

# **Long Term Trend Monitoring Program For The South Fork Trinity River Watershed**



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# South Fork Trinity River Monitoring Plan

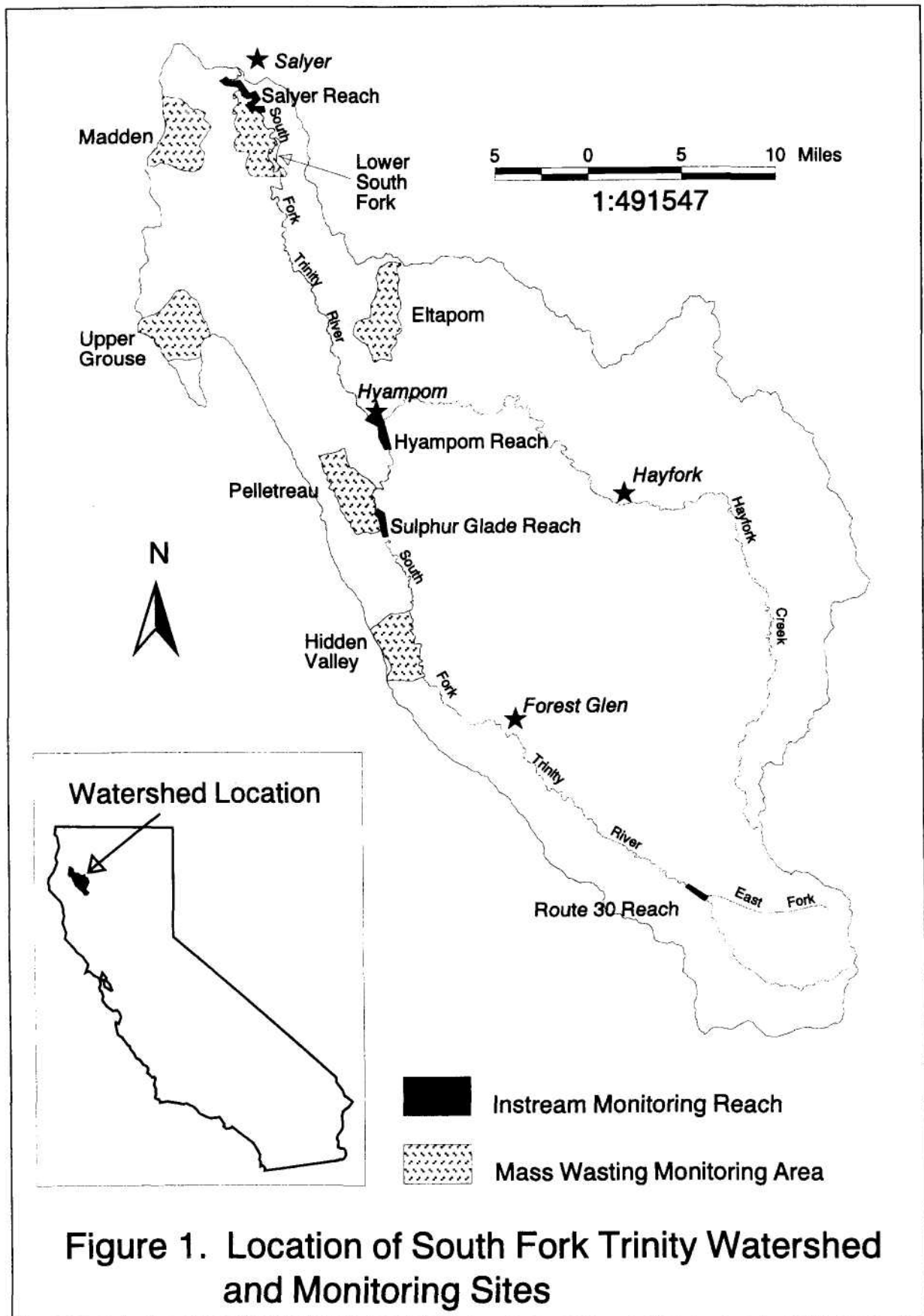
## I. Purpose, Objectives and Goals

The South Fork Trinity River is the largest undammed wild and scenic river in California (Figure 1). It once supported a thriving anadromous fishery that provided recreational opportunities and livelihood to local residents and surrounding communities. During the 1964 flood, widespread erosion and landsliding resulted in extensive sedimentation of fish habitat within the mainstem and its tributaries. Since then, anadromous fish stocks have plummeted from historic levels.

There is keen interest among local residents as well as land management and regulatory agencies to understand the current conditions and trends within the watershed as they pertain to channel conditions and fish habitat (Pacific Watershed Associates, 1994; Berol, 1995; Lower South Fork Trinity River Watershed Analysis, 1998). Some studies have been conducted to assess the current condition of the South Fork Trinity River and key tributaries, but actual instream conditions and trends directly affecting fish habitat and recovery of anadromous stocks are still not well documented or understood.

The combination of Trinity River Restoration Grant funding and the application of the Total Maximum Daily Load (TMDL) process to the South Fork Trinity River provides a unique opportunity for collaboration among interested parties to initiate a long-term trend monitoring program in this watershed. Its purpose would be to evaluate and track the condition of the South Fork Trinity River watershed on the hillslopes and in the mainstem. The monitoring will address the questions and concerns expressed by local residents regarding recovery in the mainstem, and also will meet the goals of the South Fork Trinity River TMDL. This watershed is well suited for such a project because of the baseline data that have been acquired in previous studies.

The purpose of this trend monitoring plan is to track changes in sediment loading and storage in the South Fork Trinity River, as well as trends in sediment input from hillslopes over a long period of time. The long-term goal is to measure the extent to which overall watershed conditions have improved, regardless of changes in anadromous fish populations. The monitoring will focus on conditions that would indicate long-term recovery from the impacts associated with the 1964 flood and land management disturbances. The monitoring plan is designed to track changes in upslope management conditions as well as physical instream conditions. Although a rigorous cause-and-effect relationship cannot be established between hillslope trends and instream sediment loads, the combined monitoring is expected to provide crucial insights about overall watershed condition. For example, a storm event may trigger few landslides, but mainstem sediment storage in the monitoring reaches may still increase. This would indicate that hillslope conditions are on a general recovery trend while the mainstem is lagging behind and still routing sediment. Without a combined hillslope and instream monitoring effort, the overall trends within the watershed would remain unknown.



**Figure 1. Location of South Fork Trinity Watershed and Monitoring Sites**

The remainder of this document presents the rationale, protocol, methodologies, analysis tools and suggestions for in-channel sediment trend monitoring and hillslope condition trend monitoring. The document closes with a brief discussion of other monitoring efforts that might prove useful for assessing anadromous fisheries habitat over time.

## **II. Background**

The South Fork Trinity River drains approximately 970 square miles of rugged mountains and deeply incised stream valleys in northwestern California. The watershed is dominated by coniferous forest with some grassland near Hayfork and Hyampom. The western part of the watershed is underlain by more erodible and unstable South Fork Mountain schist, Galice metasediments and Franciscan terrane, while the eastern part is underlain by more competent Rattlesnake Creek and Hayfork terranes.

The region was settled in the late 19th century and the local economy has been dominated historically by logging. By 1977, 52 percent of the watershed had been logged and 3,400 miles of road had been built (Pacific Watershed Associates 1994).

In the middle 20th century, anadromous fish were abundant, particularly winter and summer steelhead, spring and fall Chinook salmon, and coho salmon. The flood of December 1964 had a discharge of 95,400 cfs at Salyer (USGS Gage No. 11529000). This rain-on-snow event caused extensive and predominantly natural landsliding, particularly in the weaker west-side geologic terranes. Management-related landslides were locally significant, but overall delivered only about one-third as much sediment as natural landslides (Raines, 1990). The resulting sediment production caused widespread channel aggradation, decreased channel complexity, and decreased pool depth. Since 1964, a substantial decline in fish populations has been observed (Borok and Jong, 1997).

Historic data regarding instream conditions within the South Fork Trinity River are insufficient to illustrate changes in watershed condition. Evidence that the South Fork Trinity River is recovering from the 1964 event is largely anecdotal. Fish populations have not returned to historic levels, and the condition of fish habitat is unclear.

Some historic cross sections exist, primarily at three mainstem gaging stations established by the USGS. Two of the gages showed little aggradation in response to the 1964 flood, probably because they are located in confined transport reaches. The gage near Salyer showed about 20 feet of aggradation after the 1964 flood, but the stream has since downcut to pre-flood levels. Whether these changes represent overall watershed response or just local hydraulics is unclear. A few other cross sections were established and measured, primarily in headwater tributaries to monitor effects of the 1987 fires. Thirty-four stream reaches were surveyed by Shasta-Trinity National Forest personnel in 1989, but these surveys do not have the longevity to reveal trends.

Several hillslope sediment source investigations have been completed in the South Fork Trinity watershed by the California Department of Water Resources and the U.S. Forest

Service (CDWR 1979, CDWR 1992, SRNF 1998). Earlier studies were generally descriptive in terms of relative erodibility and susceptibility to landslide processes throughout the watershed. However, the information has not been suitable for establishing trends. Later studies have been more quantitative in terms of estimating volumes of sediment delivery due to both mass wasting and surface erosion associated with managed and unmanaged areas. The latest and most comprehensive study of the watershed was completed in 1998 (Raines, 1999). This study identified landslides as the major source of sediment, followed by streambank erosion, road surface erosion, and hillslope surface erosion. The sediment source investigation revealed that hillslope sediment inputs between 1944 and 1998 had declined dramatically, indicating that hillslope conditions are generally recovering. However, it will be important to observe hillslope trends into the future to generate an overall picture of watershed health.

A sediment storage analysis performed by Six Rivers National Forest in 1997 estimated total sediment storage for the South Fork Trinity watershed to be 21,000,000 tons or 21,600 tons per square mile (Cook and Llanos, 1999). This study identified tributaries with high sediment storage, but did not address changes in sediment storage over time. However, it did describe proportions of sediment stored in active, semi-active, and inactive deposits, and these proportions may reflect the relative mobility of stored sediment. Despite this and other investigations, very little data exist on long-term sediment storage trends.

Fish habitat inventories have been performed on the mainstem and many tributaries of the South Fork. These data include information on pool depth and frequency, as well as temperature. A study by Six Rivers National Forest (1990) found temperature to be limiting in the lower section of the mainstem. Gilroy et al. (1992) found that fine sediment levels may be limiting for fish, and it is thought that pools are too shallow now for temperature stratification (Pacific Watershed Associates, 1994).

We hypothesize that the South Fork Trinity River is continuing to recover from the effects of the 1964 flood and that this recovery is demonstrated by:

- downcutting of the mainstem channel,
- increasing pool depths,
- increasing proportion of channel occupied by pools,
- decreasing proportion of fine sediment on the channel bed, and
- decreasing incidence of landslide enlargement and initiation of new landslides as compared to historic levels.



### III. Instream Sediment Monitoring

#### A. Reach Selection Criteria

The main criterion we used to select stream reaches for monitoring was sensitivity to changes in sediment input and storage. The South Fork Trinity River has many miles of steep, confined bedrock gorge. We think that annual flows through these sections are sufficient to transport large volumes of sediment and leave the channel unchanged (i.e., transport capacity exceeds sediment supply). For this reason, we did not re-measure cross sections at USGS gauging stations, except the one near Salyer that showed changes from the 1964 flood. Because we wanted the response reaches to be representative of the watershed, reaches were selected away from localized sediment sources as much as possible. However, this was not completely possible, particularly in the lower South Fork where large landslides are very common.

Four reaches of the South Fork Trinity River are lower gradient, more alluvial, and considered most suitable for instream sediment trend monitoring (Figure 1).

**Reach 1 at Route 30** (river mile 72.75 to 73.75) extends approximately one mile downstream from the Forest Service bridge (Figures 2a and 2b). It is somewhat less sensitive than the other reaches and represents less watershed area. This reach responds to effects in the headwaters and could indicate amounts of sediment being routed to the lower watershed. Because it is closer to the headwaters, it is more sensitive to local events like the 1987 fires and should reflect changes in land use activity more quickly than reaches lower in the watershed.

The **Route 30 Reach** is confined (average bankfull width is 80 feet), but it has well-developed alternate bar morphology. Overall channel slope is 0.6 percent. Stream terraces are not a dominant feature within this reach. Bankfull width is generally from valley wall to valley wall.

**Reach 2 at Sulphur Glade** (river mile 36.5 to 38.5) extends from below French Ranch downstream to Hitchcock Creek and has the lowest gradient and highest storage of any reach above Hyampom Valley (Figures 3a and 3b). The sediment storage analysis indicated that this reach had relatively high storage for the South Fork Trinity River (Cook & Llanos, 1999). Because of its low gradient, it is sensitive to changes in sediment supply. This reach has similar gradient, size and form to the **Salyer Reach** and may provide validation for observed trends within the mainstem channel. Also, monitoring this reach allows us to track sediment movement through the watershed and to isolate the condition of the upper watershed.

This reach is upstream of most large sediment inputs, based on the 1998 Sediment Source Investigation. The majority of landslides and high sediment-producing tributaries (including Pelletreau, Cold Springs and Hitchcock Creeks) are downstream. The **Sulphur Glade Reach** is somewhat confined but does contain some large stream terraces

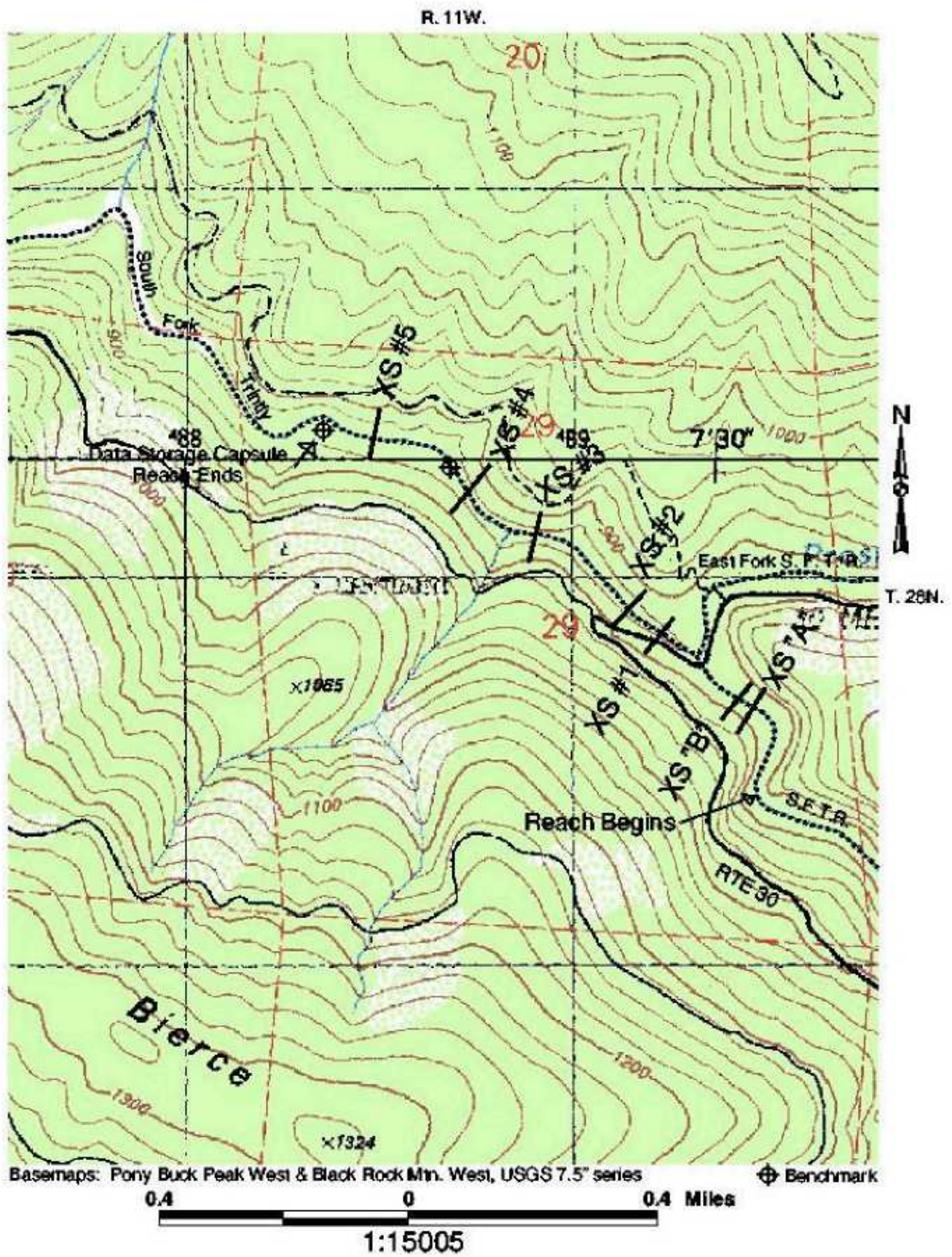


Figure 2a. Route 30 Reach



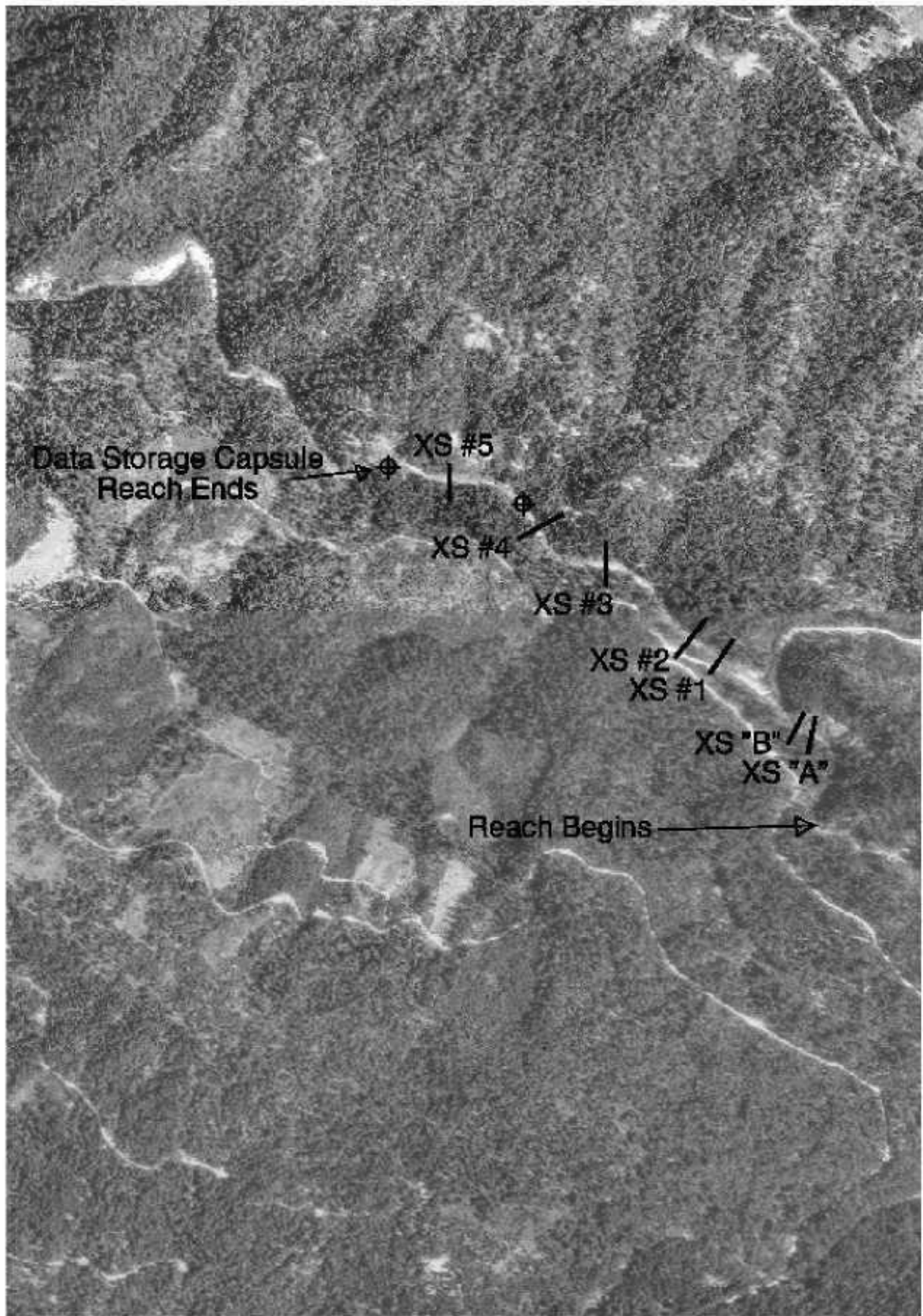


Figure 2b. Aerial View of Route 30 Reach ◆ Benchmark



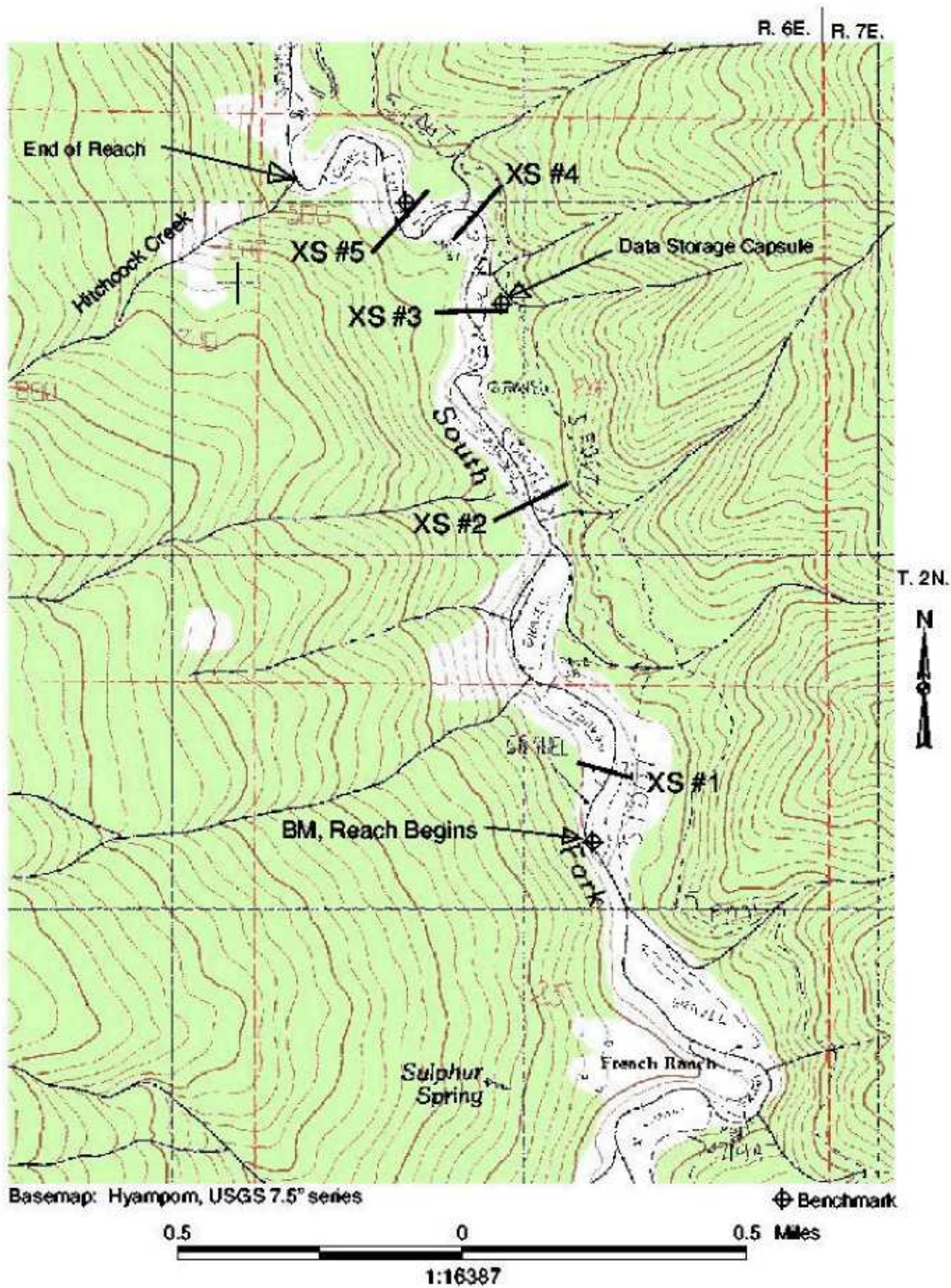


Figure 3a. Sulphur Glade Reach



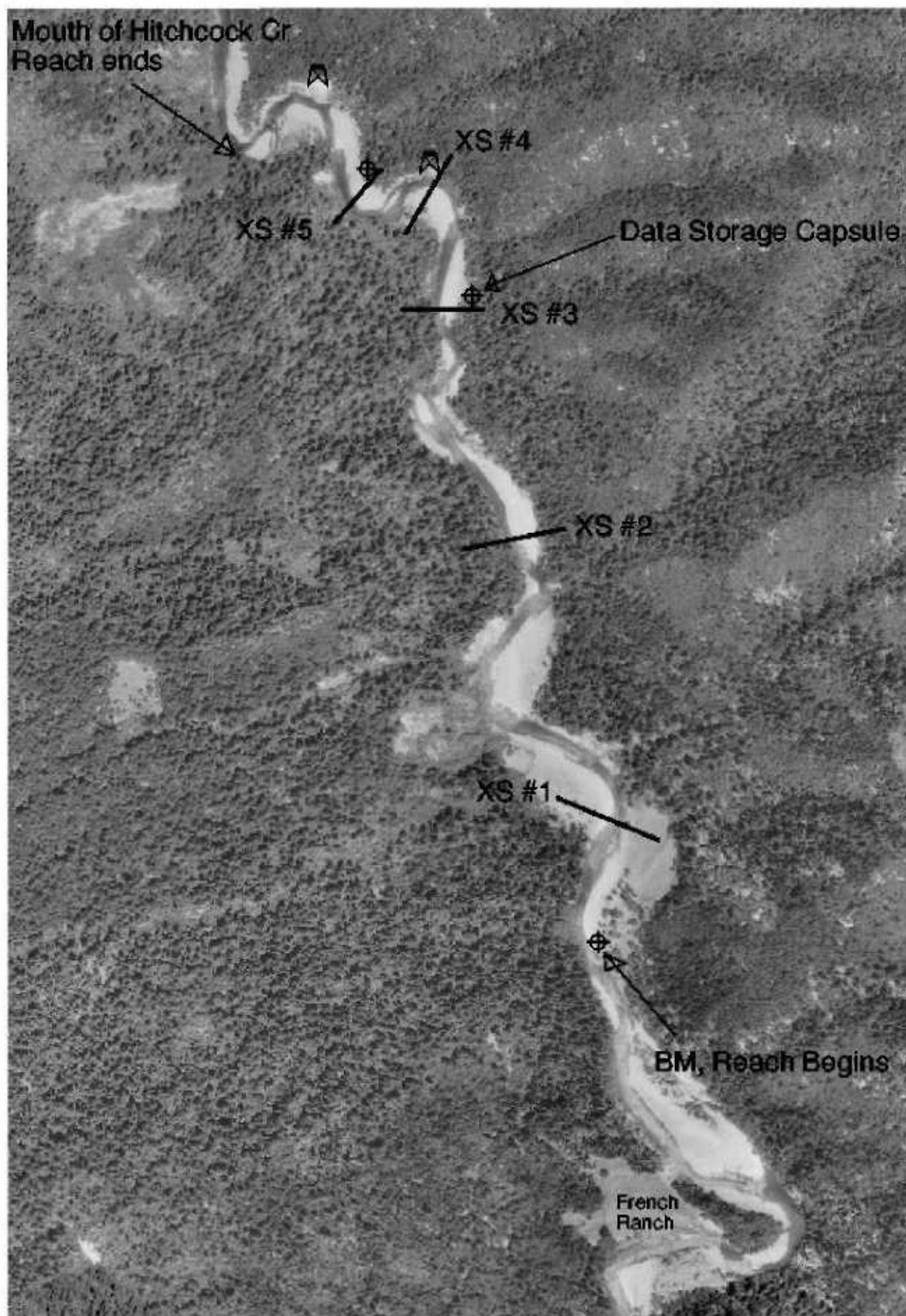


Figure 3b. Aerial View of Sulphur Glade Reach

⊕ Benchmark  
⚓ Photo Point



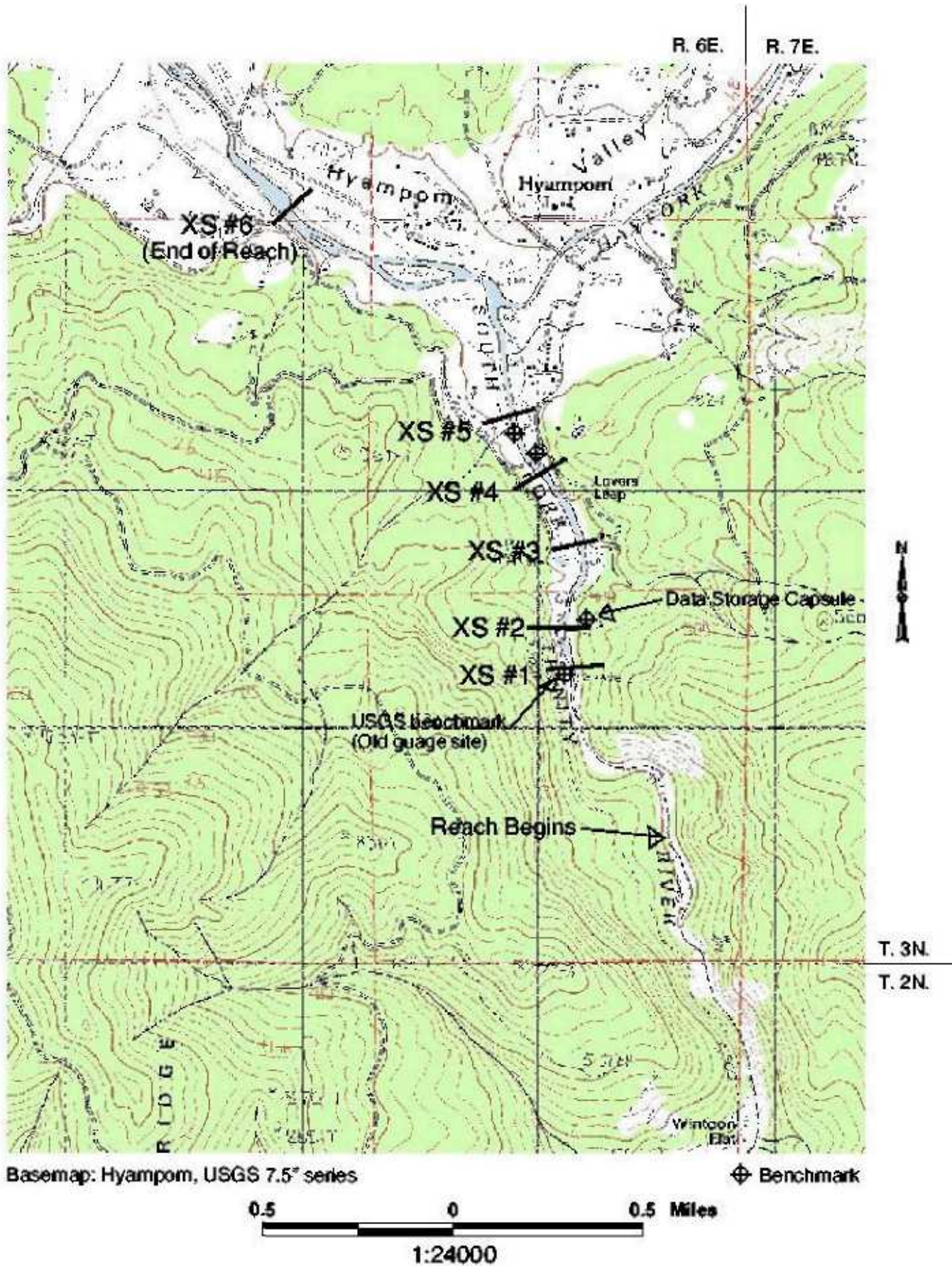
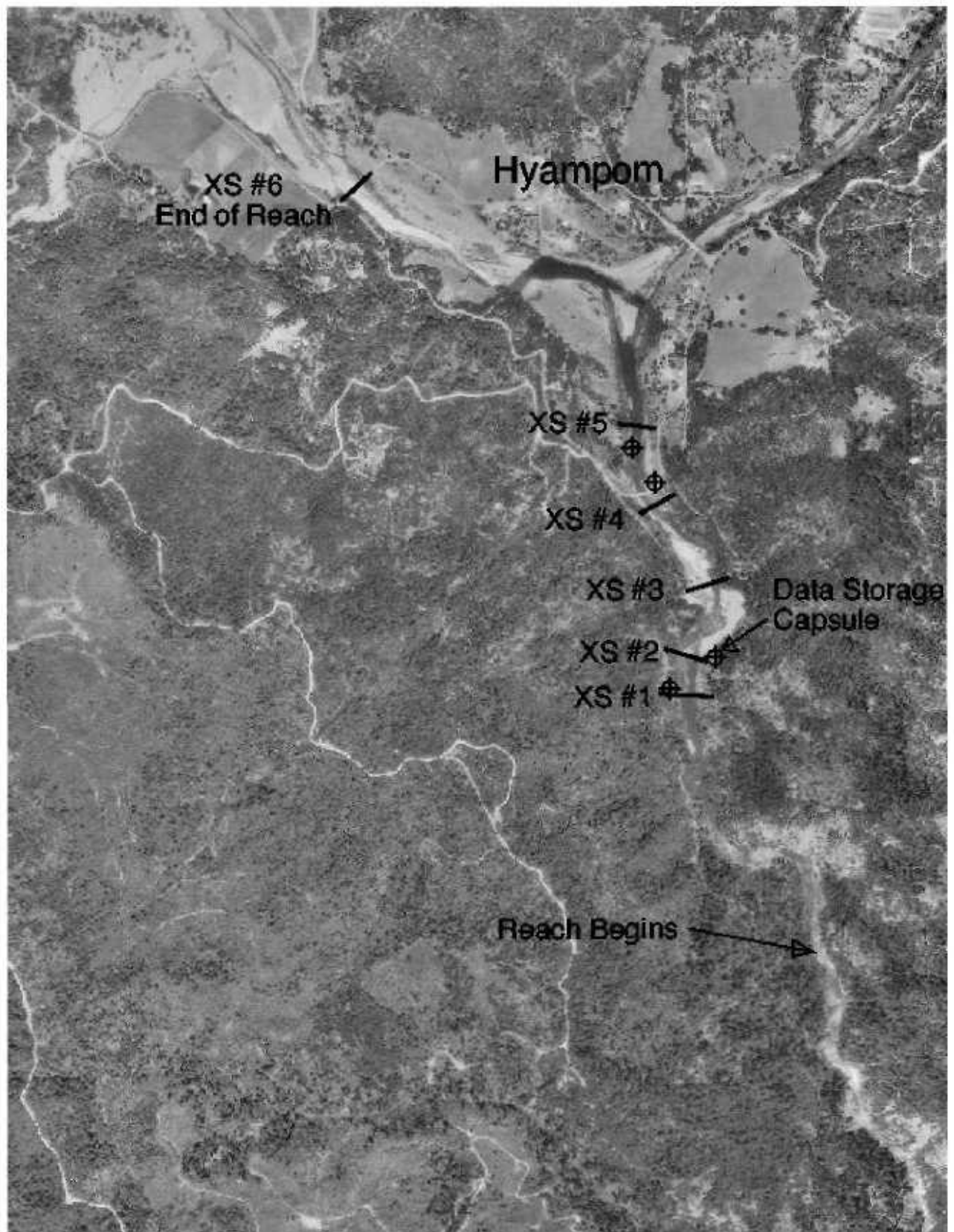


Figure 4a. Hyampom Reach





⊕ Benchmark

Figure 4b. Aerial View of Hyampom Reach



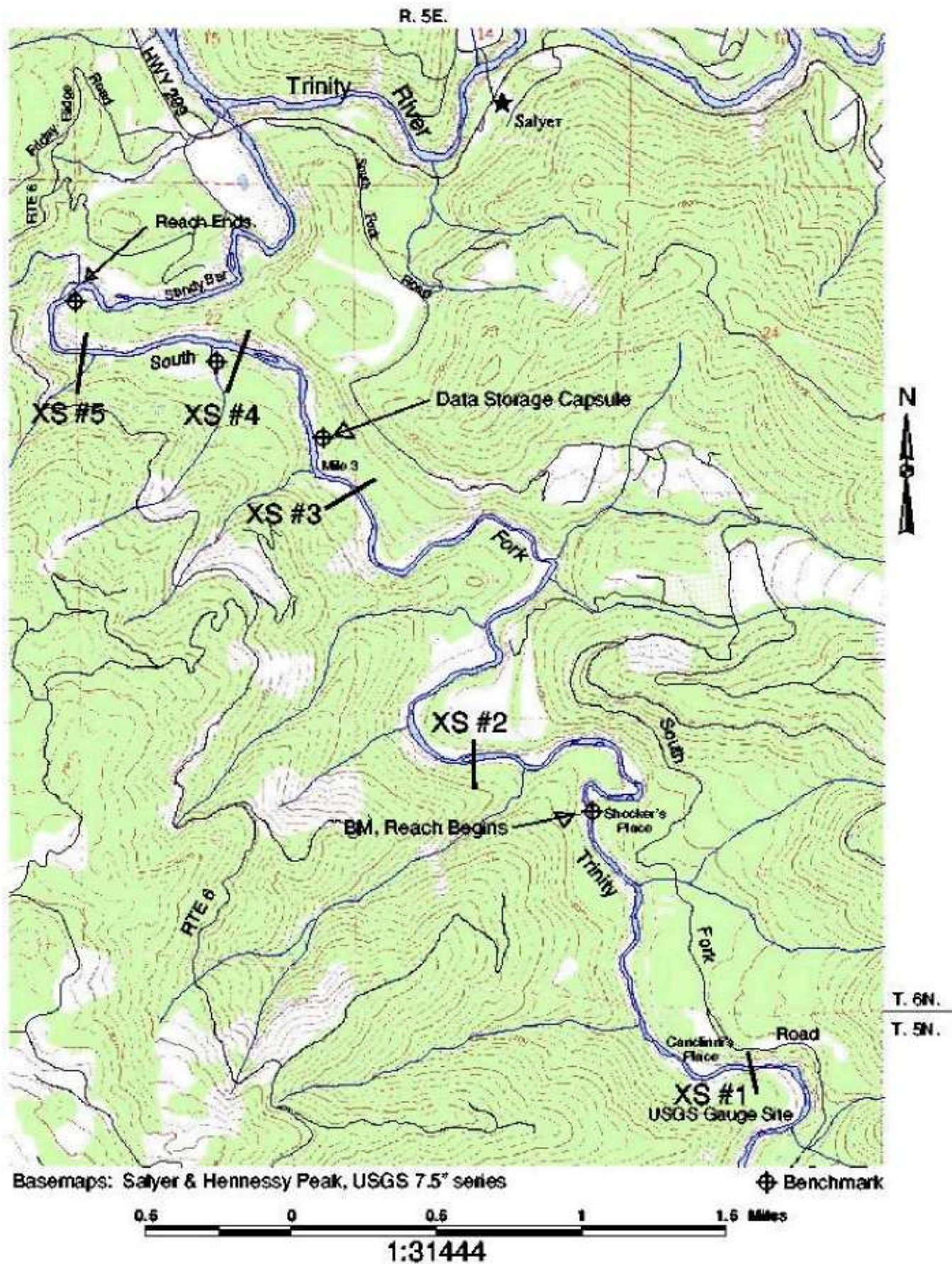


Figure 5a. Salyer Reach



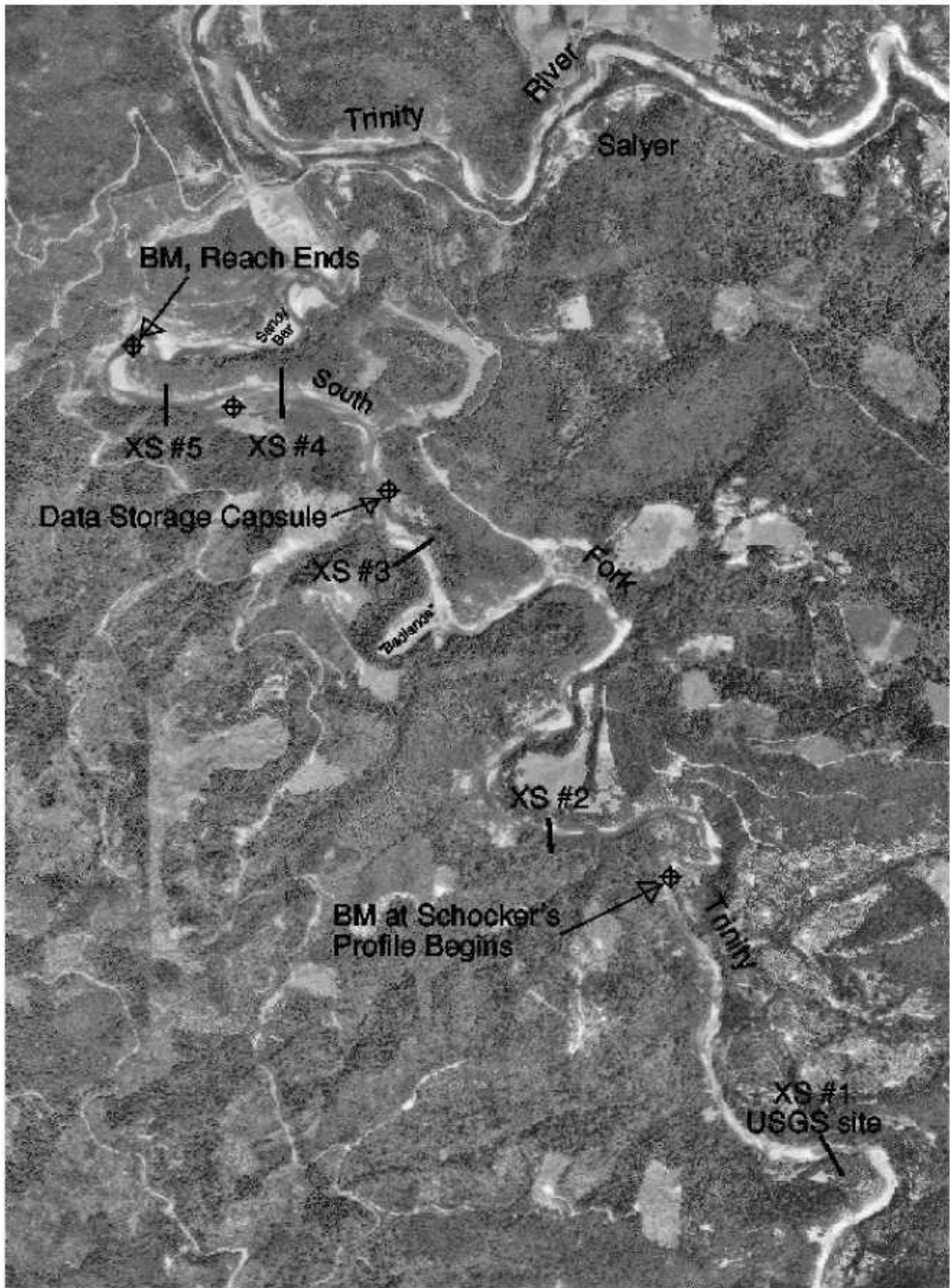


Figure 5b. Aerial View of Salyer Reach

⊕ Benchmark

which represent significant long-term sediment storage. Average bankfull width is 200 feet. Average slope for this reach is 0.4 percent.

**Reach 3 at Hyampom** (river mile 29.5 to 31.6) contains the largest sediment storage area in the entire South Fork Trinity watershed (Figures 4a and 4b). Although the valley probably always contained large amounts of sediment, there is evidence that the channel may be higher than before the 1964 flood. The old bridge across Pelletreau Creek, which was 20 feet above the channel, has only recently become exposed again after being buried by 1964 flood deposits. While other reaches of the South Fork Trinity River may have flushed out 1964 sediment, it appears that Hyampom Valley is still adjusting. The gradient within this reach is lower than upstream (0.3 percent) and the channel is unconfined. Therefore, this reach is relatively sensitive to sediment delivered from upstream sources. Because the channel geometry is wide and shallow, stream power is relatively low. Consequently, this section may respond more slowly than other reaches and would represent very long-term conditions.

This reach contains sections that are completely unconfined. In some places, bankfull width is over 700 feet and the channel migrates frequently from valley wall to valley wall (Figure 6.5).

**Reach 4 at Salyer** (river mile 1.5 to 6.2) is the most downstream monitoring reach, extending from river mile 6.2, just downstream of the USGS gage near Salyer, to Sandy Bar (Figures 5a and 5b). This reach should reflect changes in the entire watershed. In addition, it has a lower gradient (0.2 percent) and contains more stored sediment than any other reach below Hyampom Valley. Thus, it is the most sensitive reach of mainstem channel in the lower watershed. Some historic cross section data associated with the USGS gage near the Canclinni property show 20 feet of aggradation after the 1964 flood and subsequent degradation to 1955 levels. It is possible that the lower mainstem has already flushed through sediments from the 1964 flood. More comprehensive monitoring of the **Salyer Reach** may reveal if the changes at the USGS gage are anomalous or actually represent lower mainstem conditions.

Little data presently exist regarding the condition of pools in the **Salyer Reach** although anecdotal reports from long-time local residents suggest that pools were much deeper before the 1964 flood (Berol, 1995). Because this reach is used by nearly all anadromous fish in one way or another, it is an important place to monitor.

The channel in the **Salyer Reach** is quite confined, often by bedrock walls. Average bankfull width is 290 feet. Streamside landslides are common in this reach, including several large features. Although landslides may cause local data anomalies, large active landslides are common throughout the lower South Fork Trinity River.

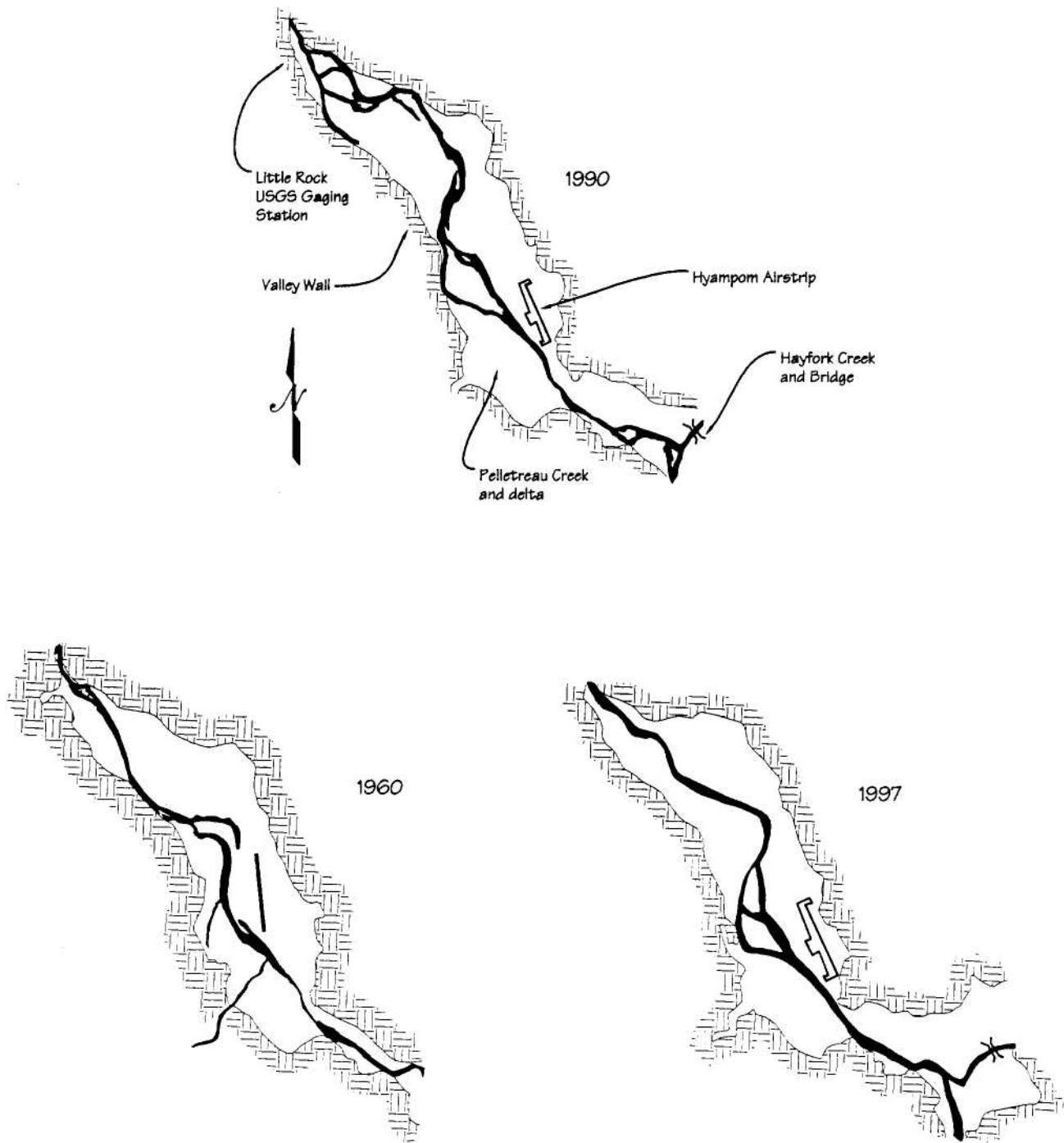


Figure 6.5 - Evidence of Channel Migration, Hyampom Valley 1960 - 1997.

## **B. Rationale for Selecting Monitoring Indicators**

Before deciding which parameters were most appropriate for long-term trend monitoring, previous research on the South Fork Trinity River was reviewed to determine if earlier measurements could be used to extend this monitoring project into the past. Although many McNeil samples, pebble counts, pool surveys, fish population studies and temperature studies were found, none of those sites were worth re-occupying. This exercise provided good reconnaissance of the watershed, but all previously collected data were rejected as being unrepeatable, insensitive to long-term trends, and/or outside the study reaches.

Indicators that will be used for this sediment trend monitoring include (1) cross section surveys, (2) longitudinal profile surveys, (3) pebble counts, and (4) photo points.

### **1. Cross section Surveys**

Repeated cross section surveys are the simplest way to quantify changes in stream channel geometry. The protocol is well established, cost is relatively low, and results are easy to evaluate.

Cross sections were surveyed at five or more representative riffles in each of the four reaches. Cross sections may be surveyed with a tape, level and stadia rod, or laser level. Cross sections targeted riffles which are more sensitive to sediment supply than pools (Lisle, personnel communication) and were located away from the influence of wood or other temporary structures affecting channel geometry.

Repeated cross section surveys show basic changes in channel geometry such as whether the channel is aggrading or degrading. Generally, when streams are transporting large amounts of sediment, they become aggraded, wide and shallow. Another way to interpret cross sections is through the width-to-depth ratio of the bankfull channel. Changes in the width-to-depth ratio can be tracked over time. (See the **Analysis Tools** section for more discussion.)

Cross sections have some limitations. They only represent one place in the channel, although multiple cross sections help to define a longer reach. Also, cross sections represent one moment in time and do not show changes that may have occurred during high flow events such as scour and fill. Finally, changes in cross sections are not easily related to fish abundance or survival.

### ***Additional Methods***

Changes in the channel that occur during high flow events can be monitored with scour chains (Harrelson et al. 1994). Metal chains are buried vertically in the channel to a depth of several feet and the tail is laid along the surface. As scour erodes the streambed, the length of the exposed tail increases and can be used to measure scour. Subsequent deposition can be measured on top of the tail. This technique was determined to be too labor-intensive for the first year of this project.

## **2. Longitudinal Profile**

Pool characteristics, particularly pool volume and depth, are of major importance for fish habitat. A longitudinal profile of the streambed will allow us to track pool depth and frequency over time. Longitudinal profiles are a well-established monitoring tool, data quality is good, and cost is relatively low.

Pools provide rearing and hiding habitat, as well as cold water refugia. Large influxes of sediment generally decrease the number and volume of pools, resulting in diminished pool habitat. The Channel Assessment Procedure Field Guidebook (Province of British Columbia, 1996) suggests that channel disturbance resulting in aggradation will lead to more extensive riffles, smaller and shallower pools, and finer bed texture. Repeated longitudinal profiles should reveal the degree to which pools are impacted by sediment.

The longitudinal profile illustrates the length of reach occupied by pools and riffles, pool-to-riffle ratio, residual pool depth and pool length. Changes over time can be calculated through determination of mean residual water depth, percent of channel in riffles, pool frequency, mean bed elevation, slope and bed variation (usually measured by fitting a regression line to the survey points). (See the **Analysis Tools** section for more discussion.)

Many pool inventory techniques have problems due to high operator variability, lack of replicability and discharge dependency. By using residual pool depth and surveying the channel, operator subjectivity will be minimized. However, this survey method will not account for changes in pool volume caused by sediment deposits along the sides of pools. It also tells us little about pool complexity and how fish respond to changes.

### ***Additional Methods***

A more rigorous technique to monitor pools over time would be to survey cross sections of the pool to determine changes in pool volume. This would be very labor intensive, particularly in the mainstem where pools are too deep to wade. This technique was considered too expensive for the first year of this project. It may be possible in the future to measure pool volume for a selection of the most significant pools.

## **3. Pebble Counts**

Pebble counts are the cheapest, easiest way to monitor gross changes in size distribution of streambed sediment. The protocol for pebble counts is well established and has been used extensively since Wolman introduced the technique in 1954. Substrate monitoring is required for the TMDL process, and pebble counts are the best way to meet that goal.

Generally, pebble count data are displayed as percent finer than a given size. Particle sizes are assigned a percentage based on their rank. For example, D35 is the size in millimeters at which 35 percent of the sampled particles are smaller. Changes in the size

of a given percentile can show if the streambed is getting coarser or finer over time. It also can be used to monitor the amount of sediment finer than a given size.

Pebble counts are inexpensive but they cannot completely characterize the size distribution of streambed sediment. The principal shortcoming of pebble counts is that they tend to under-represent the finer particle sizes. This is particularly true for sizes less than about 5 mm, which is in the range of fine sediment that can affect fish survival. Secondly, pebble counts are not performed within spawning redds because the size distribution of the streambed is changed by the spawning fish. Therefore, sampling outside of redds may not reflect the actual condition of spawning gravels in the study reaches. Furthermore, size distribution of the streambed has not been well correlated with fish abundance or survival. Finally, pebble counts are somewhat imprecise and the data resolution may be insufficient to document subtle changes.

### *Additional Methods*

**Sediment Mapping**: The best way to monitor changes in streambed particle size distribution is to map areas of similar texture. For example, areas of sand, gravel and cobble would be mapped. Changes in the bed would be represented by changes in the size and frequency of textural patches. Mapping is usually done with a total station unit, and it often takes two people a full day to map a short reach. This technique was considered too costly for the first year of this project.

**McNeil Sampling**: Another common way to measure bed material is to insert a metal tube into the bed and then to collect and sieve both surface and subsurface sediments. This technique is better at capturing the fine fractions although site selection is a problem because of the high spatial variability. McNeil sediment samples do not measure condition of spawning gravels or directly relate to fish abundance or survival. This technique was considered too costly for the quality of data obtained. High variation between samples makes this method a poor choice for long-term monitoring.

**Freeze core samples**: This technique involves elaborate hardware to inject liquid nitrogen into the streambed, extract the frozen sample, melt the sample, and sieve the resulting gravels. Freeze coring allows stratification by depth and analysis of different particle distributions at different depths. It also is very good at capturing all sizes of sediment, especially fines. Freeze coring is labor and equipment intensive. This technique was too expensive for this project.

**Permeability**: Another technique measures gravel permeability. This is done by pounding a porous tube into the substrate, evacuating the water, and measuring the time it takes to refill. Although this method is not too labor intensive, its relationship to conditions in spawning redds is unclear since fish alter the gravel when they make the redd. Individual permeability sites from the same riffle have a wide range of values, requiring large sample sizes to increase confidence in results. This technique is too new for use in this monitoring project at this time, but should be considered in the future.

#### **4. Photo Points**

At each cross section, four photo points were established as follows: from left bank looking to right bank; from right bank looking to left bank; from above the cross section looking downstream; and from below the cross section looking upstream. Additional photo points were established at other appropriate locations where the channel could be observed.

Photographs will be stored digitally so they can be compared to photos taken in future years. Photographs provide excellent semi-quantitative data and help to show changes in the channel that are not easily captured by other survey techniques. Care must be taken that photographs and negatives are not lost or damaged.

#### **C. Sampling Time Frame**

There are two factors to consider when deciding how frequently to sample. After baseline data have been established, future sampling efforts should be frequent enough to ensure that channel changes are being detected. On the other hand, sampling is probably not needed every year, particularly in low-flow years when channel changes have been minor.

We propose a variable sampling scheme based on antecedent flow and channel conditions rather than a fixed time interval. After the first year, sampling should be repeated within two or three years even if peak flows are small. This will reveal sampling variability and the sensitivity of reaches to change, and it can guide future sampling frequencies (e.g., after 5, 10, 15 year recurrence interval flows). Sampling frequency should be adaptive. When significant channel changes are observed, it may be prudent to re-survey the following year regardless of flow magnitude. It must be recognized that re-surveying will be driven in part by budget constraints. Nevertheless, this study was designed to enable Forest Service personnel to re-survey at a minimum after a 10- to 15-year peak flow. Furthermore, a variable sampling scheme should allow monitoring when changes occur and avoid sampling when no change has occurred.

After the storm effects have been measured, the sampling interval should again be reduced to monitor channel changes as long as they remain significant. If funding is limited, we recommend re-occupying as many cross sections as possible at the expense of the profile. This is because cross section surveys are easily repeatable, utilize readily available equipment and can be completed in a short period of time. Changes in the cross sections also could be used to indicate whether a survey of the longitudinal profile is justified. Sufficient benchmarks and reference points were established to enable the profiles to be shortened if necessary. However, profile surveys must be long enough to represent characteristics of the reach as a whole and not be affected by local anomalies.

An alternative to profile surveys is to measure the maximum residual pool depths of several large pools in each reach. A very minimum level of monitoring could be accomplished even in the leanest budget year by reoccupying all the photo points.

## **D. Field Methods**

### **1. Channel Surveys**

Although survey technology continues to advance, we tried to keep the survey protocol simple so that future surveys could be done with a tape and level. However, time and budget constraints may preclude using a tape in the future, particularly for the longitudinal profile. Moreover, the South Fork Trinity River is so large that stringing a tape down either the thalweg or the center of the channel is nearly impossible. A tape and level should be used for surveying the cross sections. We used a Criterion 400 laser level for both cross sections and the long profiles, but found the precision was not as good as we wanted on the cross sections. It is hoped that laser technology (or better) will be available for future surveys of the longitudinal profile.

The Criterion "laser gun" shoots to a reflector target and measures angles, bearings and distances which are converted to x, y, and z coordinates. We found 3-inch diameter reflectors are easiest to hit, red reflectors are easier to see in the brush, and some reflectors are more reflective than others. A survey prism can also be used, but may be difficult to see in low light or heavy brush.

To measure pool depths, we mounted the reflector on the end of a standard 16-foot telescoping survey stadia rod. Thus, the rod length (usually fixed in a laser survey) was variable up to 16 feet and allowed us to get to the bottom of deep pools or elevate the target above brush. Rod height was fixed at intervals (i.e., rod collapsed, one section deployed, two sections deployed, etc.). Failure to keep track of changes in target height can be a significant source of error.

The laser gun can be hand-held or mounted on a monopod or tripod. We favored the increased accuracy provided by a tripod. Although cumbersome to carry, a tripod does provide a very stable station. Special tri-bract adapters were needed to secure the laser gun to a tripod and care had to be taken to avoid instrument wobble.

We generally surveyed as a two-person crew, one person on the instrument and one on the rod. The instrument person was in charge of data management and all field notes. The rod person waded or swam down the thalweg. We did not employ any flotation devices for the rod person other than a life jacket or PFD. Others have used a "belly-boat" (inner tube with a seat - usually used by fishermen) and swim fins with success. We found it was difficult to stay in position in a boat, and time was needed to get in and out frequently. The rod person often used a facemask to see the channel bottom and determine the thalweg. Swimming the pools was refreshing in August and a cold prospect in October. If working past August, you will need a dry-suit, preferably Gore-Tex. On the Salyer Reach, a canoe was used to transport the instrument downstream.



The laser gun has some inherent inaccuracy with each shot, generally less than a foot. To reduce error associated with shooting great distances we decided not to shoot over 300 feet if possible. Also, any survey point that was important (e.g., cross section pins, brass caps, turning points) was shot two or three times to minimize error.

Stations were typically 600 feet apart with three turning points used for each turn. There was a substantial learning curve, but eventually we were spending about 45 minutes per station, or about 800 feet per hour or 7 hours per mile. This overall average includes surveying the cross sections as they were encountered.

The thalweg was surveyed continuously downstream at every slope break and often more frequently. Few shots were more than 50 feet apart no matter how uniform the bed. We tried to use a minimum of three points to determine a line.

In addition to the thalweg, the water surface was surveyed, but much less intensively. In pools, where the water surface is assumed flat, water surface shots were 100-150 feet apart. In riffles or areas where the water surface is changing rapidly, shots were closely spaced to capture the changes. Surveying the water surface is useful to validate the data and identify anomalous points.

The margins of the channel were also surveyed. Wherever there was a break in slope, or at each station as a minimum, the edges of the active channel, bankfull channel and valley walls were surveyed. More detailed surveys of the channel banks were performed at each cross section. This required the rod person to frequently get out of the thalweg and go over to the channel margins, but the extra measurements allow conversion of the data to centerline distance as opposed to thalweg distance. Centerline is worth measuring because it does not vary from year to year and would be easier to reproduce if one were using a cloth tape. Where the channel is confined, thalweg distance is not expected to change much over time. In the end, we used thalweg distance to present our findings.

Cross sections were monumented with 3/8-inch rebar fitted with aluminum caps. We decided to use four rebar "pins" at each cross section. Two were placed near the edge of the active channel where they are easy to find and use for stringing a tape, etc. Because it is likely that these pins will be exposed to water and debris at high flows, few are expected to last the duration of this monitoring project. Future surveyors should plan to replace some of these lower pins from time to time. Due to the instability of the lower pins, two more were added upslope on stable ground. These may be hard to find, generally being 100 feet upslope, but they should be more permanent.

Cross section pins were numbered 1-4 beginning on the left bank (facing downstream). That is, the upslope pin on the left bank is Pin #1, the pin at the edge of the channel on the left bank is Pin #2, the pin at the edge of the channel on the right bank is Pin #3, and the upslope pin on the right bank is Pin #4.

An important element of cross section data analysis is the identification of bankfull flood elevation in the field. Because many areas of the South Fork Trinity River have little or no

floodplain, bankfull must be determined from other indicators such as vegetation, soil type, or breaks in slope. For assistance identifying bankfull in the field, see Leopold (1994), Dunne & Leopold (1978), Harrelson et al. (1994), and a video produced by the USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Stream Systems Technology Center, entitled *A Guide to Field Identification of Bankfull Stage in the Western United States*.

#### Error Discussion.

Standard survey technique is to survey back to the starting point (“closing the loop”) to estimate error of the survey. Due to time constraints this was not done on this project. Because we used more than one turning point, a loop could be fabricated. A second survey using an auto level was done of the pins and benchmarks on the Route 30 Reach. Closure of the loop indicated an error of 0.53 feet (elevation) over 12,356 feet (distance) or 1 in 32800ft for the auto level survey. Comparing the results from the two surveys reveals that the laser instrument is fairly accurate, but not that precise (Table 1). That is, agreement between the surveys is constant with distance, however, any one shot from the laser gun could be off a foot or more. For example, I compared the difference in elevation between cross-section pins on opposite sides of the bank to remove error associated with distance or turning points. One of the samples was more than 1 foot in error. That is, the auto-level survey said the two pins were exactly 4 feet apart while the laser survey said they were 5.03 feet apart (Table 1). This shows that although individual shots may be off up to a foot, errors are not cumulative and overall accuracy of the survey should be good.

Ideally the survey could be repeated in the future with a total station, although this would be quite time consuming. Although the laser gun has some inherent variability, I think it is adequate for this project. What needs to be remembered is that surveying with the laser gun is like sampling a population. Although individuals may be outside the norm, repeated samples will bring the estimate closer and closer to the true value. In other words, one shot from the laser gun should not be used to indicate change, but a profile made up of thousands of points is probably very accurate. Another thing to consider is that any shot of great importance (e.g., benchmarks, turning points) should be shot more than once.

Table 1 Laser/Level Comparison

	Level Survey Value	Laser Survey Value	difference
xsApin2	842.5	842.5	0
xsApin3	842.1	841.991	0.109
xsBpin2	841.5	843.845	-2.345
xs2pin2	832.5	831.995	0.505
xs3pin2	826.6	825.886	0.714
xs3pin3	830.6	830.92	-0.32
xs4pin2	823.9	822.205	1.695
xs4pin3	824.3	823.071	1.229
xs5pin2	824	823.726	0.274
xs5pin3	821.4	821.05	0.35
Brass Cap	826.95	825.778	1.172
lbeorpin	820.09	827.242	-7.152
Apin2-3	0.4	0.509	-0.109
3pin2-3	4	5.034	-1.034
4pin2-3	0.4	0.866	-0.466
5pin2-3	2.6	2.676	-0.076

## 2. Pebble Counts

Pebble counts were performed underneath the cross section tape. Distance across the active channel (usually between pin #2 and pin #3) was divided by 100 to determine the sampling interval. In a few cases, the sampling interval was deemed too small (i.e., it was likely the same particle could be sampled twice). In these cases the active channel width was divided by 50 to determine the sampling interval and a second transect located a few feet downstream. Pebbles were selected randomly along the tape transect. The intermediate diameter of each pebble was recorded in millimeters.

## 3. Photo Points

Photos were taken at each cross section and selected viewpoints. Each cross section was photographed while the tape was strung out. Photos were taken (1) from the left bank looking at the right bank, (2) from the right bank looking at the left bank, (3) from upstream looking downstream, and (4) from downstream looking upstream. In larger channels, multiple photos were needed sometimes to show upstream or downstream views, and left and right bank photos were taken from the center of the channel to show more definition of the bank. Reach-specific photo points will be described in **Appendix A: Location and Access**.

## **IV. Hillslope Sediment Source Trend Monitoring**

The relationships between hillslope conditions and in-channel conditions are well known *in theory* but difficult to evaluate in specific detail. In other words, it is generally impractical to monitor actual cause-and-effect relationships between hillslopes and channels except in "spectacular" cases such as Devastation Slide. This is mostly a result of the relatively long and highly variable *delayed response* of stream channels to dispersed upslope disturbances. Nevertheless, tracking hillslope conditions can help to characterize the overall "recovery" of a watershed.

### **A. Methods**

The principal emphasis of hillslope monitoring should be sediment production and its delivery downslope and ultimately downstream. The primary monitoring objective will be to relate points or areas of sediment production to management activities (usually on a subjective basis), rather than to track actual sediment movement to points of impact in the aquatic system. Existing information clearly indicates the higher contribution of mass wasting to the overall sediment budget of the South Fork Trinity River (Raines, 1999). However, sediment production *attributable to management* may be more evenly balanced between mass wasting and chronic surface erosion processes in managed landscapes (i.e., cutover areas and roads). Therefore, the data collection strategy will address both sediment production regimes.

#### **1. Mass Wasting Regime**

Significant landsliding tends to be associated with major storm/flood events. There have been six such events in this region since about 1930 (in 1955, 1964, 1975, 1986, 1995 & 1997), so comparable triggering events are expected to recur on average every 10-15 years. Mass wasting in heavily managed terrain could result from somewhat less extreme storm events than in undisturbed terrain. Due to the stochastic nature of landslide processes, data collection will be flexible in response to triggering events.

Landslides occur more frequently on sensitive geomorphic terrains that can be mapped across the landscape. These include inner gorge areas, toe zones of older landslide deposits, and steep headwall areas. Subsequent impacts to aquatic resources are also much more likely to result from landslides that occur on certain parts of that landscape. These include relatively steeper slopes in middle or lower slope positions and particularly in the vicinity of major road/stream crossings.

Hillslope monitoring will test the hypothesis that sediment production from mass wasting associated with recent harvesting and road building has been significantly reduced compared to historic levels because of (1) more benign forest practices adopted under the Northwest Forest Plan, (2) reduced management levels, and/or (3) more effective mitigation on the sensitive terrains and high potential delivery sites noted above.

A representative suite of sampling areas has been established in the most sensitive parts of the South Fork Trinity watershed in terms of past observed landslide frequency (Figures 1 and 7 through 12) which include the Grouse, Old Campbell, Hyampom, Lower South Fork, Eltapom and Hidden Valley subwatersheds. Although effects of individual storms are usually distributed unevenly across a region, the monitoring areas will be fixed so that temporal comparisons will be valid.

All of these monitoring areas contain substantial management disturbance, except for the Old Campbell subwatershed which will serve as a "control" area. The combined monitoring area comprises about 10-15 percent of the relatively unstable lands in the western part of the watershed, or roughly 25,000 ac. These areas will be inventoried primarily by examining aerial photos following a major, landslide-producing storm/flood event. Assuming an average coverage of 600 acres per photo, there will be about 40-50 aerial photo effective areas to inventory. The photos may either have been recently acquired on the normal 5-year cycle or specially flown. Some level of field verification of aerial photo observations will also be done, depending on the scale and extent of observed storm impacts. Therefore, the aerial photos will be acquired in the first or second year following the triggering event.

An intensive aerial photo inventory of the six monitoring areas will be performed to delineate landslides and note characteristics according to the 1995 Landslide Study protocol (i.e., type, size, management-related or natural, slope position, runout to stream, and trend since previous photos) which is presented in Appendix E.

The resulting tabulated data will be used to identify a sample of landslide sites for field verification. These will be predominantly ones associated with management and representative of the various recorded factors above. The field sample will probably range from 30-50 percent of inventoried, management-related features, with the smaller fraction for larger magnitude storms when presumably more landslides would occur. In some cases, a full census of management-related features may be appropriate.

Storms of sufficient magnitude to warrant a trend monitoring effort in the South Fork Trinity watershed may also generate a number of storm-damage sites on the road system. Most of these sites will automatically receive a comprehensive geotechnical review prior to repair under ERFO (Emergency Relief for Federal Roads), and the assessments would complement data collection for this mass-wasting trend monitoring. Additional field data collection associated with ERFO reviews would include all road/stream crossing failures, culvert diversions, road prism failures, and instances of substantial sediment delivery to streams. Observations of relevant BMP implementation or effectiveness at observed sites would also be recorded. Finally, a complete photographic record of observed impacts would be maintained. (See Appendix F for detailed protocol.)

Data tables will then be revised on the basis of field data collection. Final monitoring results will be compiled and interpreted. Key conclusions are likely to address: comparative numbers, types and sizes of slides; relative frequencies of management-



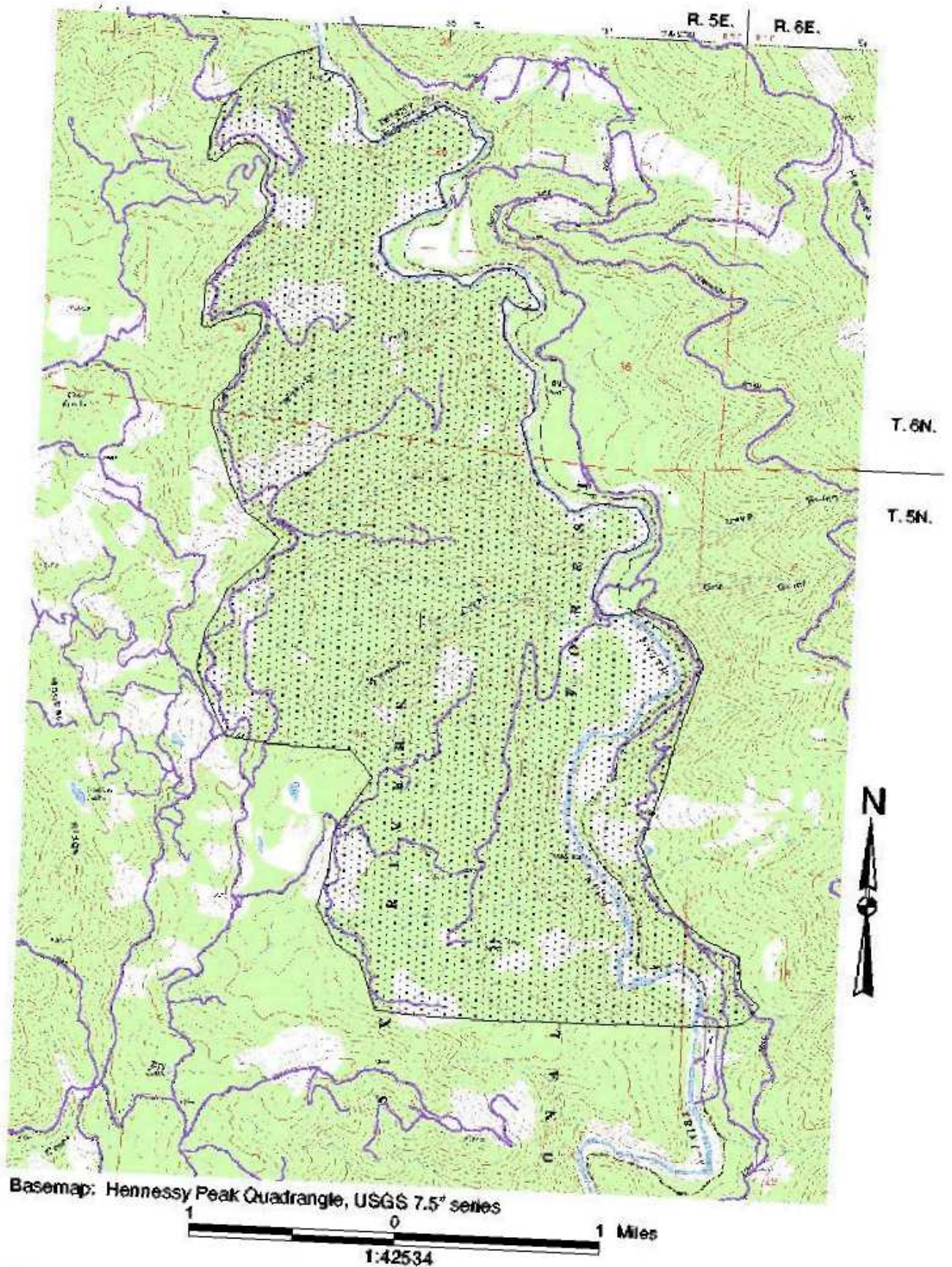
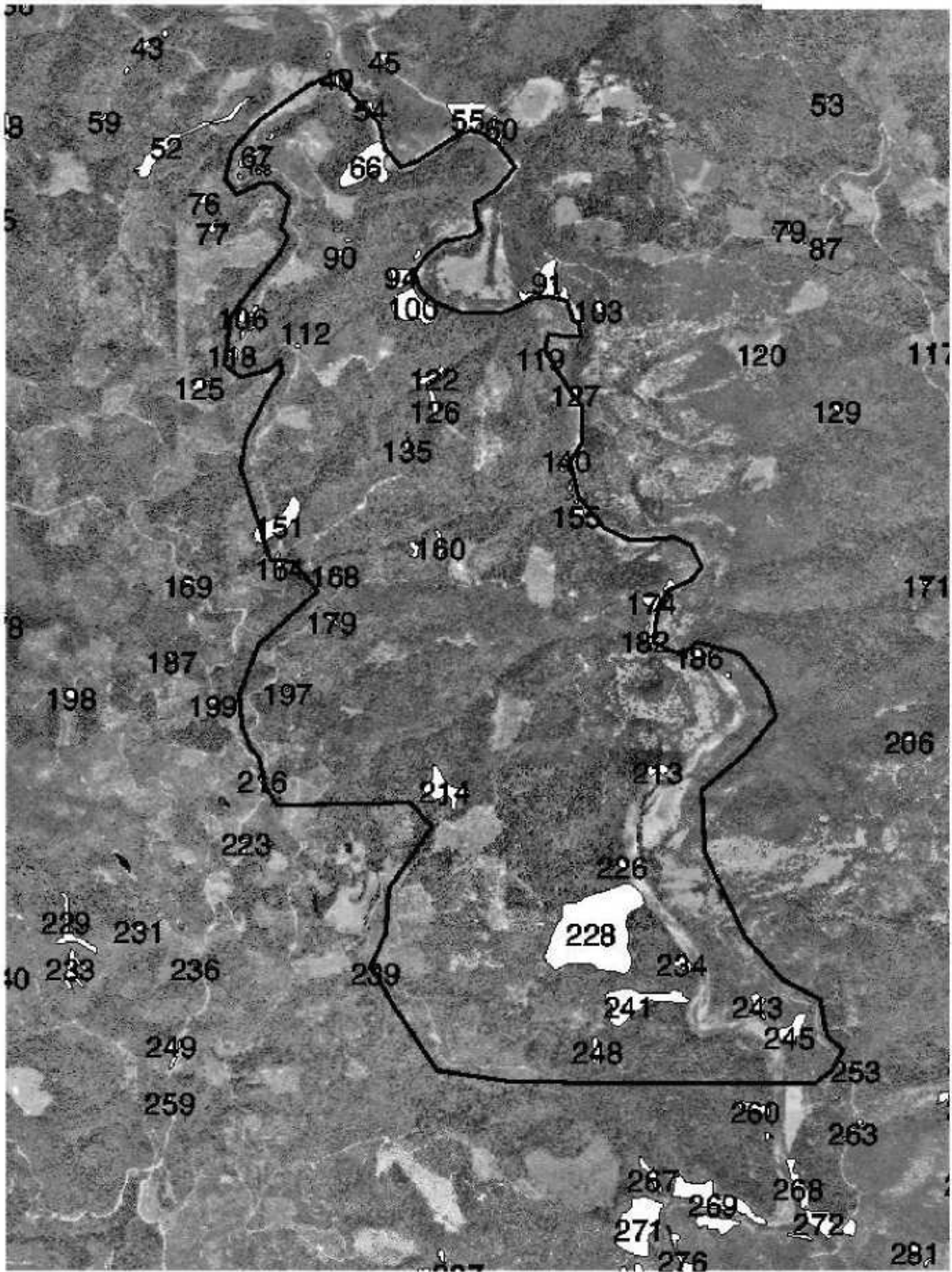


Figure 7a. Lower South Fork Mass Wasting Monitoring Area





○ Active Landslides

Figure 7b. Lower South Fork Mass Wasting Monitoring Area



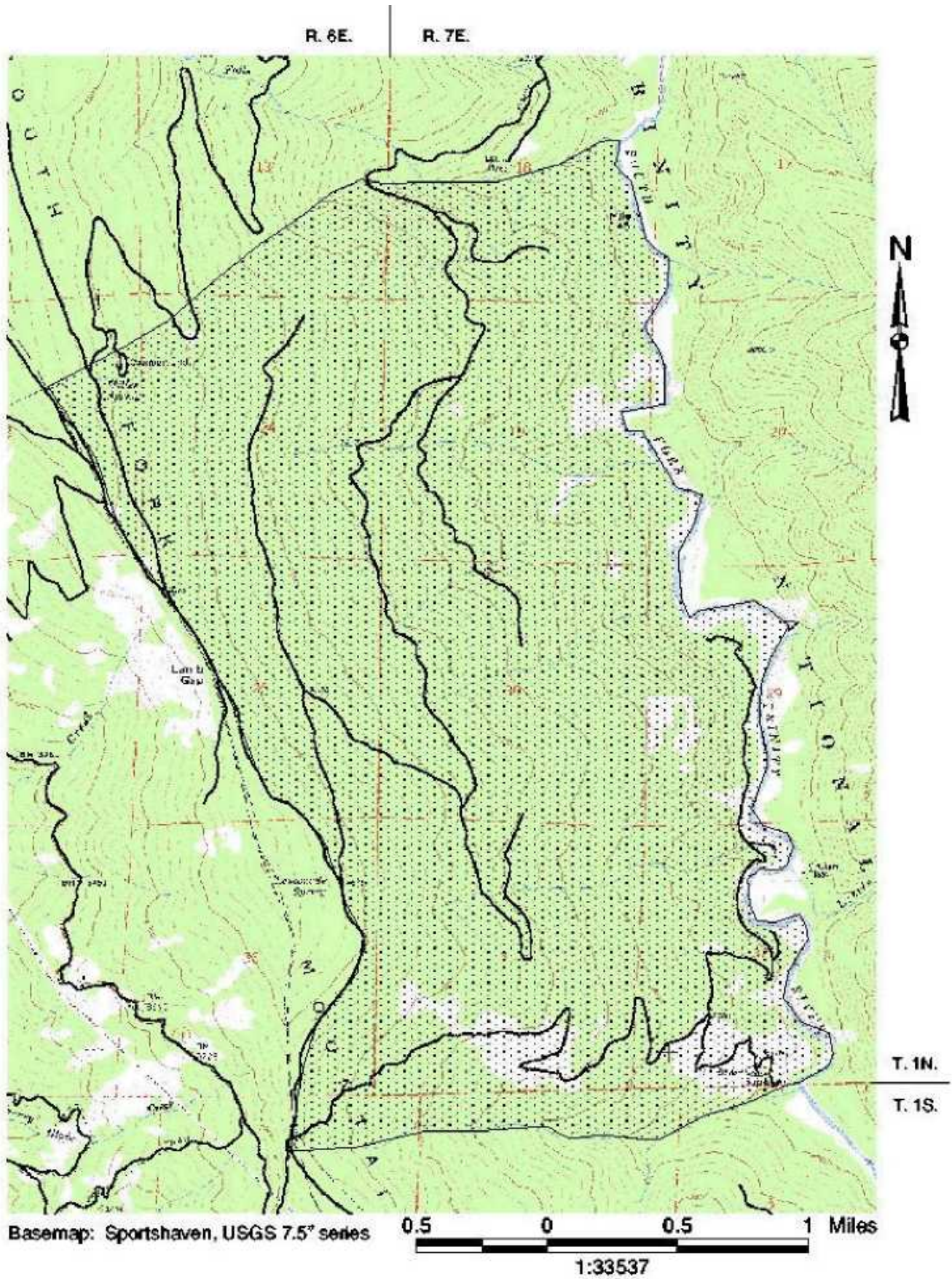
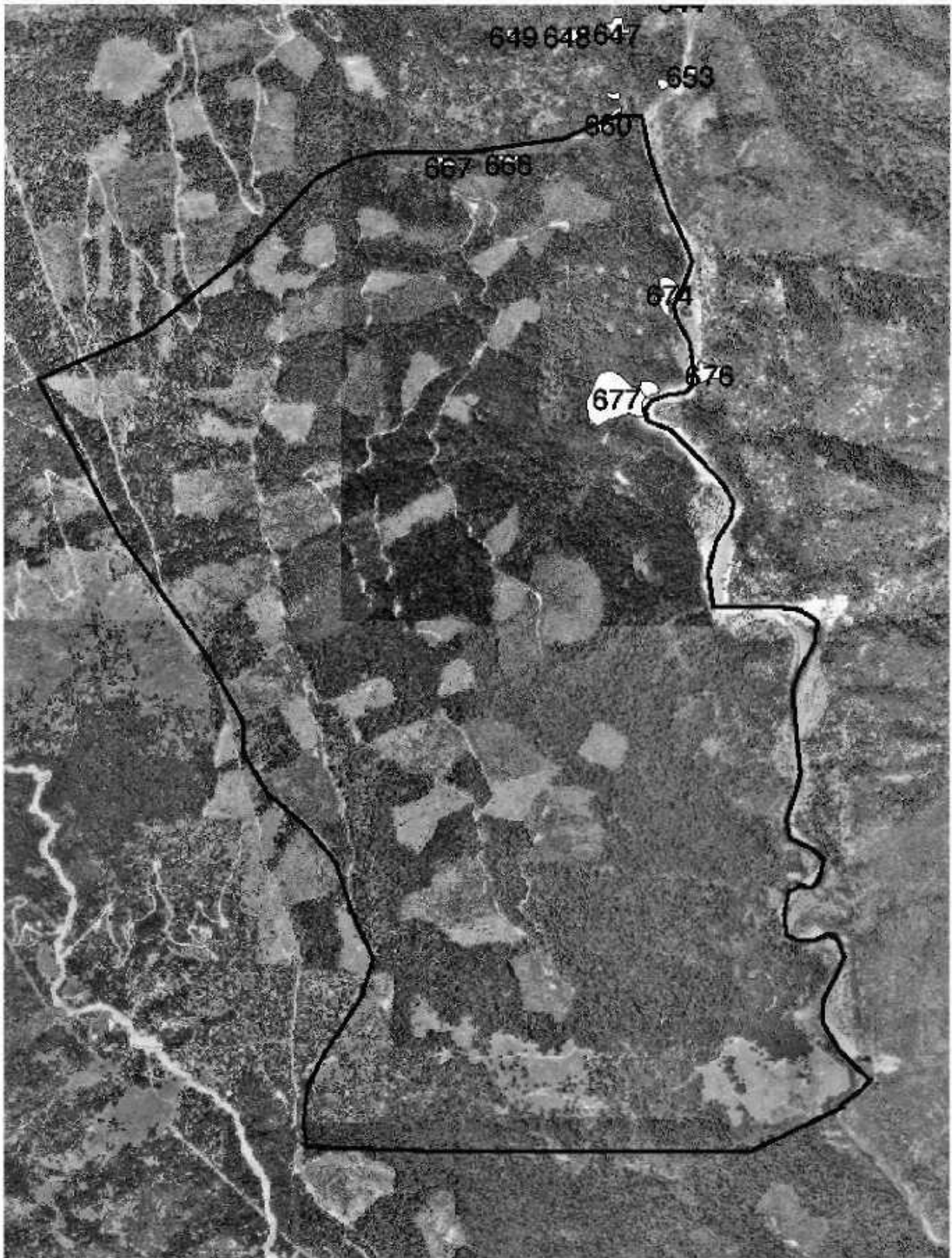


Figure 8a. Hidden Valley Mass Wasting Monitoring Area

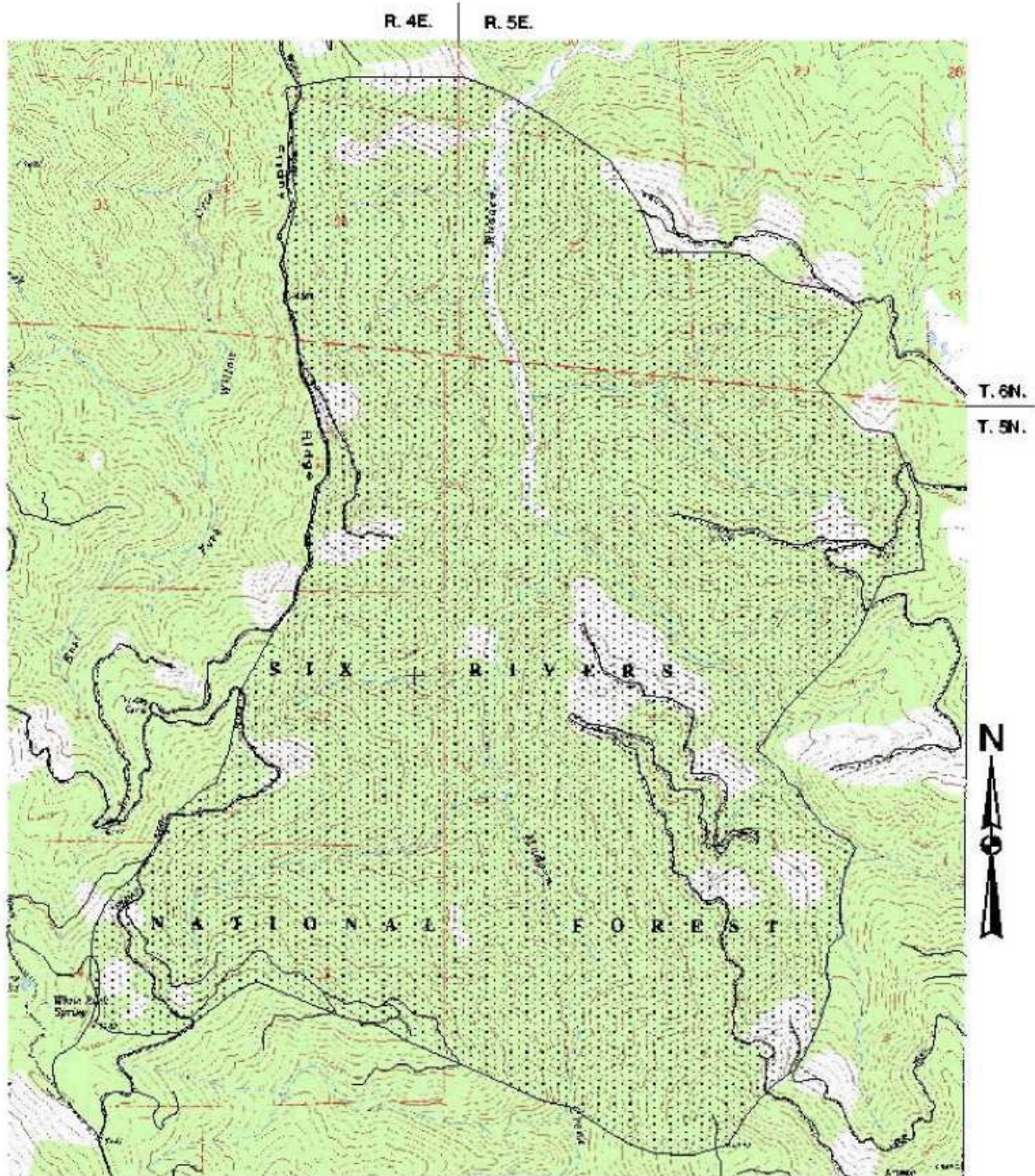




○ Active Landslides

Figure 8b. Hidden Vally Mass Wasting Monitoring Area





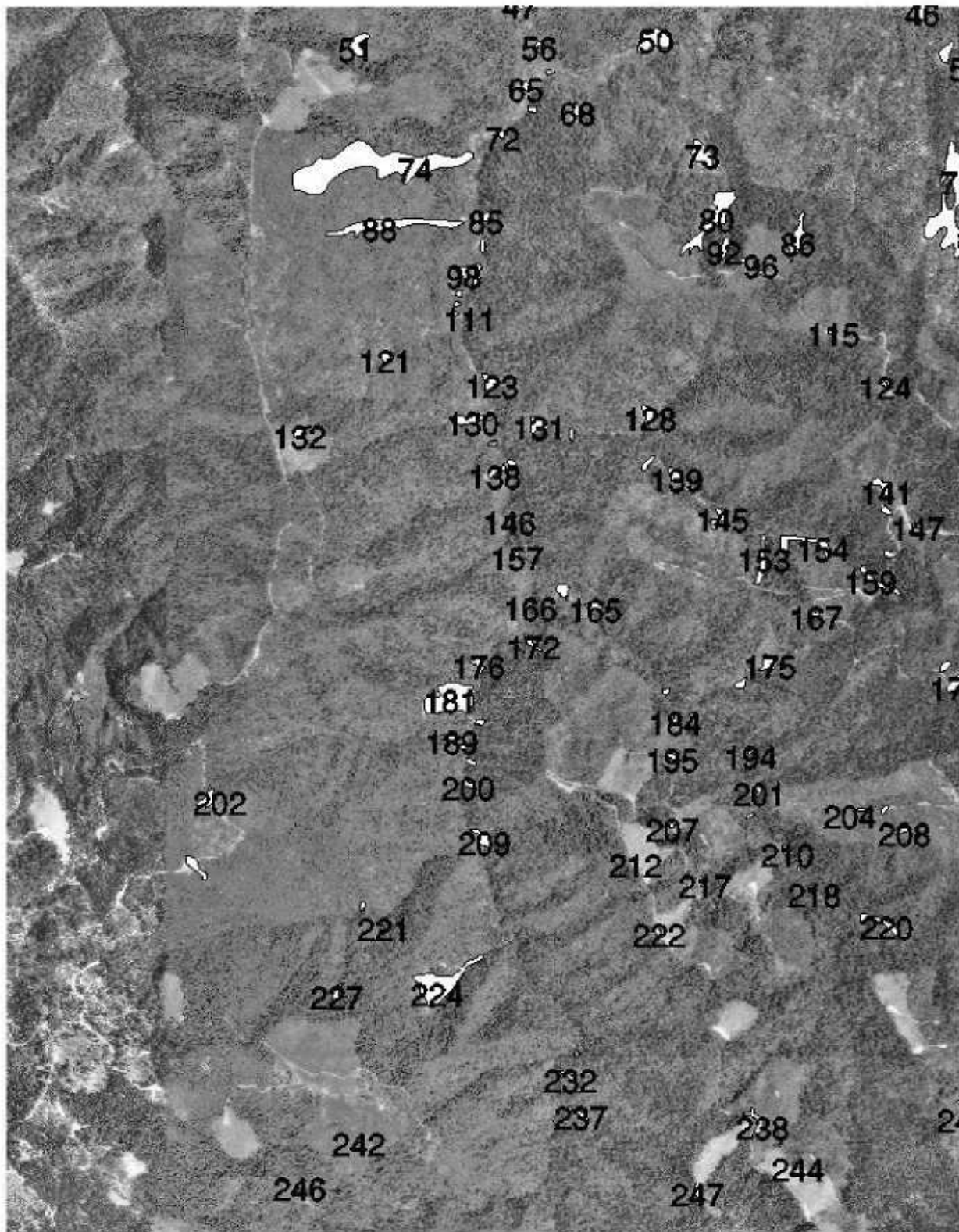
Basemap: Grouse Mtn., USGS 7.5" series

0.5 0 0.5 1 1.5 Miles

1:35927

Figure 9a. Old Campbell Mass Wasting Monitoring Area

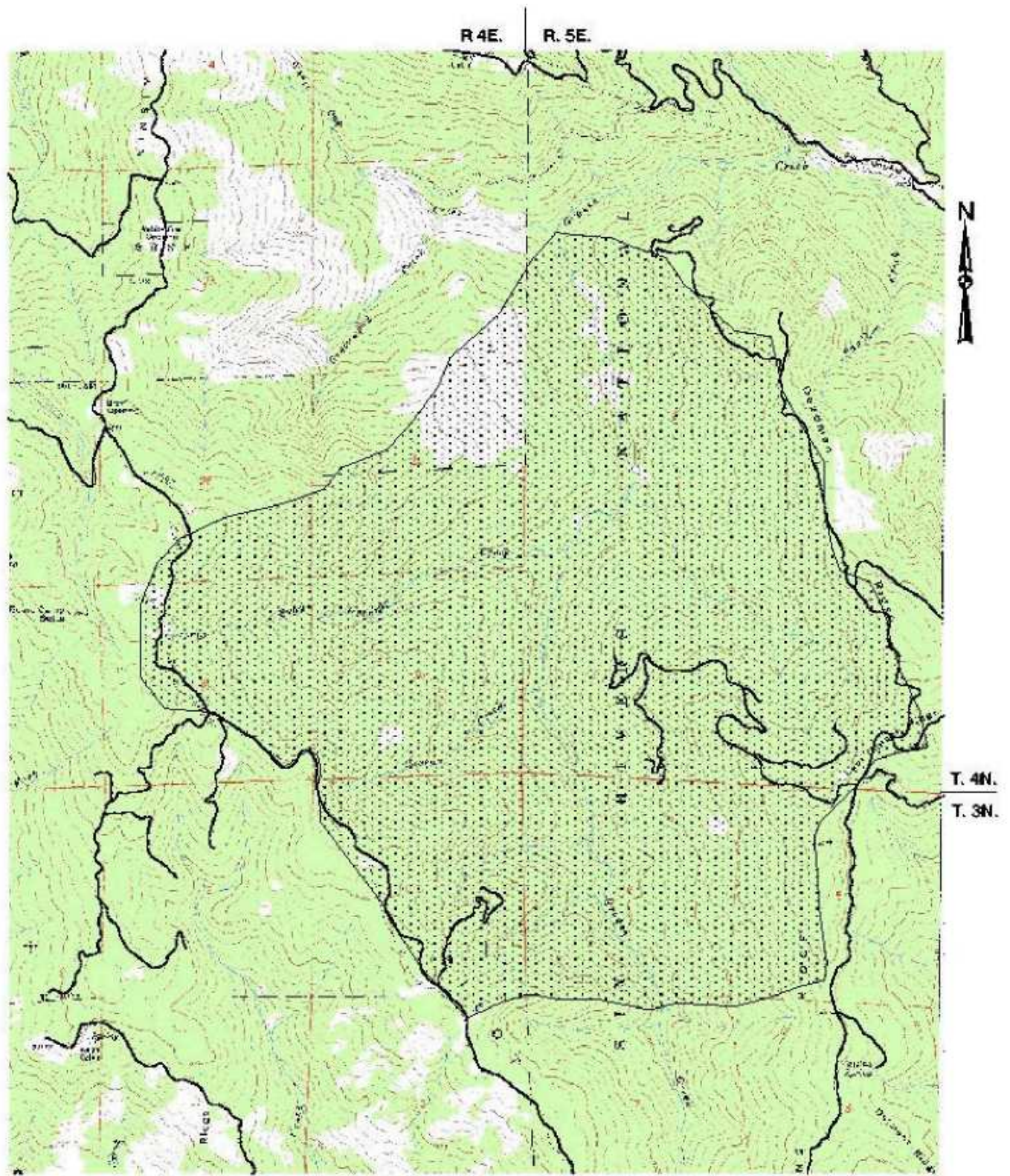




○ Active Landslides

Figure 9b. Old Campbell Mass Wasting Monitoring Area





Basemap: Board Camp Mtn., USGS 7.5" series

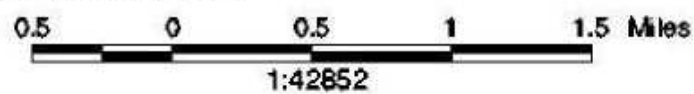
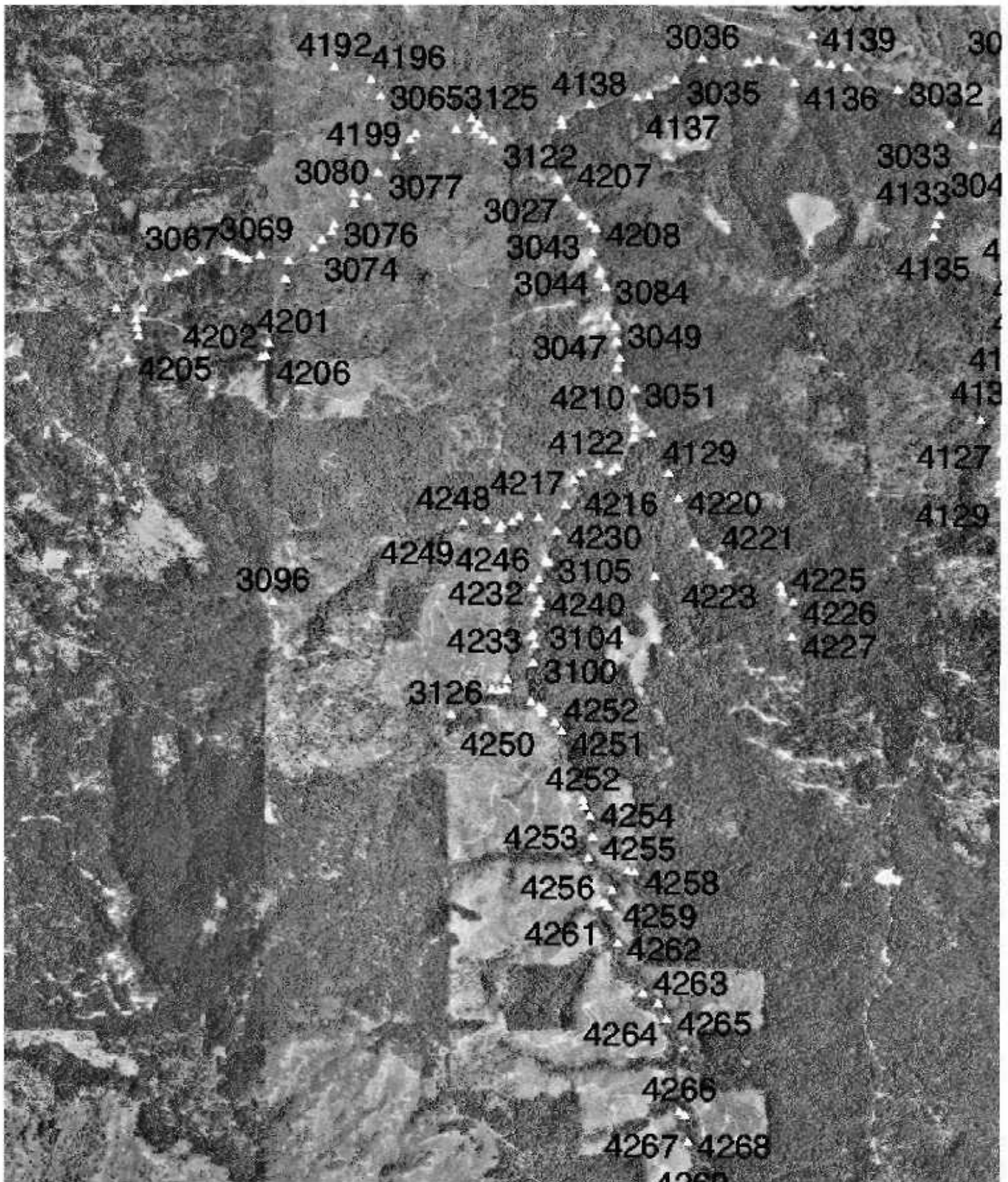


Figure 10a. Upper Grouse Mass Wasting Monitoring Area





△ Active Landslides

Figure 10b. Upper Grouse Mass Wasting Area



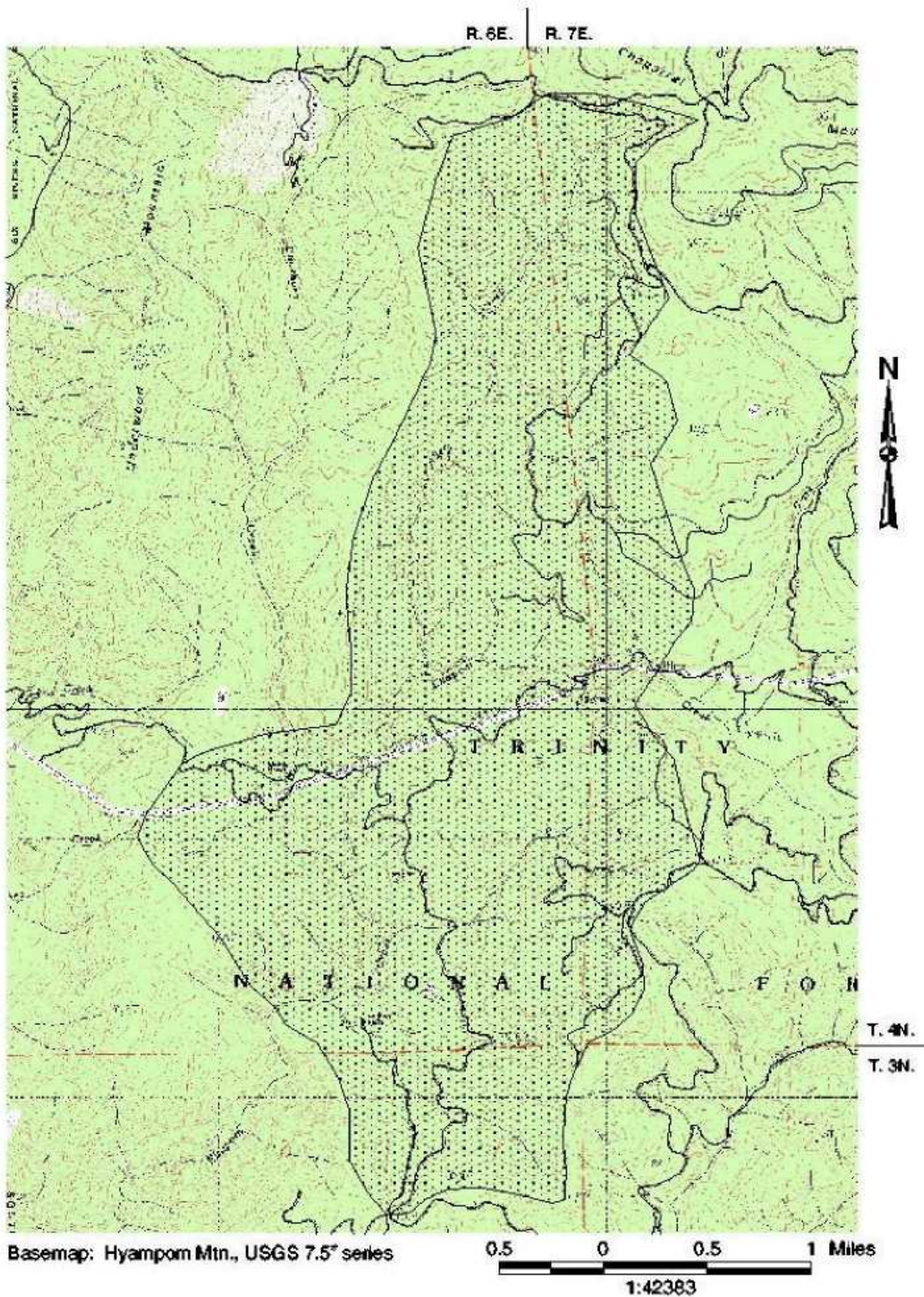
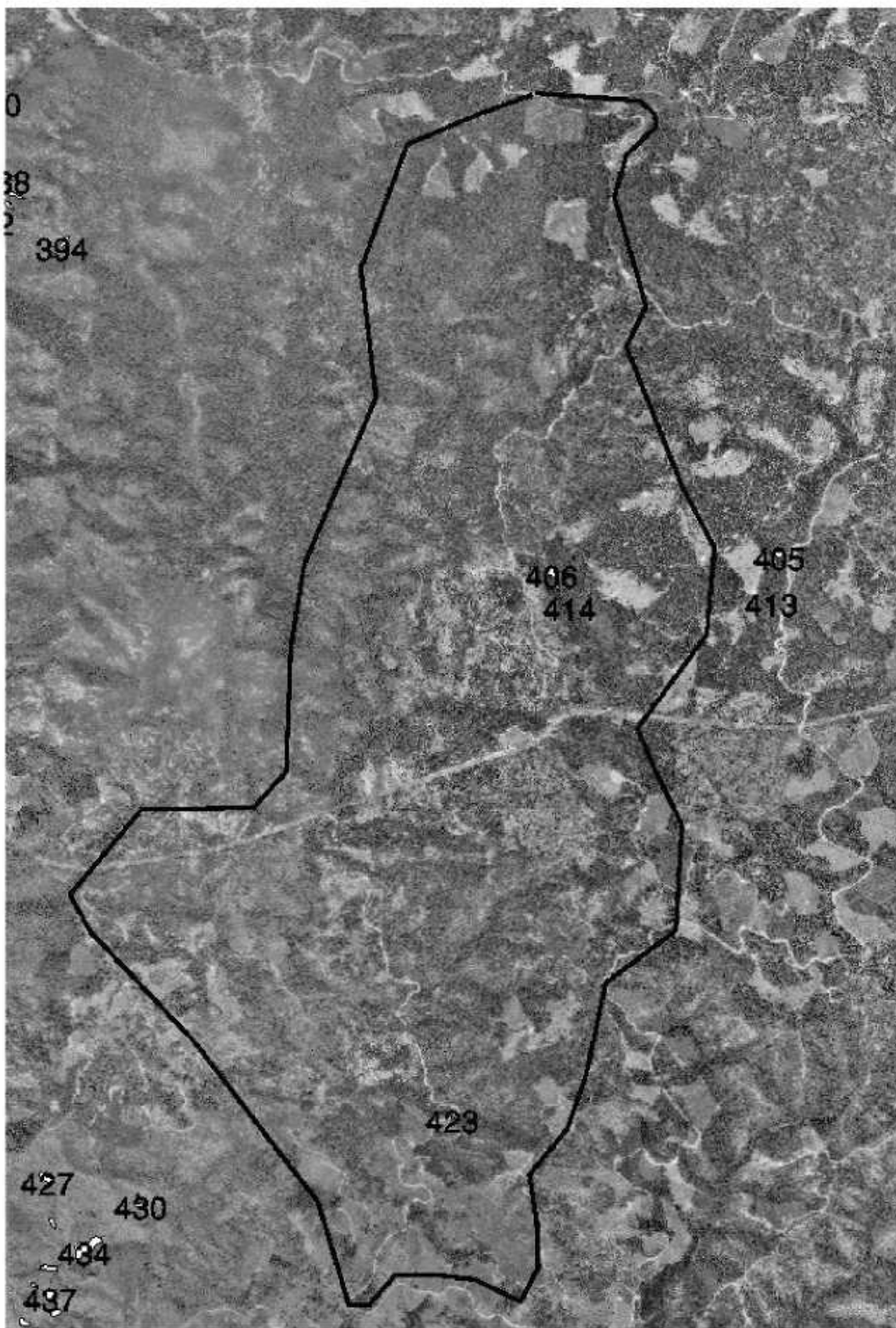


Figure 11a. Eltapom Mass Wasting Monitoring Area

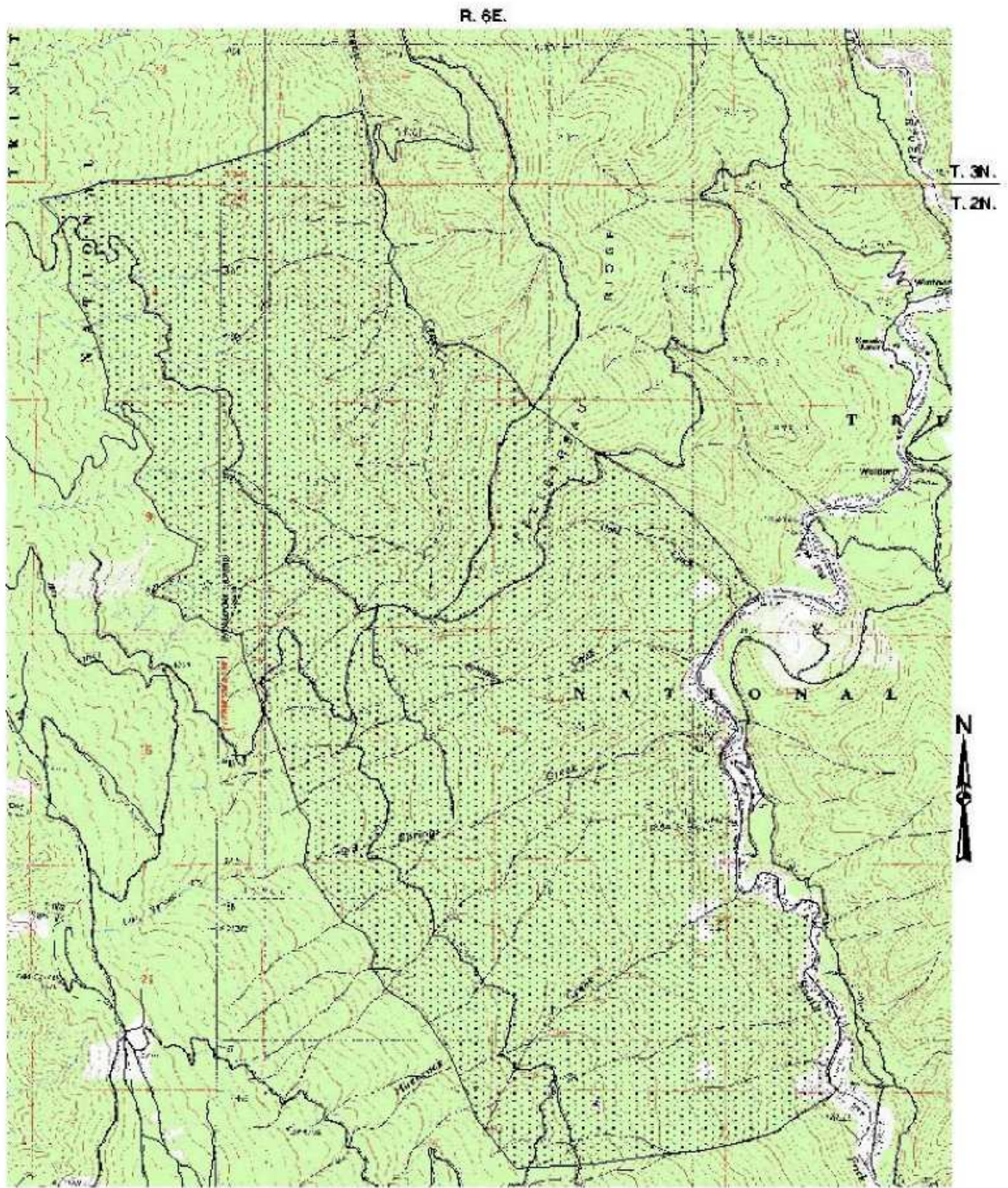




○ Active Landslides

Figure 11b. Eltapom Mass Wasting Monitoring Area





Basemaps: Hyampom and Blake Mtn., USGS 7.5" series

0.5 0 0.5 Miles

1:38103

Figure 12a. Pelletreau Mass Wasting Monitoring Area



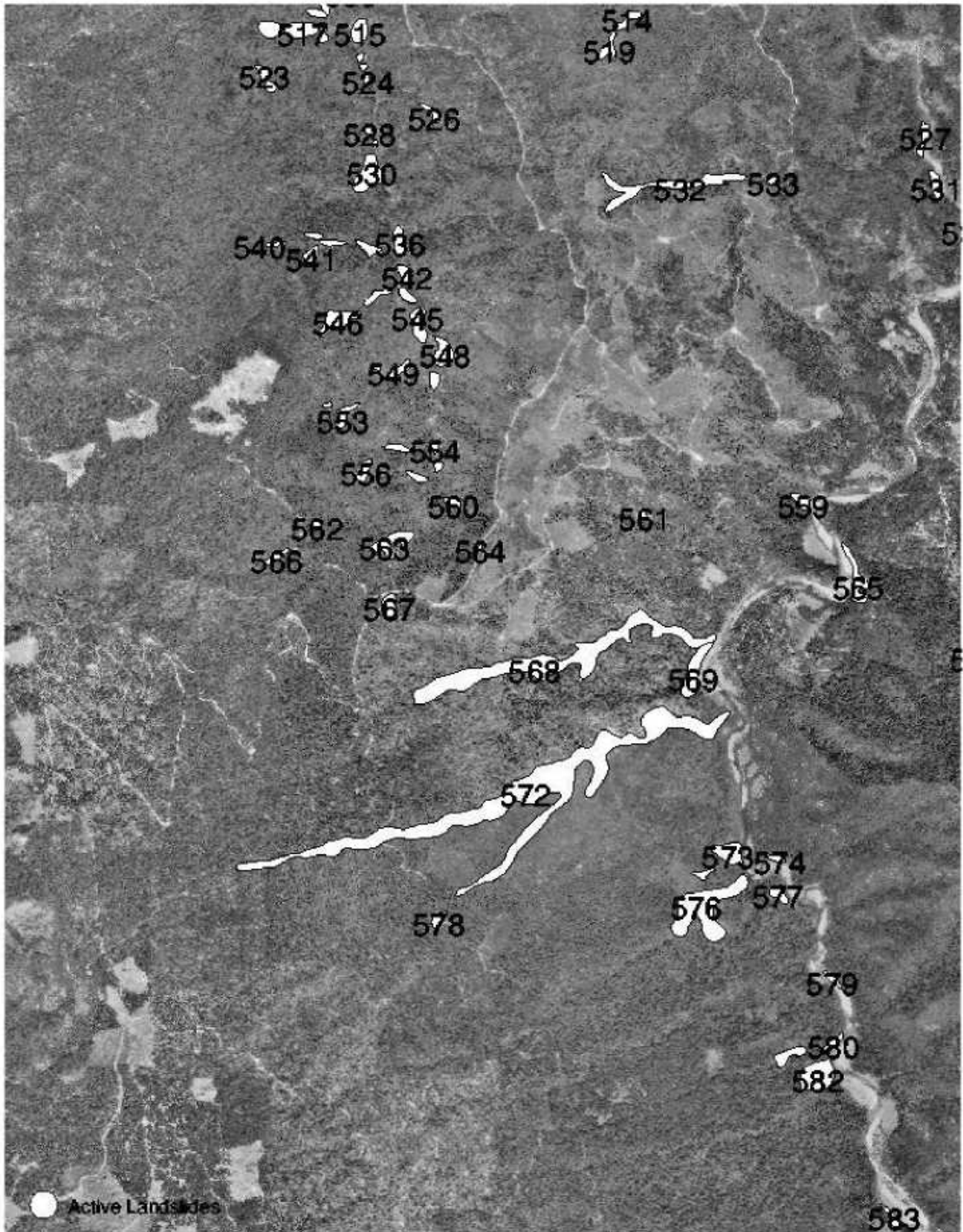


Figure 12b. Pelletreau Mass Wasting Monitoring Area

related and natural landslides; and frequency trends relative to sensitive geologic or geomorphic terranes.

