The second epoch of the Quaternary Period, beginning approximately 10,000 years ago and continuing to the present time.¹

Igneous Rock - A rock made from molten (melted) or partly molten material that has cooled and solidified.¹

Interbed – A bed, typically thin, of one kind of rock material occurring between or alternating with beds of another kind.³

Interfluvium – The area between rivers.³

Interlayer – A layer placed between others of a different nature.³

Intrusive Rock - An *igneous rock* formed by the entrance of *magma* into preexisting rock.¹

Joint - A *fracture* dividing a rock into two sections that have not visibly moved relative to each other.¹

Lacustrine - Pertaining to, produced by, or formed in a lake or lakes.³

Latite - A porphyritic extrusive igneous rock having phenocrysts of plagioclase and potassium feldspar in nearly equal amounts, little or no quartz, and a finely crystalline to glassy groundmass.³

Magma - Molten (melted) rock that forms naturally within the Earth. Magma may be either a liquid or a fluid mixture of liquid, crystals, and dissolved gases.¹

Massive - Said of a stratified igneous rock that occurs in very thick homogeneous beds.³

Matrix-Supported - A sedimentary texture in which the large particles are not in contact, but separated by finer particles.³

Medium-Grained - (a) Said of an igneous rock, and its texture, in which the individual crystals have an average diameter in the range of 0.04-.02 in. (b) Said of a sediment or sedimentary rock, and of its texture, in which the individual particles have an average diameter in the range of 1/16 to 2mm.³

Metamorphic Differentiation - The process by which minerals from a chemically uniform rock separate from each other during metamorphism and form individual layers within a new *metamorphic rock*.¹

Metamorphic Rock - A rock that has undergone chemical or structural changes. Heat, pressure, or a chemical reaction may cause such changes.¹

Metasedimentary Rock - A sediment or sedimentary rock that shows evidence of having been subjected to metamorphism.³

Metavolcanic Rock - An informal term for volcanic rock that shows evidence of having been subjected to metamorphism.³

Miocene - An epoch of the upper Tertiary period, after the Oligocene and before the Pliocene.³

Mudflow - A general term for a mass movement landform and a process characterized by a flowing mass of predominately fine-grained earth material possessing a high degree of fluidity during the movement.³

Mylonitic Fabric - A structural characteristic of mylonites, produced by intense microbrecciation and shearing which gives the appearance of a flow structure.

Pegmatite - A coarse-grained *igneous rock* with exceptionally large crystals, formed from a *magma* that contains a high proportion of water.¹

Phaneritic - Said of the texture of an igneous rock in which the individual components are distinguishable with the unaided eye.³

Phyllite - A *foliated metamorphic* rock that develops from *slate* and is marked by a silky sheen and medium grain size.¹

Physiographic Province - A region in which all parts are similar in geologic structure and climate and which has consequently had a unified geomorphic history; a region whose pattern of relief features or landforms differs significantly from that of adjacent regions.³

Piedmont - Lying or formed at the base of a mountain or mountain range.³

Pleistocene - The first epoch of the Quaternary Period, beginning 2 to 3 million years ago and ending approximately 10,000 years ago. See also *Holocene* Epoch.¹

Pluton - An *intrusive* rock, as distinguished from the preexisting country rock that surrounds it.¹

Porphyritic - Said of the texture of an igneous rock in which larger crystals are set in a finer grained groundmass, which may be crystalline or glassy or both.³

Proterozoic - The more recent of two great divisions of the Pre-Cambrian.³

Quartzite - An extremely durable, non-foliated *metamorphic* rock derived from pure *sandstone* and consisting primarily of quartz.¹

Quaternary - The second period of the Cenozoic Era, following the Tertiary.³

Rhyolite - Any of a group of *felsic igneous rocks* that are the *extrusive* equivalents of *granite*.¹

Sandstone - A *clastic rock* composed of particles that range in diameter from 1/16 millimeter to 2 millimeters in diameter. Sandstones make up about 25% of all sedimentary rocks.¹

Schist - A coarse-grained, strongly *foliated metamorphic* rock that develops from *phyllite* and splits easily into flat, parallel slabs.¹

Sedimentary Rock - A physical characteristic of detrital *sediment* that reflects the conditions under which the sediment was deposited.¹

Sill - A concordant *pluton* that is substantially wider than it is thick. Sills form within a few kilometers of the Earth's surface. See also *dike*.¹

Talus - A pile of rock fragments lying at the bottom of the cliff or steep slope from which they have broken off.¹