The estimated cost of this landslide monitoring is about \$9500, including \$4000 for aerial photos, \$1800 for aerial photo analysis, \$2700 for field checking, and \$1000 for data management. Since the active landslide GIS layer for the Six Rivers National Forest will likely be updated following major storms, much of the data for this trend monitoring in the Lower South Fork, Old Campbell and Grouse Creek subwatersheds would be acquired anyway. However, there may be cases where monitoring would be initiated in the South Fork Trinity watershed without taking on a Forest-wide inventory for the Six Rivers.

## **2. Chronic Accelerated Erosion**

Erosion potential varies substantially across the whole watershed. Important factors are geologic and soil units, slope, road geometry and grade, and existing vegetation. Virtually all erosion problems attributable to management are likely to be associated with road prisms (cut slope, tread and fill slope) rather than harvested areas, since intensive tractor logging has been curtailed or eliminated in this watershed. Accelerated erosion will also tend to occur on barren landslide scars (i.e., new features or older ones that are not re-vegetating), some of which may be associated with past management.

Estimating surface erosion associated with the road system will require field sampling, which could be in conjunction with Best Management Practices (BMP) assessments focused on road construction and maintenance practices. Erosion monitoring will need to be more frequent than for the mass wasting regime to provide meaningful data, probably on the order of every third year. We propose to use the screening protocol being developed for ATM Planning to identify parts of the road system most susceptible to erosion. Then a representative sample will be selected across geographic sub-areas defined in the Sediment Source Analysis (Raines, 1998). The sample will be stratified according to: (1) geologic/soils types (principally on South Fork Mtn. schist, Franciscan sedimentary, Galice metasedimentary and decomposed granitics which have the higher erosion rates); (2) hillslope position and gradient (with emphasis on steeper middle and lower slopes); and (3) road geometry and surface type (with emphasis on the larger native and aggregate-surfaced roads). The assessment method for periodic road erosion will involve visually estimating soil volumes mobilized and delivered to channels. Indicators would include fresh cutslope sloughs, blockage of inboard ditches, rilling/gullying of road tread, rilling/gullying of fill slopes, sediment plumes on slopes, and residual coarse lag material in ditches.

In addition, any major road failure sites (such as landslides and washouts) identified under ERFO or storm monitoring will be assessed in terms of secondary erosional effects such as diversions, continuing gullies, etc (see Appendix F for detailed protocol).

Over the longer term, this hillslope monitoring information will be related spatially to in-channel monitoring information to provide a more accurate, qualitative picture of sediment mobilization and movement through the fluvial system than we have at present. Spatial

patterns may emerge from this analysis that would highlight the most important "hot spots" of sediment production from landsliding and chronic surface erosion. For example, there could be important contrasts in sediment deposition between response reaches downstream of areas with mostly "natural" sediment production from mass wasting, compared to areas with predominantly management-related sediment production from both mass wasting and accelerated surface erosion. In other words, tributary channels may respond differently to "natural" versus "management-dominated" sediment production regimes. There may also be observable differences in timing of instream responses between the two types of areas.

## **V. Analysis Tools**

This section will outline available analytical tools and previous studies that may assist with future data analysis once the South Fork Monitoring Program acquires several years of information on which trends can be established. In addition, given the level of interest in the South Fork Trinity River by various Federal, State and local government agencies, as well as local residents, an interactive Internet work site will be described that can facilitate data storage and information sharing.

### **A. Cross Section Survey Interpretation**

The repeated surveying of established cross sections is a primary tool for long-term trend monitoring. The data provided can be used to calculate mean bed elevation, bankfull width, mean depth at bankfull, and the width-to-depth ratio. All these parameters can be tracked over time to illustrate changes in stream morphology. The bankfull channel is used for these calculations because well-defined relationships exist between the bankfull channel and hydrologic variables such as discharge of water and sediment. The elevation of bankfull discharge is determined in the field at the time of survey.

Bankfull width is simply the width of the water surface at bankfull discharge. In alluvial channels, bankfull width would be expected to increase when the sediment supply exceeds transport capacity. Because the South Fork Trinity River is typically confined within narrow valley walls, bankfull width is not expected to change much.

Mean water depth is calculated by taking the area under the bankfull water surface and dividing by the bankfull width. Mean bed elevation is the elevation of the bankfull water surface minus the mean water depth. By definition, the mean bed elevation determines whether the streambed is aggrading or degrading, and is a clear representation of trends in sediment storage. The cross section at the USGS gage near Salyer (11529000) is an example of how repeated surveys can show channel filling and the subsequent erosion and return of the streambed to pre-flood levels. Unfortunately, no data exist on the level of bankfull discharge at this site that would permit the more refined analysis recommended here.

The width-to-depth ratio is the width of the bankfull water surface divided by the mean water depth at bankfull discharge. Streams are predicted to get wider and shallower as

they become overwhelmed by sediment supply in excess of transport capacity (the width-to-depth ratio will increase).

It is useful to track these parameters over time to see trends in sediment supply. Because we don't have multiple years of data, we suggest reviewing Madej (1999) for an example of what the figures should look like and how changes can be identified. A software program called Winscour is available through Milestone Software (Dwain Goforth, 1260 Sunset Avenue, Arcata, CA 95521) that will assist with some of the calculations.

## **B. Longitudinal Profile Interpretation**

Although cross sections provide valuable data for quantifying changes in channel morphology, the main tool for illustrating changes in slope and pool depths is the longitudinal profile survey. Analysis of the longitudinal profile can tell us the pool/riffle ratio, maximum residual pool depth, mean riffle length, mean residual water depth, channel slope and  $R^2$  from a least-squares regression.

Pool definition has been a common problem with previous channel profile analyses. For this study, pools were defined objectively using the survey points and the residual water depth. The residual water depth is the depth of water that would remain in the channel if the discharge were reduced to zero. Depth at riffle crests would be zero. Additionally, we set a minimum pool depth to reflect the biological significance of larger pools. For example, on the Route 30 Reach, we set minimum pool depth at one foot; if a pool were less than one foot deep at its deepest point, it would not be counted as a pool. Using this criterion does not change residual depth, only the number of pools.

The pool/riffle ratio provides a revealing measure of a section of channel. It is the total length of all the pools divided by the total length of all the riffles. This ratio is generally expected to be lower as sediment supply overwhelms transport capacity because pools will fill and the proportion of the reach classified as riffles will increase. The pool/riffle ratio also reflects how much of the reach is pool habitat.

A similar indicator of sediment loading is mean riffle length. It is predicted that when sediment supply exceeds transport capacity, the riffles will enlarge and take up more of the channel. This would cause an increase in mean riffle length.

Maximum pool depth is another indicator of sediment loading. As sediment supply surpasses transport capacity, it is expected that pools will fill in and maximum (residual) pool depth will decrease. It is likely that the deepest pool on each reach will be the same pool each year. It may be useful to record the maximum depth of several of the deepest pools in each reach. This would be a rapid and efficient way to collect useful long-term trend data without surveying the longitudinal profile.

Mean residual water depth is another indicator of sediment loading. Standardized data are used and the mathematical average of all the depths is calculated (depth over riffles = 0). This index incorporates both the amount of riffles (more riffles → more zero values) and

the pool depths, so it is somewhat more sensitive to changes in sediment supply than the pool/riffle ratio or maximum pool depth alone.

Finally, useful information can be gleaned from fitting the long profile with a smooth line based on a least-squares regression. This provides objective slope data as well as a measure of the channel variability. It is predicted that as sediment supply surpasses transport capacity, channel slope will decrease and the value of  $R^2$  will increase, indicating homogeneity of the bed.

A program called Winlongpro is available from Milestone Software that will perform some of these calculations.

### **C. Pebble Count Interpretation**

The repeated sampling of streambed gravels should illustrate trends in sediment size and whether the channel is impacted by fine sediments. If the South Fork Trinity is recovering from sedimentation associated with the 1964 flood, we would expect an increase in the size of the D50, and a decrease in the proportion of sediment finer than 2 mm.

## **V. Other Potential Monitoring or Investigation Efforts – in progress**

In developing and designing this trend monitoring program on the South Fork Trinity River, it became readily apparent that in order to gain a full understanding of the processes and functions that influence fish abundance, many more questions arose than could be answered by this particular trend monitoring program. Outlined below are the additional monitoring efforts that could provide future insight into the status of the South Fork Trinity fisheries.

### **A. Fish Habitat**

- Need to monitor fish habitat and usage relationships – both spatially and temporally within the South Fork
- Need to monitor fish spawning and rearing as well as return numbers

### **B. Temperature**

Temperature has long been recognized in the South Fork as limiting for some fish populations. High temperatures in the summer stress many anadromous fish species. Considerable effort has been made within the past few years to characterize summer temperatures throughout the mainstem and tributaries within the South Fork Trinity River. This effort has yielded some insight into the concept of temperature refugia within the river system as being a key survival strategy for some species of fish. It would be particularly important to refine the temperature refugia knowledge through designing a refugia investigation that further identifies where and when the fish use the temperature refugia within the South Fork and what can be done to protect or enhance these refugia. While

further temperature characterization data collection on the South Fork would be valuable, it is important not to focus on collecting information where little could be done to influence long-term temperature, but to focus on the remaining data gap of locating and understanding temperature refugia within the watershed.

- Infrared aerial reconnaissance of mainstem to locate refugia – potential grant
- Field investigation to identify temperature refugia
- Investigate pool stratification – where does it exist and how do the fish utilize the habitat?
- Continued temperature trend monitoring on Hayfork Creek associated with water diversions and riparian restoration measures.

## References

- Berol, E., 1995. "A River History: Conversations with Long-Term Residents of the Lower South Fork Trinity River". Report prepared for Patrick Truman and Associates and South Fork Coordinated Resource Management Planning Group.
- Borok, S.L. and H.W. Jong, 1997. "Evaluation of Salmon and Steelhead Spawning Habitat Quality in the South Fork Trinity River Basin, 1997". California Department of Fish and Game, Inland Fisheries Division, Administrative Report No. 97-8
- California Department of Water Resources, 1979. "South Fork Trinity River Watershed Erosion Investigation". California Department of Water Resources, Northern District, Red Bluff, CA.
- California Department of Water Resources, 1992. "South Fork Trinity River Sediment Investigation". California Department of Water Resources, Northern District, Red Bluff, CA.
- Cook, C., and A. Llanos, 1999. Measurement of Sediment Storage and Streambank Erosion in the South Fork Trinity Watershed, Northwestern California. USDA Forest Service, Six Rivers National Forest, Eureka, CA.
- Dean, M., 1994. "Life History, Distribution, Run Size, and Harvest of Spring Chinook Salmon in the South Fork Trinity River Basin". Chapter VII. Job VII. P.193-227. In: K.Urquhart and R.M. Kano (eds.). "Annual Report, Trinity River Basin Salmon and Steelhead Monitoring Project, 1991-1992 Season". California Department of Fish and Game, Inland Fisheries Division, Sacramento, CA. 235 p.
- Gilroy, M.M., M.K. Arey and G. Tanaka, 1992. "Trinity River Basin Restoration Program, South Fork of the Trinity River Habitat Typing Report 1991". Prepared for USDI Bureau of Reclamation, Interagency Agreement No. 9-AA-20-08530, USDA Forest Service, Shasta-Trinity National Forest, Hayfork, CA.
- Harrelson, C.C., C.L. Rawlins and J.P. Potyondy, 1994. "Stream Channel Reference Sites: an illustrated guide to field technique". General Technical Report RM-245. Fort Collins, CO: USDA Forest Service, Rocky Mountain Forest and Range Experiment Station. 61 p.
- Haskins, D.M., and R.A. Irizarry, 1988. "A Holistic Appraisal of Cumulative Watershed Effects on Watershed Condition and Fisheries, South Fork Trinity River, Northwestern California". USDA Forest Service, Shasta-Trinity National Forest, Redding, CA.
- Leopold, L.B. 1994. *A View of the River*. Harvard University Press, Cambridge, MA. 298 p.

Madej, M.A., 1999. Spatial and Temporal Changes in Thalweg Profiles. Earth Surface Processes and Landforms.

Pacific Watershed Associates. 1994. Action Plan for Restoration of the South Fork Trinity River Watershed and its Fisheries. Prepared for U.S. Bureau of Reclamation and the Trinity River Task Force

Province of British Columbia, 1996. Forest Practices Code of British Columbia Channel Assessment Procedure Field Guidebook. 95 p.

Raines, M., 1999. "South Fork Trinity River Sediment Source Analysis". Final report prepared for Tetra Tech, Inc.

Shasta-Trinity National Forest, 1989. "South Fork Trinity River Watershed and Fisheries Monitoring Plan".

Shasta-Trinity National Forest, 1990. "Annual Progress Report for South Fork Trinity River Watershed and Fisheries Monitoring Program".

Shasta-Trinity National Forest, 1989. "Annual Progress Report for South Fork Trinity River Watershed and Fisheries Monitoring Program".

Six Rivers National Forest, 1998. "Lower South Fork Trinity Watershed Analysis".

Wolman, M.G., 1954. "A Method of Sampling Coarse Gravels". Transactions, American Geophysical Union 35:951-95



## **Appendix A: Location And Access**

### **Reach 1 - Route 30**

The Route 30 reach is so named because Forest Service Route 30 (the “wild-mad road” which runs roughly from the town of Wildwood to the town of Ruth) crosses the South Fork Trinity River here. The reach begins at a big pool approximately 500 ft upstream of the bridge and extends downstream approximately 3000 ft downstream of the bridge.

The upstream section of the reach, above the confluence with the East Fork of the South Fork, was originally surveyed in 1989 by the Shasta-Trinity National Forest as part of their watershed monitoring after the 1987 fires. Surveys were conducted again in 1990 and then abandoned. They monumented six cross sections, only two of which could be found in 1998. We surveyed those two cross sections in addition to our usual 5, which are all downstream of the confluence.

To get to the Route 30 bridge from Eureka, take Highway 36 east to Mad River, turn south on the Ruth Rd., go past Ruth and pick up Route 30 at Barry Creek. Follow Route 30 up over South Fork Mountain at Cedar Gap and down to the South Fork. Total drive time from Eureka is about 3 hours. From the North or East, pick up Route 30 on Highway 36 about 2 miles west of Wildwood and follow it south to the South Fork Trinity. Be aware that from the north the first bridge will be over the East Fork. The South Fork is another few miles. From the north the bridge is about 1 hour from Highway 36 at Wildwood.

On the bridge itself, on the northwest corner, there is a carriage bolt sunk into the concrete of the bridge. This is the benchmark for the upper part of the reach. Two other benchmarks exist on the Route 30 reach. One is a brass cap that we set on top of a giant (15-foot diameter) boulder that sits mid-channel about halfway down the reach. The other is a piece of rebar set in the concrete we poured around the data storage capsule (sometimes called a “nipple”) at the end of the reach. This benchmark is located about 100 feet upslope on the left bank above a big bedrock outcrop. Photos of all benchmarks were taken to help locate them and the benchmarks were all GPS'ed.

Besides photos of the cross sections, only one photo point exists for this reach. Photos were taken from the bridge, looking upstream and looking downstream.

Although a trail runs along the right bank, and an old road runs along the left bank, the fastest access to all parts of the reach is down the channel.

### **Reach 2 - Sulphur Glade**

We named this reach the Sulphur Glade reach because originally it was intended to stretch from the mouth of Sulphur Glade Creek to the mouth of Hitchcock Creek. Actually, the reach begins downstream of French Ranch, but we still call it the Sulphur Glade reach. Immediately downstream from French Ranch there is a huge bar/terrace along the right bank and then the valley walls close in. Right where the valley begins to open up again is the start of the reach. It ends at the mouth of Hitchcock Creek.

To get to the Sulphur Glade reach, take the St. Johns Road (County 316) from Hyampom to the end of the road (approximately 45 minutes from Hyampom). The road ends at a little parking area at the trailhead for the South Fork Trinity River Scenic Trail. This trail is the only access to the reach without crossing private property. Follow the trail south until it comes down to the river (about a 20-minute hike). This is near cross section #3, approximately in the middle of the reach.

The data storage capsule is here, east of the trail about 100 feet, in a copse of small oaks. Look for a small boulder embedded in the trail, then turn your head to the left and look for reflectors mounted on bearing trees around the data storage capsule. A rebar here also serves as a benchmark for the middle part of the reach.

We installed a brass cap at the upper end of the reach on a 15-foot diameter boulder imbedded in the right bank at about bankfull level. This is the benchmark for the upper part of the reach. We installed another benchmark near the bottom of the reach. This is a rebar set in concrete in the middle of the big meanders, very close to cross section #5. It should be noted that the last time we were there someone had vandalized the site. They didn't have much luck mauling the rebar or cement, but they ripped out all our flagging and reflectors and attempted to cover the benchmark with debris. Be prepared to look around - it's there somewhere. Also, Pin#3 had been damaged but Pin#4 was in good condition.

Sulphur Glade has some nice photo points. On the right bank of the two prominent meanders are two prominent landslides. There is a good view down on the channel from here and both were used as photo points, looking both upstream and downstream. The trail passes very close to one of the slides; the other one may take a little deduction to figure out. Upstream from cross section #3 a HUGE boulder (60-foot diameter) is visible on the left bank. It is possible, with aide from a small alder on the downstream side, for an agile hydrologist to get up there and it provides an excellent view of the channel. The top of this rock was also used for photo monitoring..

The brass cap, data storage capsule, and cross sections #1, #3, #4, and #5 were GPS'ed. For the lower benchmark, find cross section #5 pin#3 (GPS'ed) and look about 50 feet downstream.

Hiking up to the trail from cross section #5 will save time.

### **Hyampom Reach**

This reach begins in the gorge above Hyampom Valley and runs down past the confluence with Hayfork Creek to the old bridge site near Gene Rickstrew's driveway. The fastest way to get there from Eureka is to take Highway 299 to Forest Service route 60, which runs from Burnt Ranch to Hyampom. Allow one hour to get to Route 60 and another hour to get to Hyampom.

The upper part of the reach requires belly-deep wading. Access to the very top of the reach can be made by taking the trail along the left bank and dropping down a little ridge. The lower section is generally shallow.

There are three brass cap benchmarks on this reach. The most upstream one is a brass cap set by the USGS to reference their gauging station. The gauging station is gone but the cap remains, on the left bank about halfway down the straightaway from the gorge. Cross section #1 is about 5 feet upstream of the cap. The second benchmark is a brass cap near the northeast corner of the bridge. The third, visible from the bridge, is about 400 feet downstream of the bridge, on a 15 foot diameter boulder in the channel near the left bank. Although no cap was set at the bottom of the reach, we surveyed the old bridge footing on the left bank down by Gene Rickstrew's place intending that to be a benchmark for the lower part of the reach.

The data storage capsule is near the old USGS gauging station - right by their old cableway. Part of the cable still protrudes from the rock, about 5 feet downstream of the data storage capsule. This is a large rock outcrop on the right bank, a few hundred feet from the gorge.

Cross sections #1 and #2 are near the old USGS gauging station. Cross section #3 is underneath the powerlines by Lover's Leap. Cross section #4 is just upstream of the bridge. Cross section #5 is approximately 500 feet downstream from the bridge. Cross section #6 is at the old bridge site near Rickstrew's place.

The only photo points established for the Hyampom reach are from the bridge, looking upstream and downstream.

## **Salyer Reach**

Although closest to Eureka, the Salyer reach is the most difficult to survey. It begins at John Shocker's place, approximately river mile 6, and runs to the mouth of Old Campbell (previous to 1997 known as Madden) Creek, approximately river mile 1.5. Both these places are access points (use Sandy Bar for access to Old Campbell Creek). The only other access is at mile 3. The owner of "the mansion", Mr. McCoy, may be willing to permit access on his property given enough notice. John Shocker has been extremely kind and helpful; allowing us access with short notice and letting us camp on his property.

The biggest problem with access to this reach is that the channel is confined and the water is deep. Swimming or boating is required. The survey equipment we used was not waterproof so we used a canoe to transport it from station to station. This required extra time for shuttling vehicles, and because this reach can generally only be traveled in one direction (downstream).

There are four benchmarks. The reach starts at an old property corner on John Shocker's land (the property boundary has been moved but the marker remains). It looks like a fat piece of rebar with a stout cap and sits right next to the cliff on the right bank. The reach starts here. The second monument is a brass cap set by Forest Service surveyors. It is on the terrace at mile 3, sort of on the northwest end of the terrace, in what used to be the road (no longer driveable). Several bearing trees are there to help you. We set the data storage capsule here about 5 feet from the cap. The third benchmark is a property corner (aluminum cap on pipe) up the hillside on the left bank about mile 2.3 (south section 22). The fourth benchmark is a brass cap we installed in a crack in the rock on the right bank across from the mouth of Old Campbell Creek. The rock outcrop there is in two pieces. The cap is on the north end of the south piece (i.e., hike up the rock from the south side).

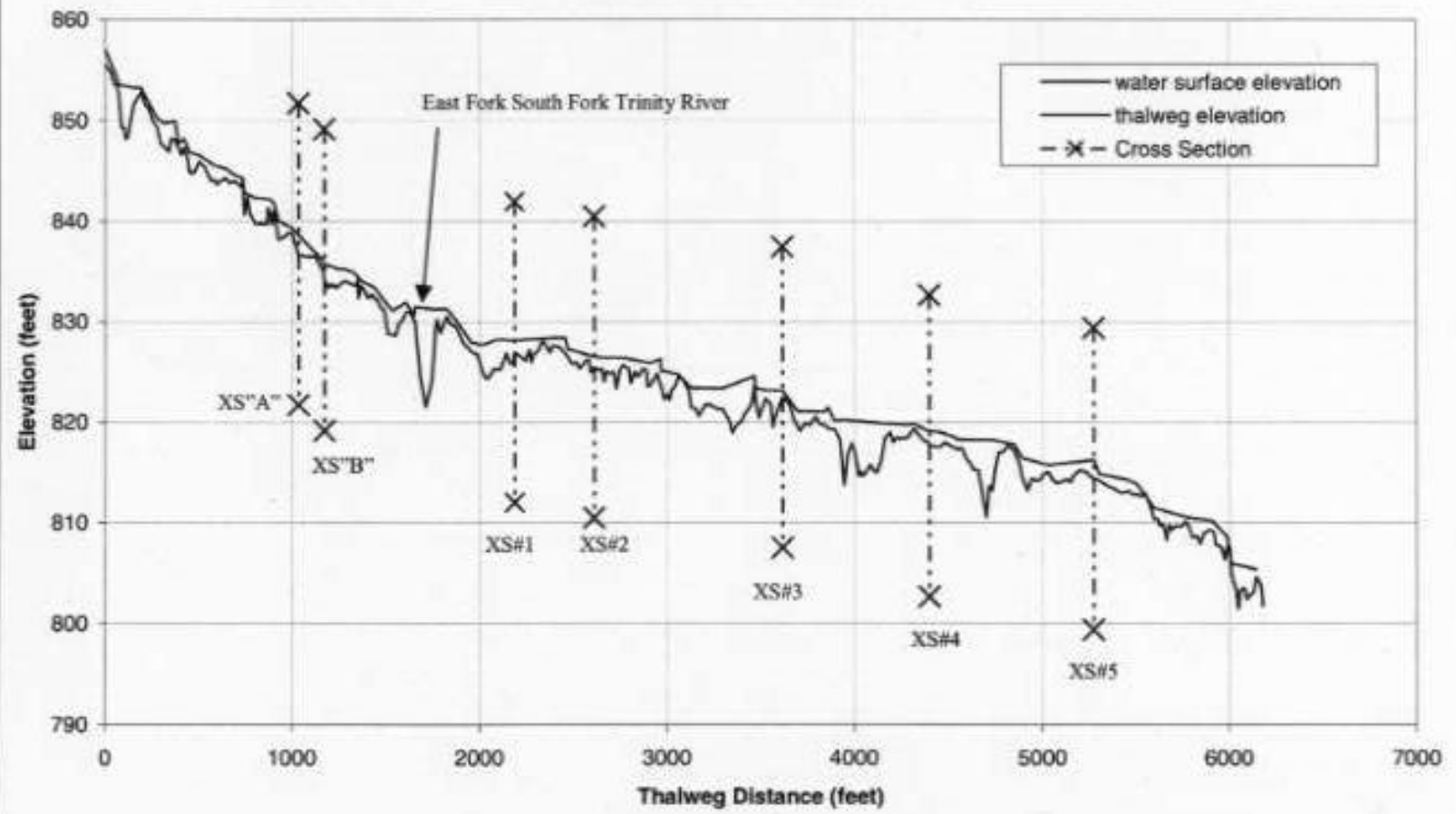
Cross section #1 is the USGS Salyer gauge site (although it is outside of the section where the profile was surveyed). Cross section #2 is just downstream from Mahala Creek. Cross section #3 is just upstream of mile 3. Cross sections #4 and #5 are in section 22, cross section #5 being right about mile 2.

Other than photos of the cross sections, no photo points were established for this reach. The top of the slide that comes down the left bank from FS Route 6 just upstream of Old Campbell Creek would be a good one.

Historical footnote: We always wondered why the USGS called their gauge "near Salyer" when the town is miles away and not even on the South Fork of the Trinity. Well, it turns out the historic Salyer ranch site was on the big terrace at mile 3.

## Appendix B: Plots

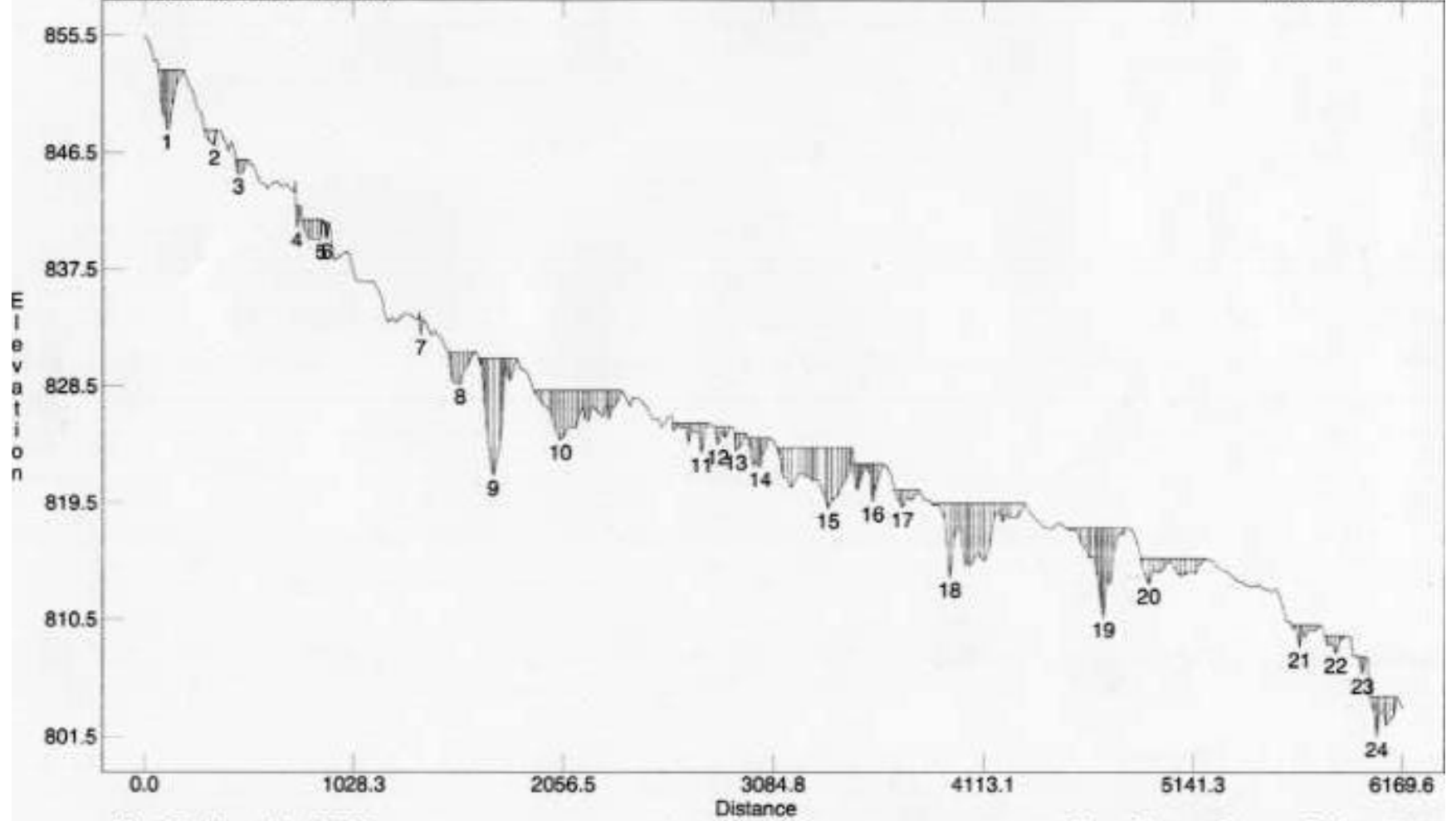
### Longitudinal Profile of Channel Bed - Route 30 Reach River Mile 72.75 to 73.75



South Fork Trinity River - RTE 30 Reach  
Surveyed 1998

MINIMUM POOL DEPTH: 1.00

POOL COUNT: 24

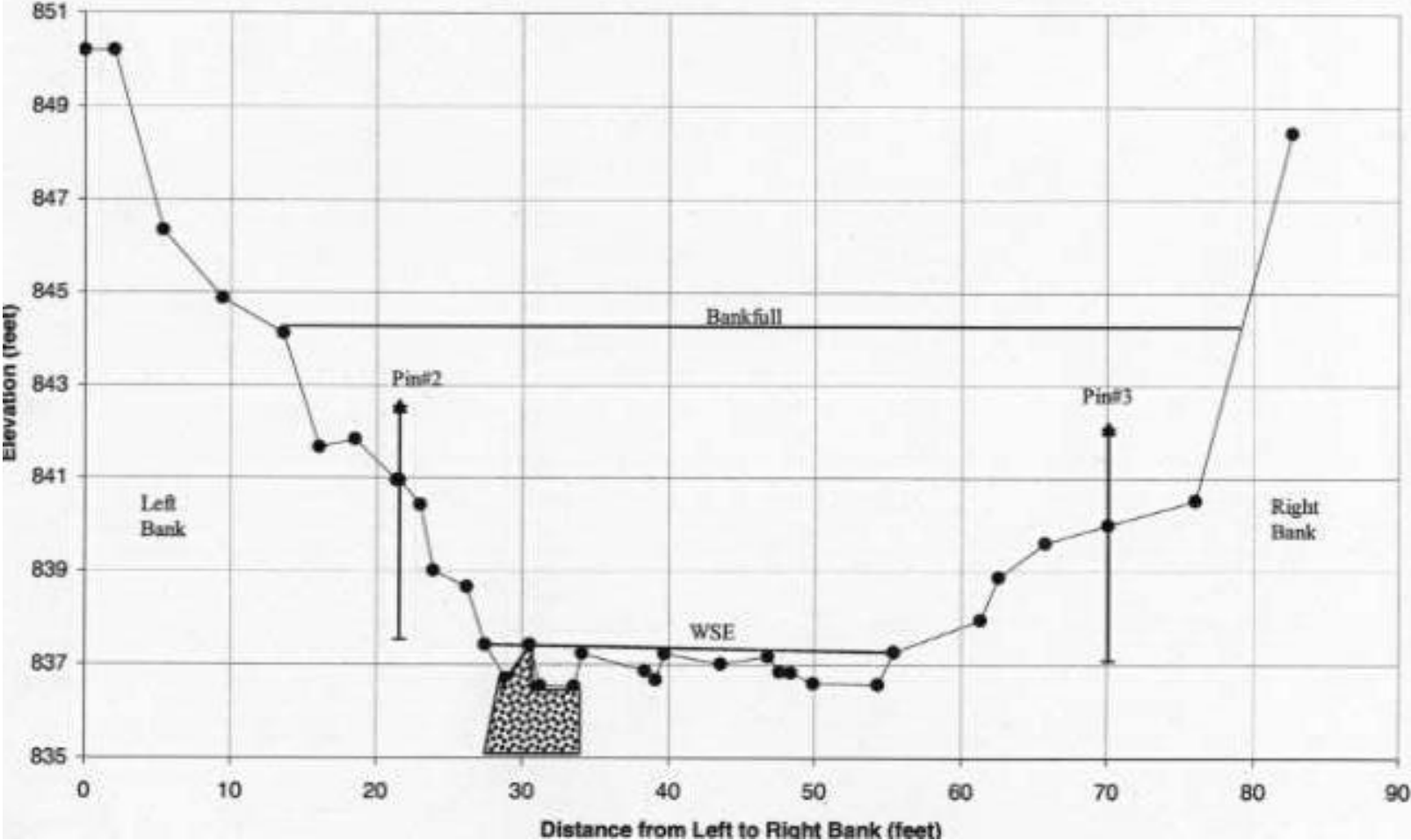


Mean Pool Length: 154.28  
Mean Riffle Length: 105.20

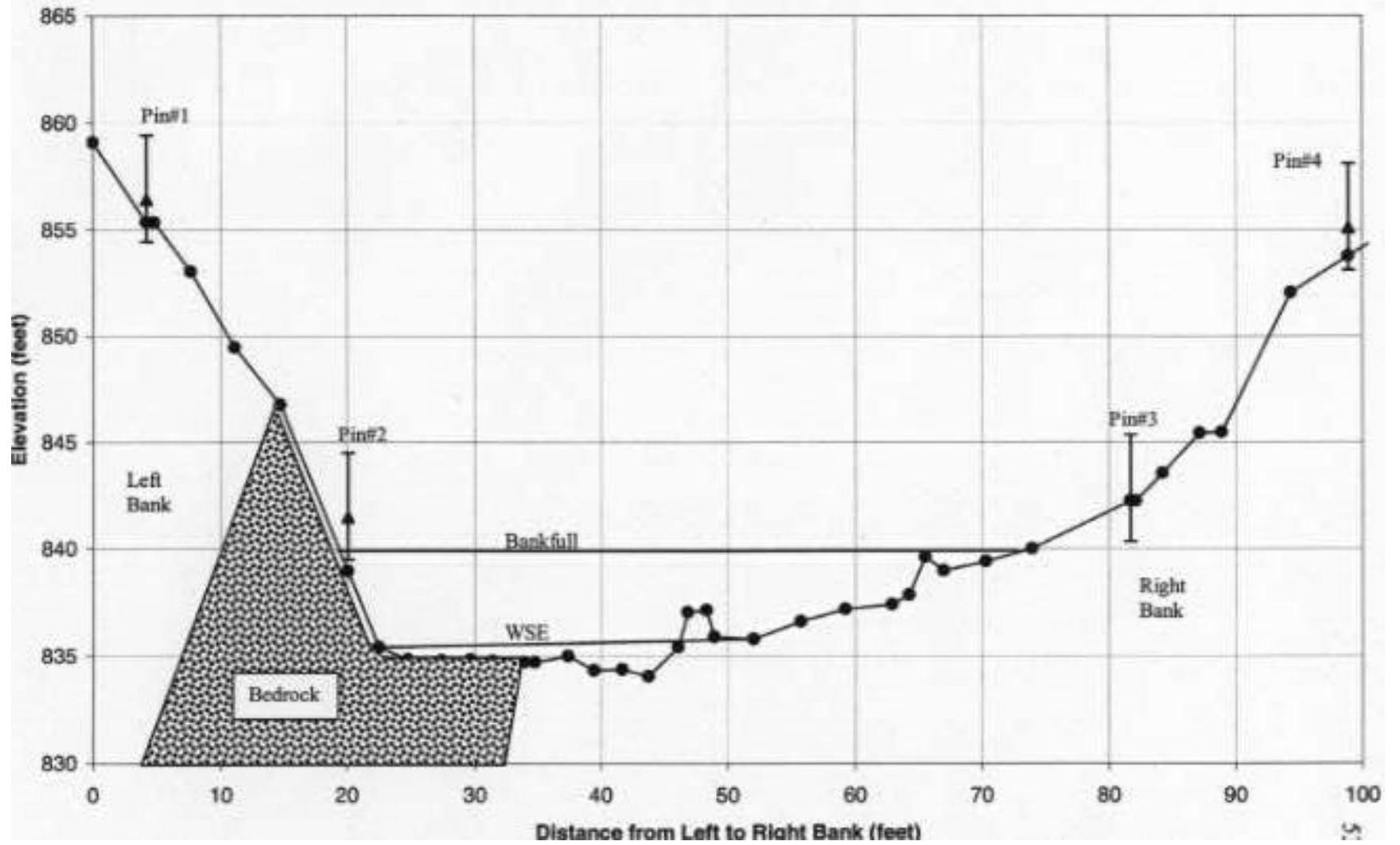
Mean Distance Between Pools: 258.15  
Mean Distance Between Riffles: 258.79



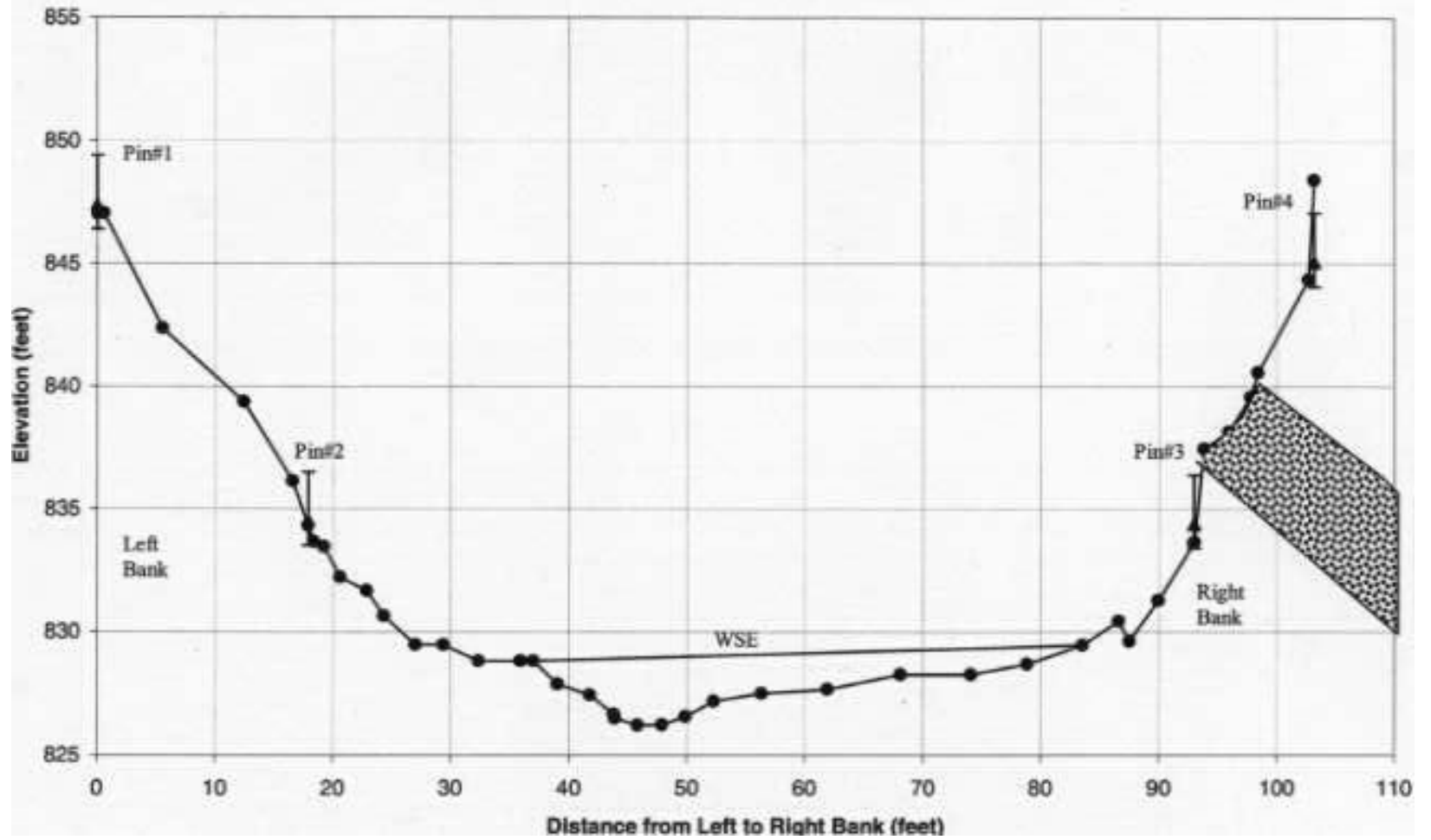
### Route 30 Reach, Cross Section A



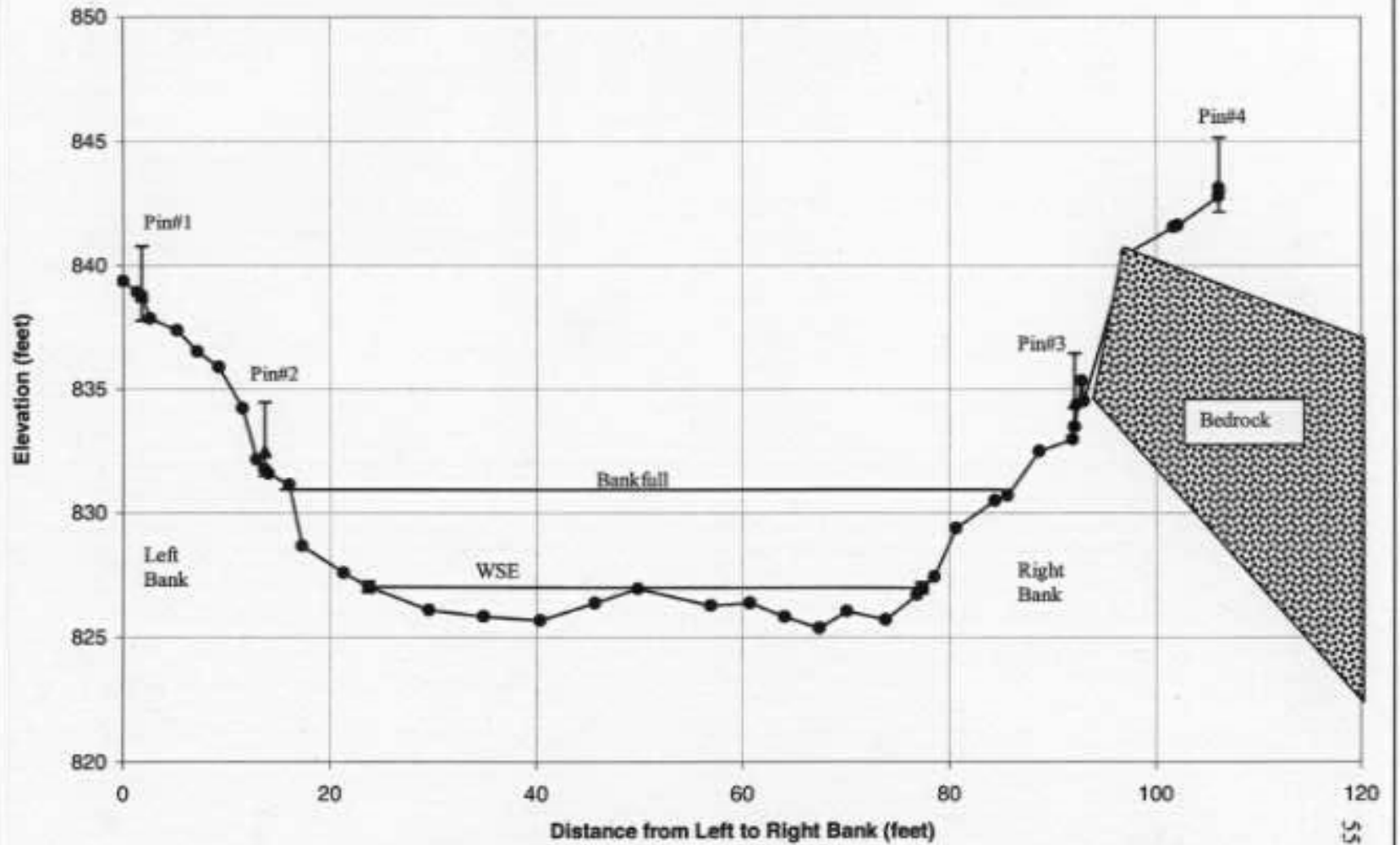
Route 30 Reach, Cross Section B



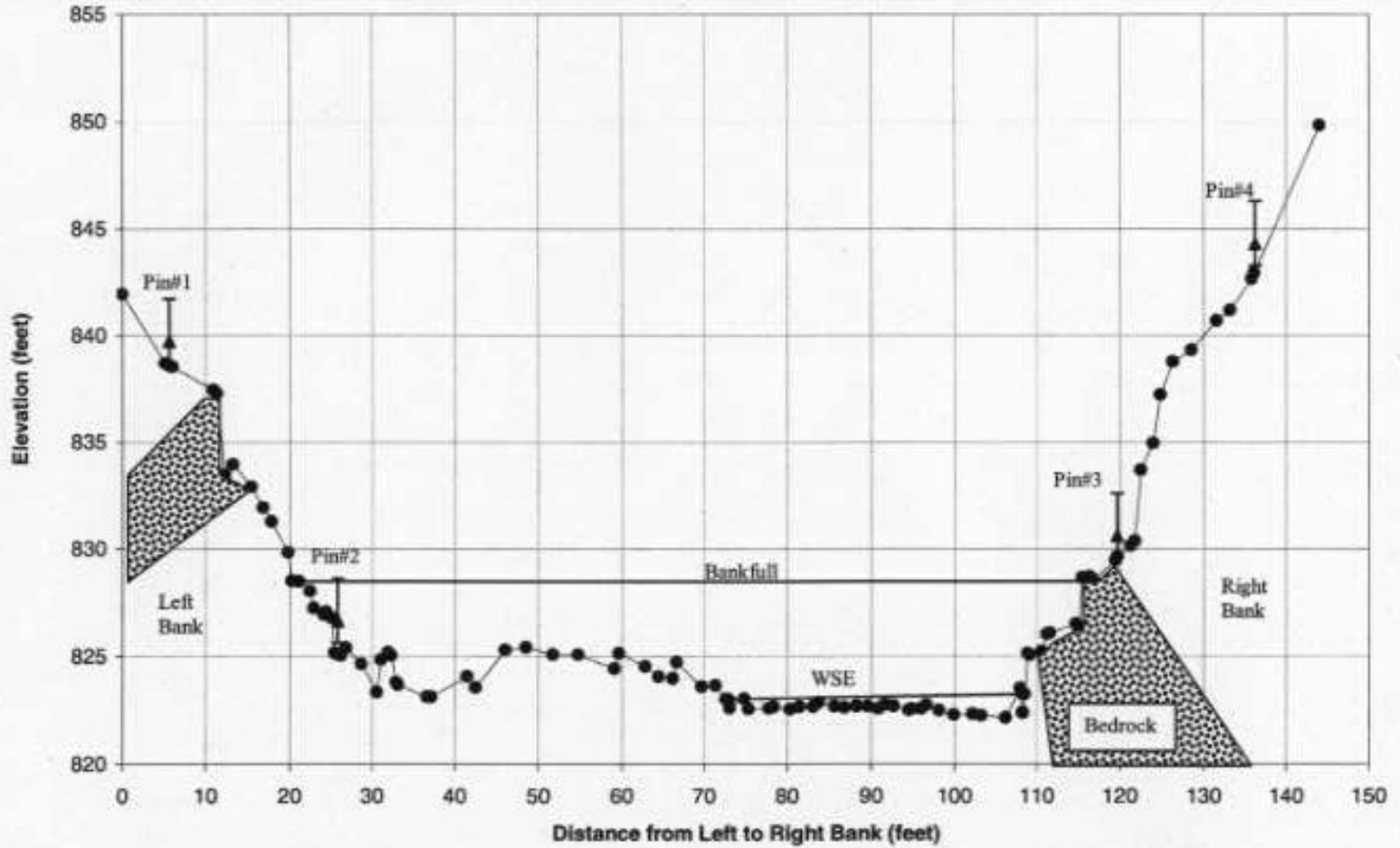
Route 30 Reach, Cross Section #1



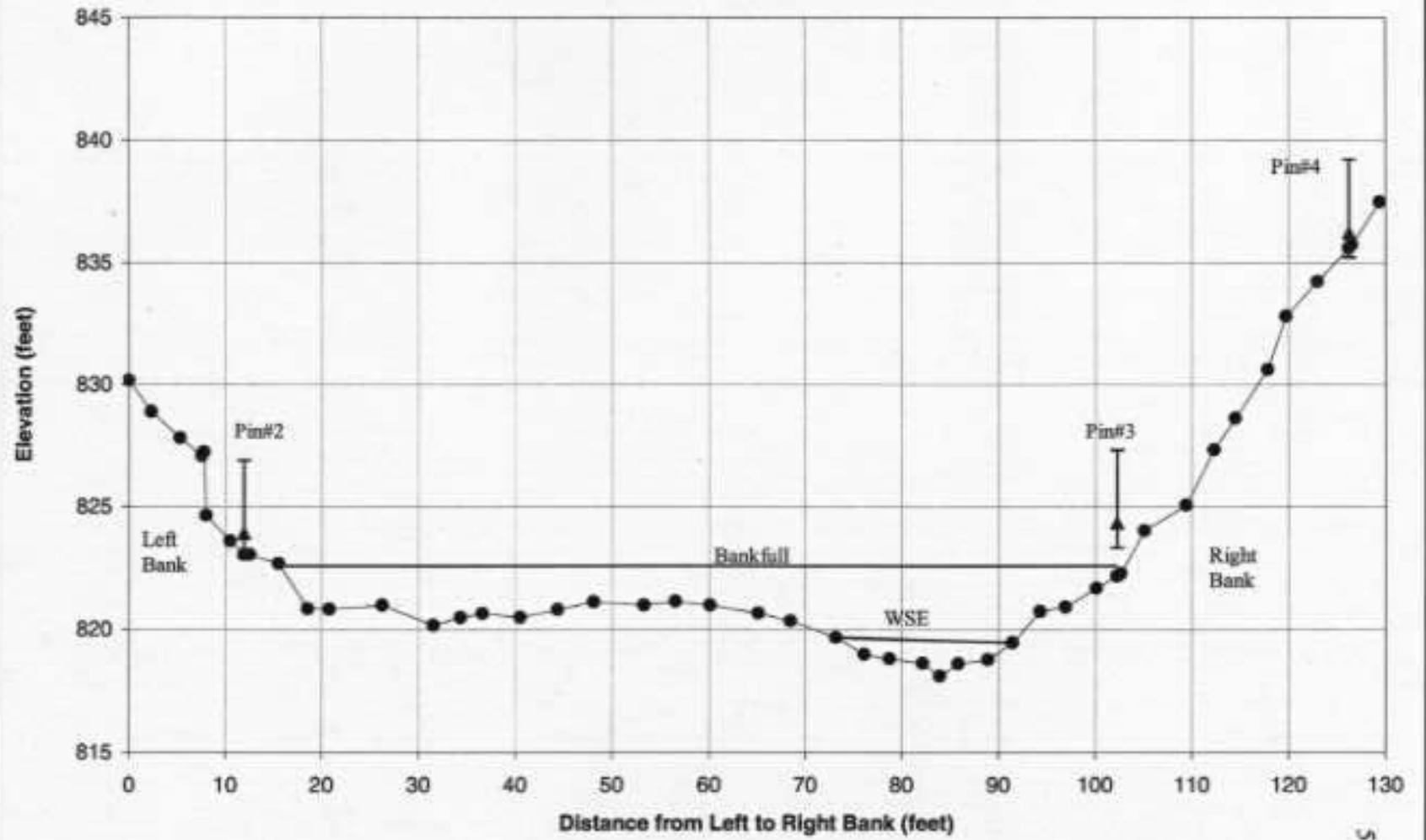
Route 30 Reach, Cross Section #2



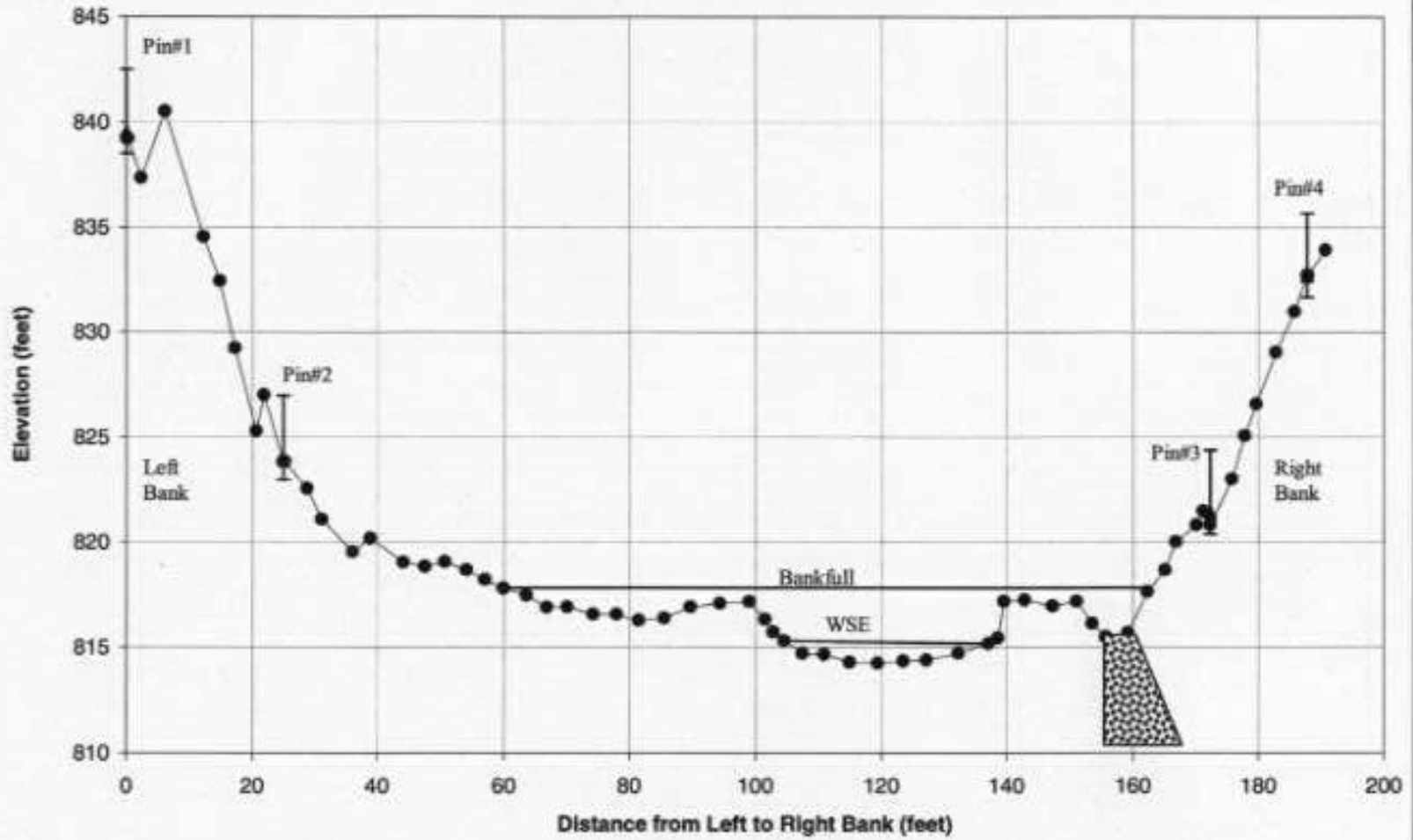
Route 30 Reach, Cross Section #3



Route 30 Reach, Cross Section #4

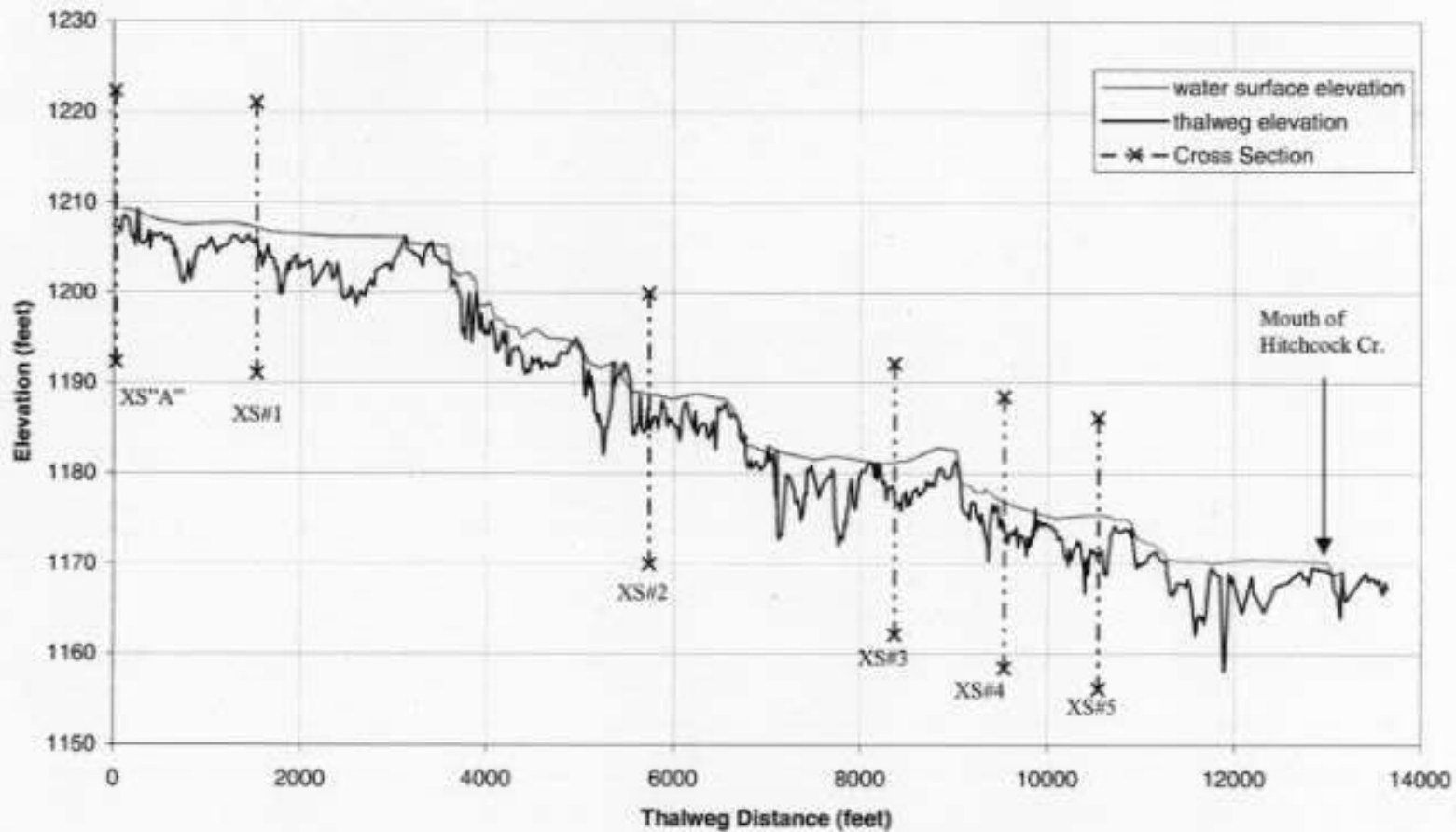


Route 30 Reach, Cross Section #5

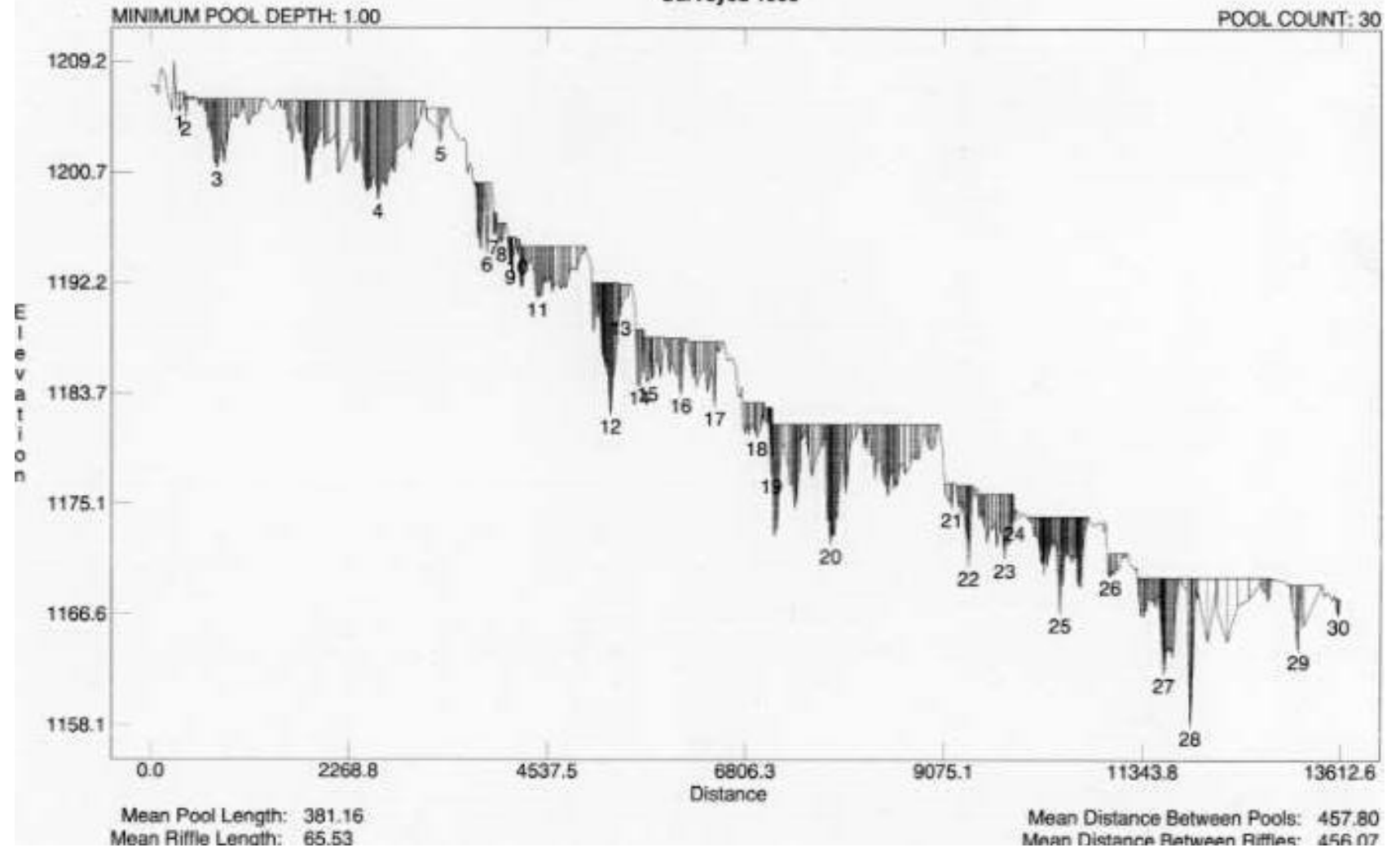




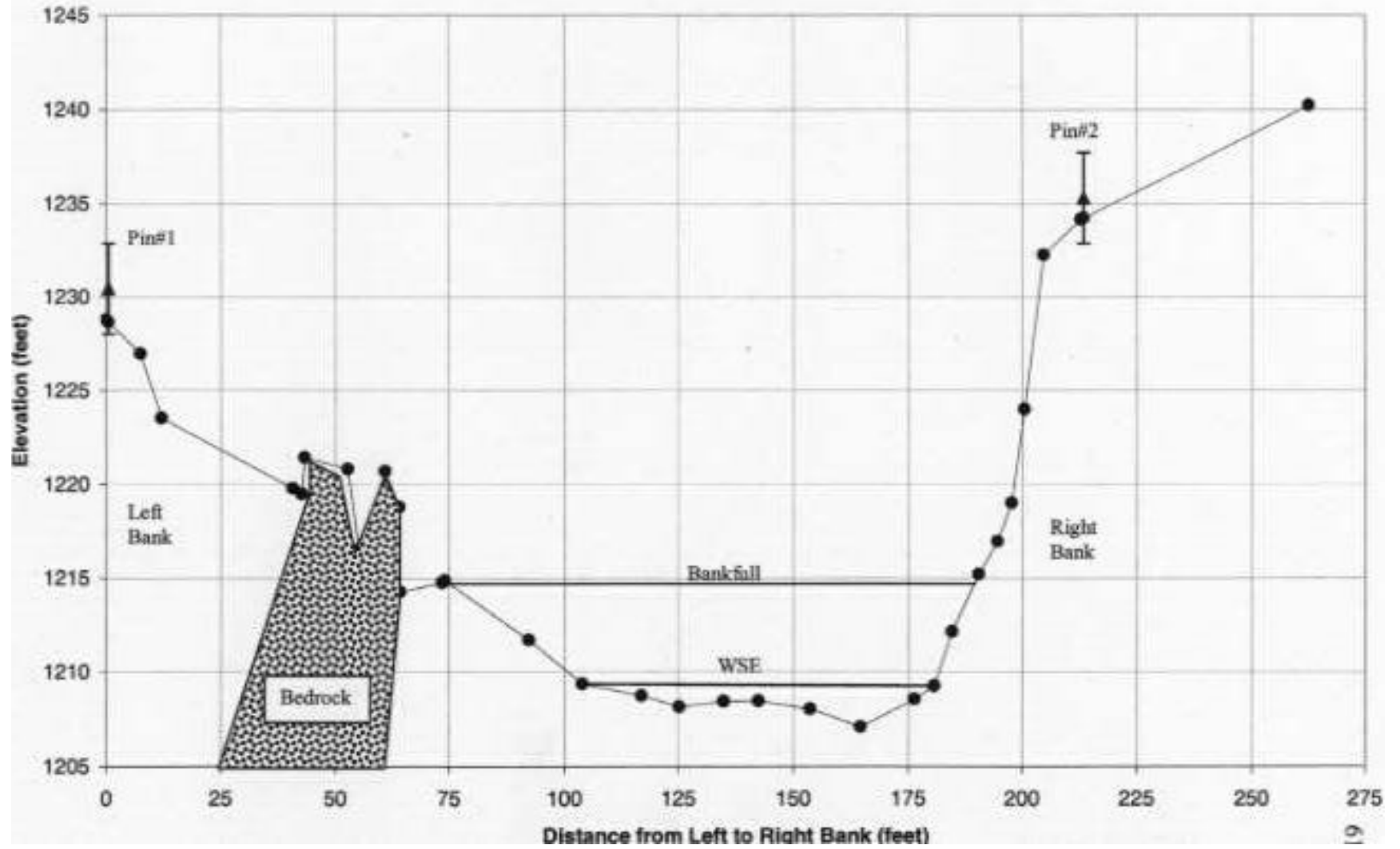
### Longitudinal Profile of Channel Bed - Sulphur Glade Reach River Mile 36.5 to 38.5



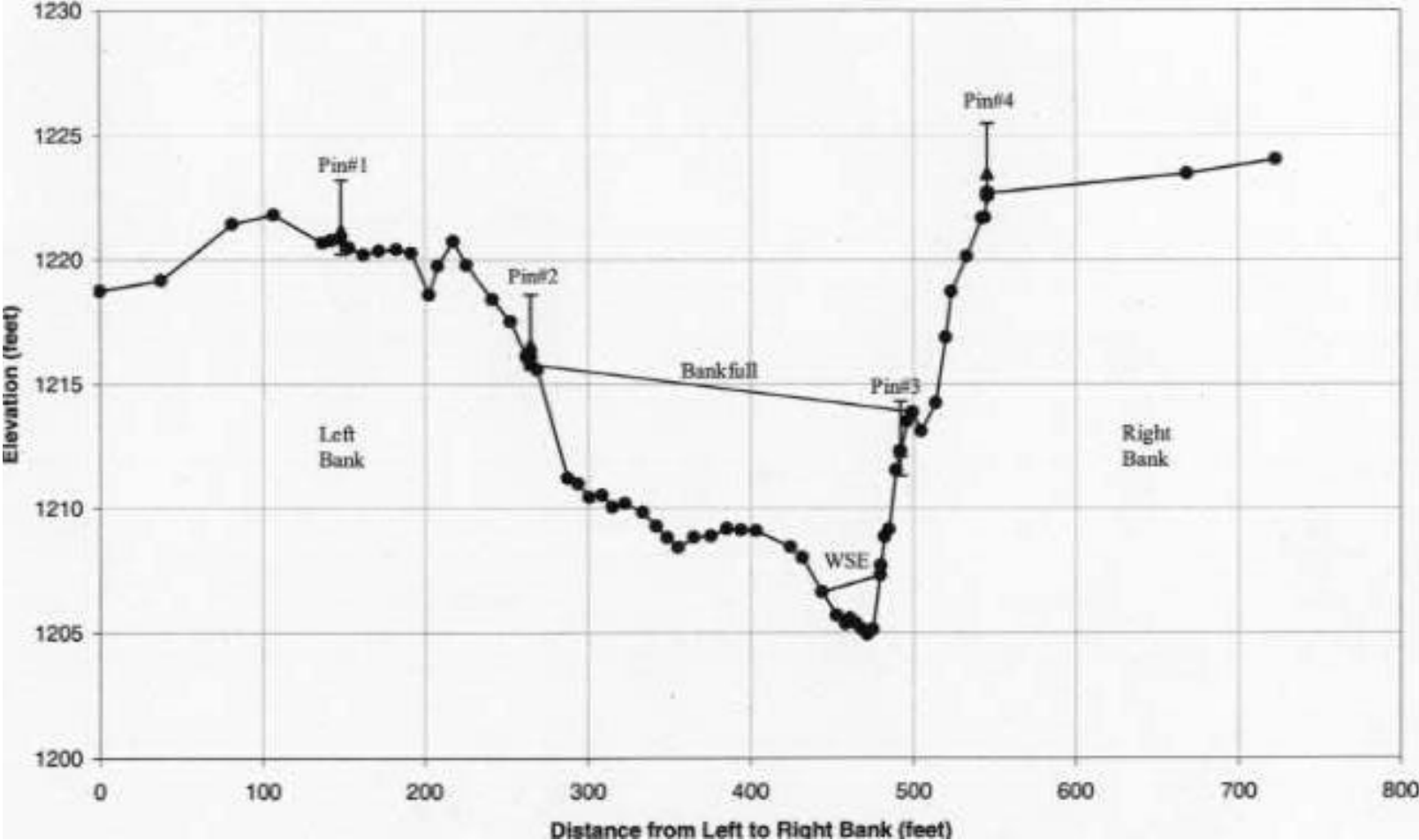
### South Fork Trinity River - Sulphur Glade Reach Surveyed 1998



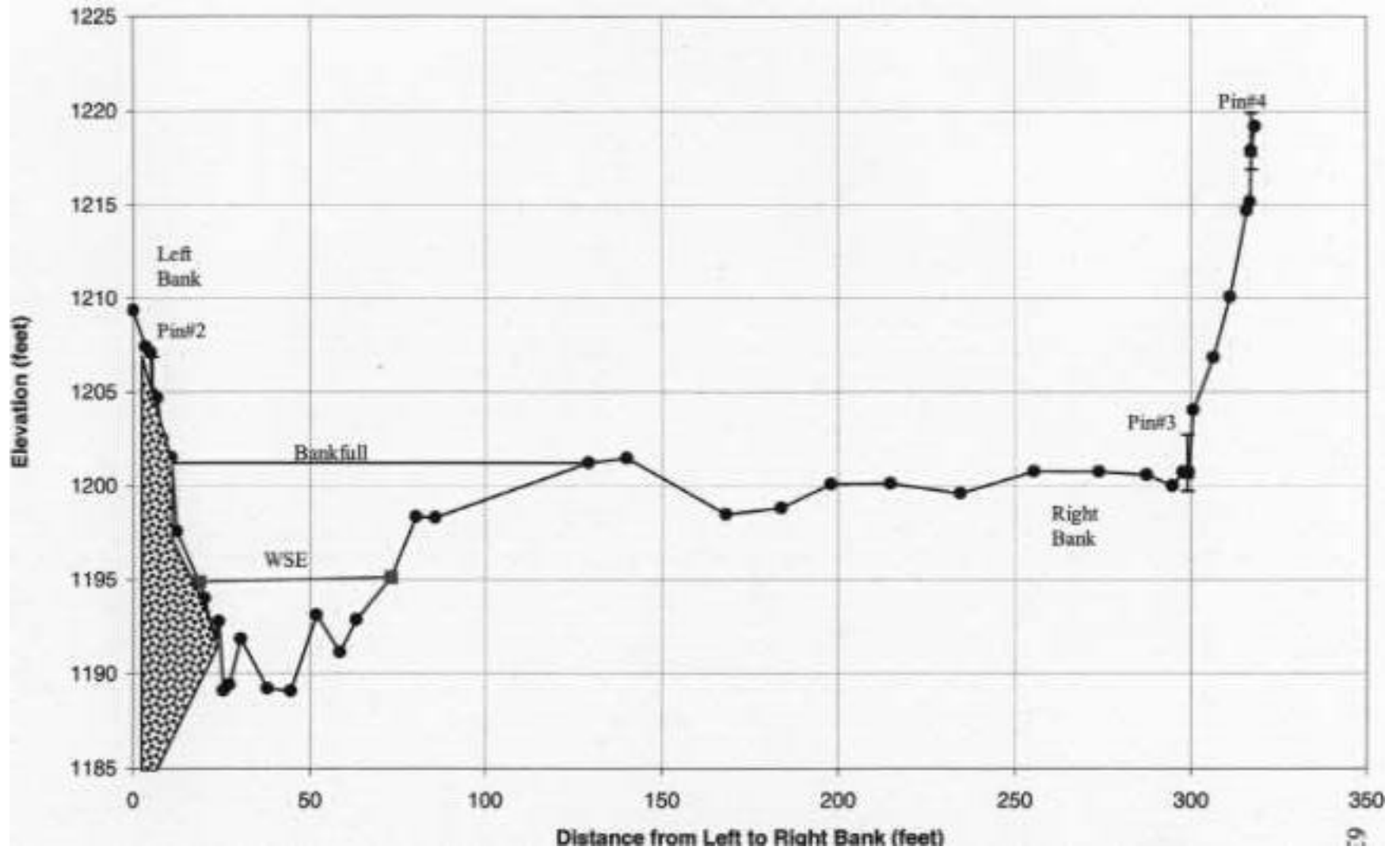
### Sulphur Glade Reach, Cross Section A



### Sulpher Glade Reach, Cross Section #1

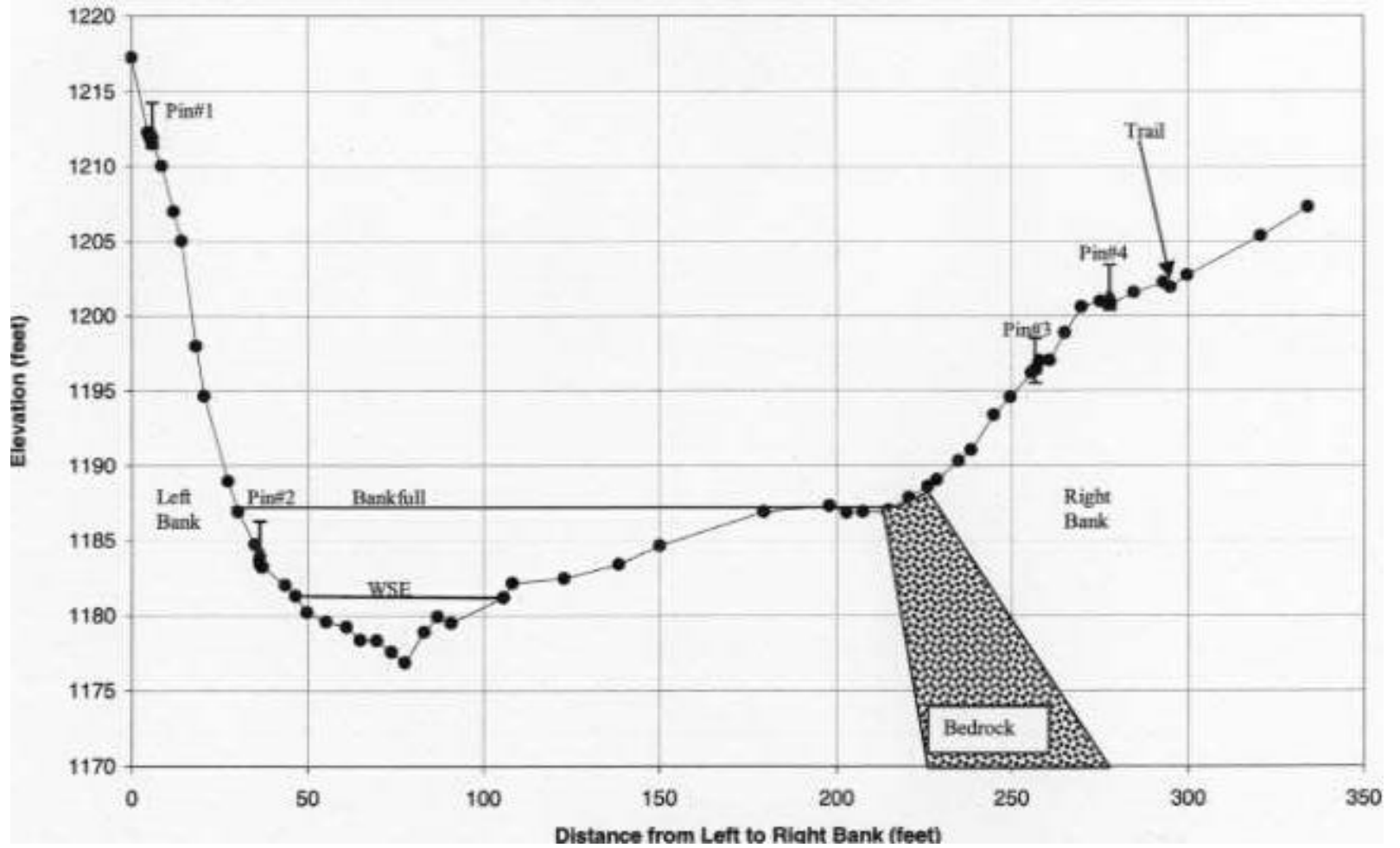


Sulpher Glade Reach, Cross Section #2

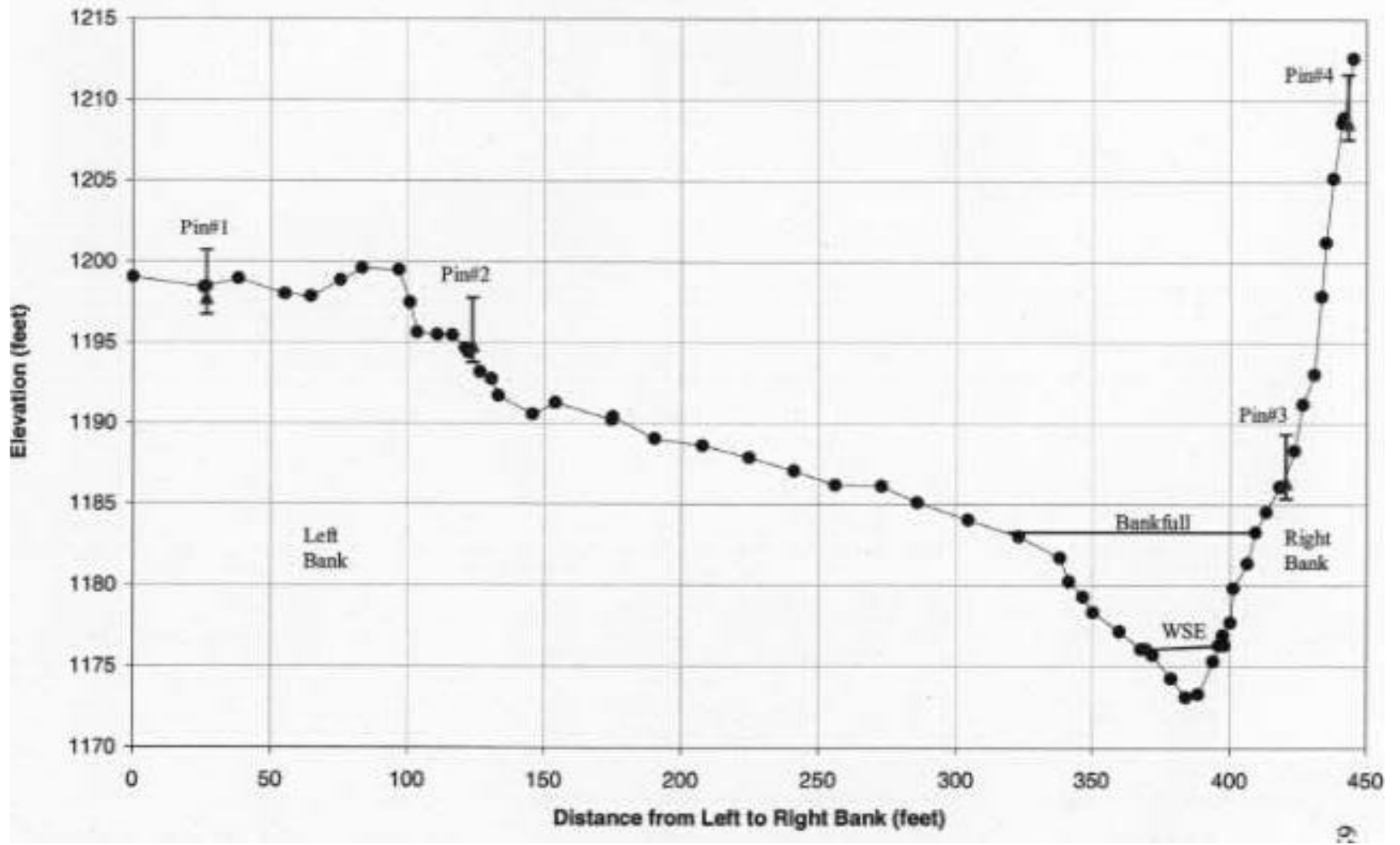




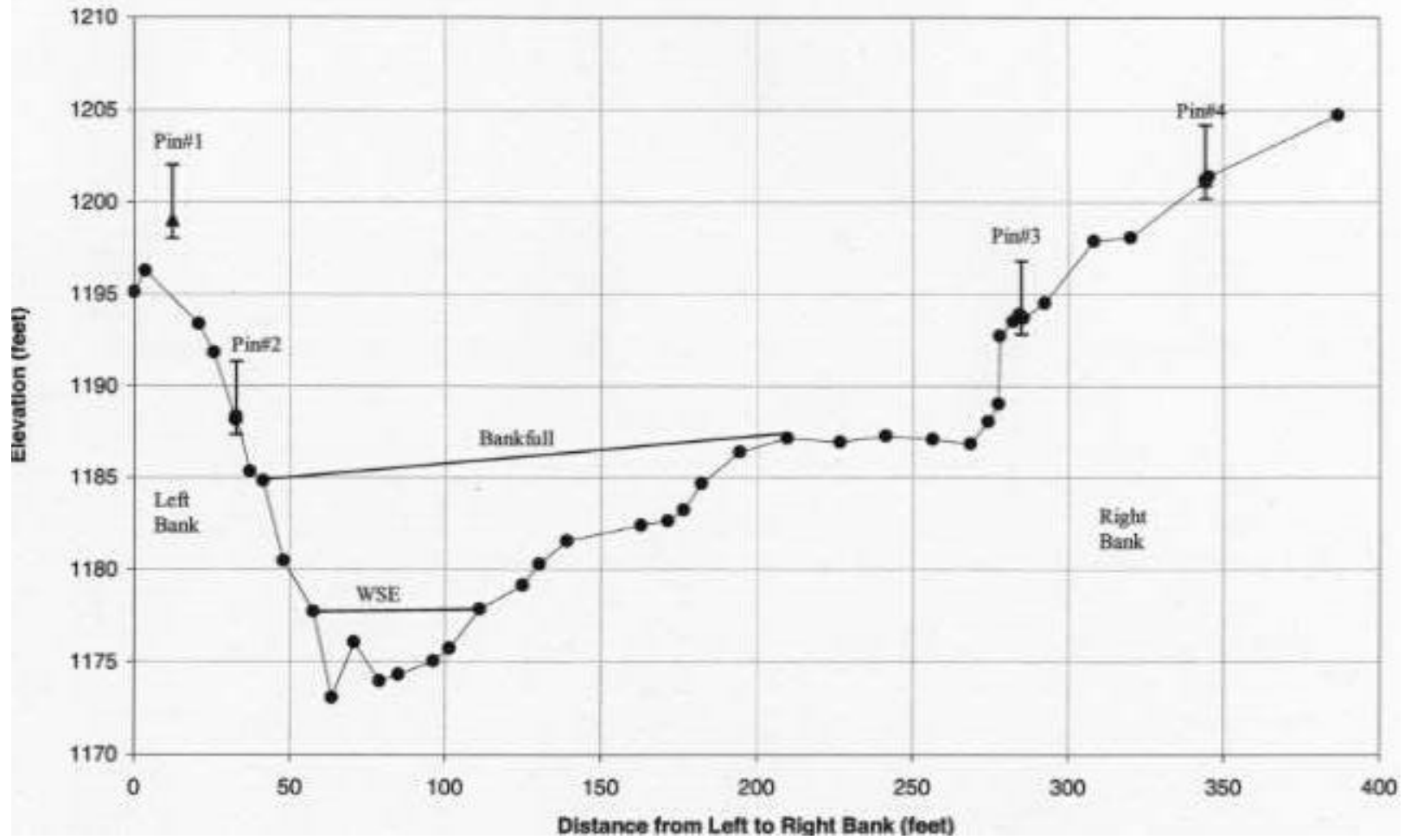
Sulpher Glade Reach, Cross Section #3



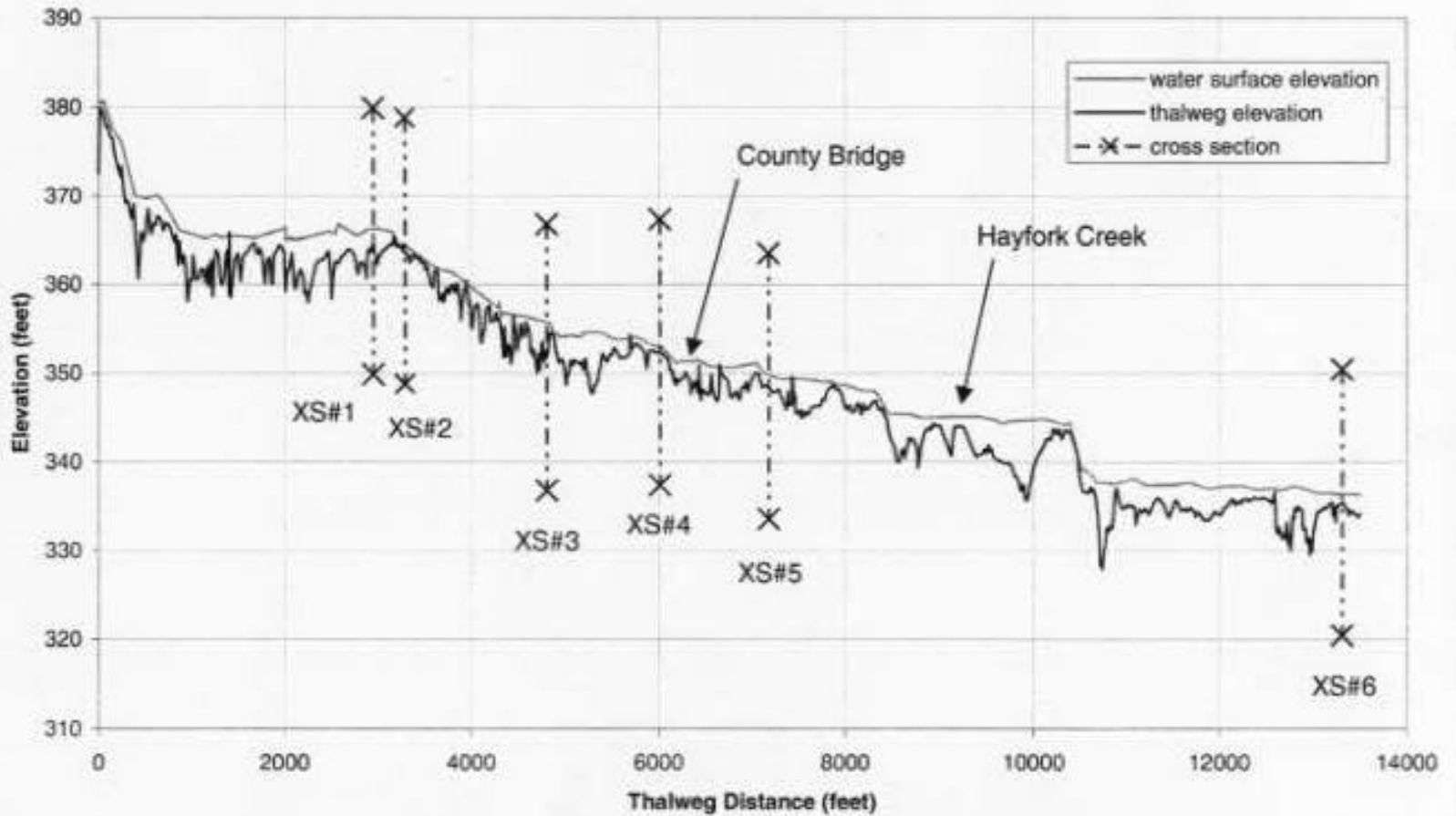
### Sulpher Glade Reach, Cross Section #4



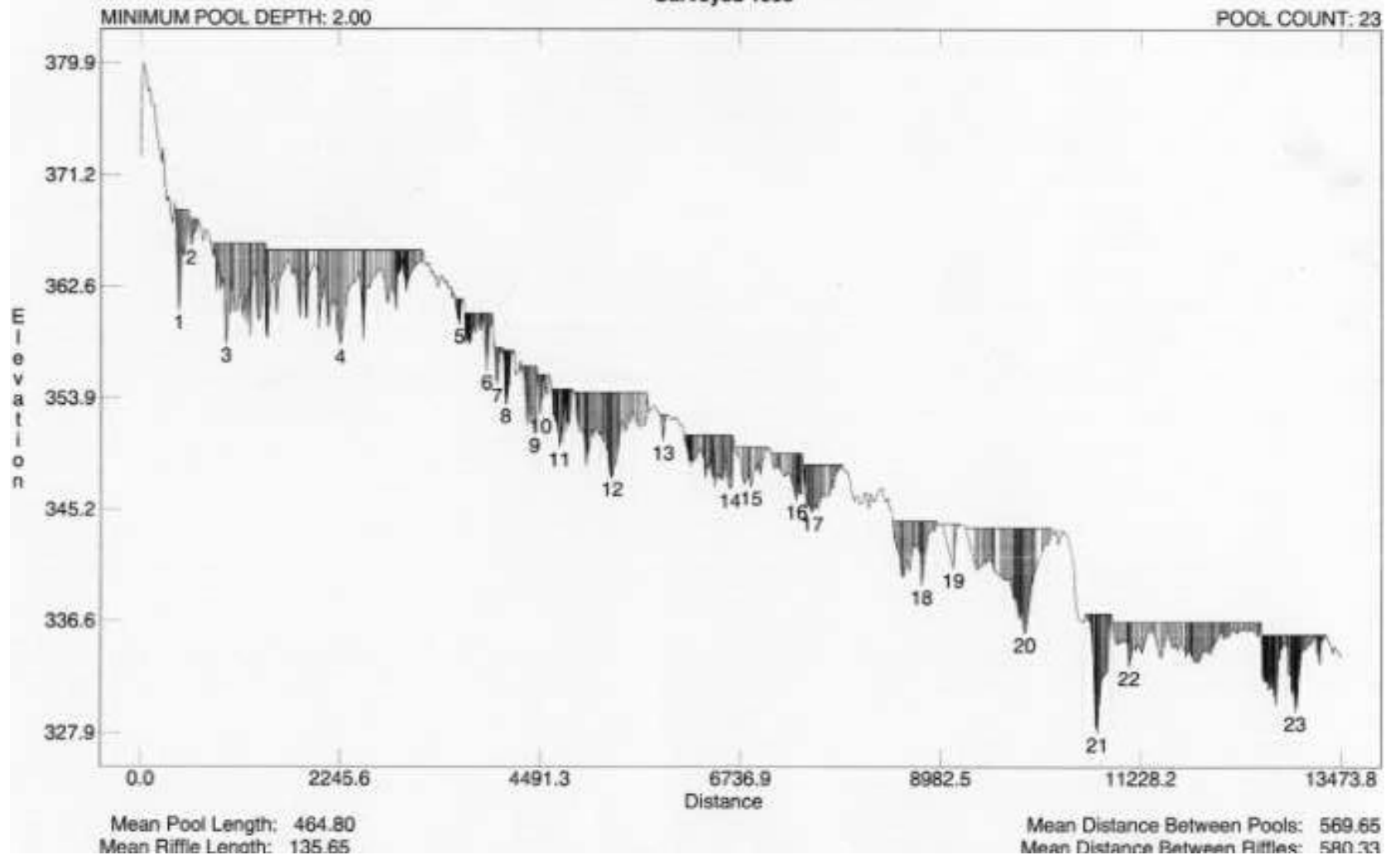
### Sulpher Glade Reach, Cross Section #5



Longitudinal Profile of Channel Bed - Hyampom Reach  
River Mile 29.5 to 31.6

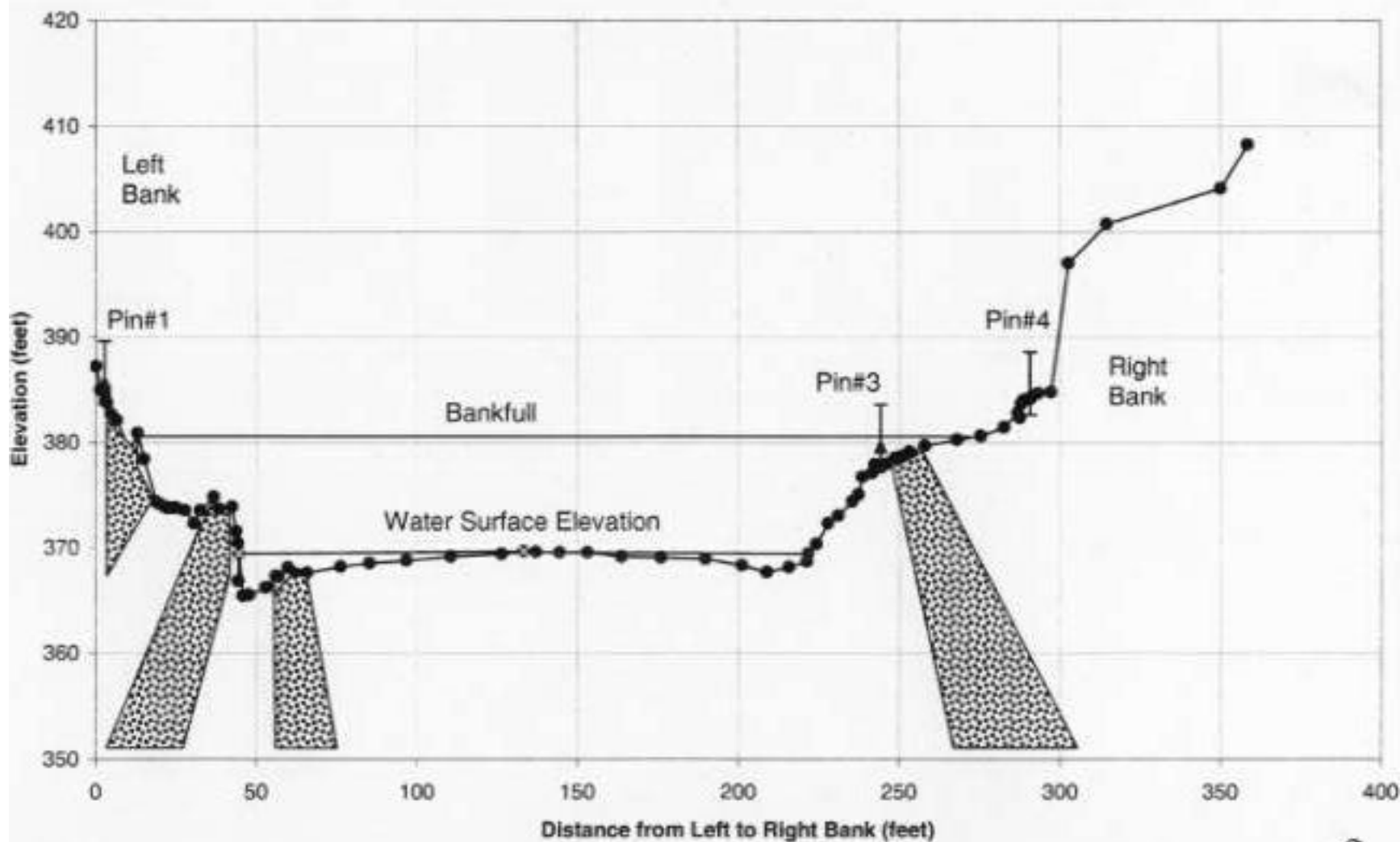


### South Fork Trinity River - Hyampom Reach Surveyed 1998

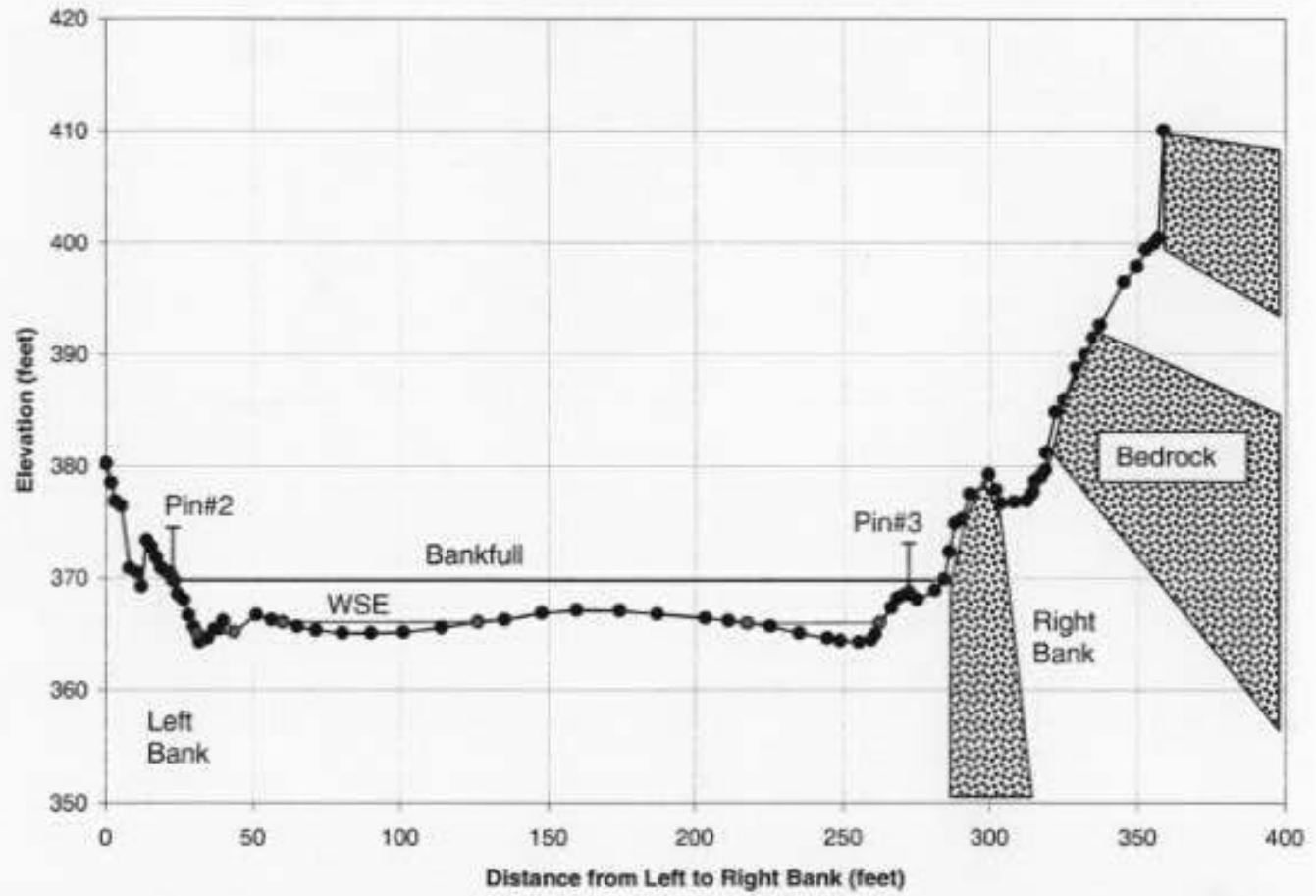




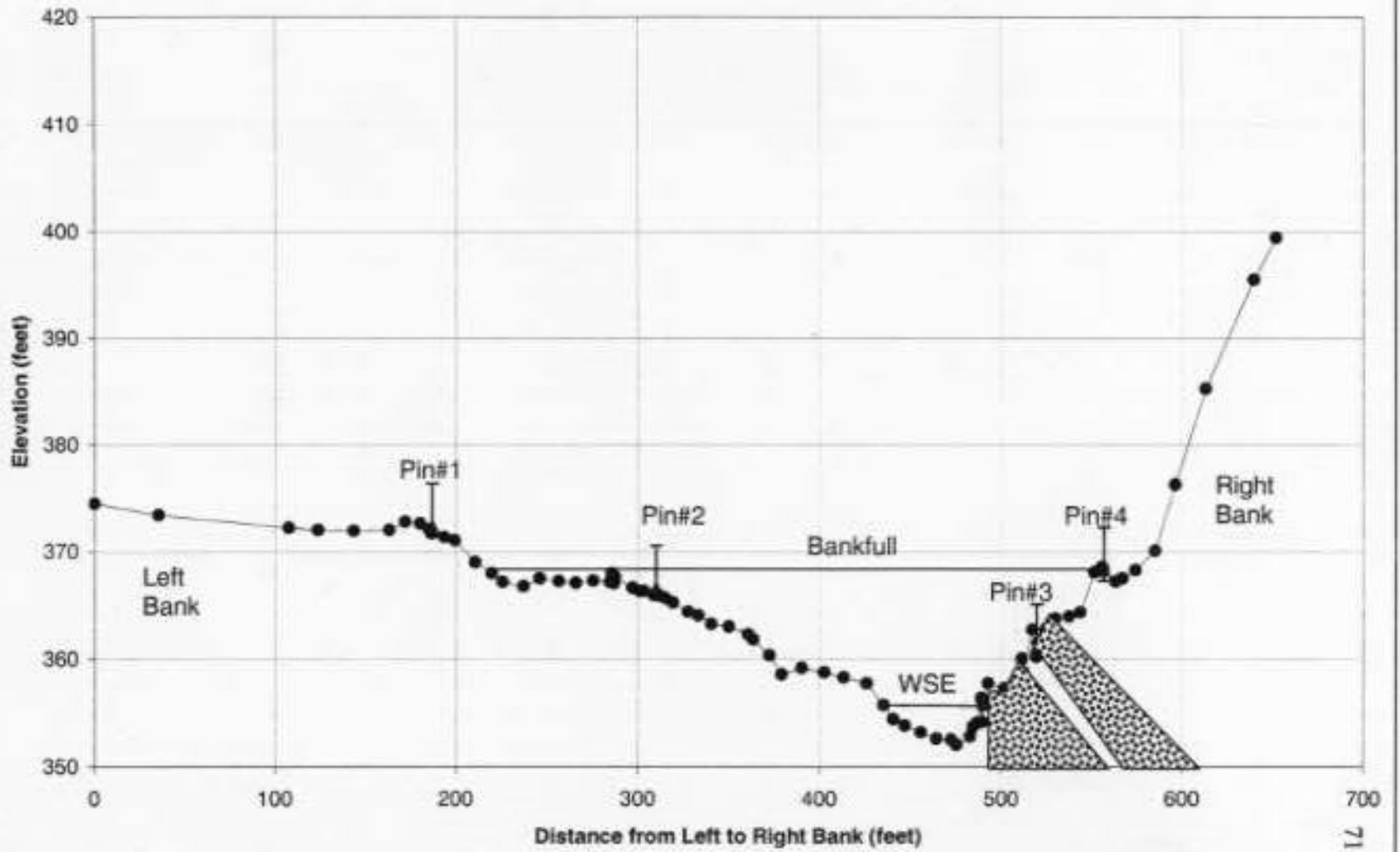
Hyampom Reach, Cross Section #1

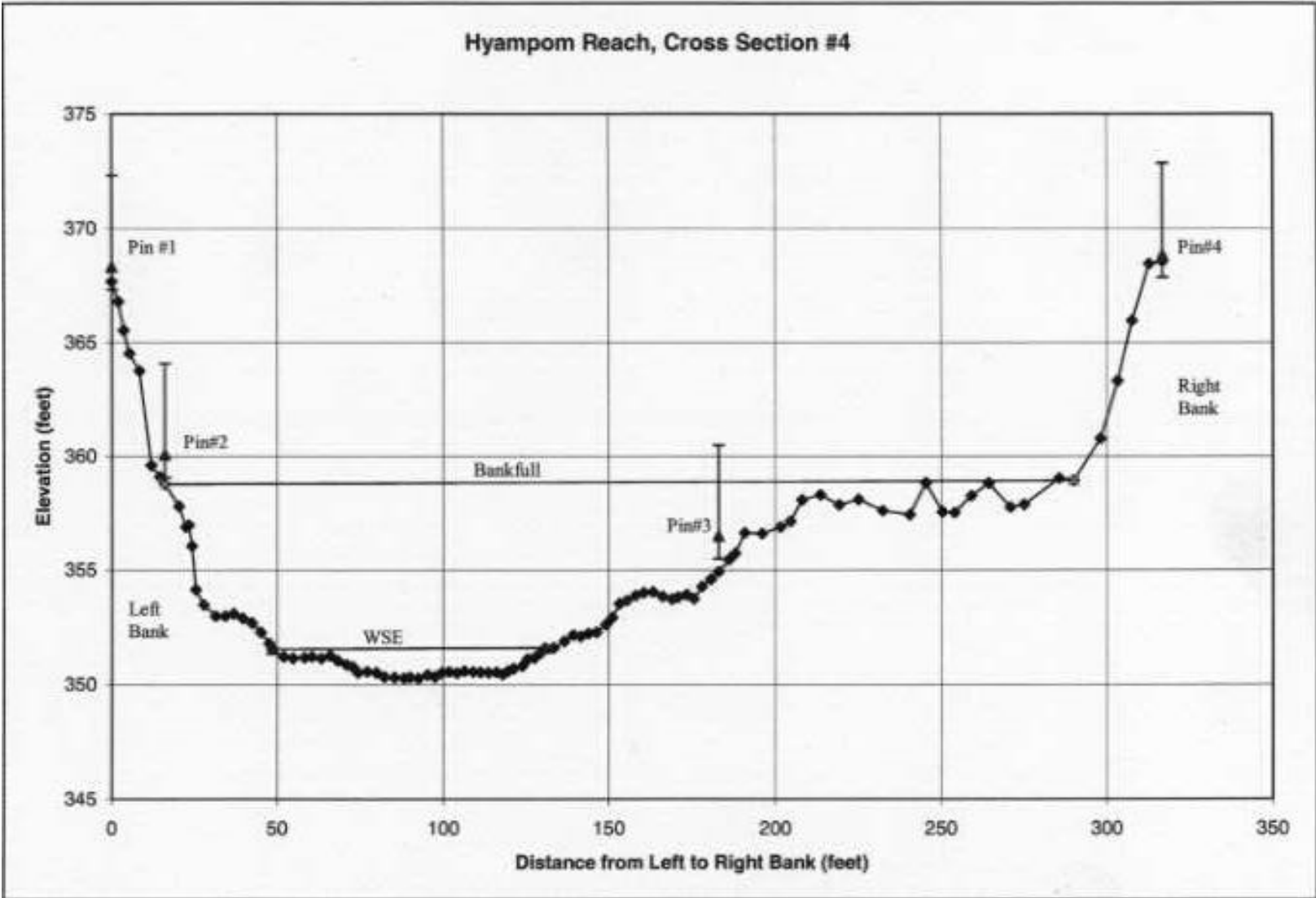


Hyampom Reach, Cross Section #2



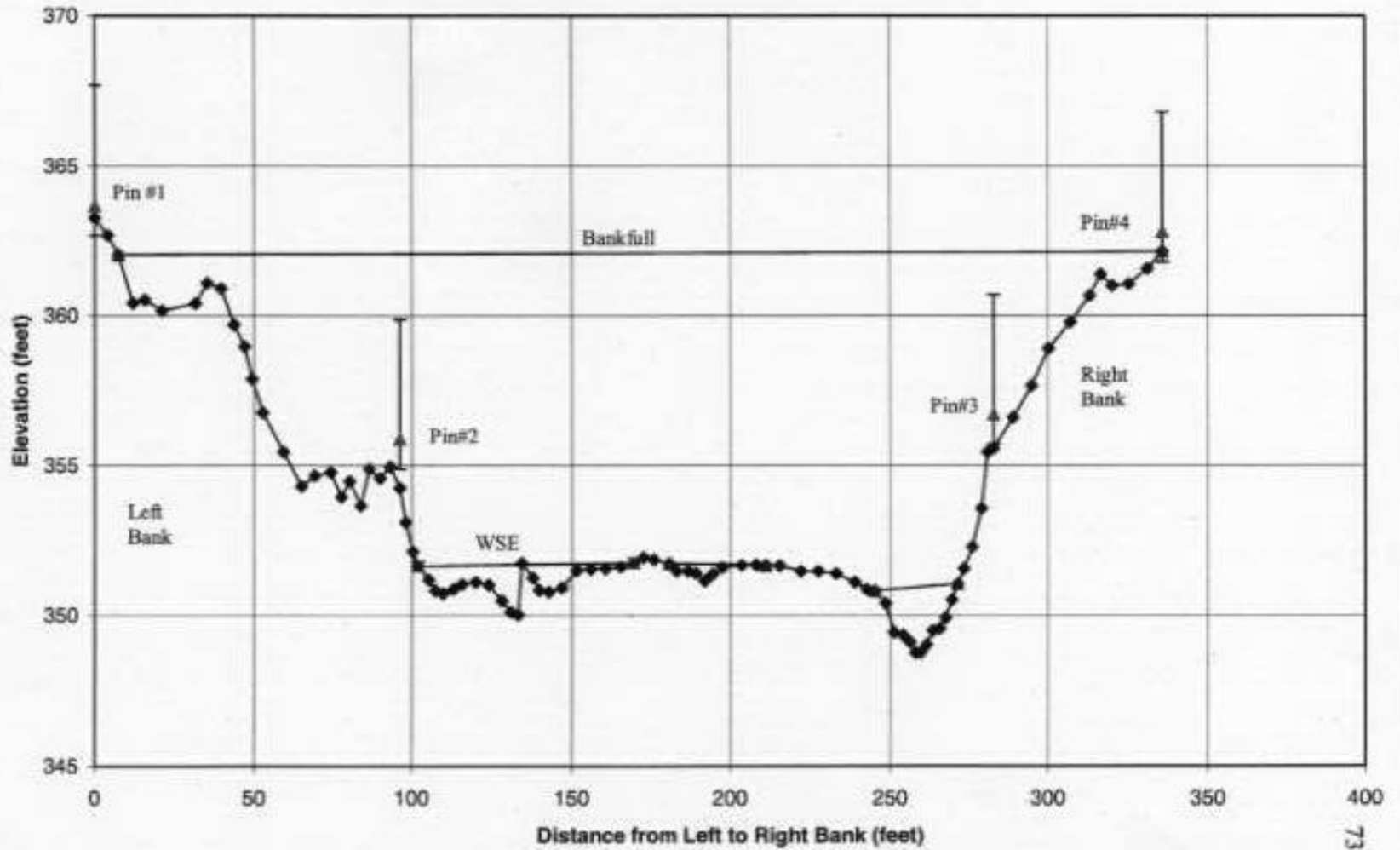
Hyampom Reach, Cross Section #3



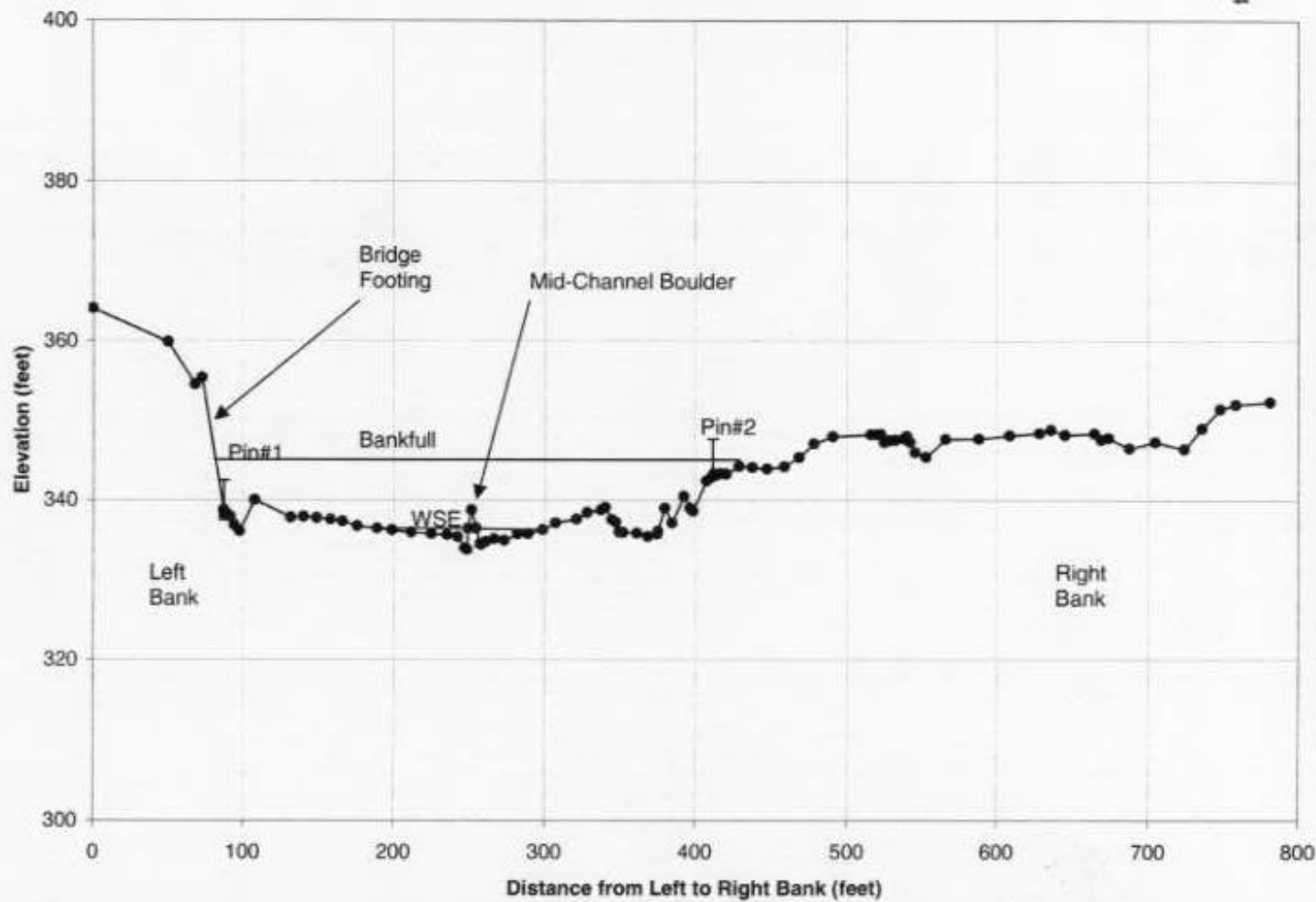




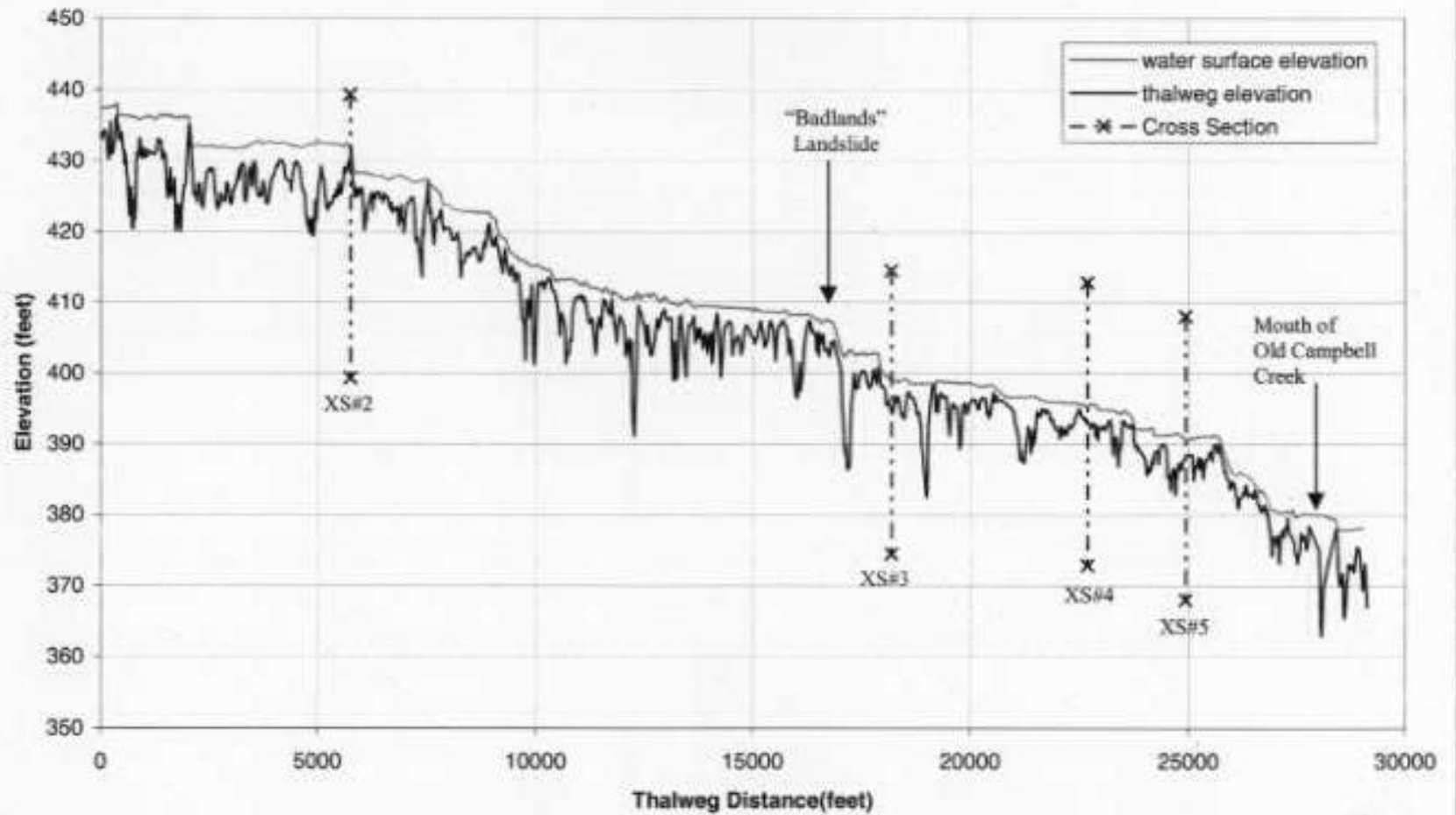
### Hyampom Reach, Cross Section #5

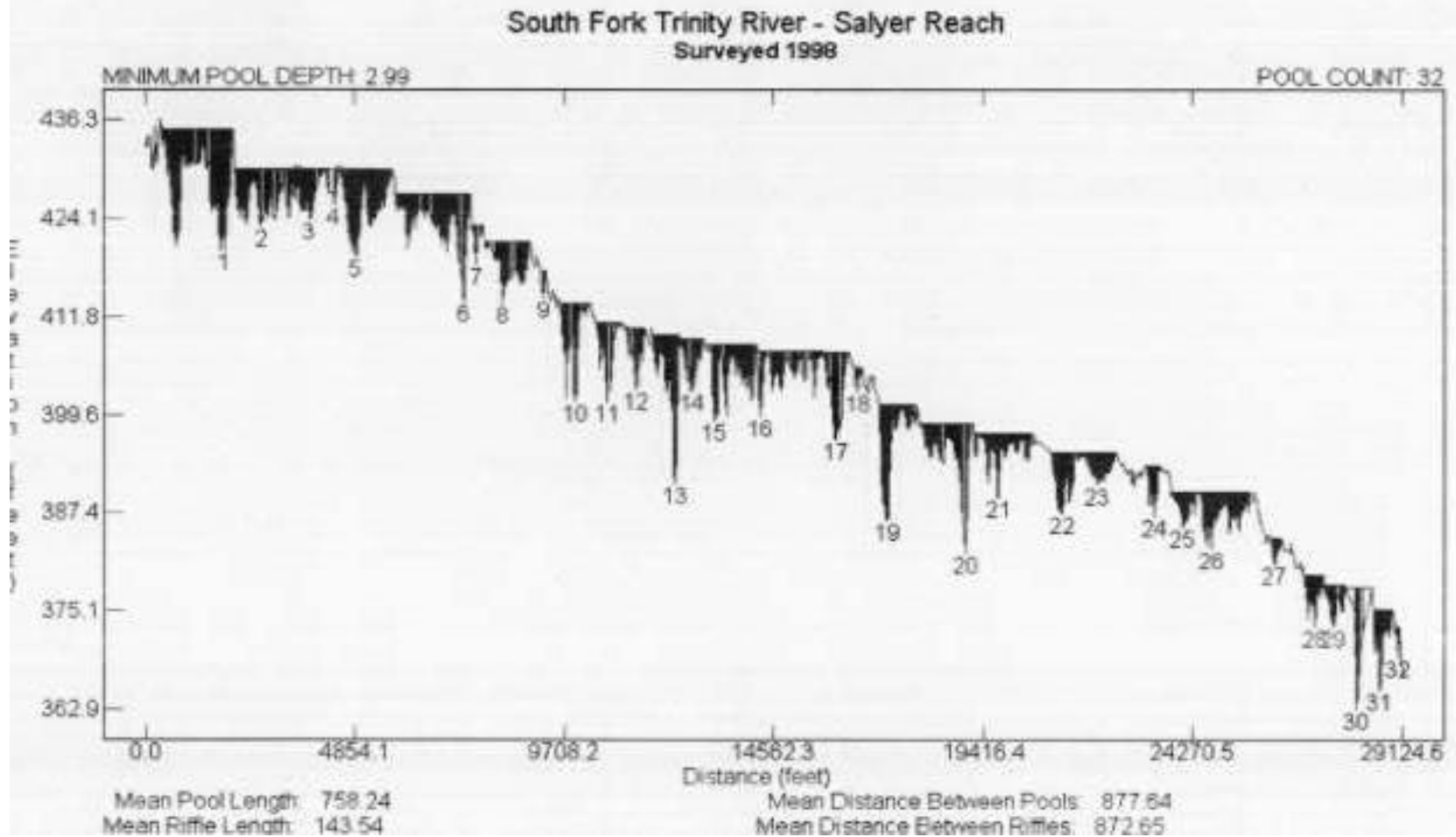


### Hyampom Reach, Cross Section #6



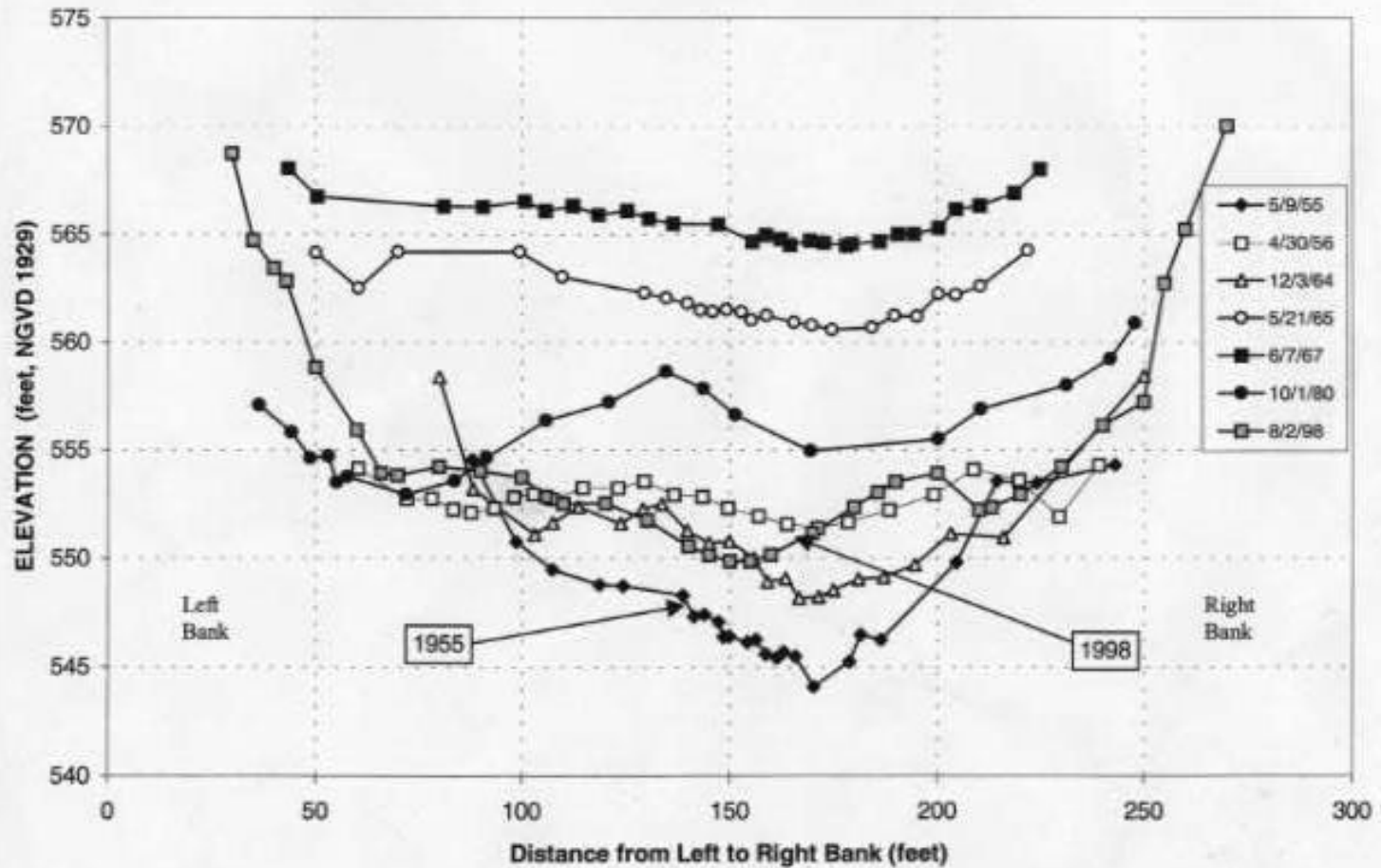
### Longitudinal Profile of Channel Bed - Salyer Reach River Mile 1.5 to 6.2



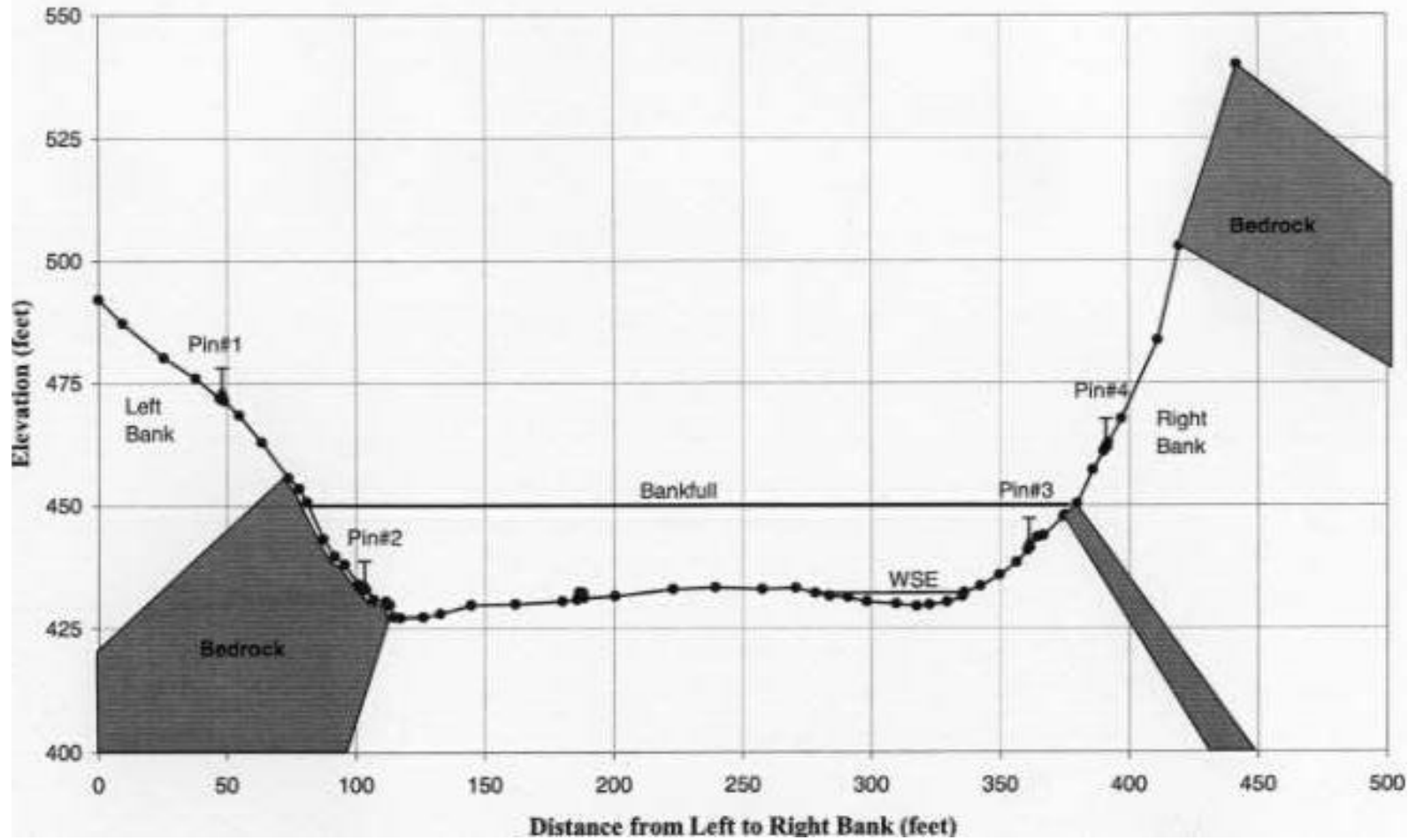




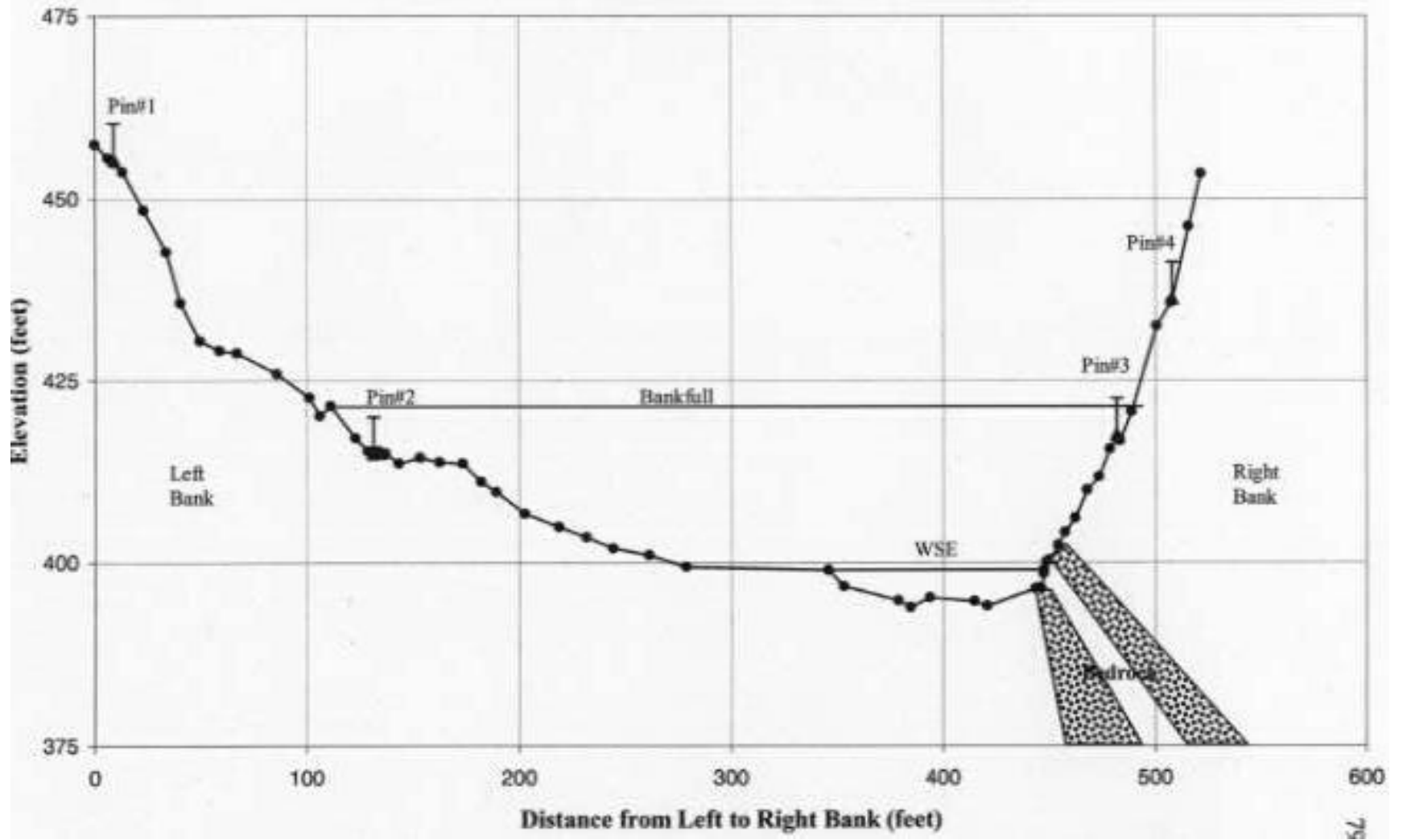
**Salyer Reach, XS#1**  
**Cross Sections from Cableway Discharge Measurements, DWR Surveys in 1980 and 1990, and**  
**1998 Field Surveys at Cableway Section for USGS Gage # 11529000**



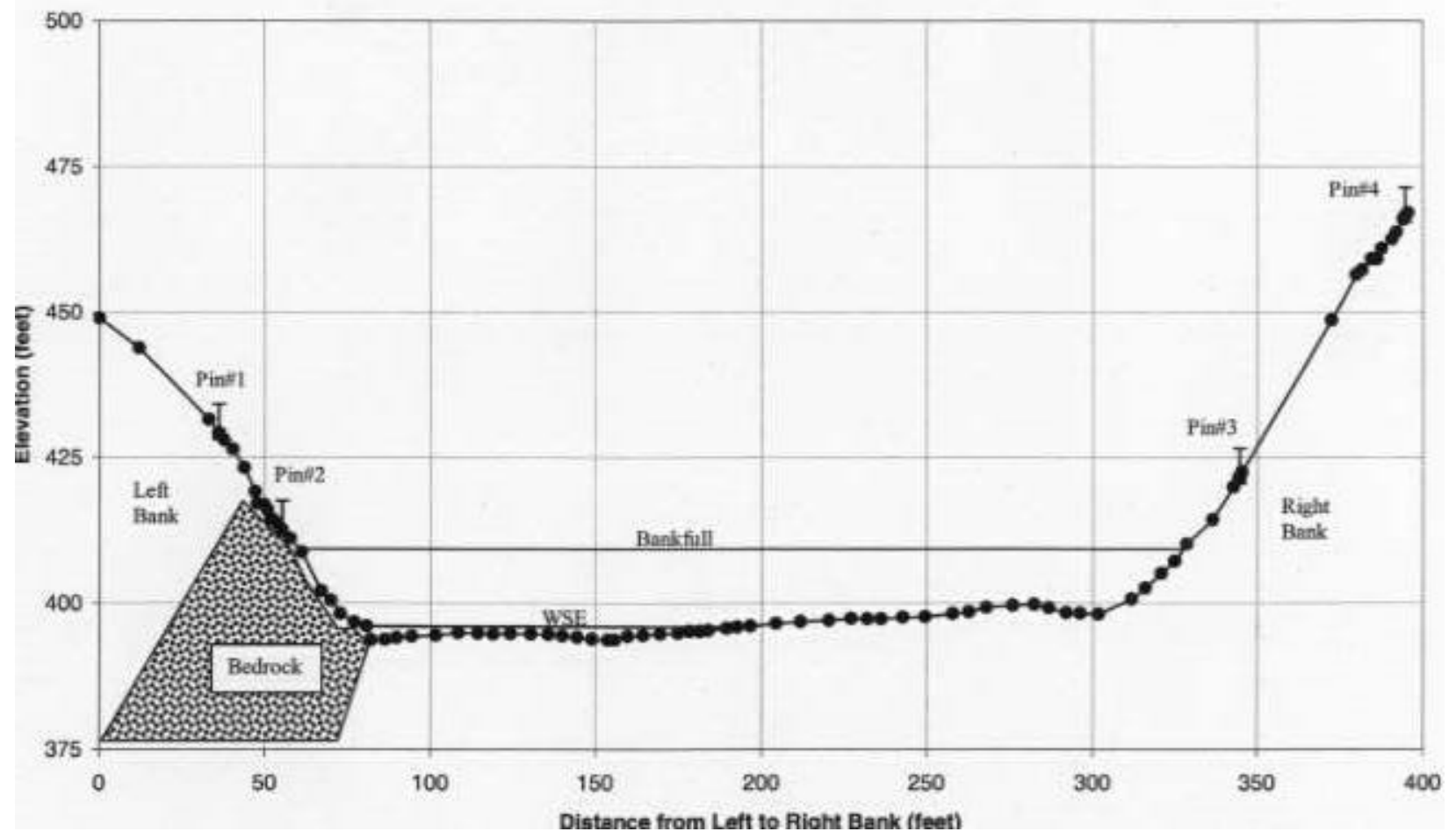
### Salyer Reach, Cross Section #2



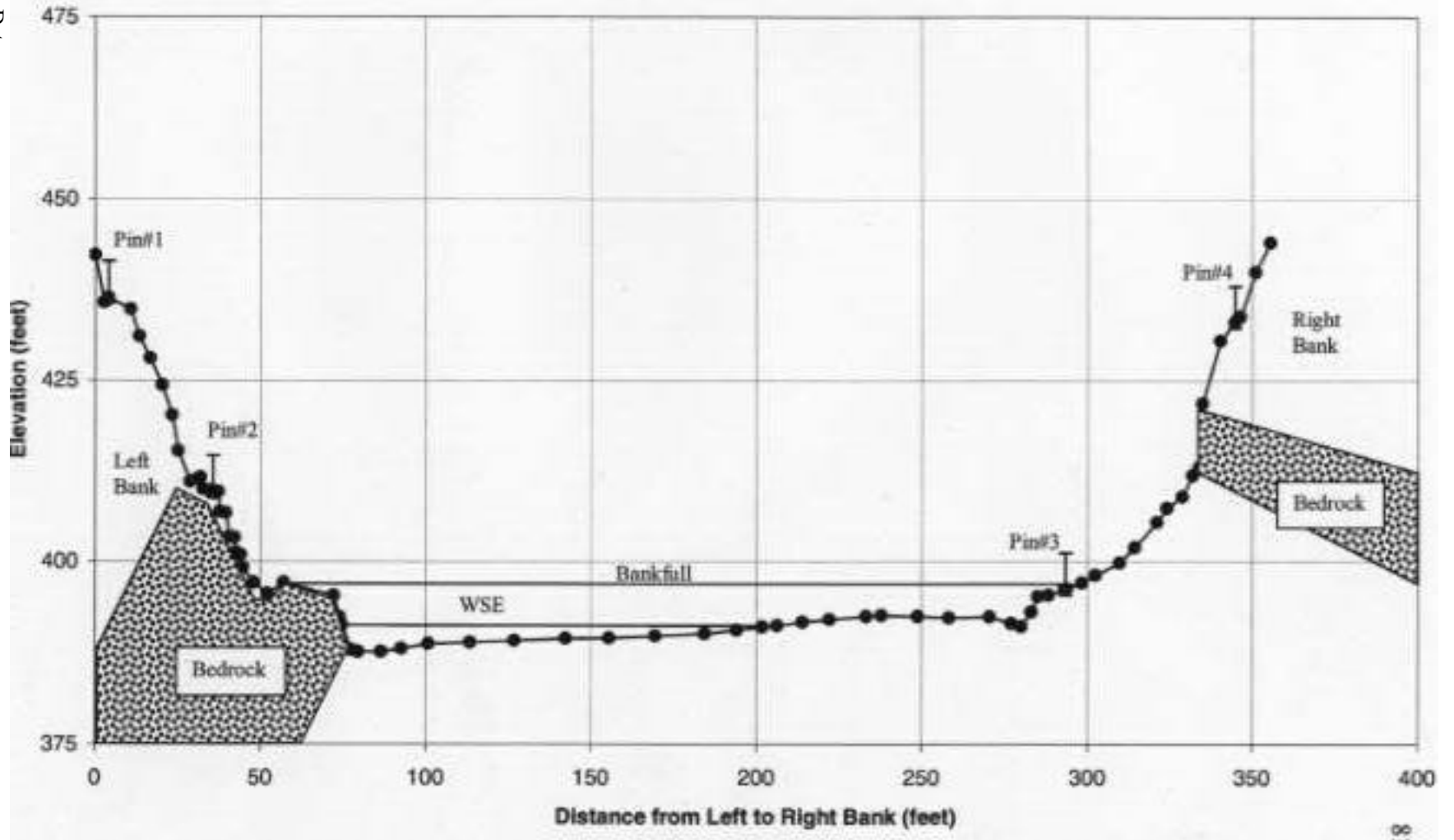
### Salyer Reach, Cross Section #3



### Salyer Reach, Cross Section #4



### Salyer Reach, Cross Section #5





## Appendix C: Data

## Notes on Data Tables

We used the following abbreviations in the data tables:

Record #	unique to each shot
Sta	Station (location) from which the point was taken
SS	Side Shot, number of shot taken from that station
HAR	Horizontal Angle (i.e., azimuth or compass direction)
VI	Vertical Inclination
HD	Horizontal Distance
TC	Target Correction (i.e., boot)
X	distance in X direction (horizontal)
Y	distance in Y direction (horizontal)
Z	distance in Z direction (elevation)
th	thalweg
ws	water surface
rc	riffle crest
gs	ground surface
vw	valley wall (lvw = left valley wall; rvw = right valley wall)
bf	bankfull (lbf = left bankfull; rbf = right bankfull)
ac	active channel (lac = left active channel; rac = right active channel)
ter	terrace
rx	rock
xs	cross-section
p	cross-section pin
bt	bearing tree
tp	turning point
bd	bedrock (also bdrc or bdrx)
vbd	vertical bedrock (ac, bf, and vw are concurrent)
bm	benchmark
LEW	Left Edge Water (REW = Right Edge Water)
lb	left bank (looking downstream); rb = right bank
WSE	Water Surface Elevation

Unless otherwise noted all measurements are English units.

Column "TH or XS DIST" is thalweg distance for thalweg and water surface shots, distance from left to right bank for cross-section shots, and blank for other shots.

## Notes on Data Summary Tables:

The data summary tables are provided to make resurveying the reaches easier. All the important benchmarks and landmarks have been taken out of the main data table and presented so you don't have to look through all the data to find the locations of cross-sections and benchmarks. You may want to take this page in the field with you when you survey.

Thalweg distance is provided to aid in locating the benchmarks or landmarks. Since none of these points are actually in the thalweg, thalweg distance is an approximation. Locations of the cross-sections has been determined mathematically, so they are somewhat reliable, but for other features thalweg distance has been estimated and this distance should not be used as a hard number when you survey.

In some cases, sections of the reaches were surveyed in 1999 using an auto-level to check the elevations of benchmarks and cross-section pins. If data exists from a level survey, it is presented along with the data from the laser survey.

Route 30 Survey Data Summary- October, 1998												
record#	stn	ss	HAR	VI	HD	tc	Approx. Thalweg Dist. (ft)	X	Y	Z	Feature	Elevation from Level Survey
76	2	11	172.7	1.6	268.10	-5	425	10742.0	9244.2	858.1	bt2	
162	3	26	122	0.3	68.10	-5	1037	10428.8	9639.5	842.6	xsa p2	842.0
163	3	27	80.1	-0.2	63.20	-5	1037	10433.3	9686.5	842.0	xsa p3	841.5
178	3	42	328.6	4.4	43.37	-5	1174	10348.4	9712.6	845.6	bt4	
184	3	48	327.1	9.1	79.59	-5	1174	10327.8	9742.4	855.0	xsb p4	
223	4	29	79.9	23.1	37.62	-5	1245	10262.3	9778.2	857.7	bt5	
290	5	15	93.6	6.9	190.91	0	1590	10007.9	10000.7	855.1	bridge cntr	855.1
311	5	36	40.2	0.1	157.50	0	1715	9919.0	10132.9	832.2	East Fork	
367	6	17	77.8	10.7	48.15	-3.8	2100	9579.3	10104.5	841.3	bt6	
371	6	21	100.6	0.3	110.30	-5	2000	9640.6	10074.0	834.0	shark rx	
383	6	33	328.4	1.6	30.29	-5	2189	9516.3	10120.1	834.3	xs1 p3	
388	6	38	338.6	16.8	38.10	-5	2189	9518.3	10129.8	844.9	xs1 p4	
389	6	39	220.3	1.3	56.29	-5	2189	9495.8	10051.4	834.7	xs1 p2	
394	6	44	214.4	11.1	72.32	-5	2189	9491.4	10034.6	847.6	xs1 p1	
443	7	24	52.4	11.7	78.73	0	2613	9141.0	10262.9	843.1	xs2 p4	
444	7	25	57.8	2.3	68.24	-5	2613	9136.3	10251.2	834.5	xs2 p3	
447	7	28	136.5	1	50.49	-5	2613	9113.3	10178.2	832.6	xs2 p2	833.1
448	7	29	146.6	6.8	57.89	-5	2613	9110.5	10166.5	838.7	xs2 p1	
452	7	33	74.5	2.9	103.97	-10	2560	9178.8	10242.6	842.0	btf	
583	9	29	21.7	11.6	74.35	-5	3616	8298.9	10643.8	844.2	xs3 p4	
584	9	30	26	1.3	64.98	-5	3616	8299.9	10633.1	830.4	xs3 p3	830.4
588	9	34	131.2	-2.4	46.06	-5	3616	8306.1	10544.4	827.0	xs3 p2	827.0
589	9	35	143	10.2	59.84	-5	3616	8307.4	10526.9	839.7	xs3 p1	
592	9	38	206.7	8.2	65.13	-5	3650	8242.2	10516.5	838.3	btg	
664	10	43	287.8	0.9	180.58	0	4398	7602.8	10647.9	823.4	xs4 p2	823.2
665	10	44	325.8	5.5	159.36	0	4398	7685.1	10724.5	835.9	xs4 p4	
669	10	48	317	0.5	157.99	-3	4398	7666.9	10708.2	824.9	xs4 p3	824.1
690	10	69	309.5	0.3	459.69	-5	4700	7420.0	10885.1	828.0	br cap	826.8
788	12	42	187.9	3.6	52.80	-5	4630	6947.8	10897.5	824.8	bt	
789	12	43	199	11	93.25	-5	5273	6924.7	10861.6	839.6	xs5 p1	
794	12	48	204.6	1.7	81.86	-5	5273	6921.0	10875.4	823.9	xs5 p2	824.7
795	12	49	313.8	-0.1	88.30	-5	5273	6891.3	11010.9	821.3	xs5 p3	822.0
799	12	53	318.7	6.3	102.38	-5	5273	6887.5	11026.7	832.7	xs5 p4	
912	14	28	293.6	11	68.71	-5	6180	6069.9	10952.9	823.9	rb end rebar	
913	14	29	167.5	7	77.82	-5	6180	6149.7	10849.4	820.1	lb end rebar	826.2
922	14	38	134	19.4	111.87	1.25	6080	6213.3	10847.6	843.7	nipple	850.3

Sulphur Glade Survey Data Summary- September, 1998												
												Elevation
							Approx.					from
							Thalweg					Level
Record #	Stn	pt	HAR	VI	HD	TC	Dist. (ft)	X	Y	Z	Feature	Survey
2	A	2	179.1	10.4	80.5	0	21.9	10047.31	9644.39	1230.45	p1h	
32	A	33	63.3	7	159.7	0	21.9	10188.72	9796.59	1235.29	p4h	
35	A	36	350.5	2.2	279.0	0	200	10000.00	10000.00	1226.40	bm1	
165	D	17	284.1	1.2	97.8	0	1530	9510.53	10984.87	1221.22	p1 xs1	
179	D	31	38.8	-4.5	32.5	0	1530	9625.72	10986.38	1216.61	p2 xs1	
214	D	66	83.3	-1.6	246.0	0	1530	9849.68	10989.76	1212.30	p3 xs1	
226	D	78	83	0.1	289.0	-3.8	1530	9892.20	10996.27	1223.47	p4 xs1	
463	1	5	187.4	3.4	136.3	0	5732	8364.74	12817.54	1205.19	p2 xs2	
499	1	42	75	2.2	208.4	0	5732	8583.64	13006.62	1205.11	p3 xs2	1203.62
509	1	52	73.3	3.6	225.0	-5.1	5732	8597.76	13017.31	1216.35	p4 xs2	
512	1	55	68.9	6.3	224.4	-5.1	5732	8591.68	13033.46	1226.98	bt rb xs2	
634	3	46	290.3	-2	173.1	0	5870	8284.64	12920.81	1188.91	trib mouth	
639	3	51	40.1	6.8	225.3	0	5732	8592.11	13033.10	1221.82	bt10	
784	8	48	68.4	3.5	190.7	0	7700	7645.44	13797.29	1197.16	camp	
794	8	58	13.7	0.8	195.5	0	7480	7514.39	13916.99	1188.23	big rock	
850	9	48	2.3	1	299.3	-2.7	8364	7485.42	14458.74	1196.19	p3xs3	1198.4
852	10	1	237.9	12.9	123.4	0	8364	7257.46	14390.18	1212.14	p1xs3	
875	10	24	233.3	0.1	96.1	0	8364	7284.95	14398.32	1184.05	p2xs3	1185.41
914	10	64	86.9	7	144.0	0	8364	7505.81	14463.54	1201.56	p4xs3	1202.95
925	11	3	86.6	6.2	236.5	0	8420	7600.76	14537.55	1211.54	bm rebar	1213.34
926	11	4	86.6	6.3	236.9	0	8420	7601.12	14537.57	1211.99	bm nipple	
927	11	5	86	6.1	230.0	-5.1	8420	7594.10	14539.56	1215.52	bt15	
928	11	6	83.9	6.1	172.2	0	8420	7535.92	14541.82	1204.25	rock in trail	
933	11	11	92.3	5.9	155.0	-5.1	8420	7519.52	14517.30	1206.96	bt16	
1044	13	2	195.7	1.4	143.8	-5.1	9532	6990.96	15119.46	1194.98	tp8l p2xs4	
1059	13	17	38.9	7.2	176.1	0	9532	7140.44	15394.90	1208.62	p4xs4	
1068	13	26	41.2	0	155.9	0	9532	7132.55	15375.15	1186.37	p3xs4	1186.57
1109	13	67	195.6	3.4	143.6	0	9532	6991.23	15119.50	1194.91	p2xs4	1194.82
1112	13	70	191	3.7	144.0	-5.1	9600	7002.38	15116.50	1200.78	bt17	
1122	13	80	200.1	3.4	206.9	0	9600	6958.74	15063.52	1198.67	bt18	
1125	13	83	201.5	3	235.5	2	9532	6943.55	15038.76	1196.71	p1xs4	
1226	14	60	265.6	1.8	293.5	0	10545	6355.69	15013.69	1188.25	p2xs5	1188.39
1228	14	62	264.4	2.8	302.6	0	10545	6347.09	15006.67	1193.83	p1xs5	
1234	14	68	321.2	3.1	215.4	-5.1	10545	6513.32	15204.06	1195.79	p3xs5	1195.92
1293	15	58	31.1	6	179.5	0	10545	6550.29	15249.02	1201.77	p4xs5	1201.86
1297	15	62	13.1	4.7	168.6	0	10560	6495.79	15259.55	1196.77	bm rebar	1196.77
1299	15	64	11.2	4.6	156.4	-5.1	10560	6487.95	15248.72	1200.59	bt19	
1300	15	65	10.8	5.1	133.5	-5.1	10560	6482.58	15226.41	1199.92	bt20	
1540	18	63	223.8	9.9	177.1	0	13140	5447.68	15050.45	1204.73	p1end	
1543	18	66	334.7	3.8	134.5	-5.1	13200	5512.79	15299.89	1187.85	p2end	
1544	18	67	233.3	3.5	154.9	0	13140	5446.07	15085.71	1183.29	htchck cr	



Hyampm Survey Data Summary - September, 1998												
Record #	Stn	pt	HAR	VI	HD	TC	Dist. (ft)	X	Y	Z	Feature	Survey
Survey has bad shots from stn 1 and 2 and 5 so they are unusable, start survey at station 6.												
347	6	73	347.2	1	143.28		600	10816.61	8710.12	375.67	bdrx nose	
517	9	25	249.4	0.5	100.80		2495	10000.11	10000.14	370.59	usgs bm	370.5
525	9	33	246.8	4.9	127.23	-5	2946	9977.52	9985.48	385.61	xs1 p1	
535	9	43	246.4	2.2	110.52		2946	9993.19	9991.35	373.95	xs1 p2	369.41
585	9	93	79.4	2.8	107.77	-5	2946	10200.39	10055.42	379.98	xs1 p3	
602	9	110	77.5	3.7	152.88	-5	2946	10243.72	10068.69	384.59	xs1 p4	
607	9	115	50.3	4.6	180.42		2946	10233.27	10150.84	384.22	bt2	
616	9	124	12	1.7	306.07		3280	10158.10	10334.98	378.79	xs2 p4	
619	9	127	314.5	1.2	306.53		3280	9875.83	10250.45	376.13	xs2 p1	
671	10	52	262.7	-0.6	160.59	-5	3280	9889.32	10256.30	370.51	xs2 p2	
714	10	95	59.9	1.3	84.88	0	3280	10122.04	10319.28	369.12	xs2 p3	367.78
749	10	131	62.5	9.4	165.74	-5	3280	10195.63	10353.24	399.63	bm rebar	
752	10	134	62.5	9.5	165.70	-5	3280	10195.59	10353.22	399.92	Data Storage Monument	
753	10	135	62	10.1	166.58	-5	3280	10195.69	10354.91	401.86	usgs cable	
755	10	137	56.3	7.3	144.92	-5	3280	10169.17	10357.11	390.76	bt3	
957	13	56	358.3	-1.5	297.60	-5	4810	10054.22	11390.92	360.34	xs3 p3	362.01
958	13	57	294.7	2	271.33	0	4810	9816.54	11206.84	372.61	xs3 p1	
998	14	39	227.5	-2.8	35.36	-5	4810	9908.96	11281.84	366.59	xs3 p2	365.45
1044	14	85	53.5	2.9	171.58	3.71	4810	10072.96	11407.79	368.30	xs3 p4	
1180	16	35	320.9	-1.7	278.78	-5	6010	9144.19	12046.58	357.71	xs4 p3	356.47
1189	17	7	194.7	1.9	93.85	-5	6010	9050.75	11909.69	361.16	xs4 p2	360.08
1190	17	8	196.9	8.1	108.41	0	6010	9043.05	11896.74	368.47	xs4 p1	368.32
1191	17	9	52.1	4.4	217.06	0	6010	9245.84	12133.80	369.75	xs4 p4	368.86
1243	18	5	110.4	11	202.22	3.71	6200	9024.31	12296.23	388.16	br cap bridge	387.33
1313	19	6	175.9	1.6	299.38	0	6360	8684.36	12527.30	359.70	our br cap	
1340	19	33	78.4	2	153.31	-5	7173	8813.13	12856.75	361.69	xs5 p4	362.8
1354	19	47	79.8	-0.3	100.70	-5	7173	8762.06	12843.75	355.81	xs5 p3	356.71
1395	19	88	271.3	-0.9	85.99	-5	7173	8576.99	12827.87	354.98	xs5 p2	355.88
1426	19	119	263.8	3.6	179.35	0	7173	8484.66	12806.55	362.62	xs5 p1	363.69
1442	19	135	8.9	0.2	206.30	0	6965	8694.87	13029.74	352.05	buick	
1595	22	30	45.4	-2.1	67.05	0	8800	7823.37	14336.41	342.89	th hayfork	
1662	23	21	38	-0.3	164.10	-5	9560	7382.30	14442.43	348.93	chevy	
1758	24	57	235.5	8.3	97.67	-5	10600	6670.60	13923.13	357.55	deck	
1882	28	5	126.8	-0.5	291.69	-5	12000	5368.66	14156.53	339.73	old footing	
1941	28	64	262.3	2.3	183.25	-5	12500	4953.50	14306.70	349.64	huge rock	
2010	29	51	5.1	5.8	159.48	-5	13040	4610.23	14647.69	359.07	powerline	
2025	29	66	278.3	-0.7	132.59	-5	13230	4464.85	14507.98	341.25	iron beam	
2026	29	67	203.6	13.9	84.26		13304	4562.32	14411.63	358.72	abutment	
2027	29	68	204	12.5	84.55		13304	4561.67	14411.60	356.62	btm of wall	
2028	29	69	193.5	13.9	86.98	3.71	13304	4575.75	14404.26	355.69	btm of wall	
2029	29	70	193.9	13.6	87.09	0	13304	4575.13	14404.30	358.94	top of wall	
2038	29	79	189.1	15.9	62.80	0	13304	4586.12	14426.83	355.76	top of pin	
2040	29	81	186.5	19.6	63.97	0	13304	4588.81	14425.28	360.65	s peir	
2044	29	85	201.5	20.8	59.55		13304	4574.23	14433.43	360.49	n peir	
2051	29	92	193.5	0.6	59.60	0	13304	4582.14	14430.89	338.50	xs6 pin1	
2082	29	123	28.6	0.6	84.10		13304	4636.31	14562.67	338.75	top of rc bldr	
2114	29	155	24.1	1.5	220.52		13304	4686.10	14690.14	343.65	xs6 pin2	
2134	30	6	281.4	32.4	11.91	-5	13304	4706.03	14771.50	361.18	telepole	
2135	30	7	49.1	-0.4	172.20	0	13304	4847.86	14881.89	347.42	bm nail in rd	
2139	30	11	34.6	0.6	314.38		13304	4896.23	15027.93	351.92	telepole	



Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
1	1	1	136.9	-0.1	166.00	0	0.0	10765.6	8877.3	855.5	th
4	1	2	136.8	0.4	165.80	0	0.0	10765.7	8877.7	857.0	ws
5	1	3	139.6	-0.4	139.10	0	27.8	10742.3	8892.6	854.8	th bdrc
6	1	4	141.9	-1.1	118.88	0	48.7	10725.5	8905.0	853.5	th bdrc
7	1	5	145.8	-1.2	107.08	0	62.8	10712.4	8910.0	853.6	th
8	1	6	146	-0.9	107.09	0	62.8	10712.1	8909.8	854.1	ws
9	1	7	148.9	-2	98.04	0	73.4	10702.8	8914.6	852.4	th pool
10	1	8	147.7	-1.3	98.17	0	73.4	10704.7	8915.6	853.6	ws
11	1	9	153.1	-1.8	86.96	3.71	86.4	10691.5	8921.0	849.4	th
12	1	10	149.6	-2.2	72.85	3.71	101.3	10689.1	8935.7	849.3	th
13	1	11	149.5	-3.5	64.48	3.71	109.7	10684.9	8943.0	848.2	th
14	1	12	150.6	-4	52.47	3.71	121.7	10678.0	8952.8	848.4	th
15	1	13	146.9	-8.3	40.08	0	134.5	10674.1	8965.0	850.0	th
16	1	14	126.7	-9.8	24.04	0	153.8	10671.5	8984.2	851.7	th
17	1	15	126.4	-6	23.97	0	153.8	10671.5	8984.3	853.3	ws
18	1	16	46.9	-5.3	32.66	0	190.8	10676.0	9020.9	852.8	th rc
19	1	17	45.9	-4.5	32.20	0	190.8	10675.3	9021.0	853.3	ws
20	1	18	16.9	-4.9	49.72	0	217.8	10666.6	9046.1	851.6	th bdrc
21	1	19	18.5	-3.9	68.04	0	236.2	10673.8	9063.1	851.2	th
22	1	20	17.6	-3.8	88.80	0	257.0	10679.0	9083.2	849.9	th
23	1	21	17.5	-3.3	109.62	0	277.8	10685.2	9103.1	849.5	th
24	1	22	17.4	-2.9	109.76	0	277.8	10685.0	9103.3	850.3	ws
25	1	23	16.3	-1.9	130.33	3.71	298.6	10688.8	9123.6	847.8	th
26	1	24	15.3	-1.8	148.23	3.71	316.7	10691.3	9141.5	847.4	th pool
27	1	25	15.3	-0.9	148.38	3.71	316.7	10691.3	9141.7	849.8	ws
28	1	26	14.7	-1.7	173.42	3.71	341.9	10696.2	9166.3	847.0	th
29	1	27	15.3	-1.2	186.56	3.71	355.2	10701.4	9178.5	848.2	th bdrc
30	1	28	14.8	-1.1	205.96	3.71	374.7	10704.8	9197.7	848.1	th
31	1	29	15	-0.6	205.89	3.71	374.7	10705.5	9197.4	849.9	ws
32	1	30	14.2	-1.2	217.45	3.71	386.4	10705.5	9209.4	847.5	th bdrc
33	1	31	14.7	-1.2	224.25	3.71	393.5	10709.1	9215.5	847.4	th
34	1	32	14.6	-1.1	224.16	3.71	393.5	10708.7	9215.5	847.8	ws
35	1	33	14.7	-2.2	239.72	0	408.9	10713.0	9230.4	846.6	th
36	1	34	14.8	-1.9	255.66	0	424.9	10717.5	9245.7	847.3	th rc
37	1	35	14.7	-1.7	255.49	0	424.9	10717.0	9245.7	848.2	ws
38	1	36	13.6	-2	273.63	0	443.7	10716.5	9264.5	846.3	th
39	1	37	13.5	-2.2	280.99	0	451.1	10717.8	9271.8	845.0	th pool
40	1	38	13.7	-1.8	281.06	0	451.1	10718.8	9271.6	847.0	ws
41	1	39	24.4	0.6	152.09	0		10715.0	9137.1	857.4	rvbd
42	1	40	41.7	2.1	65.56	0		10695.8	9047.5	858.2	rvbd
43	1	41	78.7	3.5	38.53	0		10690.0	9006.1	858.2	rvbd
44	1	42	129.8	4.4	45.96	0		10687.5	8969.1	859.4	rvbd
45	1	43	135.3	0.7	109.79	0		10729.4	8920.5	857.2	rvbd
46	1	44	139.7	2	202.88	0		10783.4	8843.8	862.9	lvbd
47	1	45	164.1	4	139.76	0		10690.5	8864.1	865.6	lvbd
48	1	46	170.1	4.7	129.46	0		10674.5	8871.0	866.5	lvbd
49	1	47	176.5	5.1	63.25	0		10656.1	8935.4	861.5	lvbd
50	1	48	224	6.1	15.01	0		10641.8	8987.8	857.4	lvbd
51	1	49	319.8	6.6	31.79	0		10631.7	9022.8	859.5	lvbd
52	1	50	345.7	5.6	93.35	0		10629.1	9089.0	865.0	lvbd
75	2	10	172.7	1.6	268.20	-5		10742.1	9244.1	858.1	bt2
76	2	11	172.7	1.6	268.10	-5		10742.0	9244.2	858.1	bt2

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
77	2	12	177.4	-0.1	238.50	0	452.1	10718.8	9271.9	845.2	th
78	2	13	176.7	-0.2	234.80	0	456.8	10721.5	9275.7	844.8	th
79	2	14	176.8	0.3	234.90	0	456.8	10721.1	9275.6	846.8	ws
80	2	15	177.4	-0.2	213.90	0	477.8	10717.7	9296.5	844.9	th bdrc
81	2	16	176.1	0.1	187.30	0	504.8	10720.7	9323.3	845.9	th rc
82	2	17	176.6	0.3	187.60	0	504.8	10719.1	9322.9	846.6	ws
83	2	18	176.3	-0.1	155.20	0	536.9	10718.0	9355.3	845.3	th bdrc
84	2	19	176	-0.7	125.49	0	566.7	10716.7	9385.0	844.1	th
85	2	20	177.9	-0.8	105.89	0	586.6	10711.9	9404.3	844.1	th
86	2	21	177.8	0	105.80	0	586.6	10712.0	9404.4	845.6	ws
87	2	22	175.9	-1.2	93.38	0	599.6	10714.6	9417.0	843.7	th
88	2	23	164.9	0.1	102.60	-5		10734.7	9411.1	850.8	rx
89	2	24	165	0.1	102.40	-5		10734.5	9411.2	850.8	rx
90	2	25	165	0.1	102.40	-5		10734.5	9411.2	850.8	rx
91	2	26	177.3	-1.2	78.78	0	614.4	10711.7	9431.5	844.0	th
92	2	27	184	-1.6	46.68	0	647.2	10704.7	9463.6	844.3	th
93	2	28	183.7	-0.4	46.80	0	647.2	10705.0	9463.5	845.3	ws
94	2	29	193.1	-4.3	24.03	0	670.5	10702.5	9486.7	843.8	th
95	2	30	257.8	-8.3	10.49	0	692.2	10697.7	9507.9	844.1	th
96	2	31	257.8	-5.6	10.15	0	692.2	10698.1	9508.0	844.6	ws
97	2	32	255.1	13.2	44.30	0		10665.2	9498.8	856.0	lvw
98	2	33	254.5	3.5	29.15	0		10679.9	9502.4	847.4	lac
99	2	34	68.5	1.3	24.79	0		10731.0	9519.2	846.2	rac
100	2	35	324.2	-4.7	23.12	0	713.4	10694.4	9528.9	843.7	th
101	2	36	325.7	-3	42.34	0	732.7	10684.1	9545.1	843.4	th
102	2	37	329.5	-1.7	45.98	0	737.3	10684.6	9549.8	844.3	th rc
103	2	38	329.5	-1.6	46.28	0	737.3	10684.5	9550.0	844.3	ws
104	2	39	332.4	-5.1	55.38	0	747.1	10682.3	9559.2	840.7	th pool
105	2	40	332.4	-2.9	54.93	0	747.1	10682.5	9558.8	842.8	ws
106	2	41	334.9	-2.6	71.03	0	763.0	10677.8	9574.5	842.4	th rc
107	2	42	334.6	-0.7	83.79	3.71	775.7	10672.0	9585.8	840.9	th bdrc
108	2	43	316	0.2	76.20	-5		10655.0	9565.0	850.9	rx
109	2	44	328.8	-2.2	70.65	0		10671.4	9570.6	842.9	old sta3
110	2	45	328.8	-2.2	70.55	0		10671.4	9570.5	842.9	old ta3
111	2	46	334.5	-0.9	94.59	3.71	786.5	10667.3	9595.5	840.4	th bdrc
112	2	47	329.7	-1.1	108.88	3.71	803.2	10653.0	9604.2	839.8	th pool
113	2	48	329.1	-1.7	109.55	0	803.2	10651.7	9604.2	842.4	ws
114	2	49	324.4	-2.7	123.46	0	821.3	10636.1	9610.5	839.8	th bdrc
115	2	50	317.8	-0.4	116.00	-5		10630.1	9596.1	849.8	rx
116	2	51	317.8	-0.4	116.00	-5		10630.1	9596.1	849.8	rx
117	2	52	309.8	0	115.90	0		10618.9	9584.3	845.6	lac
118	2	53	335.2	0.5	142.79	0		10648.1	9639.8	846.9	rac
119	2	54	323.8	-2.2	151.99	0	849.8	10618.2	9632.8	839.8	th
120	2	55	322.3	-2	166.40	0	864.8	10606.2	9641.8	839.8	th
121	2	56	321.7	-1.4	174.85	0	873.5	10599.6	9647.4	841.3	th rc
122	2	57	321.6	-1.1	174.87	0	873.5	10599.4	9647.2	842.3	ws
123	2	58	320.4	-1.5	184.14	0	883.6	10590.6	9652.0	840.8	th pool
124	2	59	320.3	0.1	184.20	3.71	883.6	10590.3	9651.9	842.2	ws
125	2	60	319.4	0.5	188.99	7.5	889.5	10585.0	9653.6	839.8	th rc
126	2	61	323.9	-0.2	199.20	0		10590.6	9671.1	844.9	rac
146	3	10	107.5	1.5	209.93	0		10571.2	9612.5	842.8	lac
147	3	11	96.3	0.7	211.68	0	893.3	10581.4	9652.4	839.8	th pool

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
148	3	12	96.2	1.3	211.75	0	893.3	10581.5	9652.7	842.1	ws
149	3	13	97.5	1.1	199.66	0	906.0	10569.0	9649.5	841.1	th rc
150	3	14	97.5	1.3	200.15	0	906.0	10569.4	9649.5	841.8	ws
151	3	15	93.9	0.3	181.20	0	928.0	10551.8	9663.3	838.2	th pool
152	3	16	94.1	0.9	181.28	0	928.0	10551.8	9662.6	840.1	ws
153	3	17	93.5	0.4	159.60	0	949.6	10530.3	9665.8	838.4	th rc
154	3	18	96.3	0.8	119.99	0	989.8	10490.3	9662.4	838.9	th
155	3	19	98.1	0.8	106.29	0	1004.0	10476.2	9660.6	838.7	th
156	3	20	98.2	1.1	106.08	0	1004.0	10476.0	9660.5	839.3	ws
157	3	21	97	-0.4	73.70	0	1036.6	10444.2	9666.6	836.7	th
158	3	22	112.8	0.9	95.99	-5		10459.5	9638.4	843.8	rx
160	3	24	122	0.2	68.10	-5		10428.8	9639.5	842.5	xsa p2
161	3	25	122.2	0.3	68.10	-5		10428.6	9639.3	842.6	xsa p2
162	3	26	122	0.3	68.10	-5		10428.8	9639.5	842.6	xsa p2
163	3	27	80.1	-0.2	63.20	-5		10433.3	9686.5	842.0	xsa p3
164	3	28	80.1	-0.2	63.30	-5		10433.4	9686.5	842.0	xsa p3
165	3	29	355.6	6.6	9.93	0		10370.2	9685.5	838.4	old sta5
166	3	30	355.3	6.6	9.93	0		10370.2	9685.5	838.4	old sta5
167	3	31	113.4	-1	42.89	0	1071.3	10410.4	9658.6	836.5	th
168	3	32	144.5	-2.9	14.38	0	1102.8	10379.4	9663.9	836.5	th
169	3	33	252.8	-2.7	15.28	0	1126.9	10356.4	9671.1	836.5	th
170	3	34	253.7	-1.5	14.99	0	1126.9	10356.6	9671.4	836.9	ws
171	3	35	223.1	3.3	36.54	0		10346.0	9648.9	839.4	lac
172	3	36	345.6	6.8	32.77	0		10362.9	9707.3	841.2	rac
173	3	37	279.6	-2.5	36.57	0	1150.8	10335.0	9681.7	835.7	th
174	3	38	278.2	-2.3	53.56	0		10318.0	9683.2	835.1	th bdrc
175	3	39	278	-1.2	52.99	0	1167.8	10318.5	9683.0	836.2	ws
176	3	40	276.7	-3	59.02	0		10312.4	9682.5	834.2	th pool
177	3	41	277	-1.7	58.87	0	1167.8	10312.6	9682.8	835.5	ws
178	3	42	328.6	4.4	43.37	-5		10348.4	9712.6	845.6	bt4
179	3	43	328.2	4.4	43.37	-5	1173.5	10348.2	9712.4	845.6	bt4
182	3	46	327	9.2	79.46	-5		10327.7	9742.2	855.1	xsb p4
183	3	47	326.9	9.2	79.86	-5	1173.5	10327.4	9742.5	855.2	xsb p4
184	3	48	327.1	9.1	79.59	-5		10327.8	9742.4	855.0	xsb p4
204	4	10	115.6	1.6	136.85	-5		10348.6	9712.4	845.4	bt4
205	4	11	115.7	1.7	136.44	-5		10348.2	9712.4	845.7	bt4
206	4	12	115.6	1.7	136.74	-5		10348.5	9712.5	845.7	bt4
209	4	15	129.2	0.7	83.79	0		10290.2	9718.6	837.6	old sta5
210	4	16	129.3	0.7	83.89	0		10290.1	9718.4	837.6	old sta 5
211	4	17	142.7	-1.7	107.75	0	1195.6	10290.5	9685.9	833.4	th pool
212	4	18	142.8	-0.5	107.60	0	1195.6	10290.3	9685.9	835.7	ws
213	4	19	145.9	-1.8	89.06	0	1215.1	10275.1	9697.8	833.8	th
214	4	20	149.9	-2.5	74.23	0	1231.0	10262.4	9707.4	833.4	th
215	4	21	152.1	-2.8	63.52	0	1242.0	10254.9	9715.4	833.5	th rc
216	4	22	152.3	-1.2	63.19	0	1242.0	10254.6	9715.6	835.3	ws
217	4	23	165.1	-3.1	52.82	0	1258.9	10238.8	9720.5	833.8	th
218	4	24	179.3	-3.3	45.13	0	1273.2	10225.8	9726.5	834.0	th
219	4	25	192.4	-4.1	35.11	0	1286.8	10217.7	9737.3	834.1	th
220	4	26	192.7	-2.2	35.07	0	1286.8	10217.5	9737.4	835.3	ws
221	4	27	204.5	3.1	51.52	0		10203.9	9724.7	839.4	lac
222	4	28	79.9	23	37.65	-5		10262.3	9778.2	857.6	bt5
223	4	29	79.9	23.1	37.62	-5		10262.3	9778.2	857.7	bt5



Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
224	4	30	116.1	1	14.40	0		10238.2	9765.2	836.9	rac
225	4	31	226.9	-4.7	32.89	0	1307.0	10201.2	9749.1	833.9	th
226	4	32	256.1	-3.9	42.80	0	1328.4	10183.7	9761.3	833.7	th
227	4	33	256	-2.2	43.07	0	1328.4	10183.4	9761.2	835.0	ws
228	4	34	277	-3.5	48.81	0	1346.0	10176.8	9777.5	833.6	th
229	4	35	278.9	-2.6	53.64	0	1351.1	10172.2	9779.9	834.2	th
230	4	36	278.9	-2.2	53.46	0	1351.1	10172.4	9779.8	834.6	ws
231	4	37	281.5	-4.2	56.85	0	1355.2	10169.5	9782.9	832.4	th
232	4	38	288.8	-2.5	69.83	0	1370.5	10159.1	9794.1	833.6	th
233	4	39	288.9	-2.1	69.65	0	1370.5	10159.3	9794.1	834.1	ws
234	4	40	297.6	-2.5	78.63	0	1384.9	10155.5	9808.0	833.2	th
235	4	41	304.3	-2.5	96.81	0	1405.7	10145.2	9826.1	832.4	th
236	4	42	303.7	-1.9	115.74	0	1424.7	10128.9	9835.8	832.8	th
237	4	43	303.4	-1.9	129.03	0	1438.0	10117.5	9842.6	832.3	th
238	4	44	303.3	-1.4	129.26	0	1438.0	10117.2	9842.5	833.5	ws
239	4	45	289.5	-3.1	108.64	-5		10122.8	9807.8	835.7	old sta 7
240	4	46	289.4	-3	108.55	-5		10122.8	9807.6	835.9	old sta7
241	4	47	289.4	-2.9	108.56	-5		10122.8	9807.6	836.1	old sta7
242	4	48	298.1	-2.6	143.25	-5		10098.9	9839.0	835.1	rx
243	4	49	298.2	-2.6	143.15	-5		10099.1	9839.2	835.1	rx
244	4	50	302.3	-1.7	145.14	0	1454.3	10102.5	9849.1	832.3	th
245	4	51	302.3	-1.8	163.52	0	1472.7	10087.0	9858.9	831.5	th
246	4	52	302.8	-1.7	182.32	0	1491.5	10072.0	9870.3	831.2	th
247	4	53	301.7	-2.2	177.27	-5		10074.4	9864.7	834.8	rx
248	4	54	301.6	-2.2	177.37	-5		10074.2	9864.5	834.8	rx
249	4	55	301.9	-1.9	190.89	0	1500.6	10063.2	9872.4	830.3	th
250	4	56	301.8	-1.4	190.94	0	1500.6	10062.9	9872.2	831.9	ws
251	4	57	300.1	-2	196.18	-5		10055.5	9870.0	834.8	rx
252	4	58	300.2	-2.1	196.17	-5		10055.7	9870.2	834.4	rx
253	4	59	302.1	-2.2	203.15	0	1512.9	10053.1	9879.5	828.8	th
254	4	60	301.7	-2	225.36	0	1535.1	10033.5	9890.0	828.7	th
255	4	61	301.7	-1.4	225.33	0	1535.1	10033.5	9890.0	831.1	ws
256	4	62	302.4	-1.9	240.57	0	1550.6	10022.1	9900.5	828.6	th
257	4	63	302.7	-1.5	260.51	0	1570.6	10006.0	9912.3	829.8	th
258	4	64	303.4	-1.3	281.33	0	1591.7	9990.4	9926.4	830.2	th
259	4	65	303.8	-1.1	296.75	0	1607.2	9978.6	9936.7	830.9	th
260	4	66	303.7	-0.9	296.66	0	1607.2	9978.4	9936.2	832.0	ws
261	4	67	303.5	-1	318.15	0	1628.7	9959.9	9947.2	831.1	th
262	4	68	304.5	-1.1	340.24	0	1651.5	9944.8	9964.3	830.1	th
263	4	69	304.3	-1	339.95	0	1651.5	9944.4	9963.1	830.7	ws
275	5	1	112.1	-2.3	133.39	-5		9941.0	9962.5	831.6	tp4r
289	5	14	88.8	7	191.07	0		10008.4	10016.6	855.4	rd cntr
290	5	15	93.6	6.9	190.91	0		10007.9	10000.7	855.1	bridge cntr
291	5	16	97.8	6.9	190.31	0		10005.9	9986.8	855.0	br
292	5	17	104.6	7	188.48	0		9999.8	9965.1	855.1	br
293	5	18	110.2	7.1	185.07	0		9991.1	9948.7	855.0	br
294	5	19	119.9	7.3	177.65	0		9971.4	9924.1	854.7	br
295	5	20	125.6	7.5	172.11	0		9957.3	9912.4	854.6	br
296	5	21	139.5	8.2	159.95	0		9921.3	9891.0	855.0	br
297	5	22	144.1	8.6	153.16	0		9907.2	9888.6	855.1	br
298	5	23	167.7	13.7	104.25	0		9839.6	9910.8	857.4	rd
299	5	24	128.6	2.4	167.25	0		9948.1	9908.3	839.0	gs br peir

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
300	5	25	108	0.8	183.38	0		9991.8	9956.0	834.5	gs br pier
301	5	26	108.9	-0.8	136.29	0	1656.0	9946.3	9968.5	830.1	th pool
302	5	27	108.8	-0.2	136.10	0	1656.0	9946.2	9968.8	831.5	ws
303	5	28	106.5	-1.9	127.33	0	1666.5	9939.5	9976.5	827.8	th
304	5	29	104.9	-2.5	121.88	0	1673.0	9935.2	9981.3	826.7	th
305	5	30	104.9	-2.5	121.88	-5		9935.2	9981.3	831.7	ws
306	5	31	102.5	-1.8	114.04	3.71	1682.2	9928.7	9988.0	824.7	th
307	5	32	91.2	0.6	92.89	11.44	1711.5	9910.3	10010.7	821.5	th
308	5	33	50.1	-0.4	130.10	0		9917.2	10096.1	831.1	th ef
310	5	35	50.1	0.1	129.80	0		9917.0	10095.9	832.2	ws ef
311	5	36	40.2	0.1	157.50	0		9919.0	10132.9	832.2	th ef
312	5	37	34.7	0.3	170.70	0		9914.6	10153.0	832.9	th ef
313	5	38	34.7	0.7	171.19	0		9914.8	10153.4	834.1	ws ef
314	5	39	51.4	0.1	62.70	0		9866.4	10051.8	832.1	approx old
315	5	40	102.9	-3.8	63.76	3.71	1744.6	9879.5	9998.4	824.0	th
316	5	41	109.6	-5.7	56.82	0	1754.5	9870.9	9993.6	826.3	th
317	5	42	109.6	-5.7	56.82	-5	1754.5	9870.9	9993.6	831.3	ws
318	5	43	117.5	-3.1	52.42	0	1763.2	9863.9	9988.4	829.1	th
319	5	44	127	-2.2	45.07	0	1774.1	9853.4	9985.5	830.2	th
320	5	45	146.1	-5.2	34.06	0	1791.1	9836.4	9984.4	828.9	th
321	5	46	222	-3.4	23.06	0	1827.3	9802.0	9995.5	830.6	th rc
322	5	47	221.6	-1.7	23.19	0	1827.3	9802.0	9995.3	831.3	ws
323	5	48	211.3	2.3	38.67	0		9797.3	9979.6	833.5	lac
324	5	49	5.2	0.9	63.09	0		9823.1	10075.5	833.0	rac
325	5	50	246.8	-3.3	37.74	0	1846.7	9782.7	9997.8	829.8	th
326	5	51	246.5	-1.6	38.58	0	1846.7	9782.0	9997.3	830.9	ws
327	5	52	268.7	-2.3	60.35	0	1875.7	9757.0	10011.3	829.6	th
328	5	53	277.7	-2.4	77.13	0	1895.6	9740.9	10023.0	828.7	th
329	5	54	279.3	-1.7	77.17	0	1895.6	9741.2	10025.1	829.7	ws
330	5	55	275.7	-2.4	100.31	0	1919.0	9717.6	10022.6	827.8	th
331	5	56	279.6	-2.2	117.21	0	1937.4	9701.8	10032.2	827.5	th
332	5	57	279.9	-2.1	134.41	0	1954.6	9685.0	10035.8	827.0	th
333	5	58	279.6	-1.7	134.84	0	1954.6	9684.4	10035.1	828.0	ws
334	5	59	281.2	-1.8	166.52	0	1986.9	9654.0	10045.0	826.7	th
335	5	60	282.7	0.5	179.49	7.5	2000.7	9642.3	10052.1	826.0	th pool
336	5	61	283.9	1.3	195.15	11.44	2016.8	9628.0	10059.5	825.0	th
337	5	62	283.2	2.1	195.47	11.44	2016.8	9627.1	10057.3	827.7	ws
338	5	63	289.2	1.6	187.03	3.71		9640.8	10074.1	833.5	shark rx
339	5	64	289.2	1.6	187.23	3.71		9640.6	10074.2	833.5	shark rx
340	5	65	282.7	1	214.77	11.44	2036.9	9607.9	10059.9	824.3	th
341	5	66	282.2	1	233.96	11.44	2056.2	9588.7	10062.1	824.6	th
342	5	67	281.3	-1.5	253.61	0	2076.2	9568.7	10062.3	825.3	th
358	6	8	-----	-----	#VALUE!	0		#VALUE!	#VALUE!	#VALUE!	instr leveled
364	6	14	87.3	7.9	23.67	-5		9555.9	10095.4	836.7	rx
365	6	15	87.5	8.2	23.85	-5		9556.0	10095.3	836.9	rx
366	6	16	87.4	8.2	23.95	-5		9556.1	10095.4	836.9	rx
367	6	17	77.8	10.7	48.15	-3.8		9579.3	10104.5	841.3	bt6
368	6	18	77.6	10.7	48.05	-3.8		9579.1	10104.6	841.3	bt6
369	6	19	100.2	0.3	110.50	-5		9641.0	10074.7	834.0	shark rx
370	6	20	100.6	0.3	110.40	-5		9640.7	10074.0	834.0	shark rx
371	6	21	100.6	0.3	110.30	-5		9640.6	10074.0	834.0	shark rx
372	6	22	104.1	-4.3	61.33	-5		9591.7	10079.3	828.8	old sta

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
373	6	23	104.2	-4.3	61.63	-5		9592.0	10079.2	828.8	old sta
374	6	24	117	-3	59.82	0	2093.7	9585.5	10067.1	825.3	th
375	6	25	117.9	-0.2	59.80	0	2093.7	9585.1	10066.3	828.2	ws
376	6	26	126.6	-4.2	43.38	0	2112.2	9567.0	10068.4	825.2	th
377	6	27	142.9	-4	33.12	0	2127.1	9552.2	10067.9	826.1	th
378	6	28	143.1	-0.3	32.80	0	2127.1	9551.9	10068.1	828.2	ws
379	6	29	174.7	-3.9	22.45	0	2145.4	9534.3	10071.9	826.9	th
380	6	30	210.8	-6	23.77	0	2159.8	9520.0	10073.9	825.9	th
381	6	31	240.9	-4.7	32.19	0	2176.4	9504.1	10078.6	825.8	th
382	6	32	240.7	-0.5	32.00	0	2176.4	9504.3	10078.6	828.1	ws
383	6	33	328.4	1.6	30.29	-5		9516.3	10120.1	834.3	xs1 p3
384	6	34	328.3	1.7	30.29	-5		9516.3	10120.0	834.3	xs1 p3
385	6	35	328.4	1.6	30.39	-5		9516.3	10120.2	834.3	xs1 p3
386	6	36	338.8	16.8	37.91	-5		9518.5	10129.6	844.9	xs1 p4
387	6	37	339	16.8	38.20	-5		9518.5	10129.9	844.9	xs1 p4
388	6	38	338.6	16.8	38.10	-5		9518.3	10129.8	844.9	xs1 p4
389	6	39	220.3	1.3	56.29	-5		9495.8	10051.4	834.7	xs1 p2
390	6	40	220.3	1.2	56.19	-5		9495.9	10051.4	834.6	xs1 p2
391	6	41	214.3	11	72.35	-5		9491.4	10034.5	847.5	xs1 p1
392	6	42	214.5	11	72.35	-5		9491.2	10034.7	847.5	xs1 p1
393	6	43	214.4	11	72.05	-5		9491.5	10034.8	847.4	xs1 p1
394	6	44	214.4	11.1	72.32	-5		9491.4	10034.6	847.6	xs1 p1
395	6	45	258	-2.1	39.17	0	2189.1	9493.9	10086.1	827.0	th
396	6	46	266.7	-1.6	67.07	0	2218.1	9465.3	10090.4	826.5	th
397	6	47	275.4	-1.4	93.57	0	2247.2	9439.1	10103.1	826.1	th
398	6	48	280.3	-0.6	112.29	0	2267.8	9421.7	10114.4	827.2	th
399	6	49	281.6	-1.2	120.27	0	2276.2	9414.4	10118.5	825.9	th
400	6	50	284.3	-0.7	133.69	0	2290.9	9402.7	10127.3	826.8	th
401	6	51	285.1	-0.5	155.59	0	2312.9	9382.0	10134.8	827.1	th
402	6	52	286	-0.1	180.00	0	2337.5	9359.2	10143.9	828.1	th
403	6	53	283.4	-0.2	198.40	0	2357.8	9339.2	10140.3	827.7	th
404	6	54	280.9	-0.4	217.29	0	2378.7	9318.8	10135.4	826.9	th
405	6	55	282.3	-0.2	230.10	0	2392.6	9307.4	10143.3	827.6	th rc
406	6	56	281.2	0	230.20	0	2392.6	9306.4	10139.0	828.4	ws
407	6	57	282.6	-0.2	263.00	0	2425.6	9275.6	10151.7	827.5	th
408	6	58	280.8	-0.3	295.30	0	2459.0	9242.2	10149.6	826.9	th
409	6	59	280.8	0	295.60	0	2459.0	9241.9	10149.7	828.4	ws
429	7	10	111.6	-0.1	161.70	0	2473.4	9228.9	10155.3	826.5	th
430	7	11	111.3	0.2	159.90	0	2473.4	9227.6	10156.7	827.3	ws
431	7	12	111.9	-0.4	138.80	0	2496.3	9207.4	10163.0	825.8	th
432	7	13	112.5	-0.4	115.30	0	2519.9	9185.1	10170.7	826.0	th
433	7	14	108.1	-0.8	105.29	0	2533.0	9178.7	10182.1	825.3	th
434	7	15	105.2	-0.7	85.69	0	2553.2	9161.3	10192.4	825.7	th
435	7	16	99.5	-0.5	67.60	0	2572.8	9145.3	10203.7	826.2	th
436	7	17	89.2	-0.5	66.10	0	2584.9	9144.7	10215.7	826.2	th
437	7	18	89.3	-0.1	65.90	0	2584.9	9144.5	10215.6	826.7	ws
438	7	19	81.7	-1.6	64.08	0	2593.6	9142.0	10224.1	825.0	th
439	7	20	72.9	-1.6	52.78	0	2608.0	9129.0	10230.3	825.3	th
440	7	21	72.3	-0.2	52.60	0	2608.0	9128.7	10230.8	826.6	ws
441	7	22	52.9	11.7	78.63	0		9141.3	10262.3	843.0	xs2 p4
442	7	23	52.4	11.7	78.73	0		9141.0	10262.9	843.1	xs2 p4
443	7	24	52.4	11.7	78.73	0		9141.0	10262.9	843.1	xs2 p4

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
444	7	25	57.8	2.3	68.24	-5		9136.3	10251.2	834.5	xs2 p3
445	7	26	57.8	2.3	68.15	-5		9136.2	10251.1	834.5	xs2 p3
446	7	27	136.5	1	50.49	-5		9113.3	10178.2	832.6	xs2 p2
447	7	28	136.5	1	50.49	-5		9113.3	10178.2	832.6	xs2 p2
448	7	29	146.6	6.8	57.89	-5		9110.5	10166.5	838.7	xs2 p1
449	7	30	146.7	6.8	57.99	-5		9110.4	10166.4	838.7	xs2 p1
450	7	31	146.7	6.8	57.89	-5		9110.4	10166.4	838.7	xs2 p1
451	7	32	74.6	2.9	103.87	-10		9178.7	10242.4	842.0	btf
452	7	33	74.5	2.9	103.97	-10		9178.8	10242.6	842.0	btf
453	7	34	68.2	-1.5	49.38	0	2613.4	9124.4	10233.2	825.5	th bdrc
454	7	35	45.4	-2.6	34.76	0	2635.4	9103.3	10239.2	825.2	th
455	7	36	13.5	-3.5	23.86	0	2654.6	9084.2	10238.0	825.3	th bdrc
456	7	37	12.4	-0.9	22.80	0	2654.6	9083.5	10237.1	826.4	ws
457	7	38	345.6	-6	26.06	0	2666.8	9072.1	10240.1	824.0	th
458	7	39	329.9	-2.8	35.76	0	2679.6	9060.7	10245.8	825.0	th
459	7	40	318.3	-2.3	47.66	0	2694.1	9046.9	10250.4	824.9	th bdrc
460	7	41	245.4	-9.6	25.73	-5		9055.2	10204.1	827.4	old 14?
461	7	42	245.7	-9.8	25.62	-5		9055.2	10204.3	827.3	old 14?
462	7	43	245.7	-9.8	25.62	-5		9055.2	10204.3	827.3	old 14?
463	7	44	306.3	-1.5	69.38	0	2718.9	9022.7	10255.9	824.9	th
464	7	45	308.2	-2.4	82.03	0	2731.8	9014.1	10265.5	823.3	th
465	7	46	304.8	-0.9	101.39	0	2751.9	8995.3	10272.7	825.2	th
466	7	47	297	-0.6	106.79	0	2767.1	8983.4	10263.3	825.6	th
467	7	48	297	-0.2	106.90	0	2767.1	8983.3	10263.4	826.4	ws
468	7	49	292.9	-0.6	135.89	0	2797.4	8953.4	10267.7	825.3	th
469	7	50	293.8	-1.1	148.57	0	2810.3	8942.6	10274.8	823.9	th
470	7	51	294.9	-0.6	169.19	0	2831.2	8925.1	10286.1	825.0	th
471	7	52	286.4	0.4	180.80	0		8905.1	10265.9	828.0	lac
472	7	53	306.4	0.4	164.70	0		8946.0	10312.6	827.9	rac
473	7	54	296.9	-0.7	185.39	0	2848.5	8913.3	10298.7	824.5	th
474	7	55	297.2	-0.4	208.49	0	2871.6	8893.1	10310.1	825.3	th
475	7	56	296.8	-0.4	227.99	0	2891.2	8875.1	10317.6	825.2	th
476	7	57	295.7	-0.8	233.98	0	2898.6	8867.8	10316.3	823.5	th bdrc
477	7	58	295.9	-0.7	250.48	0	2915.2	8853.3	10324.2	823.7	th bdrc
478	7	59	295.9	-0.2	250.60	0	2915.2	8853.2	10324.3	825.9	ws
479	7	60	297	-0.5	271.29	0	2936.6	8836.9	10338.0	824.4	th
480	7	61	298.8	-0.4	280.39	0	2949.1	8832.9	10349.9	824.8	th
481	7	62	300.9	-0.6	297.08	0	2968.9	8823.7	10367.4	823.7	th
482	7	63	300.9	-0.1	297.20	0	2968.9	8823.6	10367.4	826.2	ws
483	7	64	297.2	0.4	305.69	0		8806.7	10354.6	828.9	lac
484	7	65	297.1	0.4	305.99	0		8806.2	10354.2	828.9	lac
503	8	9	123.1	0.1	218.90	-5		8855.4	10398.8	829.0	rx
504	8	10	123.1	0.1	219.00	-5		8855.5	10398.8	829.0	rx
505	8	11	115.3	0.9	217.57	0		8868.7	10425.4	827.1	rac
506	8	12	134.9	0	211.50	0	2971.4	8821.9	10369.1	823.7	th
507	8	13	134.9	0.4	211.09	0	2971.4	8821.6	10369.4	825.1	ws
508	8	14	136	-0.4	196.80	0	2986.6	8808.7	10376.8	822.3	th
509	8	15	136.2	-0.3	180.60	0	3002.8	8797.0	10388.0	822.7	th
510	8	16	135.8	-0.5	165.89	0	3017.6	8787.7	10399.4	822.2	th bdrc
511	8	17	135.6	-0.2	158.90	0	3024.6	8783.2	10404.9	823.1	th bdrc
512	8	18	142.3	1.7	152.63	0		8765.4	10397.6	828.2	lac
513	8	19	134	0	136.60	0	3047.3	8770.3	10423.5	823.7	th

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record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
514	8	20	129.8	0.4	125.20	0	3062.2	8768.2	10438.2	824.5	th rc
515	8	21	129.7	0.5	125.10	0	3062.2	8768.3	10438.5	824.8	ws
516	8	22	122.8	0.3	103.20	0	3088.2	8758.8	10462.5	824.2	th
517	8	23	105.8	0.6	118.09	0		8785.7	10486.2	824.9	rac
518	8	24	110.4	-0.4	81.80	0	3117.3	8748.7	10489.9	823.1	th
519	8	25	104.1	-1.7	74.47	0	3128.6	8744.3	10500.2	821.5	th
520	8	26	104.2	-0.2	74.40	0	3128.6	8744.2	10500.1	823.4	ws
521	8	27	95.2	-2.5	53.35	0	3151.9	8725.2	10513.5	821.3	th
522	8	28	79.2	-4.2	41.89	0	3169.4	8713.2	10526.2	820.6	th
523	8	29	16.5	-5.1	21.81	0	3206.7	8678.2	10539.3	821.7	th
524	8	30	335	-3.2	34.35	0	3229.8	8657.5	10549.5	821.7	th bdrc
525	8	31	323.9	-2.5	49.45	0	3246.8	8642.9	10558.3	821.5	th
526	8	32	300.3	-7.3	40.47	-5		8637.1	10538.8	823.5	old sta15?
527	8	33	300.3	-7.3	40.37	0		8637.2	10538.7	818.5	old
528	8	34	315.2	-1.9	71.96	0	3271.1	8621.3	10569.4	821.3	th
529	8	35	311.6	-1.7	81.66	0	3281.9	8611.0	10572.6	821.2	th bdrc
530	8	36	308.2	-1.4	96.37	0	3297.6	8596.3	10578.0	821.3	th
531	8	37	308.2	-0.2	96.50	0	3297.6	8596.2	10578.1	823.3	ws
532	8	38	314.1	0.8	95.09	0		8603.7	10584.6	825.0	rac
533	8	39	270.7	2.9	91.48	0		8580.6	10519.5	828.3	lac
534	8	40	300.8	-1.6	130.55	0	3334.7	8559.9	10585.2	820.0	th
535	8	41	297.1	-1.6	140.05	-5		8547.4	10582.2	824.7	rx
536	8	42	297.1	-1.7	139.94	-5		8547.5	10582.1	824.5	rx
537	8	43	297	-1.7	140.04	-5		8547.3	10582.0	824.5	rx
538	8	44	298.9	-0.4	142.70	3.71	3347.6	8547.1	10587.3	819.0	th bdrc
539	8	45	295.8	-0.1	163.20	3.71	3369.7	8525.1	10589.4	819.7	th bdrc
540	8	46	295.6	-1.1	188.27	0	3394.8	8502.3	10599.7	820.0	th
541	8	47	294.8	-0.8	207.78	0	3414.5	8483.4	10605.5	820.8	th
542	8	48	295.5	-0.6	227.69	0	3434.6	8466.5	10616.4	821.3	th
543	8	49	293.3	-0.4	243.59	0	3452.9	8448.3	10614.7	822.0	th
544	8	50	291.5	0	254.70	0	3466.5	8435.1	10611.7	823.7	th rc
545	8	51	291.5	0.2	255.30	0	3466.5	8434.5	10611.9	824.6	ws
562	9	8	97.2	0.8	149.49	0		8419.7	10556.0	826.0	lac
563	9	9	70.1	0.6	164.89	0		8426.5	10630.8	825.7	rac
564	9	10	77.4	-0.5	161.89	0	3472.4	8429.4	10610.0	822.5	th
565	9	11	77.4	-0.2	161.70	0	3472.4	8429.2	10610.0	823.4	ws
566	9	12	78.2	-0.8	158.68	0	3476.3	8426.8	10607.1	821.7	th
567	9	13	78	-1.4	144.16	0	3490.8	8412.4	10604.7	820.4	th
568	9	14	76.1	-1.2	136.07	0	3500.2	8403.5	10607.4	821.1	th
569	9	15	73.7	-1.1	126.48	0	3511.2	8392.8	10610.2	821.5	th
570	9	16	71	-0.8	114.39	0	3524.6	8379.6	10611.9	822.3	th
571	9	17	71	-0.4	114.10	0	3524.6	8379.3	10611.8	823.1	ws
572	9	18	64.4	-1	107.58	0	3539.0	8368.4	10621.2	822.1	th
573	9	19	58.8	-1.4	93.27	0	3556.4	8351.2	10623.0	821.7	th
574	9	20	53.4	-2.9	87.89	0	3566.5	8342.0	10627.1	819.5	th
575	9	21	51.7	-2.6	80.82	0	3574.0	8334.8	10624.8	820.3	th
576	9	22	63.6	-0.6	74.80	0		8338.4	10608.0	823.2	old sta 16?
577	9	23	63.7	-0.5	74.70	0		8338.4	10607.8	823.3	old sta16?
578	9	24	46	-2.4	66.34	0	3590.2	8319.1	10620.8	821.2	th
579	9	25	32.8	-1.9	43.88	0	3615.8	8295.2	10611.6	822.5	th
580	9	26	32.8	-1.1	43.49	0	3615.8	8295.0	10611.3	823.1	ws
581	9	27	21.7	11.5	74.18	-5		8298.9	10643.6	844.0	xs3 p4



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record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
582	9	28	22	11.5	74.38	-5		8299.3	10643.7	844.1	xs3 p4
583	9	29	21.7	11.6	74.35	-5		8298.9	10643.8	844.2	xs3 p4
584	9	30	26	1.3	64.98	-5		8299.9	10633.1	830.4	xs3 p3
585	9	31	25.9	1.3	64.98	-5		8299.8	10633.1	830.4	xs3 p3
586	9	32	25.9	1.3	64.88	-5		8299.8	10633.1	830.4	xs3 p3
587	9	33	131.2	-2.4	46.16	-5		8306.2	10544.3	827.0	xs3 p2
588	9	34	131.2	-2.4	46.06	-5		8306.1	10544.4	827.0	xs3 p2
589	9	35	143	10.2	59.84	-5		8307.4	10526.9	839.7	xs3 p1
590	9	36	143.1	10.2	59.74	-5		8307.3	10526.9	839.7	xs3 p1
591	9	37	206.6	8.2	65.03	-5		8242.3	10516.5	838.3	btg
592	9	38	206.7	8.2	65.13	-5		8242.2	10516.5	838.3	btg
593	9	39	6.9	-3.7	27.54	0	3638.4	8274.7	10602.0	822.2	th bdrc
594	9	40	319.4	-6.8	20.26	0	3658.8	8258.2	10590.1	821.5	th
595	9	41	306.8	-5.9	35.21	0	3674.8	8243.2	10595.8	820.3	th bdrc
596	9	42	288.2	-4.8	51.82	0	3696.4	8222.2	10590.9	819.6	th
597	9	43	288	-3.2	51.12	0	3696.4	8222.8	10590.5	821.1	ws
598	9	44	280	-4.3	64.02	0	3711.1	8208.4	10585.8	819.1	th
599	9	45	272.1	-2.7	85.41	0	3734.8	8186.1	10577.8	819.9	th
600	9	46	265.6	-2.2	110.62	0	3762.4	8161.1	10566.2	819.7	th
601	9	47	268	2.1	116.72	3.71		8154.8	10570.6	824.5	rx
602	9	48	268.1	2.1	116.82	3.71		8154.7	10570.8	824.5	rx
603	9	49	262.5	-1.4	139.06	0	3791.6	8133.6	10556.5	820.5	th
604	9	50	258.3	-1.5	161.54	0	3816.6	8113.2	10541.9	819.7	th
605	9	51	257	-1.3	186.75	0	3842.1	8089.5	10532.7	819.7	th
606	9	52	257.2	-0.9	186.78	0	3842.1	8089.3	10533.3	821.0	ws
607	9	53	255.4	-1.3	203.55	0	3859.8	8074.4	10523.4	819.3	th
608	9	54	255.3	-0.7	203.78	0	3859.8	8074.3	10523.0	821.5	ws
609	9	55	254.7	0.7	236.28	7.5	3892.6	8043.5	10512.3	819.3	th
610	9	56	254.9	0.9	235.67	7.5	3892.6	8043.9	10513.3	820.1	ws
611	9	57	247.8	-0.6	224.39	0		8063.7	10489.9	821.6	old sta17?
630	10	9	121.3	0.4	253.29	0		7991.1	10461.1	822.3	lac
631	10	10	111.2	0.4	202.10	0		7963.1	10519.6	822.0	rac
632	10	11	112.4	0.3	273.50	3.71	3921.3	8027.6	10488.5	818.3	th
633	10	12	115.8	-0.7	255.68	3.71	3945.1	8004.9	10481.4	813.7	th
634	10	13	115.9	-1.2	255.74	-5	3945.1	8004.8	10481.0	820.2	ws
635	10	14	117.1	-0.9	236.57	0	3965.0	7985.3	10484.9	816.8	th
636	10	15	119.7	-0.7	219.58	0	3984.9	7965.4	10483.9	817.9	th
637	10	16	119.5	-1	203.37	0	4001.1	7951.7	10492.5	817.0	th
638	10	17	121.3	-0.7	182.89	3.71	4022.5	7931.0	10497.7	814.6	th
639	10	18	122.5	-0.6	173.29	3.71	4032.8	7920.9	10499.6	815.0	th
640	10	19	124.1	-0.8	161.38	3.71	4045.6	7908.3	10502.2	814.6	th
641	10	20	128.6	-0.7	145.19	3.71	4065.7	7888.2	10502.1	815.1	th
642	10	21	132.1	-0.5	128.40	3.71	4084.5	7870.0	10506.6	815.7	th
643	10	22	134.8	-0.8	115.19	3.71	4098.9	7856.4	10511.5	815.2	th
644	10	23	140.9	-1.1	98.88	3.71	4118.7	7837.1	10515.9	815.0	th
645	10	24	144.7	-3.3	77.67	0	4140.7	7819.6	10529.3	816.1	th
646	10	25	144.6	-0.5	78.30	0	4140.7	7820.1	10528.9	819.9	ws
647	10	26	154.2	-2.1	58.96	0	4162.5	7800.4	10539.6	818.4	th
648	10	27	177.5	-2.3	39.67	0	4190.0	7776.4	10553.0	819.0	th
649	10	28	198.9	-3.7	39.92	0	4204.8	7761.8	10554.9	818.0	th
650	10	29	226.3	-3	39.85	0	4223.7	7745.9	10565.1	818.5	th
651	10	30	224.4	0.9	57.69	0		7734.3	10551.5	821.5	lac

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record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
652	10	31	323.2	9.9	13.89	0		7766.4	10603.8	823.0	rac
653	10	32	254	-4.7	26.51	0	4244.2	7749.2	10585.4	818.4	th
654	10	33	289.5	-2.3	53.76	0	4279.8	7724.0	10610.6	818.4	th
655	10	34	289.9	-0.9	53.59	0	4279.8	7724.3	10610.9	819.7	ws
656	10	35	303.8	-0.8	85.99	0	4316.2	7703.2	10640.5	819.4	th rc
657	10	36	305.4	-0.5	88.10	0	4316.2	7702.9	10643.7	819.8	ws
658	10	37	309.7	-1	114.58	0	4346.6	7686.5	10665.9	818.6	th
659	10	38	310.1	-1	142.68	0	4374.7	7665.6	10684.6	818.1	th
660	10	39	310.5	-0.9	159.28	0	4391.3	7653.6	10696.1	818.1	th
661	10	40	311.5	-0.5	159.49	0	4391.3	7655.2	10698.4	819.2	ws
662	10	41	287.8	0.9	180.28	0		7603.1	10647.8	823.4	xs4 p2
663	10	42	287.8	0.9	180.68	0		7602.7	10647.9	823.4	xs4 p2
664	10	43	287.8	0.9	180.58	0		7602.8	10647.9	823.4	xs4 p2
665	10	44	325.8	5.5	159.36	0		7685.1	10724.5	835.9	xs4 p4
666	10	45	325.7	5.5	159.66	0		7684.7	10724.6	835.9	xs4 p4
667	10	46	325.8	5.5	159.56	0		7685.0	10724.6	835.9	xs4 p4
668	10	47	317	0.6	157.99	-3		7667.0	10708.2	825.2	xs4 p3
669	10	48	317	0.5	157.99	-3		7666.9	10708.2	824.9	xs4 p3
670	10	49	317	0.6	158.09	-3		7666.9	10708.3	825.2	xs4 p3
671	10	50	310.3	-1	165.87	0	4398.0	7648.2	10700.0	817.7	th
672	10	51	311.4	-0.9	187.98	0	4420.3	7633.7	10717.0	817.6	th
673	10	52	311.9	-0.8	218.98	0	4451.4	7611.7	10738.9	817.5	th
674	10	53	311.9	-0.4	219.19	0	4451.4	7611.6	10739.1	819.0	ws
675	10	54	311.4	-0.6	248.79	0	4481.3	7588.1	10757.2	818.0	th
676	10	55	311.8	-0.6	271.89	0	4504.4	7572.0	10773.9	817.7	th
677	10	56	312.1	-0.6	298.58	0	4531.2	7553.2	10792.9	817.4	th
678	10	57	312.2	-0.4	298.09	0	4531.2	7553.9	10792.9	818.5	ws
690	10	69	309.5	0.3	459.69	-5		7420.0	10885.1	828.0	br cap
698	11	8	118.3	-1.4	72.48	0	4544.2	7562.7	10784.0	817.3	th
699	11	9	118.4	-0.6	72.50	0	4544.2	7562.7	10783.8	818.3	ws
700	11	10	113.7	-1.6	57.38	0	4560.2	7551.4	10795.3	817.4	th
701	11	11	107.1	-2.2	44.77	0	4574.1	7541.7	10805.2	817.3	th
702	11	12	99	-4.8	48.53	-5		7546.8	10810.7	820.0	rx
703	11	13	99	-4.8	48.53	-5		7546.8	10810.7	820.0	rx
704	11	14	85.4	-5	30.68	0	4593.9	7529.5	10820.8	816.4	th
705	11	15	39	-9.3	19.05	0	4616.2	7510.9	10833.1	815.9	th
706	11	16	352	-9.4	23.18	0	4633.5	7495.7	10841.3	815.2	th
707	11	17	304.1	-2.4	8.29	0		7492.0	10823.0	818.7	old sta
708	11	18	305	-2.8	8.19	0		7492.2	10823.0	818.6	old sta
709	11	19	303.9	-2.8	8.09	0		7492.2	10822.8	818.7	old sta
710	11	20	302.9	-2.8	8.19	0		7492.0	10822.8	818.6	old sta
711	11	21	335.8	-7.8	27.34	0	4641.7	7487.7	10843.3	815.3	th pool
712	11	22	336.7	-1.7	27.29	0	4641.7	7488.1	10843.4	818.2	ws
713	11	23	325.9	-5	44.23	0	4659.6	7474.1	10854.9	815.2	th
714	11	24	322.3	-5.4	50.47	0	4666.5	7468.0	10858.3	814.3	th
715	11	25	319.6	-5.4	54.36	-5		7463.7	10859.7	818.9	rx
716	11	26	319.5	-5.4	54.46	-5		7463.5	10859.7	818.9	rx
717	11	27	323.1	-1.5	57.88	3.71	4674.0	7464.2	10864.6	813.8	th
718	11	28	321.7	-2.6	71.33	3.71	4687.5	7454.7	10874.3	812.1	th
719	11	29	318.2	-2.9	79.40	3.71	4696.8	7446.0	10877.5	811.3	th
720	11	30	315	-0.7	81.09	7.5	4701.6	7441.6	10875.7	810.6	th
721	11	31	319.7	-1	95.89	3.71	4718.1	7436.9	10891.4	813.7	th