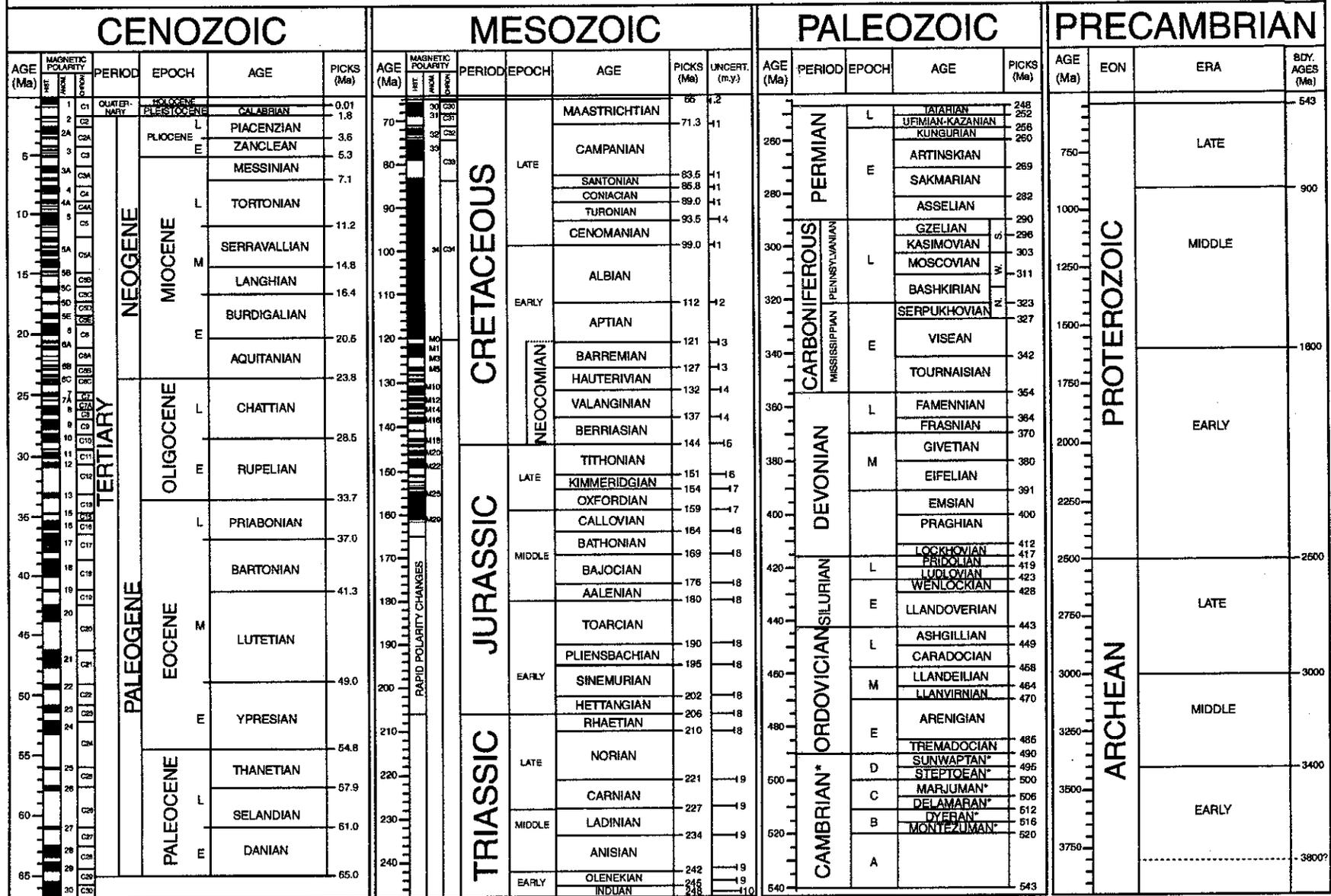
Tertiary - A period in the geologic time scale that spans from 65 to 1.6 million years ago.²

¹<http://college.hmco.com/geology/resources/geologylink/glossary.html>

²<http://interactive2.usgs.gov/glossary/index.asp>

³Bates and Jackson, 1987, Glossary of Geology, American Geologic Institute, Third Edition, 7

1999 GEOLOGIC TIME SCALE



GEOLOGICAL SOCIETY OF AMERICA

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*International ages have not been established. These are regional (Laurentian) only. Boundary Picks were based on dating techniques and fossil records as of 1999. Paleomagnetic attributions have errors. Please ignore the paleomagnetic scale.

Sources for nomenclature and ages: Primarily from Gradstein, F., and Ogg, J., 1996, *Episodes*, v. 19, nos. 1 & 2; Gradstein, F., et al., 1995, *SEPM Special Pub. 54*, p. 95–128; Berggren, W. A., et al., 1995, *SEPM Special Pub. 54*, p. 129–212; Cambrian and basal Ordovician ages adapted from Landing, E., 1998, *Canadian Journal of Earth Sciences*, v. 35, p. 329–338; and Davidek, K., et al., 1998, *Geological Magazine*, v. 135, p. 305–309. Cambrian age names from Palmer, A. R., 1998, *Canadian Journal of Earth Sciences*, v. 35, p. 323–328.