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
722	11	32	319.8	-3	111.15	0	4733.3	7427.2	10903.2	813.2	th
723	11	33	319.8	-3	111.15	-5	4733.3	7427.2	10903.2	818.2	ws
724	11	34	320.8	-1.6	127.45	0	4749.8	7418.4	10917.1	815.5	th
725	11	35	319.1	-0.8	145.59	0	4768.4	7403.6	10928.4	817.0	th
726	11	36	315.7	-0.7	166.89	0	4791.6	7382.3	10937.8	817.0	th
727	11	37	313.1	0.7	187.99	3.71	4814.2	7361.6	10946.8	817.6	th
728	11	38	311.4	1.6	209.42	7.5	4836.4	7341.8	10956.8	817.4	th rc
729	11	39	8.7	9.4	38.77	-5		7504.8	10856.6	830.5	bt
730	11	40	8.7	9.5	38.86	-5		7504.8	10856.7	830.6	bt
731	11	41	292.1	0.7	217.78	0		7297.1	10900.3	821.7	lac
732	11	42	316.1	0.3	217.30	0		7348.2	10974.9	820.2	rac
736	11	46	309.7	1.6	103.96	-5		7418.9	10884.7	827.0	br cap
737	11	47	228.1	4.2	54.15	0		7458.6	10782.2	823.0	lac
738	11	48	28.9	-0.7	30.10	0		7513.5	10844.7	818.7	rac
756	12	10	87.7	0.1	375.10	0	4850.8	7329.9	10964.9	817.1	th rc
757	12	11	87.6	0.2	374.90	0	4850.8	7329.6	10965.5	817.7	ws
758	12	12	85.9	-0.1	350.40	0	4878.0	7304.6	10974.9	815.8	th
759	12	13	84.3	-0.3	343.30	0	4890.0	7296.7	10983.9	814.6	th pool
760	12	14	84.5	0	343.10	0	4890.0	7296.6	10982.7	816.4	ws
761	12	15	84.5	-0.6	311.88	0	4921.4	7265.5	10979.7	813.2	th
762	12	16	84.5	-0.4	288.89	0	4944.4	7242.6	10977.5	814.4	th
763	12	17	86.5	-0.5	265.89	0	4969.4	7220.5	10966.0	814.1	th
764	12	18	88.1	-0.5	244.89	0	4991.6	7199.8	10957.9	814.3	th
765	12	19	88.2	-0.4	231.89	0	5004.6	7186.8	10957.1	814.8	th
766	12	20	80	0.2	235.10	0		7186.6	10990.6	817.3	rac
767	12	21	94.5	0.4	219.99	0		7174.4	10932.5	818.0	lac
768	12	22	90.3	-0.4	207.09	0	5030.6	7162.2	10948.7	815.0	th
769	12	23	90.2	-0.2	206.90	0	5030.6	7162.0	10949.1	815.7	ws
770	12	24	89.7	-0.7	181.49	0	5056.3	7136.5	10950.8	814.2	th
771	12	25	90.1	-0.9	160.88	0	5077.0	7115.9	10949.5	813.9	th
772	12	26	91.8	-1	136.68	0	5101.6	7091.7	10945.5	814.0	th
773	12	27	86.6	-1.1	111.08	0	5129.5	7065.9	10956.4	814.3	th
774	12	28	82.8	-1.5	92.07	0	5149.6	7046.4	10961.3	814.0	th
775	12	29	80.8	-1.3	81.58	0	5160.6	7035.6	10962.8	814.6	th rc
776	12	30	81.7	-0.1	218.50	0		7171.3	10981.3	816.1	old sta
777	12	31	81.9	0	218.40	0		7171.3	10980.6	816.4	old sta
778	12	32	81.8	0	218.20	0		7171.0	10980.9	816.4	old sta
779	12	33	77.3	-1.3	69.78	0	5173.2	7023.1	10965.1	814.8	th
780	12	34	62.7	-1.6	43.08	0	5203.3	6993.3	10969.6	815.2	th
781	12	35	8.5	-3.3	25.66	0	5238.3	6958.9	10975.2	815.0	th
782	12	36	334.9	-3.9	27.34	0	5253.7	6943.5	10974.6	814.6	th
783	12	37	332	-12.1	23.96	-5		6943.8	10971.0	816.3	rx
784	12	38	331.9	-12.6	23.81	-5		6943.8	10970.8	816.1	rx
785	12	39	303.6	-3.2	36.34	0	5272.9	6924.8	10969.9	814.4	th
786	12	40	303.7	-0.3	36.10	0	5272.9	6925.0	10969.8	816.2	ws
787	12	41	188	3.6	52.90	-5		6947.7	10897.4	824.8	bt
788	12	42	187.9	3.6	52.80	-5		6947.8	10897.5	824.8	bt
789	12	43	199	11	93.25	-5		6924.7	10861.6	839.6	xs5 p1
790	12	44	198.9	11.1	93.12	-5		6924.9	10861.7	839.7	xs5 p1
791	12	45	199	11	93.35	-5		6924.7	10861.5	839.6	xs5 p1
792	12	46	204.7	1.8	81.96	-5		6920.8	10875.3	824.0	xs5 p2
793	12	47	204.6	1.8	81.76	-5		6921.0	10875.5	824.0	xs5 p2

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
794	12	48	204.6	1.7	81.86	-5		6921.0	10875.4	823.9	xs5 p2
795	12	49	313.8	-0.1	88.30	-5		6891.3	11010.9	821.3	xs5 p3
796	12	50	313.8	-0.1	88.30	-5		6891.3	11010.9	821.3	xs5 p3
797	12	51	318.7	6.3	102.48	-5		6887.4	11026.8	832.7	xs5 p4
798	12	52	318.8	6.3	102.38	-5		6887.6	11026.8	832.7	xs5 p4
799	12	53	318.7	6.3	102.38	-5		6887.5	11026.7	832.7	xs5 p4
800	12	54	272.6	-1.6	41.98	0		6913.1	10951.7	815.3	ol sta aprx
801	12	55	272.6	-1.5	41.99	0		6913.1	10951.7	815.3	ol sta aprx
802	12	56	283.8	-2.1	61.76	0	5303.1	6895.1	10964.5	814.2	th
803	12	57	284	-1.5	61.78	0	5303.1	6895.1	10964.7	814.8	ws
804	12	58	272.9	-1.6	96.46	0	5340.8	6858.7	10954.7	813.7	th
805	12	59	270.5	-1.5	111.86	0	5356.8	6843.2	10950.8	813.5	th
806	12	60	268.6	-1.3	131.87	0	5377.2	6823.2	10946.6	813.4	th
807	12	61	265.3	-1.2	160.66	0	5407.2	6794.9	10936.6	813.1	th
808	12	62	262	-1.1	180.87	0	5429.7	6776.0	10924.6	813.0	th
809	12	63	259.8	-0.9	206.67	0	5456.5	6751.7	10913.2	813.2	th
810	12	64	259.9	-0.6	206.79	0	5456.5	6751.5	10913.5	814.3	ws
811	12	65	259.1	-0.9	233.37	0	5483.3	6725.9	10905.7	812.8	th
812	12	66	266.5	-0.4	221.49	0		6734.0	10936.3	814.9	rac
813	12	67	250.2	0.2	215.40	0		6752.4	10876.8	817.2	lac
831	13	10	86.3	0.6	181.69	0	5508.7	6712.7	10884.1	812.8	th
832	13	11	86.4	0.9	181.88	0	5508.7	6712.9	10883.8	813.8	ws
833	13	12	88.3	0.6	162.79	0	5528.5	6694.1	10877.2	812.6	th
834	13	13	91.1	0.8	145.19	0	5547.6	6676.5	10869.6	812.9	th
835	13	14	102.5	1.9	145.12	0		6673.1	10841.0	815.7	lac
836	13	15	65.8	1.2	139.77	0		6658.9	10929.7	813.8	rac
837	13	16	94.6	0.6	129.59	0	5565.3	6660.6	10862.0	812.3	th
838	13	17	100	0.2	114.00	0	5584.7	6643.7	10852.6	811.3	th bdrc
839	13	18	103.4	-0.3	102.10	0	5598.2	6630.7	10848.7	810.4	th
840	13	19	103.4	0.3	102.00	0	5598.2	6630.6	10848.7	811.5	ws
841	13	20	104.8	-0.4	82.20	0	5618.2	6610.9	10851.4	810.3	th bdrc
842	13	21	107	-1	70.49	0	5630.3	6598.8	10851.8	809.7	th
843	13	22	109.9	-1.1	54.69	0	5646.4	6582.8	10853.7	809.9	th
844	13	23	131	3	46.04	0		6566.1	10842.2	813.3	lac
845	13	24	116.9	-4	37.41	0	5664.5	6564.7	10855.4	808.3	th
846	13	25	124.4	-2.5	26.77	0	5675.9	6553.5	10857.2	809.7	th
847	13	26	36.2	3.1	41.34	0		6555.8	10905.7	813.2	rac
848	13	27	157.4	-5.3	18.02	0	5691.2	6538.3	10855.7	809.2	th
849	13	28	222.1	-4	17.86	0	5710.4	6519.4	10859.1	809.7	th
850	13	29	242.1	-2.8	26.57	0	5721.9	6507.9	10859.9	809.6	th
851	13	30	255.4	-1.7	44.88	0	5741.9	6488.0	10861.0	809.6	th
852	13	31	264.5	-0.7	67.49	0	5766.1	6464.2	10865.9	810.1	th bdrc
853	13	32	268.2	-0.8	80.39	0	5779.9	6451.0	10869.8	809.8	th
854	13	33	268.2	-0.3	80.20	0	5779.9	6451.2	10869.8	810.5	ws
855	13	34	269.5	-1.3	105.87	0	5805.5	6425.5	10871.4	808.5	th
856	13	35	269.4	-1	126.38	0	5826.0	6405.0	10871.0	808.7	th
857	13	36	269.3	-1.2	144.27	0	5843.9	6387.1	10870.6	807.9	th
858	13	37	272	-0.7	162.89	0	5863.8	6368.6	10878.0	808.9	th
859	13	38	274.5	-0.6	174.99	0	5878.0	6356.9	10886.1	809.1	th
860	13	39	276.4	-0.5	187.49	0	5891.9	6345.1	10893.3	809.3	th
861	13	40	278.5	-0.5	198.39	0	5904.9	6335.2	10901.7	809.2	th
862	13	41	278.4	-0.2	198.50	0	5904.9	6335.0	10901.4	810.2	ws

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
863	13	42	278.9	-0.5	210.19	0	5916.7	6323.7	10904.9	809.1	th
864	13	43	279.5	-0.8	220.78	0	5927.6	6313.6	10908.8	807.8	th
865	13	44	283	0	214.30	0		6322.6	10920.6	810.9	old sta
866	13	45	282.9	0	214.40	0		6322.4	10920.2	810.9	old sta
867	13	46	290.1	0.5	214.49	0		6330.0	10946.1	812.8	rac
868	13	47	273.5	0	217.30	0		6314.5	10885.6	810.9	lac
869	13	48	283.2	-0.8	227.78	0	5943.6	6309.6	10924.4	807.7	th
870	13	49	281.6	-0.8	240.68	0	5958.1	6295.6	10920.8	807.6	th
871	13	50	281.8	-0.2	258.50	3.71	5976.0	6278.3	10925.2	806.3	th
872	13	51	283	0.1	269.90	3.71	5988.6	6268.4	10933.1	807.7	th
873	13	52	283	-0.5	269.99	0	5988.6	6268.3	10933.1	808.6	ws
874	13	53	283.9	-0.7	283.98	0	6003.4	6255.7	10940.6	807.4	th
875	13	54	283	-0.4	280.99	0		6257.6	10935.6	809.0	rx
876	13	55	284	-0.4	281.29	0		6258.4	10940.4	809.0	rx
892	14	8	85.6	-0.1	121.90	0	6009.4	6254.4	10934.7	805.3	th
893	14	9	85.6	0.2	121.50	0	6009.4	6254.0	10934.7	806.0	ws
894	14	10	72.4	1.9	141.52	0		6267.8	10968.1	810.2	rac
895	14	11	78.7	1.5	136.65	0		6266.9	10952.1	809.1	old sta
896	14	12	78.9	1.3	136.66	0		6267.0	10951.7	808.6	old sta
897	14	13	84.6	-0.6	113.69	0	6017.8	6246.0	10936.1	804.3	th pool
898	14	14	84.7	0.2	113.60	0	6017.8	6246.0	10935.9	805.9	ws
899	14	15	82.2	-1.2	97.48	0	6034.6	6229.4	10938.6	803.5	th
900	14	16	87.9	-2.6	89.11	0	6047.1	6221.9	10928.6	801.5	th pool
901	14	17	82.9	-1.6	80.77	0	6058.3	6213.0	10935.3	803.3	th
902	14	18	70.3	-1.8	63.37	0	6081.7	6192.5	10946.7	803.5	th
903	14	19	63	-3.2	56.21	0	6092.2	6182.9	10950.9	802.4	th
904	14	20	49.1	-3.9	39.81	0	6112.2	6162.9	10951.4	802.8	th
905	14	21	31.5	-5.6	24.78	0	6130.0	6145.8	10946.5	803.1	th
906	14	22	6.9	-3.6	14.77	0	6142.9	6134.6	10940.0	804.6	th rc
907	14	23	5.8	-0.6	15.50	0	6142.9	6134.4	10940.8	805.4	ws
908	14	24	283.1	-6.4	13.91	0	6162.1	6119.3	10928.5	804.0	th bdrc
909	14	25	269.1	-5.2	20.22	0	6169.6	6112.6	10925.0	803.7	th
910	14	26	266	-7.5	28.85	0	6178.3	6104.1	10923.3	801.7	th
911	14	27	295.1	11	68.91	-5		6070.5	10954.6	823.9	rb end rebar
912	14	28	293.6	11	68.71	-5		6069.9	10952.9	823.9	rb end rebar
913	14	29	167.5	7	77.82	-5		6149.7	10849.4	820.1	lb end rebar
914	14	30	130.3	5.4	7.77	0		6138.8	10920.3	806.3	old sta
915	14	31	130.3	5.1	7.67	0		6138.7	10920.4	806.2	old sta
916	14	32	136.8	5.9	26.16	0		6150.8	10906.3	808.2	lac
917	14	33	94.5	2.5	57.25	0		6189.9	10920.9	808.0	lac
918	14	34	359	2.5	29.97	0		6132.3	10955.3	806.8	rac
919	14	35	125.6	8.5	56.57	-5		6178.9	10892.4	819.0	bt
920	14	36	126	8.5	56.47	-5		6178.5	10892.2	819.0	bt
921	14	37	126	8.6	56.66	-5		6178.7	10892.1	819.1	bt
922	14	38	134	19.4	111.87	1.25		6213.3	10847.6	843.7	nipple
923	14	39	133.8	19.3	111.65	0		6213.4	10848.1	844.6	nipple
1012	25	2	274	2.1	70.05	0		#N/A	#N/A	#N/A	PIN 2 XSA
1013	25	3	298.3	0.4	110.70	0	70.1	-97.5	52.5	0.8	PIN 3 XSA
1014	25	4	261.6	5.6	104.10	0	0.0	-103.0	-15.2	10.2	PIN 1 XSA
1015	25	5	262.7	4.9	103.72	0	2.0	-102.9	-13.2	8.9	GS PIN 1 XSA
1016	25	6	264.4	2.8	102.88	0	5.4	-102.4	-10.0	5.0	GS
1017	25	7	263.9	3.2	102.64	0	4.4	-102.1	-10.9	5.7	BT



Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
1018	25	8	266.6	2	101.94	0	9.4	-101.8	-6.0	3.6	GS
1019	25	9	268.8	1.6	100.46	0	13.6	-100.4	-2.1	2.8	LFB TR
1020	25	10	270.2	0.2	100.20	0	16.0	-100.2	0.3	0.3	GS
1021	25	11	271.6	0.3	99.90	0	18.5	-99.9	2.8	0.5	TR
1022	25	12	273.2	-0.2	100.50	0	21.4	-100.3	5.6	-0.4	GS PIN 2 XSA
1023	25	13	273.3	0.7	100.59	0	21.6	-100.4	5.8	1.2	PIN 2 XSA
1024	25	14	274.1	-0.5	100.90	0	23.0	-100.6	7.2	-0.9	GS
1025	25	15	274.6	-1.3	101.07	0	23.9	-100.7	8.1	-2.3	LEC
1026	25	16	275.9	-1.5	101.27	0	26.2	-100.7	10.4	-2.7	GS
1027	25	17	276.6	-2.2	101.03	0	27.5	-100.4	11.6	-3.9	LEW
1028	25	18	277.4	-2.6	101.30	0	28.9	-100.5	13.0	-4.6	GS
1029	25	19	278.3	-2.2	101.13	0	30.5	-100.1	14.6	-3.9	BR
1030	25	20	278.7	-2.7	101.19	0	31.2	-100.0	15.3	-4.8	BR
1031	25	21	280	-2.7	101.39	0	33.5	-99.8	17.6	-4.8	BR
1032	25	22	280.3	-2.3	101.52	0	34.1	-99.9	18.2	-4.1	GS
1033	25	23	283.2	-2.3	101.62	0	39.7	-98.9	23.2	-4.1	GS
1034	25	24	282.7	-2.5	102.00	0	38.4	-99.5	22.4	-4.5	GS
1035	25	25	283.1	-2.6	102.19	0	39.1	-99.5	23.2	-4.6	GS
1036	25	26	287.4	-2.5	102.40	0	47.6	-97.7	30.6	-4.5	GS
1037	25	27	285.3	-2.4	102.61	0	43.6	-99.0	27.1	-4.3	GS
1038	25	28	287.7	-2.5	102.90	0	48.4	-98.0	31.3	-4.5	GS
1039	25	29	287.1	-2.3	103.02	0	46.8	-98.5	30.3	-4.1	GS
1040	25	30	288.4	-2.6	103.79	0	49.9	-98.5	32.8	-4.7	GS
1041	25	31	290.8	-2.6	104.39	0	54.3	-97.6	37.1	-4.7	GS
1042	25	32	291.1	-2.2	105.32	0	55.4	-98.3	37.9	-4.0	REW
1043	25	33	294.2	-1.8	106.85	0	61.3	-97.5	43.8	-3.4	GS
1044	25	34	294.7	-1.3	107.67	0	62.6	-97.8	45.0	-2.4	GS
1045	25	35	296.3	-0.9	108.69	0	65.8	-97.4	48.2	-1.7	REC
1046	25	36	298.1	0.3	110.40	0	69.6	-97.4	52.0	0.6	PIN 3 xsa
1047	25	37	255.9	7.8	91.15	0		-88.4	-22.2	12.5	BTB
1048	25	38	299	-0.1	111.60	0	71.9	-97.6	54.1	-0.2	PIN 3 xsa
1049	25	39	298.1	-0.4	110.70	0	69.9	-97.6	52.1	-0.8	RBF PIN 3 xs a
1051	25	41	301.2	-0.4	112.50	0	76.0	-96.2	58.3	-0.8	BR
1052	25	42	303.8	3.5	116.58	0	82.6	-96.9	64.9	7.1	BR
1055	26	4	323.1	12.9	70.48	0	98.9	-42.3	56.4	16.1	PIN 4 XSB
1056	26	5	322.4	12.2	72.92	0	101.5	-44.5	57.8	15.8	GS
1057	26	6	319.4	10.5	70.50	0	94.4	-45.9	53.5	13.1	BR
1058	26	7	315.2	9.7	67.13	0	87.1	-47.3	47.6	11.5	BR
1059	26	8	315.1	5.4	68.89	0	88.9	-48.6	48.8	6.5	BR
1060	26	9	312.7	3.9	67.34	0	84.2	-49.5	45.7	4.6	GS
1061	26	10	310.9	2.9	66.81	0	81.7	-50.5	43.7	3.4	PIN 3 xsb
1062	26	11	310.9	2.8	67.22	0	82.1	-50.8	44.0	3.3	GS PIN 3 xsb
1063	26	12	304.3	0.9	65.79	0	74.0	-54.4	37.1	1.0	GS
1064	26	13	301.2	0.4	64.90	0	70.3	-55.5	33.6	0.5	RBF
1065	26	14	298.3	0	64.20	0	67.0	-56.5	30.4	0.0	GS
1066	26	15	297	0.6	64.10	0	65.5	-57.1	29.1	0.7	GS
1067	26	16	295.9	-1	64.39	0	64.2	-57.9	28.1	-1.1	GS REC
1068	26	17	294.7	-1.4	64.28	0	62.9	-58.4	26.9	-1.6	GS
1069	26	18	291.4	-1.6	64.37	0	59.2	-59.9	23.5	-1.8	GS
1070	26	19	288.3	-2.1	64.66	0	55.7	-61.4	20.3	-2.4	GS
1071	26	20	285.1	-2.8	65.12	0	52.0	-62.9	17.0	-3.2	REW
1072	26	21	282.4	-2.7	65.43	0	48.9	-63.9	14.0	-3.1	GS

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
1073	26	22	281.9	-1.6	65.47	0	48.4	-64.1	13.5	-1.8	GS
1074	26	23	280.6	-1.7	65.47	0	46.9	-64.4	12.0	-1.9	GS
1075	26	24	280	-3.1	65.80	0	46.1	-64.8	11.4	-3.6	GS
1076	26	25	278.3	-4.2	67.12	0	43.8	-66.4	9.7	-4.9	GS
1077	26	26	276.6	-3.9	67.64	0	41.7	-67.2	7.8	-4.6	GS
1078	26	27	274.8	-3.9	68.34	0	39.4	-68.1	5.7	-4.7	GS
1079	26	28	273.2	-3.3	69.09	0	37.4	-69.0	3.9	-4.0	GS
1080	26	29	271.1	-3.5	69.77	0	34.7	-69.8	1.3	-4.3	GS
1081	26	30	270.4	-3.5	69.97	0	33.9	-70.0	0.5	-4.3	BR
1082	26	31	268.6	-3.4	70.97	0	31.4	-71.0	-1.7	-4.2	BR
1083	26	32	267.4	-3.3	71.88	0	29.7	-71.8	-3.3	-4.1	BR
1084	26	33	265.8	-3.3	72.88	0	27.4	-72.7	-5.3	-4.2	BR
1085	26	34	264.1	-3.2	74.38	0	24.8	-74.0	-7.6	-4.2	BR
1086	26	35	262.7	-2.7	75.72	0	22.5	-75.1	-9.6	-3.6	LEW
1087	26	36	260.9	1.9	76.26	0	20.1	-75.3	-12.1	2.5	PIN 2 xsb
1088	26	37	257.7	5.6	79.42	0	14.7	-77.6	-16.9	7.8	BR
1089	26	38	255.8	7.3	81.83	0	11.1	-79.3	-20.1	10.5	GS
1090	26	39	253.6	9.6	83.12	0	7.7	-79.7	-23.5	14.1	GS
1091	26	40	253	10.8	85.85	0	4.8	-82.1	-25.1	16.4	GS PIN 1 xsb
1092	26	41	252.6	11.5	85.84	0	4.2	-81.9	-25.7	17.5	PIN 1 xsb
1093	26	42	251	12.7	89.26	0	0.0	-84.4	-29.1	20.1	GS
1098	32	4	303.9	9.7	89.01	0	102.7	-73.9	49.6	15.2	GS AT PIN 4 xs1
1099	32	5	94.9	0.5	48.70	0		48.5	-4.2	0.4	RX O
1100	32	6	304.1	10.1	89.39	0	103.2	-74.0	50.1	15.9	PIN4 xs1
1101	32	7	301.2	7.4	87.96	0	98.4	-75.2	45.6	11.4	BDRX
1102	32	8	112.4	0.2	250.00	0		231.1	-95.3	0.9	TH
1103	32	9	112.9	0.5	222.39	0		204.9	-86.5	1.9	TH
1104	32	10	112.5	0.5	190.19	0		175.7	-72.8	1.7	TH
1105	32	11	301	6.8	87.38	0	97.7	-74.9	45.0	10.4	BDRX
1106	32	12	299.8	5.9	87.04	0	95.9	-75.5	43.3	9.0	BDRX
1107	32	13	112.2	0.5	173.69	0		160.8	-65.6	1.5	TH
1108	32	14	112.2	0.6	168.39	0		155.9	-63.6	1.8	TH
1109	32	15	298.5	5.5	86.30	0	93.8	-75.8	41.2	8.3	BDRX
1110	32	16	113	0.2	144.50	0		133.0	-56.5	0.5	TH
1111	32	17	117.7	1.3	126.97	0		112.4	-59.0	2.9	LEC
1112	32	18	112.8	-0.2	124.00	0		114.3	-48.1	-0.4	TH
1113	32	19	115.2	-0.8	97.79	0		88.5	-41.6	-1.4	TH
1114	32	20	129.6	2.5	78.72	0		60.7	-50.2	3.4	LEC
1115	32	21	118.4	-1.4	73.28	0		64.5	-34.9	-1.8	TH
1116	32	22	118.3	-0.6	73.30	0		64.5	-34.7	-0.8	WS
1117	32	23	94.1	-0.9	72.79	0		72.6	-5.2	-1.1	TH BRAID
1118	32	24	94.1	-0.5	72.80	0		72.6	-5.2	-0.6	WS
1119	32	25	85.4	1.6	73.57	0		73.3	5.9	2.1	REC
1120	32	26	298.1	3.5	85.74	0	93.0	-75.6	40.4	5.2	PIN 3 AT BF xs1
1121	32	27	298.1	3	85.78	0	93.0	-75.7	40.4	4.5	GS AT PIN3 xs1
1122	32	28	123	-3.1	51.92	0		43.5	-28.3	-2.8	TH
1123	32	29	122.4	-0.8	52.49	0		44.3	-28.1	-0.7	WS
1124	32	30	130.1	-6.8	32.97	0		25.2	-21.2	-3.9	TH
1125	32	31	130.4	-1.1	32.89	0		25.0	-21.3	-0.6	WS
1126	32	32	154.8	-11.1	19.72	0		8.4	-17.8	-3.9	TH
1127	32	33	236.1	-7.5	24.29	0		-20.2	-13.5	-3.2	TH
1128	32	34	235.6	-1.3	24.49	0		-20.2	-13.8	-0.6	WS

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
1129	32	35	296.2	4.8	84.80	5	90.0	-76.1	37.4	2.1	GS
1131	32	36	38	8.4	16.03	0		9.9	12.6	2.4	REC
1132	32	37	294.6	4.4	84.15	6	87.5	-76.5	35.0	0.5	GS
1134	32	38	292.8	4.3	84.06	6	83.6	-77.5	32.6	0.3	REW
1136	32	39	289.6	3.8	83.52	6	78.9	-78.7	28.0	-0.5	GS
1138	32	40	286.3	-0.6	83.40	0	74.1	-80.0	23.4	-0.9	GS
1139	32	41	282.2	-0.6	83.50	0	68.1	-81.6	17.6	-0.9	GS
1140	32	42	278	-1	84.09	0	61.9	-83.3	11.7	-1.5	GS
1141	32	43	274.3	-1.1	85.08	0	56.4	-84.8	6.4	-1.6	GS
1142	32	44	271.6	-1.3	85.68	0	52.3	-85.6	2.4	-1.9	GS
1143	32	45	270.2	-1.7	86.86	0	49.9	-86.9	0.3	-2.6	GS
1144	32	46	269	-1.9	87.65	0	47.9	-87.6	-1.5	-2.9	GS
1145	32	47	267.7	-1.9	88.25	0	45.8	-88.2	-3.5	-2.9	GS
1146	32	48	266.5	-1.7	88.76	0	43.9	-88.6	-5.4	-2.6	GS
1147	32	49	294.8	5	83.28	6	86.6	-75.6	34.9	1.3	REC
1149	32	50	266.5	-1.6	88.87	0	43.8	-88.7	-5.4	-2.5	GS
1150	32	51	265.2	-1.1	88.78	0	41.8	-88.5	-7.4	-1.7	GS
1151	32	52	263.7	-0.8	90.19	0	39.0	-89.6	-9.9	-1.3	GS
1152	32	53	262.6	-0.2	91.30	0	35.9	-90.5	-11.8	-0.3	GS
1153	32	54	260.6	-0.2	92.80	0	32.4	-91.6	-15.2	-0.3	GS
1154	32	55	263.1	-0.2	92.00	0	37.0	-91.3	-11.1	-0.3	LEW
1155	32	56	259	0.2	94.20	0	29.4	-92.5	-18.0	0.3	GS
1156	32	57	257.6	0.2	94.80	0	27.0	-92.6	-20.4	0.3	GS
1157	32	58	256.1	0.9	95.79	0	24.4	-93.0	-23.0	1.5	GS
1158	32	59	255.6	1.5	96.97	0	22.9	-93.9	-24.1	2.5	GS
1159	32	60	254.5	1.8	98.25	0	20.6	-94.7	-26.3	3.1	GS
1160	32	61	253.8	2.5	99.01	0	19.2	-95.1	-27.6	4.3	GS
1161	32	62	253.5	2.6	99.70	0	18.4	-95.6	-28.3	4.5	GS AT PIN 2 xs1
1162	32	63	253.4	3.1	99.25	0	17.9	-95.1	-28.4	5.4	PIN2 xs1
1163	32	64	252.8	4	100.06	0	16.6	-95.6	-29.6	7.0	GS
1164	32	65	333.4	14.9	28.80	0		-12.9	25.7	7.7	BT D
1165	32	66	250.9	5.7	102.49	0	12.4	-96.8	-33.5	10.2	GS
1166	32	67	294.5	11.3	39.32	0		-35.8	16.3	7.9	RX P
1167	32	68	248.7	-6.7	29.20	0		-27.2	-10.6	-3.4	TH
1168	32	69	248.5	-1.1	28.89	0		-26.9	-10.6	-0.6	WS
1169	32	70	247.7	7.1	106.08	0	5.6	-98.1	-40.3	13.2	GS
1170	32	71	252.2	-3.2	50.92	0		-48.5	-15.6	-2.8	TH
1171	32	72	252.1	-0.7	50.70	0		-48.2	-15.6	-0.6	WS
1172	32	73	245.7	9.3	109.34	0	0.6	-99.7	-45.0	17.9	GS AT PIN1 xs1
1173	32	74	245.4	9.5	109.18	0	0.0	-99.3	-45.5	18.3	PIN1 xs1
1194	34	1	55.3	8.3	104.30	0	106.1	85.7	59.4	15.2	GS AT PIN4 xs2
1195	34	2	55.3	8.5	104.34	0	106.2	85.8	59.4	15.6	PIN 4 xs2
1196	34	3	56.7	7.9	101.23	0	102.2	84.6	55.6	14.0	GS
1197	34	4	56.6	7.9	100.83	0	101.7	84.2	55.5	14.0	GS
1198	34	5	59.4	7.7	94.34	0	92.9	81.2	48.0	12.8	BDRX
1199	34	6	59.4	4.2	93.65	0	92.2	80.6	47.7	6.9	PIN 3 xs2
1200	34	7	57.1	8.2	96.40	1	97.2	80.9	52.4	12.9	BDRX
1202	34	8	59.3	4.2	94.45	0	93.1	81.2	48.2	6.9	BDRX
1203	34	9	59.5	3.3	93.54	0	92.0	80.6	47.5	5.4	GS AT PIN3 xs2
1204	34	10	60.5	3.1	90.77	0	88.8	79.0	44.7	4.9	GS
1205	34	11	62.3	2	89.55	0	85.7	79.3	41.6	3.1	GS
1206	34	12	64.7	1.2	86.58	0	80.7	78.3	37.0	1.8	GS

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
1207	34	13	62.5	1.9	88.35	0	84.5	78.4	40.8	2.9	RBF
1208	34	14	65.8	-0.4	84.70	0	77.3	77.3	34.7	-0.6	REW
1209	34	16	65	-0.1	84.50	0	78.5	76.6	35.7	-0.1	REC
1210	34	17	65.8	-0.6	84.20	0	76.8	76.8	34.5	-0.9	REW
1211	34	18	67.6	-1.3	82.68	0	73.8	76.4	31.5	-1.9	GS
1212	34	19	69.8	-1.1	80.59	0	70.0	75.6	27.8	-1.5	GS
1213	34	20	71.5	-1.6	79.47	0	67.4	75.4	25.2	-2.2	GS
1214	34	21	73.6	-1.3	77.78	0	64.1	74.6	22.0	-1.8	GS
1215	34	22	75.7	-0.9	75.99	0	60.7	73.6	18.8	-1.2	GS
1216	34	23	78.3	-1	74.39	0	57.0	72.8	15.1	-1.3	GS
1217	34	24	83.2	-0.5	71.00	0	49.9	70.5	8.4	-0.6	GS
1218	34	25	86.3	-1	69.09	0	45.6	68.9	4.5	-1.2	GS
1219	34	26	90.6	-1.6	67.77	0	40.3	67.8	-0.7	-1.9	GS
1220	34	27	95.1	-1.5	66.48	0	34.9	66.2	-5.9	-1.7	GS
1221	34	28	99.6	-1.3	65.38	0	29.6	64.5	-10.9	-1.5	GS
1222	34	29	104.7	-0.5	64.40	0	23.8	62.3	-16.3	-0.6	LEW
1223	34	30	106.6	0	63.20	0	21.3	60.6	-18.1	0.0	LEC
1224	34	31	110.3	1	62.89	0	17.3	59.0	-21.8	1.1	GS
1225	34	32	111.3	3.2	63.50	0	16.0	59.2	-23.1	3.6	GS
1226	34	33	113.1	3.6	63.77	0	14.0	58.7	-25.0	4.0	GS AT PIN2 xs2
1227	34	34	113.4	4.4	63.81	0	13.6	58.6	-25.3	4.9	PIN2 xs2
1228	34	35	114.1	4.1	63.84	0	12.9	58.3	-26.1	4.6	LBF
1229	34	36	115.3	5.9	64.26	0	11.5	58.1	-27.5	6.6	GS
1230	34	37	117.3	7.4	64.06	0	9.2	56.9	-29.4	8.3	GS
1231	34	38	119.1	7.9	64.48	0	7.1	56.3	-31.4	8.9	GS
1232	34	39	120.6	8.5	65.47	0	5.2	56.4	-33.3	9.8	GS
1233	34	40	122.7	8.8	66.41	0	2.6	55.9	-35.9	10.3	GS
1234	34	41	123.6	9	66.57	0	1.4	55.4	-36.8	10.5	GS AT PIN4 xs2
1235	34	42	123.4	9.6	66.26	0	1.8	55.3	-36.5	11.2	PIN 1 xs2
1236	34	43	124.4	9.9	67.58	0	0.0	55.8	-38.2	11.8	GS
1240	36	61	312.3	21.4	52.88	0		-39.1	35.6	20.7	PIN 4 xs3
1241	36	62	312.1	20	52.81	0	135.9	-39.2	35.4	19.2	GS AT PIN 4 xs3
1242	36	63	308.6	18.7	50.96	0	131.7	-39.8	31.8	17.2	GS
1243	36	64	308.4	17.1	49.80	0	126.4	-39.0	30.9	15.3	GS
1244	36	65	307.7	15.8	48.21	0		-38.1	29.5	13.6	0
1245	36	66	307.9	15.9	48.38	0	124.9	-38.2	29.7	13.8	BR
1246	36	68	307.7	13.6	47.53	0	124.1	-37.6	29.1	11.5	BR
1247	36	69	306	12.3	47.00	0	122.6	-38.0	27.6	10.2	BR
1248	36	70	305.5	8.2	46.52	0	121.4	-37.9	27.0	6.7	BR
1249	36	71	304	7.6	45.20	0	119.6	-37.5	25.3	6.0	GS AT PIN 3 xs3
1250	36	72	303.9	8.4	45.41	0		-37.7	25.3	6.7	PIN 3 xs3
1251	36	73	301.3	6.7	43.50	0	116.9	-37.2	22.6	5.1	BR
1252	36	74	299.7	6.9	43.09	0	115.6	-37.4	21.3	5.2	BR
1253	36	75	299.3	3.8	42.81	0	115.2	-37.3	20.9	2.8	BR RBF
1254	36	76	295.1	3.6	41.12	0	111.3	-37.2	17.4	2.6	BR
1255	36	77	292.9	2.3	40.37	0	109.2	-37.2	15.7	1.6	BR REC
1256	36	78	292.3	-0.3	40.30	0	108.6	-37.3	15.3	-0.2	REW
1257	36	79	292.1	-1.5	40.39	0	108.4	-37.4	15.2	-1.1	BR
1258	36	80	288.6	0.1	39.20	0	105.5	-37.2	12.5	0.1	GS
1259	36	81	284.6	-1.7	37.58	0	102.3	-36.4	9.5	-1.1	GS
1260	36	82	278.5	-1.5	36.59	0	98.2	-36.2	5.4	-1.0	GS
1261	36	83	275.3	-1.4	36.19	0	96.0	-36.0	3.3	-0.9	GS

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
1262	36	84	273.5	-1.4	36.49	0	94.8	-36.4	2.2	-0.9	GS
1263	36	85	268.7	-1.1	36.49	0	91.6	-36.5	-0.8	-0.7	GS
1264	36	86	263.5	-1.2	36.69	0	88.3	-36.5	-4.2	-0.8	GS
1265	36	87	259.4	-1.2	36.79	0	85.6	-36.2	-6.8	-0.8	GS
1266	36	88	255.7	-1.2	37.29	0	83.1	-36.1	-9.2	-0.8	GS
1267	36	89	253.4	-1.2	37.89	0	81.5	-36.3	-10.8	-0.8	GS
1268	36	90	249.3	-1.3	38.49	0	77.8	-36.0	-13.6	-0.9	GS
1269	36	91	245.9	-1.3	39.19	0	75.4	-35.8	-16.0	-0.9	GS
1270	36	92	242.9	-1.2	39.89	0	73.2	-35.5	-18.2	-0.8	LEW
1271	36	93	240.5	0.3	40.20	0	71.4	-35.0	-19.8	0.2	GS
1272	36	94	234.8	0.7	42.60	0	66.2	-34.8	-24.6	0.5	GS
1273	36	95	231.2	1.4	44.39	0	62.8	-34.6	-27.8	1.1	GS
1274	36	96	227.9	2.1	46.17	0	59.7	-34.3	-31.0	1.7	GS
1275	36	97	223.9	1.9	49.27	0	54.8	-34.2	-35.5	1.6	GS
1276	36	98	219.2	2.1	53.76	0	48.5	-34.0	-41.7	2.0	GS
1277	36	99	214.9	0.1	58.10	0	42.5	-33.2	-47.7	0.1	GS
1278	36	100	212.5	-0.3	62.00	0	37.2	-33.3	-52.3	-0.3	GS
1279	36	101	210.5	0.3	65.50	0	32.9	-33.2	-56.4	0.3	GS
1280	36	102	210	1.4	65.58	0	32.3	-32.8	-56.8	1.6	GS
1281	36	103	209.6	-0.1	67.00	0	30.6	-33.1	-58.3	-0.1	GS
1282	36	104	209.1	1	68.79	0	28.7	-33.5	-60.1	1.2	GS
1283	36	105	208.1	1.3	70.28	0	26.2	-33.1	-62.0	1.6	GS AT PIN 2 xs3
1284	36	106	207.8	2.6	70.43	0	25.8	-32.8	-62.3	3.2	TOP PIN 2 xs3
1285	36	107	207.5	2.7	70.82	0	25.1	-32.7	-62.8	3.3	GS
1286	36	108	207.1	2.8	71.51	0	24.2	-32.6	-63.7	3.5	GS LEC
1287	36	109	206.4	3.6	72.86	0	22.4	-32.4	-65.3	4.6	LBF
1288	36	110	205.3	3.9	74.33	0	20.3	-31.8	-67.2	5.1	GS
1289	36	111	204.8	6.3	76.83	0	16.8	-32.2	-69.7	8.5	GS
1290	36	112	203.5	7.5	79.81	0	13.2	-31.8	-73.2	10.5	GS
1291	36	113	203.3	9.7	81.02	0	11.3	-32.0	-74.4	13.8	GS
1292	36	114	201.7	10	85.58	0	6.0	-31.6	-79.5	15.1	GS AT PIN 1 xs3
1293	36	115	201.7	9.8	85.73	-1.3		-31.7	-79.7	16.1	PIN 1 xs3
1295	37	-----	246.9	-0.3	299.00	0		-275.0	-117.3	-1.6	17 TO 18
1296	37	1	93.2	1.9	82.65	0		82.5	-4.6	2.7	RX V
1297	37	2	121.9	1.2	89.88	0		76.3	-47.5	1.9	LEC
1298	37	3	58	1.4	54.18	0		46.0	28.7	1.3	REC
1299	37	4	10.3	-10.8	18.96	0		3.4	18.7	-3.6	TH
1300	37	5	11	-0.5	19.10	0		3.6	18.7	-0.2	WS
1301	37	6	2.5	-9.8	18.82	0		0.8	18.8	-3.3	TH
1302	37	7	343.6	-9.7	17.35	0		-4.9	16.6	-3.0	TH
1303	37	8	343.9	-0.5	17.20	0		-4.8	16.5	-0.2	WS
1304	37	9	312.9	-5.9	19.89	0		-14.6	13.5	-2.1	WS
1305	37	10	293.3	-3.7	30.24	0		-27.8	12.0	-2.0	TH
1306	37	11	293.4	-0.2	30.10	0		-27.6	12.0	-0.1	WS
1307	37	12	312	20.1	52.68	0		-39.2	35.3	19.3	GS AT PIN 4 xs3
1308	37	13	201.6	9.9	85.90	-1.3		-31.6	-79.9	16.3	PIN 1 xs3
1310	37	14	201.9	9.9	85.80	-1.3	5.6	-32.0	-79.6	16.3	PIN 1 xs3
1311	37	15	201.6	10.1	85.65	0	5.2	-31.5	-79.6	15.3	GS AT PIN1 xs3
1312	37	16	199.9	11.6	90.12	0	0.0	-30.7	-84.7	18.5	GS
1313	37	17	203	9.8	81.10	0	10.9	-31.7	-74.7	14.0	BDRX
1314	37	18	203.9	7.1	80.58	0	12.3	-32.6	-73.7	10.0	BDRX
1315	37	19	204.6	6.9	78.23	0	15.4	-32.6	-71.1	9.5	BDRX

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
1316	37	20	204.5	5.9	75.90	0	17.9	-31.5	-69.1	7.8	GS
1317	37	21	205.6	4.9	74.53	0	19.8	-32.2	-67.2	6.4	GS
1318	37	22	205.9	3.9	74.03	0	21.1	-32.3	-66.6	5.0	GS
1319	37	23	206.4	3	72.40	0	22.9	-32.2	-64.9	3.8	BF
1320	37	24	207.1	2.9	71.21	0	24.5	-32.4	-63.4	3.6	GS
1321	37	25	208.1	3	70.70	0		-33.3	-62.4	3.7	PIN 2
1322	37	26	207.5	1.4	70.48	0	25.4	-32.5	-62.5	1.7	GS AT PIN2
1323	37	27	207.8	1.6	69.77	0	26.8	-32.5	-61.7	1.9	LEC
1324	37	28	209.7	1.2	66.49	0	31.1	-32.9	-57.8	1.4	GS
1325	37	29	210.2	1.5	65.88	0	31.9	-33.1	-56.9	1.7	GS
1326	37	30	210.4	0.2	65.30	0	33.1	-33.0	-56.3	0.2	GS
1327	37	31	212.3	-0.3	62.50	0	36.6	-33.4	-52.8	-0.3	GS
1328	37	32	215.4	0.6	59.00	0	41.5	-34.2	-48.1	0.6	GS
1329	37	33	217.4	1.9	55.57	0	46.0	-33.8	-44.1	1.8	GS
1330	37	34	221.9	1.8	51.77	0	51.7	-34.6	-38.5	1.6	GS
1331	37	35	228.1	1.2	46.69	0	59.1	-34.8	-31.2	1.0	GS
1332	37	36	233.2	0.8	43.80	0	64.5	-35.1	-26.2	0.6	GS
1333	37	37	235.3	1.7	42.88	0	66.7	-35.3	-24.4	1.3	GS
1334	37	38	239	0.2	41.50	0	69.7	-35.6	-21.4	0.1	GS
1335	37	39	242	1.4	39.99	0	72.5	-35.3	-18.8	1.0	GS
1336	37	40	242.3	-0.6	40.10	0	72.7	-35.5	-18.6	-0.4	LEW
1337	37	41	245.2	-0.6	39.10	0	74.9	-35.5	-16.4	-0.4	GS
1338	37	42	249.3	-1.2	37.89	0	78.4	-35.4	-13.4	-0.8	GS
1339	37	43	252.1	-1.4	37.19	0	80.4	-35.4	-11.4	-0.9	GS
1340	37	44	256.5	-0.9	36.90	0	83.8	-35.9	-8.6	-0.6	GS
1341	37	45	261.3	-1.3	36.49	0	86.9	-36.1	-5.5	-0.8	GS
1342	37	46	265.5	-1.2	36.59	0	89.6	-36.5	-2.9	-0.8	GS
1343	37	47	267.5	-1.4	36.49	0	90.9	-36.5	-1.6	-0.9	GS
1344	37	48	270.3	-1.2	36.19	0	92.7	-36.2	0.2	-0.8	GS
1345	37	49	273.2	-1.5	36.29	0	94.5	-36.2	2.0	-1.0	GS
1346	37	50	276.1	-1.1	36.59	0	96.6	-36.4	3.9	-0.7	GS
1347	37	51	281.2	-1.8	37.08	0	100.0	-36.4	7.2	-1.2	GS
1348	37	52	285.6	-1.8	38.38	0	103.3	-37.0	10.3	-1.2	GS
1349	37	53	289.8	-1.9	39.18	0	106.3	-36.9	13.3	-1.3	GS
1350	37	54	292	-1.5	40.49	0	108.3	-37.5	15.2	-1.1	GS
1351	37	55	291.7	0.1	40.40	0	108.1	-37.5	14.9	0.1	REW
1352	37	56	292.7	2.4	40.56	0	109.0	-37.4	15.7	1.7	REC BDRX
1353	37	57	294.9	2.5	40.46	0	110.7	-36.7	17.0	1.8	BDRX
1354	37	58	295.4	3.7	40.81	0	111.7	-36.9	17.5	2.6	BDRX
1355	37	59	298.9	4.1	42.59	0	114.8	-37.3	20.6	3.1	RBF BDRX
1356	37	60	300.8	6.9	43.48	0	116.5	-37.3	22.3	5.3	BDRX
1357	37	61	301.1	7.2	44.15	0		-37.8	22.8	5.6	0
1358	37	62	304.1	7.8	45.38	0	119.8	-37.6	25.4	6.2	GS AT PIN3 xs3
1359	37	63	304	9	45.24	0	119.6	-37.5	25.3	7.2	PIN 3 xs3
1360	37	64	306	8.5	46.29	0	121.8	-37.4	27.2	6.9	BDRX
1361	37	65	307	7.9	47.05	-5		-37.6	28.3	11.5	0
1363	37	66	310.3	12.7	48.29	-5	128.6	-36.8	31.2	15.9	GS
1365	37	67	310.4	19.3	50.68	0	133.3	-38.6	32.8	17.7	GS
1366	37	68	312.4	20.4	52.49	0		-38.8	35.4	19.5	GS AT PIN4 xs3
1367	37	69	312.4	21.5	52.94	0	136.2	-39.1	35.7	20.9	PIN 4 xs3
1368	37	70	316.4	23.8	59.84	0	144.2	-41.3	43.3	26.4	GS
72							0.0	37.1	-95.1	830.2	GS



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record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
71							2.3	39.1	-93.9	828.9	GS
70							5.3	39.8	-91.0	827.8	GS RX
69							7.6	41.6	-89.7	827.1	GS
68							7.8	41.4	-89.6	827.2	GS RX
66							8.1	41.2	-89.6	824.6	RX
65							10.5	43.1	-88.0	823.6	GS
64							12.0	44.1	-87.0	823.0	PIN 2 xs4
63							12.6	43.7	-86.5	823.0	GS AT PIN2 xs4
62							15.5	45.9	-84.5	822.7	LBF
61							18.6	48.3	-82.6	820.8	LEC
60							20.8	49.5	-80.7	820.8	GS
59							26.3	53.7	-77.3	821.0	GS
57							31.6	57.4	-73.5	820.2	GS
56							34.4	59.3	-71.5	820.5	GS
55							36.6	61.0	-69.9	820.6	GS
54							40.5	63.7	-67.1	820.5	GS
53							44.4	66.1	-64.0	820.8	GS
52							48.1	68.8	-61.5	821.1	GS
51							53.3	72.5	-57.9	821.0	GS
50							56.6	74.7	-55.4	821.1	GS
49							60.2	77.0	-52.7	821.0	GS
48							65.1	80.3	-49.0	820.6	GS
47							68.5	82.9	-46.9	820.3	GS
46							73.2	85.6	-43.0	819.7	LEW
45							76.1	87.8	-41.1	819.0	GS
44							78.7	89.8	-39.4	818.8	GS
43							82.2	92.0	-36.8	818.6	GS
42							83.9	93.0	-35.3	818.1	GS
41							85.9	94.4	-34.0	818.6	GS
40							88.9	96.6	-32.0	818.7	GS
39							91.5	98.4	-30.1	819.5	REW
38							94.3	100.4	-28.0	820.7	REC
37							96.9	101.5	-25.7	820.9	GS
35							100.1	104.1	-23.8	821.7	BF
34							102.2	105.8	-22.5	822.2	PIN 3 xs4
33							102.7	106.0	-22.1	822.3	GS AT PIN3 xs4
32							105.1	107.9	-20.6	824.0	GS
31							109.4	110.4	-17.1	825.1	GS
30							112.3	112.4	-15.0	827.3	GS
29							114.5	114.1	-13.6	828.6	GS
28							117.9	116.2	-11.0	830.6	GS
27							119.7	117.5	-9.7	832.8	GS
26							123.0	119.2	-6.9	834.2	GS
23							126.2	121.5	-4.7	835.6	PIN 4 xs4
24							126.6	121.2	-4.7	835.7	GS AT PIN4 xs4
25							129.4	122.9	-2.4	837.5	GS
237							0.0	266.3	-760.8	839.2	PIN 1 xs 5
236							0.2	266.1	-761.0	839.2	GS AT PIN1 xs 5
235							2.3	268.2	-761.4	837.4	GS
239							6.1	264.4	-761.5	840.5	GS
234							12.2	270.5	-762.0	834.6	GS
233							14.8	273.0	-762.6	832.5	GS

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record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
232							17.2	274.8	-764.1	829.2	GS
230							20.6	278.2	-764.4	825.3	GS
231							21.9	277.0	-764.7	827.0	GS
229							24.9	280.1	-764.9	823.8	PIN 2 xs 5
228							25.2	280.1	-765.2	823.8	GS AT PIN2 xs 5
227							28.8	283.7	-765.4	822.5	GS
226							31.1	286.0	-765.7	821.1	GS
224							36.1	290.9	-766.3	819.5	GS
225							38.9	288.1	-766.5	820.2	GS
223							44.1	293.4	-766.9	819.0	GS
222							47.5	296.7	-767.3	818.8	GS
221							50.7	299.8	-768.3	819.1	GS
220							54.1	303.0	-769.3	818.7	GS
219							57.0	305.9	-769.7	818.2	GS
218							59.9	308.7	-770.3	817.8	GS
217							63.5	312.3	-770.9	817.5	GS
216							66.7	315.4	-771.6	816.9	GS
215							70.1	318.6	-772.4	816.9	GS
214							74.1	322.7	-772.6	816.6	GS
213							77.9	326.3	-774.0	816.6	GS
212							81.5	329.8	-774.4	816.3	GS
211							85.6	333.9	-774.8	816.4	GS
210							89.8	338.1	-775.0	816.9	GS
209							94.4	342.7	-775.6	817.1	GS
208							99.1	347.3	-776.1	817.2	GS
206							101.6	349.7	-776.8	816.3	GS
205							102.8	350.9	-777.1	815.7	GS
204							104.6	352.6	-777.5	815.3	LEW
203							107.4	355.4	-778.3	814.7	GS
202							110.8	358.7	-778.9	814.7	GS
201							114.9	362.7	-779.5	814.3	GS
200							119.4	367.1	-780.6	814.2	GS
199							123.5	371.2	-781.1	814.3	GS
198							127.2	374.9	-781.7	814.4	GS
197							132.3	379.9	-782.5	814.7	GS
196							137.1	384.4	-784.2	815.2	REW
195							138.6	385.8	-784.6	815.5	GS
194							139.6	386.7	-785.1	817.2	REC
193							142.9	389.8	-786.3	817.2	GS
192							147.3	393.9	-787.7	817.0	GS
191							151.1	397.5	-788.9	817.2	GS
190							153.6	399.9	-789.5	816.1	GS
189							155.7	401.9	-790.1	815.5	BDRX
188							159.2	405.3	-791.1	815.7	BDRX
187							162.3	408.3	-791.7	817.6	RBF
186							165.1	411.0	-792.4	818.7	GS
185							166.8	412.7	-792.7	820.0	GS
183							170.1	416.0	-793.3	820.8	GS AT PIN3 xs 5
182							171.2	417.1	-793.3	821.5	GS
184							172.3	416.0	-793.4	820.8	PIN 3 xs 5
181							175.7	419.4	-793.6	823.0	GS
180							177.8	421.3	-794.6	825.1	GS

Route 30 Survey Data - October, 1998							TH or XS				
record#	stn	ss	HAR	VI	HD	tc	Dist	X	Y	Z	Feature
179							179.7	423.1	-794.9	826.6	GS
178							182.8	426.2	-795.4	829.1	GS
177							185.8	429.2	-795.9	831.0	GS
175							187.8	431.0	-796.7	832.7	PIN 4 xs 5
176							188.0	431.1	-796.7	832.7	GS AT PIN4 xs 5
174							190.8	433.9	-797.3	833.9	GS

Sulphur Glade Survey Data - September, 1998									TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature	
1	A	1	179	9.2	80.8	5.02	0	0.00	10047.46	9644.00	1228.78	0	
2	A	2	179.1	10.4	80.5	5.02	0	0.41	10047.31	9644.39	1230.45	p1h	
3	A	4	174.8	8.4	76.5	5.02	0	7.52	10052.98	9648.68	1226.97	gss	
4	A	5	172.1	6.1	73.5	5.02	0	12.15	10056.15	9652.05	1223.54	gss	
5	A	6	150.8	4	58.6	5.02	0	40.62	10074.61	9673.72	1219.78	gss	
6	A	7	149.8	3.6	60.2	5.02	0	42.55	10076.32	9672.82	1219.47	gss	
7	A	8	149.3	5.4	60.6	5.02	0	43.24	10077.00	9672.70	1221.41	brx	
8	A	9	140.3	4.9	59.7	5.02	0	52.73	10084.17	9678.91	1220.80	brx	
9	A	10	138.1	0.8	59.0	5.02	0	55.11	10085.45	9680.92	1216.51	gss	
10	A	11	132.4	4.9	58.4	5.02	0	60.97	10089.16	9685.46	1220.69	brx	
11	A	12	129.4	3	58.8	5.02	0	64.07	10091.50	9687.50	1218.76	brx	
12	A	13	129.3	-1.4	58.9	5.02	0	64.19	10091.61	9687.54	1214.24	gss	
13	A	14	120.4	-0.9	59.9	5.02	0	73.46	10097.71	9694.52	1214.74	gss	
14	A	15	120.9	-0.8	60.1	5.02	0	74.02	10097.61	9693.97	1214.84	lbf	
15	A	16	105.5	-3.4	66.8	5.02	0	92.27	10110.40	9706.99	1211.71	lec	
16	A	17	97.9	-4.9	73.7	5.02	0	103.88	10119.08	9714.70	1209.36	lew	
17	A	18	89.9	-4.9	81.0	5.02	0	116.88	10127.05	9724.97	1208.74	gss	
18	A	19	85.5	-5	86.2	5.02	0	125.12	10131.95	9731.59	1208.14	gss	
19	A	20	81.8	-4.4	94.0	5.02	0	134.89	10139.11	9738.24	1208.45	gss	
20	A	21	79.5	-4.1	100.5	5.02	0	142.49	10144.91	9743.15	1208.48	gss	
21	A	22	75.8	-4	109.4	5.02	0	153.67	10152.14	9751.68	1208.03	gss	
22	A	23	71.9	-4.2	117.2	5.02	0	164.60	10157.43	9761.24	1207.08	gss	
23	A	24	69.1	-3.2	127.3	5.02	0	176.34	10164.97	9770.25	1208.56	gss	
24	A	25	68.4	-2.8	131.3	5.02	0	180.68	10168.17	9773.18	1209.26	rew	
25	A	26	67.8	-1.5	135.1	5.02	0	184.65	10171.09	9775.86	1212.15	rec	
26	A	27	66.2	-0.2	139.5	5.02	0	190.52	10173.68	9781.13	1215.20	gss	
27	A	28	66.4	0.5	143.6	5.02	0	194.64	10177.63	9782.32	1216.94	rbf	
28	A	29	66	1.3	146.6	5.02	0	197.78	10179.94	9784.44	1219.01	gss	
29	A	30	65.4	3.2	148.9	5.02	0	200.55	10181.40	9786.80	1224.01	gss	
30	A	31	64.5	6.2	152.4	5.02	0	204.81	10183.60	9790.44	1232.24	gss	
31	A	32	63.1	6.6	159.6	5.02	0	212.98	10188.41	9797.06	1234.15	gss	
32	A	33	63.3	7	159.7	5.02	0	213.54	10188.72	9796.59	1235.29	p4h	
33	A	34	58	6.8	205.8	5.02	0	262.64	10220.61	9833.91	1240.23	gss	
34	A	35	58.8	7	214.1	5.02	0		10229.17	9835.74	1241.97	t10	
35	A	36	350.5	2.2	279.0	5.02	0		10000.00	10000.00	1226.40	bm1	
36	A	37	348.7	0.6	272.1	5.02	0		9992.73	9991.64	1218.53	gss	
37	A	38	344.7	0.8	261.8	5.02	0		9976.97	9977.33	1219.34	brx	
38	A	39	344.5	0.6	259.6	5.02	0		9976.68	9974.98	1218.40	brx	
39	A	40	343.7	0.4	258.0	5.02	0		9973.64	9972.46	1217.48	brx	
40	A	41	343.6	-0.5	256.7	5.02	0		9973.57	9971.08	1213.44	rbf	
41	A	42	343.4	-0.9	256.0	5.02	0		9972.92	9970.13	1211.66	rac	
42	A	43	343.4	-1.4	255.4	5.02	0		9973.08	9969.61	1209.44	brx	
43	A	44	59.9	-4.3	109.9	5.02	0	0.00	10141.12	9779.94	1207.42	th	
44	A	45	48.4	-4.5	106.4	5.02	0	21.95	10125.59	9795.45	1207.31	th	
45	A	46	30.4	-4.4	109.6	5.02	0	55.88	10101.50	9819.34	1207.25	th	
46	A	47	19.3	-4.9	105.6	5.02	0	77.06	10080.95	9824.51	1206.63	th	
47	A	48	8.1	-4	106.9	5.02	0	97.84	10061.12	9830.70	1208.20	th	
48	A	49	3.5	-3.4	107.7	5.02	0	97.84	10052.62	9832.34	1209.28	ws	
49	A	50	357.3	-3.7	109.6	5.02	0	118.39	10040.89	9834.28	1208.60	th	
50	A	51	342.5	-3.6	118.7	5.02	0	149.13	10010.36	9838.01	1208.22	th	
51	A	52	334.2	-3.6	123.5	5.02	0	167.30	9992.32	9835.98	1207.91	th	
52	A	53	335.9	-2.8	132.3	5.02	0	167.30	9992.01	9845.64	1209.21	ws	
53	A	54	334.1	-3.6	151.1	5.02	0	194.94	9980.05	9860.76	1206.18	th	
54	A	55	335	-3.2	168.7	5.02	0	212.76	9974.74	9877.76	1206.25	th	
55	A	56	331.8	-3.1	192.5	5.02	0	238.58	9955.07	9894.50	1205.26	th	
56	A	57	330.9	-1.7	217.3	5.02	0	263.57	9940.36	9914.71	1209.23	th	

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
57	A	58	329.6	-2.4	237.0	5.02	0	283.92	9926.12	9929.24	1205.75	th
58	A	59	328	-2.2	268.9	5.02	0	316.60	9903.55	9952.87	1205.35	th
59	A	60	326.4	-1.8	312.7	5.02	0	361.19	9872.98	9985.32	1205.85	th
60	A	61	337.9	-0.2	324.6	5.02	-5		9923.93	10025.58	1219.55	r10
61	A	62	326.1	-1.5	338.2	5.02	0	386.68	9857.43	10005.53	1206.83	th
62	A	63	328.7	-0.8	492.7	5.02	0		9790.11	10145.78	1208.80	fs stb
63	A	64	329	-0.9	492.5	5.02	0		9792.37	10147.02	1207.94	fs stb
64	A	65	328	-0.6	462.7	5.02	0		9800.87	10117.20	1210.84	r11
65	B	1	148.2	0.9	492.5	5.02	0		10048.83	9725.79	1216.49	bs sta
66	B	2	148.4	0.9	492.6	5.02	0		10047.42	9724.80	1216.49	bs sta
67	B	3	146.6	1.3	549.4	5.02	0		10091.70	9685.77	1221.22	rx
68	B	4	124.5	4	255.2	5.02	0		9999.59	9999.86	1226.59	bs bm1
69	B	5	130.8	3.4	179.3	5.02	0		9925.01	10027.25	1219.40	r10
70	B	6	156	0.5	250.5	5.02	0		9891.17	9915.56	1210.94	lac
71	B	7	158.9	1.1	253.7	5.02	0		9880.60	9907.75	1213.62	lbf
72	B	8	161.8	2	256.7	5.02	0		9869.48	9900.50	1217.72	lvw
73	B	9	156	-1.5	147.6	5.02	0	395.70	9849.34	10009.51	1204.88	th
74	B	10	155	-0.9	162.3	5.02	0	410.57	9857.87	9997.32	1206.20	th
75	B	11	157.5	-1	132.5	5.02	0	441.05	9839.99	10022.00	1206.44	th
76	B	12	166.3	-1.3	110.6	5.02	0	469.77	9815.48	10036.97	1206.24	th
77	B	13	171.5	-0.4	94.4	5.02	0	469.77	9803.24	10051.04	1208.09	ws
78	B	14	175.5	-1.6	81.2	5.02	0	502.87	9795.66	10063.48	1206.48	th
79	B	15	180.8	-2.2	60.0	5.02	0	525.04	9788.45	10084.45	1206.45	th
80	B	17	193.2	-3.8	43.4	5.02	0	544.93	9779.38	10102.14	1205.87	th
81	B	18	159.2	3.8	30.7	5.02	0		9800.20	10115.67	1210.79	r11
82	B	19	207.4	-5.2	32.3	5.02	0	559.40	9774.44	10115.75	1205.81	th
83	B	20	242.4	-6	25.7	5.02	0	577.93	9766.55	10132.51	1206.05	th
84	B	21	279.3	-4.8	30.6	5.02	0	596.33	9759.10	10149.34	1206.18	th
85	B	22	300.5	-3.8	51.2	5.02	0	621.56	9745.18	10170.38	1205.35	th
86	B	23	307.7	-2.8	66.2	5.02	0	638.27	9736.89	10184.89	1205.51	th
87	B	24	316.1	-3.4	81.5	5.02	0	656.92	9732.81	10203.09	1203.91	th
88	B	25	322	-2.4	96.5	5.02	0	674.53	9729.87	10220.45	1204.70	th
89	B	26	327.6	-2.9	108.0	5.02	0	689.71	9731.44	10235.55	1203.28	th
90	B	27	331.1	-2.7	119.9	5.02	0	703.50	9731.36	10249.34	1203.10	th
91	B	28	331.7	-2.1	130.7	5.02	2	714.42	9727.32	10259.49	1201.96	th
92	B	29	333.5	-2.2	140.2	5.02	2	724.82	9726.73	10269.86	1201.36	th
93	B	30	334.3	-2	154.6	5.02	2	739.37	9722.24	10283.71	1201.35	th
94	B	31	334.9	-2	165.0	5.02	2	749.90	9719.30	10293.82	1200.99	th
95	B	32	335.6	-0.4	172.8	5.02	0	749.90	9717.91	10301.76	1207.54	ws
96	B	33	336.5	-1.6	181.3	5.02	2	766.93	9716.98	10310.69	1201.68	th
97	B	34	337.7	-1.4	198.4	5.02	2	784.50	9713.99	10328.00	1201.90	th
98	B	35	339.9	-1.4	216.4	5.02	0	804.17	9714.91	10347.65	1203.46	th
99	B	36	343.7	-1.3	236.3	5.02	2	829.09	9722.96	10371.24	1201.39	th
100	B	37	345	-0.9	257.3	5.02	2	850.76	9722.70	10392.90	1202.71	th
101	B	38	345.6	-1.3	264.1	5.02	0	858.14	9723.60	10400.23	1202.76	th
102	B	39	346.3	-1	280.2	5.02	0	874.51	9722.94	10416.58	1203.86	th
103	B	40	346.6	-0.7	313.6	5.02	0	907.96	9716.62	10449.44	1204.92	th
104	B	41	347.9	-0.2	313.7	5.02	0		9723.53	10451.13	1207.65	r12
105	B	42	349.2	-0.6	347.7	5.02	0	945.21	9724.14	10485.92	1205.11	th
106	B	43	350	-0.6	374.1	5.02	0	972.09	9724.33	10512.79	1204.83	th
107	B	44	350.3	-0.5	405.6	5.02	0	1003.66	9720.95	10544.18	1205.21	th
108	B	45	352.4	-0.4	428.4	5.02	0	1031.11	9732.63	10569.02	1205.76	th
109	B	46	349.7	-0.1	521.0	5.02	0		9696.13	10657.00	1207.84	stc
110	B	47	345.5	0	482.2	5.02	0		9668.55	10611.24	1208.75	tp
111	B	48	349.7	-0.2	521.0	5.02	0		9696.13	10657.00	1206.93	fs stc
112	C	1	170.7	0	520.3	5.02	0		9785.70	10144.53	1207.29	bs stb

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
113	C	2	170.7	0.2	520.5	5.02	0		9785.73	10144.34	1209.11	bs stb
114	C	3	170.1	0.4	550.6	5.02	0		9796.28	10115.60	1211.14	bs r11
115	C	4	173.6	0.2	207.1	5.02	0		9724.70	10452.18	1208.02	tp
116	C	5	210.4	1.5	56.6	5.02	0		9672.98	10609.19	1208.78	tp
117	C	6	156.8	-0.7	102.4	5.02	0	1041.76	9741.95	10563.88	1206.04	th
118	C	7	161.1	-0.9	121.5	5.02	0	1062.60	9740.97	10543.06	1205.39	th
119	C	8	142.6	-1.9	88.8	5.02	0	1109.35	9755.52	10587.49	1204.35	th
120	C	9	132.6	-1.9	70.9	5.02	0	1131.96	9753.77	10610.03	1204.94	th
121	C	10	110.6	-2.3	56.7	5.02	0	1160.01	9754.65	10638.06	1205.02	th
122	C	11	92.8	-2.2	56.6	5.02	0	1177.52	9758.10	10655.23	1205.12	th
123	C	12	92.2	2.6	78.4	5.02	0		9779.98	10654.98	1210.85	rac
124	C	13	88.1	6.9	94.4	5.02	0		9795.97	10661.12	1218.72	rbb
125	C	14	280.3	0.9	34.1	5.02	0		9668.07	10664.09	1207.83	lew
126	C	15	277.1	6.2	38.9	5.02	0		9663.04	10662.80	1211.52	lac
127	C	16	274.8	10	41.3	5.02	0		9660.50	10661.44	1214.57	lbf
128	C	17	54.6	-1.5	76.2	5.02	0	1224.74	9763.71	10702.12	1205.30	th
129	C	18	42.3	-0.8	95.8	5.02	0	1251.57	9766.08	10728.84	1205.96	th
130	C	19	32.1	-0.5	118.6	5.02	0	1281.22	9764.64	10758.46	1206.26	th
131	C	20	30.4	0.2	124.4	5.02	0	1281.22	9764.56	10765.29	1207.73	ws
132	C	21	27.2	-0.4	158.7	5.02	0	1323.01	9774.15	10799.14	1206.19	th
133	C	22	26.7	-0.5	185.3	5.02	0	1349.64	9784.87	10823.53	1205.68	th
134	C	23	25.6	-0.5	209.1	5.02	0	1373.74	9791.96	10846.56	1205.47	th
135	C	24	23.4	-0.4	236.0	5.02	0	1401.96	9795.34	10874.58	1205.65	th
136	C	25	22.2	-0.3	253.1	5.02	0	1419.81	9797.24	10892.33	1205.97	th
137	C	26	21.4	-0.2	277.1	5.02	0	1444.10	9802.72	10915.98	1206.33	th
138	C	27	20.5	-0.3	303.9	5.02	0	1471.28	9808.04	10942.64	1205.70	th
139	C	28	19.6	-0.3	343.1	5.02	0	1510.81	9816.71	10981.21	1205.50	th
140	C	29	20	0	335.8	5.02	0	1510.81	9816.46	10973.54	1207.29	ws
141	C	30	19.4	-0.2	362.2	5.02	0	1529.95	9821.92	10999.62	1206.03	th
142	C	31	18.7	-0.5	386.3	5.02	0	1554.47	9825.46	11023.88	1203.92	th
143	C	32	17.6	-0.4	407.4	5.02	0	1576.90	9824.80	11046.31	1204.45	th
144	C	33	16.6	-0.6	420.2	5.02	0	1591.59	9821.65	11060.66	1202.89	th
145	C	34	355.6	0.6	355.1	5.02	0		9674.37	11012.02	1211.01	tp
146	C	35	5.2	1.2	243.9	5.02	0		9723.72	10900.93	1212.40	tp rx
147	C	36	342.6	2.2	319.1	5.02	0		9606.20	10962.46	1219.55	fs std
148	C	37	342.4	2.3	319.1	5.02	0		9605.12	10962.19	1220.11	fs std
149	D	1	53.2	-5.5	84.9	5.02	0		9673.35	11011.92	1210.99	tp
150	D	2	53.8	-5.5	84.9	5.02	0		9673.88	11011.20	1210.99	tp
151	D	3	116.6	-2.9	133.3	5.02	0		9724.58	10901.35	1212.42	tp rx
152	D	4	116.6	-2.9	133.1	5.02	0		9724.40	10901.44	1212.43	tp rx
153	D	5	162.3	-2	318.9	5.02	0		9702.32	10657.25	1208.03	bs stc
154	D	6	162.4	-2	318.5	5.02	0		9701.66	10657.46	1208.05	bs stc
155	D	7	275.6	4.5	88.0	5.02	0		9517.75	10969.64	1226.10	t11
156	D	8	274.7	0.4	85.4	5.02	0		9520.25	10968.05	1219.77	gss
157	D	9	283.4	0.8	108.4	5.02	0	137.04	9499.92	10986.17	1220.68	gss
158	D	10	283.3	1.1	138.1	5.02	0		9470.99	10992.82	1221.82	xsi
159	D	11	280.7	1.1	137.9	5.02	0	107.00	9469.88	10986.65	1221.82	gss
160	D	12	278.2	0.8	163.0	5.02	0	81.05	9444.04	10984.30	1221.45	gss
161	D	13	276.3	0	206.3	5.02	0	37.31	9400.30	10983.69	1219.17	gss
162	D	14	276.1	-0.1	243.6	5.02	0	0.00	9363.14	10986.94	1218.75	gss
163	D	15	283.4	0.9	103.0	5.02	0	142.44	9505.17	10984.92	1220.79	gss
164	D	16	284	1	97.4	5.02	0	148.14	9510.87	10984.61	1220.87	gss
165	D	17	284.1	1.2	97.8	5.02	0	148.57	9510.53	10984.87	1221.22	p1i
166	D	18	285.7	0.8	93.7	5.02	0	153.45	9515.16	10986.41	1220.48	gss
167	D	19	285.8	0.7	84.9	5.02	0	162.25	9523.67	10984.17	1220.21	gss
168	D	20	287.5	0.9	75.3	5.02	0	172.14	9533.55	10983.69	1220.35	gss



Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
169	D	21	290.2	1.1	65.2	5.02	0	182.77	9544.18	10983.56	1220.42	gss
170	D	22	294.1	1.1	57.0	5.02	0	191.96	9553.34	10984.32	1220.26	gss
171	D	23	298.6	-0.7	47.2	5.02	0	202.57	9563.92	10983.65	1218.59	gss
172	D	24	302.5	0.8	42.6	5.02	0	208.09	9569.43	10983.94	1219.76	gss
173	D	25	310.3	2.6	34.7	5.02	0	217.58	9578.92	10983.47	1220.74	gss
174	D	26	321.6	1.2	30.1	5.02	0	225.42	9586.67	10984.64	1219.80	gss
175	D	27	353.8	-1.8	24.3	5.02	0	241.50	9602.74	10985.20	1218.41	gss
176	D	28	18.5	-3.6	26.1	5.02	0	252.44	9613.66	10985.85	1217.53	gss
177	D	29	35.2	-5.6	31.1	5.02	0	262.05	9623.26	10986.43	1216.13	gss
178	D	30	38.4	-5.8	32.3	5.02	0	264.24	9625.44	10986.39	1215.89	gss
179	D	31	38.8	-4.5	32.5	5.02	0	264.52	9625.72	10986.38	1216.61	p2i
180	D	32	39.1	-5.3	32.8	5.02	0	264.83	9626.02	10986.48	1216.13	gss
181	D	33	43.5	-5.7	35.9	5.02	0	268.95	9630.09	10987.11	1215.58	lbf
182	D	34	59.1	-9	50.2	5.02	0	287.28	9648.41	10986.82	1211.22	lac
183	D	35	61.9	-8.3	56.1	5.02	0	293.75	9654.85	10987.48	1210.99	gss
184	D	36	65.3	-8	62.2	5.02	0	300.77	9661.86	10987.04	1210.43	gss
185	D	37	68.1	-7.1	69.4	5.02	0	308.63	9669.72	10986.93	1210.53	gss
186	D	38	70.1	-6.9	75.4	5.02	0	315.13	9676.21	10986.70	1210.05	gss
187	D	39	72.1	-6.2	82.6	5.02	0	322.89	9683.97	10986.45	1210.20	gss
188	D	40	72.9	-5.7	93.5	5.02	0	333.88	9694.76	10988.56	1209.83	gss
189	D	41	75.2	-5.6	100.9	5.02	0	342.23	9702.93	10986.83	1209.28	gss
190	D	42	75.7	-5.5	107.6	5.02	0	348.98	9709.63	10987.63	1208.81	gss
191	D	43	77.1	-5.4	113.8	5.02	0	355.73	9716.28	10986.46	1208.41	gss
192	D	44	77.9	-4.8	123.3	5.02	0	365.35	9725.89	10986.89	1208.82	??
193	D	45	78.1	-4.4	133.7	5.02	0	375.80	9736.19	10988.62	1208.88	??
194	D	46	79.1	-4	143.0	5.02	0	385.35	9745.73	10988.09	1209.17	gss
195	D	47	80	-3.8	151.3	5.02	0	393.99	9754.33	10987.32	1209.12	gss
196	D	48	80.7	-3.6	160.2	5.02	0	403.10	9763.44	10986.94	1209.09	gss
197	D	49	81.4	-3.1	170.6	5.02	0	413.66	9773.99	10986.56	1209.93	gss
198	D	50	80.6	-3.4	180.7	5.02	0	424.09	9783.61	10990.56	1208.44	gss
199	D	51	81	-3.4	188.0	5.02	0	431.49	9791.01	10990.46	1208.00	gss
200	D	52	82.1	-3.6	199.3	5.02	0	443.42	9802.77	10988.45	1206.63	lew
201	D	53	82.1	-3.7	208.4	5.02	0	452.48	9811.75	10989.69	1205.70	gss
202	D	54	82.3	-3.7	213.7	5.02	0	457.82	9817.09	10989.68	1205.35	gss
203	D	55	82.4	-3.6	216.4	5.02	0	460.56	9819.83	10989.67	1205.56	gss
204	D	56	82.9	-3.6	219.5	5.02	0	464.19	9823.14	10988.18	1205.36	gss
205	D	57	82.8	-3.6	223.2	5.02	0	467.91	9826.76	10989.02	1205.13	gss
206	D	58	82.9	-3.6	226.5	5.02	0	471.22	9830.07	10989.04	1204.92	gss
207	D	59	83.1	-3.5	229.8	5.02	0	474.64	9833.46	10988.66	1205.12	gss
208	D	60	83.2	-2.9	234.3	5.02	0	479.18	9838.01	10988.80	1207.30	rew
209	D	61	83.2	-2.8	234.6	5.02	0	479.50	9838.33	10988.83	1207.70	rx
210	D	62	82.9	-2.5	236.7	5.02	0	481.90	9840.22	10990.31	1208.84	rac
211	D	63	83.2	-2.4	239.2	5.02	0	484.71	9842.87	10989.38	1209.15	gss
212	D	64	83.2	-1.8	243.6	5.02	0	489.10	9847.22	10989.90	1211.52	gss
213	D	65	83.3	-1.6	245.9	5.02	0	491.46	9849.58	10989.74	1212.30	gss
214	D	66	83.3	-1.6	246.0	5.02	0	491.56	9849.68	10989.76	1212.30	p3i
215	D	67	83.3	-1.6	246.3	5.02	0	491.86	9849.98	10989.79	1212.29	gss
216	D	68	83.4	-1.3	250.3	5.02	0	495.91	9854.03	10989.83	1213.49	gss
217	D	69	83.4	-1.2	253.3	5.02	0	498.92	9857.02	10990.17	1213.86	gss
218	D	70	83.3	-1.2	253.4	5.02	0	499.38	9857.07	10990.62	1213.86	gss
219	D	71	83.4	-1.4	248.3	5.02	0	504.51	9852.04	10989.60	1213.10	rbf
220	D	72	83.4	-1.1	257.5	5.02	0	513.64	9861.10	10990.65	1214.23	gss
221	D	73	83.4	-0.5	263.6	5.02	0	519.78	9867.20	10991.35	1216.87	gss
222	D	74	83.5	-0.1	267.3	5.02	0	523.52	9870.94	10991.31	1218.70	gss
223	D	75	83.3	0.2	276.9	5.02	0	533.16	9880.37	10993.36	1220.14	gss
224	D	76	83	0.5	286.2	5.02	0	542.57	9889.41	10995.93	1221.67	gss

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
225	D	77	82.9	0.5	288.0	5.02	0	544.44	9891.14	10996.65	1221.68	gss atp4i
226	D	78	83	0.1	289.0	5.02	-3.8	545.57	9892.20	10996.27	1223.47	p4i
227	D	79	83	0.7	288.8	5.02	0	545.79	9891.98	10996.25	1222.70	gss
228	D	80	83	0.7	288.1	5.02	0	546.49	9891.29	10996.16	1222.69	gss
229	D	81	83.9	0.1	287.1	5.02	0		9890.83	10991.56	1219.67	t12
230	D	82	79.5	0.6	352.0	5.02	0		9951.45	11025.20	1222.86	gss
231	D	83	84.4	0.6	409.6	5.02	0	668.28	10012.98	11001.02	1223.46	gss
232	D	84	84.5	0.6	464.4	5.02	0	723.08	10067.59	11005.56	1224.03	gss
233	D	85	84.6	0.7	300.1	5.02	0		9904.10	10989.29	1222.84	gss
234	D	86	84.1	-0.1	268.0	5.02	0		9871.94	10988.60	1218.70	gss
235	D	87	79.6	-3.6	221.8	5.02	0	1651.19	9823.48	11001.09	1205.22	th
236	D	88	73.6	-3.8	231.1	5.02	0	1676.65	9827.05	11026.30	1203.82	th
237	D	89	72.9	-3.2	223.1	5.02	0	1676.65	9818.55	11026.64	1206.70	ws
238	D	90	67.8	-3.7	237.7	5.02	0	1701.27	9825.44	11050.87	1203.80	th
239	D	91	64.8	-3.7	240.3	5.02	0	1714.05	9822.79	11063.37	1203.63	th
240	D	92	57.4	-3.9	247.5	5.02	0	1746.35	9813.89	11094.41	1202.30	th
241	D	93	57.4	-3.8	247.6	5.02	0	1746.38	9813.91	11094.43	1202.73	th
242	D	94	55	-3.9	249.5	5.02	0	1756.97	9809.75	11104.17	1202.16	th
243	D	95	52.8	-3.6	252.5	5.02	2	1767.06	9806.48	11113.72	1201.28	th
244	D	96	51.1	-3.9	252.9	5.02	2	1774.57	9802.19	11119.87	1199.93	th
245	D	97	49.4	-3.7	253.3	5.02	2	1782.08	9797.66	11125.88	1200.79	th
246	D	98	47	-3.8	252.4	5.02	2	1792.71	9789.98	11133.22	1200.40	th
247	D	99	44.5	-3.9	253.9	5.02	2	1803.85	9783.33	11142.16	1199.86	th
248	D	100	41.6	-3.4	256.2	5.02	3	1816.97	9775.49	11152.68	1200.95	th
249	D	101	38.4	-3.8	261.4	5.02	0	1832.32	9767.74	11165.93	1201.81	th
250	D	102	39.9	-3.5	272.0	5.02	0	1844.99	9779.83	11169.72	1202.53	th
251	D	103	38.9	-3.6	272.1	5.02	0	1849.74	9776.20	11172.78	1202.05	th
252	D	104	35.4	-3.3	274.4	5.02	0	1866.59	9764.34	11184.76	1203.35	th
253	D	105	32.1	-3.4	280.2	5.02	0	1883.57	9754.26	11198.42	1202.52	th
254	D	106	29.8	-3.2	286.1	5.02	0	1896.35	9747.52	11209.28	1203.18	th
255	D	107	27.5	-3.1	293.8	5.02	0	1910.31	9741.01	11221.63	1203.26	th
256	D	108	24.6	-2.9	300.6	5.02	0	1926.84	9730.50	11234.38	1203.94	th
257	D	109	18.6	-3	285.5	5.02	0	1961.02	9696.42	11231.65	1204.21	th
258	D	110	16.5	-3.2	296.0	5.02	0	1976.00	9689.44	11244.90	1202.62	th
259	D	111	18.4	-2	299.8	5.02	0		9700.00	11245.54	1208.70	r12
260	D	112	14.2	-2.9	316.3	5.02	0	1999.69	9682.95	11267.68	1203.15	th
261	D	113	11.1	-2.8	332.5	5.02	0	2023.58	9669.37	11287.34	1202.91	th
262	D	114	11.8	-1.8	345.9	5.02	0	2107.20	9676.10	11299.67	1208.30	r13
263	D	115	1	-2.3	387.3	5.02	0	2129.21	9612.12	11348.28	1203.62	th
264	D	116	359.2	-2.4	405.4	5.02	0	2130.94	9599.70	11366.46	1202.18	th
265	D	117	359.2	-2.3	407.2	5.02	2	2140.00	9599.67	11368.19	1200.82	th
266	D	118	358.1	-2.3	411.7	5.02	2		9591.71	11372.50	1200.64	th
267	D	119	358.5	0.2	439.5	5.02	0		9593.85	11400.40	1220.70	tpe
268	D	120	358.6	0.3	439.3	5.02	0		9594.63	11400.22	1221.47	tpe
269	D	121	341.2	-1.5	441.0	5.02	0		9463.22	11378.57	1207.62	r14
270	D	122	340.3	-1.5	457.6	5.02	0		9451.09	11391.91	1207.19	r15
271	D	123	340.3	-1.5	457.7	5.02	0		9451.06	11392.01	1207.18	r15
272	D	124	330.5	-0.8	435.2	5.02	0		9391.08	11339.80	1213.09	r16
273	E	1	131.7	3.2	104.7	5.02	0		9390.39	11339.56	1212.73	r16
274	E	2	96.8	0.1	140.9	5.02	0		9452.10	11392.55	1207.12	r15
275	E	3	101.6	0.4	153.0	5.02	0		9462.06	11378.47	1207.95	r14
276	E	4	106.8	0.2	380.5	5.02	0		9676.45	11299.26	1208.21	r13
277	E	5	110.7	-0.5	401.0	5.02	0	2281.98	9687.29	11267.50	1203.38	th
278	E	6	109.2	-0.6	371.6	5.02	0	2313.07	9663.10	11287.04	1202.99	th
279	E	7	108.4	-0.1	360.9	5.02	0	2313.07	9654.64	11295.32	1206.25	ws
280	E	8	107.4	-0.4	347.6	5.02	3	2339.59	9643.87	11305.29	1201.45	th

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
281	E	9	106.6	-0.9	333.3	5.02	0	2354.69	9631.56	11314.03	1201.64	th
282	E	10	105.7	-0.9	319.2	5.02	0	2369.69	9619.44	11322.87	1201.86	th
283	E	11	103.9	-0.7	297.8	5.02	0	2393.16	9601.25	11337.70	1203.24	th
284	E	12	97.3	-0.6	282.9	5.02	3	2429.74	9592.78	11373.29	1200.91	th
285	E	13	96.6	-0.9	267.7	5.02	3	2445.33	9578.08	11378.47	1199.67	th
286	E	14	95.7	-1	255.2	5.02	3	2458.49	9566.09	11383.89	1199.42	th
287	E	15	93.6	-1.1	242.4	5.02	3	2474.21	9554.07	11394.02	1199.22	th
288	E	16	91.8	2.9	282.4	5.02	0		9594.49	11400.36	1221.18	tpe
289	E	17	91.8	2.9	282.4	5.02	0		9594.49	11400.36	1221.18	tpe
290	E	18	92	-1.1	231.1	5.02	3	2487.30	9543.11	11401.17	1199.44	th
291	E	19	90.2	-1.1	217.2	5.02	3	2502.87	9529.35	11408.48	1199.71	th
292	E	20	87.9	-1.2	208.0	5.02	3	2515.42	9520.00	11416.86	1199.52	th
293	E	21	85.2	-1	187.8	5.02	3	2537.65	9499.30	11424.95	1200.60	th
294	E	22	82.9	-1.3	168.5	5.02	3	2558.24	9479.35	11430.06	1200.05	th
295	E	23	78.5	-1.7	148.7	5.02	3	2581.41	9457.94	11438.89	1199.46	th
296	E	24	75.2	-2.2	136.7	5.02	3	2595.98	9444.35	11444.15	1198.63	th
297	E	25	72.4	-2.2	123.7	5.02	3	2610.44	9430.11	11446.64	1199.12	th
298	E	26	69.2	-2.1	106.2	5.02	3	2629.05	9411.49	11446.96	1199.98	th
299	E	27	62.2	-2.4	89.4	5.02	3	2649.65	9391.29	11450.94	1200.13	th
300	E	28	51.7	-3.2	72.9	5.02	3	2671.82	9369.39	11454.41	1199.80	th
301	E	29	36.9	-3.6	67.4	5.02	3	2690.70	9352.64	11463.11	1199.64	th
302	E	30	20.2	-3.1	61.4	5.02	3	2710.30	9333.39	11466.87	1200.55	th
303	E	31	12.1	1.2	102.5	5.02	0		9333.67	11509.44	1209.02	rac
304	E	32	11.2	2.5	106.9	5.02	0		9332.95	11514.10	1211.54	rbf
305	E	33	205.2	5.5	16.5	5.02	0		9305.15	11394.28	1208.47	lac
306	E	34	207	5.1	47.5	5.02	0		9290.62	11366.90	1211.12	lbf
307	E	35	207	2.7	608.9	5.02	0		9035.74	10866.68	1235.59	lvw
308	E	36	355.3	-2.5	64.9	5.02	3	2737.76	9306.87	11473.96	1201.04	th
309	E	37	341.6	-1.9	74.1	5.02	3	2756.65	9288.81	11479.51	1201.42	th
310	E	38	330.3	-2.1	83.2	5.02	3	2774.63	9270.94	11481.54	1200.82	th
311	E	39	324.3	-2	91.2	5.02	3	2786.77	9258.94	11483.33	1200.69	th
312	E	40	316.2	-2.5	104.5	5.02	0	2805.90	9239.86	11484.66	1202.31	th
313	E	41	309.4	-2.1	116.6	5.02	0	2823.74	9222.07	11483.26	1202.60	th
314	E	42	304.6	-1.4	165.2	5.02	0	2873.64	9176.25	11503.02	1202.84	th
315	E	43	300.4	-1.1	200.5	5.02	0	2911.39	9139.29	11510.68	1203.03	th
316	E	44	297	-0.9	230.5	5.02	0	2944.00	9106.84	11513.87	1203.26	th
317	E	45	294.9	-1	256.9	5.02	0	2971.85	9079.20	11517.38	1202.39	th
318	E	46	292.3	-0.6	294.5	5.02	0	3011.49	9039.73	11520.98	1203.79	th
319	E	47	290.1	-0.5	317.0	5.02	0	3036.87	9014.51	11518.17	1204.11	th
320	E	48	295.6	0.1	343.5	5.02	0		9002.41	11557.66	1207.48	r17
321	E	49	295.6	0.1	343.6	5.02	0		9002.32	11557.70	1207.48	r17
322	E	50	285.6	-0.3	355.4	5.02	0	3083.45	8969.89	11504.81	1205.02	th
323	E	51	281.9	-0.1	390.8	5.02	0	3126.25	8929.79	11489.82	1206.19	th
324	E	52	281.3	-0.1	395.9	5.02	0	3126.25	8923.96	11486.81	1206.19	ws
325	E	53	280.3	-0.1	394.6	5.02	0	3137.86	8923.95	11479.79	1206.19	th
326	E	54	278.2	-0.3	392.9	5.02	0	3152.39	8923.31	11465.27	1204.82	th
327	E	55	277.6	-0.3	394.0	5.02	0	3156.66	8921.66	11461.34	1204.81	th
328	E	56	277.8	-0.2	394.3	5.02	0	3156.66	8921.54	11462.75	1205.50	ws
329	E	57	279.6	0	267.0	5.02	0		9048.93	11453.76	1206.88	fs stf
330	E	58	279.5	-0.1	267.2	5.02	0		9048.65	11453.34	1206.41	fs stf
331	F	1	99.2	0.1	266.8	5.02	0		9312.26	11410.45	1206.94	bs ste
332	F	2	99.3	0.1	266.9	5.02	0		9312.28	11409.97	1206.94	bs ste
333	F	3	336	0.5	114.5	5.02	0		9002.32	11557.70	1207.48	r17
334	F	4	342.8	-1.5	96.5	5.02	0	3286.21	9020.36	11545.26	1203.95	th
335	F	5	329.7	-1.8	112.1	5.02	0	3314.65	8992.31	11549.93	1202.95	th
336	F	6	319.4	-1	113.1	5.02	0	3334.89	8975.30	11538.96	1204.50	th

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
337	F	7	301.1	-0.7	115.2	5.02	0	3371.25	8950.25	11512.60	1205.07	th
338	F	8	283.9	-0.4	126.6	5.02	0	3409.12	8926.00	11483.51	1205.59	th
339	F	9	266.4	-1.1	131.1	5.02	0	3448.57	8918.07	11444.87	1203.96	th
340	F	10	266.5	-0.5	140.7	5.02	0	3448.57	8908.46	11444.51	1205.25	ws
341	F	11	267.3	-0.9	161.8	5.02	0	3479.36	8887.29	11445.48	1203.94	th
342	F	12	269.8	-0.9	190.8	5.02	0	3509.35	8858.11	11452.44	1203.48	th
343	F	13	271.4	-0.9	208.6	5.02	0	3528.00	8840.38	11458.20	1203.20	th
344	F	14	273.4	-0.8	231.7	5.02	0	3552.34	8817.62	11466.84	1203.24	th
345	F	15	273.8	-0.7	256.7	5.02	0	3577.41	8792.77	11470.11	1203.34	th
346	F	16	274.6	-0.3	256.9	5.02	0	3577.41	8792.82	11473.71	1205.13	ws
347	F	17	273.8	-0.7	278.9	5.02	0	3599.60	8770.62	11471.59	1203.07	th
348	F	18	272.8	-0.7	290.9	5.02	0	3612.59	8758.36	11467.31	1202.92	th
349	F	19	272.7	-1.1	297.0	5.02	0	3618.78	8752.17	11467.10	1200.77	th
350	F	20	273.2	-1.1	304.6	5.02	0	3626.82	8744.72	11470.11	1200.63	th
351	F	21	272.9	-0.7	309.3	5.02	0	3626.82	8740.01	11468.75	1202.70	ws
352	F	22	273.7	-0.9	325.8	5.02	0	3648.11	8723.81	11474.12	1201.36	th
353	F	23	274.6	-0.9	345.3	5.02	0	3668.31	8704.74	11480.79	1201.05	th
354	F	24	275.7	-1	369.3	5.02	0	3693.35	8681.37	11489.79	1200.03	th
355	F	25	275.8	-0.7	378.6	5.02	0	3693.35	8672.26	11491.36	1201.85	ws
356	F	26	275.8	-1	396.1	5.02	0	3720.16	8654.78	11493.14	1199.56	th
357	F	27	275.8	-1	396.2	5.02	0	3720.26	8654.68	11493.15	1199.56	th
358	F	28	275.6	-0.6	404.4	5.02	3	3728.52	8646.44	11492.56	1199.24	th
359	F	29	275.4	-1.1	411.0	5.02	3	3735.31	8639.69	11491.78	1195.59	th
360	F	30	275.6	-1	417.1	5.02	3	3741.59	8633.74	11493.81	1196.20	th
361	F	31	275.9	-1	422.1	5.02	3	3747.05	8628.99	11496.50	1196.11	th
362	F	32	276	-1	432.1	5.02	3	3757.08	8619.12	11498.27	1195.93	th
363	F	33	276.3	-1.1	439.9	5.02	3	3765.19	8611.63	11501.38	1195.03	th
364	F	34	276.5	-1.1	449.6	5.02	3	3775.01	8602.16	11504.00	1194.84	th
365	F	35	277.4	-0.8	463.3	5.02	3	3790.42	8589.49	11512.77	1197.01	th
366	F	36	278.9	-0.6	472.4	5.02	3	3805.69	8582.20	11526.18	1198.53	th
367	F	37	276.7	-0.1	487.6	5.02	0	3805.69	8564.62	11509.99	1205.63	r18
368	F	38	277.9	-0.5	484.9	5.02	0	3818.05	8568.61	11519.75	1202.25	ws
369	F	39	280.3	-0.8	476.7	5.02	0		8579.92	11538.33	1199.82	th
370	F	40	297.3	-0.4	581.9	5.02	0		8531.82	11719.98	1202.42	fs stg
371	F	42	301.4	0	447.9	5.02	0		8666.58	11686.46	1206.48	r20
372	F	43	303.8	0	452.7	5.02	0		8672.70	11704.94	1206.48	fs stg
373	F	44	0.2	0.2	138.7	5.02	0		9049.37	11591.80	1206.96	rvw
374	F	45	178.8	0.2	18.8	5.02	0		9049.28	11434.31	1206.54	lac
375	F	46	182.3	6.5	26.7	5.02	0		9047.82	11426.40	1209.52	lbf
376	G	1	124	0.1	452.3	5.02	0		9048.41	11452.21	1206.86	bs stf
377	G	1	114.3	0.3	360.6	5.02	0		9002.08	11556.74	1207.95	r17
378	G	2	200.5	-0.2	18.9	5.02	0		8666.82	11687.42	1206.00	r20
379	G	5	276.9	-1.4	141.6	5.02	0		8532.90	11722.13	1202.61	r21
380	G	6	304.4	-0.9	208.2	5.02	0		8501.67	11822.74	1202.80	r22
381	G	7	308.1	-1.7	282.0	5.02	0		8451.54	11879.12	1197.70	fs sti
382	G	8	308	-1.7	282.2	5.02	0		8451.08	11878.85	1197.69	fs sti
383	I	1	128	1.8	281.2	5.02	0		8673.38	11706.37	1206.32	bs stg
384	I	2	131.7	1.8	288.4	5.02	0		8667.13	11687.65	1206.54	r20
385	I	3	163.1	1.2	386.2	5.02	0		8564.10	11509.93	1205.57	r18
386	I	4	163.1	1.2	385.9	5.02	0		8564.01	11510.22	1205.56	bs r18
387	I	5	159.3	0	389.6	5.02	3	3843.27	8589.54	11515.02	1194.48	th
388	I	6	159.1	0.6	387.4	5.02	3	#N/A	8590.02	11517.58	1198.54	th
389	I	7	159	0.6	353.4	5.02	0	3888.57	8578.47	11549.56	1201.18	ws
390	I	8	157.9	0.4	345.2	5.02	0	3888.57	8581.70	11559.64	1199.89	th
391	I	9	155.1	0.2	323.4	5.02	0	3916.01	8587.99	11586.13	1198.61	ws
392	I	10	155.2	0.1	322.7	5.02	0	3916.01	8587.18	11586.53	1198.04	th

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
393	I	11	155	-0.3	316.5	5.02	0	3922.32	8585.58	11592.63	1195.82	th
394	I	12	154.8	0.3	310.5	5.02	3	3928.42	8584.03	11598.52	1196.11	th
395	I	13	154.8	0.3	299.2	5.02	3	3939.72	8579.22	11608.75	1196.05	th
396	I	14	156.7	0.6	297.1	5.02	3	3949.83	8569.34	11606.61	1197.59	th
397	I	15	157.5	0.3	286.0	5.02	3	3961.64	8561.27	11615.24	1195.98	th
398	I	16	157	0.8	287.7	5.02	3	3961.64	8564.23	11614.67	1198.50	ws
399	I	17	158.2	0.2	272.2	5.02	3	3975.85	8552.91	11626.74	1195.43	th
400	I	18	158.1	0.3	256.7	5.02	3	3991.36	8547.57	11641.30	1195.82	th
401	I	19	158	0.2	240.1	5.02	3	4007.96	8541.77	11656.85	1195.32	th
402	I	20	159	0.3	218.5	5.02	3	4029.93	8530.13	11675.48	1195.62	th
403	I	21	159	-0.2	211.3	5.02	0	4037.13	8527.55	11682.21	1196.74	th
404	I	22	157.5	0.4	191.4	5.02	0	4037.13	8525.07	11702.64	1198.82	ws
405	I	23	158.3	-0.2	187.5	5.02	0	4061.05	8521.15	11705.26	1196.83	th
406	I	24	156.9	-0.3	181.5	5.02	0	4068.56	8523.03	11712.52	1196.53	th
407	I	25	152.7	1.5	177.2	5.02	0		8533.12	11721.97	1202.12	r21
408	I	26	154.5	-0.1	170.8	5.02	0	4091.31	8525.36	11725.31	1197.18	ws
409	I	27	153.9	-1	160.6	5.02	0	4091.31	8522.47	11735.27	1194.68	th
410	I	28	154.6	-1.4	149.8	5.02	0	4102.29	8516.06	11744.19	1193.82	th
411	I	29	156.2	-1.6	143.9	5.02	0	4109.41	8509.91	11747.77	1193.46	th
412	I	30	156.5	-1.5	136.8	5.02	0	4116.63	8506.36	11754.06	1193.90	th
413	I	31	157.2	-1.7	128.0	5.02	0	4125.49	8501.45	11761.43	1193.68	th
414	I	32	156.6	-1.7	117.9	5.02	0	4135.67	8498.67	11771.22	1193.98	th
415	I	33	172.5	1	96.7	5.02	0		8464.45	11783.61	1199.17	lac
416	I	34	181.2	2.4	97.9	5.02	0		8449.78	11781.58	1201.58	lbf
417	I	35	193.9	7.2	100.3	5.02	0		8427.73	11782.10	1210.15	lvw
418	I	36	133.9	1.5	96.8	5.02	0		8521.55	11812.37	1200.01	rac
419	I	37	121.3	4.3	125.6	5.02	0		8559.19	11814.19	1206.93	lbf
420	I	38	154.9	-0.4	88.2	5.02	0	4169.71	8489.24	11799.60	1196.86	ws
421	I	39	149.5	-1.2	86.3	5.02	0	4169.71	8495.62	11805.13	1195.67	th
422	I	40	153.3	-2.5	71.9	5.02	0	4184.98	8484.15	11815.21	1194.34	th
423	I	41	132.5	-2.1	50.4	5.02	0	4215.60	8488.96	11845.44	1195.63	th
424	I	42	133.7	-1.7	46.1	5.02	0	4215.60	8485.14	11847.63	1196.11	ws
425	I	43	130.3	-5.5	45.9	5.02	0	4220.44	8486.82	11849.79	1193.06	th
426	I	44	130.4	-2.7	45.2	5.02	3	4221.09	8486.29	11850.14	1192.35	th
427	I	45	120.4	-3.6	38.6	5.02	3	4230.93	8485.14	11859.92	1192.05	th
428	I	46	113.3	-4.1	35.3	5.02	3	4236.58	8484.26	11865.50	1191.95	th
429	I	47	96.5	-4.6	31.8	5.02	3	4246.98	8483.42	11875.87	1191.92	th
430	I	48	69.2	-2	33.8	5.02	3	4262.58	8483.40	11891.46	1193.30	th
431	I	49	50.1	-0.8	45.6	5.02	3	4280.16	8486.81	11908.72	1193.84	th
432	I	50	41.5	-0.6	70.8	5.02	3	4306.76	8498.74	11932.49	1193.74	th
433	I	51	40.3	1.3	73.8	5.02	3	4306.76	8499.55	11935.74	1196.15	ws
434	I	52	42.2	-0.3	96.9	5.02	3	4332.89	8516.92	11951.25	1193.97	th
435	I	53	44.7	0.8	101.9	5.02	3	4332.89	8523.50	11951.89	1195.90	ws
436	I	54	42.1	-0.4	115.3	5.02	3	4351.29	8529.12	11965.02	1193.67	th
437	I	55	51.3	1.5	124.1	5.02	3		8548.64	11957.04	1197.73	rac
438	I	56	21.9	1.7	106.5	5.02	3		8491.53	11978.24	1197.64	lac
439	I	57	38.7	-0.6	144.1	5.02	3	4381.08	8541.92	11991.92	1192.97	th
440	I	58	36.3	0.2	146.7	5.02	3	4381.08	8538.67	11997.70	1194.99	ws
441	I	59	34.8	-1.1	165.8	5.02	3	4405.17	8546.43	12015.59	1191.30	th
442	I	60	34.2	-1.1	180.2	5.02	3	4419.68	8553.10	12028.48	1191.02	th
443	I	61	32.3	-0.9	193.3	5.02	3	4434.18	8555.10	12042.84	1191.44	th
444	I	62	32	-0.9	211.6	5.02	3	4452.51	8563.94	12058.89	1191.16	th
445	I	63	30.9	-0.8	227.0	5.02	3	4468.48	8568.39	12074.23	1191.31	th
446	I	64	29.9	-0.4	245.2	5.02	3	4487.15	8574.05	12092.03	1192.77	th
447	I	65	28.1	-0.5	262.3	5.02	3	4506.01	8575.37	12110.84	1192.19	th
448	I	66	27.9	-0.4	279.3	5.02	3	4523.04	8582.52	12126.30	1192.53	th

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
449	I	67	26.5	0.3	281.7	5.02	3	4523.04	8577.52	12131.57	1195.95	ws
450	I	68	22.5	0.4	300.4	5.02	3		8566.78	12157.00	1196.58	r23
451	I	69	32.9	1.2	306.2	5.02	3		8618.16	12136.59	1200.89	r24
452	I	70	28.2	-0.4	306.9	5.02	3	4550.68	8596.85	12149.93	1192.34	th
453	I	72	27.4	-0.3	318.3	5.02	3	4562.89	8598.31	12162.06	1192.81	th
454	I	73	26.4	-0.5	341.5	5.02	3	4586.79	8603.66	12185.34	1191.50	th
455	I	74	26.4	-0.4	352.0	5.02	3	4597.29	8608.33	12194.75	1192.02	th
456	I	75	43	2.5	246.9	5.02	0		8620.19	12060.02	1208.26	j1
457	I	76	10.5	0.5	349.8	5.02	0		8515.57	12223.40	1200.53	j2
458	I	77	28.5	-0.2	505.1	5.02	0		8692.84	12323.36	1195.72	j3
459	1	1	188.8	5	140.3		0	0.00	8360.84	12814.05	1209.37	gss
460	1	2	187.9	4.3	137.4		0	3.59	8363.41	12816.56	1207.43	g
461	1	3	187.6	4.2	136.2		0	4.97	8364.28	12817.63	1207.10	bd
462	1	4	187.5	3.3	136.3		0	5.21	8364.51	12817.56	1204.96	bd
463	1	5	187.4	3.4	136.3		0	5.45	8364.74	12817.54	1205.19	p2
464	1	6	187.2	3.2	136.2		0	5.93	8365.23	12817.55	1204.71	gs
465	1	7	187	3.2	135.5		0	6.77	8365.78	12818.19	1204.67	gs
466	1	9	186.5	2.3	134.6		0	8.26	8367.06	12818.94	1202.50	gs
467	1	10	185.6	1.9	133.1		0	10.82	8369.30	12820.18	1201.52	bd
468	1	11	185	0.2	132.3		0	12.44	8370.76	12820.87	1197.56	bd
469	1	12	183	-1	128.0		0	18.70	8375.60	12824.86	1194.87	bd
470	1	13	182.5	-1.4	126.8		0	20.35	8376.77	12826.02	1194.00	lbf
471	1	14	181.6	-2.3	125.4		0	22.76	8378.79	12827.32	1192.06	bd
472	1	15	181.6	-2	123.8		0	24.33	8378.84	12828.89	1192.78	lac
473	1	16	181	-3.7	123.6		0	25.64	8380.14	12829.04	1189.10	lew
474	1	17	180.5	-3.6	122.3		0	27.39	8381.23	12830.41	1189.41	bd
475	1	18	179.3	-2.5	120.4		0	30.55	8383.77	12832.29	1191.84	gs
476	1	19	176.5	-3.9	115.5		0	38.08	8389.35	12837.35	1189.22	gs
477	1	20	173.7	-4.1	111.9		0	44.71	8394.58	12841.43	1189.08	gs
478	1	21	170.4	-2.1	108.7		0	51.82	8400.43	12845.46	1193.11	gs
479	1	22	167	-3.2	106.5		0	58.57	8406.26	12848.86	1191.14	gs
480	1	23	164.6	-2.3	105.4		0	63.15	8410.29	12851.04	1192.87	gs
481	1	24	159.4	-1.1	102.4		0	73.05	8418.32	12856.83	1195.13	gs
482	1	25	155.4	0.7	100.9		0	80.30	8424.29	12860.93	1198.33	rew
483	1	26	152.5	0.7	98.8		0	85.77	8427.91	12865.04	1198.31	rac
484	1	27	146.6	-0.4	98.2		0	95.92	8436.35	12870.69	1196.41	rbf
485	1	28	141.4	-0.1	96.5		0	104.92	8442.50	12877.25	1196.93	gs
486	1	29	135.1	3.5	96.5		0	115.52	8450.43	12884.30	1203.00	gs
487	1	30	127	2.4	98.1		0	129.36	8460.65	12893.62	1201.21	gs
488	1	31	120.9	2.5	100.1		0	140.10	8468.19	12901.26	1201.47	gs
489	1	32	107.3	0.7	113.1		0	168.44	8490.27	12919.04	1198.48	gs
490	1	33	101.4	0.8	122.8		0	183.97	8502.66	12928.40	1198.81	gs
491	1	34	96.3	1.3	131.4		0	198.16	8512.87	12938.25	1200.08	gs
492	1	35	91.4	1.2	143.3		0	214.87	8525.52	12949.17	1200.10	gs
493	1	36	86.7	0.9	158.6		0	234.55	8540.61	12961.79	1199.59	gs
494	1	37	82	1.2	174.6		0	255.56	8555.16	12976.96	1200.76	gs
495	1	38	78.7	1.1	189.9		0	274.11	8568.48	12989.87	1200.74	gs
496	1	39	76.1	1	200.1		0	287.61	8576.51	13000.73	1200.59	gs
497	1	40	75.2	0.8	206.6		0	294.87	8582.02	13005.44	1199.98	gs
498	1	41	74.6	1	208.7		0	297.88	8583.47	13008.08	1200.74	gs
499	1	42	75	2.2	208.4		0		8583.64	13006.62	1205.11	p39
500	1	43	74.7	0	208.7		0	298.25	8583.60	13007.74	1197.10	gs
501	1	44	74.9	-0.1	208.7		-5.1	298.97	8583.79	13007.03	1201.83	p3
502	1	45	74.8	1	208.5		0	299.41	8583.47	13007.32	1200.74	gs
503	1	46	74.7	1.9	209.7		0	300.68	8584.55	13008.00	1204.06	gs
504	1	47	74	2.6	214.9		0	306.48	8588.85	13011.89	1206.86	gs



Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
505	1	48	73.4	3.4	218.8		0	311.02	8591.99	13015.18	1210.10	gs
506	1	49	73.3	4.5	223.6		0	315.83	8596.47	13016.92	1214.70	gs
507	1	50	73.3	4.6	224.6		0	316.80	8597.40	13017.20	1215.17	gs
508	1	51	73.4	4	224.6		-5.1	317.19	8597.49	13016.82	1217.90	gs
509	1	52	73.3	3.6	225.0		-5.1	317.76	8597.76	13017.31	1216.35	p4
510	1	53	73.5	3.5	225.1		-5.1	318.55	8598.11	13016.59	1215.97	gs
511	1	54	73.4	4.3	226.0		-5.1	319.52	8598.84	13017.22	1219.19	gs
512	1	55	68.9	6.3	224.4		-5.1		8591.68	13033.46	1226.98	bt rb xs2
513	1	56	0	0	0.0		0		8382.29	12952.67	1197.10	xsj
514	2	1	0	0	0.0		0		8707.93	12371.67	1195.42	stn tr onj
515	2	2	356	1.6	310.3		0		8686.28	12681.20	1204.09	rx25
516	2	3	356.1	0.7	310.4		-5.1		8686.82	12681.33	1204.31	r25
517	2	4	196.4	0	52.0		0		8693.25	12321.79	1195.42	tpj3
518	2	5	232.5	1.3	241.5		0		8516.30	12224.64	1200.90	j2
519	2	6	213.5	0.2	257.0		0		8566.08	12157.37	1196.32	r23
520	2	7	213.4	0.3	257.2		0		8566.35	12156.95	1196.77	r23
521	2	8	195.6	2.9	325.6		5		8620.37	12058.09	1206.91	j1
522	2	9	201.1	1.9	252.1		5		8617.19	12136.51	1198.78	0
523	2	10	207.1	-0.7	259.3		0	4654.28	8589.81	12140.86	1192.25	th
524	2	11	208.2	-0.1	257.6		0	4654.28	8586.20	12144.65	1194.97	ws
525	2	12	157.4	4.6	88.2		0		8741.83	12290.23	1202.52	rbf
526	2	13	209.2	-0.9	236.0		0	4679.29	8592.81	12165.69	1191.71	th
527	2	14	159.2	1	74.9		0		8734.52	12301.67	1196.73	rac
528	2	15	211.8	-0.9	210.1		0	4707.09	8597.23	12193.13	1192.12	th
529	2	16	213.6	-1.1	186.4		0	4731.60	8604.79	12216.45	1191.84	th
530	2	17	215.4	-1.1	160.7		0	4757.86	8614.85	12240.71	1192.33	th
531	2	18	273.9	1.7	113.2		0		8595.04	12379.37	1198.78	lec
532	2	19	217.8	-1	145.7		0	4774.17	8618.64	12256.57	1192.88	th
533	2	20	279.5	5.3	117.4		0		8592.14	12391.05	1206.31	lbf
534	2	21	222.8	-0.9	129.2		0	4794.54	8620.15	12276.89	1193.39	th
535	2	22	229.8	-1.5	114.2		0		8620.73	12297.99	1192.43	0
536	2	23	236.3	-1.2	100.7		0		8624.17	12315.81	1193.31	0
537	2	24	246.3	-1.6	79.5		0	4859.15	8635.16	12339.73	1193.20	th
538	2	25	258.8	-1.4	69.5		0	4878.17	8639.77	12358.18	1193.72	th
539	2	26	260.1	-0.5	74.6		0	4878.17	8634.44	12358.85	1194.77	ws
540	2	27	287.3	-0.9	65.7		0	4911.64	8645.21	12391.21	1194.39	th
541	2	28	310.5	-0.7	64.0		0	4937.77	8659.26	12413.24	1194.64	th
542	2	29	333.3	-0.4	62.3		0	4962.79	8679.93	12427.33	1194.98	th
543	2	30	353.5	-1	62.5		0	4984.68	8700.85	12433.76	1194.33	th
544	2	31	10.3	-1.1	61.6		0	5002.82	8718.94	12432.27	1194.24	th
545	2	32	29.3	-1.5	69.6		0	5025.86	8741.98	12432.35	1193.60	th
546	2	33	30	-1.5	74.3		0	5025.86	8745.06	12436.00	1193.47	ws
547	2	34	34.6	-2.1	78.2		0	5036.90	8752.36	12436.08	1192.55	th
548	2	35	37	-3.3	83.1		0	5042.78	8757.91	12438.01	1190.63	th
549	2	36	40.7	-1.2	92.5		5	5053.76	8768.23	12441.79	1188.48	th
550	2	37	38.2	-1	101.4		5	5063.62	8770.62	12451.35	1188.65	th
551	2	38	34.3	-2.1	115.0		0	5079.11	8772.75	12466.69	1191.20	th
552	2	39	28.2	-1.8	129.3		0	5098.43	8769.04	12485.66	1191.35	th
553	2	40	26.8	-1.5	123.5		0	5098.43	8763.59	12481.87	1192.19	ws
554	2	41	26.8	-2.5	129.9		0	5101.65	8766.49	12487.60	1189.75	th
555	2	42	25.4	-2.5	135.7		0	5108.29	8766.12	12494.23	1189.50	th
556	2	43	26.3	-1.8	150.4		0	5123.21	8774.58	12506.53	1190.69	th
557	2	44	24.6	-2	159.6		0	5133.48	8774.37	12516.79	1189.85	th
558	2	45	20.6	-2.4	160.8		0	5144.72	8764.49	12522.15	1188.68	th
559	2	46	18.6	-1.8	163.3		3	5150.92	8760.02	12526.46	1187.29	th
560	2	47	16.8	-1.9	171.8		3	5160.91	8757.58	12536.15	1186.72	th

Sulphur Glade Survey Data - September, 1998									TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature	
561	2	48	14.7	-1.9	178.2		3	5169.97	8753.15	12544.04	1186.51	th	
562	2	49	13.6	-1.8	187.6		3	5180.01	8752.04	12554.02	1186.52	th	
563	2	50	12.4	-2	192.5		3	5186.30	8749.26	12559.67	1185.70	th	
564	2	51	10.4	-1.7	200.4		3	5196.78	8744.10	12568.79	1186.47	th	
565	2	52	9.4	-1.8	211.3		3	5208.24	8742.44	12580.13	1185.78	th	
566	2	53	7.9	-1.9	219.0		3	5217.77	8738.02	12588.58	1185.16	th	
567	2	54	5.1	-0.2	218.6		3	5217.77	8727.36	12589.41	1191.66	ws	
568	2	55	10	-0.1	229.9		0		8747.85	12598.08	1195.02	rec	
569	2	56	9.9	1.3	232.2		0		8747.86	12600.46	1200.69	rbf	
570	2	57	6.4	-1.1	230.9		6	5231.02	8733.66	12601.09	1184.99	th	
571	2	58	5.3	-1.6	238.2		6	5239.64	8729.93	12608.86	1182.77	th	
572	2	59	3.9	-1.5	244.3		7	5248.13	8724.54	12615.43	1182.02	th	
573	2	60	1.8	-1.3	253.7		7	5261.25	8715.90	12625.28	1182.66	th	
574	2	61	359.9	-1.6	264.5		3	5275.02	8707.47	12636.17	1185.03	th	
575	2	62	358.9	-1.6	270.9		3	5282.94	8702.73	12642.52	1184.85	th	
576	2	63	356.7	-1.4	281.4		3	5297.87	8691.73	12652.62	1185.54	th	
577	2	64	342.9	0.5	198.5		0		8649.56	12561.39	1197.15	lec	
578	2	65	355.3	-1	303.8		3	5321.33	8683.04	12674.41	1187.12	th	
579	2	66	333.3	1.9	193.4		0		8621.03	12544.45	1201.84	lbf	
580	2	67	353.5	-0.8	315.6		3	5336.63	8672.20	12685.22	1188.01	th	
581	2	68	351.4	-0.6	311.1		0	5348.96	8661.41	12679.26	1192.16	th	
582	2	69	349.6	-1.1	303.9		0	5360.97	8653.06	12670.63	1189.58	th	
583	2	70	348.3	-1	300.7		0	5368.58	8646.96	12666.08	1190.17	th	
584	2	71	348.2	-0.6	294.4		0	5368.58	8647.73	12659.84	1192.34	ws	
585	2	72	342.3	0.9	244.9		0		8633.48	12604.95	1199.27	tp1l	
586	2	73	342.2	0.9	245.0		0		8633.04	12604.92	1199.27	tp1l	
587	2	74	356.2	1.5	310.2		0		8687.37	12681.19	1203.54	tp1r	
588	2	75	356.1	0.6	310.3		-5.1		8686.82	12681.24	1203.77	0	
589	3	1	126.8	0.9	300.0		-5.1		8687.17	12681.08	1204.77	tp1r	
590	3	2	126.8	0.6	300.0		-5.1		8687.19	12681.06	1203.20	tp1r	
591	3	3	125.7	0.2	287.9		0		8680.78	12692.76	1195.96	rbf	
592	3	4	125.8	0.2	286.3		0		8679.19	12693.29	1195.96	rac	
593	3	5	143.9	0.5	316.6		0		8633.51	12604.96	1197.72	tp1l	
594	3	6	143.9	0.9	316.4		0		8633.38	12605.14	1199.93	tp1l	
595	3	7	143.6	0.3	315.1		0		8633.97	12607.14	1196.61	lbf	
596	3	8	143.6	0.3	315.1		0		8633.97	12607.14	1196.61	lac	
597	3	9	141.6	0.3	300.6		5	5398.08	8633.70	12625.19	1191.53	ws	
598	3	10	140	0.2	286.8		5	5398.08	8631.33	12641.06	1190.96	th	
599	3	11	145.3	-0.2	251.5		3	5441.24	8590.16	12653.99	1191.08	th	
600	3	12	147.8	-0.7	230.0		0	5465.18	8569.53	12666.15	1192.15	th	
601	3	13	150.1	-0.8	205.8		0	5490.91	8549.56	12682.37	1192.08	th	
602	3	14	152	-1.9	182.5		0	#N/A	8532.66	12699.62	1188.90	th	
603	3	15	154.2	-1.8	186.9		0	5536.53	8528.33	12692.49	1189.08	ws	
604	3	16	155.7	-1.7	163.8		0	5536.53	8514.40	12711.45	1190.10	th	
605	3	17	156.1	-3.1	151.6		0	5548.83	8508.39	12722.18	1186.75	th	
606	3	18	157.6	-2.2	153.2		0	5548.83	8505.36	12719.13	1189.07	ws	
607	3	19	156.8	-4.3	140.8		0	5559.75	8502.45	12731.34	1184.37	th	
608	3	20	158.5	-5.1	120.1		0	5580.79	8491.01	12749.00	1184.24	th	
609	3	21	163.2	-5.8	94.7		0	5607.66	8474.36	12770.09	1185.34	th	
610	3	22	169.4	-6.6	83.6		0	5622.33	8462.37	12778.55	1185.28	th	
611	3	23	177.1	-5	73.1		0	5637.20	8450.68	12787.73	1188.56	th	
612	3	24	190.9	-9.7	58.8		0	5658.46	8435.85	12802.98	1184.90	th	
613	3	25	212.1	-11.4	51.9		0	5679.96	8419.43	12816.83	1184.50	th	
614	3	26	237.2	-11.2	50.3		0	5702.21	8404.68	12833.50	1184.99	th	
615	3	27	250.9	-7.8	57.5		0	5716.89	8392.68	12841.96	1187.09	th	
616	3	28	44	5.6	217.1		0		8597.76	13016.90	1216.24	p4j	

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
617	3	29	44	5.6	217.1		0		8597.76	13016.90	1216.24	p4j
618	3	30	242.1	3.6	92.5		-5.1		8365.22	12817.47	1205.88	p2j
619	3	31	242.1	3.6	92.6		-5.1		8365.13	12817.42	1205.88	p2j
620	3	32	42.9	1.8	200.4		0		8583.40	13007.56	1201.26	p3j
621	3	33	241	8.5	100.4		-5.1		8359.18	12812.09	1215.06	p1j
622	3	34	241.1	8.6	100.3		-5.1		8359.21	12812.31	1215.22	p1j
623	3	35	241.1	8.6	100.3		-5.1		8359.21	12812.31	1215.22	p1j
624	3	36	42.6	1.5	200.8		0		8582.92	13008.59	1200.22	rbf
625	3	37	239.3	1.7	80.1		0		8378.14	12819.88	1197.33	lbf
626	3	38	239.4	0.1	75.4		0		8382.08	12822.38	1195.09	lac
627	3	39	40.1	0.7	177.0		0		8560.98	12996.14	1197.12	rac
628	3	40	265.9	-10.5	54.1		0	5731.83	8393.04	12856.89	1184.94	th
629	3	41	272.5	-9.5	60.5		0	5741.00	8386.58	12863.40	1184.84	th
630	3	42	285.9	-5.4	92.1		0	5777.10	8358.42	12885.99	1186.25	th
631	3	43	290.3	-4.3	116.0		0	5802.27	8338.21	12901.00	1186.24	th
632	3	44	292.8	-4	143.6		0	5830.51	8314.56	12916.43	1184.91	th
633	3	45	291.7	-2.5	145.4		0	5830.51	8311.92	12914.51	1188.61	ws
634	3	46	290.3	-2	173.1		0		8284.64	12920.81	1188.91	trib mouth
635	3	47	298.5	-2.2	181.3		0	5871.41	8287.68	12947.25	1187.99	th
636	3	48	302.6	-2.1	213.9		0	5906.92	8266.82	12975.98	1187.12	th
637	3	49	303.7	-2.4	233.7		0	5927.21	8252.56	12990.42	1185.16	th
638	3	50	304.1	-1.4	249.5		3	5943.13	8240.36	13000.65	1185.86	th
639	3	51	40.1	6.8	225.3		0		8592.11	13033.10	1221.82	bt10
640	3	52	308.4	0.1	335.0		3		8184.45	13068.84	1192.54	tp2l
641	3	53	308.5	-0.2	335.1		3		8184.73	13069.36	1190.79	tp2l
642	3	54	308.4	-0.2	335.0		3		8184.45	13068.84	1190.79	tp2l
643	3	55	326.4	0.7	292.9		0		8284.91	13104.70	1198.54	tp2r
644	3	56	326.4	0.7	293.0		0		8284.85	13104.79	1198.54	tp2r
645	5	1	129.7	0.3	239.3		-5.1		8285.23	13105.31	1198.84	tp2r
646	5	2	129.7	0.3	239.3		-5.1		8285.23	13105.31	1198.84	tp2r
647	5	3	101.9	1.7	389.1		6		8481.88	13177.92	1198.03	rbf
648	5	4	131.5	0.9	242.7		0		8282.86	13097.36	1196.29	rac
649	5	5	156.4	-1.9	207.1		-5.1		8184.02	13068.40	1190.71	tp2l
650	5	6	156.3	-1.7	207.1		-5.1		8184.36	13068.52	1191.44	tp2l
651	5	7	150.3	-1.2	304.7		0	5956.90	8252.10	12993.46	1186.10	th
652	5	8	150.8	-1.4	281.5		0	5980.26	8238.45	13012.42	1185.60	th
653	5	9	151.8	-0.9	272.1		0	5980.26	8229.68	13018.39	1188.21	ws
654	5	10	152.2	-1.7	249.7		0	6012.73	8217.57	13037.29	1185.07	th
655	5	11	152.4	-1.9	222.5		0	6039.96	8204.19	13061.00	1185.10	th
656	5	12	154.9	-2.5	203.6		0	6060.99	8187.48	13073.78	1183.59	th
657	5	13	155.7	-2.4	194.2		0	6070.77	8181.04	13081.14	1184.34	th
658	5	14	155.7	-1.9	176.6		0	6088.40	8173.79	13097.21	1186.62	th
659	5	15	154	-1.8	155.6		0	6109.95	8169.33	13118.29	1187.59	th
660	5	16	152.8	-2.1	125.9		0	6139.80	8158.67	13146.17	1187.87	th
661	5	17	156.2	-3.8	94.9		0	6171.49	8139.41	13171.34	1186.18	th
662	5	18	160.1	-5.3	74.0		0	6193.17	8126.30	13188.60	1185.62	th
663	5	19	169.4	-7.2	60.6		0	6210.38	8112.27	13198.58	1184.82	th
664	5	20	182	-6.7	48.9		0	6227.14	8099.41	13209.33	1186.74	th
665	5	21	197.9	-10.9	42.9		0	6241.14	8087.93	13217.33	1184.22	th
666	5	22	198.8	-4.3	49.1		0	6241.14	8085.30	13211.72	1188.79	ws
667	5	23	214	0.8	100.1		0		8045.14	13175.18	1193.88	lec
668	5	24	220.3	1.8	121.6		0		8022.44	13165.39	1196.31	lbf
669	5	25	220.7	4.2	140.9		0		8009.22	13151.32	1202.83	gs
670	5	26	242.7	-6.1	67.7		0	6289.13	8040.94	13227.10	1185.25	th
671	5	27	262.5	-4.5	88.2		0	6322.70	8013.64	13246.65	1185.54	th
672	5	28	271.9	-3.9	104.5		0	6345.30	7996.71	13261.62	1185.36	th

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Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
673	5	29	276	-4	124.3		0	6366.75	7977.50	13271.15	1183.79	th
674	5	30	281	-3	152.4		0	6397.31	7951.52	13287.24	1184.50	th
675	5	31	284.1	-2.2	174.3		0	6420.90	7932.09	13300.62	1185.79	th
676	5	32	286.5	-2.8	201.9		0	6449.58	7907.57	13315.49	1182.61	th
677	5	33	287.2	-1.3	224.9		0	6472.81	7886.23	13324.68	1187.38	th
678	5	34	16.9	7.5	10.3		0		8104.11	13268.03	1193.84	rec
679	5	35	288.6	-1.3	247.6		0	6496.22	7866.41	13337.15	1186.86	th
680	5	36	18.1	0.8	117.4		0		8137.58	13369.74	1194.12	rbf
681	5	37	289.6	-0.9	276.6		0	6554.02	7840.57	13350.94	1188.14	ws
682	5	38	292.3	-0.9	302.7		0	6554.02	7821.09	13373.01	1187.73	th
683	5	39	294.5	-1	331.8		0	6585.64	7799.14	13395.78	1186.69	th
684	5	40	289.8	-1	355.5		-5.1		7766.59	13378.60	1191.38	tp3l
685	5	41	289.8	-1	355.6		-5.1		7766.49	13378.63	1191.37	tp3l
686	5	42	309.3	-0.5	293.4		0		7874.08	13443.99	1189.92	tp3r
687	5	43	309.4	-0.4	293.3		0		7874.48	13444.32	1190.44	tp3r
688	7	1	97.4	-1.7	306.3		-5.1		7874.35	13444.50	1189.92	tp3r
689	7	2	97.4	-1.7	306.3		-5.1		7874.35	13444.50	1189.92	tp3r
690	7	3	90.9	-1	315.2		0		7885.75	13478.99	1188.41	rec
691	7	4	89.8	-0.3	315.9		0		7886.53	13485.05	1192.26	rbf
692	7	5	118.3	-1.8	222.6		-5.1		7766.62	13378.42	1192.02	tp3l
693	7	6	118.4	-2	222.5		-5.1		7766.32	13378.13	1191.24	tp3l
694	7	7	136.5	-0.4	222.6		0		7723.86	13322.48	1192.36	lec
695	7	8	139.6	0.2	230.3		0		7719.89	13308.56	1194.72	lbf
696	7	9	144	2.1	239.0		0		7711.14	13290.56	1202.68	gs
697	7	10	110.2	-2	220.0		0	6610.87	7777.07	13407.99	1186.23	th
698	7	11	109.6	-1.8	202.7		0	6610.87	7761.59	13415.95	1187.54	ws
699	7	12	102.2	-2.2	193.8		0	6649.81	7760.01	13443.00	1186.47	th
700	7	13	94.9	-2.4	184.4		0	6675.62	7754.40	13468.19	1186.18	th
701	7	14	87.9	-2.6	183.0		0	6698.10	7753.52	13490.65	1185.60	th
702	7	15	87.9	-2.7	175.8		0	6698.10	7746.32	13490.38	1185.62	ws
703	7	16	83.4	-3.2	178.8		0	6712.91	7748.27	13504.50	1183.92	th
704	7	17	82.3	-3.5	168.1		0	6724.15	7737.20	13506.46	1183.63	th
705	7	18	79.5	-4.1	146.3		0	6747.22	7714.51	13510.61	1183.42	th
706	7	19	75.4	-4.4	126.0		0	6769.72	7692.59	13515.71	1184.22	th
707	7	20	74	-5.7	123.2		0	6773.88	7689.05	13517.90	1181.62	th
708	7	21	70.1	-5.3	115.9		0	6773.88	7679.61	13523.39	1183.16	ws
709	7	22	63.3	-6.6	115.2		0	6797.48	7673.58	13535.72	1180.58	th
710	7	23	49	-6.6	108.4		0	6826.13	7652.43	13555.04	1181.37	th
711	7	24	40.9	-7.3	104.5		0	6841.65	7639.08	13562.96	1180.52	th
712	7	25	31.8	-7.2	103.3		0	6858.19	7625.06	13571.72	1180.87	th
713	7	26	31.6	-6.3	99.7		0	6858.19	7622.87	13568.85	1182.91	ws
714	7	27	18.3	-6.8	105.4		0	6882.79	7603.71	13583.97	1181.35	th
715	7	28	5.6	-6.8	109.5		0	6906.92	7581.32	13592.94	1180.85	th
716	7	29	359.2	-6.4	118.2		0	6922.28	7568.98	13602.09	1180.66	th
717	7	30	36.4	2	190.7		0		7683.79	13637.42	1200.57	gs
718	7	31	37.9	-1.4	146.0		0		7660.29	13599.11	1190.35	rbf
719	7	32	37.8	-3.2	132.1		0		7651.59	13588.32	1186.53	rec
720	7	33	1.4	-6.9	112.2		0	6929.71	7573.37	13596.09	1180.34	th
721	7	34	352.4	-6	125.6		0	6952.67	7554.02	13608.45	1180.71	th
722	7	35	235	-1.2	115.4		0		7476.12	13417.77	1191.50	lac
723	7	36	345.5	-5.3	140.8		0	6974.74	7535.38	13620.25	1180.85	th
724	7	37	235.3	1.3	125.3		0		7467.64	13412.63	1196.76	lbf
725	7	38	340.2	-4.2	158.9		0	6997.50	7516.82	13633.42	1182.25	th
726	7	39	339.3	-4.4	151.0		0	6997.50	7517.27	13625.15	1182.30	ws
727	7	40	337.2	-4.4	162.6		0	7006.71	7507.62	13633.86	1181.40	th
728	7	41	334.6	-3.8	164.0		0	7014.25	7500.27	13632.12	1183.02	th

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Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
729	7	42	332.3	-4.2	165.0		0	7020.92	7493.95	13629.99	1181.80	th
730	7	43	281.1	-0.2	214.5		0		7360.15	13525.24	1193.16	lbf
731	7	44	330.5	-4.1	151.8		0	7020.92	7495.88	13616.07	1183.03	ws
732	7	46	343.1	-3.2	213.7		-5.1		7508.52	13688.38	1187.07	tp4r
733	7	47	343	-3.2	213.5		-5.1		7508.22	13688.08	1187.08	tp4r
734	7	48	283.1	-0.6	219.8		-5.1		7356.56	13533.76	1196.71	tp4l
735	7	49	283.1	-0.6	219.8		-5.1		7356.56	13533.76	1196.71	tp4l
736	7	50	357.4	0.7	275.6		3		7558.13	13759.24	1194.28	r26
737	7	51	357.6	0.6	275.6		3		7559.09	13759.29	1193.80	r26
738	8	1	133.4	-3.1	56.1		-5.1		7508.86	13688.51	1187.56	tp4r
739	8	3	133.4	-3.1	56.3		-5.1		7509.01	13688.37	1187.55	tp4r
740	8	4	209.9	1.3	224.2		-5.1		7356.31	13532.67	1195.69	tp4l
741	8	5	209.9	1.3	224.3		-5.1		7356.26	13532.59	1195.69	tp4l
742	8	6	229.1	1.4	200.0		0		7316.89	13596.09	1190.39	lec
743	8	7	69.8	5.4	96.2		0		7558.35	13760.28	1194.59	rx26
744	8	8	69.9	5.4	96.1		0		7558.31	13760.08	1194.58	rx26
745	8	9	151.7	-2.2	106.9		0	7045.92	7518.78	13632.93	1181.39	th
746	8	10	156.4	-1.9	102.9		0	7055.40	7509.30	13632.73	1182.08	th rc
747	8	11	162.6	-2.2	103.3		0	7066.56	7498.99	13628.47	1181.53	th
748	8	12	162.6	-2.3	103.2		0	7066.67	7498.96	13628.57	1181.35	th
749	8	13	168.7	-2.8	104.0		0	7077.72	7488.46	13625.11	1180.41	th
750	8	14	170.6	-3.3	103.6		0	7081.18	7485.02	13624.83	1179.52	th
751	8	15	174	-3.5	103.2		0	7087.33	7478.88	13624.43	1179.19	th
752	8	16	177.9	-4.5	103.3		0	7094.35	7471.87	13623.86	1177.37	th
753	8	17	177.9	-4.5	103.3		-5.1	7094.35	7471.87	13623.86	1182.47	ws
754	8	18	182.7	-3.8	104.1		-4	7103.07	7463.19	13623.11	1182.59	th
755	8	19	185.9	-4.3	91.9		5	7116.37	7458.64	13635.61	1173.58	th
756	8	20	191.9	-5	83.7		5.5	7128.72	7450.83	13645.19	1172.68	th
757	8	21	199.9	-6.5	72.5		4	7144.30	7443.40	13658.87	1173.23	th
758	8	22	211	-7.3	64.9		4	7159.62	7434.68	13671.46	1173.19	th
759	8	23	221	-6.7	60.2		4	7171.47	7428.60	13681.64	1174.43	th
760	8	24	236.8	-3.7	66.9		4	7190.14	7412.14	13690.46	1177.17	th
761	8	25	254.8	-4.2	76.2		0	7214.35	7394.56	13707.09	1179.90	th
762	8	26	269.4	-3.5	97.9		0	7245.23	7370.18	13726.04	1179.51	th
763	8	27	287	-0.2	146.8		0		7327.71	13769.99	1184.99	lec
764	8	28	89.1	4.4	139.2		0		7607.26	13729.25	1196.21	lvw
765	8	29	295.9	-3.9	109.8		0	7294.24	7369.28	13775.05	1178.01	th
766	8	30	89.7	3.2	105.4		0		7573.52	13727.62	1191.39	rbf
767	8	31	302.1	-2.8	99.5		4	7309.58	7383.82	13779.93	1176.63	th
768	8	32	88.5	0.8	86.3		0		7554.35	13729.33	1186.70	rec
769	8	33	314.6	-3.3	78.4		4	7338.13	7412.29	13782.10	1176.98	th
770	8	34	324.4	-4.1	76.9		4	7351.48	7423.32	13789.60	1175.99	th
771	8	35	334	-4.8	79.8		4	7364.91	7433.10	13798.81	1174.79	th
772	8	36	341.4	-4.8	72.3		4	7377.24	7445.01	13795.63	1175.42	th
773	8	37	348.5	-4.3	75.2		4	7386.81	7453.10	13800.75	1175.84	th
774	8	38	357	-5	89.1		0	7405.23	7463.43	13816.01	1177.71	th
775	8	39	1.1	-4.5	100.5		0	7418.52	7470.02	13827.54	1177.59	th
776	8	40	351.1	1.2	133.5		0		7447.44	13858.93	1188.29	lec
777	8	41	346.2	5.3	150.2		0		7432.27	13872.89	1199.43	lvw
778	8	42	61.1	1.2	229.8		0		7669.32	13838.15	1190.31	rvw
779	8	43	6.5	-3	96.9		0	7428.49	7479.06	13823.31	1180.42	th
780	8	44	60.5	1.2	228.0		0		7666.57	13839.37	1190.27	rbf
781	8	45	15.1	-2.9	103.7		0	7444.99	7495.10	13827.16	1180.25	th
782	8	46	56.8	0.2	219.2		0		7651.51	13847.09	1186.26	rec
783	8	47	21.7	-2	132.7		0	7477.02	7517.16	13850.38	1180.86	th
784	8	48	68.4	3.5	190.7		0		7645.44	13797.29	1197.16	camp

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Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
785	8	49	19.1	-0.5	139.8		4	7486.42	7513.83	13859.17	1180.28	th
786	8	50	20.6	-2.2	160.0		0	7506.98	7524.38	13876.82	1179.35	th
787	8	51	21.2	-2.2	175.6		0	7522.67	7531.58	13890.76	1178.75	th
788	8	52	22	-1.3	176.0		0	7522.67	7534.00	13890.21	1181.50	ws
789	8	53	48.4	1.7	279.8		0		7677.31	13912.82	1193.80	rvw
790	8	54	26.8	-1.2	200.4		4	7553.49	7558.43	13905.90	1177.30	th
791	8	55	47.9	0.4	272.8		0		7670.50	13909.96	1187.40	rbf
792	8	56	25.7	-0.8	225.9		4	7579.34	7566.04	13930.60	1178.34	th
793	8	57	47.5	-0.3	269.7		0		7666.93	13909.27	1184.09	rec
794	8	58	13.7	0.8	195.5		0		7514.39	13916.99	1188.23	big rock
795	8	59	21.2	-1.5	251.3		0	7610.91	7558.97	13961.37	1178.92	th
796	8	60	22	-1.2	287.7		0	7647.53	7575.88	13993.85	1179.47	th
797	8	61	23.3	-1.1	309.6		0	7670.46	7590.57	14011.46	1179.55	th
798	8	62	23.6	-1	328.4		0	7689.34	7599.58	14028.05	1179.76	th
799	8	63	31.9	-0.2	296.6		-5.1		7624.82	13978.87	1189.56	tp5r
800	8	64	31.9	-0.2	296.6		-5.1		7624.82	13978.87	1189.56	tp5r
801	8	65	2.2	1.3	267.7		-5.1		7478.37	13994.60	1196.67	tp5l
802	8	66	2	1.3	267.8		-5.1		7477.44	13994.74	1196.68	tp5l
803	9	1	178.3	2.9	164.2		0		7478.28	13995.61	1196.58	tp5l
804	9	2	178.2	2.9	164.3		0		7478.57	13995.52	1196.59	tp5l
805	9	3	140.3	-0.9	236.2		-5.1		7624.27	13978.02	1189.65	tp5r
806	9	4	140.3	-0.9	236.3		-5.1		7624.33	13977.94	1189.65	tp5r
807	9	5	134.3	-2.5	178.0		0	7696.78	7600.83	14035.39	1180.49	th
808	9	6	130.6	-2.6	182.6		0	7709.29	7612.06	14040.89	1179.97	th
809	9	7	131	-2	181.0		0	7709.29	7610.00	14040.99	1181.94	ws
810	9	8	128.6	-2.4	179.3		4.5	7716.41	7613.57	14047.84	1176.25	th
811	9	9	123.6	-3.1	181.6		4.5	7732.32	7624.70	14059.21	1173.93	th
812	9	10	120	-3.1	181.4		4.5	7743.72	7630.54	14069.01	1173.94	th
813	9	11	117.2	-3.2	178.7		4.5	7752.93	7632.37	14078.03	1173.77	th
814	9	12	114	-3.4	181.4		5.5	7763.33	7639.11	14085.95	1171.99	th
815	9	13	112.7	-3.1	175.7		6.5	7770.27	7635.54	14091.91	1172.25	th
816	9	14	155	1.3	400.8		0		7642.79	13796.48	1197.36	camp
817	9	15	112.3	-3	172.2		6.5	7774.05	7632.70	14094.40	1172.74	th
818	9	16	111	-3.1	165.6		6.5	7781.69	7627.97	14100.40	1172.80	th
819	9	17	106.6	-1.4	162.1		0		7628.71	14113.43	1184.30	rvw
820	9	18	110.1	-3.2	155.8		6.5	7791.81	7619.68	14106.20	1173.06	th
821	9	19	107.3	-3.7	141.8		6.5	7807.54	7608.80	14117.56	1172.59	th
822	9	20	102.1	-4.4	130.4		4.5	7824.33	7600.93	14132.39	1173.73	th
823	9	21	97.5	-4.1	125.6		4.5	7835.68	7597.91	14143.33	1174.76	th
824	9	22	96.7	-4.6	119.6		4.5	7841.89	7592.21	14145.77	1174.14	th
825	9	23	92	-4.1	109.5		4.5	7855.67	7582.86	14155.90	1175.91	th
826	9	24	85	-4.1	104.4		4.5	7869.68	7577.44	14168.83	1176.28	th
827	9	25	78.4	-5.7	102.0		0	7881.81	7573.32	14180.23	1178.08	th
828	9	26	72.5	-2.5	114.6		0		7582.70	14194.18	1183.26	rvw
829	9	27	159.3	-0.7	101.0		0		7509.11	14065.25	1187.03	lec
830	9	28	66.8	-4.9	104.2		0	7902.77	7569.20	14200.78	1179.33	th
831	9	29	174.7	0.2	96.6		0		7482.33	14063.54	1188.60	lbf
832	9	30	62.9	-5.1	104.6		0	7909.89	7566.51	14207.37	1178.93	th
833	9	31	55.8	-4.2	95.3		4.5	7925.32	7552.27	14213.32	1176.76	th
834	9	32	195	3.2	114.8		0		7443.69	14048.82	1194.68	lvw
835	9	33	46	-4.8	93.0		4.5	7941.58	7540.29	14224.31	1175.96	th
836	9	34	37.2	-4.3	90.0		4.5	7955.92	7527.85	14231.45	1176.99	th
837	9	35	22.9	-5.5	93.4		0	7978.99	7509.74	14245.74	1179.27	th
838	9	36	6.8	-4.5	101.8		0	8007.56	7485.46	14260.79	1180.25	th
839	9	37	347.1	-3.7	123.6		0	8051.73	7445.81	14280.25	1180.27	th
840	9	38	338.3	-3	136.7		0	8075.58	7422.86	14286.75	1181.10	th



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Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
841	9	39	324.7	-2.5	164.9		0	8120.98	7378.10	14294.34	1181.06	th
842	9	40	320	-2.5	176.8		0	8139.35	7359.75	14295.19	1180.54	th
843	9	41	317.9	-2.7	185.3		0	8150.10	7349.18	14297.21	1179.53	th
844	9	42	321.6	-1.7	303.9		-5.1		7284.66	14397.86	1184.35	p2xs3
845	9	43	321.6	-1.6	303.7		-5.1		7284.78	14397.72	1184.88	p2xs3
846	9	44	328.3	-1.8	273.9		-5.1		7329.50	14392.73	1184.76	tp6l
847	9	45	328.9	-2	273.9		-5.1		7331.91	14394.29	1183.80	tp6l
848	9	46	339	-1.7	207.8		-5.1		7398.94	14353.73	1187.20	tp6r
849	9	47	338.9	-1.7	207.8		-5.1		7398.60	14353.60	1187.20	tp6r
850	9	48	2.3	1	299.3		-2.7		7485.42	14458.74	1196.19	p3xs3
851	9	49	-----	-----	#VALUE!		0		#VALUE!	#VALUE!	#VALUE!	0
852	10	1	237.9	12.9	123.4		0	5.86	7257.46	14390.18	1212.14	p1xs3
853	10	2	237.6	13	123.5		0		7257.77	14389.61	1212.38	p1xs3
854	10	3	207.6	-4	70.6		-5.1		7329.28	14393.16	1184.04	tp6l
855	10	4	207.4	-4	70.6		-5.1		7329.50	14393.05	1184.04	tp6l
856	10	5	160	-0.8	108.8		-5.1		7399.21	14353.53	1187.46	tp6r
857	10	6	160	-0.8	108.7		-5.1		7399.18	14353.62	1187.46	tp6r
858	10	7	238.1	12.9	124.0		0	4.66	7256.74	14390.23	1212.28	gs
859	10	8	237.9	12.4	128.6		-5.1	0.00	7253.04	14387.40	1217.26	gs
860	10	9	238.1	12.8	123.6		0	5.10	7257.11	14390.47	1211.95	gs
861	10	10	237.3	12.2	121.0		0	8.47	7260.18	14390.38	1210.04	gs
862	10	11	236.8	11.1	117.8		0	11.88	7263.47	14391.28	1206.98	gs
863	10	12	236.8	7.9	115.6		-5.1	14.04	7265.28	14392.46	1205.02	gs
864	10	13	236.8	7.2	111.5		0	18.12	7268.69	14394.69	1197.97	gs
865	10	14	236.2	5.6	109.6		0	20.38	7270.95	14394.80	1194.62	gs
866	10	15	220.8	-4.4	34.9		0	105.59	7339.20	14429.34	1181.20	rew
867	10	16	234.4	2.8	103.6		0	27.25	7277.78	14395.46	1188.95	gs
868	10	17	217.8	-3	33.3		0	108.01	7341.62	14429.48	1182.14	gs
869	10	18	194.5	-3.4	23.8		0	122.81	7356.05	14432.75	1182.47	gs
870	10	19	233	1.7	102.3		0	30.09	7280.34	14394.22	1186.92	lbf
871	10	20	155.3	-1.2	22.8		0	138.45	7371.53	14435.05	1183.40	gs
872	10	21	233.6	0.5	97.6		0	34.86	7283.45	14397.84	1184.73	lec
873	10	22	233.6	-0.4	96.0		0	36.72	7284.73	14398.79	1183.21	gs at pin2
874	10	23	132.8	1.5	28.7		0	150.04	7383.05	14436.26	1184.63	gs
875	10	24	233.3	0.1	96.1		0		7284.95	14398.32	1184.05	p2xs3
876	10	25	233.3	0.1	96.4		0		7284.71	14398.14	1184.05	p2xs3
877	10	26	233.4	-0.4	95.8		0	37.11	7285.09	14398.64	1183.21	gs
878	10	27	231.6	-1.2	90.1		0	43.53	7291.41	14399.80	1181.99	gs
879	10	28	230.9	-1.7	87.3		0	46.55	7294.28	14400.72	1181.29	lew
880	10	29	229.9	-2.5	84.3		0	49.85	7297.50	14401.44	1180.20	gs
881	10	31	227.9	-3.1	79.7		0	55.30	7302.88	14402.33	1179.57	gs
882	10	32	226.9	-3.6	74.1		0	61.09	7307.93	14405.16	1179.22	gs
883	10	33	225.6	-4.5	70.4		0	65.11	7311.72	14406.51	1178.34	gs
884	10	34	224.1	-4.8	66.1		0	69.78	7316.03	14408.31	1178.33	gs
885	10	35	222.6	-5.8	62.3		0	73.92	7319.85	14409.91	1177.55	gs
886	10	36	220.9	-6.8	58.9		0	77.76	7323.45	14411.25	1176.86	gs
887	10	37	217.3	-5.2	54.8		0	83.20	7328.81	14412.18	1178.90	gs
888	10	38	214.9	-4.4	51.6		0	87.04	7332.45	14413.40	1179.91	gs
889	10	39	212.6	-5.2	48.4		0	90.86	7335.93	14414.98	1179.48	gs
890	10	40	107.2	3.3	52.6		0	179.52	7412.26	14440.20	1186.91	gs
891	10	41	100.3	2.8	69.6		0	198.01	7430.50	14443.31	1187.29	gs
892	10	42	98.9	2.3	74.1		0	202.87	7435.25	14444.28	1186.86	gs
893	10	43	98.3	2.2	78.7		0	207.54	7439.92	14444.39	1186.91	gs
894	10	44	96.8	2.1	85.7		0	214.95	7447.14	14445.60	1187.03	gs
895	10	45	96.7	2	85.4		0	214.62	7446.87	14445.79	1186.86	bdrx
896	10	46	95.3	2.5	91.0		0	220.71	7452.63	14447.35	1187.85	bdrx

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Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
897	10	47	94.7	2.8	96.3		0	226.07	7457.96	14447.87	1188.59	bdrx
898	10	48	94.5	3	98.9		0	228.67	7460.56	14448.00	1189.06	gs
899	10	49	93.7	3.5	104.9		0	234.88	7466.69	14448.99	1190.30	gs
900	10	50	92.4	3.8	107.6		0	238.47	7469.47	14451.25	1191.03	lbf
901	10	51	90.8	4.8	113.2		0	244.89	7475.19	14454.17	1193.39	gs
902	10	52	89.7	5.2	117.5		0	249.74	7479.52	14456.37	1194.58	gs
903	10	53	88.9	5.7	123.2		0	255.66	7485.17	14458.12	1196.18	gs
904	10	54	88.8	5.8	124.2		0	257.13	7486.14	14458.36	1196.49	gs
905	10	55	88.6	5.9	124.3		0		7486.30	14458.79	1196.73	p3xs3
906	10	56	88.6	5.9	124.1		0		7486.10	14458.79	1196.71	p3xs3
907	10	57	88.9	6	124.9		0	257.91	7486.89	14458.15	1197.01	gs
908	10	58	88.3	5.9	127.4		0	260.75	7489.37	14459.54	1197.05	gs
909	10	59	88.4	6.5	131.7		0	265.08	7493.70	14459.43	1198.89	gs
910	10	60	87.8	7	136.2		0	269.73	7498.08	14460.98	1200.60	gs
911	10	61	87.2	6.9	141.3		0	275.02	7503.10	14462.66	1200.98	gs
912	10	62	86.9	6.7	143.7		0	277.58	7505.50	14463.53	1200.76	gs
913	10	63	86.9	6.9	143.6		0		7505.35	14463.52	1201.25	p4xs3
914	10	64	86.9	7	144.0		0	277.65	7505.81	14463.54	1201.56	p4xs3
915	10	65	87	6.7	144.0		0	277.99	7505.81	14463.29	1200.80	gs
916	10	66	86.6	6.7	150.5		0	284.53	7512.20	14464.68	1201.56	gs
917	10	67	86	6.6	158.7		0	292.96	7520.36	14466.83	1202.25	trail
918	10	68	86	6.4	160.7		0	294.91	7522.30	14466.96	1201.91	trail
919	10	69	85.9	6.5	165.5		0	299.75	7527.11	14467.59	1202.74	gs
920	10	70	87.7	6.6	185.8		0	320.72	7547.61	14463.21	1205.37	gs
921	10	71	88	6.7	199.2		0	334.23	7561.11	14462.71	1207.29	gs
922	10	72	-----	-----	#VALUE!		0		#VALUE!	#VALUE!	#VALUE!	0
923	11	1	86.6	6.2	236.4		0		7600.67	14537.54	1211.52	bm rebar
924	11	2	86.7	6.2	236.6		0		7600.89	14537.14	1211.55	bm rebar
925	11	3	86.6	6.2	236.5		0		7600.76	14537.55	1211.54	bm rebar
926	11	4	86.6	6.3	236.9		0		7601.12	14537.57	1211.99	bm nipple
927	11	5	86	6.1	230.0		-5.1		7594.10	14539.56	1215.52	bt15
928	11	6	83.9	6.1	172.2		0		7535.92	14541.82	1204.25	rock in trail
929	11	7	168.4	-1.1	173.6		-5.1		7399.57	14353.50	1187.61	tp6r
930	11	8	168.3	-1.1	173.6		-5.1		7399.87	14353.56	1187.61	tp6r
931	11	9	195.1	-2.8	135.2		-5.1		7329.44	14392.95	1184.33	tp6l
932	11	10	195.5	-2.9	135.2		-5.1		7328.53	14393.21	1184.09	tp6l
933	11	11	92.3	5.9	155.0		-5.1		7519.52	14517.30	1206.96	bt16
934	11	12	94.5	5.9	160.5		0		7524.72	14510.92	1202.43	trail
935	11	13	180.8	-1.2	224.4		0	8162.62	7361.54	14299.19	1181.14	th
936	11	14	183.8	-1.7	222.9		0	8174.42	7349.90	14301.11	1179.23	th
937	11	15	176.7	-1.2	226.4		0	8202.44	7377.70	14297.55	1181.10	th
938	11	16	148.6	-0.3	165.6		0		7450.95	14382.17	1184.98	rec
939	11	17	184.7	-1.8	222.3		0	8234.00	7346.46	14301.98	1178.86	ws
940	11	18	184.3	-1.8	221.1		0	8235.96	7348.09	14303.05	1178.89	th
941	11	19	135.5	0.1	117.7		0		7447.17	14439.57	1186.05	rec
942	11	20	186.4	-1.3	212.1		0	8235.96	7341.02	14312.70	1181.03	th
943	11	21	187.6	-1.9	204.3		0	8256.75	7337.65	14321.03	1179.07	th
944	11	22	191.9	-2.6	193.5		0	8275.16	7324.77	14334.18	1177.06	th
945	11	23	195.5	-2.4	180.1		0	8292.93	7316.53	14349.93	1178.29	th
946	11	24	33.1	1.6	153.2		0		7448.36	14651.89	1190.12	rec
947	11	25	199.6	-2.5	169.2		0	8309.51	7307.90	14364.09	1178.45	th
948	11	26	206.4	0	169.7		0		7289.22	14371.52	1185.84	lbf
949	11	27	206.7	1.1	175.3		0		7285.92	14366.94	1189.21	0
950	11	28	206.7	1.1	175.3		0		7285.92	14366.94	1189.21	lvw
951	11	29	202.1	-3	137.7		0	8341.74	7312.86	14395.93	1178.63	th
952	11	30	203.4	-4.3	115.6		0	8364.06	7318.77	14417.45	1177.15	th

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Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
953	11	31	205.9	-4.7	109.7		0	8371.69	7316.74	14424.81	1176.82	th
954	11	32	212.6	-2.6	148.1		-5.1		7284.85	14398.71	1184.22	p2xs3
955	11	33	212.8	-2.6	148.2		-5.1	36.21	7284.37	14398.91	1184.21	p2xs3
956	11	34	213.5	-5.6	93.5		0	8392.79	7313.09	14445.59	1176.68	th
957	11	35	118.2	4.3	139.0		0	256.67	7487.18	14457.83	1196.29	p3xs3
958	11	36	222.3	-6	86.6		0	8408.19	7306.37	14459.45	1176.74	th
959	11	37	228	-5.1	85.3		2	8416.85	7301.31	14466.47	1176.23	th
960	11	38	235.7	-5.6	81.8		2	8428.58	7297.09	14477.42	1175.82	th
961	11	39	245.4	-6.5	77.8		0	8442.66	7293.94	14491.13	1176.98	th
962	11	40	256.2	-6.2	76.4		0	8457.23	7290.53	14505.31	1177.55	th
963	11	41	273.5	-5.7	79.2		0	8480.80	7285.61	14528.36	1177.94	th
964	11	42	283.2	-6.7	81.3		0	8494.54	7285.48	14542.09	1176.29	th
965	11	43	283.2	-6.7	81.3		-5.1	8494.54	7285.48	14542.09	1181.39	ws
966	11	44	289.8	-4.4	87.9		2	8506.30	7281.93	14553.31	1177.08	th
967	11	45	299.9	-5.4	99.1		0	8526.14	7278.80	14572.90	1176.48	th
968	11	46	305.7	-4.6	108.2		0	8540.01	7276.84	14586.63	1177.14	th
969	11	47	313.7	-3.8	118.3		0	8558.80	7279.12	14605.28	1177.98	th
970	11	48	324.6	-2.9	147.6		0	8597.36	7279.16	14643.84	1178.36	th
971	11	49	330.2	-2.9	165.3		0	8620.71	7282.53	14666.95	1177.47	th
972	11	50	324.4	-0.8	222.5		-5		7235.16	14704.42	1187.74	lvw
973	11	51	328.5	-2	221.1		0	8676.78	7249.17	14712.01	1178.12	th
974	11	52	330.1	-1.9	202.0		0	8696.75	7263.98	14698.62	1179.14	th
975	11	53	330.3	-1.8	231.8		0	8726.55	7249.83	14724.86	1178.56	th
976	11	54	332.6	-1.6	249.6		0	8746.82	7249.81	14745.12	1178.87	th
977	11	55	333.6	-1.5	278.1		0	8775.69	7241.02	14772.62	1178.56	th
978	11	56	335	-0.8	310.8		-5.1		7233.34	14805.17	1186.60	tp7l
979	11	57	335.1	-1.6	310.6		-5.1		7233.91	14805.23	1182.27	tp7l
980	11	58	3.6	-0.2	310.6		-5.1		7384.17	14833.51	1189.86	tp7r
981	11	59	3.5	-0.2	310.5		-5.1		7383.63	14833.44	1189.86	tp7r
982	11	60	10.8	0.7	327.5		-5.1		7426.03	14845.20	1194.94	0
983	12	1	152.8	0.5	364.8		-5.2		7384.33	14832.65	1190.62	tp7r
984	12	2	152.8	0.6	364.7		-5.2		7384.28	14832.75	1191.26	tp7r
985	12	3	177.4	-0.6	351.5		-5.1		7233.53	14805.98	1183.66	tp7l
986	12	4	177.5	-0.7	351.5		-5.1		7232.91	14805.96	1183.05	tp7l
987	12	5	172.7	-0.3	349.7		0	8818.77	7262.02	14810.24	1180.41	th
988	12	6	174	0.1	349.4		0	8818.77	7254.11	14809.62	1182.85	ws
989	12	7	179.4	0.5	325.5		0		7220.99	14831.63	1185.08	lec
990	12	8	181	1.6	321.0		0		7211.98	14836.18	1191.21	lbf
991	12	9	182	2.6	323.9		0		7206.28	14833.43	1196.95	lvw
992	12	10	171.2	-0.3	312.0		0	8857.45	7265.31	14848.78	1180.61	th
993	12	11	171.7	-0.5	279.9		0	8889.66	7257.99	14880.14	1179.80	th
994	12	12	172.5	-0.6	266.6		0	8903.50	7252.38	14892.80	1179.45	th
995	12	13	174.5	0.1	251.6		0	8903.50	7241.70	14906.66	1182.68	ws
996	12	14	172.8	-0.7	233.1		0	8937.03	7246.80	14925.86	1179.39	th
997	12	15	172.3	-0.7	212.0		0	8958.21	7245.99	14947.03	1179.65	th
998	12	16	170.7	-0.5	189.2		0	8981.68	7248.16	14970.40	1180.59	th
999	12	17	164.1	-0.3	174.1		0	9007.46	7265.28	14989.66	1181.33	th
1000	12	18	161.1	-0.3	171.3		0	9016.92	7273.07	14995.04	1181.34	th
1001	12	19	161.2	0.1	166.0		0	9016.92	7271.08	14999.96	1182.53	ws
1002	12	20	156.1	-0.4	171.9		0	9031.91	7287.23	14999.94	1181.04	th
1003	12	21	151.1	-0.8	175.7		0	9047.53	7302.49	15003.30	1179.79	th
1004	12	22	147.7	-0.9	178.5		0	9058.40	7312.95	15006.24	1179.44	th
1005	12	23	145.7	-1.3	181.9		0	9065.54	7320.06	15006.87	1178.11	th
1006	12	24	145.1	-1.1	179.3		0	9065.54	7320.15	15010.07	1178.80	ws
1007	12	25	144.5	-1.4	182.3		0	9069.39	7323.47	15008.65	1177.78	th
1008	12	26	143.6	0	181.8		0		7325.47	15010.77	1182.24	rec

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1009	12	27	143.3	1.2	181.1		0		7325.79	15011.93	1186.03	rbf
1010	12	28	140.8	3.3	182.8		0		7333.12	15015.44	1192.78	rvw
1011	12	29	143.2	-2	172.6		0	9079.93	7320.97	15018.90	1176.21	th
1012	12	30	141.5	-2.3	159.6		0	9093.86	7316.92	15032.22	1175.83	th
1013	12	31	142.9	-1.4	157.1		0		7312.32	15031.84	1178.40	ws
1014	12	32	133	-1.3	126.4		4	9133.17	7310.00	15070.92	1175.37	th
1015	12	33	131.1	-1.4	109.9		4	9150.13	7300.37	15084.88	1175.55	th
1016	12	34	126.8	-1.9	103.5		4	9160.33	7300.49	15095.08	1174.81	th
1017	12	35	126.3	-3.5	90.0		0	9173.86	7290.14	15103.80	1176.73	th
1018	12	36	125.8	-2.8	75.0		0	9173.86	7278.42	15113.22	1178.57	ws
1019	12	37	118.2	-1.1	75.7		4	9192.35	7284.29	15121.34	1176.79	th
1020	12	38	108.2	-1.4	60.8		4	9211.38	7275.32	15138.12	1176.75	th
1021	12	39	100.9	-2.5	53.4		4	9221.69	7270.07	15146.99	1175.91	th
1022	12	40	105.9	-0.5	47.8		4	9221.69	7263.55	15144.01	1177.82	ws
1023	12	41	82	-4	45.7		4	9239.68	7262.83	15163.46	1175.05	th
1024	12	42	64.7	-9.1	43.6		0	9253.27	7257.04	15175.75	1175.25	th
1025	12	43	42.3	-10	43.8		0	9270.26	7247.08	15189.51	1174.51	th
1026	12	44	29	-7.1	53.5		0	9285.06	7243.51	15203.88	1175.58	th
1027	12	45	17.4	-6.6	68.1		0	9304.13	7237.96	15222.13	1174.36	th
1028	12	46	13.4	-3.4	73.6		0	9304.13	7234.63	15228.67	1177.87	ws
1029	12	47	11	-6	86.1		0	9324.04	7234.02	15241.64	1173.19	th
1030	12	48	11	-6	86.1		-5.1	9324.04	7234.02	15241.64	1178.29	ws
1031	12	49	9	-3.3	94.2		4	9332.75	7232.33	15250.18	1172.81	th
1032	12	50	5.4	-3.2	105.0		4	9345.22	7227.47	15261.67	1172.37	th
1033	12	51	0.9	-4.3	105.9		4	9353.55	7219.25	15262.99	1170.28	th
1034	12	52	357.9	-3.4	114.5		4	9363.90	7213.39	15271.52	1171.44	th
1035	12	53	357.2	-3.7	126.2		0	9375.73	7211.42	15283.19	1174.08	th
1036	12	54	9.3	0	152.5		0		7242.23	15307.60	1182.24	rec
1037	12	55	11.4	1.4	156.7		0		7248.55	15310.66	1186.07	rbf
1038	12	56	12.1	3.2	158.1		0		7250.71	15311.64	1191.08	rvw
1039	12	57	358.9	-0.6	161.1		-5.1		7214.49	15318.16	1185.65	tp8r
1040	12	58	358.8	-0.6	161.2		-5.1		7214.21	15318.26	1185.65	tp8r
1041	12	59	261.2	1.9	229.7		-5.1		6990.61	15121.96	1194.96	tp8l p2xs4
1042	12	60	261	2	229.6		-5.1		6990.85	15121.19	1195.36	tp8l p2xs4
1043	13	1	195.6	1.5	143.8		-5.1		6991.20	15119.40	1195.24	tp8l p2x4
1044	13	2	195.7	1.4	143.8		-5.1		6990.96	15119.46	1194.98	tp8l p2xs4
1045	13	3	71.2	-1.7	194.4		-5.1		7213.90	15320.50	1185.70	tp8r
1046	13	4	71.3	-1.7	194.5		-5.1		7214.10	15320.22	1185.70	tp8r
1047	13	5	79.8	-3.7	171.7		0	9389.25	7198.88	15288.26	1175.27	th
1048	13	6	73.3	-3.3	169.2		0	9408.74	7191.94	15306.48	1176.61	th
1049	13	7	72.8	-3.1	163.4		0	9408.74	7185.91	15306.16	1177.52	ws
1050	13	8	67.3	-3.8	159.0		0	9428.70	7176.59	15319.23	1175.81	th
1051	13	9	61.8	-3.9	150.8		0	9445.72	7162.71	15329.09	1176.09	th
1052	13	10	57.4	-4	141.6		0	9460.22	7149.11	15334.12	1176.47	th
1053	13	11	59	-4	131.7		0	9460.22	7142.73	15325.67	1177.16	ws
1054	13	12	51.8	-5.2	134.3		0	9475.50	7135.43	15340.93	1174.15	th
1055	13	13	48.3	-5.5	127.8		0	9485.83	7125.28	15342.87	1174.06	th
1056	13	14	174	1.7	114.5		0		7041.83	15143.93	1189.77	lec
1057	13	15	38.8	8.3	179.8		0	447.22	7142.52	15397.97	1212.60	gs
1058	13	16	39	7.3	176.2		0	443.53	7140.72	15394.75	1208.94	gs
1059	13	17	38.9	7.2	176.1		0	443.22	7140.44	15394.90	1208.62	p4xs4
1060	13	18	39	7.2	176.1		0	442.91	7140.68	15394.71	1208.62	gs
1061	13	19	39.5	7.5	173.4		4	439.82	7140.16	15391.65	1205.20	gs
1062	13	20	39.6	6.3	170.9		4	437.26	7138.77	15389.50	1201.23	gs
1063	13	21	39.5	3.9	169.1		0	435.48	7137.42	15388.34	1197.90	gs
1064	13	22	39.4	2.3	166.6		0	432.92	7135.58	15386.56	1193.06	gs

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1065	13	23	40	3.1	162.8		4	428.74	7134.48	15382.53	1191.19	gs
1066	13	24	40.7	0.7	160.2		0	425.50	7134.32	15379.30	1188.33	gs
1067	13	25	41.3	-0.1	155.7		0	420.72	7132.62	15374.82	1186.10	gs
1068	13	26	41.2	0	155.9		0		7132.55	15375.15	1186.37	p3xs4
1069	13	27	41.2	0	156.0		0	420.35	7132.61	15375.23	1186.37	p3xs4
1070	13	28	41.2	-0.1	155.8		0	420.20	7132.48	15375.08	1186.10	gs
1071	13	29	41.4	-0.7	150.9		0	415.26	7129.64	15371.03	1184.53	rbf
1072	13	30	41.6	-1.2	147.0		0	411.30	7127.43	15367.75	1183.29	gs
1073	13	31	41.6	-2	144.0		0	408.34	7125.47	15365.54	1181.34	rec
1074	13	32	41.8	-2.7	138.9		0	403.25	7122.47	15361.43	1179.82	gs
1075	13	33	41.6	-3.6	137.8		0	402.04	7121.36	15360.92	1177.70	gs
1076	13	34	41.7	-4	135.2		0	399.37	7119.78	15358.77	1176.92	gs
1077	13	35	42	-4.3	133.9		0	397.93	7119.47	15357.37	1176.30	rew
1078	13	36	42	-4.8	131.8		0	395.85	7118.07	15355.82	1175.30	gs
1079	13	37	41.9	-4.4	131.7		0	395.59	7117.82	15355.89	1176.24	ws xs
1080	13	38	41.9	-4	129.6		0	393.46	7116.40	15354.30	1177.31	gs
1081	13	39	42.2	-4.4	128.4		0	392.11	7116.12	15352.99	1176.49	ws xs
1082	13	40	42.3	-5.9	126.5		0	390.21	7115.01	15351.43	1173.30	gs
1083	13	41	42.4	-6.2	122.0		0	385.66	7112.11	15347.93	1173.12	gs
1084	13	42	43.7	-5.9	117.4		0	380.31	7110.95	15342.71	1174.24	gs
1085	13	43	44.5	-5.5	111.0		0	373.73	7107.65	15337.01	1175.68	gs
1086	13	44	45.5	-5.5	107.2		0	369.49	7106.32	15332.99	1176.05	lew
1087	13	45	46.8	-5.3	99.6		0	361.51	7102.44	15326.01	1177.13	gs
1088	13	46	48.1	-5.1	90.2		0	351.93	7097.03	15318.12	1178.32	gs
1089	13	47	48.4	-4.7	86.5		0	348.17	7094.55	15315.29	1179.26	gs
1090	13	48	49.6	-4.3	81.7		0	343.02	7092.05	15310.78	1180.23	gs
1091	13	49	50.4	-3.4	78.7		0	339.81	7090.47	15307.99	1181.70	gs
1092	13	50	54.9	-3	64.6		0	324.69	7082.72	15295.00	1182.99	gs
1093	13	51	63.6	-2.8	48.0		0	306.09	7072.89	15279.21	1184.02	gs
1094	13	52	82.1	-2.1	34.8		0	287.42	7064.30	15262.63	1185.10	gs
1095	13	53	103.6	-0.5	30.4		0	274.52	7059.40	15250.70	1186.11	gs
1096	13	54	136.4	-0.4	28.7		0	257.76	7049.65	15237.07	1186.17	gs
1097	13	55	160.1	1.1	35.8		0	242.80	7042.04	15224.20	1187.06	gs
1098	13	56	174.4	1.8	48.3		0	226.59	7034.57	15209.81	1187.89	gs
1099	13	57	186.2	2.1	61.3		0	209.46	7023.24	15196.95	1188.62	rec
1100	13	58	192.8	2	77.0		0	191.88	7012.81	15182.81	1189.06	gs
1101	13	59	194.9	2.5	92.0		0	176.51	7006.20	15168.93	1190.39	gs
1102	13	60	195	2.4	91.7		0	176.18	7006.12	15169.26	1190.22	gs
1103	13	61	194.8	2.5	112.2		0	155.70	7001.20	15149.38	1191.27	gs
1104	13	62	195.5	2	120.3		0	147.44	6997.70	15141.90	1190.57	gs
1105	13	63	196.2	2.3	132.6		0	135.08	6992.87	15130.52	1191.70	rec
1106	13	64	195.8	2.7	135.0		0	132.55	6993.11	15128.00	1192.74	rbf
1107	13	65	195.6	2.8	139.1		0	128.33	6992.44	15123.84	1193.18	gs
1108	13	66	195.6	3.2	143.4		0	124.09	6991.30	15119.76	1194.39	gs
1109	13	67	195.6	3.4	143.6		0		6991.23	15119.50	1194.91	p2xs4
1110	13	68	195.7	3.3	143.7		0	123.79	6990.98	15119.55	1194.65	p2xs4
1111	13	69	196	3.3	143.7		0	122.91	6990.26	15119.76	1194.65	gs
1112	13	70	191	3.7	144.0		-5.1		7002.38	15116.50	1200.78	bt17
1113	13	71	196.3	3.5	148.3		0	118.19	6988.23	15115.49	1195.44	gs
1114	13	72	194.9	3.1	148.2		0		6991.75	15114.65	1194.40	snag
1115	13	73	196.9	3.4	153.4		0	112.84	6985.26	15111.05	1195.49	gs
1116	13	74	198	3.3	160.3		0	105.31	6980.31	15105.36	1195.62	gs
1117	13	75	198	3.9	162.9		0	102.72	6979.51	15102.90	1197.48	gs
1118	13	76	198.5	4.5	166.8		0	98.60	6976.94	15099.69	1199.50	gs
1119	13	77	199.2	4.2	180.0		0	85.20	6970.66	15087.85	1199.59	gs
1120	13	78	199.7	3.8	187.9		0	77.17	6966.52	15080.96	1198.85	gs

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1121	13	79	199.7	3.3	198.7		0	66.38	6962.89	15070.81	1197.83	gs
1122	13	80	200.1	3.4	206.9		0	58.00	6958.74	15063.52	1198.67	bt18
1123	13	81	199.4	3.2	208.1		0	55.22	6960.74	15061.59	1198.00	gs
1124	13	82	200.4	3.2	224.5		0	38.32	6951.59	15047.39	1198.93	gs
1125	13	83	201.5	3	235.5		2		6943.55	15038.76	1196.71	p1xs4
1126	13	84	201.5	3	235.5		0		6943.55	15038.76	1198.71	p1xs4 ???
1127	13	85	201.2	3	235.5		0	26.74	6944.70	15038.31	1198.71	p1xs4
1128	13	86	201.3	3.4	236.3		2	25.91	6944.03	15037.71	1198.41	gs
1129	13	87	201.2	3.2	262.2		2	0.00	6935.04	15013.40	1199.03	gs
1130	13	88	54.7	-4.8	135.1		0	9502.23	7140.14	15335.93	1175.02	th
1131	13	89	47.6	-5.5	127.6		0	9520.14	7124.09	15343.90	1174.08	th
1132	13	90	42.4	-5.9	124.6		0	9531.97	7113.90	15349.89	1173.49	th
1133	13	91	36.6	-6	121.3		0	9544.84	7102.20	15355.26	1173.62	th
1134	13	92	27.1	-5	116.2		4	9565.17	7082.77	15361.26	1172.21	th
1135	13	93	21.2	-7	111.3		0	9577.85	7070.09	15361.59	1172.71	th
1136	13	94	13.8	-7	106.7		0	9592.64	7055.31	15361.47	1173.27	th
1137	13	95	0	-6.9	106.2		0	9618.22	7029.86	15364.08	1173.52	th
1138	13	96	352.6	-6.9	108.8		0	9632.34	7015.84	15365.75	1173.20	th
1139	13	97	337.6	-6.6	107.4		0	9660.59	6988.94	15357.13	1173.95	th
1140	13	98	340.5	-2.8	139.4		0		6983.31	15389.29	1179.55	rec
1141	13	99	340.9	-1.2	149.1		0		6981.08	15398.71	1183.25	rbf
1142	13	100	342.3	1.8	157.5		0		6981.97	15407.92	1191.32	rvw
1143	13	101	328.8	-7.4	112.2		0	9678.09	6971.76	15353.79	1171.80	th
1144	13	102	327.6	-6	96.3		0	9678.09	6978.27	15339.13	1176.25	ws
1145	13	103	316.4	-6.4	118.0		0	9703.61	6948.51	15343.27	1173.14	th
1146	13	104	309.3	-6	126.7		0	9721.09	6931.81	15338.10	1173.05	th
1147	13	105	302.6	-5.4	142.9		0	9743.64	6909.50	15334.82	1172.87	th
1148	13	106	297.3	-4	154.0		4	9761.32	6892.99	15328.49	1171.60	th
1149	13	107	295.4	-4.1	160.2		4	9769.39	6885.15	15326.56	1170.89	th
1150	13	108	288.6	-4.6	166.7		0	9789.82	6871.90	15311.01	1172.96	th
1151	13	109	284.3	-4.5	183.0		0	9810.79	6852.49	15303.06	1171.97	th
1152	13	110	280.7	-4.2	191.7		0	9825.40	6841.51	15293.44	1172.30	th
1153	13	111	277.2	-3.7	196.7		0	9838.27	6834.72	15282.50	1173.65	th
1154	13	112	275.8	-3.5	201.3		0	9844.99	6829.56	15278.20	1174.06	th
1155	13	113	274.3	-2.6	205.6		4	9851.81	6824.85	15273.27	1173.04	th
1156	13	114	270.2	-1.8	201.5		4	9866.94	6828.36	15258.55	1176.04	th
1157	13	115	267.6	-2.3	213.7		4	9882.37	6816.32	15248.90	1173.79	th
1158	13	116	263.1	-2	216.5		4	9899.48	6814.96	15231.85	1174.81	th
1159	13	117	273.5	-1.1	265.6		0		6764.80	15274.06	1181.27	rec
1160	13	118	274	-0.3	268.9		0		6761.62	15276.61	1184.96	rbf
1161	13	119	274.8	0.1	265.9		-5.1		6764.89	15280.10	1191.94	rvw
1162	13	120	278.4	-2.2	219.3		0		6812.87	15289.89	1177.95	tp9r
1163	13	121	278.4	-2.2	219.4		0		6812.77	15289.91	1177.94	tp9r
1164	13	122	250.7	-0.6	87.5		-5.1		6947.28	15228.93	1190.56	tp9l
1165	13	123	250.8	-0.6	87.4		-5.1		6947.32	15229.11	1190.56	tp9l
1166	13	124	-----	-----	#VALUE!		0		#VALUE!	#VALUE!	#VALUE!	0
1167	14	1	57.1	1.8	355.3		0		6946.62	15229.20	1190.19	tp9l
1168	14	2	57.1	1.8	355.1		0		6946.45	15229.09	1190.18	tp9l
1169	14	3	33.2	-1.1	302.7		-5.1		6814.06	15289.53	1178.31	tp9r
1170	14	4	33	-1.1	302.6		-5.1		6813.12	15290.02	1178.31	tp9r
1171	14	5	56.3	1.9	313.0		0		6908.71	15209.88	1189.41	lbf
1172	14	6	19.3	0.1	144.5		0		6696.04	15172.58	1179.28	rec
1173	14	7	19.3	0.1	144.5		0		6696.04	15172.58	1179.28	rvw
1174	14	8	53.1	0.6	300.5		0		6888.58	15216.62	1182.17	lec
1175	14	9	42.5	-1	252.8		0	9909.63	6819.05	15222.56	1174.61	th
1176	14	10	44.1	-1.1	235.4		0	9928.32	6812.07	15205.22	1174.50	th



Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1177	14	11	44.3	-1.2	234.5		0	9929.47	6812.10	15204.07	1174.11	th
1178	14	12	49.2	-1.3	198.8		0	9969.66	6798.81	15166.13	1174.51	th
1179	14	13	53	-1.5	181.1		0	9991.39	6792.95	15145.21	1174.28	th
1180	14	14	60	-1.7	160.0		0	10021.02	6786.87	15116.22	1174.27	th
1181	14	15	71.9	-2.2	134.1		0	10060.95	6775.75	15077.86	1173.87	th
1182	14	16	81.3	-2.5	122.9		0	10084.79	6769.75	15054.79	1173.66	th
1183	14	17	82.8	-1.9	120.7		0	10084.79	6768.07	15051.33	1175.02	ws
1184	14	18	91.4	-3.3	110.3		0	10108.83	6758.57	15033.51	1172.66	th
1185	14	19	98.7	-3.6	99.7		0	10125.89	6746.84	15021.12	1172.75	th
1186	14	20	103.4	-3.8	91.6		0	10137.16	6737.39	15014.97	1172.94	th
1187	14	21	111	-5.1	74.1		0	10157.79	6717.47	15009.64	1172.41	th
1188	14	22	116.7	-6.1	67.5		0	10167.42	6708.60	15005.86	1171.81	th
1189	14	23	123.5	-7.4	60.1		0	10178.01	6698.40	15003.03	1171.22	th
1190	14	24	133.3	-8.6	55.7		0	10188.84	6688.80	14998.02	1170.61	th
1191	14	25	142.8	-9.5	50.3		0	10199.12	6678.70	14996.13	1170.61	th
1192	14	26	149.6	-10.4	44.5		0	10207.22	6670.78	14997.86	1170.86	th
1193	14	27	160.2	-10.3	45.9		0	10215.70	6663.85	14992.97	1170.67	th
1194	14	28	165.6	-6.4	46.8		4	10220.15	6659.92	14990.86	1169.77	th
1195	14	29	178.7	-8.8	47.4		0	10230.92	6649.36	14988.78	1171.68	th
1196	14	30	186.3	-8.1	56.5		0	10242.31	6642.08	14980.01	1170.98	th
1197	14	31	196	-7.7	63.6		0	10254.69	6630.75	14975.04	1170.42	th
1198	14	32	200.7	-6.9	68.1		0	10261.71	6624.21	14972.49	1170.78	th
1199	14	33	203.4	-6.3	72.3		0	10267.02	6619.59	14969.88	1171.05	th
1200	14	34	207.8	-5.5	80.7		0	10277.32	6610.63	14964.79	1171.25	th
1201	14	35	212.3	-4.7	89.7		0	10288.50	6600.35	14960.38	1171.65	th
1202	14	36	217.9	-3.9	101.0		0	10303.11	6586.26	14956.53	1172.14	th
1203	14	37	222.2	-3.2	115.8		0	10320.03	6570.49	14950.40	1172.55	th
1204	14	38	225.8	-3.2	125.5		0	10332.33	6558.31	14948.70	1172.01	th
1205	14	39	231.5	-2.9	131.5		0	10346.46	6545.35	14954.32	1172.36	th
1206	14	40	135.1	0.8	137.5		0		6745.33	14938.81	1180.94	lec
1207	14	41	233.7	-3.1	152.0		0	10367.61	6525.80	14946.23	1170.79	th
1208	14	42	139.3	3.1	138.5		0		6738.60	14931.20	1186.52	lbf
1209	14	43	238.9	-1.9	169.3		4	10390.24	6503.31	14948.75	1169.41	th
1210	14	44	241.5	-2.7	175.8		4	10400.41	6493.78	14952.31	1166.73	th
1211	14	45	244.3	-2.8	179.7		0	10409.93	6486.37	14958.28	1170.24	th
1212	14	46	244.3	-2.8	179.7		-5.1	10409.93	6486.37	14958.28	1175.34	ws
1213	14	47	248	-2.6	184.0		0	10422.44	6477.67	14967.27	1170.67	th
1214	14	48	251.6	-1.9	186.0		4	10434.23	6471.80	14977.49	1168.85	th
1215	14	49	254.9	-2.4	195.6		0	10448.84	6459.41	14985.24	1170.82	th
1216	14	50	257.9	-2.1	200.6		0	10460.32	6452.18	14994.16	1171.67	th
1217	14	51	260	-2.1	210.1		0	10472.44	6441.42	14999.72	1171.32	th
1218	14	52	262.8	-1	220.8		4	10487.45	6429.26	15008.53	1171.17	th
1219	14	53	265.7	-0.9	228.8		4	10501.36	6420.16	15019.05	1171.43	th
1220	14	54	267.5	-0.9	248.3		4	10522.24	6400.25	15025.37	1171.12	th
1221	14	55	268.6	-1	255.9		4	10531.25	6392.50	15029.95	1170.56	th
1222	14	56	222.3	0.3	172.1		0		6532.46	14908.91	1179.92	lec
1223	14	57	103.8	2.2	232.9		-5		6874.49	14980.64	1192.97	lec
1224	14	58	103.8	2.2	232.9		-5		6874.49	14980.64	1192.97	lbf
1225	14	59	223.7	2.6	193.8		0		6514.39	14896.09	1187.82	lbf
1226	14	60	265.6	1.8	293.5		0		6355.69	15013.69	1188.25	p2xs5
1227	14	61	226.3	3.3	219.5		-5		6489.57	14884.53	1196.68	lvw
1228	14	62	264.4	2.8	302.6		0		6347.09	15006.67	1193.83	p1xs5
1229	14	63	282	1.9	135.1		-5.1		6516.11	15064.29	1188.61	rx28
1230	14	64	267.1	-1.6	157.5		-5.1		6490.95	15028.23	1179.72	tp10l
1231	14	65	267	-1.5	157.5		-5.1		6490.95	15027.96	1180.00	tp10l
1232	14	66	321.8	3.3	215.4		-5.1		6515.05	15205.51	1196.55	tp10r

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1233	14	67	321.2	3.1	215.4		-5.1		6513.32	15204.06	1195.79	tp10r
1234	14	68	321.2	3.1	215.4		-5.1		6513.32	15204.06	1195.79	p3xs5
1235	14	69	-----	-----	#VALUE!		0		#VALUE!	#VALUE!	#VALUE!	0
1236	15	1	26.8	3.6	123.4		-5.1		6513.19	15205.41	1195.77	tp10r
1237	15	2	26.9	3.7	123.4		-5.1		6513.42	15205.39	1195.99	tp10r
1238	15	3	153.4	-5.9	76.0		-5.1		6491.60	15027.35	1180.15	tp10l
1239	15	4	153	-5.9	76.0		-5.1		6492.07	15027.59	1180.15	tp10l
1240	15	5	0	0	0.0		0		6457.57	15095.31	1182.90	xs5
1241	15	6	-----	-----	#VALUE!		0		#VALUE!	#VALUE!	#VALUE!	0
1242	15	7	229.9	4.8	145.4		0	0.00	6346.36	15001.66	1195.11	gsxs5
1243	15	8	230	4.6	142.8		0	3.65	6348.15	15003.49	1194.40	p1xs5
1244	15	9	230.1	6.1	150.8		0	12.36	6341.85	14998.55	1199.03	gs
1245	15	10	230.2	4.2	142.5		0	20.69	6348.08	15004.08	1193.37	gs
1246	15	11	230.5	3.7	137.6		0	25.65	6351.39	15007.77	1191.80	gs
1247	15	12	231.1	2.3	130.8		0	32.61	6355.78	15013.17	1188.16	gs
1248	15	13	231	2.5	130.7		0		6356.02	15013.07	1188.61	p2xs5
1249	15	14	231.2	2.3	130.7		0	32.83	6355.72	15013.41	1188.15	p2xs5
1250	15	15	231	3	130.3		0	33.32	6356.29	15013.29	1189.73	gs
1251	15	16	231.4	1.1	126.3		0	37.46	6358.88	15016.52	1185.33	gs
1252	15	17	231.3	0	119.5		0	44.24	6364.31	15020.59	1182.90	gs
1253	15	18	231.1	0.9	122.1		0	46.86	6362.56	15018.64	1184.82	lbf
1254	15	19	230.9	-1.2	115.6		0	53.39	6367.88	15022.42	1180.48	lac
1255	15	20	230.5	-3.7	107.6		0	61.42	6374.56	15026.88	1175.95	gs
1256	15	21	230.1	-2.8	106.2		0	63.01	6376.12	15027.20	1177.71	lew
1257	15	22	230.6	-5.6	100.3		0	68.94	6380.05	15031.63	1173.07	gs
1258	15	23	230	-4.2	93.2		0	76.08	6386.14	15035.37	1176.06	gs
1259	15	24	230.4	-6	85.0		0	84.32	6392.05	15041.10	1173.97	gs
1260	15	25	231.2	-6.2	79.1		0	90.33	6395.90	15045.72	1174.31	gs
1261	15	26	232.8	-6.6	67.9		0	101.70	6403.45	15054.23	1175.04	gs
1262	15	27	233.8	-6.5	62.9		0	106.88	6406.82	15058.16	1175.74	gs
1263	15	28	234.7	-4.2	58.3		0	111.53	6409.95	15061.59	1178.62	gs
1264	15	29	235.6	-5.4	53.3		0	116.68	6413.62	15065.21	1177.87	rew
1265	15	30	237.3	-9.4	45.2		0	124.89	6419.55	15070.89	1175.42	gs
1266	15	31	237.7	-5.4	39.6		0	130.46	6424.08	15074.13	1179.16	gs
1267	15	32	240.6	-4.3	34.5		0	135.91	6427.51	15078.37	1180.31	gs
1268	15	33	247.6	-2.9	26.5		0	144.76	6433.10	15085.22	1181.56	gs
1269	15	34	265.4	-16.5	18.7		0	155.14	6438.93	15093.81	1177.37	gs
1270	15	35	286.4	-12.9	15.6		0	162.09	6442.61	15099.71	1179.33	gs
1271	15	36	310.4	-2	14.3		0	168.43	6446.69	15104.57	1182.41	gs
1272	15	37	339.5	-0.8	17.6		0	177.06	6451.41	15111.79	1182.66	gs
1273	15	38	351.2	0.9	20.6		0	181.96	6454.42	15115.66	1183.23	gs
1274	15	39	1.7	4.1	24.6		0	187.74	6458.30	15119.93	1184.67	gs
1275	15	40	14.6	5.7	35.1		0	200.13	6466.42	15129.30	1186.41	gs
1276	15	41	21	4.9	49.5		0	215.26	6475.32	15141.53	1187.15	gs
1277	15	42	25	3.5	66.1		0	232.29	6485.50	15155.19	1186.95	gs
1278	15	43	26.8	3.1	80.6		0	246.98	6493.90	15167.23	1187.27	gs
1279	15	44	27	2.5	95.5		0	261.91	6500.93	15180.40	1187.07	gs
1280	15	45	27.4	2.1	107.6		0	274.05	6507.10	15190.86	1186.85	gs
1281	15	46	27.2	2.6	113.4		0	279.82	6509.40	15196.15	1188.05	rec
1282	15	47	26.9	3	116.6		0	283.13	6510.34	15199.32	1189.02	rec
1283	15	48	26.8	4.8	117.0		0	283.53	6510.32	15199.73	1192.73	rbf
1284	15	49	26.9	5	121.2		0	287.79	6512.42	15203.42	1193.51	gs
1285	15	50	26.6	5.1	123.2		0	289.86	6512.74	15205.47	1193.90	gs
1286	15	51	26.7	3.7	123.4		-5.1		6513.04	15205.59	1195.99	p3xs5
1287	15	52	26.6	3.7	123.3		-5.1	290.37	6512.80	15205.59	1195.98	p3xs5
1288	15	53	26.5	5	123.3		0	291.12	6512.60	15205.68	1193.69	gs

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1289	15	54	26.2	5.1	130.2		0	298.00	6515.05	15212.11	1194.52	gs
1290	15	55	28.5	3.9	145.1		-5.1	313.87	6526.79	15222.79	1197.89	gs
1291	15	56	28.4	4.4	157.0		-3.1	325.85	6532.26	15233.44	1198.09	gs
1292	15	57	31.2	6	179.4		0		6550.51	15248.77	1201.76	p4xs5
1293	15	58	31.1	6	179.5		0	349.68	6550.29	15249.02	1201.77	p4xs5
1294	15	59	31	6	179.4		0.5	350.15	6549.97	15249.09	1201.26	gs
1295	15	60	31.2	6.2	179.6		1	350.82	6550.63	15248.97	1201.42	gs
1296	15	61	34.8	5.3	219.1		-1.5	392.16	6582.59	15275.19	1204.73	gs
1297	15	62	13.1	4.7	168.6		0		6495.79	15259.55	1196.77	bm rebar
1298	15	63	13.1	4.6	168.9		0		6495.84	15259.77	1196.49	bm rebar
1299	15	64	11.2	4.6	156.4		-5.1		6487.95	15248.72	1200.59	bt19
1300	15	65	10.8	5.1	133.5		-5.1		6482.58	15226.41	1199.92	bt20
1301	15	66	233.7	-7.5	89.0		0	10545.55	6385.82	15042.60	1171.18	th
1302	15	67	247.5	-7.6	89.5		0	10567.00	6374.88	15061.05	1170.96	th
1303	15	68	251.3	-7.1	92.8		0	10573.88	6369.69	15065.56	1171.35	th
1304	15	69	256.4	-7.5	87.1		0	10583.67	6372.87	15074.81	1171.43	th
1305	15	70	263.3	-8.1	87.4		0	10594.17	6370.75	15085.11	1170.46	th
1306	15	71	265.1	-5.8	90.3		4	10598.21	6367.57	15087.59	1169.73	th
1307	15	72	267.4	-5.7	96.1		4	10605.10	6361.55	15090.95	1169.31	th
1308	15	73	266.3	-4.3	100.2		0	10605.10	6357.56	15088.84	1175.37	ws
1309	15	74	270.6	-5.7	100.6		4	10612.19	6356.98	15096.36	1168.86	th
1310	15	75	276	-5.3	106.1		4	10623.39	6352.01	15106.40	1169.06	th
1311	15	76	281.8	-5.1	113.9		4	10636.98	6346.03	15118.61	1168.74	th
1312	15	77	285.1	-5.6	124.6		0	10649.66	6337.27	15127.77	1170.69	th
1313	15	78	289.6	-4.9	132.3		0	10662.35	6332.92	15139.69	1171.56	th
1314	15	79	295.4	-3.9	143.4		0	10680.14	6328.06	15156.80	1173.13	th
1315	15	80	300.3	-3.4	157.5		0	10699.25	6321.57	15174.78	1173.55	th
1316	15	81	302.9	-2.8	178.1		0	10721.18	6308.05	15192.04	1174.20	th
1317	15	82	300.3	-2.5	181.5		0	10721.18	6300.84	15186.89	1174.98	ws
1318	15	83	304.9	-2.5	214.0		0	10757.73	6282.06	15217.74	1173.56	th
1319	15	84	116.9	0.8	66.9		-5.1		6517.23	15065.04	1188.94	rx28
1320	15	85	308.5	-2.2	245.2		0	10792.11	6265.66	15247.96	1173.48	th
1321	15	86	299.6	-0.8	252.6		0		6237.96	15220.06	1179.38	lec
1322	15	87	297.9	-0.1	262.1		0		6225.94	15217.95	1182.45	lbf
1323	15	88	296.8	1.6	271.4		0		6215.33	15217.67	1190.49	lvw
1324	15	89	339.4	1.1	137.2		0		6409.31	15223.71	1185.54	rec
1325	15	90	354.2	4	163.8		0		6441.02	15258.27	1194.36	rbf
1326	15	91	306.8	-2.3	230.7		0	10808.24	6272.83	15233.51	1173.64	th
1327	15	92	309.9	-2	259.5		0	10839.96	6258.46	15261.79	1173.84	th
1328	15	93	309.6	-1.7	266.9		0	10839.96	6251.93	15265.42	1174.98	ws
1329	15	94	309.8	-1.8	296.3		0	10876.67	6229.96	15284.94	1173.59	th
1330	15	95	310.5	-1.8	315.4		0	10896.22	6217.70	15300.17	1172.99	th
1331	15	96	310.1	-1.6	322.6		0	10903.69	6210.83	15303.08	1173.89	th
1332	15	97	309.3	-1.5	322.4		0	10903.69	6208.09	15299.50	1174.46	ws
1333	15	98	310.4	-1.6	333.2		0	10914.43	6203.85	15311.24	1173.60	th
1334	15	99	310.7	-1.8	341.3		0	10922.78	6198.80	15317.89	1172.18	th
1335	15	100	310.2	-1.5	351.8		0	10922.78	6188.88	15322.36	1173.69	ws
1336	15	101	311.6	-1.6	369.1		-5.1		6181.59	15340.33	1177.70	tp11l
1337	15	102	311.5	-1.5	369.1		-5.1		6181.15	15339.86	1178.34	tp11l
1338	15	103	344.4	1.6	276.5		0		6383.22	15361.61	1190.63	tp11r
1339	15	104	344.3	1.6	276.6		0		6382.72	15361.58	1190.63	tp11r
1340	15	105	327	-0.7	318.3		0		6284.22	15362.23	1179.02	rx29
1341	16	1	131.4	1.4	305.2		-5.1		6384.21	15360.82	1190.83	tp11r
1342	16	2	131.4	1.4	305.4		-5.1		6384.36	15360.69	1190.84	tp11r
1343	16	3	147.1	-1.1	238.6		-5.1		6284.84	15362.36	1178.79	rx29
1344	16	4	173.7	-1.4	223.1		-5.1		6179.75	15340.87	1177.92	tp11l

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1345	16	5	173.7	-1.4	223.1		-5.1		6179.75	15340.87	1177.92	tp11l
1346	16	6	132.9	0.2	242.7		0		6333.05	15397.45	1179.12	rec
1347	16	7	179.9	-0.8	183.4		0		6155.59	15379.28	1175.71	lec
1348	16	8	122.3	1.3	256.9		0		6372.44	15425.37	1184.11	rbf
1349	16	9	181.6	1.1	183.0		-5.1		6150.16	15379.76	1186.89	lvw
1350	16	10	168.9	-2.3	216.8		0	10954.83	6197.01	15349.89	1169.57	th
1351	16	11	169.9	-2.3	214.2		0	10959.40	6192.83	15351.75	1169.67	th
1352	16	12	169.9	-2.4	207.5		0	10966.11	6191.66	15358.36	1169.58	th
1353	16	13	170.5	-1.5	209.4		0	10966.11	6189.83	15356.10	1172.79	ws
1354	16	14	171.5	-2.5	187.7		0	10986.66	6183.01	15377.00	1170.08	th
1355	16	15	173.3	-2.9	167.3		0	11007.84	6174.78	15396.52	1169.80	th
1356	16	16	175.6	-3.1	149.3		0	11026.93	6166.72	15413.82	1170.19	th
1357	16	17	177.2	-3.3	141.1		0	11036.09	6162.16	15421.76	1170.14	th
1358	16	18	182.8	-3.9	118.6		0	11061.85	6149.47	15444.18	1170.19	th
1359	16	19	185	-2.8	120.7		0	11061.85	6144.75	15442.46	1172.37	ws
1360	16	20	191.8	-4.7	87.9		0	11096.50	6137.29	15476.61	1171.05	th
1361	16	21	206.8	-5.4	76.0		0	11120.94	6121.02	15494.86	1171.09	th
1362	16	22	220.1	-6.2	66.0		0	11140.13	6112.75	15512.17	1171.10	th
1363	16	23	68.1	0.3	112.5		0		6259.65	15604.62	1178.86	rec
1364	16	24	67.7	3.3	150.9		0		6294.93	15619.94	1186.98	rbf
1365	16	25	223.6	-4.2	84.0		0	11140.13	6097.36	15501.85	1172.11	ws
1366	16	26	225.6	0.4	114.5		0		6073.46	15482.55	1179.07	lec
1367	16	27	58.8	4.5	174.1		0		6304.15	15652.83	1191.97	rvw
1368	16	28	226.2	2.4	137.8		0		6055.82	15467.30	1184.05	lbf
1369	16	29	228.6	5.1	163.5		0		6032.66	15454.57	1192.86	terrace
1370	16	30	241.8	-7.1	55.5		0	11165.23	6106.38	15536.45	1171.37	th
1371	16	31	263.2	-6.8	63.8		0	11188.86	6091.87	15555.10	1170.66	th
1372	16	32	280.5	-5.7	78.6		0	11214.78	6077.97	15576.98	1170.43	th
1373	16	33	292.5	-4.9	92.6		0	11237.42	6069.75	15598.08	1170.34	th
1374	16	34	300.1	-4.3	108.3		0	11258.01	6061.57	15616.97	1170.13	th
1375	16	35	298.3	-3.7	111.5		0	11258.01	6057.12	15615.50	1171.07	ws
1376	16	36	325	-0.5	182.9		0		6050.36	15712.48	1176.68	rvw
1377	16	37	325	-0.5	182.9		0		6050.36	15712.48	1176.68	rec
1378	16	38	304.8	-4	112.4		0	11267.96	6062.95	15626.82	1170.41	th
1379	16	39	308.6	-4.2	117.3		0	11276.99	6063.61	15635.83	1169.66	th
1380	16	40	307.5	-3.7	120.2		0	11276.99	6059.87	15635.86	1170.50	ws
1381	16	41	311.5	-4.4	123.3		0	11285.57	6062.89	15644.38	1168.79	th
1382	16	42	312.1	-4.3	138.5		0	11300.81	6052.50	15655.52	1167.86	th
1383	16	43	313.2	-4.3	155.2		0	11317.69	6042.16	15668.87	1166.61	th
1384	16	44	313.2	-3.9	169.1		0	11331.64	6031.99	15678.42	1166.75	th
1385	16	45	309.3	-3.7	182.8		0	11349.84	6013.79	15678.45	1166.45	th
1386	16	46	305.6	-3.3	192.0		0	11365.01	5999.17	15674.42	1167.21	th
1387	16	47	302.7	-3.2	201.8		0	11378.99	5985.46	15671.67	1166.99	th
1388	16	48	301.3	-2.3	196.8		0	11378.99	5987.07	15664.92	1170.37	ws
1389	16	49	299.9	-2.8	212.5		0	11393.76	5971.01	15668.61	1167.88	th
1390	16	50	298.6	-2.6	228.7		0	11410.64	5954.50	15672.12	1167.89	th
1391	16	51	297.3	-2.4	250.6		0	11433.22	5932.60	15677.59	1167.77	th
1392	16	52	297.3	-2.2	271.2		0	11453.84	5914.27	15687.04	1167.86	th
1393	16	53	297	-2.1	290.1		0	11472.80	5896.78	15694.36	1167.64	th
1394	16	54	296.1	-1.6	288.5		0	11472.80	5896.20	15689.58	1170.22	ws
1395	16	55	294.1	-1.3	381.2		-5.1		5807.29	15718.32	1174.72	tp12r
1396	16	56	294.1	-1.3	381.1		-5.1		5807.38	15718.27	1174.73	tp12r
1397	16	57	299.8	-1.6	309.5		-5.1		5886.71	15716.46	1174.73	rx30
1398	16	58	251.9	2.9	313.0		0		5857.76	15465.42	1194.13	tp12l
1399	16	59	251.8	2.9	312.8		0		5858.12	15464.96	1194.12	tp12l
1400	17	1	102.1	4.9	215.0		-5.1		5859.23	15463.64	1194.32	tp12l

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1401	17	2	102.3	4.9	215.0		-5.1		5859.07	15462.91	1194.32	tp12l
1402	17	3	36.8	-0.3	263.0		-5.1		5806.53	15719.30	1174.51	tp12r
1403	17	4	36.8	-0.3	262.9		-5.1		5806.47	15719.22	1174.51	tp12r
1404	17	5	48.5	-0.2	316.4		-5.1		5885.96	15718.36	1174.78	rx30
1405	17	6	46.4	1.9	329.7		0		5887.76	15736.09	1181.72	rvw
1406	17	7	47	1.7	326.8		0		5887.97	15731.56	1180.48	rbf
1407	17	8	47.4	1.3	326.8		0		5889.56	15729.92	1178.20	rec
1408	17	9	52.1	-0.1	301.6		0	11483.63	5886.98	15693.98	1170.26	ws
1409	17	10	51.6	0.1	302.7		4	11483.63	5886.21	15696.73	1167.31	th
1410	17	11	48.2	-0.5	291.3		0	11504.62	5866.14	15702.86	1168.24	th
1411	17	12	45.5	-0.6	276.7		0	11524.42	5846.34	15702.64	1167.89	th
1412	17	13	43.6	-0.8	268.3		0	11536.76	5834.00	15702.99	1167.04	th
1413	17	14	41.8	-1.1	257.8		0	11550.14	5820.79	15700.86	1165.84	th
1414	17	15	40.1	-0.4	252.6		4	11559.30	5811.69	15701.93	1165.02	th
1415	17	16	38.6	-0.6	249.5		4	11566.57	5804.64	15703.69	1164.17	th
1416	17	17	37.3	-0.7	244.3		4	11574.22	5797.02	15703.03	1163.80	th
1417	17	18	35.1	-1.1	242.8		4	11583.69	5788.58	15707.32	1162.12	th
1418	17	19	35.8	-1.4	231.7		-5.1	11583.69	5784.54	15696.66	1170.22	ws
1419	17	20	33.2	-1	232.2		4	11596.89	5776.12	15702.98	1162.73	th
1420	17	21	29.1	1	246.2		0		5768.71	15723.80	1175.08	rec
1421	17	22	29.1	1.6	250.1		0		5770.62	15727.24	1177.77	rbf
1422	17	23	28.6	3	259.6		4		5773.28	15736.67	1180.39	rvw
1423	17	24	32.6	-0.8	223.4		4	11605.99	5769.34	15696.90	1163.67	th
1424	17	25	32	-0.7	202.1		4	11627.40	5756.08	15680.09	1164.32	th
1425	17	26	32.9	-0.9	183.7		4	11646.06	5748.76	15662.93	1163.90	th
1426	17	27	102	5.8	109.0		0		5755.65	15486.04	1181.86	lec
1427	17	28	33	-0.9	163.9		4	11665.86	5738.25	15646.15	1164.21	th
1428	17	29	32.9	-1.3	149.2		4	11680.58	5730.01	15633.95	1163.40	th
1429	17	30	36.2	-2.2	146.7		-5.1	11680.58	5735.63	15627.09	1170.25	ws
1430	17	31	110.2	7.1	176.3		0		5814.48	15447.82	1192.75	lbf
1431	17	32	33.8	-1	130.4		4	11699.49	5721.52	15617.05	1164.51	th
1432	17	33	33.9	-2.3	120.1		0	11709.76	5715.98	15608.40	1165.96	th
1433	17	34	35.8	-1.7	107.7		0	11722.77	5711.96	15596.02	1167.59	th
1434	17	35	39.1	-1.4	91.6		0	11739.84	5706.74	15579.78	1168.55	th
1435	17	36	42.4	-1	80.0		0	11752.43	5702.93	15567.78	1169.39	th
1436	17	37	46.9	-0.5	81.7		0	11752.43	5708.64	15564.53	1170.07	ws
1437	17	38	134	3.2	186.8		0		5783.37	15378.94	1181.23	lec
1438	17	39	47.3	-1.1	65.9		0	11767.83	5697.41	15553.39	1169.52	thl
1439	17	40	72.5	-2.6	40.4		0	11801.86	5687.48	15520.85	1168.95	thl
1440	17	41	148.4	-3.1	41.0		0	11851.92	5670.50	15473.76	1168.56	thl
1441	17	42	29.8	-2.2	116.9		0		5707.09	15610.16	1166.29	thr
1442	17	43	24.3	-0.9	108.9		0		5693.80	15607.95	1169.07	thr
1443	17	44	18.8	-2.6	110.1		0		5684.47	15612.92	1165.79	thr
1444	17	45	20.7	-1.6	108.2		0		5687.22	15609.89	1167.76	thr
1445	17	46	15.8	-2.6	105.9		0		5677.82	15610.60	1165.98	thr
1446	17	47	9.6	-2.4	93.4		0		5664.57	15600.82	1166.87	thr
1447	17	48	5.8	-2.4	85.4		0		5657.62	15593.70	1167.20	thr
1448	17	49	2.9	-3.1	73.0		0		5652.68	15581.61	1166.83	thr
1449	17	50	7.2	-0.7	72.0		0	#N/A	5658.01	15580.14	1169.91	ws thr
1450	17	51	2.4	-2.9	59.3		0		5651.48	15567.98	1167.78	thr
1451	17	52	356.8	-3.9	47.6		0		5646.33	15556.23	1167.54	thr
1452	17	53	350.5	-3.8	41.0		0		5642.22	15549.16	1168.06	thr
1453	17	54	337.7	-6.2	29.0		0		5637.98	15535.57	1167.63	thr
1454	17	55	311.1	-2.6	25.1		0		5630.10	15525.19	1169.65	thr
1455	17	56	311	-1.9	19.3		0	#N/A	5634.43	15521.37	1170.15	ws thr
1456	17	57	292.6	-3.5	25.4		0		5625.59	15518.45	1169.23	thr

Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1457	17	58	277	-8	29.3		0		5619.90	15512.28	1166.67	thr
1458	17	59	257.3	-6.7	27.9		0		5621.77	15502.58	1167.51	thr
1459	17	60	225.8	-6.9	34.1		0		5624.58	15484.97	1166.66	thr
1460	17	61	204	-5.8	38.9		0		5633.17	15473.17	1166.83	thr
1461	17	62	191.8	-5.7	51.0		0		5638.55	15458.74	1165.69	thr
1462	17	63	184.1	-0.3	78.4		-5.1		5643.39	15430.51	1175.47	rx31
1463	17	64	180.5	-4.9	53.8		0		5648.52	15454.91	1166.17	thr
1464	17	65	171.8	0.8	88.2		-5.1		5661.57	15421.42	1177.12	rx32=rx41
1465	17	66	181.9	-2.9	59.0		4		5647.03	15449.72	1163.80	thr
1466	17	67	180.1	-2.9	68.4		8		5648.87	15440.30	1159.32	thr
1467	17	68	177	-2.1	69.1		8		5652.60	15439.75	1160.25	thr
1468	17	69	168.9	-4.3	71.7		8		5662.79	15438.35	1157.39	thr
1469	17	70	165.2	-3.6	73.9		8	11888.47	5667.86	15437.31	1158.14	th
1470	17	71	162.2	-2.2	88.3		8	11903.55	5675.99	15424.60	1159.39	th
1471	17	72	158.3	-3.3	90.5		4	11910.03	5682.47	15424.58	1161.56	th
1472	17	73	155.1	0.4	94.7		-5		5688.86	15422.82	1176.45	0
1473	17	74	165.1	-2.1	98.9		4	11924.04	5674.43	15413.10	1163.16	th
1474	17	75	188.7	-0.3	252.6		-5.1		5610.78	15259.02	1174.56	tp13r
1475	17	76	188.9	-0.2	252.6		-5.1		5609.91	15259.15	1175.00	tp13r
1476	17	77	146.6	-0.9	207.4		-5.1		5763.15	15335.58	1172.63	tp13l
1477	17	78	146.8	-0.9	207.4		-5.1		5762.54	15335.19	1172.63	tp13l
1478	18	1	50.2	-1.4	248.5		-5.1		5761.21	15337.38	1172.84	tp13l
1479	18	2	50.3	-1.5	248.6		-5.1		5761.56	15337.10	1172.41	tp13l
1480	18	3	27.8	-2.6	89.1		-5.1		5611.83	15257.11	1174.87	tp13r
1481	18	4	27.7	-2.7	89.3		-5.1		5611.78	15257.36	1174.70	tp13r
1482	18	5	16.4	-1.7	238.8		0		5637.69	15407.37	1166.73	thr
1483	18	6	27.9	-1.1	253.4		0	11942.10	5688.82	15402.20	1168.95	thl
1484	18	7	14	-2.2	230.5		0		5626.04	15401.97	1164.96	thr
1485	18	8	32.6	-1.3	262.1		0	11964.99	5711.50	15399.13	1167.87	thl
1486	18	9	13.7	-1.6	214.5		4		5621.08	15386.70	1163.82	thr
1487	18	10	35.9	-1.2	258.0		0	11980.51	5721.58	15387.32	1168.41	th
1488	18	11	14	-1.5	200.5		4	12084.32	5618.79	15372.87	1164.56	th
1489	18	12	37.8	-1.2	249.0		0	12188.47	5722.91	15375.08	1168.60	th
1490	18	13	17.5	-2.4	201.4		-5.1	12188.47	5630.84	15370.39	1170.47	ws
1491	18	14	40.3	-1.6	245.5		0	12199.83	5729.06	15365.53	1166.96	th
1492	18	15	13.7	-2.8	187.6		0	12314.30	5614.70	15360.53	1164.64	th
1493	18	16	42.7	-1.5	243.9		0	12435.33	5735.69	15357.55	1167.43	th
1494	18	17	13.2	-2.1	160.3		0	12566.21	5606.88	15334.35	1167.94	th
1495	18	18	47.1	-1.1	240.3		0	12705.81	5746.27	15341.84	1169.20	th
1496	18	19	52.9	-1.3	235.0		0	12730.41	5757.74	15320.07	1168.48	th
1497	18	20	9.1	0.4	183.7		0		5599.33	15359.67	1175.10	rec
1498	18	21	60.2	-1.4	222.7		0	12762.04	5763.55	15288.98	1168.37	thl
1499	18	22	8	2.1	184.4		0		5595.93	15360.87	1180.58	rbf
1500	18	23	63.1	-1.4	217.5		0	12774.33	5764.27	15276.71	1168.50	thl
1501	18	24	5	1.9	180.9		-5		5586.04	15358.50	1184.82	rvw
1502	18	25	66.7	-1.7	206.4		0	12791.68	5759.85	15259.94	1167.69	thl
1503	18	26	68.7	-1.6	190.2		0	12809.28	5747.50	15247.39	1168.50	thl
1504	18	27	11.8	-2.4	129.6		0		5596.77	15305.14	1168.38	thr
1505	18	28	69.6	-1.4	176.2		0	12823.55	5735.47	15239.73	1169.51	thl
1506	18	29	4.8	-2.7	97.6		0	12984.61	5578.44	15275.54	1169.21	th
1507	18	30	8.2	-2.2	94.7		0	12984.61	5583.78	15272.05	1170.18	ws
1508	18	31	64.9	-0.1	234.9		0		5782.99	15277.94	1173.41	lec
1509	18	32	357.8	-3	82.1		0		5567.12	15260.32	1169.51	thr
1510	18	33	67.4	0.6	245.3		0		5796.72	15272.55	1176.38	lbf
1511	18	34	336.4	-4.8	58.5		0	13038.48	5546.85	15231.89	1168.90	th
1512	18	35	341.8	-4.4	53.3		0		5553.61	15228.97	1169.71	thr



Sulphur Glade Survey Data - September, 1998								TH or XS				
Record #	Stn	pt	HAR	VI	HD	HT	TC	Dist	X	Y	Z	Feature
1513	18	36	330.5	-5.9	49.9		0	13048.69	5545.68	15221.75	1168.66	th
1514	18	37	322.4	-9.2	40.7		0	13059.93	5545.46	15210.51	1167.23	th
1515	18	38	318.8	-8	36.0		0	13059.93	5546.53	15205.41	1168.75	ws
1516	18	39	271.2	-7	60.8		0	13107.42	5509.44	15179.57	1166.35	th
1517	18	40	261.9	-7.1	75.5		0	13125.75	5495.51	15167.65	1164.41	th
1518	18	41	259.3	-6.7	84.1		0	13135.09	5487.61	15162.67	1163.93	th
1519	18	42	108.2	0.2	178.4		0		5739.75	15122.57	1174.44	lbf
1520	18	43	246.2	-3.4	82.4		0	13154.16	5494.92	15145.06	1168.92	thl
1521	18	44	236.4	-4.4	85.1		0	13168.73	5499.35	15131.17	1167.26	thl
1522	18	45	235.6	-2.9	91.2		0	13168.73	5495.04	15126.78	1169.20	ws
1523	18	46	222.7	-5.9	77.2		0	13189.65	5517.93	15121.56	1165.84	thl
1524	18	47	107.4	-0.8	167.9		0		5730.47	15128.09	1171.47	lec
1525	18	48	201.9	2.9	114.2		0		5527.69	15072.38	1179.60	lec
1526	18	49	135.4	1.1	141.4		0		5669.54	15077.63	1176.53	lec
1527	18	50	135.4	1.1	141.4		0		5669.54	15077.63	1176.53	lvw
1528	18	51	205	5.4	122.2		0		5518.65	15067.58	1185.36	lbf
1529	18	52	72.4	-1.9	145.8		0	13405.92	5709.27	15222.38	1168.98	thl
1530	18	53	76.6	-2.7	120.2		0	13433.35	5687.17	15206.14	1168.15	thl
1531	18	54	90.2	-3.1	100.1		0	13466.19	5670.33	15177.94	1168.40	thl
1532	18	55	107.4	-3.7	86.4		0	13497.16	5652.74	15152.45	1168.23	thl
1533	18	56	123.7	-4.7	72.9		0	13523.44	5630.88	15137.87	1167.83	thl
1534	18	57	143.8	-5.5	58.4		0	13550.39	5604.78	15131.14	1168.19	thl
1535	18	58	173.3	-6.9	59.0		0	13580.29	5577.15	15119.72	1166.68	thl
1536	18	59	173.6	-6.5	59.1		0	13580.63	5576.86	15119.54	1167.08	thl
1537	18	60	185.2	-6.8	60.3		0	13592.75	5564.81	15118.27	1166.63	thl
1538	18	61	201.4	-4.9	68.4		0	13612.61	5545.30	15114.56	1167.95	thl
1539	18	62	221.2	-4.9	77.2		0	13639.10	5519.41	15120.19	1167.20	thl
1540	18	63	223.8	9.9	177.1		0		5447.68	15050.45	1204.73	p1end
1541	18	64	223.7	9.9	177.1		0		5447.90	15050.24	1204.73	p1end
1542	18	65	334.7	3.8	134.4		-5.1		5512.83	15299.80	1187.84	p2end
1543	18	66	334.7	3.8	134.5		-5.1		5512.79	15299.89	1187.85	p2end
1544	18	67	233.3	3.5	154.9		0		5446.07	15085.71	1183.29	htchck cr
1545	18	68	236.7	1.9	130.7		0		5461.01	15106.52	1178.15	htchck cr
1546	18	69	306.2	-0.4	152.0		0		5447.62	15268.06	1172.75	tp14
1547	18	70	306.1	-0.4	151.9		0		5447.54	15267.79	1172.76	tp14
1548	19	1	155.2	-0.3	330.5		0		5447.58	15267.92	1172.75	tp14
1549	19	3	155.2	-0.3	330.5		0		5447.58	15267.92	1172.75	tp14
1550	19	4	3.4	1	292.2		0		5326.28	15859.58	1179.58	trail
1551	19	5	3.3	1.1	305.7		0		5326.55	15873.18	1180.36	trail
1552	19	6	1.3	1.5	323.1		0		5316.28	15890.95	1182.95	trail
1553	19	7	357.5	1.7	350.3		0		5293.67	15917.95	1184.88	trail
1554	19	8	355	2.5	388.8		2		5275.06	15955.29	1189.46	trail
1555	19	9	16.6	6.7	361.4		0		5412.20	15914.29	1216.94	trail
1556	19	10	357.3	2.7	392.6		0		5290.46	15960.07	1193.00	trail
1557	19	11	0.3	3.4	375.6		0		5310.92	15943.57	1196.80	trail
1558	-----	-----	0	0	0		0		#N/A	#N/A	#N/A	end 9/16/1998

Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
Survey has bad shots from stn 1 and 2 and 5 so they are unusable, start survey at station 6.											
279	6	5	128.9	0.8	446.96			11196.19	8289.73	379.41	lbf
280	6	6	128.9	0.8	446.96			11196.19	8289.73	379.41	lww
281	6	7	124.7	0.9	428.65			11200.76	8326.39	379.90	lac
282	6	8	114.6	-0.2	449.80		0.0	11257.32	8383.16	371.60	th
283	6	9	114.7	-0.8	449.76		0.8	11256.96	8382.47	366.89	th
284	6	10	114.9	-0.4	454.09		5.4	11260.23	8379.22	370.00	th
285	6	11	114.5	-0.7	438.77		21.0	11247.61	8388.45	367.81	th
286	6	12	115.3	-0.5	424.98		36.1	11232.57	8388.79	369.46	th
287	6	13	115.2	-0.2	425.10		36.1	11232.99	8389.41	371.68	ws
288	6	14	116.6	-0.7	403.47		59.6	11209.11	8389.75	368.24	th
289	6	15	116.7	-0.8	384.96		78.1	11192.26	8397.44	367.79	th
290	6	16	116.7	-0.3	384.69		78.1	11192.02	8397.56	371.15	ws
291	6	17	115.1	-0.6	372.58		94.4	11185.75	8412.36	369.27	th
292	6	18	114.1	-0.6	351.08		116.8	11168.83	8427.05	369.49	th
293	6	19	115.7	-0.6	322.68		146.7	11139.11	8430.47	369.79	th
294	6	20	115.5	-0.3	323.30		146.7	11140.15	8431.22	371.48	ws
295	6	21	116.4	-0.9	307.66		162.2	11123.93	8433.61	368.34	th
296	6	22	111.2	0.7	284.48			11113.58	8467.53	376.64	lbf
297	6	23	111.2	0.7	284.48			11113.58	8467.53	376.64	lac
298	6	24	111.2	0.7	284.48			11113.58	8467.53	376.64	lww
299	6	25	118.5	-1.2	275.14		196.4	11090.15	8439.12	367.41	th
300	6	26	118.9	-1.2	261.24		210.4	11077.06	8444.15	367.70	th
301	6	27	119.1	-0.7	261.18		210.4	11076.56	8443.39	369.98	ws
302	6	28	119.8	-1.4	253.52		219.1	11068.35	8444.41	366.97	th
303	6	29	119.8	-1.8	240.88		231.8	11057.38	8450.69	365.60	th
304	6	30	118.8	-1.6	232.91		240.8	11052.45	8458.20	366.66	th
305	6	31	118.3	-1.4	227.53		246.5	11048.69	8462.54	367.61	th
306	6	32	118.4	-1	224.77		246.5	11046.06	8463.50	369.25	ws
307	6	33	117.5	-1.9	216.18		258.3	11040.10	8470.59	366.00	th
308	6	34	117.1	-2.2	196.75		277.8	11023.50	8480.78	365.61	th
309	6	35	119.6	-2.5	174.83		301.1	11000.37	8484.05	365.54	th
310	6	36	119.6	-1.7	174.02		301.1	10999.66	8484.45	368.00	ws
311	6	37	119.6	-3.6	140.62		335.3	10970.62	8500.95	364.32	th
312	6	38	117.7	-3.9	120.92		355.5	10955.41	8514.20	364.93	th
313	6	39	122.3	-4.6	106.26		372.8	10938.16	8513.63	364.62	th
314	6	40	124.7	-4.2	99.63		380.7	10930.26	8513.69	365.85	th
315	6	41	126.3	-4.4	89.54		391.1	10920.51	8517.40	366.28	th
316	6	42	120.4	-4.8	85.90		400.8	10922.44	8526.94	365.96	th
317	6	43	114.6	-4.7	86.11		409.5	10926.64	8534.56	366.09	th
318	6	44	114.6	-3.3	86.06		409.5	10926.59	8534.58	368.21	ws
319	6	45	113.6	0.2	97.80			10937.97	8531.25	373.51	rx
320	6	46	108.2	-6.6	76.89		422.5	10921.39	8546.39	364.27	th
321	6	47	88.7	-8.4	64.30		449.4	10912.63	8571.87	363.67	th
322	6	48	71.9	-9.7	55.40		469.0	10901.00	8587.62	363.70	th
323	6	49	53.9	-10	53.18		486.1	10891.32	8601.74	363.79	th
324	6	50	30	-11.6	45.55		507.9	10871.12	8609.85	363.82	th
325	6	51	29.9	-6.5	45.80		507.9	10871.18	8610.11	367.95	ws
326	6	52	16.3	-8.4	58.47		525.7	10864.76	8626.52	364.54	th
327	6	53	10.3	-7.4	76.66		545.2	10862.06	8645.83	363.21	th
328	6	54	10.3	-7.4	76.66	-5	545.2	10862.06	8645.83	368.21	ws
329	6	55	8.4	-2.3	78.14			10859.76	8647.71	370.03	rbf
330	6	56	8.4	-2.3	78.14			10859.76	8647.71	370.03	rac
331	6	57	8.4	-2.3	78.14			10859.76	8647.71	370.03	rw
332	6	58	8.4	-2.3	78.14			10859.76	8647.71	370.03	bedrock
333	6	59	242.8	6	52.11			10802.00	8546.59	378.65	rbf
334	6	60	242.8	6	52.11			10802.00	8546.59	378.65	rac
335	6	61	242.8	6	52.11			10802.00	8546.59	378.65	rw
336	6	62	242.8	6	52.11			10802.00	8546.59	378.65	bdrx
337	6	63	355.7	-5.3	76.07		564.6	10842.64	8646.27	366.11	th
338	6	64	354.8	-5.7	89.36		578.0	10840.25	8659.39	364.25	th
339	6	65	344.6	-4.4	91.63		594.2	10824.02	8658.75	366.12	th

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
340	6	66	339.2	-4.1	93.56		603.2	10815.12	8657.87	366.46	th
341	6	67	338.1	-4.5	109.46		619.2	10807.52	8671.97	364.55	th
342	6	68	338	-2.8	109.37		619.2	10807.38	8671.81	367.82	ws
343	6	69	337.8	-4	122.50		632.2	10802.06	8683.83	364.60	th
344	6	70	337.6	-3.7	131.72		641.5	10798.15	8692.19	364.65	th
345	6	71	337.8	-2.7	141.94		651.7	10794.72	8701.83	366.47	th
346	6	72	338.8	-3	150.19		660.3	10794.03	8710.44	365.30	th
347	6	73	347.2	1	143.28			10816.61	8710.12	375.67	bdrx nose
348	6	74	341.1	-2.3	162.57		674.2	10795.69	8724.21	366.64	th
349	6	75	341.2	-1.8	162.72		674.2	10795.91	8724.44	368.05	ws
350	6	76	341.5	-2.1	183.48		695.2	10790.13	8744.40	366.44	th
351	6	77	341.8	-2.7	205.67		717.4	10784.11	8765.79	363.47	th
352	6	78	341.7	-1.5	205.43		717.4	10783.85	8765.45	367.79	ws
353	6	79	341.2	-1.8	222.69		734.5	10776.58	8781.22	366.17	th
354	6	80	339.5	-1.7	239.19		752.4	10764.58	8794.45	366.07	th
355	6	81	339.3	-1.5	249.41		762.7	10760.19	8803.72	366.64	th
356	6	82	338.2	-1.2	262.74		776.9	10750.77	8814.36	367.66	th
357	6	83	337.6	-0.8	277.57		792.0	10742.57	8827.04	369.29	th
358	6	84	340.7	-1.6	265.20			10760.70	8820.70	365.76	tp6r
359	6	85	340.7	-1.6	265.20			10760.70	8820.70	365.76	tp6r
360	6	86	340.7	-1.6	265.20			10760.70	8820.70	365.76	tp6r
361	6	87	327.2	-1.8	195.70			10742.33	8734.91	367.02	tp6l
362	6	88	327.3	-1.7	195.81			10742.56	8735.19	367.36	tp6l
363	7	1	151	-0.2	294.40			10743.53	8735.41	367.44	tp6l
364	7	2	151.1	-0.2	294.50			10743.13	8735.08	367.44	tp6l
365	7	3	137.3	-0.7	234.68			10759.96	8820.43	365.60	tp6r
366	7	4	137.2	-0.7	234.68			10760.26	8820.71	365.60	tp6r
367	7	5	89.8	5.4	34.75			10635.55	8993.02	371.75	lbf
368	7	6	89.8	5.4	34.75			10635.55	8993.02	371.75	lac
369	7	7	89.8	5.4	34.75			10635.55	8993.02	371.75	lvw
370	7	8	127.5	3.7	205.17			10763.58	8868.00	381.73	lbf
371	7	9	186.5	1.2	88.28			10590.81	8905.19	370.31	rbf
372	7	10	186.5	1.2	88.28			10590.81	8905.19	370.31	rac
373	7	11	160.8	0.6	229.49			10676.28	8776.18	370.87	rac
374	7	12	164.5	2.3	231.61			10662.70	8769.71	377.77	lbf
375	7	13	142.9	-0.9	231.87		811.1	10740.67	8807.96	364.82	th
376	7	14	142.6	-0.1	231.70		811.1	10741.53	8808.83	368.06	ws
377	7	15	141.1	-0.5	203.19		840.6	10728.40	8834.77	366.69	th
378	7	16	140.7	-0.9	188.28		855.6	10720.06	8847.20	365.51	th
379	7	17	141.2	-1.2	179.76		864.3	10713.44	8852.81	364.70	th
380	7	18	142.5	-0.8	166.68		877.9	10702.28	8860.66	366.14	th
381	7	19	145.6	0	159.70		889.2	10691.03	8861.13	368.46	th
382	7	20	150.2	-1.3	143.36		909.5	10672.05	8868.49	365.21	th
383	7	21	155.3	-1.1	122.68		933.3	10652.07	8881.45	366.11	th
384	7	22	155.5	-0.1	122.80		933.3	10651.73	8881.16	368.25	ws
385	7	23	160.7	-1.3	113.47		947.8	10638.31	8885.81	365.89	th
386	7	24	167.2	-1.2	102.58		964.1	10623.53	8892.87	366.31	th
387	7	25	172	-0.6	92.89		976.8	10613.73	8900.91	367.49	th
388	7	26	174.4	-2.2	83.74		986.7	10608.98	8909.56	365.25	th
389	7	27	183.1	-3.3	77.47		1000.4	10596.62	8915.54	364.00	th
390	7	28	190.9	-2	60.96		1019.4	10589.28	8933.04	366.33	th
391	7	29	210.7	-2.1	45.07		1043.4	10577.80	8954.15	366.81	th
392	7	30	210.6	-0.4	45.60		1043.4	10577.59	8953.65	368.14	ws
393	7	31	232.7	1.8	79.96			10537.20	8944.44	370.98	lbf
394	7	32	233.2	4.9	89.07			10529.48	8939.54	376.10	lvw
395	7	33	266.2	-1.9	32.58		1081.2	10568.30	8990.74	367.38	th
396	7	34	282.1	-0.8	57.79		1109.2	10544.30	9005.01	367.66	th
397	7	35	287.9	-0.6	95.99		1148.1	10509.46	9022.40	367.46	th
398	7	36	284.5	-1.7	107.45		1161.0	10496.78	9019.80	365.27	th
399	7	37	292.2	-1.2	118.87		1180.0	10490.74	9037.82	365.97	th
400	7	38	292.4	-0.1	119.60		1180.0	10490.23	9038.48	368.25	ws
401	7	39	297.8	-1.2	133.97		1199.5	10482.30	9055.38	365.66	th

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
402	7	40	301.9	-1.4	146.26		1215.4	10476.64	9070.19	364.89	th
403	7	41	305	-1.5	154.55		1227.0	10474.21	9081.54	364.42	th
404	7	42	307.7	-1.6	161.24		1237.0	10473.23	9091.50	363.96	th
405	7	43	307.5	-1.9	169.41		1245.2	10466.41	9096.03	362.84	th
406	7	44	307.5	-1.9	169.41	-5	1245.2	10466.41	9096.03	367.84	ws
407	7	45	307.1	-0.6	175.89		1251.8	10460.52	9099.00	366.62	th
408	7	46	307.9	-0.5	183.59		1259.9	10455.94	9105.68	366.86	th
409	7	47	311.8	1	183.87	3.71	1272.4	10463.73	9115.46	367.96	th
410	7	48	316.9	1.4	196.44	3.71	1293.5	10466.58	9136.33	369.55	th
411	7	49	321.2	0.3	217.30	3.71	1319.4	10464.65	9162.25	365.89	th
412	7	50	321.1	0.8	217.48	3.71	1319.4	10464.24	9162.15	367.79	ws
413	7	51	322	-0.7	225.48		1328.2	10461.98	9170.58	365.71	th
414	7	52	311.5	0.9	246.57			10416.14	9156.28	372.34	lac
415	7	53	308.4	2.3	246.10			10407.94	9145.77	378.35	lbf
416	7	54	307.6	3.6	250.60			10402.25	9145.80	384.23	lww
417	7	55	338.2	-0.3	191.70			10529.62	9170.89	367.46	rbf
418	7	56	338.2	-0.3	191.70			10529.62	9170.89	367.46	rac
419	7	57	338.2	-0.3	191.70			10529.62	9170.89	367.46	rw
420	7	58	323.1	-0.1	230.00		1334.5	10462.71	9176.83	368.06	th
421	7	59	322.6	0	240.70		1345.4	10454.61	9184.12	368.46	th
422	7	60	323.9	0.3	256.40		1362.1	10449.74	9200.07	369.81	th
423	7	61	323.9	0	256.60		1362.1	10449.62	9200.23	368.46	ws
424	7	62	322.8	-0.3	279.30		1385.5	10431.94	9215.37	367.00	th
425	7	63	322.3	-0.7	287.98		1394.5	10424.70	9220.76	364.94	th
426	7	64	323.9	-1	298.95		1408.2	10424.66	9234.45	363.24	th
427	7	65	324.7	-0.9	312.06		1422.0	10420.48	9247.58	363.56	th
428	7	66	326	-0.9	323.06		1435.2	10420.15	9260.73	363.39	th
429	7	67	328.4	-1	328.65		1449.9	10428.60	9272.82	362.73	th
430	7	68	328.5	-1	333.55		1454.9	10426.53	9277.30	362.64	th
431	7	69	329.8	-0.8	340.17		1465.0	10429.70	9286.90	363.71	th
432	7	70	330.1	-0.2	342.90			10429.88	9290.16	367.27	tp7l
433	7	71	330	-0.2	343.00			10429.31	9289.94	367.27	tp7l
434	7	72	337.8	-0.8	192.18			10528.19	9170.83	365.78	tp7r
435	7	73	337.9	-0.6	192.09			10528.54	9170.88	366.45	tp7r
436	8	1	145.8	-0.4	434.39			10528.96	9170.82	365.91	tp7r
437	8	2	145.8	-0.4	434.19			10528.84	9170.98	365.91	tp7r
438	8	3	149	-0.3	280.00			10429.00	9290.09	367.47	tp7l
439	8	4	149	-0.3	280.20			10429.11	9289.92	367.47	tp7l
440	8	5	149.1	0.2	274.40			10425.71	9294.64	369.90	lbf
441	8	6	149.1	0.2	274.40			10425.71	9294.64	369.90	lac
442	8	7	149.1	0.2	274.40			10425.71	9294.64	369.90	lww
443	8	8	149.1	0.2	274.40			10425.71	9294.64	369.90	bdrx
444	8	9	132.2	0.6	319.28			10521.32	9315.63	372.28	rac
445	8	10	130.9	1.4	327.20			10532.11	9315.86	376.94	rbf
446	8	11	148.1	-0.2	274.90		1473.9	10430.06	9296.71	367.98	ws
447	8	12	148.8	-1.2	274.34		1473.9	10426.91	9295.43	363.19	th
448	8	13	150.1	-1.2	266.04		1484.3	10417.41	9299.46	363.37	th
449	8	14	150.6	-1.2	250.65		1499.8	10407.84	9311.73	363.69	th
450	8	15	149.2	0.4	241.69		1510.6	10408.55	9322.49	370.63	th
451	8	16	144	-0.9	227.77		1536.0	10418.68	9345.82	365.36	th
452	8	17	138.4	-0.8	213.48		1561.9	10426.53	9370.45	365.96	th
453	8	18	134.7	-0.8	207.28		1576.8	10432.13	9384.29	366.05	th
454	8	19	132.8	-0.7	190.39		1595.0	10424.49	9400.74	366.61	th
455	8	20	129.1	-1.3	175.35		1614.1	10420.88	9419.50	364.96	th
456	8	21	128.9	-0.2	175.10		1614.7	10421.06	9420.14	368.33	th
457	8	22	126.8	-1.6	151.34		1639.2	10405.98	9439.44	364.71	th
458	8	23	125.6	-2	128.72		1662.0	10389.46	9455.16	364.45	th
459	8	24	120.4	-2.8	111.17		1682.7	10380.68	9473.84	363.50	th
460	8	25	117.5	-2.2	101.33		1693.9	10374.67	9483.31	365.05	th
461	8	26	112	-1.7	87.26		1710.6	10365.70	9497.41	366.35	th
462	8	27	100.3	-1.9	77.56		1730.0	10361.10	9516.23	366.37	th
463	8	28	91.3	-2.1	68.35		1744.6	10353.13	9528.54	366.43	th

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
464	8	29	84.1	-2.1	61.36		1755.4	10345.83	9536.40	366.69	th
465	8	30	73.4	-3.8	47.00		1772.9	10329.83	9543.52	365.82	th
466	8	31	69	-3.8	41.01		1779.7	10323.08	9544.79	366.22	th
467	8	32	69	-3.8	41.01		#N/A	10323.08	9544.79	366.22	ws err
468	8	33	34.8	-1.6	37.99		1803.2	10306.47	9561.29	367.88	th
469	8	34	12.2	-2.6	46.55		1821.7	10294.63	9575.59	366.83	th
470	8	35	353	-5	51.70		1838.9	10278.49	9581.41	364.42	th
471	8	36	347.7	-4	57.66		1846.7	10272.51	9586.43	364.91	th
472	8	37	342.5	-2.6	84.91		1874.7	10259.26	9611.08	365.08	th
473	8	38	344	-0.6	111.49		1901.4	10254.06	9637.27	367.77	th
474	8	39	285.5	1.1	89.88			10198.18	9554.11	370.67	lac
475	8	40	281.5	4.9	101.83			10185.01	9550.39	377.67	lbf
476	8	41	279.9	6.4	123.03			10163.60	9551.25	382.74	lvw
477	8	42	26.2	1.5	133.35			10343.67	9649.75	372.43	rac
478	8	43	26.3	2.8	137.54			10345.73	9653.39	375.67	rbf
479	8	44	26.9	4.6	140.05			10348.16	9654.99	380.21	rw
480	8	45	359.2	-1.5	106.36		1930.6	10283.31	9636.45	366.15	th
481	8	46	359.1	-0.3	106.40		1930.6	10283.12	9636.48	368.38	ws
482	8	47	356.5	-2.2	121.61		1946.8	10277.37	9651.48	364.27	th
483	8	48	354.2	-1	135.38		1961.5	10271.11	9664.78	366.58	th
484	8	49	348.3	-0.8	166.58		1996.3	10251.01	9693.22	366.61	th
485	8	50	344.1	1.1	187.87		2021.2	10233.33	9710.77	372.55	th
486	8	51	341.5	3.4	204.14	11.44	2039.8	10220.02	9723.68	369.63	th
487	8	52	340	3.7	231.22	11.44	2067.4	10205.71	9747.37	372.45	th
488	8	53	339.4	-0.3	252.40		2088.8	10195.99	9766.35	367.62	th
489	8	54	352.9	0.9	261.47			10252.48	9789.56	373.05	tp8r
490	8	55	353.1	2.2	261.21			10253.41	9789.41	378.97	tp8r
491	8	56	322.9	2.3	198.64			10164.97	9688.53	376.92	tp8l
492	8	57	322.9	1.4	198.64			10164.97	9688.53	373.79	tp8l
493	8	58	352.9	0.9	261.47			10252.48	9789.56	373.05	tp8r
494	9	1	147	1.1	293.85			10254.50	9789.16	375.35	tp8r
495	9	2	147.1	1	293.86			10254.08	9788.87	374.84	tp8r
496	9	3	168.5	0.9	353.06			10164.85	9689.63	375.25	tp8l
497	9	4	169.2	0.9	352.96			10160.60	9688.89	375.25	tp8l
498	9	5	171.8	0.5	332.39			10141.87	9706.61	372.61	lac
499	9	6	174.4	1.2	331.43			10126.80	9705.75	376.65	lbf
500	9	7	167.4	0.1	327.80		2147.0	10165.97	9715.69	370.28	ws
501	9	8	167.3	-0.5	327.39		2147.0	10166.44	9716.22	366.85	th
502	9	9	165.4	-0.5	305.69		2171.1	10171.52	9739.78	367.04	th
503	9	10	168.3	-0.5	237.59		2240.5	10142.64	9802.95	367.63	th
504	9	12	171.7	-0.4	213.99		2267.6	10125.35	9823.85	368.21	th
505	9	13	175.7	-0.5	189.59		2295.8	10108.68	9846.54	368.05	th
506	9	14	179.3	-0.7	168.29		2319.9	10096.52	9867.32	367.65	th
507	9	15	185.5	-0.7	154.29		2342.2	10079.67	9882.02	367.82	th
508	9	16	185.6	0	154.50		2342.2	10079.38	9881.84	369.71	ws
509	9	17	191.5	-0.7	144.19		2360.8	10065.71	9894.30	367.95	th
510	9	18	194.7	-1.2	142.47		2369.0	10058.31	9897.79	366.72	th
511	9	19	199.6	-1.7	135.64		2382.7	10048.96	9907.82	365.68	th
512	9	20	203.4	-1.8	123.74		2397.4	10045.32	9922.04	365.82	th
513	9	21	209.4	-1.6	113.46		2413.5	10038.77	9936.76	366.54	th
514	9	22	217.9	-1.4	104.47		2432.0	10030.29	9953.16	367.15	th
515	9	23	225.3	-1.6	90.76		2450.6	10029.95	9971.76	367.17	th
516	9	24	242.2	-3.1	90.77		2477.3	10014.17	9993.27	364.79	th
517	9	25	249.4	0.5	100.80			10000.11	10000.14	370.59	usgs bm
518	9	26	249.4	0.6	100.99			9999.92	10000.07	370.76	usgs bm
519	9	27	249.3	0.3	100.90			10000.08	9999.93	370.24	usgs bm
520	9	28	246.9	7.7	129.32		0.0	9975.51	9984.86	387.19	gs
521	9	29	247.2	6.8	128.19		1.3	9976.29	9985.92	384.99	gs
522	9	30	246.7	6.7	127.23		2.8	9977.61	9985.28	384.65	gs
523	9	31	246.8	6.4	127.10		3.1	9977.64	9985.53	383.96	gs
524	9	32	246.7	5	126.92	-5		9977.90	9985.40	385.81	xs1 p1
525	9	33	246.8	4.9	127.23	-5	2.6	9977.52	9985.48	385.61	xs1 p1

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
526	9	34	246.8	6.3	126.73		3.5	9977.98	9985.68	383.70	gs
527	9	35	246.8	5.9	125.53		4.7	9979.08	9986.15	382.68	gs
528	9	36	246.8	5.7	123.69		6.5	9980.78	9986.87	382.05	bdrc
529	9	37	245.9	5.3	120.18		13.1	9984.75	9986.52	380.86	bdrc
530	9	38	246.3	4.2	118.38		15.1	9986.06	9988.02	378.40	bdrc
531	9	39	246.2	2.3	114.71		18.7	9989.51	9989.31	374.31	bdrc
532	9	40	246.4	2.2	113.42		20.1	9990.53	9990.19	374.06	gs
533	9	41	246.4	2.1	111.62		21.9	9992.17	9990.91	373.80	gs
534	9	42	246.4	2.1	110.63		22.9	9993.09	9991.31	373.76	gs
535	9	43	246.4	2.2	110.52			9993.19	9991.35	373.95	xs1 p2
536	9	44	246.2	2.2	110.72			9993.16	9990.92	373.96	xs1 p2
537	9	45	246.3	2.1	110.63		23.1	9993.17	9991.13	373.76	gs
538	9	46	246.4	2	108.83		27.8	9994.73	9992.03	373.51	gs
539	9	47	246.2	1.4	106.07		30.6	9997.41	9992.80	372.30	bdrc
540	9	48	246	2.1	104.03		32.6	9999.42	9993.29	373.52	bdrc
541	9	49	246	2.9	99.97		36.7	10003.13	9994.94	374.77	bdrc
542	9	50	246	2.3	98.22		38.4	10004.73	9995.65	373.65	bdrc
543	9	51	245.6	2.5	94.21		42.5	10008.67	9996.68	373.82	bdrc
544	9	52	245.5	1.1	92.98		43.8	10009.85	9997.04	371.49	bdrc
545	9	53	245.7	0.4	92.50		44.3	10010.16	9997.54	370.35	bdrc
546	9	54	245.7	-0.2	92.20		44.6	10010.43	9997.66	369.39	lew
547	9	55	245.7	-1.8	92.35		44.5	10010.29	9997.59	366.80	bdrc
548	9	56	245.6	-2.7	90.90		45.9	10011.68	9998.05	365.42	bdrc
549	9	57	245.2	-2.7	89.20		47.8	10013.49	9998.18	365.50	gs
550	9	58	244.3	-2.4	84.13		53.0	10018.66	9999.12	366.18	gs
551	9	59	243.9	-1.7	80.96		56.2	10021.75	9999.98	367.30	gs
552	9	60	243.7	-1.8	80.26		57.0	10022.51	10000.04	367.18	bdrc
553	9	61	243.4	-1.2	77.28		60.0	10025.36	10001.00	368.09	bdrc
554	9	62	242.5	-1.7	75.07		62.5	10027.88	10000.94	367.48	bdrc
555	9	63	245.3	2.1	110.63		25.0	9993.96	9989.37	373.76	lac
556	9	64	247.1	4.5	119.73		10.5	9984.17	9989.01	379.13	lbf
557	9	65	241.8	-1.7	71.87		65.8	10031.12	10001.64	367.57	gs
558	9	66	239.6	-1.4	61.68		76.3	10041.26	10004.39	368.20	gs
559	9	67	237.8	-1.3	52.99		85.2	10049.62	10007.36	368.50	gs
560	9	68	234.1	-1.3	41.99		96.6	10060.45	10010.98	368.75	gs
561	9	69	225.3	-1.1	29.09		110.6	10073.78	10015.13	369.15	gs
562	9	70	200.8	-1.1	16.40		126.3	10088.64	10020.27	369.39	gs
563	9	71	177.2	-0.3	12.90		133.2	10095.09	10022.72	369.64	rew
564	9	72	159.9	-0.6	12.50		137.0	10098.76	10023.86	369.58	gs
565	9	73	130	-0.6	14.90		144.5	10105.87	10026.02	369.55	lew
566	9	74	111.7	-0.5	21.40		153.1	10114.34	10027.69	369.52	gs
567	9	75	100.2	-1.1	30.69		163.7	10124.67	10030.16	369.12	gs
568	9	76	91.2	-0.9	41.59		176.0	10136.05	10034.73	369.05	gs
569	9	77	86.8	-0.8	54.89		189.8	10149.27	10038.66	368.94	gs
570	9	78	84.6	-1.2	65.99		201.1	10160.15	10041.81	368.32	gs
571	9	79	83.3	-1.6	73.47		208.8	10167.43	10044.17	367.65	gs
572	9	80	82.9	-1.1	80.39		215.7	10174.23	10045.54	368.16	gs
573	9	81	82.4	-0.7	85.89		221.3	10179.60	10046.96	368.66	gs
574	9	82	82.6	-0.2	86.30		221.8	10180.04	10046.71	369.41	rew
575	9	83	81.9	0.4	88.60		224.3	10182.17	10048.08	370.33	gs
576	9	84	81	1.6	91.86		227.9	10185.19	10049.97	372.27	gs
577	9	85	80.7	2	94.94		231.0	10188.16	10050.94	373.02	gs
578	9	86	79.9	2.7	99.19		235.4	10192.11	10052.99	374.38	rac
579	9	87	79.7	3	101.16		237.4	10193.99	10053.69	375.01	gs
580	9	88	79.6	3.9	102.36		238.7	10195.14	10054.08	376.69	gs
581	9	89	79.5	4	105.34		241.6	10198.04	10054.80	377.07	gs
582	9	90	79.5	4.4	106.19		242.5	10198.87	10054.95	377.88	gs
583	9	91	79.2	4.3	107.30		243.7	10199.86	10055.71	377.77	gs
584	9	92	79.4	2.6	107.49	-5	244.1	10200.12	10055.37	379.59	xs1 p3
585	9	93	79.4	2.8	107.77	-5		10200.39	10055.42	379.98	xs1 p3
586	9	94	79.2	4.2	107.61		244.5	10200.17	10055.76	377.61	gs
587	9	95	79.2	4.3	109.19		246.1	10201.72	10056.06	377.92	gs



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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
588	9	96	79.3	4.5	111.95		248.9	10204.47	10056.39	378.52	bdrc
589	9	97	79.4	4.5	114.15		251.1	10206.66	10056.60	378.69	bdrc
590	9	98	79.5	4.6	116.32		253.3	10208.84	10056.80	379.07	bdrc
591	9	99	79.5	4.5	116.94		253.9	10209.44	10056.91	378.91	gs
592	9	100	79.2	4.7	120.99		258.0	10213.31	10058.27	379.65	gs
593	9	101	78.5	4.6	130.98		268.1	10222.81	10061.71	380.25	gs
594	9	102	78.1	4.5	138.17		275.4	10229.66	10064.09	380.58	gs
595	9	103	77.8	4.6	145.33		282.5	10236.51	10066.31	381.40	gs
596	9	104	77.6	5	149.63		286.9	10240.60	10067.73	382.80	gs
597	9	105	77.6	4.8	150.27		287.5	10241.23	10067.87	382.33	gs
598	9	106	77.6	5.3	150.65		287.9	10241.60	10067.95	383.68	gs
599	9	107	77.7	5.4	151.33		288.6	10242.31	10067.84	384.01	gs
600	9	108	77.5	5.4	152.12		289.6	10242.98	10068.52	384.09	gs
601	9	109	77.6	5.4	152.52		290.1	10243.42	10068.35	384.12	gs
602	9	110	77.5	3.7	152.88	-5	290.5	10243.72	10068.69	384.59	xs1 p4
603	9	111	77.5	3.7	152.88	-5		10243.72	10068.69	384.59	xs1 p4
604	9	112	77.6	5.4	153.02		290.8	10243.91	10068.46	384.17	gs
605	9	113	77.5	5.5	155.28		293.1	10246.06	10069.21	384.66	gs
606	9	114	77.7	5.4	159.19		297.0	10250.00	10069.51	384.75	gs
607	9	115	50.3	4.6	180.42			10233.27	10150.84	384.22	bt2
608	9	116	50.2	4	180.56			10233.18	10151.18	382.33	bt2
609	9	117	55.8	4.9	177.85			10241.56	10135.56	384.95	rwv
610	9	118	56.5	6.2	189.19			10252.22	10140.02	390.26	vw
611	9	119	71.1	8.7	201.16			10284.77	10100.76	400.49	gs
612	9	120	77.7	9.4	208.07		350.1	10297.75	10079.92	404.15	gs
613	9	121	77.6	10.1	216.49		358.6	10305.90	10082.09	408.27	gs
614	9	122	77.9	10.2	217.43		314.5	10263.06	10071.74	400.73	gs
615	9	123	79.5	9.6	161.41		302.5	10253.17	10065.01	397.01	gs
616	9	124	12	1.7	306.07			10158.10	10334.98	378.79	xs2 p4
617	9	125	12	1.6	306.28			10158.14	10335.19	378.26	xs2 p4
618	9	126	314.6	1.4	306.41			9876.29	10250.75	377.20	xs2 p1
619	9	127	314.5	1.2	306.53			9875.83	10250.45	376.13	xs2 p1
620	10	1	191.7	0.7	291.68	0		9989.46	9991.09	370.76	usgs bm
621	10	2	191.6	0.7	291.78	0		9989.94	9990.89	370.76	usgs bm
622	10	3	190.4	-0.1	281.70	-5		9997.76	9999.64	371.70	xs1 p2
623	10	4	190.5	-0.1	281.70	-5		9997.28	9999.73	371.70	xs1 p2
624	10	5	187.7	-1	287.36	0	2481.5	10010.11	9991.94	362.18	th
625	10	6	187.6	-0.2	287.80		2481.5	10010.55	9991.44	366.19	ws
626	10	7	187.5	-0.8	282.57		2486.4	10011.73	9996.55	363.25	th
627	10	8	187.5	-0.7	274.68		2494.3	10012.76	10004.38	363.84	th
628	10	9	187.5	-0.8	266.97		2502.0	10013.76	10012.02	363.46	th
629	10	10	188.4	-0.7	257.18		2512.6	10011.04	10022.29	364.05	th
630	10	11	189.2	-0.8	247.58		2522.9	10009.03	10032.32	363.74	th
631	10	12	189.9	-0.8	237.08		2533.8	10007.85	10043.16	363.88	th
632	10	13	191	-0.6	222.09		2549.4	10006.24	10058.70	364.87	th
633	10	14	192.3	-1	209.77		2562.7	10003.92	10071.76	363.53	th
634	10	15	194.1	-1.1	201.26		2573.3	9999.58	10081.51	363.33	th
635	10	16	195.6	-1.3	195.35		2581.2	9996.08	10088.55	362.76	th
636	10	17	196.4	-1.5	188.94		2588.2	9995.27	10095.46	362.25	th
637	10	18	197.5	-1.5	181.54		2596.4	9994.02	10103.57	362.44	th
638	10	19	198.9	-1.4	173.05		2605.9	9992.56	10112.99	362.96	th
639	10	20	199	-0.3	173.50		2605.9	9992.13	10112.66	366.28	ws
640	10	21	201	-1.4	161.75		2618.7	9990.64	10125.70	363.24	th
641	10	22	205.1	-1.4	147.16		2637.0	9986.19	10143.45	363.60	th
642	10	23	210.3	-1.4	134.86		2654.8	9980.57	10160.27	363.90	th
643	10	24	216.9	-1.5	123.76		2673.3	9974.30	10177.74	363.95	th
644	10	25	224.3	-1.5	115.86		2690.7	9967.69	10193.79	364.16	th
645	10	26	243.6	-1.5	104.06		2729.4	9955.40	10230.44	364.47	th
646	10	27	254.4	-1.5	104.96		2749.0	9947.51	10248.48	364.44	th
647	10	28	254.4	-0.7	105.29		2749.0	9947.20	10248.39	365.91	ws
648	10	29	255.6	-0.8	125.59		2769.8	9926.97	10245.48	365.44	th
649	10	30	256	-0.9	134.28		2778.6	9918.32	10244.22	365.08	th

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
650	10	31	256.3	-0.9	139.98		2784.3	9912.61	10243.55	364.99	th
651	10	32	256.9	-1.1	145.97		2790.5	9906.44	10243.62	364.39	th
652	10	33	260.6	-1.1	149.77		2800.7	9900.85	10252.25	364.32	th
653	10	34	263.7	-1.1	151.07		2809.0	9898.45	10260.13	364.29	th
654	10	35	263	4.1	182.03		0.0	9867.94	10254.52	380.24	vw
655	10	36	262.9	3.6	180.34		1.7	9869.65	10254.42	378.54	gs
656	10	37	262.7	3.1	179.04		3.2	9871.03	10253.96	376.89	gs
657	10	38	262.6	3	177.16		5.1	9872.93	10253.89	376.48	lbf
658	10	39	262.4	1.2	174.36		7.9	9875.78	10253.65	370.85	gs
659	10	40	262.3	1.1	171.97		10.3	9878.19	10253.67	370.49	gs
660	10	41	262.3	1.9	171.41	-5		9878.75	10253.74	377.88	xs2 p1
661	10	42	262.2	1.9	171.41	-5		9878.79	10253.45	377.88	xs2 p1
662	10	43	262.4	0.7	170.49		11.9	9879.62	10254.16	369.28	gs
663	10	44	262.3	2.1	168.79		13.6	9881.35	10254.09	373.38	gs
664	10	45	262.2	1.9	167.31		15.1	9882.85	10254.00	372.74	gs
665	10	46	262.3	1.6	165.54		16.9	9884.57	10254.53	371.82	gs
666	10	47	262.4	1.3	164.06		18.4	9885.99	10255.01	370.92	gs
667	10	48	262.5	1.2	162.66		19.8	9887.34	10255.48	370.60	gs
668	10	49	262.5	1.2	162.76		19.9	9887.24	10255.46	370.60	gs
669	10	50	262.7	1.1	161.27		21.5	9888.65	10256.22	370.29	gs
670	10	51	262.8	-0.6	160.59	-5	22.2	9889.29	10256.58	370.51	xs2 p2
671	10	52	262.7	-0.6	160.59	-5		9889.32	10256.30	370.51	xs2 p2
672	10	53	262.8	0.9	159.88		23.0	9889.99	10256.67	369.70	gs
673	10	54	262.8	0.5	158.69		24.1	9891.17	10256.82	368.58	lac
674	10	55	262.7	0.3	156.80		26.1	9893.08	10256.78	368.01	gs
675	10	56	262.8	-0.2	155.00		27.9	9894.83	10257.28	366.65	gs
676	10	57	262.9	-0.6	153.39		29.5	9896.40	10257.75	365.59	gs
677	10	58	263.1	-0.8	152.49		30.6	9897.23	10258.39	365.06	lew
678	10	59	263	-1.1	151.57		31.5	9898.17	10258.24	364.28	gs
679	10	60	263.1	-1	148.78		34.3	9900.91	10258.83	364.60	gs
680	10	61	263.1	-0.7	146.59		36.5	9903.08	10259.10	365.40	gs
681	10	62	263.2	-0.7	145.09		38.0	9904.54	10259.53	365.42	gs
682	10	63	263.3	-0.4	143.60		39.5	9906.00	10259.95	366.19	gs
683	10	64	262.6	-0.8	146.89		43.3	9902.95	10257.79	365.14	rew
684	10	65	263.1	-0.2	139.30		51.0	9910.32	10259.97	366.71	gs
685	10	66	263.2	-0.4	134.20		56.1	9915.36	10260.82	366.26	gs
686	10	67	263.7	-0.5	130.50		60.0	9918.90	10262.39	366.05	lew
687	10	68	263.9	-0.7	125.59		64.9	9923.73	10263.36	365.66	gs
688	10	69	264.5	-0.9	119.19		71.4	9929.97	10265.28	365.32	gs
689	10	70	265.5	-1.1	110.38		80.4	9938.57	10268.05	365.07	gs
690	10	71	266.4	-1.2	100.78		90.2	9948.03	10270.38	365.08	gs
691	10	72	268.1	-1.3	90.28		101.1	9958.38	10273.71	365.14	gs
692	10	73	270.8	-1.2	78.08		113.9	9970.54	10277.80	365.56	gs
693	10	74	273.9	-1	66.49		126.1	9982.28	10281.23	366.03	rew
694	10	75	277.5	-0.9	58.39		135.1	9990.72	10284.33	366.28	gs
695	10	76	284.2	-0.4	47.50		147.6	10002.56	10288.36	366.86	gs
696	10	77	293.5	-0.1	37.80		159.5	10013.95	10291.78	367.13	gs
697	10	78	312.8	-0.2	27.70		174.3	10028.29	10295.53	367.10	gs
698	10	79	339.8	-1	23.00		187.0	10040.67	10298.29	366.79	gs
699	10	80	17.8	-1.7	26.49		203.5	10056.71	10301.93	366.41	gs
700	10	81	30.6	-1.9	31.18		211.4	10064.48	10303.55	366.16	gs
701	10	82	38.7	-2	35.38		217.7	10070.73	10304.32	365.96	lew
702	10	83	45.5	-2.1	41.67		225.5	10078.33	10305.92	365.66	gs
703	10	84	50.5	-2.4	50.46		235.1	10087.54	10308.80	365.08	gs
704	10	85	53.2	-2.5	59.54		244.6	10096.29	10312.38	364.59	gs
705	10	86	54.8	-2.5	63.54		248.9	10100.53	10313.33	364.42	gs
706	10	87	56.7	-2.4	69.44		255.2	10106.65	10314.83	364.28	gs
707	10	88	58	-2.1	73.35		259.4	10110.82	10315.58	364.50	gs
708	10	89	58.5	-1.7	74.57		260.8	10112.19	10315.67	364.98	gs
709	10	90	58.9	-0.9	75.99		262.3	10113.68	10315.96	366.00	rew
710	10	91	58.3	0.1	79.80		266.2	10116.51	10318.64	367.33	gs
711	10	92	59.4	0.7	81.09		268.3	10118.41	10317.99	368.18	gs

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
712	10	93	59.5	0.9	83.59		270.7	10120.63	10319.13	368.51	gs
713	10	94	59.9	1.3	84.58	0	271.9	10121.78	10319.12	369.11	xs2 p3
714	10	95	59.9	1.3	84.88	0		10122.04	10319.28	369.12	xs2 p3
715	10	96	60	1	85.09		272.4	10122.30	10319.25	368.68	gs
716	10	97	60.4	3	87.58	3.71	275.0	10124.76	10319.97	368.07	rac
717	10	98	61.3	3.3	93.54	3.71	281.1	10130.66	10321.63	368.88	gs
718	10	99	60.9	1.6	96.46	0	284.1	10132.90	10323.62	369.89	rbf
719	10	101	60.9	3	98.37		286.0	10134.56	10324.55	372.35	bdrc
720	10	102	60.8	4.4	100.20		287.9	10136.08	10325.59	374.90	bdrc
721	10	103	60.9	4.5	102.68		290.4	10138.33	10326.65	375.27	bdrc
722	10	104	61.3	5.6	105.30		293.1	10140.97	10327.27	377.52	bdrc
723	10	105	62.1	5.4	108.42		296.5	10144.43	10327.44	377.44	bdrc
724	10	106	62.8	6.2	111.15		299.6	10147.47	10327.51	379.27	bdrc
725	10	107	63.2	5.4	113.39		301.9	10149.83	10327.84	377.91	bdrc
726	10	108	63.1	4.7	115.01		303.6	10151.18	10328.74	376.65	gs
727	10	109	63.5	4.6	119.51		308.2	10155.57	10330.03	376.81	gs
728	10	110	63.9	4.5	123.62		312.3	10159.62	10331.09	376.92	gs
729	10	111	63.9	4.7	125.28		314.0	10161.11	10331.82	377.49	gs
730	10	112	63.7	4.8	125.76		314.7	10161.35	10332.43	377.75	gs
731	10	113	63.5	5.5	125.72	0		10161.12	10332.80	379.30	xs2 p4
732	10	114	63.8	5.5	125.92	0		10161.59	10332.30	379.32	xs2 p4
733	10	115	63.6	5.2	126.38		315.3	10161.81	10332.90	378.69	gs
734	10	116	63.7	5.3	128.35		317.3	10163.67	10333.58	379.10	gs
735	10	117	64	5.5	129.60		318.7	10165.10	10333.52	379.67	gs
736	10	118	64	6.2	129.34		319.0	10164.86	10333.41	381.24	bdrc
737	10	119	64.4	7.6	132.33		322.1	10167.95	10333.88	384.85	bdrc
738	10	120	64.4	7.9	135.20		325.0	10170.54	10335.13	385.95	bdrc
739	10	121	64.5	8.8	139.34		329.1	10174.38	10336.70	388.76	bdrc
740	10	122	64.9	9.1	142.29		332.2	10177.46	10337.07	389.98	bdrc
741	10	123	64.7	9.5	145.08		335.1	10179.78	10338.71	391.47	bdrc
742	10	124	64.5	11.2	147.24	3.71	337.3	10181.51	10340.10	392.64	bdrc
743	10	125	64.4	10.7	155.25	0	345.3	10188.62	10343.79	396.53	gs
744	10	126	64.6	10.9	159.57		349.7	10192.76	10345.15	397.92	gs
745	10	127	64.6	11.2	162.64		352.7	10195.53	10346.47	399.40	gs
746	10	128	64.3	11.2	165.29		355.5	10197.55	10348.39	399.92	bdrc
747	10	129	64.6	11.3	166.41		356.9	10198.94	10348.09	400.44	bdrc
748	10	130	64	12.8	166.56	-5	358.7	10198.31	10349.72	410.03	bdrc
749	10	131	62.5	9.4	165.74	-5	363.1	10195.63	10353.24	399.63	bm rebar
750	10	132	62.4	9.4	165.65	-5	363.4	10195.41	10353.45	399.62	bm rebar
751	10	133	62.6	9.5	165.79	-5	364.0	10195.81	10353.01	399.94	Data Storage M
752	10	134	62.5	9.5	165.70	-5		10195.59	10353.22	399.92	Data Storage M
753	10	135	62	10.1	166.58	-5		10195.69	10354.91	401.86	usgs cable
754	10	136	62.1	10.3	166.37	-5	365.6	10195.65	10354.56	402.43	usgs cable
755	10	137	56.3	7.3	144.92	-5		10169.17	10357.11	390.76	bt3
756	10	138	20.7	-0.1	175.90			10110.79	10441.25	366.89	rac
757	10	139	263.9	-1.1	150.57		2809.7	9898.89	10260.71	364.30	th
758	10	140	270.4	-1.1	153.27		2827.2	9895.34	10277.78	364.25	th
759	10	141	276.4	-1	159.28		2844.6	9890.33	10294.46	364.41	th
760	10	142	283.9	-1.1	166.77		2844.6	9886.73	10316.77	363.99	ws
761	10	143	283.5	-1.2	165.46		2865.6	9887.72	10315.33	363.73	th
762	10	144	283.5	-0.9	165.78		2865.6	9887.41	10315.41	364.59	ws
763	10	145	287.7	-1.1	177.07		2882.7	9879.93	10330.54	363.79	th
764	10	146	292.7	-1.2	187.46		2901.7	9875.67	10349.05	363.27	th
765	10	147	296.9	-1.1	197.76		2919.2	9872.25	10366.18	363.40	th
766	10	148	294.7	-0.6	206.49			9861.01	10362.99	365.03	lac
767	10	149	294.8	0.4	213.79			9854.53	10366.38	368.69	lbf
768	10	150	299.7	-1.2	204.86		2931.3	9870.67	10378.21	362.90	th
769	10	151	302.4	-1.3	207.65		2941.4	9873.29	10387.97	362.48	th
770	10	152	305.3	-1.2	213.85		2953.7	9874.08	10400.28	362.71	th
771	10	153	307	-1	224.97		2966.6	9868.95	10412.10	363.27	th
772	10	154	307.9	-0.9	244.57		2986.6	9855.63	10426.94	363.35	th
773	10	155	309.9	-0.9	262.47		3006.5	9847.26	10445.07	363.07	th

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
774	10	156	312.4	-0.9	278.57		3026.5	9842.90	10464.55	362.82	th
775	10	157	314.5	-0.8	298.27		3048.8	9835.87	10485.77	363.03	th
776	10	158	314.7	-0.5	321.39			9820.17	10502.77	364.39	lac
777	10	159	314.7	0.2	328.40			9815.19	10507.70	368.34	lac
778	10	160	302.2	-0.4	211.19	0		9869.90	10389.25	365.72	tp10l
779	10	161	302.2	-0.4	211.09	0		9869.98	10389.20	365.72	tp10l
780	10	162	336.3	-1	262.06	-5		9943.28	10516.67	367.62	tp10r
781	10	163	336.4	-1	262.06	-5		9943.70	10516.85	367.62	tp10r
782	11	1	200.7	-0.1	205.20	0		9869.35	10388.38	366.17	tp10l
783	11	2	200.3	-0.1	205.20	0		9870.69	10387.88	366.17	tp10l
784	11	3	178.6	-4	62.45	-5		9943.41	10517.90	367.17	tp10r
785	11	4	178.6	-4	62.55	-5		9943.41	10517.80	367.16	tp10r
786	11	5	225.1	-1.6	146.74		3058.1	9837.94	10476.75	362.43	th
787	11	6	234.1	-1.7	134.84		3083.2	9832.66	10501.26	362.53	th
788	11	7	235.2	-1.9	122.63		3095.6	9841.18	10510.34	362.46	th
789	11	8	233.4	-2.4	115.60		3103.6	9849.08	10511.41	361.69	th
790	11	9	234.6	-2.4	106.81		3112.7	9854.82	10518.46	362.06	th
791	11	10	237.2	-2.7	96.59		3123.9	9860.69	10528.01	361.98	th
792	11	11	242.5	-2.9	92.68		3133.5	9859.67	10537.54	361.84	th
793	11	12	245	-3.5	88.93		3138.9	9861.28	10542.75	361.09	th
794	11	13	248.4	-4	80.00		3149.2	9867.50	10550.88	360.94	th
795	11	14	248	-3	80.39		3149.2	9867.35	10550.22	362.32	ws
796	11	15	257	-2.2	83.64			9860.39	10561.52	363.32	rac
797	11	16	258.4	1.7	92.46	3.71		9851.31	10561.74	365.57	rbf
798	11	17	252.5	-5.5	65.99		3164.1	9878.94	10560.49	360.18	th
799	11	18	255.8	-6.4	58.43		3172.5	9885.23	10566.00	359.98	th
800	11	19	263.9	-8.2	48.10		3185.2	9894.05	10575.22	359.60	th
801	11	20	271	-8.6	41.53		3193.8	9900.36	10581.06	360.25	th
802	11	21	282.8	-7.9	36.35		3203.3	9906.43	10588.39	361.49	th
803	11	22	315	-9.1	31.00		3222.7	9919.96	10602.26	361.57	th
804	11	23	339.8	-9.7	29.47		3235.8	9931.71	10607.99	361.49	th
805	11	24	349.8	-10.1	29.73		3241.0	9936.62	10609.59	361.24	th
806	11	25	357.6	-11.1	29.54		3245.0	9940.65	10609.84	360.74	th
807	11	26	5.6	-13.2	31.84		3249.8	9944.99	10612.02	359.07	th
808	11	27	14.3	-12.5	37.49		3257.6	9951.14	10616.66	358.22	th
809	11	28	14.4	-7.2	38.20		3257.6	9951.38	10617.33	361.71	ws
810	11	29	16.8	-9.8	46.02		3266.3	9955.18	10624.39	358.58	th
811	11	30	14.7	-8.3	54.62		3275.1	9955.74	10633.17	358.56	th
812	11	31	10.4	-8	57.73		3280.3	9952.30	10637.12	358.42	th
813	11	32	6	-6.7	64.06		3288.2	9948.58	10644.04	359.01	th
814	11	33	3.4	-6.8	69.90		3294.8	9946.03	10650.11	358.20	th
815	11	34	7.3	-6.4	75.43		3302.2	9951.47	10655.15	358.07	th
816	11	35	10	-6	79.66		3307.8	9955.71	10658.78	358.16	th
817	11	36	10	-5	89.76		3317.9	9957.47	10668.72	358.68	th
818	11	37	8.9	-3.9	102.46		3330.7	9957.73	10681.56	359.55	th
819	11	38	8.1	-3.5	114.19		3342.5	9957.97	10693.38	359.55	th
820	11	39	9.9	-3.5	122.17		3351.3	9962.89	10700.68	359.06	th
821	11	40	12.2	-3.3	131.28		3361.8	9969.63	10708.65	358.96	th
822	11	41	16.8	-2.9	139.72		3375.5	9982.27	10714.09	359.45	th
823	11	42	6.8	-1.5	138.55			9958.29	10717.91	362.90	lac
824	11	43	3.9	-0.6	138.89			9951.33	10718.90	365.08	lbf
825	11	44	17	-2.8	138.04		3377.3	9982.24	10712.33	359.78	th
826	11	45	20.9	-2.4	155.56		3397.4	9997.38	10725.66	360.01	th
827	11	46	20.8	-1.9	155.31		3397.4	9997.04	10725.52	361.38	ws
828	11	47	23.2	-2.4	171.75		3414.9	10009.54	10738.19	359.33	th
829	11	48	26.4	-2.4	177.34		3426.1	10020.74	10739.18	359.10	th
830	11	49	27.4	-2.1	185.88		3435.2	10027.42	10745.35	359.72	th
831	11	50	28.2	-1.9	193.79		3443.6	10033.46	10751.12	360.10	th
832	11	51	29.6	-0.8	201.08	3.71	3452.3	10041.20	10755.17	360.01	th
833	11	52	31.2	-0.9	209.67	3.71	3462.7	10050.50	10759.68	359.53	th
834	11	53	35.6	-1.5	228.02	3.71	3487.5	10074.62	10765.74	356.85	th
835	11	54	34.9	-1.7	230.40	3.71	3491.2	10073.70	10769.29	355.98	th

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Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
836	11	55	36.9	-1.3	233.74	3.71	3500.0	10082.22	10767.25	357.52	th
837	11	56	38.8	-1.9	243.47	0	3512.5	10094.44	10770.07	358.46	th
838	11	57	40.7	-1.6	253.30		3525.3	10107.06	10772.37	359.46	th
839	11	58	41	-1.5	268.31		3540.4	10117.91	10782.83	359.51	th
840	11	59	41.7	-1.4	274.92		3547.8	10124.77	10785.60	359.81	th
841	11	60	94.4	0.9	237.47			10178.65	10562.11	370.26	rac
842	11	61	98.5	1.8	246.48			10185.65	10543.90	374.28	rw
843	11	62	133.5	3.6	316.97	-5		10171.81	10362.14	391.48	bt3
844	11	63	39.1	-3.2	146.17	-5		10034.07	10693.77	363.36	tp11r
845	11	64	39.3	-3.2	146.37	-5		10034.59	10693.60	363.35	tp11r
846	11	65	33.4	-0.2	239.50	-5		10073.72	10780.28	370.70	tp11l
847	11	66	33.3	-0.1	239.60	-5		10073.43	10780.59	371.11	tp11l
848	11	67	33.4	-0.1	239.60	-5		10073.78	10780.36	371.11	rx g
849	12	1	237.4	-0.8	288.87	-5		10074.85	10779.73	371.31	tp11l
850	12	2	237.4	-0.8	288.97	-5		10074.77	10779.67	371.30	tp11l
851	12	3	229.8	-1.9	373.29	-5		10033.09	10694.42	362.96	tp11r
852	12	4	229.8	-1.9	373.29	-5		10033.09	10694.42	362.96	tp11r
853	12	5	231.2	-2.3	245.90		3552.5	10126.57	10781.28	360.46	th
854	12	6	230.9	-2.5	240.97		3557.6	10131.21	10783.39	359.82	th
855	12	7	230.6	-2.7	236.94		3561.8	10135.13	10784.97	359.17	th
856	12	8	230.7	-2.8	236.42			10135.26	10785.62	358.78	th (??)
857	12	9	230.3	-2.9	232.40			10139.40	10786.91	358.57	th (??)
858	12	10	231.1	-3	228.99		3570.0	10140.01	10791.57	358.34	th
859	12	11	231.1	-3.2	224.95		3574.0	10143.15	10794.10	357.76	th
860	12	12	231.3	-2.2	221.54	3.71	3577.5	10145.32	10796.85	358.12	th
861	12	13	230.8	-2.5	212.00	3.71	3587.3	10153.93	10801.37	357.37	th
862	12	14	230.2	-3	203.42	3.71	3596.1	10161.93	10805.15	355.97	th
863	12	15	230.2	-3.1	203.50	3.71	3596.2	10161.87	10805.10	355.61	th
864	12	16	272.2	3.5	177.97	-5		10140.38	10942.19	386.22	rx h
865	12	17	229.8	-3.5	190.44	3.71	3609.3	10172.75	10812.44	354.98	th
866	12	18	229.3	-3.4	174.09	3.71	3625.7	10186.23	10821.84	356.29	th
867	12	19	229.3	-3.2	162.95	3.71	3636.9	10194.68	10829.11	357.52	th
868	12	20	230.4	-4.8	153.26	0	3647.0	10200.12	10837.67	357.47	th
869	12	21	230.1	-4.1	154.00	0	3647.0	10200.07	10836.58	359.30	ws
870	12	22	230.8	-5.1	144.63		3655.7	10206.14	10843.96	357.43	th
871	12	23	256	-0.8	105.69	-5		10215.66	10909.79	373.86	rx i
872	12	24	231.6	-5.2	137.33		3663.3	10210.59	10850.06	357.84	th
873	12	25	233.3	-5.7	125.97		3675.3	10217.21	10860.08	357.77	th
874	12	26	234.9	-6.8	114.49		3687.3	10224.54	10869.53	356.69	th
875	12	27	235.7	-7.7	109.21		3692.8	10228.00	10873.82	355.57	th
876	12	28	237.1	-8.6	104.31		3698.3	10230.63	10878.70	354.56	th
877	12	29	239.2	-7.6	98.92	3.71	3704.9	10233.24	10884.71	353.43	th
878	12	30	238.7	-8.3	89.75	3.71	3714.1	10241.53	10888.74	353.54	th
879	12	31	239.3	-8.9	80.42	3.71	3723.5	10249.06	10894.30	354.04	th
880	12	32	241.9	-9.3	74.11	3.71	3730.7	10252.84	10900.45	354.49	th
881	12	33	245.7	-9.6	68.63	3.71	3737.9	10255.67	10907.12	355.02	th
882	12	34	250.6	-13	66.26	0	3744.1	10255.72	10913.35	355.04	th
883	12	35	257.5	-12.8	62.90		3752.6	10256.81	10921.75	356.05	th
884	12	36	267.5	-11	67.05		3764.7	10251.23	10932.44	357.31	th
885	12	37	276.9	-9.2	80.16		3782.4	10238.64	10944.99	357.36	th
886	12	38	280	-8.2	89.08		3792.5	10230.49	10950.83	357.50	th
887	12	39	203.9	-0.5	50.00			10297.96	10889.65	369.90	lac
888	12	40	279.9	-7.8	92.83		3796.2	10226.76	10951.32	357.62	th
889	12	41	160.3	-0.1	127.30			10361.13	10815.51	370.12	rbf
890	12	42	279.1	-7.5	98.85		3802.4	10220.61	10951.00	357.33	th
891	12	43	157.8	1.8	148.23			10374.22	10798.12	375.00	rw
892	12	44	279.9	-7.9	105.39		3809.1	10214.39	10953.48	355.72	th
893	12	45	6.7	-0.5	104.40			10330.39	11039.05	369.43	rac
894	12	46	43.5	0.4	198.10			10454.57	11079.06	371.72	rbf
895	12	47	43.5	0.4	198.10			10454.57	11079.06	371.72	rw
896	12	48	353.5	-0.1	352.30			10278.33	11285.40	369.72	rac
897	12	49	348.6	-0.4	417.09			10235.77	11344.22	367.43	rw

Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
898	12	50	279.8	-2.4	161.86	-5		10158.72	10962.91	368.56	tp12l
899	12	51	279.7	-2.6	161.73	-5		10158.79	10962.61	367.99	tp12l
900	12	52	331.6	-2.1	119.02	-5		10261.61	11040.06	370.97	tp12r
901	12	53	331.7	-2.2	119.21	-5		10261.70	11040.33	370.76	tp12r
902	13	1	143.7	0	162.10	-5		10159.02	10962.82	368.13	tp12l
903	13	2	144.4	0	161.90	-5		10157.30	10961.82	368.13	tp12l
904	13	3	104.9	0.8	205.98	-5		10262.11	11040.49	371.01	tp12r
905	13	4	104.8	0.8	206.18	-5		10262.39	11040.79	371.01	tp12r
906	13	5	131.5	-2.2	187.36	0	3828.4	10203.38	10969.31	355.93	th
907	13	6	131	-2.4	173.35		3842.5	10193.88	10979.73	355.87	th
908	13	7	129.8	-2.5	165.14		3851.4	10189.93	10987.75	355.92	th
909	13	8	129.2	-2.4	153.27		3863.4	10181.82	10996.59	356.71	th
910	13	9	129.2	-2.5	145.56		3871.1	10175.85	11001.46	356.78	th
911	13	10	128.7	-2.9	139.92		3876.9	10172.25	11005.97	356.04	th
912	13	11	129.2	-2.9	135.93		3881.1	10168.39	11007.55	356.25	th
913	13	12	129.2	-2.5	129.98		3881.1	10163.78	11011.31	357.46	ws
914	13	13	128.2	-2	145.01		3902.8	10177.01	11003.78	358.07	ws
915	13	14	129.3	-3.5	114.19		3902.8	10151.41	11021.13	356.15	th
916	13	15	130.9	-4.7	96.57		3920.7	10136.05	11030.23	355.19	th
917	13	16	131.4	-4.1	93.86		3920.7	10133.46	11031.39	356.40	ws
918	13	17	131.9	-6.5	82.86		3934.4	10124.73	11038.12	353.69	th
919	13	18	134.1	-9.3	69.38		3948.2	10112.87	11045.18	351.77	th
920	13	19	134.1	-9.3	69.38	-5	3948.2	10112.87	11045.18	356.77	ws
921	13	20	131.3	-7.7	58.27		3959.8	10106.83	11055.00	355.25	th
922	13	21	115.8	-12.3	51.69		3976.0	10109.59	11070.96	351.86	th
923	13	22	98.4	-12.8	44.56		3992.2	10107.14	11086.95	353.01	th
924	13	23	73.6	-13.2	42.45		4011.0	10103.77	11105.44	353.18	th
925	13	24	48.8	-12.2	38.71	3.71	4028.8	10092.17	11118.95	351.05	th
926	13	25	40.4	-6.7	57.70	3.71	4049.0	10100.45	11137.40	352.64	th
927	13	26	40.8	-2.8	60.83	3.71	4052.1	10102.80	11139.50	356.45	th
928	13	27	29.8	-3.3	73.48	3.71	4070.1	10099.57	11157.22	355.19	th
929	13	28	203.6	1.7	130.54	0		10010.79	10973.83	367.01	lac
930	13	29	203.6	1.7	130.54	0		10010.79	10973.83	367.01	lbf
931	13	30	203.6	1.7	130.54			10010.79	10973.83	367.01	lvw
932	13	31	28.4	-3.2	84.57	3.71	4081.4	10103.27	11167.85	354.69	th
933	13	32	26.6	-4	98.06	3.71	4095.2	10106.96	11181.14	352.57	th
934	13	33	20.8	-5.1	104.39	0	4107.2	10100.12	11191.04	353.82	th
935	13	34	20.1	-4.6	116.03		4118.9	10102.93	11202.41	353.80	th
936	13	35	20.8	-3.4	127.67		4130.7	10108.39	11212.81	355.55	th
937	13	36	20.8	-3	127.62		4130.7	10108.37	11212.76	356.44	ws
938	13	37	21	-3.2	141.38		4144.4	10113.72	11225.44	355.23	th
939	13	38	18.7	-3.2	162.05		4165.9	10115.01	11246.95	354.07	th
940	13	39	15.3	-2.6	183.91		4190.1	10111.58	11270.85	354.78	th
941	13	40	15.1	-2.3	184.45		4190.9	10111.10	11271.54	355.72	th
942	13	41	10.3	-2.3	205.03		4217.2	10099.71	11295.19	354.90	th
943	13	42	7.9	-2.4	219.01		4233.7	10093.15	11310.39	353.95	th
944	13	43	10.6	-0.4	240.79			10107.35	11330.14	361.45	rbf
945	13	44	11.4	0.1	246.00	-5		10111.68	11334.60	368.56	rx j
946	13	45	6.8	-2.8	218.34		4238.0	10088.90	11310.26	352.45	th
947	13	46	6.9	-1.8	219.39		4238.0	10089.41	11311.26	356.24	ws
948	13	47	4.7	-2.6	224.47		4248.1	10081.44	11317.17	352.94	th
949	13	48	2.9	-1.8	236.28	3.71	4262.0	10075.01	11329.44	352.00	th
950	13	49	2.3	-1.6	247.20	3.71	4273.2	10072.97	11340.46	352.52	th
951	13	50	1.9	-1.7	255.99	3.71	4282.2	10071.54	11349.30	351.82	th
952	13	51	359.6	-1.8	260.57	3.71	4293.5	10061.23	11354.02	351.23	th
953	13	52	359.2	-1.8	260.97	3.71	4295.4	10059.41	11354.40	351.22	th
954	13	53	357	-1.2	270.84	7.5	4309.6	10048.88	11363.93	349.96	th
955	13	54	355.6	-0.7	285.08	7.5	4325.3	10041.18	11377.69	352.15	th
956	13	55	358.4	-1.5	297.50	-5		10054.75	11390.84	360.34	xs3 p3
957	13	56	358.3	-1.5	297.60	-5		10054.22	11390.92	360.34	xs3 p3
958	13	57	294.7	2	271.33	0		9816.54	11206.84	372.61	xs3 p1
959	13	58	294.7	1.9	271.75	0		9816.16	11207.01	372.15	xs3 p1

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
960	14	1	55.1	-3.1	147.68	-5		10056.16	11390.22	360.32	xs3 p3
961	14	2	55.2	-3	147.60	-5		10056.23	11389.96	360.58	xs3 p3
962	14	3	230.8	3.3	155.24	0		9814.73	11207.61	372.27	xs3 p1
963	14	4	230.9	3.3	155.24	0		9814.56	11207.82	372.27	xs3 p1
964	14	5	231.2	3.2	241.32	3.71		9746.96	11154.51	373.10	rd
965	14	6	251	3.7	285.80	3.71		9664.80	11212.68	378.09	rd
966	14	7	213.5	3.3	225.63	3.71		9810.50	11117.58	372.62	rd
967	14	8	232.9	3.8	340.35	11.44	0.0	9663.58	11100.42	374.48	gs
968	14	9	231.6	3.3	305.39	7.5	35.7	9695.70	11116.03	373.43	gs
969	14	10	231.5	3.1	233.56	3.71	107.6	9752.25	11160.33	372.26	gs
970	14	11	231.3	2.3	217.52	0	123.6	9765.27	11169.72	372.05	gs
971	14	12	231.3	2.5	197.91		143.2	9780.58	11181.98	371.96	gs
972	14	13	231.4	2.8	178.19		162.9	9795.78	11194.56	372.03	gs
973	14	14	231.1	3.2	169.44		171.7	9803.17	11199.33	372.79	gs pole
974	14	15	230.6	3.3	161.23		180.1	9810.44	11203.39	372.61	gs
975	14	16	230.8	3.2	156.36		185.0	9813.87	11206.90	372.06	gs
976	14	17	230.7	3.1	155.27		186.3	9814.88	11207.38	371.73	gs
977	14	18	230.6	1.5	155.55	-5	186.0	9814.84	11207.00	372.39	xs3 p1
978	14	19	230.8	1.5	155.35	-5		9814.65	11207.54	372.38	xs3 p1
979	14	20	230.6	3.1	154.87	0	186.8	9815.36	11207.42	371.70	gs
980	14	21	230.6	3.1	148.28		193.4	9820.45	11211.61	371.35	gs
981	14	22	230.2	3.1	142.59		199.2	9825.48	11214.45	371.04	gs
982	14	23	229.9	2.5	131.18		210.6	9834.69	11221.23	369.04	gs
983	14	24	229	2.2	122.11		219.9	9842.88	11225.61	368.01	gs
984	14	25	228.8	1.9	116.14		225.9	9847.65	11229.23	367.17	gs
985	14	26	228.2	3.9	104.76	3.71	237.3	9856.94	11235.90	366.75	gs
986	14	27	226.9	4.7	96.08	3.71	246.3	9864.88	11240.08	367.51	gs
987	14	28	226.2	5.1	85.66	3.71	256.8	9873.21	11246.44	367.25	gs
988	14	29	225.6	5.6	76.43	3.71	266.1	9880.42	11252.25	367.10	gs
989	14	30	224	3.4	66.98	0	275.7	9888.50	11257.54	367.30	gs
990	14	31	222.4	3.8	57.97		284.9	9895.94	11262.92	367.17	gs
991	14	32	222.1	4.7	57.11		285.8	9896.75	11263.35	368.01	gs
992	14	33	221.6	4.4	56.23		287.5	9897.70	11263.67	367.64	gs
993	14	34	222.1	3.8	55.98		286.9	9897.50	11264.19	367.03	gs
994	14	35	223.9	4	46.89		297.1	9902.52	11271.94	366.60	gs
995	14	36	225.2	4	43.09		303.1	9904.45	11275.36	366.33	gs
996	14	37	227.4	4	37.31		309.0	9907.57	11280.47	365.93	gs
997	14	38	227.2	4.3	35.20		311.2	9909.21	11281.81	365.96	gs
998	14	39	227.5	-2.8	35.36	-5	311.0	9908.96	11281.84	366.59	xs3 p2
999	14	40	227.6	-2.6	35.26	-5		9908.99	11281.95	366.72	xs3 p1
1000	14	41	227.2	4.2	35.01		311.4	9909.35	11281.94	365.89	gs
1001	14	42	226.4	4.2	31.61		314.9	9912.14	11283.92	365.64	gs
1002	14	43	227.4	3.9	43.70		301.3	9902.87	11276.15	366.30	lbf
1003	14	44	223	4	27.43		319.4	9916.32	11285.66	365.24	gs
1004	14	45	216.5	3.2	19.47		327.8	9923.45	11290.08	364.41	gs
1005	14	46	209.3	2.8	14.38		333.3	9927.99	11293.18	364.02	gs
1006	14	47	187.4	-0.5	8.60		340.4	9933.93	11297.20	363.24	gs
1007	14	48	108.8	-2.8	6.59		350.2	9941.27	11303.60	362.99	gs
1008	14	49	69.3	-3.9	14.87		360.8	9948.94	11310.98	362.30	gs
1009	14	50	66.3	-4.9	17.54		363.6	9951.09	11312.77	361.81	lac
1010	14	51	63.1	-6.4	26.43		372.6	9958.61	11317.69	360.35	gs
1011	14	52	62.3	-8.2	33.06		379.2	9964.30	11321.09	358.55	gs
1012	14	53	60.1	-5.4	44.10		390.4	9973.27	11327.71	359.15	gs
1013	14	54	57.7	-4.6	56.42		402.9	9982.72	11335.87	358.78	gs
1014	14	55	57.1	-4.3	67.11		413.6	9991.38	11342.18	358.27	gs
1015	14	56	56.8	-4	79.71		426.2	10001.73	11349.37	357.74	gs
1016	14	57	56.2	-4.9	88.97		435.5	10008.97	11355.22	355.69	lew
1017	14	58	56.4	-5.4	94.28		440.8	10013.56	11357.90	354.40	gs
1018	14	59	56.4	-5.4	100.65		447.2	10018.87	11361.43	353.80	gs
1019	14	60	56.2	-5.3	109.43		456.0	10025.97	11366.60	353.17	gs
1020	14	61	55.8	-5.2	117.81		464.4	10032.47	11371.95	352.60	gs
1021	14	62	56	-4.9	126.04		472.6	10039.52	11376.21	352.51	gs



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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1022	14	63	56.1	-5	128.91		475.5	10042.03	11377.62	352.04	gs
1023	14	64	55.9	-4.4	136.30		482.9	10047.90	11382.14	352.83	gs
1024	14	65	56.2	-4	137.86		484.6	10049.60	11382.42	353.68	gs
1025	14	66	55.6	-3.8	139.49		486.8	10050.13	11384.53	354.05	gs
1026	14	67	55.5	-3.7	141.90		489.5	10051.98	11386.10	354.14	gs
1027	14	68	55.4	-3.1	142.19		489.9	10052.08	11386.47	355.62	rew
1028	14	69	55.5	-5	142.26	-5	490.2	10052.27	11386.30	355.87	bdrc
1029	14	70	55.4	-2.8	141.93		489.3	10051.86	11386.32	356.38	bdrc
1030	14	71	55.3	-2.2	144.99		493.0	10054.24	11388.27	357.75	bdrc
1031	14	72	55.2	-1.9	146.92		509.5	10055.68	11389.57	358.44	bdrc
1032	14	73	55.2	-3.8	147.87	-5	511.0	10056.46	11390.12	358.50	gs
1033	14	74	55	-2.8	147.72	-5	510.4	10056.04	11390.46	361.09	xs3 p3
1034	14	75	55.2	-2.8	147.82	-5		10056.42	11390.09	361.09	xs3 p3
1035	14	76	55.3	-3.7	147.99	-5	512.5	10056.70	11389.97	358.75	gs
1036	14	77	55	-3.2	148.37	-5	511.7	10056.57	11390.83	360.02	gs
1037	14	78	54.7	-3.1	150.08	-5	519.7	10057.52	11392.45	360.19	bdrc
1038	14	79	52.8	-2.3	151.18	0	501.9	10055.45	11397.13	357.24	bdrc
1039	14	80	53.9	4.1	152.51	11.44	524.7	10058.26	11395.58	362.81	bdrc
1040	14	81	54.2	4.3	157.85	11.44	530.2	10063.06	11398.06	363.75	bdrc
1041	14	82	54.8	4.4	162.02	11.44	544.1	10067.43	11399.12	364.34	gs
1042	14	83	55.4	5.2	168.30	11.44	563.6	10073.57	11401.30	367.19	gs
1043	14	84	55.2	5.2	172.09	11.44	567.5	10076.34	11403.94	367.54	gs
1044	14	85	53.5	2.9	171.58	3.71	556.3	10072.96	11407.79	368.30	xs3 p4
1045	14	86	53.5	3	171.46	3.71	556.2	10072.87	11407.72	368.59	gs
1046	14	87	53.4	2.9	171.88	3.71	556.7	10073.02	11408.20	368.31	gs
1047	14	88	52.9	2.9	167.49	3.71	551.8	10068.62	11406.75	368.09	gs
1048	14	89	52.8	2.8	164.50	7.5	537.9	10066.07	11405.18	363.86	gs
1049	14	90	53.5	2.8	177.09	3.71	574.7	10077.39	11411.06	368.27	gs
1050	14	91	52.9	3.2	187.41	3.71	585.2	10084.51	11418.77	370.08	gs
1051	14	92	52.8	4.8	198.50	3.71	596.3	10093.15	11425.74	376.28	gs
1052	14	93	52.3	6.8	215.18	3.71	613.0	10105.29	11437.31	385.27	gs
1053	14	94	52.8	7.6	241.36	0	639.3	10127.28	11451.65	395.52	gs
1054	14	95	52.8	8.1	253.64		651.6	10137.07	11459.08	399.42	gs pole
1055	14	96	55.1	-2.6	150.05	-5	520.7	10058.09	11391.57	361.50	rac
1056	14	97	53.9	4.1	151.11	11.44	517.3	10057.13	11394.76	362.71	rbf
1057	14	98	61.4	-4.1	129.07	3.71	4337.8	10048.35	11367.51	350.36	th
1058	14	99	57.6	-5.2	128.87	0	4346.3	10043.84	11374.78	351.59	th
1059	14	100	52.4	-4.5	127.01		4358.1	10035.66	11383.22	353.32	th
1060	14	101	47.5	-4.4	126.92		4369.0	10028.61	11391.48	353.55	th
1061	14	102	44.3	-4.8	128.65		4376.3	10024.88	11397.80	352.51	th
1062	14	103	41.5	-5.4	127.73		4382.6	10019.67	11401.39	351.24	th
1063	14	104	38.5	-4.9	126.24		4389.4	10013.62	11404.52	352.49	th
1064	14	105	34	-4.9	130.02		4400.2	10007.74	11413.52	352.17	th
1065	14	106	28.7	-4.9	134.51		4413.2	9999.63	11423.71	351.79	th
1066	14	107	24.2	-4.4	140.58		4425.6	9992.66	11433.96	352.50	th
1067	14	108	24.2	-3.1	140.69		4425.6	9992.71	11434.06	355.70	ws
1068	14	109	20	-3.5	148.62		4438.9	9985.86	11445.39	354.23	th
1069	14	110	17.4	-3.1	161.06		4453.2	9983.20	11459.42	354.59	th
1070	14	111	17.1	-2.8	161.11		4453.2	9982.41	11459.71	355.44	ws
1071	14	112	16.7	-2.9	175.38		4467.6	9985.43	11473.70	354.43	th
1072	14	113	16	-2.7	194.68		4487.1	9988.70	11492.87	354.14	th
1073	14	114	15.9	-2.6	194.50		4487.1	9988.32	11492.78	354.48	ws
1074	14	115	14.8	-2.9	213.23		4506.1	9989.50	11511.88	352.52	th
1075	14	116	13.3	-2.9	224.51		4518.8	9986.68	11524.22	351.94	th
1076	14	117	13.7	-3.5	225.18	-5	4518.8	9988.36	11524.50	354.54	ws
1077	14	118	11.8	-2.9	231.80		4528.2	9982.44	11532.63	351.57	th
1078	14	119	12.3	-0.5	238.29			9985.80	11538.55	361.24	rac
1079	14	120	13.3	0.3	259.30			9994.68	11558.07	364.67	rbf
1080	14	121	9.9	-2.9	238.89		4538.7	9976.11	11541.06	351.22	th
1081	14	122	9.6	-3.4	238.48	-5	4538.7	9974.80	11540.87	354.15	ws
1082	14	123	3.6	-2.6	259.33		4572.9	9951.32	11564.55	351.54	th
1083	14	124	0.6	-2.6	272.62		4592.1	9937.89	11578.33	350.94	th

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1084	14	125	359.4	-2.7	278.39		4600.3	9932.12	11584.10	350.19	th
1085	14	126	358.5	-2.1	286.41	3.71	4609.4	9927.54	11592.04	349.10	th
1086	14	127	357	-2.2	285.79	3.71	4617.0	9920.08	11591.12	348.63	th
1087	14	128	355.7	-2	286.53	3.71	4623.5	9913.55	11591.44	349.60	th
1088	14	129	354.4	-1.2	295.04	7.5	4634.3	9906.24	11599.35	349.64	th
1089	14	130	274.4	2.4	303.43	0		9632.49	11329.00	376.03	lvw
1090	14	131	293.1	0.9	275.07			9682.02	11413.64	367.64	lbf
1091	14	132	312.1	-0.9	244.37			9753.72	11469.56	359.48	lac
1092	14	133	355.8	-1.5	296.90	-5		9913.29	11601.83	360.54	tp14r
1093	14	134	355.8	-1.5	296.80	-5		9913.30	11601.73	360.54	tp14r
1094	14	135	339.6	-1.7	253.19	-5		9846.78	11543.03	360.80	tp14l
1095	14	136	339.8	-1.8	253.08	-5		9847.65	11543.24	360.36	tp14l
1096	14	137	355.9	-1.3	327.12	0		9911.65	11632.00	355.89	tp14r2
1097	15	1	159.4	-0.8	167.28	-5		9847.11	11543.32	360.42	tp14l
1098	15	2	159.3	-0.7	167.29	-5		9847.39	11543.42	360.71	tp14l
1099	15	3	128.3	-0.8	159.18	-5		9913.18	11601.25	360.53	tp14r
1100	15	4	128.4	-0.7	159.19	-5		9913.01	11601.03	360.81	tp14r
1101	15	5	118.7	-0.9	140.78	0		9911.74	11632.30	355.54	tp14r2
1102	15	6	118.6	-0.7	140.79			9911.87	11632.51	356.03	tp14r2
1103	15	7	128.1	-1.3	133.97	3.71	4656.1	9893.68	11617.25	351.00	th
1104	15	8	125	-1.2	123.57	3.71	4668.6	9889.48	11629.03	351.45	th
1105	15	9	124.8	0.1	124.00	3.71	4668.6	9890.08	11629.14	354.26	ws
1106	15	10	121.1	-3.6	109.98	0	4684.4	9882.43	11643.10	350.83	th
1107	15	11	117.7	-3.7	97.80		4698.0	9874.84	11654.45	351.43	th
1108	15	12	109.5	-4	89.68		4713.7	9872.79	11669.97	351.48	th
1109	15	13	97.7	3.6	78.74	11.44	4734.1	9866.29	11689.36	351.27	th
1110	15	14	80.5	4.2	64.43	11.44	4759.8	9851.80	11710.54	351.04	th
1111	15	15	81.1	7	63.82	11.44	4759.8	9851.31	11709.78	354.15	ws
1112	15	16	64.9	1	58.69	7.5	4777.4	9841.40	11724.80	351.28	th
1113	15	17	52	-6.8	58.58	0	4790.6	9834.42	11735.98	350.77	th
1114	15	18	41.2	-6.8	61.56		4802.3	9828.81	11746.23	350.41	th
1115	15	19	34.5	-5.9	62.17		4809.6	9823.47	11751.14	351.33	th
1116	15	20	33.5	-3	75.40	-5		9829.87	11762.78	358.80	rac
1117	15	21	25.3	3.2	83.57			9823.97	11775.46	362.43	rbf
1118	15	22	22.7	-6.4	54.76		4823.7	9809.39	11750.42	351.61	th
1119	15	23	22.7	-3.3	54.51		4823.7	9809.29	11750.20	354.61	ws
1120	15	24	13.5	-10.8	41.75		4838.8	9798.00	11740.50	349.79	th
1121	15	25	354.2	-12.9	33.82		4853.7	9784.84	11733.56	350.01	th
1122	15	26	331	-9.8	30.84	3.71	4867.0	9773.30	11726.88	348.72	th
1123	15	27	320.8	-8.9	37.54	3.71	4876.0	9764.53	11729.00	348.16	th
1124	15	28	313.6	-7.6	46.79	3.71	4886.6	9754.38	11732.17	347.80	th
1125	15	29	308.7	-6.8	52.93	3.71	4894.1	9746.95	11733.00	347.73	th
1126	15	30	306	-6	59.87	3.72	4901.5	9739.82	11735.10	347.74	th
1127	15	31	300.8	-3.9	79.22	3.71	4921.9	9720.21	11740.47	348.64	th
1128	15	32	296	-3.3	92.05	3.71	4936.6	9705.52	11740.26	348.74	th
1129	15	33	291	-2.5	108.60	3.71	4955.3	9686.87	11738.83	349.30	th
1130	15	34	290.5	-1.9	121.03	3.71	4967.7	9674.89	11742.29	350.03	th
1131	15	35	290.8	0.3	121.40	3.71	4967.7	9674.77	11743.02	354.68	ws
1132	15	36	291.3	-2.9	136.33	0	4983.1	9661.24	11749.43	350.85	th
1133	15	37	290.6	-2	159.00		5005.9	9639.42	11755.85	352.20	th
1134	15	38	291.9	-1.9	182.30		5029.5	9619.11	11767.90	351.71	th
1135	15	39	290.4	-1.8	206.80		5054.5	9594.43	11771.99	351.25	th
1136	15	40	290.2	-1.4	230.73		5078.5	9571.72	11779.58	352.11	th
1137	15	41	290	-1.3	254.03		5101.8	9549.54	11786.79	351.99	th
1138	15	42	291	-1	279.06		5127.2	9527.73	11799.91	352.88	th
1139	15	43	290.9	-0.8	279.27		5127.2	9527.36	11799.54	353.85	ws
1140	15	44	289.2	-1	306.75		5156.4	9498.57	11800.79	352.40	th
1141	15	45	289.2	-1	335.55		5185.2	9471.37	11810.26	351.90	th
1142	15	46	295.9	-0.2	357.70	-5		9466.49	11856.15	361.50	tp15r
1143	15	47	296	-0.2	357.80	-5		9466.67	11856.76	361.50	tp15r
1144	15	48	273.7	0.5	300.49	0		9488.39	11719.30	360.38	tp15l
1145	15	49	273.7	0.5	300.59	0		9488.29	11719.31	360.38	tp15l

Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
1146	16	1	-----	-----		0		#VALUE!	#VALUE!	#VALUE!	begin day 4
1147	16	2	-----	-----		0		#VALUE!	#VALUE!	#VALUE!	sta16
1148	16	3	-----	-----		0		#VALUE!	#VALUE!	#VALUE!	upstrm of brdg
1149	16	4	123.5	-0.2	201.90	0		9488.37	11718.80	360.28	tp15l
1150	16	5	123.5	-0.1	202.00	0		9488.45	11718.74	360.63	tp15l
1151	16	6	79.6	-1.8	148.93	-5		9466.49	11857.12	361.30	tp15r
1152	16	7	79.7	-1.7	148.93	-5		9466.54	11856.86	361.56	tp15r
1153	16	8	98.6	-2.8	147.12	0	5191.3	9465.48	11808.23	353.78	ws
1154	16	9	98.6	-3.6	147.31	0	5191.3	9465.66	11808.20	351.71	th
1155	16	10	94.6	-4.4	120.44	0	5219.7	9440.06	11820.57	351.71	th
1156	16	11	89.8	-5.3	98.98	0	5243.1	9418.98	11830.58	351.80	th
1157	16	12	77.4	-6.4	81.49	0	5269.2	9399.53	11848.01	351.84	th
1158	16	13	60.2	-7.2	68.26	0	5295.1	9379.24	11864.15	352.36	th
1159	16	14	60.1	-5.6	67.97	0	5295.4	9378.93	11864.12	354.31	th
1160	16	15	48.8	-1.2	137.97	0		9423.82	11921.11	358.09	rac
1161	16	16	49.3	0.1	146.10	0		9430.77	11925.50	361.23	rbf
1162	16	17	202.7	-3.9	81.11	0		9288.70	11755.40	355.45	lac
1163	16	18	202.3	0	99.50	0		9282.25	11738.17	360.98	lbf
1164	16	19	40.4	-7.3	64.18	0	5318.3	9361.60	11879.10	352.76	th
1165	16	20	13.1	-6.5	68.26	0	5349.8	9335.48	11896.71	353.20	th
1166	16	21	354.1	-6.7	65.35	0	5372.1	9313.29	11895.24	353.30	th
1167	16	22	354.3	-6	65.54	0	5372.1	9313.50	11895.45	354.09	ws
1168	16	23	328.8	-6.6	69.14	0	5401.8	9284.19	11889.37	352.98	th
1169	16	24	313.5	-4.9	97.94	0	5437.9	9248.96	11897.65	352.58	th
1170	16	25	200.1	3.6	110.38	0		9282.07	11726.57	367.92	lvw
1171	16	26	307.5	-4.5	110.26	0	5454.4	9232.53	11897.35	352.30	th
1172	16	27	303.4	-4.7	127.27	0	5473.4	9213.75	11900.29	350.52	th
1173	16	28	299	-3.6	144.02	0	5493.1	9194.05	11900.05	351.92	th
1174	16	29	296.5	-3.1	156.97	0	5507.6	9179.53	11900.27	352.48	th
1175	16	30	296.4	-2.8	157.31	0	5507.6	9179.10	11900.18	353.29	ws
1176	16	31	296.3	-2.6	184.31	0	5535.0	9154.77	11911.89	352.61	th
1177	16	32	298.7	-2.2	227.33	0	5578.8	9120.60	11939.40	352.25	th
1178	16	33	301.1	-1.9	259.96	0	5613.0	9097.41	11964.51	352.36	th
1179	16	34	321.1	-1.7	278.78	-5		9144.94	12047.19	357.71	xs4 p3
1180	16	35	320.9	-1.7	278.78	-5		9144.19	12046.58	357.71	xs4 p3
1181	16	36	292.3	-2.4	289.15	-5		9052.49	11939.95	353.86	tp16l
1182	16	37	292.3	-2.5	289.22	-5		9052.41	11939.98	353.35	tp16l
1183	17	1	56.8	-0.3	84.30	-5		9145.10	12046.62	357.60	xs4 p3
1184	17	2	56.7	-0.3	84.30	-5		9145.02	12046.75	357.60	xs4 p3
1185	17	3	200.4	-3.8	64.46	0		9052.09	11940.05	348.76	0
1186	17	4	200.6	-3.8	64.36	-5		9051.92	11940.22	353.77	tp16l
1187	17	5	200.5	-3.9	64.45	-5		9051.99	11940.10	353.65	tp16l
1188	17	6	194.5	2	93.74	-5		9051.09	11909.71	361.32	xs4
1189	17	7	194.7	1.9	93.85	-5		9050.75	11909.69	361.16	xs4 p2
1190	17	8	196.9	8.1	108.41	0		9043.05	11896.74	368.47	xs4 p1
1191	17	9	52.1	4.4	217.06	0		9245.84	12133.80	369.75	xs4 p4
1192	17	10	51.8	4.3	216.89	0		9245.00	12134.59	369.35	xs4 p4
1193	17	11	198.2	-1.6	32.49	0	5646.4	9064.42	11969.60	352.14	th
1194	17	12	197.9	-0.4	32.60	0	5646.4	9064.54	11969.44	352.82	ws
1195	17	13	231.3	-1.6	44.78	0	5671.4	9039.61	11972.47	351.79	th
1196	17	14	245.6	-1.3	60.18	0	5691.5	9019.75	11975.60	351.68	th
1197	17	15	248.2	-1.3	72.08	0	5703.7	9007.64	11973.70	351.41	th
1198	17	16	251.6	-1.5	81.77	0	5714.4	8996.97	11974.65	350.90	th
1199	17	17	254.3	-1.8	85.26	0	5719.7	8992.49	11977.39	350.36	th
1200	17	18	257.7	-1.6	90.16	0	5726.8	8986.47	11981.26	350.53	th
1201	17	19	262	-1.8	101.45	0	5740.2	8974.10	11986.35	349.86	th
1202	17	20	265.3	-1.5	107.16	0	5748.5	8967.76	11991.68	350.24	th
1203	17	21	268.7	-1.8	117.44	0	5760.8	8957.15	11997.80	349.35	th
1204	17	22	270	-1.9	122.13	0	5766.2	8952.43	12000.47	348.99	th
1205	17	23	271	-1.6	126.75	0	5771.3	8947.83	12002.68	349.50	th
1206	17	24	271.7	-1.7	132.14	0	5776.9	8942.48	12004.39	349.12	th
1207	17	25	271.8	-0.8	132.49	0	5776.9	8942.14	12004.63	351.19	ws

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1208	17	26	271.4	-0.9	120.79	0	5787.8	8953.81	12003.42	351.15	ws
1209	17	27	271.4	-2.1	121.22	0	5787.8	8953.38	12003.43	348.60	th
1210	17	28	271.1	-1.6	131.85	0	5798.5	8942.74	12003.00	349.36	th
1211	17	29	274.9	-1.6	143.14	0	5813.0	8931.94	12012.69	349.05	th
1212	17	30	280.2	-1.3	167.46	0	5841.2	8909.75	12030.12	349.24	th
1213	17	31	283.1	-1.1	187.07	0	5862.8	8892.36	12042.86	349.45	th
1214	17	32	283.3	-0.5	186.79	0	5862.8	8892.78	12043.44	351.41	ws
1215	17	33	287.4	-0.8	206.88	0	5887.5	8877.15	12062.33	350.16	th
1216	17	34	290.8	-0.9	235.87	0	5919.3	8854.06	12084.23	349.34	th
1217	17	35	288.2	0.9	252.37	0		8834.82	12079.29	357.01	lac
1218	17	36	287.9	1.9	260.06	0		8827.09	12080.40	361.67	lbf
1219	17	37	287.7	3	270.63	0		8816.74	12082.75	367.23	lw
1220	17	38	286.5	2.3	245.90	3.71		8838.79	12070.31	359.21	peir
1221	17	39	302.8	-0.9	190.98	0		8914.03	12103.92	350.04	peir
1222	17	40	302.7	0.8	191.18	-5		8913.68	12103.75	360.71	top metal
1223	17	41	328.4	1	185.97	3.71		8977.12	12158.86	352.58	peir
1224	17	42	293.8	-0.9	245.97	0	5935.5	8849.51	12099.73	349.18	th
1225	17	43	294	-0.4	258.69	0	5935.5	8838.23	12105.69	351.24	ws
1226	17	44	294.2	-1.2	257.84	0	5947.5	8839.38	12106.16	347.64	th
1227	17	45	293.9	0.6	259.09	0	5965.7	8837.69	12105.43	355.76	lac
1228	17	46	296	-0.9	274.07	0	5976.2	8828.23	12120.61	348.74	th
1229	17	47	295.8	0.6	271.69	0	5996.4	8829.96	12118.71	355.89	lac
1230	17	48	296.8	-1	264.26	0	6008.7	8838.69	12119.61	348.43	th
1231	17	49	298.8	-0.8	282.07	0	6008.7	8827.38	12136.36	349.11	th
1232	17	50	300.2	-0.9	292.16	0	6021.0	8822.05	12147.43	348.45	th
1233	17	51	300.3	-0.3	292.20	0		8822.28	12147.89	351.51	ws
1234	17	52	301.6	-1	302.15	0		8817.21	12158.79	347.77	th
1235	17	53	300.7	-0.9	305.26	-5		8812.08	12156.32	353.25	tp17l
1236	17	54	300.8	-1	305.45	-5		8812.19	12156.87	352.71	tp17l
1237	17	55	320.5	0.2	273.00	0		8900.91	12211.12	354.00	tp17r
1238	17	56	320.4	0.3	272.70	0		8900.74	12210.58	354.47	tp17r
1239	18	1	157	0.6	168.39	0		8900.58	12211.71	354.32	tp17r
1240	18	2	156.9	0.7	168.49	0		8900.88	12211.74	354.62	tp17r
1241	18	3	186.1	-1.3	212.25	-5		8812.23	12155.67	352.74	tp17l
1242	18	4	186.1	-1.3	212.15	-5		8812.24	12155.77	352.75	tp17l
1243	18	5	110.4	11	202.22	3.71		9024.31	12296.23	388.16	br cap bridge
1244	18	6	112.8	9.7	206.41	0		9025.06	12286.73	387.84	br
1245	18	7	110.4	11	201.53	3.71		9023.67	12296.47	388.02	rebar
1246	18	8	120.3	6.5	192.45	0		9000.95	12269.62	374.49	rw
1247	18	9	148.3	8.6	238.59	0		8960.15	12163.72	388.64	br
1248	18	10	124.3	7.2	188.10	11.44		8990.17	12260.71	364.88	rbf
1249	18	11	167.5	7.8	263.04	0		8891.71	12109.91	388.59	br
1250	18	12	181.7	7.2	284.54	0		8826.34	12082.30	388.51	br
1251	18	13	129.7	6.5	189.28	17.44		8980.41	12245.81	356.68	rac
1252	18	14	192.1	6.7	303.02	0		8771.26	12070.43	388.16	br
1253	18	15	184.7	-1.4	197.14	0	6032.6	8818.63	12170.24	347.74	th
1254	18	16	184.7	-0.5	196.89	0	6032.8	8818.65	12170.48	350.84	th
1255	18	17	183.8	-1.8	178.21	0	6051.7	8822.97	12188.89	346.96	th
1256	18	18	185.4	-1.6	158.24	0	6072.3	8819.89	12209.18	348.14	th
1257	18	19	191.5	-1.9	144.02	0	6093.7	8806.07	12225.58	347.78	th
1258	18	20	194	-2.2	125.41	0	6113.2	8804.44	12245.03	347.74	th
1259	18	21	198.6	-2.6	112.08	0	6129.6	8799.03	12260.48	347.47	th
1260	18	22	203.7	-2.7	102.29	0	6143.3	8793.67	12273.05	347.74	th
1261	18	23	203.8	-1	102.58	0	6143.3	8793.38	12272.85	350.77	ws
1262	18	24	205.2	-2.6	99.20	0		8792.54	12276.96	348.06	gs
1263	18	25	206.5	1	98.88	0		8790.66	12278.22	354.29	peir
1264	18	26	209.3	-2.2	96.03	0		8787.79	12282.97	348.87	gs
1265	18	27	209.4	1.1	96.28	0		8787.52	12282.83	354.41	peir
1266	18	28	212	-2.2	94.73	0		8784.58	12286.38	348.92	gs
1267	18	29	212.2	1.1	94.78	0		8784.27	12286.51	354.38	peir
1268	18	30	217.6	-2.3	91.13	0		8779.18	12294.52	348.90	gs
1269	18	31	217.4	1.1	91.38	0		8779.28	12294.12	354.31	peir

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1270	18	32	207.1	-2.3	85.73	0	6160.7	8795.73	12290.40	349.12	th
1271	18	33	207.9	-1.9	81.16	0	6165.4	8796.81	12294.99	349.87	th
1272	18	34	213.2	-3.8	69.95	0	6178.6	8796.48	12308.19	347.91	th
1273	18	35	221.9	-4.1	68.32	0	6189.3	8789.15	12315.86	347.66	th
1274	18	36	228.4	-4.4	68.90	0	6197.1	8783.26	12320.97	347.26	th
1275	18	37	189.5	4	38.01	0		8828.51	12329.23	355.22	peir
1276	18	38	190.3	-2.5	37.26	0		8828.12	12330.05	350.93	gs
1277	18	39	181.6	-0.1	45.30	0		8833.52	12321.43	352.48	gs
1278	18	40	181.2	3.4	45.82	0		8833.82	12320.91	355.28	peir
1279	18	41	178.3	0	48.80	0		8836.23	12317.94	352.56	gs
1280	18	42	177.9	3	49.43	0		8836.59	12317.32	355.15	peir
1281	18	43	174.8	0.7	54.70	0		8839.74	12312.24	353.23	gs
1282	18	44	174	2.8	55.23	0		8840.55	12311.78	355.26	peir
1283	18	45	248.3	-5	65.35	0	6220.5	8774.06	12342.55	346.84	th
1284	18	46	256.5	-5.7	55.42	0	6233.6	8780.89	12353.78	347.03	th
1285	18	47	270.6	-4.4	47.86	0	6248.4	8786.92	12367.22	348.88	th
1286	18	48	271	-1.9	48.07	0	6248.8	8786.71	12367.55	350.96	th
1287	18	49	296.6	-3.1	49.23	0	6270.4	8790.76	12388.76	349.89	th
1288	18	50	284.3	0.4	166.60	0		8673.35	12407.86	353.72	lac
1289	18	51	282.9	4.2	189.19	3.71		8650.36	12408.95	362.74	lbf
1290	18	52	327.8	-2.5	71.53	0	6309.3	8796.66	12427.24	349.44	th
1291	18	53	336.9	-2	98.04	0	6339.0	8796.32	12456.89	349.14	th
1292	18	54	341.8	-2.4	121.09	0	6363.8	8796.96	12481.75	347.48	th
1293	18	55	342.8	-2.2	140.50	0	6383.4	8793.23	12500.93	347.16	th
1294	18	56	342.8	-0.8	140.69	0	6383.4	8793.18	12501.11	350.60	ws
1295	18	57	344.6	-1.7	164.23	0	6407.6	8791.17	12525.05	347.69	th
1296	18	58	342.2	-1.4	188.94	0	6433.4	8777.02	12546.61	347.94	th
1297	18	59	341	-1.5	195.53	0	6441.1	8771.12	12551.59	347.44	th
1298	18	60	341.6	-1.5	213.93	0	6459.6	8767.25	12569.70	346.96	th
1299	18	61	342.5	-1	242.36	0	6488.3	8761.90	12597.86	348.33	th
1300	18	62	344.5	-0.9	269.37	0	6516.7	8762.80	12626.28	348.33	th
1301	18	63	345.4	-0.7	291.08	0	6538.8	8761.41	12648.39	349.00	th
1302	18	64	340	-1.1	339.24	-5		8718.75	12685.49	351.05	tp18r
1303	18	65	340	-1	339.25	-5		8718.75	12685.50	351.64	tp18r
1304	18	66	331.3	-0.7	339.87	-5		8671.56	12664.83	353.41	tp18l
1305	18	67	331.4	-0.8	339.97	-5		8672.04	12665.20	352.81	tp18l
1306	18	68	317.2	0.6	219.09	-5		8685.92	12527.47	359.85	our br cap
1307	18	69	317.2	0.5	219.09	-5		8685.92	12527.47	359.47	our br cap
1308	19	1	176.8	-1.1	161.07	-5		8671.95	12665.10	353.24	tp18l
1309	19	2	177	-1.1	161.17	-5		8671.39	12664.97	353.24	tp18l
1310	19	3	157.8	-1.8	151.53	-5		8720.21	12685.63	351.57	tp18r
1311	19	4	157.8	-1.9	151.42	-5		8720.17	12685.73	351.31	tp18r
1312	19	5	175.8	1.5	299.50	0		8684.89	12527.23	359.18	our br cap
1313	19	6	175.9	1.6	299.38	0		8684.36	12527.30	359.70	our br cap
1314	19	7	152.1	-0.9	219.97	0	6556.3	8765.89	12631.52	347.88	th
1315	19	8	150.1	-0.7	199.99	0	6577.6	8762.64	12652.55	348.89	th
1316	19	9	150.2	-0.1	199.70	0	6577.6	8762.20	12652.63	350.98	ws
1317	19	10	147.9	-0.6	163.99	0	6614.3	8750.10	12687.00	349.62	th
1318	19	11	145.3	-0.5	143.29	0	6636.1	8744.53	12708.11	350.08	th
1319	19	12	138.4	-0.6	135.29	0	6654.7	8752.78	12724.75	349.92	th
1320	19	13	138.3	-0.1	135.20	0	6654.7	8752.89	12724.98	351.10	ws
1321	19	14	134.1	-0.6	126.59	0	6667.8	8753.86	12737.82	350.01	th
1322	19	15	126.9	-1	118.68	0	6685.1	8757.86	12754.66	349.26	th
1323	19	16	126.6	-0.4	118.30	0	6685.1	8757.93	12755.39	350.51	ws
1324	19	17	118	-1.7	98.36	0	6711.4	8749.80	12779.75	348.41	th
1325	19	18	106.7	-1.8	85.96	0	6733.4	8745.29	12801.22	348.63	th
1326	19	19	106.4	-0.9	85.69	0	6733.4	8745.16	12801.73	349.99	ws
1327	19	20	92.6	-1.9	82.75	0	6754.3	8745.62	12822.17	348.59	th
1328	19	21	82.3	-2	83.65	0	6769.3	8745.85	12837.13	348.41	th
1329	19	22	73.6	9.6	217.02	0		8871.14	12887.19	388.04	edge co rd
1330	19	23	73.9	10.1	203.20	0		8858.19	12882.27	387.53	gs
1331	19	24	73.5	9.5	199.72	0		8854.45	12882.65	384.75	gs

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Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
1332	19	25	73.7	8.5	195.43	0		8850.53	12880.77	380.54	gs
1333	19	26	74.5	8.4	182.32	7.5		8838.65	12874.64	370.76	gs
1334	19	27	78.2	5.9	178.95	0		8838.12	12862.52	369.83	gs
1335	19	28	78.9	6.5	170.80	0.5		8830.55	12858.80	370.29	gs
1336	19	29	78.6	5.6	168.09	0		8827.73	12859.15	367.81	gs
1337	19	30	78.9	4.4	162.82	0		8822.73	12857.27	363.86	gs
1338	19	31	78.6	3.7	156.67	0		8816.54	12856.89	361.46	gs
1339	19	32	78.5	3.7	153.88	0		8813.74	12856.60	361.28	gs
1340	19	33	78.4	2	153.31	-5		8813.13	12856.75	361.69	xs5 p4
1341	19	34	78.5	2.1	153.80	-5		8813.66	12856.58	361.97	xs5 p4
1342	19	35	78.5	3.6	153.10	0		8812.98	12856.44	360.96	gs
1343	19	36	78.6	3.5	146.93	0		8806.98	12854.96	360.32	gs
1344	19	37	79.2	3.5	138.54	0		8799.04	12851.88	359.81	gs
1345	19	38	79.4	3.8	134.00	0		8794.67	12850.57	360.23	gs
1346	19	39	79.6	3.5	126.66	0		8787.54	12848.79	359.08	gs
1347	19	40	79.5	3.2	119.31	0		8780.27	12847.66	358.00	gs
1348	19	41	79.6	2.8	111.57	0		8772.69	12846.06	356.79	gs
1349	19	42	79.7	2.3	106.11	0		8767.36	12844.89	355.59	gs
1350	19	43	79.6	2	102.64	0		8763.91	12844.45	354.92	gs
1351	19	44	79.8	1.8	101.75	0		8763.10	12843.94	354.53	gs
1352	19	45	79.8	1.7	100.66	0		8762.02	12843.75	354.32	gs
1353	19	46	80	-0.4	100.60	-5		8762.02	12843.39	355.63	xs5 p3
1354	19	47	79.8	-0.3	100.70	-5		8762.06	12843.75	355.81	xs5 p3
1355	19	48	79.9	1.8	100.25	0		8761.65	12843.50	354.48	gs
1356	19	49	79.8	1.4	98.47	0		8759.87	12843.36	353.74	gs
1357	19	50	79.6	1.4	98.07	0		8759.41	12843.62	353.73	gs
1358	19	51	79.3	0.7	96.99	0		8758.26	12843.93	352.52	gs
1359	19	52	77.9	-0.5	92.20	0		8753.10	12845.25	350.53	gs
1360	19	53	77.3	-1.1	89.78	0		8750.54	12845.66	349.61	rew
1361	19	54	78.6	1.6	98.46	0		8759.47	12845.38	354.08	rac
1362	19	55	79.4	3.8	133.61	0		8794.28	12850.50	360.21	rbf
1363	19	56	76.4	-1.5	85.57	0		8746.13	12846.04	349.09	gs
1364	19	57	75.8	-2.1	81.15	0		8741.62	12845.83	348.36	gs
1365	19	58	73.9	-2.1	75.95	0		8735.92	12846.98	348.55	gs
1366	19	59	73.5	-1.7	74.37	0		8734.26	12847.04	349.13	gs
1367	19	60	72.9	-1.3	73.18	0		8732.90	12847.44	349.67	lew
1368	19	61	72.2	-0.9	71.29	0		8730.83	12847.71	350.21	gs
1369	19	62	69	-0.5	60.20	0		8719.15	12847.49	350.81	gs
1370	19	63	64.1	-0.2	47.50	0		8705.68	12846.67	351.17	gs
1371	19	64	55.3	0.1	33.50	0		8690.50	12844.99	351.39	gs
1372	19	65	40.4	-0.1	22.50	0		8677.54	12843.06	351.29	gs
1373	19	66	7.7	-0.7	14.90	0		8664.95	12840.69	351.15	gs
1374	19	67	10.7	5	43.63	0		8671.06	12868.80	355.15	rx
1375	19	68	12.1	-4.7	39.37	0		8671.21	12864.41	348.10	gs at rx
1376	19	69	344.6	-0.3	14.40	0		8659.13	12839.80	351.26	gs
1377	19	70	304.6	-1	20.80	0		8645.84	12837.73	350.97	gs
1378	19	71	287.8	-0.4	33.90	0		8630.68	12836.28	351.10	gs
1379	19	72	284.8	-0.4	40.20	0		8624.09	12836.19	351.05	rew
1380	19	73	280.7	-1.9	45.87	0		8617.88	12834.44	349.81	gs
1381	19	74	278.4	-2.3	50.96	0		8612.54	12833.37	349.29	gs
1382	19	75	277.9	-1.5	55.48	0		8608.00	12833.55	349.88	gs
1383	19	76	275.5	-2	64.26	0		8598.99	12832.08	349.09	gs
1384	19	77	275	-1.9	66.86	0		8596.35	12831.75	349.11	gs
1385	19	78	274.9	-1.1	67.89	0		8595.31	12831.72	350.03	gs
1386	19	79	274.9	-1.4	68.48	0		8594.72	12831.77	349.66	gs
1387	19	80	274.8	-1.8	68.47	0		8594.73	12831.65	349.18	gs
1388	19	81	274.5	-1.3	69.98	0		8593.19	12831.41	349.74	gs
1389	19	82	273.8	-1.8	71.66	0		8591.45	12830.67	349.08	gs
1390	19	83	272.7	-1.1	77.29	0		8585.75	12829.56	349.85	gs
1391	19	84	272	-0.5	80.80	0		8582.21	12828.74	350.63	gs
1392	19	85	271.6	-0.3	82.10	0		8580.89	12828.21	350.90	lew
1393	19	86	271.3	0.3	83.90	0		8579.08	12827.82	351.77	gs

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1394	19	87	271.3	0.9	85.89	0		8577.09	12827.87	352.68	gs
1395	19	88	271.3	-0.9	85.99	-5		8576.99	12827.87	354.98	xs5 p2
1396	19	89	271.2	-0.9	85.99	-5		8576.98	12827.72	354.98	xs5 p2
1397	19	90	271.4	1.1	86.08	0		8576.90	12828.02	352.99	gs
1398	19	91	271.4	1.1	86.08	0		8576.90	12828.02	352.99	gs
1399	19	92	271.2	1.6	87.67	0		8575.31	12827.76	353.78	gs
1400	19	93	271.1	1.4	89.07	0		8573.90	12827.63	353.51	gs
1401	19	94	270.3	0.9	92.29	0		8570.67	12826.40	352.78	gs
1402	19	95	270.4	0.8	101.29	0		8561.67	12826.63	352.75	gs
1403	19	96	270.2	0.5	108.30	0		8554.66	12826.30	352.28	gs
1404	19	97	270.1	0.8	111.49	0		8551.47	12826.12	352.89	gs
1405	19	98	270.3	0.6	116.69	0		8546.26	12826.53	352.55	gs
1406	19	99	270.2	1.3	122.57	0		8540.39	12826.35	354.11	gs
1407	19	100	269.6	1.9	126.93	0		8536.03	12825.04	355.54	gs
1408	19	101	269.6	2.5	131.08	0		8531.88	12825.01	357.06	gs
1409	19	102	269.8	2.8	135.54	0		8527.42	12825.45	357.96	gs
1410	19	103	266.2	1	100.28	0		8562.89	12819.27	353.08	gs
1411	19	104	265.2	0.9	110.49	0		8552.86	12816.68	353.07	gs
1412	19	105	264.7	2.6	114.88	3.71		8548.56	12815.31	352.84	gs
1413	19	106	263.4	3.3	123.49	3.71		8540.28	12811.73	354.74	gs
1414	19	107	263.5	1.2	118.77	0		8544.94	12812.48	353.82	lac
1415	19	108	263.8	2.4	130.29	0		8533.43	12811.85	356.79	gs
1416	19	109	263.5	3	135.51	0		8528.31	12810.58	358.43	lbf
1417	19	110	263.8	3.5	141.74	0		8522.05	12810.61	360.00	gs
1418	19	111	263.2	2.9	150.01	0		8514.00	12808.16	358.93	gs
1419	19	112	263.9	2.9	155.40	0		8508.43	12809.41	359.20	gs
1420	19	113	263.8	2.8	163.90	0		8500.01	12808.22	359.35	gs
1421	19	114	263.4	2.6	166.33	0		8497.73	12806.80	358.89	gs
1422	19	115	263.8	3.2	172.73	0		8491.23	12807.27	360.99	gs
1423	19	116	263.5	3.3	177.11	0		8486.99	12805.87	361.54	gs
1424	19	117	263.9	3.4	179.48	0		8484.49	12806.85	362.00	gs
1425	19	118	263.7	3.5	179.46	0		8484.57	12806.23	362.31	xs5 p1
1426	19	119	263.8	3.6	179.35	0		8484.66	12806.55	362.62	xs5 p1
1427	19	120	264.1	3.3	179.30	0		8484.60	12807.49	361.67	gs
1428	19	121	263.9	3.5	185.75	0		8478.25	12806.18	362.69	gs
1429	19	122	263.5	13.6	204.79	0		8459.48	12802.74	400.88	tele pole
1430	19	123	77.4	-1.9	84.25	0	6776.5	8745.18	12844.30	348.54	th
1431	19	124	59.4	-2.2	85.24	0	6803.0	8736.32	12869.31	348.06	th
1432	19	125	43.3	-2.1	97.03	0	6831.1	8729.50	12896.54	347.77	th
1433	19	126	33.2	-1.7	113.75	0	6856.0	8725.24	12921.10	347.96	th
1434	19	127	24.2	-1.3	139.56	0	6888.5	8720.16	12953.22	348.17	th
1435	19	128	19.7	-1.4	160.95	0	6912.9	8717.21	12977.45	347.40	th
1436	19	129	20	-0.7	161.29	0	6912.9	8718.12	12977.48	349.36	ws
1437	19	130	17.1	-1.4	173.45	0	6927.6	8713.96	12991.70	347.09	th
1438	19	131	19.2	0.6	176.49	0		8721.00	12992.59	353.18	rac
1439	19	132	14.9	-1.5	180.24	0	6937.2	8709.30	13000.10	346.61	th
1440	19	133	10.9	-0.4	189.90	3.71	6953.3	8698.86	13012.39	346.30	th
1441	19	134	8.9	-0.5	199.69	3.71	6965.2	8693.85	13023.21	345.88	th
1442	19	135	8.9	0.2	206.30	0		8694.87	13029.74	352.05	buick
1443	19	136	6.3	-1.3	204.95	0	6975.8	8685.44	13029.63	346.68	th
1444	19	137	4.3	-0.9	213.27	0	6986.9	8678.95	13038.59	347.98	th
1445	19	138	3.7	-1.3	216.74	0	6991.0	8676.94	13042.21	346.41	th
1446	19	139	2.6	-1.2	223.85	0	6999.3	8673.11	13049.54	346.64	th
1447	19	140	1.3	-1.2	237.65	0	7014.0	8668.35	13063.51	346.35	th
1448	19	141	359.1	-1.1	249.95	0	7029.5	8659.03	13075.84	346.53	th
1449	19	142	358.7	-0.4	249.79	0	7031.2	8657.29	13075.65	349.59	th
1450	19	143	356.7	-0.9	269.07	0	7052.5	8647.47	13094.54	347.11	th
1451	19	144	357.7	0	285.30	0		8651.50	13110.99	351.33	rac
1452	19	145	355.2	-0.8	275.37	0	7062.0	8639.91	13100.33	347.49	th
1453	19	146	354.3	-1.2	281.54	0	7069.6	8634.99	13106.07	345.44	th
1454	19	147	351.6	-1.1	297.85	0	7090.9	8619.44	13120.57	345.61	th
1455	19	148	352.5	-1.1	308.84	-5		8622.64	13132.12	350.40	tp19r



Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1456	19	149	352.4	-1.2	308.93	-5		8622.10	13132.14	349.86	tp19r
1457	19	150	336.4	-1	282.46	-5		8549.87	13084.75	351.40	tp19l
1458	19	151	336.6	-0.9	282.57	-5		8550.73	13085.25	351.89	tp19l
1459	20	1	140.2	-0.8	277.67	-5		8550.41	13084.53	351.43	tp19l
1460	20	2	140	-0.8	277.67	-5		8551.16	13085.16	351.43	tp19l
1461	20	3	123.6	-0.9	299.26	-5		8621.93	13132.26	350.61	tp19r
1462	20	4	123.6	-1	299.15	-5		8621.84	13132.32	350.09	tp19r
1463	20	5	126.1	-0.9	301.46	0	7094.1	8616.25	13120.25	345.57	th
1464	20	6	125.5	-0.9	287.36	0	7108.5	8606.62	13130.99	345.80	th
1465	20	7	125.3	-1.1	272.45	0	7123.5	8595.03	13140.43	345.08	th
1466	20	8	125.1	-1	260.96	0	7135.0	8586.18	13147.81	345.75	th
1467	20	9	125.2	-0.2	260.80	0	7135.0	8585.78	13147.53	349.40	ws
1468	20	10	124.7	-1.2	254.34	0	7141.8	8581.78	13153.07	344.98	th
1469	20	11	123.5	-1.2	236.35	0	7160.6	8569.76	13167.42	345.36	th
1470	20	12	121.1	-1.2	220.35	0	7179.2	8561.35	13184.05	345.69	th
1471	20	13	117.7	-1.4	207.14	0	7197.5	8556.07	13201.58	345.25	th
1472	20	14	114.7	-1.4	190.04	0	7217.5	8545.33	13218.45	345.66	th
1473	20	15	112.4	-1.4	175.85	0	7233.5	8535.25	13230.86	346.01	th
1474	20	16	108	-1.4	164.85	0	7250.6	8529.45	13246.92	346.28	th
1475	20	17	101.3	-1.6	148.44	0	7275.1	8518.24	13268.78	346.16	th
1476	20	18	93.8	-1.7	134.24	0	7298.4	8506.62	13288.97	346.33	th
1477	20	19	93.7	-0.5	133.69	0	7298.4	8506.09	13289.24	349.14	ws
1478	20	20	159.4	0.8	107.19	0		8410.38	13197.53	351.81	lac
1479	20	21	179.5	11.4	102.83	17.44		8373.57	13195.04	353.60	lbf
1480	20	22	80.6	-2	114.53	0	7333.1	8485.66	13316.57	346.31	th
1481	20	23	76.1	0.7	128.99	0		8497.88	13328.85	351.89	rac
1482	20	24	69.5	-1.7	109.35	0	7355.3	8475.10	13336.16	347.06	th
1483	20	25	59.7	-1.9	102.44	0	7374.7	8461.12	13349.55	346.91	th
1484	20	26	46.7	-1.4	103.37	0	7398.0	8447.90	13368.76	347.78	th
1485	20	27	46.4	-0.7	103.39	0	7398.0	8447.54	13369.17	349.05	ws
1486	20	28	38.5	-1.3	95.68	0	7414.2	8432.23	13372.74	348.14	th
1487	20	29	29.5	-1.3	87.78	0	7430.6	8415.89	13374.26	348.32	th
1488	20	30	16.4	-1.4	80.58	0	7451.1	8395.42	13375.16	348.34	th
1489	20	31	8.5	-1.2	79.28	0	7462.2	8384.39	13376.28	348.65	th
1490	20	32	8.5	-0.9	79.19	0	7462.2	8384.38	13376.19	349.07	ws
1491	20	33	358.7	-1.3	71.38	0	7477.3	8371.05	13369.23	348.69	th
1492	20	34	350.2	-1.6	65.97	0	7488.8	8361.44	13362.88	348.47	th
1493	20	35	342.6	-1.8	63.67	0	7497.7	8353.63	13358.62	348.31	th
1494	20	36	342.6	-1.4	63.48	0	7497.7	8353.69	13358.44	348.76	ws
1495	20	37	335.1	-1.7	74.67	0	7511.9	8341.23	13365.59	348.09	th
1496	20	38	331	-1.3	91.88	0	7530.1	8328.13	13378.22	348.22	th
1497	20	39	327.2	-1.3	106.37	0	7546.0	8315.05	13387.28	347.90	th
1498	20	40	326.8	-1.3	120.67	0	7560.3	8306.60	13398.84	347.57	th
1499	20	41	313.8	4.1	124.48	7.5		8282.83	13384.02	351.73	lac
1500	20	42	324.2	-1.5	131.65	0	7572.7	8295.66	13404.65	346.86	th
1501	20	43	324.1	-1.5	151.85	0	7592.9	8283.63	13420.87	346.33	th
1502	20	44	324	-0.6	152.49	0	7592.9	8283.04	13421.23	348.71	ws
1503	20	45	324.9	-1.5	168.94	0	7610.1	8275.53	13436.09	345.89	th
1504	20	46	326.4	-1.2	189.16	0	7630.9	8267.99	13455.42	346.35	th
1505	20	47	327.7	-1.1	207.66	0	7649.9	8261.71	13473.39	346.32	th
1506	20	48	328.8	-1.2	223.15	0	7666.0	8257.07	13488.74	345.64	th
1507	20	49	329.3	-1.1	241.66	0	7684.6	8249.30	13505.65	345.67	th
1508	20	50	328.8	-1	261.66	0	7704.7	8237.12	13521.68	345.74	th
1509	20	51	328.6	-0.8	279.67	0	7722.7	8226.96	13536.58	346.40	th
1510	20	52	328.5	-0.7	300.48	0	7743.5	8215.67	13554.07	346.64	th
1511	20	53	327.9	-0.8	319.57	0	7762.9	8202.85	13568.58	345.85	th
1512	20	54	327.9	-0.4	319.39	0	7762.9	8202.95	13568.43	348.08	ws
1513	20	55	325.5	-1	331.25	-5		8185.05	13570.86	349.53	tp20l
1514	20	56	325.7	-1	330.75	-5		8186.29	13571.10	349.54	tp20l
1515	20	57	347.3	-0.8	341.27	-5		8297.64	13630.78	350.54	tp20r
1516	20	58	347.5	-0.8	341.27	-5		8298.81	13631.04	350.54	tp20r
1517	21	1	147.1	-0.9	245.67	-5		8297.98	13629.88	350.53	tp20r

Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
1518	21	2	146.9	-1	245.56	-5		8298.64	13630.44	350.10	tp20r
1519	21	3	133.8	0.1	239.10	0		8337.11	13670.66	349.81	rac
1520	21	4	175.5	-1	265.26	-5		8185.35	13571.71	349.76	tp20l
1521	21	5	175.4	-1	265.26	-5		8185.81	13571.75	349.76	tp20l
1522	21	6	178.5	0	254.90	0		8171.21	13581.34	349.39	lac
1523	21	7	172.3	-0.9	259.77	0	7773.7	8199.34	13578.73	345.31	th
1524	21	8	172.9	-0.3	259.40	0	7773.7	8196.60	13578.75	348.03	ws
1525	21	9	173.5	-0.7	236.78	0	7797.2	8191.34	13600.89	346.50	th
1526	21	10	177.5	-0.9	219.47	0	7820.7	8174.11	13616.89	345.94	th
1527	21	11	180.6	-1	199.27	0	7843.9	8162.45	13636.89	345.91	th
1528	21	12	183.9	-1	176.87	0	7868.8	8152.51	13659.69	346.30	th
1529	21	13	187.8	-1	155.08	0	7893.3	8143.49	13682.51	346.68	th
1530	21	14	192.3	-1	139.88	0	7912.4	8134.74	13699.48	346.95	th
1531	21	15	192.4	-0.6	140.19	0	7912.4	8134.44	13699.23	347.92	ws
1532	21	16	198.5	-1.1	130.28	0	7929.9	8123.20	13712.61	346.89	th
1533	21	17	204.2	-1.6	116.05	0	7948.6	8116.97	13730.30	346.15	th
1534	21	18	203.8	-0.9	115.89	0	7948.6	8117.77	13730.12	347.57	ws
1535	21	19	214.7	-2.1	97.73	0	7975.4	8108.90	13755.80	345.81	th
1536	21	20	225.3	-2.1	89.94	0	7994.4	8100.61	13772.89	346.09	th
1537	21	21	237.5	-2.9	81.80	0	8014.3	8095.55	13792.20	345.25	th
1538	21	22	243.6	-3.2	74.58	0	8025.3	8097.73	13802.99	345.22	th
1539	21	23	243.9	-2.6	74.62	0	8025.3	8097.53	13803.32	346.00	ws
1540	21	24	245.8	-0.1	96.50	0		8076.52	13796.59	349.22	lac
1541	21	25	247.2	-3.4	72.57	0	8030.4	8097.64	13808.03	345.08	th
1542	21	26	253.1	-4.3	61.53	0	8043.4	8105.67	13818.27	344.76	th
1543	21	27	259.6	-5.6	56.93	0	8051.5	8108.55	13825.88	343.81	th
1544	21	28	260	-4	56.86	0	8051.5	8108.54	13826.28	345.41	ws
1545	21	29	65.4	2.2	108.42	0		8263.12	13881.29	353.55	rac
1546	21	30	71	1.6	140.65	0		8297.52	13881.94	353.32	rbf
1547	21	31	25	1.4	212.64	0		8254.40	14028.87	354.59	rac
1548	21	32	27	1	258.86	0		8282.06	14066.80	353.91	rbf
1549	21	33	277.4	-6.4	58.43	0	8069.4	8106.59	13843.68	342.84	th
1550	21	34	289.3	-5.5	73.16	0	8089.4	8095.49	13860.33	342.34	th
1551	21	35	296.7	-4.9	86.78	0	8106.5	8087.01	13875.15	341.95	th
1552	21	36	303	-4.3	107.00	0	8129.3	8074.80	13894.43	341.34	th
1553	21	37	307	-2.7	117.37	3.71	8142.3	8070.80	13906.79	340.14	th
1554	21	38	310.3	-2.5	130.78	3.71	8157.5	8064.80	13920.74	339.97	th
1555	21	39	311.2	-2.2	145.59	3.71	8172.5	8054.99	13932.05	340.09	th
1556	21	40	314.1	-2.9	165.09	0	8193.5	8045.99	13951.04	341.03	th
1557	21	41	316.4	-2.5	181.93	0	8211.7	8039.08	13967.90	341.45	th
1558	21	42	319.3	-1.5	201.03	3.71	8233.1	8033.45	13988.56	340.42	th
1559	21	43	319.9	-1.1	220.46	3.71	8252.7	8022.54	14004.79	341.45	th
1560	21	44	318.9	-1.7	239.49	0	8272.1	8007.10	14016.63	342.28	th
1561	21	45	317.8	-1.6	240.01	0	8276.8	8003.32	14013.95	342.69	th
1562	21	46	308.8	-1.8	272.37	-5		7952.27	14006.82	345.83	tp21l
1563	21	47	308.7	-1.9	272.45	-5		7951.91	14006.50	345.35	tp21l
1564	21	48	304.9	-1.7	280.88	-5		7934.18	13996.85	346.05	tp21r
1565	21	49	304.8	-1.8	280.86	-5		7933.91	13996.44	345.56	tp21r
1566	22	1	151.6	-0.8	332.77	-5		7933.90	13996.61	345.70	tp21r
1567	22	2	151.6	-0.8	332.77	-5		7933.90	13996.61	345.70	tp21r
1568	22	3	148	-0.8	333.27	-5		7952.23	14006.70	345.70	tp21l
1569	22	4	148	-0.8	333.27	-5		7952.23	14006.70	345.70	tp21l
1570	22	5	139.8	-0.5	346.29	0	8288.4	7999.14	14024.83	342.33	th
1571	22	6	139.9	0	346.30	0	8288.4	7998.69	14024.43	345.35	ws
1572	22	7	139.4	-0.5	315.99	0	8318.8	7981.27	14049.41	342.59	th
1573	22	8	139.1	-0.6	300.38	0	8334.5	7972.30	14062.28	342.20	th
1574	22	9	138.5	-0.7	282.58	0	8352.6	7962.87	14077.69	341.90	th
1575	22	10	138.9	-0.8	272.27	0	8363.1	7954.62	14084.15	341.55	th
1576	22	11	139.2	-0.5	263.59	3.71	8371.9	7947.87	14089.79	339.34	th
1577	22	12	139.7	-0.4	255.99	3.71	8379.8	7941.20	14094.09	339.85	th
1578	22	13	139.7	-0.3	243.90	3.71	8391.9	7933.38	14103.31	340.36	th
1579	22	14	139.1	-0.9	230.57	0	8405.4	7926.59	14115.05	341.73	th

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Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1580	22	15	139	-0.1	229.80	0	8405.4	7926.39	14115.89	344.95	ws
1581	22	16	139.9	-0.8	213.98	0	8422.3	7913.46	14125.65	342.36	th
1582	22	17	140.1	-0.6	193.09	0	8443.2	7899.49	14141.20	343.33	th
1583	22	18	141.9	-0.6	168.09	0	8468.8	7879.35	14157.05	343.59	th
1584	22	19	142.6	-0.6	144.39	0	8492.6	7863.33	14174.62	343.84	th
1585	22	20	146.5	-0.8	128.99	0	8510.6	7846.82	14181.77	343.55	th
1586	22	21	145.8	-0.6	110.49	0	8529.2	7837.74	14197.94	344.19	th
1587	22	22	144.6	-0.6	97.39	0	8542.4	7832.05	14209.94	344.33	th
1588	22	23	145.2	-0.9	86.39	0	8553.5	7824.93	14218.39	343.99	th
1589	22	24	145.6	-1.1	67.79	0	8572.1	7813.93	14233.39	344.05	th
1590	22	25	145.4	-1.3	54.49	0	8585.4	7806.57	14244.48	344.11	th
1591	22	26	156.6	-1.9	36.88	0	8605.1	7790.28	14255.48	344.13	th
1592	22	27	92.3	7.2	72.62	0		7848.19	14286.41	354.52	rac
1593	22	28	92.3	7.2	72.62	0		7848.19	14286.41	354.52	rbf
1594	22	29	54.5	-1.6	83.07	0	8702.8	7843.26	14337.56	343.03	th hayfork
1595	22	30	45.4	-2.1	67.05	0	8722.7	7823.37	14336.41	342.89	th hayfork
1596	22	31	27.8	-2.4	53.75	0	8745.3	7800.70	14336.88	343.10	th hayfork
1597	22	32	5.7	-2.5	49.15	0	8765.6	7780.51	14338.24	343.20	th hayfork
1598	22	33	345.3	-2	53.37	0	8784.2	7762.09	14340.95	343.49	th hayfork
1599	22	34	323.3	-2.5	57.15	0	8805.6	7741.48	14335.14	342.85	th hayfork
1600	22	35	313.9	-2.6	56.54	0	8814.9	7734.89	14328.53	342.78	th hayfork
1601	22	36	299.2	-4	61.35	0	8830.8	7722.08	14319.26	341.06	th hayfork
1602	22	38	294.7	-3.6	71.46	0	8842.1	7710.71	14319.19	340.85	th hayfork
1603	22	39	293.1	-3.3	81.66	0	8852.6	7700.51	14321.37	340.64	th hayfork
1604	22	40	291.6	-2.9	93.18	0	8864.3	7688.99	14323.63	340.63	th hayfork
1605	22	41	291.6	-2.9	93.18	0	8864.3	7688.99	14323.63	340.63	th
1606	22	42	286.7	-2	86.75	0	8874.3	7692.54	14314.25	342.32	th
1607	22	43	286.9	-0.2	86.60	0	8874.3	7692.77	14314.50	345.05	ws
1608	22	44	279	-1.2	66.09	0	8897.4	7710.36	14299.66	343.97	th
1609	22	45	273.2	-1.7	48.88	0	8915.5	7726.83	14292.06	343.90	th
1610	22	46	253.6	-2.2	32.88	0	8936.5	7744.09	14280.04	344.09	th
1611	22	47	169.1	-2.1	37.87	0	8984.2	7782.79	14252.14	343.96	th
1612	22	48	191.2	-3	29.56	0	8999.5	7769.89	14260.33	343.80	th
1613	22	49	289.5	-2.5	102.30	0	9110.0	7679.20	14323.48	340.88	th
1614	22	50	290.9	-2.2	126.61	0	9134.5	7657.35	14334.49	340.49	th
1615	22	51	290.9	-1.8	145.03	0	9152.9	7640.14	14341.06	340.79	th
1616	22	52	291	-0.1	146.60	0	9152.9	7638.77	14341.86	345.09	ws
1617	22	53	213.8	2.7	119.67	0		7709.06	14189.89	350.99	lac
1618	22	54	213.3	3.2	133.79	0		7702.18	14177.50	352.83	lbf
1619	22	55	289.3	-1.5	174.64	0	9182.9	7610.80	14347.05	340.78	th
1620	22	56	288.6	-1.3	192.45	0	9200.8	7593.23	14350.71	340.98	th
1621	22	57	288.4	-1.1	207.96	0	9216.3	7578.30	14354.97	341.36	th
1622	22	58	288.3	-1.1	226.46	0	9234.8	7560.62	14360.43	341.00	th
1623	22	59	288.2	-0.8	247.88	0	9256.3	7540.15	14366.75	341.89	th
1624	22	60	288.4	-0.9	265.07	0	9273.5	7524.11	14372.99	341.19	th
1625	22	61	289.5	-0.8	283.47	0	9292.6	7508.42	14383.95	341.39	th
1626	22	62	289.7	-0.9	298.36	0	9307.5	7494.73	14389.90	340.66	th
1627	22	63	290.6	-0.9	317.36	0	9327.1	7478.56	14400.99	340.36	th
1628	22	64	291	-0.1	319.80	0	9327.1	7477.07	14403.93	344.79	ws
1629	22	65	7.8	0.1	141.90	0		7794.89	14429.91	345.60	rac
1630	22	66	11.3	1.6	155.94	0		7806.19	14442.24	349.71	rbf
1631	22	67	312.5	0.6	250.89	0		7590.66	14458.82	347.98	rac
1632	22	68	10.8	1.3	277.23	0		7827.58	14561.64	351.64	rvw
1633	22	69	317.5	2.3	269.88	0		7593.30	14488.30	356.19	rbf
1634	22	70	309.2	0.6	259.79	0		7574.31	14453.52	348.07	rac
1635	22	71	306.9	-0.1	271.90	-5		7558.20	14452.58	349.87	tp22r
1636	22	72	307	-0.2	272.00	-5		7558.40	14453.02	349.40	tp22r
1637	22	73	306.9	-0.2	271.90	0		7558.20	14452.58	344.40	tp22r
1638	22	74	307	-0.2	271.90	-5		7558.48	14452.96	349.40	tp22r
1639	22	75	269.4	-0.6	263.19	-5		7512.46	14286.57	347.59	tp22l
1640	22	76	269.5	-0.6	263.29	-5		7512.35	14287.03	347.59	tp22l
1641	22	77	237.5	-1.3	126.77	-5		7668.72	14221.21	347.47	tp22l2

Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
1642	23	1	-----	-----	#VALUE!			#VALUE!	#VALUE!	#VALUE!	2nd wk 1st dy
1643	23	2	-----	-----	#VALUE!			#VALUE!	#VALUE!	#VALUE!	1st sta below
1644	23	3	-----	-----	#VALUE!			#VALUE!	#VALUE!	#VALUE!	hayfork cr
1645	23	4	96.8	-0.7	232.68	-5		7512.32	14285.57	346.95	tp22l
1646	23	5	96.8	-0.6	232.69	-5		7512.32	14285.57	347.36	tp22l
1647	23	6	63	-0.2	310.90	-5		7558.28	14454.26	348.71	tp22r
1648	23	7	63.1	-0.2	310.90	-5		7558.53	14453.78	348.71	tp22r
1649	23	8	62.8	0.6	313.58	0		7560.18	14456.45	348.08	rac
1650	23	9	74.1	-1	271.16		9392.1	7542.06	14387.40	340.06	th
1651	23	10	74.2	-0.1	271.40		9392.1	7542.42	14387.01	344.32	ws
1652	23	11	73.2	-1.1	253.35		9410.4	7523.81	14386.34	339.93	th
1653	23	12	70.9	-1.2	236.45		9429.9	7504.70	14390.49	339.84	th
1654	23	13	67.9	-1.3	218.14		9451.7	7483.39	14395.19	339.84	th
1655	23	14	63.7	-1.4	200.94		9474.8	7461.41	14402.15	339.88	th
1656	23	15	59.1	-1.6	186.43		9496.0	7441.24	14408.85	339.59	th
1657	23	16	59.1	-1.6	186.43	-5	9496.0	7441.24	14408.85	344.59	ws
1658	23	17	54.5	-0.6	175.59	3.71	9514.2	7424.22	14415.08	339.24	th
1659	23	18	49.6	-0.8	170.28	3.71	9529.9	7410.95	14423.48	338.71	th
1660	23	19	45.5	-1	161.58	3.71	9544.6	7396.52	14426.37	338.26	th
1661	23	20	43.8	-1	155.78	3.71	9552.1	7389.09	14425.55	338.36	th
1662	23	21	38	-0.3	164.10	-5		7382.30	14442.43	348.93	chevy
1663	23	22	40.7	-1.1	147.57	3.71	9563.7	7377.50	14425.00	338.25	th
1664	23	23	40.4	-2	148.71	-5	9563.7	7377.65	14426.36	344.60	ws
1665	23	24	36.5	-1.4	136.16	3.71	9579.1	7362.26	14422.57	337.76	th
1666	23	25	32.9	-1.7	126.34	3.71	9591.9	7349.90	14419.20	337.33	th
1667	23	26	28.7	-2.1	119.22	3.71	9603.4	7338.52	14417.69	336.71	th
1668	23	27	24.1	-2.1	113.02	3.71	9614.6	7327.42	14416.29	336.94	th
1669	23	28	20	-2.1	100.33	3.71	9629.4	7315.59	14407.40	337.40	th
1670	23	29	15.5	-2.3	96.82	3.71	9637.9	7307.15	14406.42	337.19	th
1671	23	30	9.4	-3	94.37	3.71	9648.3	7296.68	14406.22	336.14	th
1672	23	31	1.4	-1	96.59	7.5	9661.8	7283.63	14409.67	335.61	th
1673	23	32	351.5	-0.8	94.49	7.5	9678.5	7267.30	14406.57	335.97	th
1674	23	33	345.9	-0.4	95.00	7.5	9687.7	7258.13	14405.25	336.63	th
1675	23	34	337.7	0.1	98.20	7.5	9701.9	7244.01	14403.97	337.46	th
1676	23	35	328.7	0.6	106.99	7.5	9720.2	7225.69	14404.54	338.41	th
1677	23	36	319.9	-0.9	112.89	3.71	9738.1	7208.56	14399.47	339.31	th
1678	23	37	315.9	-0.8	112.79	3.71	9746.0	7202.78	14394.11	339.51	th
1679	23	38	308.8	-0.4	125.90	3.71	9765.7	7183.16	14392.00	340.20	th
1680	23	39	305.5	-0.2	141.50	3.71	9783.1	7166.07	14395.29	340.59	th
1681	23	40	310	0.7	188.29	3.71		7137.04	14434.14	343.38	rac
1682	23	41	148.1	0.8	145.69	0		7358.26	14189.43	346.83	lac
1683	23	42	132.8	0.7	157.79	0		7397.05	14205.91	346.72	lac
1684	23	43	200.2	3.1	214.69	7.5		7207.14	14111.64	348.92	lac
1685	23	44	295.9	-0.8	205.18	0	9852.9	7096.70	14402.74	341.93	th
1686	23	45	295.7	0	204.70		9852.9	7096.82	14401.89	344.79	ws
1687	23	46	292.1	-0.6	221.29		9874.3	7076.24	14396.37	342.48	th
1688	23	47	290.3	-0.5	245.69		9899.8	7050.84	14398.36	342.65	th
1689	23	48	288.7	-0.5	268.09		9923.3	7027.33	14399.07	342.45	th
1690	23	49	287.1	-0.2	294.10		9950.5	7000.17	14399.59	343.77	th
1691	23	50	291.1	0.1	317.70			6984.87	14427.49	345.35	rac
1692	23	51	280.6	-0.3	308.40		9987.5	6978.14	14369.85	343.18	th
1693	23	52	277	-0.2	312.70		10007.5	6970.90	14351.22	343.70	th
1694	23	53	271.8	-0.4	321.99		10037.7	6959.44	14323.23	342.55	th
1695	23	54	268.2	-0.3	329.10		10059.4	6952.34	14302.78	343.07	th
1696	23	55	265.3	-0.2	334.80		10077.1	6947.60	14285.68	343.62	th
1697	23	56	260.2	-0.1	347.80		10077.1	6938.55	14253.92	344.19	ws
1698	23	57	259.6	-0.9	322.76	-5		6963.81	14254.85	344.72	tp23r
1699	23	58	259.6	-0.9	322.86	-5		6963.72	14254.83	344.72	tp23r
1700	23	59	251.8	-0.9	313.66	-5		6983.30	14215.15	344.87	tp23l
1701	23	60	252.1	-0.8	313.57	-5		6982.88	14216.74	345.41	tp23l
1702	24	1	44.2	0.3	332.20	-5		6982.69	14216.61	345.04	tp23l
1703	24	2	44.3	0.3	332.00	-5		6982.96	14216.06	345.04	tp23l

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1704	24	3	37.6	0.2	348.70	-5		6963.85	14254.72	344.52	tp23r
1705	24	4	37.7	0.3	348.50	-5		6964.21	14254.19	345.13	tp23r
1706	24	5	34.7	0.9	319.96	0	10123.6	6933.24	14241.50	343.33	th
1707	24	6	34.9	1.1	320.24		10123.6	6934.32	14241.10	344.45	ws
1708	24	7	35.8	0.9	305.76		10139.0	6929.95	14226.44	343.10	th
1709	24	8	36.8	0.9	295.06		10150.9	6927.84	14214.72	342.94	th
1710	24	9	38	0.8	282.87		10164.5	6925.25	14201.36	342.25	th
1711	24	10	39.4	0.8	269.77		10179.2	6922.33	14186.91	342.07	th
1712	24	11	40.2	0.7	258.08		10191.5	6917.67	14175.57	341.45	th
1713	24	12	40.2	0.7	254.28		10195.3	6915.22	14172.67	341.41	th
1714	24	13	41.3	0.6	240.99		10209.4	6910.15	14159.50	340.83	th
1715	24	14	41.3	0.6	240.39		10209.4	6909.75	14159.05	340.82	ws
1716	24	15	40.9	0.2	227.30		10223.2	6899.92	14150.26	339.09	th
1717	24	16	40.8	0	218.00		10232.5	6893.54	14143.48	338.30	th
1718	24	17	41.5	-0.1	212.90		10238.2	6892.17	14137.90	337.93	th
1719	24	18	42.6	-0.3	200.70		10251.1	6886.94	14126.18	337.25	th
1720	24	19	42.5	0.2	200.40		10251.1	6886.48	14126.20	339.00	ws
1721	24	20	43.1	-0.5	186.39		10265.5	6878.45	14114.55	336.67	th
1722	24	21	43.4	0.3	185.50		10265.5	6878.55	14113.23	339.27	ws
1723	24	22	46.7	-0.6	159.19		10294.8	6866.95	14087.63	336.63	th
1724	24	23	50.9	-0.8	131.29		10324.6	6852.98	14061.25	336.47	th
1725	24	24	55.5	-0.6	107.39		10350.3	6839.60	14039.28	337.18	th
1726	24	25	61.7	-1	94.99		10366.9	6834.73	14023.48	336.64	th
1727	24	26	61.7	0.1	94.80		10366.9	6834.56	14023.39	338.47	ws
1728	24	27	71.5	-1	83.49		10385.9	6830.27	14004.94	336.84	th
1729	24	28	81.2	-1.5	75.87		10401.4	6826.07	13990.06	336.31	th
1730	24	29	98	3.4	179.58			6928.93	13953.46	348.97	lac
1731	24	30	117.6	1.4	110.37	-5		6848.90	13927.32	346.00	lac
1732	24	31	117.6	1.4	110.37	-5		6848.90	13927.32	346.00	lbf
1733	24	32	117.6	1.4	110.37			6848.90	13927.32	341.00	bdrx
1734	24	33	88.7	-2.1	71.45		10412.0	6822.53	13980.07	335.68	th
1735	24	34	94.1	-2.6	71.53		10418.7	6822.44	13973.34	335.05	th
1736	24	35	94.2	-0.5	71.50		10418.7	6822.40	13973.21	337.68	ws
1737	24	36	93.9	-2.8	70.42		10419.9	6821.35	13973.66	334.86	th
1738	24	37	102.5	-3.6	71.76		10430.6	6821.15	13962.92	333.79	th
1739	24	38	115.8	-2.8	77.41	3.71	10448.8	6820.79	13944.76	330.81	th
1740	24	39	121.2	-1.7	80.56	7.5	10456.9	6820.01	13936.72	328.41	th
1741	24	40	121.8	-1.9	67.86	7.5	10469.6	6808.77	13942.69	328.55	th
1742	24	41	125.8	-2.9	57.13	7.5	10481.2	6797.43	13945.03	327.91	th
1743	24	42	128.7	-1.1	45.59	7.5	10493.0	6786.67	13949.95	329.93	th
1744	24	43	141.8	-0.4	36.80	7.5	10505.8	6773.85	13949.53	330.54	th
1745	24	44	142.7	-9.8	32.81	-5	10505.8	6770.98	13952.35	337.63	ws
1746	24	45	156.4	1.7	28.49	7.5	10517.5	6762.50	13952.35	331.65	th
1747	24	46	179.6	-4.6	25.42	3.71	10528.8	6751.27	13953.03	332.55	th
1748	24	47	210.6	-4.4	31.71	3.71	10545.2	6734.95	13951.16	332.15	th
1749	24	48	231.3	-2.6	40.86	3.71	10561.0	6719.21	13952.91	332.74	th
1750	24	49	233.5	-2.4	49.86	3.71	10570.2	6711.02	13948.80	332.50	th
1751	24	50	239.8	-1.9	62.97	3.71	10584.7	6696.67	13946.78	332.50	th
1752	24	51	241.1	-0.9	73.49	3.71	10595.3	6686.76	13942.93	333.44	th
1753	24	52	241.3	-0.6	72.60	0	10595.3	6687.42	13943.59	337.54	ws
1754	24	53	247.1	-2.1	81.35	0	10606.6	6676.16	13946.80	335.32	th
1755	24	54	250.9	-1.1	91.78		10618.5	6664.36	13948.42	336.54	th
1756	24	55	253.9	-0.8	98.99		10627.3	6655.99	13951.00	336.92	th
1757	24	56	253.8	-0.4	99.20		10627.3	6655.83	13950.78	337.61	ws
1758	24	57	235.5	8.3	97.67	-5		6670.60	13923.13	357.55	deck
1759	24	58	254.3	-0.7	101.79	0	10630.1	6653.10	13950.91	337.06	th
1760	24	59	254.4	-0.4	102.30		10630.1	6652.56	13950.94	337.59	ws
1761	24	60	258.7	-1.2	124.57		10654.5	6628.94	13954.04	335.69	th
1762	24	61	259.6	-1.3	147.56		10677.6	6605.96	13951.81	334.95	th
1763	24	62	262.3	-1.2	172.76		10703.9	6579.89	13955.30	334.68	th
1764	24	63	260	-1.3	164.86			6588.74	13949.82	334.56	bdrx
1765	24	64	263.7	-1.1	181.07		10713.3	6571.12	13958.58	334.82	th

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1766	24	65	265.5	-1	196.77		10730.0	6554.93	13963.01	334.87	th
1767	24	66	265.5	-1	196.77			6554.93	13963.01	334.87	bdrc
1768	24	67	267.3	-0.8	220.98		10755.1	6530.36	13968.04	335.22	th
1769	24	68	269	-0.8	241.08		10776.4	6510.05	13974.24	334.94	th
1770	24	69	270.4	-0.7	264.28		10800.4	6486.82	13980.30	335.07	th
1771	24	70	269	-0.7	280.58		10818.0	6470.56	13973.55	334.87	th
1772	24	71	265.2	1.3	288.83			6463.28	13954.28	344.86	lac
1773	24	72	265.2	1.3	288.83			6463.28	13954.28	344.86	lbf
1774	24	73	265.2	1.3	288.83			6463.28	13954.28	344.86	bdrc
1775	24	74	268.5	-1	265.36	-5		6485.83	13971.50	338.67	tp24l
1776	24	75	268.3	-0.9	265.27	-5		6485.94	13970.58	339.13	tp24l
1777	24	76	277.8	-0.5	261.29	-5		6492.22	14013.91	341.02	tp24r
1778	24	77	277.8	-0.6	261.29	-5		6492.23	14013.91	340.57	tp24r
1779	25	1	100.1	-0.5	318.89	-5		6492.08	14014.24	341.42	tp24r
1780	25	2	100.1	-0.6	318.88	-5		6492.08	14014.24	340.86	tp24r
1781	25	3	107.9	-1	323.65	-5		6486.12	13970.69	338.55	tp24l
1782	25	4	107.9	-1	323.45	-5		6485.93	13970.75	338.56	tp24l
1783	25	5	107.3	-0.8	310.37		10823.8	6474.47	13977.87	334.87	th
1784	25	6	107.2	-0.2	310.30		10823.8	6474.56	13978.40	338.12	ws
1785	25	7	108.4	-1	302.95		10833.3	6465.60	13974.53	333.91	th
1786	25	8	108.7	-1.2	298.33		10838.1	6460.72	13974.51	332.95	th
1787	25	9	110	-0.4	294.69	3.71	10845.8	6455.06	13969.37	333.43	th
1788	25	10	109.8	-0.3	276.70	3.71	10863.8	6438.48	13976.43	334.04	th
1789	25	11	107.9	-1	259.46		10883.2	6425.04	13990.41	334.67	th
1790	25	12	106.4	-1.2	232.85		10910.6	6401.51	14004.42	334.32	th
1791	25	13	106.7	-1.2	211.65		10931.8	6380.86	14009.34	334.77	th
1792	25	14	106.6	-0.5	210.99		10931.8	6380.34	14009.88	337.36	ws
1793	25	15	111.4	0.2	200.00			6364.35	13997.19	339.90	lac
1794	25	16	103.7	-1.4	190.84		10955.1	6363.55	14024.96	334.54	th
1795	25	17	101.9	-1.7	171.92		10974.9	6346.37	14034.71	334.10	th
1796	25	18	100.9	-1.8	149.23		10997.8	6324.67	14041.94	334.51	th
1797	25	19	97.2	-1.8	128.44		11020.4	6305.56	14054.06	335.17	th
1798	25	20	89.5	-1.9	108.74		11045.7	6286.87	14071.11	335.59	th
1799	25	21	79.8	-2.1	88.84		11071.6	6265.57	14085.89	335.94	th
1800	25	22	68.6	-2.6	74.12		11093.2	6247.15	14097.21	335.84	th
1801	25	23	60.3	-3.2	65.20		11106.7	6234.77	14102.46	335.56	th
1802	25	24	37.5	-3.8	59.47		11131.9	6214.34	14117.34	335.25	th
1803	25	25	14.2	-4.4	60.62		11156.2	6193.01	14128.93	334.54	th
1804	25	26	6.7	1.7	150.93			6195.75	14220.06	343.68	rac
1805	25	27	342.6	-4.5	69.88		11192.9	6157.24	14136.85	333.70	th
1806	25	28	324.1	-3.5	77.56		11217.7	6132.66	14132.98	334.46	th
1807	25	29	313.2	-2.7	91.10		11238.7	6111.73	14132.52	334.91	th
1808	25	30	306.7	-1.9	108.74		11259.6	6090.95	14135.15	335.59	th
1809	25	31	304.8	-1.6	128.45		11279.7	6072.66	14143.47	335.61	th
1810	25	32	304.8	-0.8	128.69		11279.7	6072.47	14143.61	337.41	ws
1811	25	33	303.7	-1.6	150.74		11302.2	6052.73	14153.80	334.99	th
1812	25	34	303.7	-1.6	169.63		11321.1	6037.01	14164.28	334.46	th
1813	25	35	302.7	-1.4	190.14		11341.8	6018.13	14172.88	334.55	th
1814	25	36	302.6	-1.2	212.15		11363.8	5999.41	14184.46	334.76	th
1815	25	37	302.7	-1.2	232.05		11383.7	5982.87	14195.52	334.34	th
1816	25	38	302.3	-1	256.26		11408.0	5961.53	14207.10	334.73	th
1817	25	39	301.7	-0.9	279.57		11431.5	5940.28	14217.07	334.81	th
1818	25	40	301.8	-0.3	279.80		11431.5	5940.34	14217.60	337.74	ws
1819	25	41	310.2	-0.1	300.40	0		5948.69	14264.06	338.68	tp25r
1820	25	42	310.2	-0.1	300.40	0		5948.69	14264.06	338.68	tp25r
1821	25	43	290.1	-0.8	328.17	-5		5869.96	14182.94	339.62	tp25l
1822	25	44	289.9	-0.8	328.07	-5		5869.66	14181.83	339.62	tp25l
1823	26	1	-----	-----	#VALUE!			#N/A	#N/A	#N/A	begin
1824	26	2	-----	-----	#VALUE!			#N/A	#N/A	#N/A	sta 26
1825	26	3	-----	-----	#VALUE!			#N/A	#N/A	#N/A	09/30/1998
1827	27	2	-----	-----	#VALUE!			#VALUE!	#VALUE!	#VALUE!	upstm of sta26
1828	27	3	83.3	-1	238.96	-5		5948.92	14264.81	338.61	tp25r

Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
1829	27	4	83.4	-0.8	239.28	-5		5949.28	14264.43	339.44	tp25r
1830	27	5	109.2	-1.2	167.16	-5		5869.45	14181.96	339.28	tp25l
1831	27	6	109.3	-1.2	167.16	-5		5869.36	14181.68	339.28	tp25l
1832	27	7	130.5	1.6	181.03	0		5849.24	14119.36	342.83	lac
1833	27	8	88.2	-1	204.57		11467.2	5916.05	14243.36	334.21	th
1834	27	9	88.2	-0.1	204.70		11467.2	5916.19	14243.36	337.42	ws
1835	27	10	86.3	-1.2	189.76		11483.4	5900.95	14249.18	333.80	th
1836	27	11	83.4	-1.1	179.17		11497.5	5889.57	14257.52	334.34	th
1837	27	12	79.7	-1.2	170.16		11511.9	5879.01	14267.36	334.21	th
1838	27	13	76.4	-1.3	158.76		11526.8	5865.89	14274.26	334.18	th
1839	27	14	73.1	-1.5	149.55		11539.6	5854.68	14280.41	333.86	th
1840	27	15	61.7	1.9	177.40			5867.79	14321.04	343.66	rac
1841	27	16	71	-1.6	141.34		11549.3	5845.23	14282.95	333.83	th
1842	27	17	69.2	-1.9	128.93		11562.5	5832.11	14282.71	333.50	th
1843	27	18	68.4	-2.2	113.62		11577.9	5817.22	14278.76	333.41	th
1844	27	19	63.9	-2.5	98.61		11595.0	5800.14	14280.31	333.47	th
1845	27	20	57.8	-2.9	86.39		11610.7	5784.69	14282.97	333.40	th
1846	27	21	51.9	-3.3	75.57		11624.3	5771.06	14283.56	333.42	th
1847	27	22	51.8	-0.6	75.90		11624.3	5771.23	14283.87	336.98	ws
1848	27	23	41.8	-3.4	67.98		11639.1	5756.90	14287.61	333.74	th
1849	27	24	32.4	-3.6	60.18		11652.1	5743.83	14287.74	333.99	th
1850	27	25	18.1	-3.8	55.28		11667.3	5728.76	14289.47	334.11	th
1851	27	26	3.9	-3.2	60.41		11682.5	5715.70	14297.20	334.40	th
1852	27	27	346.7	-3.2	63.90		11701.4	5696.89	14299.12	334.21	th
1853	27	28	335.7	-3	68.91		11715.1	5683.23	14299.73	334.17	th
1854	27	29	325.8	-2.7	76.91		11730.0	5668.35	14300.55	334.15	th
1855	27	30	316.1	-2.4	90.22		11749.3	5649.03	14301.94	334.00	th
1856	27	31	312.2	-1.9	103.24		11763.9	5635.10	14306.28	334.35	th
1857	27	32	310.5	-1.6	116.05		11777.1	5623.34	14312.30	334.54	th
1858	27	33	307.2	-1.3	129.57		11792.4	5608.38	14315.27	334.84	th
1859	27	34	303.9	-1.1	146.57		11811.1	5589.93	14318.68	334.96	th
1860	27	35	304	-0.2	146.80		11811.1	5589.88	14319.02	337.27	ws
1861	27	36	298.7	-0.9	165.18		11834.5	5566.70	14316.25	335.18	th
1862	27	37	295.7	-0.7	180.59		11852.4	5548.86	14315.24	335.57	th
1863	27	38	291.3	-0.6	187.49		11868.1	5536.90	14305.04	335.81	th
1864	27	39	287.2	-0.6	195.79		11884.1	5524.55	14294.83	335.73	th
1865	27	40	285.5	-0.7	201.88		11892.6	5517.04	14290.88	335.31	th
1866	27	41	283.6	-0.7	212.98		11905.7	5504.57	14287.01	335.18	th
1867	27	42	282.7	-0.6	221.99		11915.3	5495.03	14285.73	335.45	th
1868	27	43	282.8	-0.6	233.29		11926.6	5484.10	14288.62	335.33	th
1869	27	44	281.8	-0.5	258.69		11952.4	5458.36	14289.83	335.52	th
1870	27	45	280.9	-0.5	274.39		11968.6	5442.15	14288.82	335.38	th
1871	27	46	281.1	-0.4	286.59		11980.8	5430.35	14292.11	335.78	th
1872	27	47	290.6	-0.7	292.28	-5		5438.00	14339.77	339.21	tp27r
1873	27	48	290.6	-0.7	292.28	-5		5438.00	14339.77	339.21	tp27r
1874	27	49	283.1	-0.9	289.06	-5		5430.04	14302.45	338.24	tp27r2
1875	27	50	283.3	-1	288.86	-5		5430.48	14303.38	337.74	tp27r2
1876	27	51	257.1	-0.6	352.98	-5		5367.51	14158.13	339.08	tp27l
1877	27	52	257.1	-0.5	352.89	-5		5367.61	14158.15	339.70	tp27l
1878	28	1	95.2	-0.9	295.36	-5		5429.25	14304.49	337.64	tp27r2
1879	28	2	95.2	-0.8	295.27	-5		5429.15	14304.50	338.16	tp27r2
1880	28	3	126.8	-0.6	291.58	-5		5368.58	14156.59	339.22	tp27l
1881	28	4	126.8	-0.5	291.69	-5		5368.66	14156.53	339.73	tp27l
1882	28	5	126.8	-0.5	291.69	-5		5368.66	14156.53	339.73	old footing
1883	28	6	127	0	291.60	0		5367.98	14155.77	337.28	gs at footing
1884	28	7	126	0	293.30			5372.38	14158.86	337.28	gs
1885	28	8	126.7	0	285.80			5364.25	14160.46	337.28	gs
1886	28	9	127.3	0.4	291.39	0		5366.89	14154.68	339.31	footing
1887	28	10	130.1	0.9	289.16			5356.29	14145.00	341.82	lac
1888	28	11	101.8	-0.3	287.70		12004.8	5416.72	14272.43	335.77	th
1889	28	12	101.9	0	287.70		12004.8	5416.62	14271.93	337.28	ws
1890	28	13	102.2	-0.3	267.40		12025.2	5396.46	14274.75	335.88	th



Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
1891	28	14	103.1	-0.4	246.29		12046.7	5374.98	14275.44	335.56	th
1892	28	15	103.9	-0.4	228.89		12064.4	5357.29	14276.27	335.68	th
1893	28	16	105.2	-0.4	208.59		12085.3	5336.40	14276.57	335.82	th
1894	28	17	105.4	-0.1	207.70		12085.3	5335.34	14276.10	336.92	ws
1895	28	18	108	-0.4	183.90		12111.8	5309.99	14274.43	335.99	th
1896	28	19	110.1	-0.5	161.69		12134.8	5286.94	14275.69	335.87	th
1897	28	20	112.8	-0.6	141.79		12156.0	5265.81	14276.31	335.79	th
1898	28	21	116.9	-0.7	119.19		12180.4	5241.39	14277.33	335.82	th
1899	28	22	122.9	-0.7	105.49		12198.5	5223.67	14273.96	335.99	th
1900	28	23	122.8	-0.2	105.40		12198.5	5223.69	14274.16	336.91	ws
1901	28	24	132.5	-0.9	90.99		12220.4	5202.18	14269.79	335.85	th
1902	28	25	145.2	-1.1	79.19		12242.5	5180.29	14266.24	335.76	th
1903	28	26	160.3	-1.3	70.68		12264.0	5158.93	14264.71	335.67	th
1904	28	27	175.5	-1.6	66.67		12282.5	5140.33	14264.79	335.42	th
1905	28	28	183.8	-1.6	67.57		12292.3	5130.62	14263.83	335.39	th
1906	28	29	194	-1.4	66.48		12304.3	5119.02	14266.75	335.65	th
1907	28	30	200.7	-1	70.69		12313.3	5110.11	14265.13	336.04	th
1908	28	31	203.6	-0.6	74.50		12318.6	5105.27	14262.99	336.50	th
1909	28	32	203.6	-0.2	74.50		12318.6	5105.27	14262.99	337.02	ws
1910	28	33	205.1	-1.2	78.88		12323.4	5101.64	14259.82	335.63	th
1911	28	34	206.3	-1.8	84.66		12329.5	5097.59	14255.36	334.62	th
1912	28	35	207.1	-2.7	92.10		12337.0	5093.14	14249.27	332.94	th
1913	28	36	206.4	-0.4	92.70		12337.0	5093.88	14248.23	336.63	ws
1914	28	37	211.3	-3.2	91.86		12343.7	5087.38	14252.77	332.14	th
1915	28	38	214.1	-3	92.37		12348.3	5083.31	14254.77	332.44	th
1916	28	39	217.7	-3.3	92.85		12354.1	5078.32	14257.80	331.93	th
1917	28	40	217.7	-3.3	92.85	-5	12354.1	5078.32	14257.80	336.93	ws
1918	28	41	221.7	-3.3	93.25		12360.6	5073.07	14261.64	331.90	th
1919	28	42	225.5	-2.8	94.49		12367.0	5067.71	14265.03	332.66	th
1920	28	43	228.8	-3	94.47		12372.4	5064.02	14269.03	332.33	th
1921	28	44	231.3	-3.4	92.54		12376.9	5062.88	14273.40	331.78	th
1922	28	45	231.3	-3.4	92.54	-5	12376.9	5062.88	14273.40	336.78	ws
1923	28	46	236.7	-1.1	89.68	3.71	12386.0	5060.14	14282.02	331.85	th
1924	28	47	238.5	-0.9	95.39	3.71	12392.4	5053.77	14281.42	332.07	th
1925	28	48	241.3	-1	102.48	3.71	12401.0	5045.21	14282.04	331.78	th
1926	28	49	243.6	-1.3	103.17	3.71	12405.1	5042.69	14285.38	331.23	th
1927	28	50	250.1	-1.1	106.08	3.71	12417.4	5035.35	14295.15	331.53	th
1928	28	51	247.7	-1.2	103.88	3.71	12422.3	5038.99	14291.84	331.39	th
1929	28	52	252.3	-1	108.38	3.71	12431.9	5031.85	14298.31	331.68	th
1930	28	53	254.9	-1.1	110.48	3.71	12437.3	5028.43	14302.48	331.45	th
1931	28	54	257.5	-0.6	115.49	3.71	12444.5	5022.34	14306.26	332.36	th
1932	28	55	259.1	-0.2	124.60	3.71	12454.2	5012.75	14307.70	333.13	th
1933	28	56	260.2	-1.2	130.87	3.71	12460.9	5006.14	14308.98	330.83	th
1934	28	57	262	-0.7	136.59	3.71	12468.0	4999.84	14312.25	331.90	th
1935	28	58	263	-1.1	146.07	3.71	12477.8	4990.11	14313.46	330.76	th
1936	28	59	263.3	-1.3	158.16	3.71	12489.9	4978.02	14312.81	329.98	th
1937	28	60	265	-1	162.98	3.71	12496.7	4972.74	14317.05	330.72	th
1938	28	61	266.9	-0.5	167.99	3.71	12504.1	4967.35	14322.17	332.10	th
1939	28	62	268	0.1	179.70	3.71	12516.3	4955.51	14324.99	333.88	th
1940	28	63	267.7	0	191.00	3.71	12527.6	4944.25	14323.59	333.57	th
1941	28	64	262.3	2.3	183.25	-5		4953.50	14306.70	349.64	huge rock
1942	28	65	254.3	1.4	169.35	0		4972.07	14285.43	341.42	lac
1943	28	66	268.2	-0.8	198.28	0	12535.1	4936.92	14325.03	334.51	th
1944	28	67	268.3	0	198.30		12535.1	4936.89	14325.38	337.28	ws
1945	28	68	270.5	-0.7	203.68		12544.8	4931.42	14333.04	334.79	th
1946	28	69	272.1	-0.8	209.98		12553.4	4925.26	14338.95	334.35	th
1947	28	70	275.4	-0.6	223.99		12572.1	4912.11	14352.34	334.93	th
1948	28	71	277.2	-0.6	240.29		12590.0	4896.71	14361.37	334.76	th
1949	28	72	276.7	-0.6	256.39		12606.2	4880.46	14361.17	334.59	th
1950	28	73	276	-0.6	269.69		12619.9	4866.89	14359.45	334.45	th
1951	28	74	275.3	-0.5	272.09			4864.17	14356.39	334.90	bdrc
1952	28	75	275.7	-1	274.06		12624.5	4862.40	14358.48	332.49	th

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
1953	28	76	278.2	-1	279.96		12638.0	4858.00	14371.19	332.39	th
1954	28	77	278.3	-0.2	293.40	3.71	12651.4	4844.77	14373.61	332.54	th
1955	28	78	278.1	-0.5	302.09	3.71	12660.2	4836.02	14373.82	330.93	th
1956	28	79	277.5	0.1	306.00	0		4831.72	14371.20	337.81	tp28l
1957	28	80	277.6	0.1	306.00	0		4831.79	14371.73	337.81	tp28l
1958	28	81	306.1	-0.3	285.40	-5		4904.50	14499.41	340.78	tp28r
1959	28	82	306	-0.4	285.29	-5		4904.29	14498.95	340.29	tp28r
1960	29	1	87.9	-0.4	310.49	-5		4906.34	14500.22	340.70	tp28r
1961	29	2	87.8	-0.4	310.19	-5		4906.02	14500.75	340.71	tp28r
1962	29	3	77.3	0.4	312.39			4900.80	14557.52	340.05	rac
1963	29	4	116.8	0	262.20	0		4830.09	14370.62	337.87	tp28l
1964	29	5	117	-0.1	262.40	0		4829.85	14369.71	337.41	tp28l
1965	29	6	116.1	-0.6	271.89	3.71	12666.4	4840.21	14369.22	331.31	th
1966	29	7	114.5	-0.6	258.39	3.71	12681.8	4831.17	14381.69	331.46	th
1967	29	8	114	-0.8	248.58	3.71	12691.8	4823.14	14387.73	330.69	th
1968	29	9	113.5	-1.1	240.66	3.71	12700.0	4816.75	14392.88	329.54	th
1969	29	10	112.9	-0.7	234.68	3.71	12706.5	4812.24	14397.52	331.29	th
1970	29	11	112.3	-0.9	229.17	3.71	12712.5	4808.09	14401.88	330.56	th
1971	29	12	112	-1.1	220.86	3.71	12720.9	4800.83	14406.10	329.92	th
1972	29	13	112.3	-0.6	207.69	3.71	12734.1	4788.21	14410.03	331.99	th
1973	29	14	111.1	-0.5	199.99	3.71	12742.9	4782.64	14416.84	332.42	th
1974	29	15	110.3	-1.4	189.34	0	12753.9	4773.64	14423.15	333.24	th
1975	29	16	110.5	-0.4	189.20		12753.9	4773.27	14422.58	336.55	ws
1976	29	17	108.9	-1.3	177.15		12766.9	4763.66	14431.45	333.85	th
1977	29	18	106.9	-1.2	164.76		12780.7	4753.70	14440.94	334.42	th
1978	29	19	104.2	-1.3	157.16		12791.4	4748.41	14450.29	334.31	th
1979	29	20	100.6	-1.3	145.76		12806.2	4739.33	14462.02	334.56	th
1980	29	21	96.4	-1.5	131.26		12823.9	4726.49	14474.21	334.43	th
1981	29	22	93.5	-1.5	119.66		12837.2	4715.49	14481.53	334.74	th
1982	29	23	93.6	-0.7	119.59		12837.2	4715.41	14481.33	336.41	ws
1983	29	24	87.9	-1.6	108.76		12852.7	4704.74	14492.82	334.83	th
1984	29	25	80.9	-1.8	100.55		12867.9	4695.34	14504.74	334.71	th
1985	29	26	72.3	-1.8	93.95		12883.9	4685.56	14517.40	334.92	th
1986	29	27	63.7	-1.8	90.46		12898.2	4677.15	14528.92	335.03	th
1987	29	28	54.9	-1.7	87.06		12912.2	4667.28	14538.90	335.29	th
1988	29	29	54.7	-0.9	87.49		12912.2	4667.46	14539.39	336.50	ws
1989	29	30	42.3	-1.6	87.27		12931.4	4654.78	14553.38	335.43	th
1990	29	31	37.2	-1.7	86.96		12939.1	4648.63	14558.11	335.29	th
1991	29	32	34.1	-2.6	86.21		12943.9	4644.39	14560.23	333.96	th
1992	29	33	33.7	-0.9	86.09		12943.9	4643.82	14560.46	336.52	ws
1993	29	34	31.6	-2.1	91.94			4644.23	14567.14	334.50	rc
1994	29	35	24	-2.3	88.53			4632.06	14569.71	334.32	rc
1995	29	36	26.9	-2.8	81.60			4632.97	14561.61	333.88	rc
1996	29	37	28.4	-2.7	84.31	-5		4636.15	14563.00	338.90	rc top
1997	29	38	27.3	-1.9	89.75		12954.9	4637.22	14568.59	334.89	th
1998	29	39	22.6	-2.4	88.42		12962.3	4630.03	14570.47	334.17	th
1999	29	40	24.6	-1	88.09		12962.3	4632.72	14568.93	336.33	ws
2000	29	41	18.8	-2.8	86.60		12968.4	4623.96	14570.81	333.64	th
2001	29	42	19	-0.4	80.70			4622.33	14565.14	337.31	rk
2002	29	43	13.3	-0.1	81.20			4614.73	14567.86	337.73	rx
2003	29	44	14.9	-3.1	86.47		12974.3	4618.29	14572.40	333.19	th
2004	29	45	14.7	-1.6	98.66		12986.5	4621.09	14584.27	335.12	th
2005	29	46	14.8	-0.9	98.99		12986.5	4621.34	14584.54	336.32	ws
2006	29	47	13.3	-1.5	109.26		12997.4	4621.19	14595.17	335.01	th
2007	29	48	11	-1.3	123.27		13012.1	4619.57	14609.84	335.07	th
2008	29	49	8.6	-1.1	136.27		13026.2	4616.43	14623.58	335.26	th
2009	29	50	5.5	-0.9	152.78		13044.5	4610.70	14640.92	335.47	th
2010	29	51	5.1	5.8	159.48	-5		4610.23	14647.69	359.07	powerline
2011	29	52	4.1	-0.9	171.08		13063.2	4608.29	14659.48	335.18	th
2012	29	53	2.7	-0.9	190.28		13082.9	4605.02	14678.90	334.88	th
2013	29	54	1.2	-0.9	207.27		13100.7	4600.39	14696.07	334.62	th
2014	29	55	1.4	-0.4	207.59		13100.7	4601.13	14696.37	336.42	ws

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
2015	29	56	358.4	-1	224.27		13120.7	4589.79	14713.02	333.96	th
2016	29	57	356.1	-0.8	237.88		13137.1	4579.87	14726.16	334.55	th
2017	29	58	352.7	-0.8	256.18		13160.6	4563.50	14742.94	334.29	th
2018	29	59	350	-0.8	264.57		13175.4	4550.11	14749.39	334.18	th
2019	29	60	346.4	-0.8	280.17		13198.6	4530.17	14761.15	333.96	th
2020	29	61	344.8	-0.8	293.87		13214.5	4519.00	14772.43	333.77	th
2021	29	62	342.4	-0.7	306.48		13232.3	4503.38	14780.97	334.13	th
2022	29	63	342.3	-0.3	307.20		13232.3	4502.66	14781.49	336.26	ws
2023	29	64	343	-0.1	323.20			4501.56	14797.91	337.31	rac
2024	29	65	279	0.8	171.98			4426.19	14515.74	340.27	lac
2025	29	66	278.3	-0.7	132.59	-5		4464.85	14507.98	341.25	iron beam
2026	29	67	203.6	13.9	84.26			4562.32	14411.63	358.72	abutment
2027	29	68	204	12.5	84.55			4561.67	14411.60	356.62	btm of wall
2028	29	69	193.5	13.9	86.98	3.71		4575.75	14404.26	355.69	btm of wall
2029	29	70	193.9	13.6	87.09	0		4575.13	14404.30	358.94	top of wall
2030	29	71	162.5	10.8	141.94	0.5		4638.74	14353.47	364.45	rd
2031	29	72	155.1	10.1	154.67	0		4661.17	14348.55	365.42	rd
2032	29	73	190.5	13.2	143.60	7.5	0.0	4569.88	14347.64	364.05	rd
2033	29	74	203.9	13.2	92.59			4558.54	14404.19	359.59	gs
2034	29	75	190.5	13	96.07	0.2	50.3	4578.55	14394.37	359.85	gs
2035	29	76	191.9	14.6	78.09	3.71	68.4	4579.95	14412.42	354.50	gs
2036	29	77	191	13.4	73.54		73.1	4582.02	14416.65	355.39	gs
2037	29	78	189.1	13.8	65.36			4585.72	14424.30	353.93	gs
2038	29	79	189.1	15.9	62.80	0		4586.12	14426.83	355.76	top of pin
2039	29	80	189	15.3	65.01			4585.88	14424.63	355.66	gs at pin
2040	29	81	186.5	19.6	63.97	0		4588.81	14425.28	360.65	s peir
2041	29	82	186	15.9	62.03			4589.57	14427.15	355.54	bs
2042	29	83	189.4	15.8	62.06			4585.92	14427.61	355.43	bs
2043	29	84	197.7	16.3	59.41			4577.99	14432.24	355.25	bs
2044	29	85	201.5	20.8	59.55			4574.23	14433.43	360.49	n peir
2045	29	86	201.1	16.8	57.92	-5		4575.20	14434.80	360.36	bs
2046	29	87	197.8	15.6	62.03	7.5		4577.09	14429.78	347.69	gs
2047	29	88	197.2	17.8	68.17	11.44		4575.89	14423.71	348.32	gs
2048	29	89	200.3	-1.5	57.18	0		4576.22	14435.21	336.37	gs
2049	29	90	204.3	2.4	59.45			4571.59	14434.66	340.36	gs
2050	29	91	197	-0.8	59.59			4578.63	14431.85	337.04	gs
2051	29	92	193.5	0.6	59.60	0	87.3	4582.14	14430.89	338.50	xs6 pin1
2052	29	93	193.4	0.4	59.60	0	88.1	4582.24	14430.86	338.29	gs at pin
2054	29	95	193.3	0.6	60.00			4582.25	14430.45	338.50	xs6 p1
2055	29	96	189.9	2	61.56		107.8	4585.47	14428.19	340.02	gs
2056	29	97	186.2	3.2	61.20			4589.44	14427.99	341.29	gs
2057	29	98	184.1	5.1	64.44			4591.45	14424.56	343.62	gs
2058	29	99	193.1	0.4	60.40		89.0	4582.36	14430.01	338.29	gs
2059	29	100	193.4	0.4	60.00		87.7	4582.15	14430.47	338.29	gs
2060	29	101	193.4	0.3	59.70		88.0	4582.22	14430.76	338.18	gs
2061	29	102	193	0	57.80		91.6	4583.05	14432.52	337.87	gs
2062	29	103	192.6	-1.1	55.19		94.2	4584.01	14434.98	336.81	gs
2063	29	104	192.3	-2	51.77		97.7	4585.03	14438.26	336.06	gs
2064	29	105	195.3	3.7	59.68			4580.31	14431.28	341.73	lac
2065	29	106	195.5	6.5	60.01			4580.02	14431.01	344.71	lbf
2066	29	107	189.5	-1	44.59			4588.69	14444.86	337.09	gs
2067	29	108	186.6	-0.1	38.20		131.3	4591.66	14450.89	337.81	gs
2068	29	109	181.7	0	30.20		139.8	4595.16	14458.65	337.87	gs
2069	29	110	172.7	-0.4	22.50		148.5	4598.91	14466.52	337.71	gs
2070	29	111	155.4	-1.3	15.00		157.8	4602.30	14475.20	337.53	gs
2071	29	112	124.5	-2.8	10.99		165.8	4605.11	14482.61	337.33	gs
2072	29	113	77.1	-5	13.15		175.7	4608.87	14491.77	336.72	gs
2073	29	114	49.6	-3.4	23.76		189.2	4614.15	14504.24	336.46	lew
2074	29	115	39.7	-2.9	32.46		199.1	4616.79	14513.81	336.23	gs
2075	29	116	33	-2.5	44.46		211.9	4620.27	14526.12	335.93	gs
2076	29	117	30.6	-2.1	57.86		225.5	4625.51	14538.64	335.75	gs
2077	29	118	30.3	-1.9	68.26		235.9	4630.49	14547.78	335.61	gs

Hyampom Survey Data - September, 1998											
Record #	Stn	pt	HAR	VI	HD	TC	TH or XS Dist.	X	Y	Z	Feature
2078	29	119	28.9	-1.9	75.06		242.9	4632.33	14554.55	335.38	gs
2079	29	120	29.1	-2.8	79.70		247.6	4634.82	14558.48	333.97	gs
2080	29	121	28.9	-2.9	81.20		249.1	4635.29	14559.92	333.76	bldr
2081	29	122	29.1	-1	81.69		249.7	4635.78	14560.21	336.45	ws at bldr (xs)
2082	29	123	28.6	0.6	84.10		252.2	4636.31	14562.67	338.75	top of rc bldr
2083	29	124	28.4	-0.9	86.79		254.9	4637.33	14565.18	336.51	ws at bldr (xs)
2084	29	125	28.3	-2.2	89.43		257.5	4638.45	14567.58	334.44	bldr
2085	29	126	28.4	-2.2	90.33		258.4	4639.02	14568.30	334.40	gs
2086	29	127	28.3	-1.9	93.45		261.6	4640.36	14571.12	334.77	gs
2087	29	128	28	-1.6	98.86		267.0	4642.47	14576.13	335.11	gs
2088	29	129	28.3	-1.6	105.46		273.6	4646.05	14581.69	334.93	gs
2089	29	130	27.8	-1.1	114.08		282.3	4649.26	14589.75	335.68	gs
2090	29	131	27.1	-1	121.08		289.4	4651.21	14596.63	335.76	gs
2091	29	132	26.1	-0.7	130.19		298.8	4653.33	14605.75	336.28	rew
2092	29	133	26	-0.3	138.70		307.3	4656.85	14613.50	337.15	gs
2093	29	134	25.2	-0.1	152.20		321.0	4660.86	14626.55	337.61	gs
2094	29	135	24.8	0.2	159.30		328.1	4662.87	14633.45	338.43	gs
2095	29	136	24.3	0.3	168.20		337.2	4665.27	14642.13	338.75	gs
2096	29	137	24.2	0.4	171.20		340.2	4666.23	14644.99	339.07	gs
2097	29	138	24.5	-0.1	175.40		344.5	4668.79	14648.44	337.57	gs
2098	29	139	24.5	-0.2	178.10		347.2	4669.91	14650.90	337.25	gs
2099	29	140	24.4	-0.6	180.19		349.3	4670.49	14652.93	335.98	lew
2100	29	141	24.5	-0.6	182.89		352.0	4671.90	14655.26	335.96	gs
2101	29	142	24.9	-0.6	191.89		361.1	4676.85	14662.89	335.86	gs
2102	29	143	24.7	-0.7	199.19		368.4	4679.29	14669.80	335.44	gs
2103	29	144	24.8	-0.6	205.49		374.7	4682.25	14675.38	335.72	rew
2104	29	145	24.8	-0.5	205.89		375.1	4682.42	14675.74	336.08	rac
2105	29	146	25	-0.2	205.90		384.6	4683.07	14675.45	337.15	rock
2106	29	147	25	0.2	208.40		398.7	4684.13	14677.71	338.60	rock
2107	29	148	24.6	0.3	209.60		396.8	4683.30	14679.41	338.97	rock
2108	29	149	24.3	0.3	210.10		379.7	4682.51	14680.32	338.97	gs
2109	29	150	24.1	0.7	213.28		392.7	4683.14	14683.53	340.48	gs
2110	29	151	24.1	1.2	216.75		407.7	4684.56	14686.70	342.41	gs
2111	29	152	24.2	1.4	220.03		412.3	4686.25	14689.54	343.25	gs
2112	29	153	24	1.3	219.94		410.9	4685.51	14689.77	342.86	gs
2113	29	154	24.3	1.4	220.33		420.6	4686.72	14689.65	343.26	gs
2114	29	155	24.1	1.5	220.52		411.6	4686.10	14690.14	343.65	xs6 pin2
2115	29	156	24.2	1.4	220.63		420.1	4686.50	14690.08	343.26	gs
2116	29	157	23.8	1.4	223.93		416.5	4686.42	14693.73	343.34	gs
2117	29	158	23.8	1.6	228.61		429.1	4688.31	14698.01	344.26	gs
2118	29	159	23.6	1.5	237.42		437.9	4691.10	14706.40	344.09	gs
2119	29	160	23.6	1.4	247.03		447.5	4694.95	14715.20	343.91	gs
2120	29	161	23.5	1.4	258.32		458.9	4699.06	14725.74	344.19	gs
2121	29	162	23.6	1.6	268.10		468.6	4703.39	14734.51	345.36	gs
2122	29	163	23.2	1.9	277.45		478.2	4705.35	14743.85	347.08	gs
2123	29	164	23.5	2	290.12		490.9	4711.74	14754.90	348.00	gs
2124	29	165	23.4	1.7	315.16	-1	516.0	4721.22	14778.08	348.23	gs
2125	29	166	23.6	1.6	256.50	0		4698.74	14723.88	345.04	tp29
2126	29	167	23.9	1.5	256.51	0		4699.98	14723.35	344.59	tp29
2127	29	168	24.1	1.5	220.72	0		4686.18	14690.32	343.65	xs6 p2
2128	29	169	24.3	1.4	220.83	0		4686.93	14690.11	343.27	xs6 p2
2129	30	1	201.4	-4.5	49.05	0		4699.81	14723.48	344.76	tp29
2130	30	2	201.4	-4.5	48.95	0		4699.84	14723.58	344.77	tp29
2131	30	3	201.8	-3.4	85.05	0		4686.12	14690.18	343.57	xs6 p2
2132	30	4	201.9	-3.5	84.84	0		4686.06	14690.43	343.44	xs6 p2
2133	30	5	283	0.7	11.80	0		4706.21	14771.80	348.77	gs at telepole
2134	30	6	281.4	32.4	11.91	-5		4706.03	14771.50	361.18	telepole
2135	30	7	49.1	-0.4	172.20	0		4847.86	14881.89	347.42	bm nail in rd
2136	30	8	49.1	-0.4	172.20	0		4847.86	14881.89	347.42	bm nail in rd
2137	30	9	48.1	-0.3	194.90			4862.77	14899.31	347.60	ctr of rd
2138	30	10	46.8	0	241.30			4893.60	14934.33	348.63	ctr of rd
2139	30	11	34.6	0.6	314.38			4896.23	15027.93	351.92	telepole

Hyampom Survey Data - September, 1998							TH or XS				
Record #	Stn	pt	HAR	VI	HD	TC	Dist.	X	Y	Z	Feature
2140	30	12	19.9	0.7	232.18			4796.73	14987.47	351.46	oak
2141	30	13	19.1	0.8	266.07		781.7	4804.77	15020.58	352.34	gs
2142	30	14	19.2	0.8	243.38		759.0	4797.74	14998.99	352.02	gs
2143	30	15	19	0.7	232.88		748.5	4793.52	14989.34	351.47	gs
2144	30	16	18.7	0.1	220.70		736.2	4788.46	14978.20	349.01	gs
2145	30	17	18.7	-0.6	208.69		724.2	4784.61	14966.82	346.44	gs
2146	30	18	19	-0.4	189.10		704.6	4779.27	14947.94	347.31	gs
2147	30	19	19.1	-0.7	171.69		687.2	4773.88	14931.38	346.53	gs
2148	30	20	18.9	-0.3	158.10		673.6	4768.92	14918.72	347.80	gs
2149	30	21	19.1	-0.4	153.10		668.5	4767.80	14913.82	347.56	gs
2150	30	22	19.1	-0.1	148.80		664.2	4766.39	14909.76	348.37	gs
2151	30	23	18.2	-0.2	129.60		644.9	4758.18	14892.26	348.17	gs
2152	30	24	18.1	0.1	120.50		635.8	4755.14	14883.69	348.84	gs
2153	30	25	18.1	-0.1	112.90		628.2	4752.78	14876.46	348.43	gs
2154	30	26	17.9	-0.3	93.30		608.6	4746.38	14857.93	348.14	gs
2155	30	27	17.6	-0.7	72.99		588.3	4739.78	14838.73	347.73	gs
2156	30	28	17.1	-1.1	50.69		566.0	4732.61	14817.60	347.65	gs
2157	30	29	18	-4.9	37.76		553.1	4729.37	14805.06	345.39	gs
2158	30	30	21	-4.9	30.69		545.8	4728.70	14797.80	345.99	gs
2159	30	31	21.8	-2.9	27.36		542.4	4727.87	14794.56	347.24	gs
2160	30	32	21.7	-1.3	25.09		540.1	4726.98	14792.46	348.06	rc
2161	30	33	21.3	-2.3	23.78		538.8	4726.34	14791.31	347.67	rc
2162	30	34	21.5	-2.2	23.18		538.2	4726.20	14790.72	347.73	gs
2163	30	35	25.5	-3.5	17.67		532.5	4725.31	14785.09	347.54	gs
2164	30	36	28.6	-4.8	13.75		528.5	4724.29	14781.22	347.47	gs
2165	30	37	33.6	-7.6	10.41		525.0	4723.46	14777.82	347.24	gs
2166	30	38	36.9	-2.5	8.19		522.7	4722.62	14775.70	348.27	gs
2167	30	39	39.8	-3.8	5.89		520.4	4721.47	14773.67	348.23	gs

Salyer Survey Data - October, 1998							TH or XS					
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature	
2	1	1	81.1	19.4	142.14	0.00		15000.08	9999.82	488.02	bm property	
4	1	2	81.1	19.4	142.33	0.00		15000.26	9999.85	488.08	bm property	
6	1	3	80.8	19.4	141.96	0.00		14999.77	10000.53	487.95	bm property	
8	1	4	81.1	19.4	141.96	0.00		14999.89	9999.79	487.95	bm property	
10	1	5	81.8	10.1	125.43	-5.00		14983.79	9995.72	465.30	rvw bdr c	
12	1	6	46	4.9	100.03	0.00		14931.60	10047.32	446.54	rvw bdr c	
14	1	8	29	2	121.33	0.00		14918.46	10083.95	442.20	rvw bdr c	
15	1	9	250.4	12.8	48.85	0.00		14813.62	9961.44	449.06	lvw bdr c	
16	1	10	206.8	5.3	85.03	0.00		14821.30	9901.93	445.85	lac	
17	1	11	210.3	14.8	90.40	11.44		14814.04	9899.78	450.40	lbf	
19	1	12	91.2	-3.5	67.97	0.00	0.00	14927.60	9976.41	433.80	th	
21	1	13	91.3	-0.5	67.40	0.00	0.00	14927.02	9976.30	437.37	ws	
22	1	14	72.3	-4.5	64.00	0.00	22.02	14920.62	9997.29	432.92	th	
23	1	15	61.1	-4.2	64.43	0.00	34.56	14916.05	10008.97	433.23	th	
24	1	16	38.9	-3.6	61.38	0.00	58.96	14898.19	10025.60	434.10	th	
25	1	17	17.9	-3.3	66.59	0.00	82.84	14880.11	10041.20	434.12	th	
26	1	18	1.9	-2.9	73.31	0.00	103.41	14862.07	10051.10	434.25	th	
27	1	19	348.6	-2.9	92.78	0.00	130.69	14841.30	10068.78	433.26	th	
28	1	20	343.7	-3.1	101.75	0.00	142.92	14831.09	10075.49	432.45	th	
29	1	21	343.7	-3.1	101.75	-5.00	142.92	14831.09	10075.49	437.45	ws	
31	1	22	340.2	-1.9	114.34	3.71	157.12	14820.91	10085.41	430.46	th	
33	1	23	338.9	-1.9	123.53	3.71	166.71	14815.17	10093.08	430.15	th	
35	1	24	338.9	-0.9	141.08	3.71	184.26	14808.85	10109.46	432.03	th	
37	1	25	338.3	-0.9	156.78	3.71	200.03	14801.67	10123.50	431.79	th	
39	1	26	338.2	-0.8	177.28	0.00	220.54	14793.81	10142.44	435.48	th	
40	1	27	337.3	-0.9	191.08	3.71	234.63	14785.91	10154.11	431.25	th	
42	1	28	337.4	-0.9	212.67	3.71	256.23	14777.91	10174.18	430.91	th	
44	1	29	337.6	-0.7	236.88	3.71	280.45	14769.37	10196.84	431.36	th	
46	1	30	338.3	-0.4	254.49	3.71	298.32	14765.55	10214.29	432.47	th	
48	1	31	339	-1	265.16	0.00	309.44	14764.62	10225.38	433.33	th	
50	1	32	339.3	-0.8	282.67	0.00	327.02	14759.73	10242.26	434.01	th	
51	1	33	339.6	-0.4	300.09	0.00	344.50	14755.04	10259.10	435.86	th	
52	1	34	339.6	-1	299.75	-5.00	344.50	14755.16	10258.79	437.73	ws	
54	1	35	339.4	-0.3	313.60	0.00	358.05	14749.31	10271.38	436.32	th rc	
55	1	36	339.4	-0.9	314.16	-5.00	358.05	14749.11	10271.91	438.02	ws	
57	1	37	337.5	0.8	356.67	0.00		14723.15	10307.35	442.94	lac	
59	1	38	337.5	0.8	356.57	0.00		14723.19	10307.26	442.94	lac	
61	1	39	338.5	-0.5	323.99	0.00	369.58	14740.90	10279.28	435.13	th	
62	1	40	340	-0.1	344.10	0.00	369.58	14741.95	10301.18	437.36	ws	
63	1	41	339	-0.8	306.87	-5.00		14749.67	10264.32	438.67	tp1l	
65	1	42	338.7	-0.8	306.87	-5.00		14748.17	10263.74	438.67	tp1l	
67	1	43	338.7	-0.8	306.87	-5.00		14748.17	10263.74	438.67	tp1l	
69	1	44	347.3	-0.6	359.68	-5.00		14780.57	10328.71	439.19	tp1m	
71	1	45	347.4	-0.6	359.78	-5.00		14781.16	10328.95	439.19	tp1m	
73	1	46	347.3	-0.6	359.78	-5.00		14780.55	10328.81	439.19	tp1m	
75	1	47	359.3	-0.6	358.78	-5.00		14855.26	10336.59	439.20	tp1r	
77	1	48	359.3	-0.5	358.79	-5.00		14855.26	10336.59	439.83	tp1r	
79	2	1	276.7	-4.4	101.30	-5.00		14855.95	10335.77	439.27	tp1r	
81	2	2	276.7	-4.4	101.30	-5.00		14855.95	10335.77	439.27	tp1r	
83	2	3	271.6	-2.5	175.23	-5.00		14781.40	10328.84	439.41	tp1m	
85	2	4	271.6	-2.5	175.23	-5.00		14781.40	10328.84	439.41	tp1m	
87	2	5	254.2	-2.2	217.44	-5.00		14747.34	10264.74	438.71	tp1l	
89	2	6	254.2	-2.2	217.44	-5.00		14747.34	10264.74	438.71	tp1l	
91	2	7	266	-0.5	207.29	3.71	400.87	14749.78	10309.49	436.54	ws	
93	2	8	266	-1	207.87	3.71	400.87	14749.20	10309.45	434.72	th	
95	2	9	268.5	-1.5	209.53	3.71	410.13	14747.11	10318.46	432.86	th	

Salyer Survey Data - October, 1998							TH or XS					
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature	
97	2	10	270.2	-1.4	209.74	3.71	416.35	14746.83	10324.68	433.22	th	
99	2	11	273.9	-1.4	206.54	3.71	430.17	14750.50	10337.99	433.30	th	
101	2	12	277.6	-1.3	201.55	3.71	444.25	14756.79	10350.60	433.78	th	
103	2	13	286.5	-1.3	196.75	3.71	475.53	14767.92	10379.83	433.89	th	
105	2	14	286.4	-0.6	196.59	3.71	475.53	14767.97	10379.45	436.29	ws	
107	2	15	290.5	-1.8	199.30	3.71	489.58	14769.88	10393.74	432.09	th	
109	2	16	296.1	-2	198.38	3.71	509.03	14778.41	10411.22	431.42	th	
111	2	17	302.1	-2.6	195.10	3.71	529.88	14791.29	10427.62	429.49	th	
113	2	18	306.3	-2.2	186.96	3.71	546.07	14805.89	10434.63	431.17	th	
115	2	19	311.4	-2.8	178.69	3.07	564.32	14822.53	10442.11	430.25	th	
117	2	20	312.8	-2.8	174.99	3.71	570.00	14828.17	10442.84	429.79	th	
119	2	21	317.4	-3.5	168.58	3.71	585.21	14842.45	10448.04	428.04	th pool	
121	2	22	321.9	-4	151.93	3.71	606.07	14862.82	10443.51	427.73	th	
123	2	23	327.4	-4.6	134.07	-5.00	606.07	14884.33	10436.89	436.27	ws	
125	2	24	329.3	-4.9	126.54	7.50	637.14	14891.96	10432.75	423.71	th	
127	2	25	327.8	-4.1	116.60	11.44	647.57	14894.43	10422.61	422.26	th	
129	2	26	328.1	-4.3	105.20	11.44	658.98	14900.97	10413.26	422.71	th	
131	2	27	329.7	-3.6	94.51	11.44	670.03	14908.88	10405.55	424.67	th	
133	2	28	336.7	-3	83.09	11.44	685.76	14923.70	10400.26	426.27	th	
135	2	29	343.3	-7.2	72.42	11.44	699.67	14935.75	10393.32	421.47	th	
137	2	30	347.5	-7.6	75.33	11.44	705.82	14940.26	10397.49	420.57	th	
139	2	31	347.7	-5.5	105.81	11.44	736.30	14934.02	10427.33	420.43	th	
141	2	32	348	-3.9	89.69	11.44	752.42	14937.92	10411.68	424.51	th	
143	2	33	349.5	-6.7	76.08	11.44	766.21	14942.70	10398.75	421.68	th	
145	2	34	358.9	-6.4	66.28	11.44	781.42	14955.29	10390.22	423.19	th	
147	2	35	21.3	-4.8	62.18	7.50	806.69	14979.15	10381.88	429.34	th	
149	2	36	29.9	-9.9	63.15	0.00	816.14	14988.04	10378.69	431.04	th	
151	2	37	29.9	-9.9	63.15	-5.00	816.14	14988.04	10378.69	436.04	ws	
153	2	38	286.5	1.3	245.94	0.00		14720.75	10393.80	447.64	lvw bd	
154	2	39	296.5	2.8	230.72	0.00		14750.08	10426.90	453.34	lvw bd	
155	2	40	308.9	1.9	233.47	0.00		14774.87	10470.56	449.81	lvw bd	
156	2	41	329.5	3.2	237.13	0.00		14836.21	10528.26	455.32	lvw bds	
157	2	42	346.5	4.7	180.39	0.00		14914.45	10499.35	456.89	lvw bd	
158	2	43	1.7	5.4	171.34	0.00		14961.65	10495.21	458.26	lvw bd	
159	2	44	1.8	5.5	171.41	0.00		14961.95	10495.27	458.57	lvw bd	
160	2	45	31.6	3.4	152.23	0.00		15036.33	10453.61	451.10	lvw bd	
161	2	46	37.1	2.2	208.85	0.00		15082.54	10490.52	450.08	lvw bd	
162	2	47	52.5	2.2	275.70	0.00		15175.29	10491.78	452.65	lvw bd	
163	2	48	64.3	2.6	348.54	0.00		15270.63	10475.09	457.89	lvw bd	
164	2	49	128.2	1.4	44.09	0.00		14991.21	10296.68	443.14	rac	
165	2	50	68.1	-9.2	69.79	0.00	860.09	15021.32	10349.98	430.76	th	
167	2	51	68.1	-9.2	69.79	-5.00	860.09	15021.32	10349.98	435.76	ws	
169	2	52	76.8	-6.3	83.79	0.00	878.27	15038.14	10343.08	432.81	th	
170	2	53	80.8	-5	101.71	0.00	897.31	15056.97	10340.21	433.16	th	
171	2	54	84.3	-3.7	124.14	3.71	920.77	15080.09	10336.28	430.32	th	
173	2	55	83.9	-3	142.10	3.71	938.76	15097.86	10339.05	430.90	th	
175	2	56	83.3	-2.8	162.91	3.71	959.62	15118.36	10342.95	430.38	th	
177	2	57	81.7	-2.2	179.87	3.71	977.24	15134.55	10349.91	431.44	th	
179	2	58	81.5	-1.9	197.99	3.71	995.38	15152.38	10353.21	431.78	th	
181	2	59	80.7	-2	220.07	3.71	1017.64	15173.74	10359.51	430.67	th	
183	2	60	80.3	-1.9	236.57	3.71	1034.23	15189.75	10363.81	430.50	th	
185	2	61	80.2	-1.7	260.99	3.71	1058.64	15213.74	10368.37	430.60	th	
187	2	62	80.4	-1.4	285.41	3.71	1083.09	15237.98	10371.55	431.38	th	
189	2	63	80.5	-1.9	323.82	0.00	1121.50	15275.94	10377.39	431.32	th	
191	2	64	80.5	-1.9	323.82	-5.00	1121.50	15275.94	10377.39	436.32	ws	
193	2	65	81.3	-1.4	373.99	-5.00		15326.25	10380.52	437.92	tp2m	



Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
195	2	66	81.3	-1.4	374.09	-5.00		15326.35	10380.53	437.92	tp2m
197	2	67	81.4	-1.4	374.09	-5.00		15326.45	10379.89	437.92	tp2m
199	2	68	85.8	-0.7	368.47	-5.00		15324.05	10350.93	442.56	tp2r
201	2	69	85.8	-0.5	368.49	-5.00		15324.06	10350.93	443.84	tp2r
203	2	70	87.4	0.5	368.29	-5.00		15324.47	10340.65	450.27	tp2fr
205	2	71	87.3	0.6	368.28	-5.00		15324.43	10341.30	450.92	tp2fr
208	3	1	236.2	1.3	421.69	-5.00		15324.08	10341.26	450.97	tp2fr
210	3	2	236	1.3	421.79	-5.00		15324.82	10339.98	450.97	tp2fr
212	3	3	236.2	1.2	421.41	-5.00		15324.32	10341.42	450.22	tp2fr
214	3	4	236.1	1.2	421.51	-5.00		15324.65	10340.75	450.23	tp2fr
216	3	5	237.3	0.3	416.49	-5.00		15324.02	10350.84	443.58	tp2r
218	3	6	237.4	0.2	416.50	-5.00		15323.62	10351.45	442.85	tp2r
220	3	7	240.8	-0.5	399.28	-5.00		15325.96	10381.05	437.91	tp2m
222	3	8	240.7	-0.5	398.98	-5.00		15326.56	10380.59	437.91	tp2m
224	3	9	240.7	-0.5	399.38	-5.00		15326.21	10380.39	437.91	tp2m
226	3	10	240.5	-0.5	399.18	-5.00		15327.07	10379.28	437.91	tp2m
228	3	11	243.3	-0.3	370.79	3.71	1195.96	15343.24	10409.24	430.75	th
230	3	12	243.1	-0.3	355.10	3.71	1211.71	15357.83	10415.19	430.83	th
232	3	13	243	-0.3	338.80	3.71	1228.02	15372.63	10422.04	430.91	th
234	3	14	241.3	-0.3	318.90	3.71	1250.18	15394.78	10422.70	431.02	th
236	3	15	241.4	-1	318.85	-5.00	1250.18	15394.56	10423.21	435.83	ws
238	3	16	239.8	-0.2	294.10	3.71	1276.24	15420.32	10427.91	431.66	th
240	3	17	235	-0.7	275.88	0.00	1306.26	15448.51	10417.61	433.03	th
242	3	18	230.8	-0.7	276.98	0.00	1326.55	15459.86	10400.79	433.01	th
243	3	19	225.9	-0.8	272.67	0.00	1350.43	15478.69	10386.09	432.59	th
244	3	20	220.8	-0.8	260.97	0.00	1376.90	15503.98	10378.29	432.75	th
245	3	21	219.2	-1.1	254.25	0.00	1386.74	15513.81	10378.81	431.51	th
246	3	22	219.2	-1.1	254.25	-5.00	1386.74	15513.81	10378.81	436.51	ws
248	3	23	218.3	-0.5	247.89	3.71	1394.23	15520.86	10381.31	430.52	th
250	3	24	216.1	-0.6	235.09	3.71	1410.03	15535.99	10385.90	430.22	th
252	3	25	211.8	-1.4	210.34	0.00	1439.88	15563.66	10397.08	431.26	th
254	3	26	209.3	0	242.00	0.00		15556.07	10364.80	436.40	trib
255	3	27	208.1	0.5	264.79	0.00		15549.78	10342.27	438.71	trib at rac
256	3	28	215.4	1.4	266.92	0.00		15519.88	10358.27	442.92	rac
257	3	29	215.4	3.6	277.65	0.00		15513.66	10349.52	453.86	rbf
258	3	30	206	-0.7	177.69	3.71	1477.95	15596.61	10416.14	430.52	th
260	3	31	199.6	-1.7	173.62	3.71	1497.97	15616.26	10412.28	427.53	th
262	3	32	199.6	-1.7	173.62	-5.00	1497.97	15616.26	10412.28	436.24	ws
264	3	33	194.2	-1.4	170.65	7.50	1514.46	15632.64	10410.41	424.73	th
266	3	34	192.9	-0.6	156.89	7.50	1528.71	15639.48	10422.91	427.25	th
268	3	35	192.5	-1.8	156.02	-5.00	1528.71	15640.73	10423.52	436.49	ws
270	3	36	189.3	-0.8	144.89	7.50	1544.00	15651.09	10432.86	426.87	th
272	3	37	184.1	-1.4	135.76	7.50	1559.66	15664.80	10440.43	425.58	th
274	3	38	183.2	-1.2	128.37	7.50	1567.33	15667.34	10447.67	426.21	th
276	3	39	176.3	0	114.70	7.50	1587.34	15681.90	10461.38	428.90	th
278	3	40	169.8	-1.5	116.86	7.50	1600.64	15695.20	10460.83	425.84	th
280	3	41	164.7	-2	110.93	7.50	1612.38	15703.77	10468.84	425.02	th
282	3	42	159	-1.8	104.05	7.50	1625.09	15711.79	10478.71	425.63	th
284	3	43	148.9	-1.7	93.56	7.50	1645.38	15722.83	10495.73	426.12	th
286	3	44	148.5	-3.2	94.05	-5.00	1645.38	15723.64	10495.65	436.14	ws
288	3	45	142.5	-1.9	85.65	7.50	1658.12	15726.64	10507.89	426.06	th
290	3	46	131.6	-1.1	76.09	7.50	1676.20	15731.40	10525.33	427.44	th
292	3	47	121.3	-2	73.95	7.50	1689.83	15737.69	10537.42	426.31	th
294	3	48	111.4	-4.2	72.41	7.80	1702.55	15741.91	10549.43	423.28	th
296	3	49	101.7	-3.8	73.24	11.44	1714.90	15746.22	10560.99	420.09	th
298	3	50	83.7	-2.9	70.21	11.44	1737.53	15744.29	10583.55	421.40	th

Salyer Survey Data - October, 1998							TH or XS					
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature	
300	3	51	66.6	-0.9	70.59	11.44	1758.47	15739.29	10603.88	423.85	th	
302	3	52	56.1	-3	73.20	11.44	1771.88	15735.26	10616.67	421.12	th	
304	3	53	45.4	-3.7	82.43	7.50	1789.06	15733.19	10633.72	423.57	th	
306	3	54	45.4	-3.7	82.43	-5.00	1789.06	15733.19	10633.72	436.07	ws	
308	3	55	37.9	-3.6	84.23	8.50	1800.11	15726.24	10642.31	422.60	th	
310	3	56	30.5	-3	93.47	11.44	1814.82	15721.94	10656.38	420.06	th	
312	3	57	22.1	-2.5	95.01	11.44	1828.71	15710.25	10663.87	420.81	th	
314	3	58	14	-1	104.28	11.44	1845.55	15699.73	10677.03	423.14	th	
316	3	59	3.3	-0.1	123.80	11.44	1874.36	15681.63	10699.44	424.74	th	
318	3	60	354.5	-1	140.88	7.50	1900.86	15661.00	10716.08	426.44	th	
320	3	61	353.9	-2.1	141.60	-5.00	1900.86	15659.45	10716.65	436.20	ws	
322	3	62	347.7	-0.8	164.18	7.50	1930.33	15639.53	10736.26	426.60	th	
324	3	63	341.9	-1.2	179.86	3.71	1953.74	15618.62	10746.81	428.92	th	
326	3	64	337.1	-0.6	189.59	3.71	1972.01	15600.73	10750.49	430.70	th	
328	3	65	331.9	0	186.40	3.71	1989.36	15586.70	10740.27	432.69	th	
330	3	66	323.6	-0.5	187.09	0.00	2016.40	15563.48	10726.44	434.76	th rc	
332	3	67	323.6	-0.1	187.10	0.00	2016.40	15563.47	10726.44	436.07	ws	
334	3	68	3.4	3	151.79	0.00		15683.50	10727.37	444.35	rvw	
335	3	69	34.3	3.6	118.57	0.00		15741.32	10673.79	443.86	rvw	
336	3	70	121.7	6.8	113.50	0.00		15771.07	10516.21	449.93	rvw	
337	3	71	155.3	4.8	156.75	0.00		15740.00	10433.44	449.56	rvw	
338	3	72	198.3	2.5	241.07	0.00		15598.81	10346.97	446.92	rvw	
339	3	73	205.8	0.8	235.28	0.00		15572.10	10364.02	439.68	rvw	
340	3	74	213.2	1.3	263.33	0.00		15530.31	10355.50	442.37	rvw	
341	3	75	268.1	6.3	161.32	0.00		15513.27	10570.50	454.21	lvw	
342	3	76	343.1	0.4	341.09	-5.00		15575.35	10902.21	443.78	tp3r	
344	3	77	343.1	0.4	341.19	-5.00		15575.32	10902.30	443.78	tp3r	
346	3	78	330.2	0.1	308.70	-5.00		15521.09	10843.72	441.94	tp3m	
348	3	79	330.3	0.1	308.60	-5.00		15521.60	10843.90	441.94	tp3m	
350	3	80	330.3	0.1	308.70	-5.00		15521.55	10843.99	441.94	tp3m	
352	3	81	317.7	0.1	279.60	0.00		15486.33	10782.65	436.88	tp3l	
354	3	82	317.7	0	279.40	0.00		15486.46	10782.50	436.40	tp3l	
356	3	83	317.8	0	279.40	0.00		15486.82	10782.83	436.40	tp3l	
359	4	1	139.2	-0.7	229.58	0.00		15483.80	10782.47	436.72	tp3l	
361	4	2	139.2	-0.7	229.88	0.00		15484.00	10782.24	436.72	tp3l	
363	4	3	139.2	-0.7	229.68	0.00		15483.87	10782.39	436.72	tp3l	
365	4	4	120.6	-0.7	219.08	-5.00		15522.36	10844.74	441.85	tp3m	
367	4	5	120.6	-0.8	219.08	-5.00		15522.36	10844.74	441.47	tp3m	
369	4	6	102.6	-0.2	249.60	-5.00		15577.38	10901.81	443.66	tp3r	
371	4	7	102.5	-0.2	249.50	-5.00		15577.37	10902.26	443.66	tp3r	
373	4	8	102.6	-0.1	249.50	-5.00		15577.28	10901.83	444.09	tp3r	
375	4	9	99.4	1	262.56	0.00		15592.82	10913.38	444.11	rac	
377	4	10	94.5	2.4	278.76	0.00		15611.69	10934.39	451.21	rbf	
378	4	11	92.5	3.7	286.10	0.00		15619.62	10943.78	458.03	rvw	
379	4	12	157.8	1.6	243.41	0.00		15425.76	10730.90	446.33	lvw	
380	4	13	173.4	2.2	233.83	0.00		15360.67	10723.98	448.51	lvw	
381	4	14	202.7	2.3	137.49	0.00		15280.73	10829.42	445.05	lvw	
382	4	15	246.7	2.8	122.15	0.00		15221.60	10907.94	445.50	lvw	
383	4	16	288.6	5.6	185.81	0.00		15157.69	11015.53	457.75	lvw	
384	4	17	150.2	2.7	337.72	0.00		15501.63	10663.19	455.45	lvw	
385	4	18	145.5	0.8	338.17	0.00		15525.33	10677.57	444.25	lbf	
386	4	19	144.6	0.1	334.30	0.00		15527.44	10683.76	440.11	lac	
387	4	20	135.8	-0.8	320.47	0.00	2022.67	15557.21	10726.51	435.05	th rc	
388	4	21	135.9	-0.7	319.98	0.00	2022.67	15556.47	10726.48	435.62	ws	
389	4	22	140.3	-1.3	315.02	0.00	2048.21	15535.01	10713.88	432.38	th	
390	4	23	141.9	-1.5	303.70	0.00	2062.45	15521.18	10717.27	431.57	th	

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
391	4	24	142.1	-1.2	302.83	0.00	2062.45	15519.82	10717.30	433.18	ws
392	4	25	143.5	-1.1	290.95	3.71	2077.66	15506.85	10722.38	430.23	th
394	4	26	143.6	-0.8	289.27	3.71	2077.66	15505.45	10723.43	431.78	ws
396	4	27	144.3	-1.4	284.32	3.71	2085.41	15499.70	10725.37	428.87	th
398	4	28	145.8	-1.4	280.82	3.71	2093.60	15491.63	10724.00	428.95	th
400	4	29	147	-0.8	274.97	7.50	2101.84	15483.55	10725.65	428.19	th
402	4	30	149.8	-1.5	263.81	7.50	2119.10	15466.49	10728.26	425.12	th
404	4	31	160.6	-1.7	222.10	7.50	2180.87	15407.56	10746.77	425.44	th
406	4	32	164.7	-1	226.57	11.44	2197.53	15393.57	10737.72	424.13	th
408	4	33	168.2	-1.5	204.73	7.50	2223.02	15375.66	10755.86	426.67	th pool
410	4	34	168.3	-3.5	200.33	-5.00	2223.02	15374.41	10760.10	432.27	ws
412	4	35	173.1	-2.8	184.58	3.71	2249.14	15355.96	10773.02	426.79	th
414	4	36	179.2	-3.4	166.71	3.71	2274.98	15336.12	10789.57	425.91	th
416	4	37	184.7	-4.8	145.19	3.71	2301.17	15321.89	10811.56	423.63	th
418	4	38	189.1	-5	130.50	3.71	2319.26	15313.15	10827.40	424.40	th
420	4	39	194.2	-6.2	115.92	3.71	2337.50	15305.35	10843.88	423.22	th
422	4	40	194.2	-6.2	115.92	-5.00	2337.50	15305.35	10843.88	431.93	ws
424	4	41	205	-6.3	96.71	3.71	2365.17	15292.92	10868.61	425.14	th
426	4	42	231.3	-5.6	86.78	3.71	2408.03	15266.06	10902.00	427.31	th
428	4	43	231.5	-8.2	86.80	-5.00	2408.03	15265.86	10902.22	432.02	ws
430	4	44	233.4	-1	111.88	0.00		15243.97	10889.55	437.57	lac
432	4	45	233.6	2.9	119.15	0.00		15237.89	10885.56	445.56	lbf
433	4	46	44.8	1.6	164.84	0.00		15449.94	11073.22	444.13	rac
434	4	47	245.7	-7.9	80.33	0.00	2429.93	15260.58	10923.20	428.38	th
436	4	48	260.4	-6.9	91.43	0.00	2454.51	15243.64	10941.01	428.46	th
437	4	49	280.1	-6.2	97.82	0.00	2487.49	15237.48	10973.42	428.90	th
438	4	50	289.7	-5.7	111.15	0.00	2509.44	15229.15	10993.73	428.43	th
439	4	51	301.6	-4.5	135.08	0.00	2544.35	15218.74	11027.04	428.90	th
440	4	52	307.3	-3.8	161.74	0.00	2574.79	15205.13	11054.27	428.78	th
441	4	53	307.3	-4.4	162.02	-5.00	2574.79	15204.91	11054.44	432.06	ws
443	4	54	309.1	-3.9	188.36	0.00	2601.97	15187.61	11075.06	426.69	th
444	4	55	308.9	-2.9	201.64	3.71	2615.27	15176.86	11082.88	425.60	th
446	4	56	312.9	-2.9	210.33	3.71	2632.06	15179.71	11099.44	425.16	th
448	4	57	315.6	-3	225.19	3.71	2650.12	15176.23	11117.15	424.02	th
450	4	58	317.3	-3	243.87	3.71	2670.04	15168.41	11135.48	423.04	th
452	4	59	317.3	-3	243.87	-5.00	2670.04	15168.41	11135.48	431.75	ws
454	4	60	317.2	-2.6	256.74	3.71	2682.92	15159.35	11144.63	424.16	th
456	4	61	320.6	-2.4	291.84	3.71	2721.60	15148.55	11181.78	423.59	th
458	4	62	320.1	-1.9	315.93	3.71	2745.83	15131.14	11198.63	425.34	th
460	4	63	319.7	-1.9	336.31	3.71	2766.35	15116.27	11212.76	424.66	th
462	4	64	318.5	-2.1	342.17	-5.00	2766.35	15107.06	11212.53	431.98	ws
464	4	65	322.4	-1.8	382.21	-5.00		15100.59	11259.08	432.52	tp4m
466	4	66	322.5	-1.8	382.01	-5.00		15101.24	11259.33	432.52	tp4m
468	4	67	322.6	-1.8	382.11	-5.00		15101.71	11259.82	432.52	tp4m
470	4	68	322.6	-1.8	382.11	-5.00		15101.71	11259.82	432.52	tp4m
472	4	69	309.3	-2	354.18	-5.00		15059.71	11180.59	432.16	tp4
474	4	70	309.3	-2	353.68	-5.00		15060.09	11180.28	432.18	tp4
476	4	71	309.4	-2	353.68	-5.00		15060.49	11180.75	432.18	tp4
478	4	72	306.2	-1.1	349.04	0.00		15052.13	11162.40	432.83	tp4l
480	4	73	307.8	-1.1	348.64	0.00		15058.31	11169.94	432.83	tp4l
482	4	74	306.2	-1.1	348.54	0.00		15052.54	11162.11	432.83	tp4l
484	4	75	306	-1.1	348.54	0.00		15051.82	11161.12	432.83	tp4l
486	5	1	74.6	-0.8	290.27	-5.00		15102.42	11260.93	432.95	tp4m
488	5	2	74.3	-0.8	290.47	-5.00		15102.21	11262.45	432.95	tp4m
490	5	3	74.7	-0.9	290.36	-5.00		15102.65	11260.46	432.44	tp4m
492	5	4	90.7	-1.2	238.05	-5.00		15060.60	11180.94	432.02	tp4

Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
494	5	5	90.6	-1.2	237.95	-5.00		15060.51	11181.35	432.02	tp4
496	5	6	95.4	0.2	230.70	0.00		15052.25	11162.13	432.81	tp4l
498	5	7	95.6	0.2	230.80	0.00		15052.27	11161.32	432.81	tp4l
500	5	8	95.5	0.1	230.80	0.00		15052.31	11161.72	432.41	tp4l
502	5	9	106.1	3	306.28	3.71		15116.84	11098.91	444.34	lac
504	5	10	107.2	3.8	309.62	0.00		15118.34	11092.29	452.57	lbf
505	5	11	48.2	3.1	195.11	0.00		14968.03	11313.89	442.57	rvw
506	5	12	40.7	3.2	140.68	0.00		14914.31	11290.50	439.87	rvw
507	5	13	15.8	10.9	123.92	0.00		14856.32	11303.08	455.87	rvw
508	5	14	345.2	8.2	124.91	0.00		14790.67	11304.61	450.00	rvw
509	5	15	311.6	7.4	179.89	0.00		14688.05	11303.28	455.37	rvw
510	5	16	293.6	4	255.08	0.00		14588.83	11285.96	449.84	rvw
511	5	17	278.3	3	386.87	0.00		14439.76	11239.69	452.28	rvw
512	5	18	79.5	-0.8	268.97	3.71	2801.82	15087.04	11232.86	424.54	th
514	5	19	79.5	-1.1	267.35	-5.00	2801.82	15085.45	11232.56	431.87	ws
516	5	20	76.3	-0.9	246.87	3.71	2828.19	15062.42	11242.31	424.41	th
518	5	21	73.9	-1	232.56	3.71	2845.67	15046.02	11248.34	424.23	th
520	5	22	70.3	-0.4	205.59	3.71	2875.93	15016.13	11253.15	426.86	th
522	5	23	67.7	-1.6	184.33	0.00	2898.96	14993.12	11253.79	426.85	th
524	5	24	67.7	-1.6	184.33	-5.00	2898.96	14993.12	11253.79	431.85	ws
526	5	25	61.9	-0.8	158.88	3.71	2929.74	14962.73	11258.68	426.07	th
528	5	26	55.3	-1.6	144.54	3.71	2952.32	14941.41	11266.13	424.26	th
530	5	27	44.5	-2.2	115.31	3.71	2990.33	14903.40	11266.09	423.86	th
532	5	28	35.5	-2.2	103.42	3.71	3011.19	14882.63	11268.04	424.32	th
534	5	29	24.1	-1.5	98.07	3.71	3031.90	14862.62	11273.36	425.72	th
536	5	30	5.4	-1.3	89.38	3.71	3063.54	14830.98	11272.82	426.26	th
538	5	31	352.7	-3.6	85.33	-5.00	3063.54	14811.73	11268.48	431.63	ws
540	5	32	352.4	-1.1	85.28	3.71	3083.72	14811.29	11268.38	426.66	th
542	5	33	331.1	-0.6	100.09	3.71	3120.95	14774.20	11271.47	427.24	th
544	5	34	316.8	-1.5	121.56	0.00	3155.80	14739.36	11272.46	428.82	th
546	5	35	313.9	-2	134.42	0.00	3170.20	14725.72	11277.05	427.31	th
547	5	36	304.6	-1.3	144.56	0.00	3194.97	14703.58	11265.93	428.72	th
548	5	37	298.7	-1.9	154.12	-5.00	3194.97	14687.39	11257.85	431.89	ws
550	5	38	298.8	-1	153.78	0.00	3212.65	14687.82	11257.93	429.32	th
551	5	39	288.6	-0.7	193.59	0.00	3262.90	14639.10	11245.59	429.64	th
552	5	40	287.4	-0.8	208.88	0.00	3278.77	14623.25	11246.31	429.09	th
553	5	41	287.2	-1.4	213.14	0.00	3283.09	14618.97	11246.87	426.79	th
554	5	42	287.2	-1.4	213.14	-5.00	3283.09	14618.97	11246.87	431.79	ws
556	5	43	286.3	-1	221.77	3.71	3292.37	14609.72	11246.09	424.42	th
558	5	44	284.1	-1	233.06	3.71	3306.65	14596.53	11240.62	424.22	th
560	5	45	283.1	-1	238.06	3.71	3313.12	14590.71	11237.80	424.14	th
562	5	46	282.5	-0.8	255.38	3.71	3330.62	14573.25	11239.12	424.73	th
564	5	47	279.1	-0.6	272.59	3.71	3353.89	14553.42	11226.95	425.44	th
566	5	48	277.1	-0.7	293.48	0.00	3376.99	14531.35	11220.12	428.42	th
568	5	49	273.8	-0.7	308.08	0.00	3399.64	14515.17	11204.26	428.24	th
569	5	50	274	-0.9	308.26	-5.00	3399.64	14515.06	11205.35	432.16	ws
571	5	51	271.6	-0.5	330.29	0.00	3425.01	14492.41	11193.07	429.12	th
572	5	52	271.9	-0.8	353.47	0.00	3448.25	14469.30	11195.56	427.07	th
573	5	53	271.7	-0.3	370.59	3.71	3465.43	14452.14	11194.84	426.35	th
575	5	54	271.3	-0.2	383.50	3.71	3478.60	14439.17	11192.54	426.95	th
577	5	55	271.3	-0.5	396.88	0.00	3491.98	14425.79	11192.85	428.54	th
579	5	56	269.3	-0.3	414.69	0.00	3514.74	14407.91	11178.78	429.83	th
580	5	57	268.9	-0.3	430.19	0.00	3530.52	14392.46	11175.58	429.75	th
581	5	58	268.9	-0.6	430.48	-5.00	3530.52	14392.18	11175.58	432.49	ws
583	5	59	268.6	-0.4	455.99	0.00	3556.41	14366.72	11172.70	428.82	th
584	5	60	268.6	-0.6	460.57	0.00	3561.00	14362.14	11172.59	427.18	th

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature	
585	5	61	268.3	-0.3	477.29	3.71	3577.90	14345.49	11169.68	425.79	th	
587	5	62	267.1	-0.3	490.99	3.71	3594.94	14332.21	11159.00	425.72	th	
589	5	63	267.3	-0.5	490.58	-5.00	3594.94	14332.54	11160.73	432.72	ws	
591	5	64	262.7	2.3	178.96	0.00		14645.07	11161.10	439.19	lvw	
592	5	65	268.2	0.2	505.70	-5.00		14317.13	11167.96	438.77	tp5r	
594	5	66	268.2	0.2	505.70	-5.00		14317.13	11167.96	438.77	tp5r	
596	5	67	267.9	0.3	505.69	-5.00		14317.22	11165.31	439.65	tp5r	
598	5	68	267.9	0.3	505.69	-5.00		14317.22	11165.31	439.65	tp5r	
600	5	69	267.1	-0.5	502.78	-5.00		14320.44	11158.41	432.61	tp5l	
602	5	70	267.1	-0.5	502.78	-5.00		14320.44	11158.41	432.61	tp5l	
604	5	71	267.1	-0.4	502.89	-5.00		14320.33	11158.40	433.49	tp5l	
606	5	72	265	0.9	539.13	-5.00		14285.49	11136.85	445.47	tp5fl	
608	5	73	264.8	1	538.92	-5.00		14285.87	11135.00	446.41	tp5fl	
610	5	74	265	0.9	539.03	-5.00		14285.59	11136.86	445.47	tp5fl	
614	6	1	44.6	1.4	296.01	-5.00		14285.47	11136.42	445.78	tp5fl	
616	6	2	44.7	1.4	296.01	-5.00		14285.84	11136.06	445.78	tp5fl	
618	6	3	44.8	1.8	339.23	3.71		14316.66	11166.36	440.50	tp5l	
620	6	4	44.6	1.9	339.11	3.71		14315.73	11167.11	441.09	tp5l	
622	6	5	44.7	1.7	338.75	3.71		14315.90	11166.44	439.89	tp5l	
624	6	6	46.4	-0.9	336.76	-5.00		14321.49	11157.89	433.26	tp5r	
626	6	7	46.4	-0.8	336.37	-5.00		14321.21	11157.62	433.85	tp5r	
628	6	8	46.2	-0.8	336.37	-5.00		14320.40	11158.47	433.85	tp5r	
630	6	9	44.9	1	335.35	0.00		14314.34	11163.19	439.40	rac	
631	6	10	44.1	2	333.60	-5.00		14309.78	11165.22	450.20	rbf	
633	6	11	48.2	-0.7	335.57	3.71	3605.58	14327.79	11149.32	425.74	th	
635	6	12	48	-0.8	334.47	-5.00	3605.58	14326.18	11149.46	433.88	ws	
637	6	13	48.4	-0.9	316.06	3.71	3625.13	14313.97	11135.49	424.87	th	
639	6	14	47.5	-0.9	292.16	3.71	3649.50	14293.03	11123.04	425.25	th	
641	6	15	46.7	-1	270.96	3.71	3671.06	14274.82	11111.48	425.11	th	
643	6	16	45.6	-1.1	249.45	3.71	3693.14	14255.85	11100.19	425.05	th	
645	6	17	46	-1.5	240.32	-5.00	3693.14	14250.49	11092.59	432.26	ws	
647	6	18	46.3	-0.7	224.88	3.71	3717.88	14240.21	11081.02	427.09	th	
649	6	19	46.5	-0.9	200.38	3.71	3742.40	14222.97	11063.58	426.69	th	
651	6	20	47.1	-1.4	169.65	3.71	3773.19	14201.90	11041.14	425.69	th	
653	6	21	48.8	-2.3	146.68	3.71	3796.63	14187.99	11022.27	423.95	th	
655	6	22	48.8	-2.3	146.68	-5.00	3796.63	14187.99	11022.27	432.66	ws	
657	6	23	51.6	-2.6	127.67	3.71	3816.78	14177.68	11004.95	424.04	th	
659	6	24	55.6	-3.2	104.44	3.71	3841.37	14163.80	10984.66	424.00	th	
661	6	25	66.1	-3.6	65.47	3.71	3883.17	14137.48	10952.18	425.72	th	
663	6	26	80.4	-3.8	48.09	3.71	3905.47	14125.04	10933.67	426.65	th	
665	6	27	115.3	-3.5	35.63	3.71	3933.25	14109.84	10910.42	427.66	th	
667	6	28	144.6	-3.7	34.93	3.71	3951.11	14097.86	10897.18	427.58	th	
669	6	29	144.3	-9.6	35.20	-5.00	3951.11	14098.16	10897.07	432.60	ws	
671	6	30	67.7	2.5	292.62	0.00		14348.36	11036.69	446.33	lvw	
672	6	31	83.8	2.3	183.05	0.00		14259.60	10945.42	440.90	lvw	
673	6	32	126.1	3.2	133.69	0.00		14185.64	10846.88	441.02	lvw	
674	6	33	159	4.1	137.95	0.00		14127.06	10796.87	443.44	lvw	
675	6	34	181.5	5.1	256.28	0.00		14070.91	10669.46	456.42	lvw	
676	6	35	194.5	1.8	361.52	0.00		13987.10	10575.65	444.91	lvw	
677	6	36	243.8	7.5	38.77	0.00		14042.84	10908.54	438.65	rvw	
678	6	37	310	8.1	27.72	0.00		14056.39	10943.47	437.49	rvw	
679	6	38	22.3	6.9	88.55	0.00		14111.23	11007.58	444.27	rvw	
680	6	39	40.1	2.4	233.40	0.00		14227.96	11104.18	443.33	rvw	
681	6	40	171.1	-4.1	73.71	0.00	3996.33	14089.03	10852.83	428.27	th	
683	6	41	171.2	-4.8	73.34	-5.00	3996.33	14088.84	10853.17	432.39	ws	
685	6	42	185.2	-2.8	93.49	0.00	4024.73	14069.15	10832.55	428.98	th	

Salyer Survey Data - October, 1998							TH or XS					
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature	
686	6	43	193.3	-2	118.23	0.00	4053.58	14050.42	10810.60	429.42	th	
687	6	44	196.7	-1.9	133.23	0.00	4070.33	14039.34	10798.05	429.13	th	
688	6	45	201.4	-1.1	177.17	0.00	4116.04	14012.98	10760.70	430.15	th	
689	6	46	204.2	-1	210.17	0.00	4150.36	13991.47	10733.95	429.88	th	
690	6	47	202	-0.9	238.97	0.00	4180.42	13988.10	10704.08	429.80	th	
691	6	48	199	-0.9	255.67	0.00	4201.54	13994.39	10683.91	429.53	th	
692	6	49	194.9	-1.1	269.95	0.00	4225.15	14008.21	10664.78	428.37	th	
693	6	50	194.9	-1.3	270.13	-5.00	4225.15	14008.16	10664.61	432.42	ws	
695	6	51	195.5	-1.2	297.83	0.00	4253.19	13998.03	10638.65	427.31	th	
696	6	52	189.7	2	276.83	-5.00		14030.98	10652.78	448.22	tp6m	
698	6	53	189.8	2	277.13	-5.00		14030.45	10652.57	448.23	tp6m	
700	6	54	189.7	2	277.13	-5.00		14030.93	10652.48	448.23	tp6m	
702	6	55	189.8	2	277.13	-5.00		14030.45	10652.57	448.23	tp6m	
704	6	56	184.4	3.9	286.63	-5.00		14055.63	10639.86	458.09	tp6l	
706	6	57	184.4	4	286.60	-5.00		14055.64	10639.90	458.59	tp6l	
708	6	58	184.4	3.9	286.53	-5.00		14055.64	10639.96	458.08	tp6l	
710	6	59	201.3	-0.1	394.30	-5.00		13934.39	10558.29	437.86	tp6fl	
712	6	60	201.4	-0.1	394.20	-5.00		13933.79	10558.63	437.86	tp6fl	
714	6	61	201.4	-0.1	394.40	-5.00		13933.72	10558.45	437.86	tp6fl	
716	6	62	220.5	-0.2	295.40	-5.00		13885.78	10701.03	437.52	tp6r	
718	6	63	220.5	-0.2	295.60	-5.00		13885.65	10700.88	437.52	tp6r	
720	6	64	220.4	-0.2	295.50	-5.00		13886.10	10700.62	437.52	tp6r	
728	7	1	74.3	3.7	323.32	-5.00		14054.63	10643.36	458.31	tp6fl	
730	7	1	74.2	3.7	323.13	-5.00		14054.29	10643.84	458.30	tp6fl	
732	7	2	74.2	3.9	323.25	-5.00		14054.41	10643.88	459.44	tp6fl	
734	7	3	74.3	3.7	323.32	-5.00		14054.63	10643.36	458.31	tp6fl	
736	7	4	70.8	2.1	303.80	0.00		14030.27	10655.77	443.54		
738	7	6	70.7	2	303.42	-5.00		14029.74	10656.15	448.00	tp6l	
740	7	7	70.8	2.1	303.60	-5.00		14030.08	10655.71	448.53	tp6l	
742	7	8	70.9	2.1	303.70	-5.00		14030.35	10655.24	448.54	tp6l	
744	7	9	123.4	2.3	144.68	0.00		13864.16	10476.22	438.21	lac	
746	7	10	44.4	-0.1	203.20	-5.00		13885.54	10701.04	437.05	tp6r	
748	7	11	44.4	0.2	203.30	-5.00		13885.61	10701.11	438.11	tp6r	
750	7	12	44.7	0	203.30	-5.00		13886.37	10700.37	437.40	tp6r	
752	7	13	42.8	2.2	201.85	0.00		13880.52	10703.97	440.15	rac	
754	7	14	49.1	-1.5	201.73	-5.00	4368.07	13895.85	10687.94	432.12	ws	
756	7	15	49	-0.5	198.99	3.71	4368.07	13893.55	10686.41	426.95	th	
758	7	16	48.4	-0.9	191.88	3.71	4375.47	13886.86	10683.26	425.68	th	
760	7	17	50.4	-0.3	163.90	3.71	4404.13	13869.66	10660.34	427.83	th	
762	7	18	50.2	0	134.30	3.71	4433.73	13846.55	10641.83	428.69	th	
764	7	19	54.9	-1.4	113.67	0.00	4456.72	13836.37	10621.22	429.62	th	
766	7	20	54.9	-2.7	113.27	-5.00	4456.72	13836.05	10621.00	432.06	ws	
768	7	21	75.4	-2	73.26	0.00	4508.56	13814.26	10574.33	429.84	th	
769	7	22	101.2	-3	57.22	0.00	4541.62	13799.50	10544.75	429.40	th	
770	7	23	141.5	-3.6	54.99	0.00	4580.33	13777.60	10512.83	428.94	th	
771	7	24	73.5	4.8	339.90	0.00		14069.28	10652.40	460.94	lvw	
772	7	25	105.3	7.5	172.81	0.00		13910.06	10510.26	455.15	lvw	
773	7	26	159.4	6.6	125.46	0.00		13787.52	10438.42	446.92	lvw	
774	7	27	190.9	7.2	162.81	0.00		13712.59	10395.99	452.97	lvw	
775	7	28	216.9	4.9	229.86	0.00		13605.36	10372.05	452.11	lvw	
776	7	29	240.6	3.8	330.17	0.00		13455.72	10393.78	454.33	lvw	
777	7	30	249	2.2	466.26	0.00		13308.08	10388.77	450.31	lvw	
778	7	31	322.2	12.1	73.72	0.00		13698.19	10614.12	448.20	rvw	
779	7	32	34.2	9.1	125.30	0.00		13813.80	10659.50	452.47	rvw	
780	7	33	169.3	-4.1	78.10	0.00	4619.39	13757.87	10479.12	426.80	th	
782	7	34	169.3	-4.1	78.10	-5.00	4619.39	13757.87	10479.12	431.80	ws	

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
784	7	35	179.8	-1.7	93.06	3.71	4641.00	13743.70	10462.81	425.93	th
786	7	36	192.9	-1.6	106.66	3.71	4667.49	13719.56	10451.90	425.71	th
788	7	37	203.6	-1.6	127.15	3.71	4697.35	13692.47	10439.35	425.14	th
790	7	38	207.4	-0.9	147.68	7.50	4719.80	13675.41	10424.75	422.58	th
792	7	39	213.9	-1.1	171.07	7.50	4749.32	13647.96	10413.87	421.62	th
794	7	40	217.8	-1.3	190.85	7.50	4772.62	13626.40	10405.06	420.57	th
796	7	41	219.9	-1.1	192.36	7.50	4779.80	13619.98	10408.29	421.21	th rc
798	7	42	220.7	-0.9	201.38	7.50	4789.22	13612.06	10403.19	421.74	th
800	7	43	225.5	-1.4	208.74	7.50	4807.90	13594.49	10409.56	419.80	th
802	7	44	225.5	-1.4	208.74	-5.00	4807.90	13594.49	10409.56	432.30	ws
804	7	45	224.3	1.7	246.59	7.50		13571.15	10379.38	432.22	trib
806	7	46	222.1	1.1	255.75	0.00		13571.91	10366.10	437.31	trib
808	7	47	220.1	2.3	261.79	0.00		13574.75	10355.62	442.91	trib
810	7	48	232.8	-0.8	227.78	7.50	4841.57	13561.94	10418.15	421.72	th
812	7	49	234.8	-0.8	225.58	7.50	4849.78	13559.04	10425.83	421.75	th
814	7	50	238.9	-1.2	245.85	7.90	4876.14	13532.86	10428.88	419.35	th
816	7	51	238.9	-1.2	245.85	-5.00	4876.14	13532.86	10428.88	432.25	ws
818	7	52	241.7	-0.3	269.20	11.44	4902.65	13506.35	10428.24	419.55	th
820	7	53	243	0.1	284.00	11.44	4918.73	13490.33	10426.93	421.46	th
822	7	54	245.1	-0.1	301.00	7.50	4938.83	13470.35	10429.13	424.37	th
824	7	55	248.3	-0.6	314.68	7.50	4960.80	13450.99	10439.51	421.60	th
826	7	56	249.7	-0.9	327.66	-5.00	4960.80	13436.06	10442.19	432.25	ws
828	7	57	247.3	-0.6	330.88	-5.00		13438.12	10428.17	433.93	tp7m
830	7	58	247.2	-0.6	331.08	-5.00		13438.16	10427.56	433.93	tp7m
832	7	59	247.2	-0.6	330.98	-5.00		13438.25	10427.60	433.93	tp7m
834	7	60	245.6	1.3	330.81	-5.00		13442.10	10419.20	444.91	tp7l
836	7	61	245.6	1.3	331.01	-5.00		13441.92	10419.12	444.91	tp7l
838	7	62	245.8	1.3	330.91	-5.00		13441.54	10420.21	444.91	tp7l
840	7	63	260.7	-0.5	242.79	-5.00		13503.77	10516.63	435.28	tp7r
842	7	64	260.5	-0.7	242.88	-5.00		13503.82	10515.78	434.43	tp7r
844	7	65	260.6	-0.8	242.98	-5.00		13503.66	10516.18	434.01	tp7r
847	8	1	83.6	1.2	342.22	-5.00		13442.52	10419.00	445.44	tp7l
849	8	2	83.7	1.1	342.24	-5.00		13442.60	10418.41	444.85	tp7l
851	8	3	83.7	1.1	342.24	-5.00		13442.60	10418.41	444.85	tp7l
853	8	4	71	-0.6	422.88	-5.00		13502.27	10518.53	433.85	tp7r
855	8	5	71.1	-0.6	422.78	-5.00		13502.41	10517.80	433.85	tp7r
857	8	6	71.3	-0.6	422.78	-5.00		13502.89	10516.40	433.85	tp7r
859	8	7	82.1	-0.5	339.49	-5.00		13438.70	10427.51	435.31	tp7m
861	8	8	82.2	-0.7	339.37	-5.00		13438.67	10426.91	434.13	tp7m
863	8	9	82.1	-0.7	339.47	-5.00		13438.68	10427.51	434.13	tp7m
865	8	10	79.8	-0.4	335.39	7.50	4979.28	13432.52	10440.24	423.43	th
867	8	11	79.5	-0.9	336.06	-5.00	4979.28	13432.86	10442.09	433.00	ws
869	8	12	78.4	-0.3	322.70	7.50	4994.30	13418.54	10445.74	424.09	th
871	8	13	74.6	-0.6	302.58	3.71	5023.18	13394.15	10461.20	426.40	th
873	8	14	74.4	-0.7	301.98	-5.00	5023.18	13393.29	10462.06	434.59	ws
875	8	15	70.8	-1.2	280.24	0.00	5052.71	13367.08	10473.01	427.41	th
877	8	16	66	-0.9	259.27	0.00	5083.53	13339.28	10486.30	429.20	th
879	8	17	59.9	-1.3	241.74	0.00	5115.42	13311.57	10502.08	427.79	th
880	8	18	54.5	-1.5	228.02	0.00	5141.44	13288.07	10513.26	427.30	th
881	8	19	48.8	-1.1	214.46	3.71	5167.28	13263.80	10522.11	425.45	th
883	8	20	43.6	-1.7	197.81	3.71	5192.31	13238.85	10524.10	423.69	th
885	8	21	38.8	-0.9	178.38	7.50	5217.31	13214.20	10519.87	422.97	th
887	8	22	30.7	-0.9	163.58	7.50	5245.62	13185.95	10521.51	423.21	th
889	8	23	26.3	-0.7	141.09	7.50	5270.95	13164.94	10507.34	424.05	th
891	8	24	18.1	-2.5	128.58	3.71	5293.92	13142.38	10503.07	423.95	th
893	8	25	6.4	-2.7	120.77	3.71	5320.49	13115.89	10500.86	423.87	th



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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
895	8	26	6.9	-2.8	122.25	-5.00	5320.49	13117.12	10502.22	432.30	ws
897	8	27	357.1	-2.5	116.19	3.71	5340.24	13096.55	10496.89	424.49	th
899	8	28	346.6	-2.3	115.81	3.71	5361.47	13075.59	10493.50	424.91	th
901	8	29	335.9	-2.4	117.00	3.71	5383.21	13054.66	10487.65	424.66	th
903	8	30	319	-1.7	128.34	3.71	5420.97	13018.23	10477.71	425.76	th
905	8	31	308.1	-1.8	146.43	3.71	5452.67	12987.20	10471.20	424.96	th
907	8	32	303.4	-1.3	160.06	3.71	5471.20	12968.81	10468.96	425.93	th
909	8	33	296.8	-0.9	175.28	3.71	5495.77	12945.98	10459.88	426.81	th
911	8	34	292.3	-1.2	191.36	3.71	5517.34	12925.39	10453.46	425.56	th
913	8	35	292.2	-1.8	190.71	-5.00	5517.34	12925.86	10452.91	432.28	ws
915	8	36	288.5	-1.2	204.96	3.71	5536.24	12908.07	10445.88	425.27	th
917	8	37	286.3	-1.1	210.76	3.71	5546.11	12900.14	10440.00	425.52	th
919	8	38	285.9	-0.9	228.67	3.71	5564.09	12882.51	10443.50	425.97	th
921	8	39	282.6	-1.5	242.72	0.00	5583.61	12865.56	10433.80	426.92	th
923	8	40	282.6	-1.5	242.72	-5.00	5583.61	12865.56	10433.80	431.92	ws
925	8	41	282.3	-0.9	271.67	0.00	5612.60	12837.00	10438.72	429.01	th
927	8	42	278.3	-0.9	298.76	0.00	5646.21	12806.80	10423.98	428.58	th
928	8	43	276.4	-0.9	315.36	0.00	5665.68	12789.04	10416.00	428.32	th
929	8	44	283.6	-0.4	269.19	-5.00		12840.79	10444.15	436.40	tp8r
931	8	45	283.7	-0.4	269.19	-5.00		12840.90	10444.61	436.40	tp8r
933	8	46	283.6	-0.4	269.19	-5.00		12840.79	10444.15	436.40	tp8r
935	8	47	258.9	-1.2	229.45	-5.00		12877.27	10336.68	433.47	tp8m
937	8	48	258.9	-1.2	229.65	-5.00		12877.08	10336.64	433.46	tp8m
939	8	49	258.8	-1.2	229.55	-5.00		12877.25	10336.26	433.47	tp8m
941	8	50	242.6	-1	260.06	-5.00		12871.55	10261.17	433.74	tp8l
943	8	51	242.6	-1	260.06	-5.00		12871.55	10261.17	433.74	tp8l
945	9	1	38.7	-0.6	179.79	-5.00		12840.39	10446.31	436.48	tp8r
947	9	2	38.9	-0.6	179.79	-5.00		12840.87	10445.92	436.48	tp8r
949	9	3	38.9	-0.4	179.80	-5.00		12840.88	10445.92	437.11	tp8r
951	9	4	78.8	-1.9	152.22	-5.00		12877.29	10335.56	433.32	tp8m
953	9	5	78.8	-1.8	152.22	-5.00		12877.30	10335.56	433.58	tp8m
955	9	6	107.8	-1.8	150.83	-5.00		12871.58	10259.89	433.63	tp8l
957	9	7	107.7	-1.9	150.82	-5.00		12871.65	10260.14	433.36	tp8l
959	9	8	107.7	-1.9	150.72	-5.00		12871.56	10260.17	433.37	tp8l
961	9	9	28.6	-2.2	122.81	0.00	5668.83	12786.76	10413.82	428.65	th
963	9	10	28.1	-2.7	122.06	-5.00	5668.83	12785.47	10413.67	432.61	ws
965	9	11	19.7	-2.2	110.32	0.00	5690.79	12765.16	10409.86	429.13	th
966	9	12	9.3	-2.2	95.03	0.00	5714.84	12743.33	10399.78	429.72	th
967	9	13	9.4	-3.8	94.99	-5.00	5714.84	12743.49	10399.71	432.06	ws
969	9	14	355.9	-2.1	89.24	0.00	5737.09	12721.59	10395.01	430.09	th
970	9	15	347.6	-2.6	87.01	0.00	5750.04	12709.29	10390.98	429.41	th
971	9	16	344.7	-2.7	86.20	0.00	5754.49	12705.23	10389.14	429.30	th rc
972	9	17	345.1	-4.2	86.27	-5.00	5754.49	12705.79	10389.36	432.03	ws
974	9	18	164.2	14.6	206.32	-5.00		12784.15	10107.47	492.11	bt 2.1
976	9	19	164.2	14.7	206.22	-5.00		12784.12	10107.57	492.47	bt 2.1
978	9	20	162.1	15	219.27	0.00	0.00	12795.37	10097.34	492.12	gs
980	9	21	161.6	14.4	210.09	0.00	9.40	12794.29	10106.65	487.31	gs
981	9	22	161.4	13.6	193.91	0.00	25.60	12789.82	10122.22	480.28	gs
982	9	23	161.2	13.2	181.57	0.00	37.90	12786.49	10134.11	475.95	gs
983	9	24	161.4	12.6	172.35	0.00	47.20	12782.94	10142.65	471.89	gs
984	9	25	161.4	11.4	172.53	-5.00		12783.00	10142.48	473.15	xs2 p1
986	9	26	161.1	11.4	172.63	-5.00	48.10	12783.89	10142.68	473.17	xs2 p1
988	9	27	161.1	12.5	171.73	0.00	49.00	12783.60	10143.52	471.44	gs
990	9	28	160.5	11.9	166.15	0.00	54.90	12783.44	10149.37	468.38	gs
991	9	29	160	10.6	157.56	0.00	63.60	12781.86	10157.93	462.85	gs
992	9	30	159.1	8.6	147.32	0.00	74.10	12780.53	10168.36	455.65	gs

Salyer Survey Data - October, 1998							TH or XS					
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature	
993	9	31	159.4	8	143.29	0.00	78.20	12778.39	10171.87	453.50	gs	
994	9	32	158.9	7	140.64	0.00	81.10	12778.60	10174.78	450.63	rbf bdcrc	
995	9	33	159.1	4.2	134.34	0.00	87.40	12775.90	10180.50	443.23	bdcrc	
996	9	34	159.4	2.8	129.94	0.00	91.90	12773.69	10184.36	439.72	bdcrc	
997	9	35	159.5	2.1	126.02	0.00	95.80	12772.10	10187.96	437.99	bdcrc	
998	9	36	159.3	0.3	120.90	0.00	100.90	12770.71	10192.90	434.00	bdcrc	
999	9	37	159.3	-0.2	119.00	0.00	102.80	12770.04	10194.68	432.95	bdcrc	
1000	9	38	159.1	-2.2	119.01	-5.00	103.30	12770.43	10194.81	433.79	xs2 p2	
1002	9	39	159.1	-2.2	119.01	-5.00		12770.43	10194.81	433.79	xs2 p2	
1004	9	40	159.2	-0.2	118.40	0.00	103.90	12770.02	10195.31	432.95	lac bdcrc	
1006	9	42	158.9	-1.2	115.47	0.00	106.90	12769.54	10198.26	430.95	bdcrc	
1007	9	43	158.8	-1.5	110.76	0.00	111.60	12768.03	10202.73	430.47	bdcrc	
1008	9	44	159	-1.9	109.34	0.00	113.10	12767.16	10203.92	429.74	bdcrc	
1009	9	45	159	-3.2	107.73	0.00	114.70	12766.58	10205.42	427.34	lew bdcrc	
1011	9	47	159.2	-3.4	105.11	0.00	117.30	12765.30	10207.73	427.12	gs	
1012	9	48	158.7	-3.6	96.31	0.00	126.20	12762.96	10216.26	427.31	gs	
1013	9	49	157.8	-3.4	89.84	0.00	132.80	12761.92	10222.81	428.03	rew	
1014	9	50	155.9	-2.6	78.22	0.00	144.80	12759.91	10234.59	429.81	gs	
1015	9	51	151.6	-3.2	61.80	0.00	162.00	12757.37	10251.63	429.91	gs	
1016	9	52	146.6	-3.7	44.21	0.00	180.20	12752.31	10269.09	430.51	gs	
1017	9	53	142.7	-3.7	39.22	0.00	185.90	12751.74	10274.80	430.83	gs	
1018	9	54	142.9	-1.6	38.48	0.00	186.60	12751.19	10275.30	432.29	gs	
1019	9	55	142	-1.7	37.08	0.00	188.20	12750.80	10276.77	432.27	gs	
1020	9	56	141.6	-3.4	37.23	0.00	188.50	12751.10	10276.82	431.15	gs	
1021	9	57	131.3	-4	26.54	0.00	200.60	12747.91	10288.48	431.51	gs	
1023	9	59	75	-1.3	18.50	0.00	223.00	12745.84	10310.78	432.95	gs	
1024	9	60	34.8	-0.1	25.50	0.00	239.50	12742.53	10326.93	433.32	gs	
1025	9	61	20.1	-0.6	41.80	0.00	257.80	12742.34	10345.25	432.93	gs	
1026	9	62	12.3	-0.2	52.90	0.00	270.60	12739.24	10357.68	433.18	gs	
1027	9	63	10.1	-1.2	60.29	0.00	278.30	12738.55	10365.35	432.10	lew	
1028	9	64	7.2	-1.6	64.77	0.00	283.80	12736.09	10370.26	431.56	gs	
1029	9	65	3.9	-1.7	70.77	0.00	290.90	12732.79	10376.60	431.27	gs	
1030	9	66	0.8	-2.2	76.94	0.00	298.30	12729.05	10382.93	430.41	gs	
1031	9	67	354.8	-2.3	84.63	0.00	309.70	12720.30	10390.28	429.97	gs	
1032	9	68	353.3	-2.4	92.32	0.00	317.70	12717.20	10397.68	429.50	gs	
1033	9	69	352.8	-2.1	97.13	0.00	322.60	12715.80	10402.36	429.80	gs	
1034	9	70	352.6	-1.7	103.85	0.00	329.30	12714.60	10408.98	430.28	gs	
1035	9	71	351.3	-1	109.38	0.00	335.40	12711.43	10414.12	431.46	gs	
1036	9	72	351.1	-0.6	109.89	0.00	336.00	12710.97	10414.57	432.21	rew	
1037	9	73	350.2	0.1	115.90	0.00	342.30	12708.25	10420.20	433.57	gs	
1038	9	74	349.4	1.1	122.98	0.00	349.50	12705.35	10426.87	435.73	gs	
1039	9	75	348.6	2.2	129.40	0.00	356.20	12702.40	10432.85	438.34	gs	
1040	9	76	348	3.2	133.49	0.00	360.50	12700.22	10436.57	440.83	gs	
1041	9	77	347.9	1.6	134.05	-5.00		12699.87	10437.06	442.11	xs3 p3	
1043	9	78	348	1.7	133.94	-5.00	361.00	12700.13	10437.01	442.34	xs3 p3	
1045	9	79	348	1.6	134.05	-5.00		12700.10	10437.11	442.11	xs3 p3	
1047	9	80	348	3.2	133.59	0.00	360.60	12700.20	10436.67	440.83	gs	
1048	9	81	315.5	14.3	138.57	-5.00		12630.85	10404.83	473.69	bt2.2	
1050	9	82	315.7	14.3	138.57	-5.00		12631.19	10405.17	473.69	bt2.2	
1052	9	83	315.7	14.3	138.57	-5.00		12631.19	10405.17	473.69	bt2.2	
1054	9	84	347.3	4.3	138.71	0.00	366.70	12697.48	10441.31	443.80	gs	
1055	9	85	347.3	5.7	146.47	0.00	375.00	12695.77	10448.88	447.99	bdcrc	
1056	9	86	346.9	6.4	151.15	0.00	379.70	12693.71	10453.21	450.32	bdcrc	
1057	9	87	347	8.6	157.31	0.00	385.90	12692.59	10459.27	457.16	gs	
1058	9	88	347.2	9.7	161.46	0.00	390.10	12692.20	10463.44	460.96	gs	
1059	9	89	347.1	8.5	162.10	-5.00		12691.78	10464.00	462.59	xs2 p2	

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
1061	9	90	347.2	8.5	162.00	-5.00		12692.08	10463.97	462.58	xs2 p4
1063	9	91	347.3	8.5	162.10	-5.00	390.80	12692.34	10464.13	462.59	xs2 p4
1065	9	92	347.2	8.5	161.80	-5.00		12692.13	10463.78	462.55	xs2 p4
1067	9	93	347.4	10.2	163.08	0.00	391.80	12692.40	10465.15	462.71	gs
1068	9	94	347.3	11.5	168.25	0.00	397.00	12690.98	10470.13	467.60	gs
1069	9	95	346.7	14	182.22	-5.00	411.10	12686.05	10483.33	483.80	gs
1071	9	96	346.6	18.7	190.67	-5.00	419.50	12683.78	10491.48	502.91	bdrc
1073	9	97	346.2	25.5	212.92	-5.00	441.80	12677.18	10512.77	539.92	bdrc
1075	9	98	42.6	5.1	209.27	-5.00		12869.62	10460.04	457.04	rvw
1077	9	99	315.3	6.6	138.97	0.00		12630.22	10404.78	449.45	rvw
1078	9	100	276.6	5.1	223.31	0.00		12506.14	10331.66	453.30	rvw
1079	9	101	95.1	3	312.67	0.00		13039.41	10278.20	449.75	lvw
1080	9	102	114.4	2.9	136.92	0.00		12852.67	10249.43	440.30	lvw
1081	9	103	185.8	3	130.62	0.00		12714.77	10176.04	440.21	lvw
1082	9	104	213.8	2.8	159.81	0.00		12639.07	10173.20	441.18	lvw
1083	9	105	347.1	5.6	146.40	0.00	374.40	12695.29	10448.70	447.72	rbf
1085	9	106	348.1	4.2	137.33	0.00	364.40	12699.66	10440.37	443.45	rac
1086	9	107	343.1	-2.8	86.60	0.00	5756.94	12702.80	10388.85	429.13	th
1087	9	108	337.8	-2.3	89.83	0.00	5765.71	12694.03	10389.16	429.76	th
1088	9	109	337.6	-4.2	87.36	-5.00	5765.71	12694.68	10386.77	431.95	ws
1090	9	110	329.8	-3.1	89.37	0.00	5778.22	12683.02	10383.23	428.53	th
1091	9	111	326.5	-3.1	91.77	0.00	5783.96	12677.32	10382.52	428.40	th
1092	9	112	326	-4.3	92.04	-5.00	5783.96	12676.50	10382.30	431.45	ws
1094	9	113	317	-3.6	100.00	0.00	5801.84	12659.77	10379.13	427.07	th
1095	9	114	304.8	-3.4	109.41	0.00	5825.97	12638.13	10368.44	426.87	th
1096	9	115	299.1	-1.9	112.14	3.71	5837.32	12629.99	10360.53	425.94	th
1098	9	116	299	-0.6	111.69	3.71	5837.32	12630.28	10360.15	428.49	ws
1100	9	117	294.3	-2.2	120.31	3.71	5850.03	12618.32	10355.51	425.03	th
1102	9	118	288.4	-2	138.42	3.71	5872.48	12596.63	10349.69	424.82	th
1104	9	119	288.5	-0.6	137.99	3.71	5872.48	12597.11	10349.78	428.21	ws
1106	9	120	280.7	-1.3	156.46	3.71	5899.24	12574.23	10335.04	426.11	th
1108	9	121	273.5	-1.4	175.75	3.71	5927.63	12552.55	10316.72	425.36	th
1110	9	122	270	-1.3	196.95	3.71	5951.68	12531.02	10306.00	425.19	th
1112	9	123	270	-0.4	198.40	3.71	5951.68	12529.58	10306.00	428.27	ws
1114	9	124	263.5	-0.9	224.27	3.71	5987.94	12505.14	10280.61	426.13	th
1116	9	125	258.8	-0.8	254.38	3.71	6023.85	12478.44	10256.59	426.10	th
1118	9	126	255.8	-1.2	277.84	3.71	6051.13	12458.62	10237.84	423.84	th
1120	9	127	250.7	-1.1	293.25	7.50	6080.84	12451.21	10209.07	420.24	th
1122	9	128	246.5	0.5	330.79	-5.00		12424.62	10174.09	441.25	tp9l
1124	9	129	246.7	0.5	330.89	-5.00		12424.07	10175.11	441.25	tp9l
1126	9	130	246.7	0.6	330.88	-5.00		12424.08	10175.12	441.83	tp9l
1128	9	131	261.4	-1.3	311.52	-5.00		12419.96	10259.41	431.30	tp9m
1130	9	132	261.4	-1.3	311.22	-5.00		12420.25	10259.46	431.30	tp9m
1132	9	133	261.4	-1.3	311.52	-5.00		12419.96	10259.41	431.30	tp9m
1134	9	134	261.5	-1.4	311.41	-5.00		12419.99	10259.97	430.76	tp9m
1136	9	135	269.4	-1.2	321.03	-5.00		12406.96	10302.63	431.64	tp9r
1138	9	136	269.4	-1.3	321.22	-5.00		12406.77	10302.63	431.08	tp9r
1140	9	137	269.4	-1.2	321.13	0.00		12406.86	10302.63	426.64	tp9r
1151	10	1	60.7	-0.5	272.39	-5.00		12405.92	10302.65	431.28	tp9r
1153	10	2	60.7	-0.5	272.19	-5.00		12405.74	10302.55	431.28	tp9r
1155	10	3	60.8	-0.5	272.09	-5.00		12405.89	10302.09	431.28	tp9r
1157	10	4	70.3	-0.7	267.38	-5.00		12420.10	10259.48	430.39	tp9m
1159	10	5	70.2	-0.7	267.78	-5.00		12420.32	10260.05	430.38	tp9m
1161	10	6	70.3	-0.7	267.48	-5.00		12420.20	10259.51	430.39	tp9m
1163	10	7	70.3	-0.6	267.49	-5.00		12420.20	10259.51	430.86	tp9m
1165	10	8	88.8	1.6	256.80	-5.00		12425.12	10174.72	440.83	tp9l

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
1167	10	9	88.7	1.6	256.70	-5.00		12425.01	10175.17	440.83	tp9l
1169	10	10	88.8	1.6	256.70	-5.00		12425.02	10174.72	440.83	tp9l
1171	10	11	85	-0.8	276.57	3.71	6098.09	12443.89	10193.45	421.08	th
1173	10	12	85	-1.1	277.15	-5.00	6098.09	12444.47	10193.50	428.34	ws
1175	10	13	84.1	-0.8	253.98	3.71	6121.06	12421.00	10195.45	421.40	th
1177	10	14	85.9	-1.4	225.93	0.00	6150.10	12393.73	10185.50	423.13	th
1179	10	15	85.9	-1.4	225.93	-5.00	6150.10	12393.73	10185.50	428.13	ws
1181	10	16	88.7	-1.4	195.64	0.00	6182.09	12363.96	10173.79	423.88	th
1182	10	17	93	-1.3	166.16	0.00	6214.52	12334.30	10160.65	424.89	th
1183	10	18	97	-1.5	131.95	0.00	6250.25	12299.34	10153.27	425.20	th
1184	10	19	101.3	-1.6	113.16	0.00	6271.17	12279.34	10147.17	425.50	th
1185	10	20	101.4	-2.9	113.06	0.00	6271.39	12279.20	10147.00	422.93	th
1186	10	21	111.4	-2.1	93.04	0.00	6298.23	12255.00	10135.40	425.25	th
1187	10	22	130.9	-3.2	71.79	0.00	6333.13	12222.63	10122.34	424.64	th
1188	10	23	151.4	-3.5	52.30	0.00	6362.37	12193.41	10123.43	425.46	th
1189	10	24	151.4	-1	52.09	0.00	6362.37	12193.31	10123.61	427.75	ws
1191	10	25	180.4	5.3	87.92	0.00		12167.76	10081.43	436.81	lac
1192	10	26	297.8	2.3	448.64	0.00		11771.52	10378.59	446.68	vbd
1193	10	27	316.4	2.7	191.59	0.00		12036.25	10308.09	437.69	vbd
1194	10	28	346.5	3.5	147.13	0.00		12134.03	10312.41	437.66	vbd
1195	10	29	32.9	4	147.34	0.00		12248.41	10293.06	438.96	vbd
1196	10	30	63.8	3.6	362.88	0.00		12493.97	10329.56	451.49	vbd
1197	10	31	116.7	4.8	135.62	0.00		12289.54	10108.41	440.05	vbd
1198	10	32	166.7	4.6	90.61	0.00		12189.22	10081.17	435.95	vbd
1199	10	33	203.7	4.5	94.71	0.00		12130.31	10082.63	436.11	vbd
1200	10	34	245.4	4.7	178.90	0.00		12005.71	10094.88	443.36	vbd
1201	10	35	219.2	-3.8	45.80	0.00	6417.35	12139.43	10133.86	425.61	th
1202	10	36	251.5	-3.3	70.88	0.00	6457.77	12101.15	10146.86	424.57	th
1203	10	37	260.4	-2.4	94.42	0.00	6484.51	12075.28	10153.60	424.70	th
1204	10	38	260.3	-3.5	94.92	-5.00	6484.51	12074.81	10153.35	427.85	ws
1206	10	39	262.3	-2.2	116.61	0.00	6506.98	12052.81	10153.72	424.18	th rc
1207	10	40	267.9	-1.3	145.36	0.00	6538.42	12023.11	10164.02	425.36	th
1208	10	41	269.7	-1.3	167.56	0.00	6561.15	12000.82	10168.47	424.85	th
1209	10	42	269.6	-2.1	167.69	-5.00	6561.15	12000.69	10168.18	427.51	ws
1211	10	43	273.7	-1	214.67	0.00	6610.08	11954.15	10183.20	424.91	th
1212	10	44	274.1	-1.1	260.25	0.00	6655.70	11908.79	10187.95	423.66	th pool
1213	10	45	274.1	-1.4	260.12	-5.00	6655.70	11908.92	10187.95	427.30	ws
1215	10	46	275.2	-1.1	288.65	0.00	6684.58	11880.91	10195.51	423.11	th
1216	10	47	272.1	-0.4	288.49	-5.00		11880.07	10179.92	431.64	tp10m
1218	10	48	272.2	-0.4	288.59	-5.00		11879.99	10180.43	431.64	tp10m
1220	10	49	272.1	-0.4	288.49	-5.00		11880.07	10179.92	431.64	tp10m
1222	10	50	265.1	1	296.25	-5.00		11873.20	10144.04	438.83	tp10l
1224	10	51	265.1	1	296.35	-5.00		11873.10	10144.03	438.83	tp10l
1226	10	52	265.1	1	296.45	-5.00		11873.00	10144.02	438.83	tp10l
1228	10	53	265.1	1	296.55	-5.00		11872.90	10144.02	438.83	tp10l
1230	10	54	285	-0.9	290.66	-5.00		11887.61	10244.58	429.09	tp10r
1232	10	55	284.9	-0.9	290.86	-5.00		11887.29	10244.14	429.09	tp10r
1234	10	56	284.5	-1	290.96	-5.00		11886.69	10242.20	428.58	tp10r
1236	10	57	284.5	-0.9	290.86	-5.00		11886.77	10242.17	429.09	tp10r
1238	11	1	123.9	-0.4	427.19	-5.00		11887.42	10244.92	429.10	tp10r
1240	11	2	123.8	-0.4	427.39	-5.00		11888.00	10245.43	429.09	tp10r
1242	11	3	123.9	-0.4	427.29	-5.00		11887.50	10244.87	429.09	tp10r
1244	11	4	135	0.8	481.05	-5.00		11873.00	10143.03	438.80	tp10l
1246	11	5	135.1	0.8	481.25	-5.00		11872.55	10142.30	438.80	tp10l
1248	11	6	135	0.8	481.25	-5.00		11873.14	10142.89	438.80	tp10l
1250	11	7	131.2	-0.1	461.00	-5.00		11879.71	10179.53	431.27	tp10m

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
1252	11	8	131.1	-0.1	460.90	-5.00		11880.16	10180.20	431.27	tp10m
1254	11	9	131.3	0	460.90	-5.00		11879.10	10178.99	432.08	tp10m
1256	11	10	130.2	-0.4	436.09	0.00	6700.80	11865.93	10201.71	424.03	th
1257	11	11	130.2	-0.6	436.48	-5.00	6700.80	11866.22	10201.46	427.51	ws
1258	11	12	133	-0.6	413.68	0.00	6731.34	11835.39	10201.06	422.75	th
1259	11	13	135.5	-0.6	376.28	0.00	6772.51	11796.58	10214.80	423.14	th
1260	11	14	138.4	-0.6	347.08	0.00	6806.96	11763.28	10223.64	423.44	th
1261	11	15	139.9	-0.8	307.37	0.00	6847.58	11730.83	10248.07	422.79	th
1262	11	16	141.7	-0.5	290.19	3.71	6867.16	11712.70	10255.45	420.84	th
1264	11	17	142.8	-0.9	262.87	0.00	6894.99	11691.77	10273.80	422.95	th
1266	11	18	142.8	-0.9	262.87	-5.00	6894.99	11691.77	10273.80	427.95	ws
1268	11	19	145.2	-0.8	240.88	0.00	6919.38	11670.32	10285.39	423.71	th
1269	11	20	148.8	-0.3	234.70	3.71	6935.54	11654.42	10282.44	422.14	th
1271	11	21	151.8	-0.5	226.39	3.71	6950.19	11639.83	10283.67	421.39	th
1273	11	22	154.7	-1.4	205.04	0.50	6974.17	11620.47	10297.81	421.57	th
1275	11	23	157.3	-1.1	184.97	3.71	6996.10	11604.22	10312.55	419.82	th
1277	11	24	163	-1.6	163.04	0.00	7024.01	11580.51	10327.27	422.52	th
1279	11	25	163	-1.6	163.04	-5.00	7024.01	11580.51	10327.27	427.52	ws
1281	11	26	168.7	-1.3	137.06	0.00	7053.94	11559.70	10348.78	423.97	th
1282	11	27	175.1	-1.6	110.66	0.00	7083.71	11542.30	10372.93	423.99	th
1283	11	28	188.1	-1.7	93.26	0.00	7112.55	11519.70	10390.86	424.31	th
1284	11	29	206.2	-1.7	83.16	0.00	7142.04	11496.13	10408.57	424.61	th
1285	11	30	222.2	-1.6	82.77	0.00	7165.13	11477.25	10421.87	424.77	th
1286	11	31	236.3	-1.5	84.57	0.00	7185.75	11462.48	10436.26	424.86	th
1287	11	32	250.9	-1.7	97.86	0.00	7212.41	11440.37	10451.17	424.17	th
1288	11	33	258.9	-2.5	118.39	0.00	7237.85	11416.67	10460.39	421.91	th
1289	11	34	258.9	-2.5	118.39	-5.00	7237.85	11416.67	10460.39	426.91	ws
1291	11	35	263.3	-2	136.32	3.71	7258.26	11397.46	10467.28	418.61	th rc
1293	11	36	270.2	-1.7	142.74	3.71	7276.23	11390.11	10483.68	419.13	th rc
1295	11	37	277.9	-1.6	147.34	3.71	7296.25	11386.90	10503.44	419.25	th
1297	11	38	285.2	-1.8	156.12	3.71	7317.46	11382.18	10524.12	418.46	th
1299	11	39	285.2	-1.8	156.12	-5.00	7317.46	11382.18	10524.12	427.17	ws
1301	11	40	272.3	0.1	167.70	0.00		11365.28	10489.92	427.37	trib
1303	11	41	271.4	1	171.77	0.00		11361.12	10487.38	430.08	trib
1304	11	42	271.1	1.5	175.74	0.00		11357.14	10486.56	431.68	trib
1305	11	43	302.2	2.5	419.70	0.00		11177.70	10706.83	445.40	lbf
1306	11	44	274.6	2.8	176.19	0.00		11357.22	10497.32	435.70	lbf
1307	11	45	237.5	3.9	166.91	0.00		11392.07	10393.50	438.46	lbf
1308	11	46	189	4.1	167.57	0.00		11506.63	10317.68	439.09	vbd
1309	11	47	165.8	4.7	196.54	0.00		11581.06	10292.65	443.24	vbd
1310	11	48	149.5	4.7	348.13	0.00		11709.53	10183.23	455.70	vbd
1311	11	49	118.5	2.1	237.94	0.00		11741.95	10369.65	435.80	vbd
1312	11	50	88.8	8.9	95.04	0.00		11627.86	10485.18	441.96	vbd
1313	11	51	21.6	10.6	31.26	0.00		11544.35	10512.25	432.93	vbd
1314	11	52	335.2	9.7	72.35	0.00		11502.50	10548.86	439.45	vbd
1315	11	53	292.6	-1	200.97	7.50	7367.80	11347.31	10560.42	416.07	th
1317	11	54	291.8	-1.3	215.64	7.50	7382.76	11332.62	10563.27	414.68	th rc
1319	11	55	291.8	-1.3	215.64	-5.00	7382.76	11332.62	10563.27	427.18	ws
1321	11	56	292.8	-0.5	233.99	11.44	7401.52	11317.14	10573.86	413.60	th
1323	11	57	296.2	-0.7	243.68	3.71	7418.68	11314.20	10590.77	420.39	th
1325	11	58	300.3	-0.9	248.47	3.71	7436.93	11318.32	10608.55	419.46	th
1327	11	59	302.6	-0.3	260.70	3.71	7452.86	11313.22	10623.64	422.00	th
1329	11	60	303.8	-0.8	270.87	0.00	7464.46	11307.75	10633.87	423.30	th
1331	11	61	306.3	-0.7	290.58	0.00	7487.66	11298.66	10655.21	423.53	th
1332	11	62	307.5	-0.4	312.39	0.00	7510.36	11285.01	10673.36	424.90	th
1333	11	63	306.6	-0.2	333.50	0.00	7532.07	11265.11	10682.03	425.91	th rc

Salyer Survey Data - October, 1998							TH or XS					
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature	
1334	11	64	306.7	-0.8	333.67	-5.00	7532.07	11265.32	10682.59	427.42	ws	
1336	11	65	299.6	-0.6	325.68	-5.00		11249.66	10644.05	428.67	tp11m	
1338	11	66	299.6	-0.6	325.58	-5.00		11249.75	10644.00	428.67	tp11m	
1340	11	67	296.1	1.1	341.84	-5.00		11225.86	10633.57	438.64	tp11l	
1342	11	68	296.1	1	342.05	-5.00		11225.68	10633.67	438.05	tp11l	
1344	11	69	296.1	1.1	342.04	-5.00		11225.69	10633.66	438.65	tp11l	
1346	11	70	324.5	0	273.50	0.00		11374.02	10705.85	427.08	tp11r	
1348	11	71	324.5	0	273.40	0.00		11374.08	10705.77	427.08	tp11r	
1350	11	72	324.4	0.1	273.50	0.00		11373.63	10705.57	427.56	tp11r	
1352	12	1	180.6	-0.3	227.60	0.00		11376.39	10705.09	427.27	tp11r	
1354	12	2	180.4	-0.2	227.70	0.00		11377.18	10704.98	427.66	tp11r	
1356	12	3	180.6	0	227.40	0.00		11376.39	10705.29	428.46	tp11r	
1358	12	4	204.3	-1	316.45	-5.00		11248.55	10644.26	427.93	tp11m	
1360	12	5	204.1	-1	316.45	-5.00		11249.55	10643.81	427.93	tp11m	
1362	12	6	204.4	-0.8	316.47	-5.00		11248.04	10644.47	429.04	tp11m	
1364	12	7	207.6	0.8	336.47	-5.00		11222.89	10634.50	438.16	tp11l	
1366	12	8	207.5	0.8	336.57	-5.00		11223.36	10634.14	438.16	tp11l	
1368	12	9	206.6	-0.3	279.20	0.00	7543.46	11253.76	10683.03	427.00	th	
1369	12	10	206.6	-0.4	279.39	0.00	7543.46	11253.67	10682.86	426.51	ws	
1370	12	11	212.3	-1.2	281.44	0.00	7571.43	11228.38	10694.79	422.56	th	
1371	12	12	217.7	-1.1	272.35	0.00	7599.05	11212.22	10717.19	423.23	th	
1372	12	13	217.6	-1.2	265.54	0.00	7605.87	11216.75	10722.29	422.90	th	
1373	12	14	217.6	-0.4	264.69	0.00	7605.87	11217.27	10722.96	426.61	ws	
1374	12	15	221.4	-0.8	248.88	3.71	7629.71	11214.19	10745.99	421.27	th	
1376	12	16	231.1	-1.7	220.60	3.71	7678.39	11207.09	10794.15	418.20	th	
1378	12	17	236.5	-2.1	184.88	0.00	7718.87	11224.61	10830.64	421.68	th	
1380	12	18	245.1	-2.5	153.35	0.00	7759.25	11239.67	10868.11	421.76	th	
1381	12	19	251.1	-2.8	133.74	0.00	7783.94	11252.24	10889.36	421.92	th	
1382	12	20	257.2	-3.2	102.94	0.00	7817.17	11278.39	10909.87	422.70	th	
1383	12	21	259.6	-3.4	90.34	0.00	7830.41	11289.91	10916.37	423.09	th rc	
1384	12	22	259.5	-5.2	90.13	-5.00	7830.41	11290.15	10916.25	425.26	ws	
1386	12	23	263	-4.7	70.16	0.00	7851.13	11309.13	10924.13	422.69	th	
1387	12	24	269.1	-7.4	58.41	0.00	7864.71	11320.37	10931.76	420.87	th	
1388	12	25	269.5	-9.6	58.08	-5.00	7864.71	11320.70	10932.17	423.63	ws	
1390	12	26	298.4	-10.4	45.24	0.00	7893.86	11338.97	10954.20	420.15	th	
1391	12	27	298.4	-12.3	44.75	-5.00	7893.86	11339.41	10953.96	423.70	ws	
1393	12	28	347.8	-7.1	63.21	0.00	7942.03	11365.41	10994.46	420.58	th	
1394	12	29	7.3	-4.7	96.67	0.00	7984.70	11391.05	11028.57	420.51	th	
1395	12	30	7.3	-5.7	96.42	-5.00	7984.70	11391.02	11028.32	423.83	ws	
1397	12	31	13.4	-3.2	145.87	0.00	8035.50	11412.58	11074.58	420.30	th	
1398	12	32	16.4	-2.7	202.77	0.00	8093.11	11436.02	11127.20	418.89	th	
1399	12	33	16.1	-2.9	202.54	-5.00	8093.11	11434.94	11127.27	423.20	ws	
1401	12	34	19.3	-2.2	251.21	0.00	8142.87	11461.80	11169.77	418.81	th	
1402	12	35	20.8	-1.9	279.75	0.00	8172.24	11478.11	11194.19	419.18	th	
1403	12	36	23.9	-1.6	309.98	0.00	8206.41	11504.36	11216.08	419.80	th	
1404	12	37	28.9	-1.7	355.94	0.00	8260.75	11550.79	11244.29	417.89	th	
1405	12	38	35	-1.5	367.87	-5.00		11589.77	11234.02	423.82	tp12r	
1407	12	39	34.8	-1.5	367.67	-5.00		11588.61	11234.59	423.83	tp12r	
1409	12	40	35	-1.5	367.67	-5.00		11589.66	11233.86	423.83	tp12r	
1411	12	41	21.4	-1.5	376.57	-5.00		11516.17	11283.28	423.60	tp12m	
1413	12	42	21.4	-1.4	376.59	-5.00		11516.18	11283.30	424.25	tp12m	
1415	12	43	21.4	-1.5	376.67	-5.00		11516.21	11283.38	423.59	tp12m	
1417	12	44	14.1	-0.9	399.15	-5.00		11476.01	11319.80	427.19	tp12l	
1419	12	45	14.3	-0.9	399.45	-5.00		11477.43	11319.75	427.18	tp12l	
1421	12	46	14.2	-1	399.24	-5.00		11476.71	11319.72	426.49	tp12l	
1423	12	47	14.2	-0.9	399.45	-5.00		11476.76	11319.92	427.18	tp12l	

Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
1425	13	1	220	-0.1	447.90	-5.00		11478.60	11320.22	427.13	tp12l
1427	13	2	220.1	-0.1	448.20	-5.00		11477.81	11320.49	427.13	tp12l
1429	13	3	220	-0.1	448.20	-5.00		11478.41	11319.99	427.13	tp12l
1431	13	4	213.5	-0.6	454.88	-5.00		11515.44	11284.02	423.14	tp12m
1433	13	5	213.3	-0.6	454.58	-5.00		11516.93	11283.39	423.15	tp12m
1435	13	6	213.3	-0.5	454.68	-5.00		11516.87	11283.30	423.94	tp12m
1437	13	7	202.5	-0.5	465.48	-5.00		11588.37	11233.28	423.85	tp12r
1439	13	8	202.7	-0.4	465.49	-5.00		11586.87	11233.90	424.66	tp12r
1441	13	9	202.6	-0.5	465.88	-5.00		11587.47	11233.22	423.84	tp12r
1443	13	10	204.4	-0.6	467.07	3.71	8284.37	11573.56	11237.97	414.31	th
1445	13	11	204.3	-0.7	466.17	3.71	8285.59	11574.67	11238.47	413.50	th
1447	13	12	203.8	-0.5	444.18	3.71	8307.93	11587.26	11256.92	415.32	th
1449	13	13	203	-0.5	413.88	3.71	8338.81	11604.79	11282.35	415.59	th
1451	13	14	203.1	-0.7	413.27	-5.00	8338.81	11604.37	11283.20	422.86	ws
1453	13	15	201.6	-0.5	387.59	3.71	8366.87	11623.83	11302.96	415.82	th
1455	13	16	199.8	-0.4	353.39	3.71	8402.99	11646.80	11330.83	416.73	th
1457	13	17	197.9	-0.4	318.09	3.71	8440.00	11668.74	11360.64	416.98	th
1459	13	18	196.3	-0.5	299.19	3.71	8460.77	11682.53	11376.17	416.59	th
1461	13	19	193.7	-0.5	259.89	3.71	8502.06	11704.95	11410.83	416.93	th
1463	13	20	192.3	-1.3	233.14	0.25	8529.48	11716.84	11435.54	417.37	th
1465	13	21	188	-1.5	198.93	0.00	8567.31	11738.82	11466.33	417.70	th
1467	13	22	181.2	-1.8	162.62	0.00	8609.42	11763.10	11500.75	417.80	th
1468	13	23	181.2	-1.8	162.62	-5.00	8609.42	11763.10	11500.75	422.80	ws
1470	13	24	172.1	-0.9	142.58	3.71	8640.81	11786.10	11522.10	416.96	th
1472	13	25	164.1	-1.2	119.97	3.71	8669.87	11799.37	11547.95	416.69	th rc
1474	13	26	163.9	-2.5	119.49	-5.00	8669.87	11799.64	11548.53	422.69	ws
1476	13	27	153.2	-2	98.24	3.71	8699.83	11810.80	11575.64	415.77	th
1478	13	28	131	-2.4	78.73	3.71	8738.91	11825.92	11611.68	415.90	th
1480	13	29	105.2	-2.1	68.25	3.71	8773.27	11832.37	11645.44	416.70	th rc
1482	13	30	77.5	-0.4	94.60	3.71	8819.90	11858.86	11683.81	418.54	th
1484	13	31	74.6	-2.5	118.39	0.00	8844.28	11880.64	11694.77	417.74	th
1486	13	32	74.6	-2.5	118.39	-5.00	8844.28	11880.64	11694.77	422.74	ws
1488	13	33	68.7	-0.9	167.28	0.00	8895.28	11922.36	11724.10	420.28	th
1489	13	34	70	-0.5	202.79	0.00	8931.03	11957.07	11732.69	421.14	th rc
1490	13	35	70.1	-1.5	202.53	-5.00	8931.03	11956.94	11732.27	422.60	ws
1492	13	36	71.1	-0.9	239.47	0.00	8967.96	11993.07	11740.90	419.15	th
1493	13	37	71.1	-0.2	239.30	0.00	8967.96	11992.90	11740.84	422.07	ws
1494	13	38	71.1	-1	284.56	0.00	9013.04	12035.72	11755.50	417.94	th
1495	13	39	73.5	-0.6	350.48	0.00	9080.28	12102.55	11762.87	419.24	th
1496	13	40	73.5	-0.2	350.90	0.00	9080.28	12102.95	11762.99	421.68	ws
1497	13	41	71.1	0	352.70	0.00		12100.19	11777.58	422.91	tp13r
1499	13	42	71.1	0.1	352.80	0.00		12100.28	11777.61	423.52	tp13r
1501	13	43	71.2	0	352.80	0.00		12100.48	11777.03	422.91	tp13r
1503	13	44	63.7	-0.3	352.30	-5.00		12082.33	11819.42	426.06	tp13m
1505	13	45	63.8	-0.2	352.10	-5.00		12082.43	11818.78	426.68	tp13m
1507	13	46	63.6	-0.2	352.30	-5.00		12082.06	11819.97	426.68	tp13m
1509	13	47	63.7	-0.2	352.30	-5.00		12082.34	11819.42	426.68	tp13m
1511	13	48	50.5	-0.3	395.69	-5.00		12071.83	11915.02	425.84	tp13l
1513	13	49	50.6	-0.3	395.59	-5.00		12072.20	11914.43	425.84	tp13l
1515	13	50	50.4	-0.3	395.79	-5.00		12071.47	11915.62	425.84	tp13l
1517	14	1	246.8	-0.3	306.50	-5.00		12073.55	11914.87	425.68	tp13l
1519	14	2	246.6	-0.3	306.60	-5.00		12073.88	11913.85	425.68	tp13l
1521	14	3	246.7	-0.3	306.40	-5.00		12073.85	11914.42	425.68	tp13l
1523	14	4	231.8	-0.1	348.60	-5.00		12081.31	11820.04	426.67	tp13m
1525	14	5	231.6	-0.1	348.50	-5.00		12082.14	11819.14	426.67	tp13m
1527	14	6	231.5	-0.1	348.70	-5.00		12082.36	11818.54	426.67	tp13m



Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
1529	14	7	225	0.1	363.30	0.00		12098.37	11778.72	422.91	tp13r
1531	14	8	225	0.2	363.60	0.00		12098.16	11778.51	423.55	tp13r
1533	14	9	224.7	0.1	363.30	0.00		12099.72	11777.38	422.91	tp13r
1535	14	10	219.9	-0.7	360.37	0.00	9102.14	12124.10	11759.15	417.88	th
1536	14	11	220.4	-1.1	360.03	-5.00	9102.14	12121.91	11761.43	420.37	ws
1538	14	12	217.5	-0.8	325.97	0.00	9139.42	12156.82	11777.01	417.73	th
1539	14	13	218.3	-1.1	303.04	0.00	9162.76	12167.44	11797.79	416.46	th
1540	14	14	218.1	-1.5	302.40	-5.00	9162.76	12168.67	11797.65	419.36	ws
1542	14	15	219.1	-1.1	232.76	3.71	9233.15	12208.46	11854.98	414.10	th
1544	14	16	219.2	-1.8	218.99	0.00	9246.92	12216.85	11865.91	415.40	th
1546	14	17	216.5	-1.5	182.14	0.00	9284.96	12246.92	11889.20	417.51	th rc
1547	14	18	216.7	-2.6	181.61	-5.00	9284.96	12246.72	11890.00	419.03	ws
1549	14	19	216.3	-3.1	132.11	0.00	9334.99	12277.05	11929.15	415.13	th
1550	14	20	195.4	-5.7	84.98	0.00	9395.80	12332.69	11953.69	413.80	th
1551	14	21	195.7	-6.8	84.50	-5.00	9395.80	12332.39	11954.27	417.20	ws
1553	14	22	147.5	-5.8	69.54	0.00	9460.10	12392.62	11976.96	415.22	th
1554	14	23	112.6	-5.3	101.27	0.00	9519.59	12448.75	11996.70	412.89	th rc
1555	14	24	94.9	-3.6	128.35	0.00	9563.91	12483.14	12024.65	414.21	th
1556	14	25	83.2	-3.2	155.86	0.00	9603.76	12510.02	12054.07	413.57	th
1557	14	26	77.7	-3.3	186.39	0.00	9638.39	12537.37	12075.32	411.53	th
1558	14	27	77.7	-3.5	186.45	-5.00	9638.39	12537.43	12075.33	415.88	ws
1560	14	28	67.5	-1.9	219.38	7.50	9687.19	12557.94	12119.57	407.50	th
1562	14	29	62.7	-1.8	226.59	7.50	9707.20	12556.61	12139.54	407.66	th
1564	14	30	57.2	-1.9	251.06	7.50	9740.71	12566.29	12171.62	406.45	th
1566	14	31	57.2	-1.9	251.06	-2.00	9740.71	12566.29	12171.62	415.95	ws
1568	14	32	54.3	0.4	265.19	-5.00		12570.62	12190.37	429.13	tp14r
1570	14	33	54.4	0.5	265.19	-5.00		12570.88	12189.99	429.60	tp14r
1572	14	34	54.1	0.5	265.19	-5.00		12570.07	12191.11	429.60	tp14r
1574	14	35	30.8	-1.4	187.24	-5.00		12451.14	12196.45	422.70	tp14m
1576	14	36	30.8	-1.3	187.35	-5.00		12451.19	12196.54	423.03	tp14m
1578	14	37	30.8	-1.3	187.35	-5.00		12451.19	12196.54	423.03	tp14m
1580	14	38	351.5	0.9	250.57	-5.00		12318.22	12283.43	431.22	tp14l
1582	14	39	351.5	1	250.56	-5.00		12318.22	12283.42	431.65	tp14l
1584	14	40	351.4	1	250.66	0.00		12317.78	12283.46	426.66	tp14l
1601	15	1	192.2	3.4	183.08	-5.00		12320.26	12287.13	431.02	tp14l
1603	15	2	192.2	3.4	183.18	-5.00		12320.24	12287.03	431.03	tp14l
1605	15	3	192.1	3.4	183.08	-5.00		12320.57	12287.06	431.02	tp14l
1607	15	4	161.5	0.4	284.49	-5.00		12449.22	12196.28	422.13	tp14m
1609	15	5	161.6	0.4	284.59	-5.00		12448.78	12196.03	422.13	tp14m
1611	15	6	161.5	0.4	284.59	-5.00		12449.25	12196.19	422.13	tp14m
1613	15	7	142.7	1.4	349.20	-5.00		12570.56	12188.30	428.68	tp14r
1615	15	8	142.7	1.5	349.38	-5.00		12570.67	12188.15	429.30	tp14r
1617	15	9	142.8	1.5	349.38	-5.00		12570.18	12187.78	429.30	tp14r
1619	15	10	142.8	1.5	349.28	-5.00		12570.12	12187.86	429.29	tp14r
1621	15	11	146.5	-0.9	371.05	7.50	9755.89	12563.75	12156.65	401.82	th
1623	15	12	146.6	-0.7	369.77	-5.00	9755.89	12562.50	12157.37	415.63	ws
1625	15	13	144.5	-0.8	339.17	0.00	9790.09	12555.90	12189.95	410.41	th
1627	15	14	142.2	-0.9	321.86	0.00	9811.90	12556.22	12211.75	410.09	th
1629	15	15	142.1	-0.7	295.88	3.71	9837.89	12540.70	12232.60	407.82	th
1631	15	16	140	-0.3	257.30	3.71	9877.77	12524.33	12268.97	410.09	th
1633	15	17	139.9	-0.7	222.38	0.00	9912.69	12502.19	12295.97	412.43	th
1635	15	18	139.8	-1.3	222.24	-5.00	9912.69	12502.40	12296.32	415.10	ws
1637	15	19	138.9	-0.3	197.10	11.44	9938.24	12488.51	12317.55	402.68	th
1639	15	20	139.4	-0.8	175.18	11.44	9960.21	12472.95	12333.06	401.26	th
1641	15	21	140.1	-0.4	159.20	11.44	9976.33	12461.06	12343.94	402.60	th
1643	15	22	143.8	-0.8	134.59	7.50	10002.69	12438.43	12357.47	405.77	th

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
1645	15	23	148.3	-0.7	105.99	3.71	10032.78	12414.64	12375.89	410.14	th
1647	15	24	158.5	-1.8	78.06	0.00	10065.06	12387.56	12393.44	412.69	th
1649	15	25	158.6	-3.6	77.75	-5.00	10065.06	12387.31	12393.69	415.26	ws
1651	15	26	184.9	-2.7	55.74	0.00	10102.55	12354.19	12410.54	412.52	th
1652	15	27	237.3	-3.1	40.54	0.00	10147.19	12324.83	12444.17	412.95	th rc
1653	15	28	238.1	-7.6	40.34	-5.00	10147.19	12324.70	12444.75	414.77	ws
1655	15	29	198.8	4.4	158.33	0.00		12307.92	12316.19	427.33	lac
1656	15	30	198.8	4.4	158.33	0.00		12307.92	12316.19	427.33	lbf
1657	15	31	270.9	4.3	66.31	0.00		12292.64	12467.11	420.13	lac
1658	15	32	310.5	1.2	220.55	0.00		12191.24	12609.31	419.77	lac
1659	15	33	330.7	1.1	407.62	0.00		12159.46	12821.55	422.97	lac
1660	15	34	342.1	0.5	469.08	0.00		12214.77	12912.45	419.24	lac
1661	15	35	359.4	5.3	165.59	0.00		12357.21	12631.65	430.51	vbd
1662	15	36	47.6	6.4	70.86	0.00		12411.27	12513.85	423.10	vbd
1663	15	37	89.7	5.1	105.68	0.00		12464.63	12466.63	424.58	vbd
1664	15	38	131.5	5	163.18	0.00		12481.16	12357.95	429.42	vbd
1665	15	39	141.4	3.4	344.59	0.00		12573.93	12196.77	435.62	vbd
1666	15	40	279.5	-3.2	59.61	0.00	10187.39	12300.16	12475.91	411.82	th
1668	15	41	311	-1.4	92.77	0.00	10239.64	12288.93	12526.94	412.88	th
1669	15	42	319.3	-0.9	118.99	0.00	10269.94	12281.36	12556.28	413.28	th
1670	15	43	322.1	-0.7	138.09	0.00	10290.05	12274.12	12575.04	413.46	th
1671	15	44	326.6	-0.6	169.49	0.00	10323.67	12265.65	12607.57	413.37	th rc
1672	15	45	326.5	-1.9	169.81	-5.00	10323.67	12265.22	12607.67	414.51	ws
1674	15	46	319.5	-0.9	215.57	0.00	10375.48	12218.94	12630.00	411.76	th
1675	15	47	321.7	-0.8	252.28	0.00	10413.26	12202.59	12664.05	411.63	th
1676	15	48	321.7	-0.4	252.59	0.00	10413.26	12202.39	12664.30	413.38	ws
1677	15	49	327.6	-0.9	293.86	0.00	10463.40	12201.49	12714.19	410.53	th
1678	15	50	327.7	-1.4	295.01	-5.00	10463.40	12201.31	12715.43	412.94	ws
1680	15	51	320.9	-0.2	309.20	-5.00		12163.94	12706.02	419.07	tp15l
1682	15	52	320.9	-0.2	309.20	-5.00		12163.94	12706.02	419.07	tp15l
1684	15	53	334.7	-0.4	291.29	0.00		12234.46	12729.42	413.11	tp15m
1686	15	54	334.5	-0.2	291.30	0.00		12233.54	12728.99	414.13	tp15m
1688	15	55	334.6	-0.3	291.50	0.00		12233.91	12729.39	413.62	tp15m
1690	15	56	347.5	0.9	289.06	0.00		12296.38	12748.28	419.69	tp15r
1692	15	57	347.5	1	289.16	0.00		12296.36	12748.37	420.20	tp15r
1694	16	1	201.2	-0.4	184.50	0.00		12295.72	12747.80	420.11	tp15r
1696	16	2	201.2	-0.4	184.40	0.00		12295.76	12747.89	420.11	tp15r
1698	16	3	201.7	-0.4	184.40	0.00		12294.26	12748.48	420.11	tp15r
1700	16	4	213.8	-1.9	229.47	0.00		12234.79	12729.12	413.78	tp15m
1702	16	5	213.6	-2	229.56	0.00		12235.40	12728.60	413.38	tp15m
1704	16	6	213.8	-2	229.56	0.00		12234.74	12729.05	413.38	tp15m
1706	16	7	222.9	-1.4	291.41	-5.00		12164.07	12706.34	419.28	tp15l
1708	16	8	222.8	-1.4	291.31	-5.00		12164.51	12706.07	419.28	tp15l
1710	16	9	223.1	-1.5	291.30	-5.00		12163.40	12707.11	418.77	tp15l
1712	16	10	222.9	-1.5	291.30	-5.00		12164.15	12706.42	418.77	tp15l
1714	16	11	220.9	-2.6	253.04	0.00	10478.52	12196.77	12728.55	409.91	th
1716	16	12	220.9	-3	252.55	-5.00	10478.52	12197.08	12728.92	413.16	ws
1718	16	13	228.8	-3.3	229.52	0.00	10519.21	12189.75	12768.63	408.16	th
1720	16	14	232.4	-3.4	208.33	3.71	10544.46	12197.38	12792.70	405.31	th rc
1723	16	16	234.2	-3.2	185.41	3.71	10568.20	12212.06	12811.35	407.32	th
1725	16	17	237.2	-4.5	164.29	0.00	10591.21	12224.34	12830.81	408.47	th rc
1727	16	18	248.9	-4.4	132.61	3.71	10634.90	12238.72	12872.07	407.48	th rc
1729	16	19	255.9	-6	108.01	3.71	10663.52	12257.69	12893.50	406.34	th rc
1731	16	20	265.6	-7	102.73	7.50	10682.10	12260.02	12911.93	401.28	th
1733	16	21	279.5	-7.3	89.57	7.50	10708.78	12274.10	12934.59	402.42	th
1735	16	22	280.2	-8.4	89.53	-5.00	10708.78	12274.33	12935.66	413.18	ws

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
1737	16	23	306.7	-8.5	74.67	7.50	10750.03	12302.57	12964.44	402.74	th
1739	16	24	330.3	-9.7	75.01	3.71	10780.64	12325.28	12984.97	404.87	th
1741	16	25	346.2	-8	93.38	-5.00	10780.64	12340.17	13010.50	413.27	ws
1743	16	26	346.2	-8	93.38	3.71	10810.19	12340.17	13010.50	404.56	th
1745	16	27	0.7	-6.9	107.12	0.00	10838.93	12363.75	13026.92	408.43	th
1747	16	28	20.4	-4.9	131.12	0.00	10886.05	12408.15	13042.71	410.16	th
1748	16	29	31.1	-3.6	169.46	0.00	10933.41	12449.98	13064.92	410.74	th
1749	16	30	31.2	-4.5	169.08	-5.00	10933.41	12450.03	13064.43	413.09	ws
1751	16	31	38	-2.7	227.95	0.00	10996.49	12502.78	13099.43	410.65	th rc
1752	16	32	37.9	-3.5	227.57	-5.00	10996.49	12502.24	13099.39	412.48	ws
1754	16	33	38.4	-2.2	268.70	0.00	11037.29	12529.34	13130.39	411.07	th
1755	16	34	39.6	-2	321.50	0.00	11090.45	12567.38	13167.53	410.17	th
1756	16	35	39.1	-1.6	321.37	0.00	11090.45	12565.12	13169.21	412.42	ws
1757	16	36	24.6	6.8	555.56	0.00		12593.71	13424.95	487.64	vbd
1758	16	37	12.4	3	335.84	0.00		12434.56	13247.82	439.00	vbd
1759	16	38	351.4	2.1	209.66	0.00		12331.09	13127.11	429.09	vbd
1760	16	39	316.7	5.4	145.05	0.00		12262.96	13025.38	435.11	vbd
1761	16	40	274.8	4	147.74	0.00		12215.22	12932.17	431.73	vbd
1762	16	41	243.7	3.5	245.64	0.00		12142.23	12810.97	436.42	vbd
1763	16	42	218	1.5	336.78	0.00		12155.10	12654.42	430.22	vbd
1764	16	43	181.7	7.5	67.81	0.00		12360.43	12852.03	430.33	vbd
1765	16	44	113.5	12.6	47.04	0.00		12405.58	12901.05	431.91	vbd
1766	16	45	79	9.6	64.78	0.00		12426.03	12932.17	432.35	vbd
1767	16	46	54.6	2.7	188.59	0.00		12516.17	13029.06	430.29	vbd
1768	16	47	47	0.2	333.50	0.00		12606.35	13147.26	422.56	vbd
1769	16	48	45.4	-1.4	336.30	-5.00		12601.90	13155.94	418.18	tp16r
1771	16	49	45.4	-1.3	336.01	-5.00		12601.69	13155.74	418.77	tp16r
1773	16	50	45.3	-1.3	336.21	-5.00		12601.42	13156.30	418.77	tp16r
1775	16	51	37.1	-2.3	341.22	-5.00		12568.27	13191.97	412.69	tp16m
1777	16	52	37.1	-2.3	341.03	-5.00		12568.15	13191.81	412.70	tp16m
1779	16	53	37.2	-2.3	341.12	-5.00		12568.68	13191.53	412.70	tp16m
1781	16	54	37.2	-2.3	341.12	-5.00		12568.68	13191.53	412.70	tp16m
1783	16	55	28.8	-1.3	350.61	-5.00		12531.35	13227.05	418.44	tp16l
1785	16	56	28.7	-1.2	350.62	-5.00		12530.82	13227.36	419.05	tp16l
1787	16	57	28.8	-1.3	350.71	-5.00		12531.40	13227.14	418.44	tp16l
1789	17	1	215.5	-0.2	310.80	-5.00		12531.77	13227.03	418.55	tp16l
1791	17	2	215.5	-0.1	310.90	-5.00		12531.71	13226.94	419.10	tp16l
1793	17	3	206.2	-1.3	322.22	-5.00		12569.99	13190.94	412.33	tp16m
1795	17	4	206.4	-1.2	322.03	-5.00		12569.06	13191.61	412.89	tp16m
1797	17	5	206.3	-1.2	322.13	-5.00		12569.52	13191.27	412.89	tp16m
1799	17	6	199	-0.2	342.30	-5.00		12600.81	13156.40	418.44	tp16r
1801	17	7	199.2	-0.2	342.30	-5.00		12599.68	13156.79	418.44	tp16r
1803	17	8	199.1	-0.2	342.40	-5.00		12600.21	13156.50	418.44	tp16r
1805	17	9	202.2	-0.7	323.58	0.00	11116.49	12589.99	13180.46	410.69	th
1806	17	10	202.7	-0.3	323.60	0.00	11116.49	12587.37	13181.52	412.94	ws
1807	17	11	199.1	-1	284.16	0.00	11159.19	12619.27	13211.54	409.68	th
1808	17	12	193.9	-1.8	235.98	0.00	11212.78	12655.56	13250.98	407.22	th
1809	17	13	187.7	-2.1	207.06	0.00	11250.31	12684.50	13274.86	407.05	th
1810	17	14	187.8	-2.1	206.96	-5.00	11250.31	12684.16	13275.00	412.05	ws
1812	17	15	179.9	-2.4	164.26	0.00	11299.92	12712.53	13315.80	407.75	th
1813	17	16	170.8	-2.2	140.70	3.71	11333.64	12734.74	13341.16	405.52	th
1815	17	17	163.1	-3.3	120.10	3.71	11360.64	12747.16	13365.14	404.00	th
1817	17	18	156.1	-4.4	103.69	3.91	11381.97	12754.26	13385.25	402.75	th
1819	17	19	148.8	-4.7	86.51	3.71	11402.96	12757.06	13406.05	403.82	th
1821	17	20	130.9	-5.8	75.31	0.00	11430.46	12769.17	13430.74	406.99	th
1823	17	21	130.9	-5.8	75.31	-5.00	11430.46	12769.17	13430.74	411.99	ws

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
1825	17	22	105.7	-4.7	81.82	0.00	11465.32	12791.02	13457.91	407.91	th
1826	17	23	81.1	-4.3	106.10	0.30	11511.85	12817.07	13496.47	406.36	th
1828	17	24	81.1	-4.3	106.10	-5.00	11511.85	12817.07	13496.47	411.66	ws
1830	17	25	73.6	-3.1	112.83	0.00	11527.67	12820.49	13511.91	408.53	th
1831	17	26	59.2	-2	121.73	0.00	11558.36	12816.80	13542.38	410.39	th rc
1832	17	27	59.2	-1.5	121.66	0.00	11558.36	12816.75	13542.34	411.45	ws
1834	17	28	43.6	3	318.46	0.00		12931.86	13710.67	431.33	vbd
1835	17	29	66.9	3.2	177.62	0.00		12875.63	13549.74	424.57	vbd
1836	17	30	103	2.8	101.58	0.00		12811.22	13457.20	419.61	vbd
1837	17	31	146.8	3.8	95.69	0.00		12764.64	13399.98	420.99	vbd
1838	17	32	187.8	3.3	263.56	0.00		12676.48	13218.93	429.84	vbd
1839	17	33	199.3	2.5	394.52	0.00		12581.85	13107.70	431.86	vbd
1840	17	34	229.3	4.8	327.45	0.00		12464.00	13266.52	442.14	vbd
1841	17	35	262.4	8.2	73.94	0.00		12638.96	13470.27	425.29	vbd
1842	17	36	306.3	10.6	91.61	0.00		12638.42	13534.28	431.78	vbd
1843	17	37	350.7	7.8	130.68	0.00		12691.13	13609.01	432.54	vbd
1844	17	38	6.8	5.6	301.55	0.00		12747.95	13779.48	444.21	vbd
1845	17	39	46.5	-1.6	164.04	0.00	11610.97	12831.23	13592.97	410.06	th
1846	17	40	46.8	-0.9	163.98	0.00	11610.97	12831.78	13592.30	412.06	ws
1847	17	41	43.2	-1.6	212.62	0.00	11660.72	12857.79	13635.04	408.70	th
1848	17	42	41.7	-1.4	261.92	0.00	11710.41	12886.48	13675.61	408.24	th
1849	17	43	37.8	-0.8	300.67	0.00	11753.61	12896.53	13717.63	410.44	th
1850	17	44	37.6	-0.7	300.58	0.00	11753.61	12895.64	13718.20	410.97	ws
1851	17	45	40.1	-1.2	307.93	-5.00		12910.59	13715.59	413.19	tp17r
1853	17	46	40.1	-1	307.95	-5.00		12910.61	13715.61	414.26	tp17r
1855	17	47	40	-1	307.95	-5.00		12910.19	13715.96	414.26	tp17r
1857	17	48	30.4	-1	303.05	-5.00		12865.60	13741.44	414.35	tp17m
1859	17	49	30.4	-1.1	303.04	-5.00		12865.60	13741.43	413.82	tp17m
1861	17	50	21.5	-0.1	299.30	-5.00		12821.94	13758.52	419.12	tp17l
1863	17	51	21.4	-0.1	299.30	-5.00		12821.45	13758.72	419.12	tp17l
1865	17	52	21.6	-0.1	299.20	-5.00		12822.39	13758.24	419.12	tp17l
1867	18	1	196.1	0.1	314.60	-5.00		12822.57	13758.57	418.76	tp17l
1869	18	2	196	0.2	313.70	-5.00		12823.34	13759.29	419.31	tp17l
1871	18	3	196.2	0.2	313.70	-5.00		12822.29	13759.59	419.31	tp17l
1873	18	4	187.9	0	322.80	0.00		12865.44	13741.10	413.21	tp17m
1875	18	5	187.9	0.1	322.60	0.00		12865.47	13741.30	413.78	tp17m
1877	18	6	187.8	0.1	322.60	0.00		12866.03	13741.22	413.78	tp17m
1879	18	7	179.7	-0.7	345.47	-5.00		12911.62	13715.36	413.99	tp17r
1881	18	8	180.2	-0.6	345.38	-5.00		12908.61	13715.46	414.60	tp17r
1883	18	9	180.2	-0.6	345.78	-5.00		12908.60	13715.06	414.59	tp17r
1885	18	10	182.1	-0.8	323.67	0.00	11773.42	12897.95	13737.38	408.69	th
1886	18	11	182.2	-0.3	323.60	0.00	11773.42	12897.39	13737.48	411.52	ws
1887	18	12	179.8	-1.4	277.92	0.00	11820.73	12910.78	13782.92	406.42	th
1888	18	13	175.8	-1.6	262.60	0.00	11845.02	12929.04	13798.94	405.88	th
1889	18	14	172.2	-0.7	264.48	0.00		12945.70	13798.80	409.98	trib
1890	18	15	173.5	-1.2	245.25	3.71	11865.15	12937.57	13817.16	404.37	th
1892	18	16	170.5	-1.7	220.80	0.00	11892.46	12946.25	13843.06	406.66	th
1894	18	17	163.8	-1.6	183.63	0.00	11936.45	12961.04	13884.50	408.08	th
1895	18	18	154.6	-2	159.70	0.00	11972.88	12978.31	13916.57	407.64	th
1896	18	19	143.5	-2.6	139.86	0.00	12007.95	12993.00	13948.41	406.86	th
1897	18	20	143.4	-1.1	139.57	0.00	12007.95	12993.03	13948.78	410.53	ws
1898	18	21	135	-3.1	120.62	0.00	12035.16	12995.10	13975.54	406.68	th
1899	18	22	127.6	-4.2	106.21	0.00	12055.68	12993.96	13996.03	405.41	th
1900	18	23	127.6	-4.2	106.21	-5.00	12055.68	12993.96	13996.03	410.41	ws
1902	18	24	117.9	-4.2	96.24	3.71	12075.47	12994.87	14015.80	402.44	th
1904	18	25	103.5	-4.1	87.97	3.71	12099.97	12995.35	14040.30	403.20	th

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
1906	18	26	83.1	-3.8	77.53	3.71	12131.03	12986.78	14070.15	404.35	th
1908	18	27	57.3	-3.7	71.55	3.71	12164.82	12970.02	14099.49	404.88	th
1910	18	28	39.6	-5.8	74.52	3.71	12187.48	12957.31	14118.25	401.93	th
1912	18	29	39.6	-5.8	74.52	-5.00	12187.48	12957.31	14118.25	410.64	ws
1914	18	30	28	-4.1	73.41	7.50	12202.47	12944.28	14125.65	400.45	th
1916	18	31	17.6	-1	75.29	7.50	12216.08	12932.58	14132.60	404.40	th rc
1918	18	32	9.1	-4.6	75.85	11.44	12227.29	12921.81	14135.73	395.67	th
1920	18	33	356.3	-5.1	84.36	12.94	12247.05	12904.37	14145.02	392.74	th
1922	18	34	345.3	-4.5	97.60	14.44	12268.91	12885.04	14155.24	391.09	th
1924	18	35	345.3	-4.5	97.60	-5.00	12268.91	12885.04	14155.24	410.53	ws
1926	18	36	332.9	-4.7	80.33	11.44	12294.68	12873.22	14132.34	395.17	th
1928	18	37	318.4	-4.6	81.54	7.50	12315.14	12855.68	14121.81	399.15	th
1930	18	38	309.8	-4.3	92.74	3.71	12332.33	12838.56	14120.20	402.53	th
1932	18	39	302.7	-4	96.26	0.00	12344.55	12828.80	14112.84	406.48	th
1934	18	40	302.7	-4	96.26	-5.00	12344.55	12828.80	14112.84	411.48	ws
1936	18	41	283.4	-2.1	101.13	0.00	12377.99	12811.43	14084.27	409.50	th
1937	18	42	276.4	-2.5	109.10	0.00	12393.08	12801.39	14073.00	408.45	th rc
1938	18	43	276.3	-1.4	109.87	0.00	12393.08	12800.61	14072.89	410.53	ws
1939	18	44	274.4	-1.8	147.53	0.00	12431.77	12762.72	14072.15	408.58	th
1940	18	45	273	-1.8	190.01	0.00	12474.44	12720.06	14070.78	407.24	th
1941	18	46	275.4	-1.7	227.00	0.00	12512.45	12683.82	14082.20	406.48	th
1942	18	47	278.3	-1.2	265.54	3.71	12552.94	12647.05	14099.17	403.94	th
1944	18	48	278.5	-1.5	266.71	-5.00	12552.94	12646.03	14100.26	411.23	ws
1946	18	49	282.7	-1.3	284.43	0.00	12581.26	12632.34	14123.36	406.76	th
1948	18	50	292.1	-1.2	328.23	3.71	12647.78	12605.70	14184.32	402.63	th
1950	18	51	292.1	-1.3	328.72	-5.00	12647.78	12605.25	14184.51	410.75	ws
1952	18	52	210.9	3.9	259.80	0.00		12776.39	13837.91	430.92	vbd
1953	18	53	234.9	6.8	176.45	0.00		12765.45	13959.37	434.25	vbd
1954	18	54	265.8	2.9	240.79	0.00		12669.67	14043.20	425.41	vbd
1955	18	55	274.9	3.1	301.06	0.00		12609.85	14086.55	429.52	vbd
1956	18	56	286	2.5	378.44	0.00		12546.03	14165.15	429.74	vbd
1957	18	57	296.3	0.9	508.44	0.00		12454.00	14286.11	421.20	vbd
1958	18	58	300.3	1	1153.92	0.00		11913.52	14643.02	433.35	vbd
1959	18	59	308.6	1.7	855.62	0.00		12241.12	14594.64	438.61	vbd
1960	18	60	310.6	2.2	243.32	0.00		12725.06	14219.18	422.56	vbd
1961	18	61	321.5	2.9	104.07	0.00		12845.03	14142.28	418.48	vbd
1962	18	62	343.6	3.8	151.27	0.00		12867.10	14205.95	423.26	vbd
1963	18	63	17.4	7.6	112.40	0.00		12943.42	14168.09	428.21	vbd
1964	18	64	46.5	7.5	156.55	0.00		13023.37	14168.60	433.82	vbd
1965	18	65	88.6	6.2	137.59	0.00		13047.36	14064.20	428.16	vbd
1966	18	66	123.4	7.3	119.52	0.00		13009.59	13995.04	428.52	vbd
1967	18	67	157.1	5.9	215.75	0.00		12993.76	13862.09	435.51	vbd
1968	18	68	177.7	4.1	413.04	0.00		12926.39	13648.13	442.82	vbd
1969	18	69	292.9	-1	349.65	-5.00		12587.72	14196.89	412.11	tp18l
1972	18	71	292.9	-1	349.85	-5.00		12587.54	14196.97	412.11	tp18l
1975	18	73	293	-1	349.85	-5.00		12587.78	14197.53	412.11	tp18l
1977	18	74	302.3	-0.8	303.37	-5.00		12653.38	14222.94	413.98	tp18m
1979	18	75	302.3	-0.8	303.37	-5.00		12653.38	14222.94	413.98	tp18m
1981	18	76	302.4	-0.8	303.37	-5.00		12653.67	14223.39	413.98	tp18m
1983	18	77	308.5	0.8	292.07	-5.00		12681.23	14242.65	422.29	tp18r
1985	18	78	308.5	0.9	292.06	-5.00		12681.24	14242.65	422.80	tp18r
1987	19	1	126.2	1.2	414.31	-5.00		12680.40	14241.57	423.10	tp18r
1990	19	3	126.2	1.1	414.22	-5.00		12680.33	14241.62	422.38	tp18r
1992	19	4	126.3	1.2	414.41	-5.00		12680.05	14240.93	423.10	tp18r
1994	19	5	130.3	-0.1	404.70	-5.00		12654.72	14224.51	413.72	tp18m
1996	19	6	130.2	-0.1	404.70	-5.00		12655.18	14225.05	413.72	tp18m

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
1998	19	7	130.2	-0.1	404.70	-5.00		12655.18	14225.05	413.72	tp18m
2000	19	8	140	0.4	376.89	0.00		12588.33	14197.55	412.05	tp18l
2002	19	9	140.1	0.4	376.89	0.00		12587.82	14197.13	412.05	tp18l
2004	19	10	140.6	0.4	376.69	0.00		12585.17	14195.19	412.05	tp18l
2006	19	11	139	-0.6	376.68	-5.00		12593.19	14201.98	410.48	ws
2008	19	12	138.2	-0.5	360.69	3.71	12686.03	12586.48	14217.38	402.57	th
2010	19	13	138.2	-0.5	360.69	-5.00	12686.03	12586.48	14217.38	411.28	ws
2012	19	14	138.3	-0.3	333.90	3.71	12712.82	12568.19	14236.97	403.96	th
2014	19	15	138.3	-0.2	302.20	3.71	12744.52	12547.10	14260.63	404.66	th
2016	19	16	138.6	-0.7	278.38	0.00	12768.39	12530.16	14277.45	406.02	th
2018	19	17	138.6	-0.7	278.38	-5.00	12768.39	12530.16	14277.45	411.02	ws
2020	19	18	134.7	-0.4	247.89	0.00	12803.73	12522.27	14311.90	407.69	th
2021	19	19	127.4	-0.8	219.78	0.00	12844.64	12520.66	14352.78	406.35	th
2022	19	20	126.7	-0.7	194.39	0.00	12870.16	12501.92	14370.10	407.05	th
2023	19	21	126.9	-1.3	194.25	-5.00	12870.16	12501.41	14369.64	410.01	ws
2025	19	22	129.7	-0.4	154.60	0.00	12910.97	12465.01	14387.52	408.34	th
2026	19	23	138.8	-0.2	106.40	0.00	12963.29	12416.15	14406.21	409.05	th rc
2027	19	24	138.7	-2	105.14	-5.00	12963.29	12415.46	14407.28	410.75	ws
2029	19	25	164.6	-1.8	59.57	0.00	13022.08	12361.89	14428.84	407.55	th
2030	19	26	219.3	-2.7	39.26	0.00	13070.94	12321.20	14455.89	407.57	th
2031	19	27	219.9	-6.4	38.96	-5.00	13070.94	12321.08	14456.38	410.05	ws
2033	19	28	281.6	-1.3	68.18	0.00	13131.78	12279.28	14499.98	407.88	th pool
2034	19	29	286.8	-3.4	75.97	0.00	13141.94	12273.34	14508.22	404.91	th
2035	19	30	286.8	-3.4	75.97	-5.00	13141.94	12273.34	14508.22	409.91	ws
2037	19	31	300.5	-1.6	106.86	7.50	13179.57	12254.00	14540.50	398.94	th
2039	19	32	285.7	1.4	102.97	7.50	13206.87	12246.94	14514.13	404.44	th rc
2041	19	33	283.2	-0.8	116.89	7.50	13221.59	12232.27	14512.96	400.29	th
2043	19	34	280.8	-1.1	140.97	7.50	13246.27	12207.59	14512.68	399.22	th
2045	19	35	279.3	-0.7	161.39	7.50	13267.06	12186.80	14512.35	399.95	th
2047	19	36	278.9	-1.7	159.43	-5.00	13267.06	12188.56	14510.93	409.69	ws
2049	19	37	276.7	-1.5	186.04	0.00	13292.93	12161.30	14507.97	404.55	th
2051	19	38	276.7	-1.5	186.04	-5.00	13292.93	12161.30	14507.97	409.55	ws
2053	19	39	273.9	-0.4	208.79	0.00	13317.64	12137.76	14500.47	407.96	th
2054	19	40	269.1	-0.3	240.20	0.00	13354.22	12105.90	14482.49	408.16	th rc
2056	19	41	269.2	-1.1	239.86	-5.00	13354.22	12106.24	14482.92	409.82	ws
2058	19	42	267.3	-0.5	292.19	3.71	13406.87	12054.20	14472.50	403.16	th
2060	19	43	271	-0.7	312.58	3.71	13435.09	12033.54	14491.72	401.89	th
2062	19	44	272.3	-0.4	350.49	7.50	13473.74	11995.86	14500.33	399.48	th
2064	19	45	272.3	-0.7	350.37	-5.00	13473.74	11995.98	14500.33	410.14	ws
2066	19	46	271.6	0	355.60	-5.00		11990.61	14496.20	414.42	tp19l
2068	19	47	271.4	0	355.60	-5.00		11990.57	14494.96	414.42	tp19l
2070	19	48	271.4	0	355.90	-5.00		11990.27	14494.96	414.42	tp19l
2072	19	49	271	0.9	358.66	0.00		11987.47	14492.53	415.06	vbd
2073	19	50	254.5	1.1	214.16	0.00		12139.70	14429.04	413.53	vbd
2074	19	51	228.9	4.6	148.62	0.00		12234.07	14388.57	421.38	vbd
2075	19	52	181.6	3.8	135.50	0.00		12342.29	14350.82	418.42	vbd
2076	19	53	154.6	2.7	205.17	0.00		12434.07	14300.93	419.10	vbd
2077	19	54	145.3	1.3	276.83	0.00		12503.66	14258.67	415.70	vbd
2078	19	55	125.1	2	393.86	0.00		12668.30	14259.80	423.18	vbd
2079	19	56	115.7	3.2	166.04	0.00		12495.68	14414.26	418.71	vbd
2080	19	57	61.9	8.7	75.03	0.00		12412.25	14521.61	420.90	vbd
2081	19	58	350.2	9.2	77.49	0.00		12332.88	14562.63	421.97	vbd
2082	19	59	302.9	9.3	192.14	0.00		12184.74	14590.63	440.89	vbd
2083	19	60	293.1	5.7	311.25	0.00		12059.77	14608.38	440.49	vbd
2084	19	61	284.1	4.3	680.38	-5.00		11686.19	14652.02	465.58	tp19fl
2086	19	62	269.7	2.6	362.53	-5.00		11983.55	14484.37	430.88	tp19fl

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
2088	19	63	269.5	2.7	362.50	-5.00		11983.59	14483.10	431.52	tp19fl
2090	19	64	283.5	-0.2	344.70	-5.00		12010.89	14566.74	413.22	tp19r
2092	19	65	283.4	-0.2	344.70	-5.00		12010.75	14566.15	413.22	tp19r
2094	19	66	283.5	-0.3	344.50	-5.00		12011.09	14566.69	412.62	tp19r
2117	20	1	92.1	-0.3	328.30	-5.00		12010.96	14566.14	413.23	tp19r
2119	20	2	92.1	-0.3	328.20	-5.00		12010.86	14566.15	413.23	tp19r
2121	20	3	91.9	-0.3	328.30	-5.00		12011.00	14567.29	413.23	tp19r
2123	20	4	105.1	-0.2	318.40	-5.00		11990.29	14495.23	413.84	tp19l
2125	20	5	105.2	-0.1	318.60	-5.00		11990.33	14494.64	414.39	tp19l
2127	20	6	104.9	-0.1	318.60	-5.00		11990.77	14496.25	414.39	tp19l
2129	20	7	107.6	2.7	315.55	-5.00		11983.66	14482.76	429.83	tp19fl
2131	20	8	107.7	3	315.47	-5.00		11983.41	14482.26	431.48	tp19fl
2133	20	9	107.8	3	315.37	-5.00		11983.15	14481.77	431.48	tp19fl
2135	20	10	104	-0.8	316.97	3.71	13479.29	11990.43	14501.49	401.81	th
2137	20	11	104	-0.8	316.97	-5.00	13479.29	11990.43	14501.49	410.52	ws
2139	20	12	103.9	-0.5	301.69	3.71	13494.58	11975.74	14505.70	403.61	th
2141	20	13	104	-0.9	288.16	0.00	13508.12	11962.49	14508.46	405.42	th
2143	20	14	100	-0.7	256.68	0.00	13544.88	11935.66	14533.60	406.81	th
2144	20	15	95	-0.8	227.28	0.00	13581.05	11909.29	14558.36	406.78	th
2145	20	16	90.6	-0.8	198.58	0.00	13614.06	11881.45	14576.09	407.18	th
2146	20	17	82.8	-0.6	175.29	0.00	13648.51	11856.79	14600.14	408.12	th
2147	20	18	82.7	-0.2	174.80	0.00	13648.51	11856.26	14600.38	409.34	ws
2148	20	19	72.9	-1.9	168.11	0.00	13678.99	11843.56	14627.60	404.37	th
2149	20	20	72.3	-1.5	145.75	0.00	13701.41	11821.73	14622.48	406.13	th
2150	20	21	69	-1.7	124.75	0.00	13723.80	11799.34	14622.88	406.25	th
2151	20	22	59.1	-2.9	99.27	0.00	13755.70	11768.06	14629.15	404.92	th
2152	20	23	45.4	-3.1	65.40	0.00	13794.64	11729.45	14624.10	406.41	th
2153	20	24	11.3	-5.7	49.95	0.00	13831.55	11692.67	14627.15	404.97	th
2154	20	25	336.3	-6.7	46.28	1.00	13860.70	11664.28	14620.55	403.51	th
2156	20	26	336.3	-6.7	46.28	-5.00	13860.70	11664.28	14620.55	409.51	ws
2158	20	27	301.4	-4.7	59.10	0.00	13894.59	11632.44	14608.96	405.09	th
2159	20	28	285.8	-2.9	84.49	0.00	13926.41	11601.58	14601.18	405.67	th
2160	20	29	277.7	-1.6	123.55	3.71	13968.05	11560.44	14594.73	402.79	th
2162	20	30	272.2	-1	138.18	3.71	13987.32	11544.80	14583.48	403.83	th
2164	20	31	269.2	-1.8	157.52	0.00	14008.14	11525.37	14575.97	405.00	th
2166	20	32	261.4	-1.3	185.85	0.00	14044.81	11499.12	14550.38	405.73	th
2167	20	33	259	-1.4	199.64	3.71	14060.78	11486.91	14540.08	401.36	th
2169	20	34	256	-1	221.07	3.71	14084.87	11468.38	14524.69	402.38	th
2171	20	35	249.6	-0.7	260.48	0.00	14132.52	11438.74	14487.38	406.77	th
2173	20	36	246	-0.3	301.80	0.00	14177.44	11407.18	14455.42	408.37	th
2174	20	37	244.7	-0.4	326.59	0.00	14203.24	11387.62	14438.60	407.67	th rc
2175	20	38	244.8	-0.1	326.80	0.00	14203.24	11387.18	14439.03	409.38	ws
2176	20	39	242.5	1.5	393.67	0.00		11333.70	14396.40	420.26	vbd
2177	20	40	257.9	2.8	304.44	0.00		11385.21	14514.36	424.84	rvbd
2178	20	41	268.8	3.5	202.32	0.00		11480.60	14573.93	422.33	rvbd
2179	20	42	301.5	8.1	93.66	0.00		11603.03	14627.11	423.28	rvbd
2180	20	43	346.7	6.6	61.49	0.00		11668.74	14638.01	417.07	rvbd
2181	20	44	40.3	6.2	88.58	0.00		11740.17	14645.73	419.57	rvbd
2182	20	45	70	5.6	195.26	0.00		11866.37	14644.96	429.10	rvbd
2183	20	46	88.6	4.2	486.89	0.00		12169.62	14590.07	445.71	rvbd
2184	20	47	108.2	1.9	231.87	0.00		11903.15	14505.75	417.64	lvbd
2185	20	48	139.7	5.1	122.91	0.00		11762.38	14484.43	420.92	lvbd
2186	20	49	191.8	4.7	111.92	0.00		11659.99	14468.61	419.15	lvbd
2187	20	50	216.7	2.5	164.84	0.00		11584.37	14446.00	417.15	lvbd
2188	20	51	224.3	0.7	384.67	0.00		11414.22	14302.87	414.65	lvbd
2189	20	52	224.6	-0.2	309.30	-5.00		11465.71	14357.94	413.87	tp20l



Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
2191	20	53	224.8	-0.4	309.29	-5.00		11464.94	14358.71	412.79	tp20l
2193	20	54	224.7	-0.3	309.40	-5.00		11465.25	14358.25	413.33	tp20l
2195	20	55	231.9	-0.1	337.20	-5.00		11417.53	14370.11	414.36	tp20m
2197	20	56	232.1	-0.1	337.30	-5.00		11416.72	14370.97	414.36	tp20m
2199	20	57	232.2	-0.1	337.20	-5.00		11416.44	14371.50	414.36	tp20m
2201	20	58	241.3	-0.3	387.49	-5.00		11342.99	14392.09	412.92	tp20r
2203	20	59	241.3	-0.3	387.59	-5.00		11342.90	14392.04	412.92	tp20r
2205	21	1	51	-0.5	429.48	-5.00		11465.20	14358.53	412.72	tp20l
2207	21	2	50.9	-0.4	429.39	-5.00		11464.66	14359.05	413.47	tp20l
2209	21	3	51	-0.4	429.79	-5.00		11465.44	14358.72	413.47	tp20l
2211	21	4	45.3	-0.3	401.69	-5.00		11416.96	14370.80	414.37	tp20m
2213	21	5	45.3	-0.3	401.49	-5.00		11416.82	14370.66	414.37	tp20m
2215	21	6	45.4	-0.3	401.49	-5.00		11417.31	14370.16	414.37	tp20m
2217	21	7	34.9	-0.6	369.98	-5.00		11343.12	14391.69	412.60	tp20r
2219	21	8	34.8	-0.5	369.99	-5.00		11342.59	14392.06	413.24	tp20r
2221	21	9	34.9	-0.5	370.39	-5.00		11343.35	14392.02	413.24	tp20r
2223	21	10	35.2	-0.7	370.47	7.50	14267.15	11344.99	14390.98	399.44	th
2225	21	11	37	-1	349.25	3.71	14291.20	11341.62	14367.17	401.66	th
2227	21	12	39.8	-1.1	316.14	0.00	14328.07	11333.80	14331.13	405.40	th
2229	21	13	39.9	-1.3	316.22	-5.00	14328.07	11334.27	14330.84	409.29	ws
2231	21	14	40.7	-1	277.56	0.00	14366.94	11312.43	14298.67	406.63	th
2232	21	15	43.9	-1.1	239.56	0.00	14407.57	11297.54	14260.86	406.87	th
2233	21	16	50.2	-1.2	198.16	0.00	14455.40	11283.67	14215.09	407.32	th
2234	21	17	56.5	-1.7	154.93	0.00	14502.72	11260.63	14173.76	406.87	th
2235	21	18	64.7	-2.1	141.70	3.71	14527.70	11259.55	14148.80	402.56	th
2237	21	19	72.8	-1.8	120.44	3.71	14555.85	11246.49	14123.86	403.98	th
2239	21	20	82.3	-2	96.64	3.71	14585.61	11227.20	14101.19	404.39	th
2241	21	21	82.2	-4.3	96.23	-5.00	14585.61	11226.77	14101.31	409.24	ws
2243	21	22	106.9	-2.2	72.75	3.71	14628.59	11201.04	14067.10	404.97	th
2245	21	23	132.3	-2.2	63.65	3.71	14659.86	11178.51	14045.41	405.32	th
2247	21	24	166.2	-2.7	80.41	3.71	14704.82	11150.61	14010.16	403.97	th
2249	21	25	182.4	-3.2	91.66	3.71	14731.50	11127.59	13996.67	402.64	th
2251	21	26	196.5	-2	119.03	3.71	14769.00	11097.63	13974.12	403.60	th
2253	21	27	207.9	-2.2	144.59	0.00	14805.51	11063.77	13960.46	405.92	th
2255	21	28	219.4	-1.5	179.34	0.00	14852.92	11017.60	13949.67	406.77	th rc
2257	21	30	220.1	-2.3	181.75	-5.00		11014.36	13949.22	409.17	ws
2259	21	31	226.2	-1.3	230.94	0.00	14909.89	10964.75	13928.40	406.23	th
2260	21	32	228.8	-1.3	264.53	0.00	14945.31	10932.40	13914.00	405.47	th
2261	21	33	228.8	-1.6	265.20	-5.00	14945.31	10931.90	13913.56	409.06	ws
2263	21	34	231.1	-1.2	306.93	0.00	14989.22	10892.56	13895.50	405.04	th pool
2264	21	35	231.4	-1.1	340.94	0.00	15023.27	10864.98	13875.54	404.92	th
2265	21	36	231.5	-1.3	340.71	-5.00	15023.27	10864.79	13876.15	408.74	ws
2267	21	37	235.2	-0.7	347.07	-5.00		10846.43	13890.17	412.23	tp21r
2269	21	38	235.1	-0.7	347.17	-5.00		10846.70	13889.61	412.23	tp21r
2271	21	39	235.1	-0.7	347.27	-5.00		10846.62	13889.55	412.23	tp21r
2273	21	40	229.2	3.1	834.58	0.00		10499.66	13542.92	456.67	rvbd
2274	21	41	243.1	3	378.78	0.00		10793.64	13916.87	431.32	rvbd
2275	21	42	270.8	6.4	158.21	0.00		10973.24	14090.46	429.22	rvbd
2276	21	43	311.9	9.7	167.77	0.00		11006.56	14200.29	440.15	rvbd
2277	21	44	347.1	9.1	185.54	0.00		11090.01	14269.10	441.19	rvbd
2278	21	45	19.4	3.3	253.28	0.00		11215.56	14327.14	426.07	rvbd
2279	21	46	35	1.8	547.03	0.00		11445.20	14536.35	428.66	rvbd
2280	21	47	31.6	2.7	349.41	0.00		11314.52	14385.85	427.95	rvbd
2281	21	48	44.9	1.7	789.55	0.00		11688.76	14647.52	434.90	rvbd
2282	21	49	55.8	2.6	317.47	0.00		11394.01	14266.69	425.89	lvbd
2283	21	50	78	3.2	156.16	0.00		11284.18	14120.71	420.20	lvbd

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
2284	21	51	135.9	5	103.01	0.00		11203.12	14014.27	420.48	lvbd
2285	21	52	176.6	3.3	129.29	0.00		11139.10	13959.19	418.93	lvbd
2286	21	53	188	4	141.65	0.00		11111.72	13947.97	421.38	lvbd
2287	21	54	203.9	2	238.85	0.00		11034.66	13869.87	419.81	lvbd
2288	21	55	210.3	0.2	420.60	0.00		10919.23	13725.10	412.94	lvbd
2289	21	56	209.5	-0.2	367.10	-5.00		10950.67	13768.74	415.19	tp21l
2291	21	57	209.5	-0.3	366.89	-5.00		10950.77	13768.92	414.55	tp21l
2293	21	58	209.5	-0.2	367.00	-5.00		10950.71	13768.83	415.19	tp21l
2295	21	59	222.1	-1.1	348.84	-5.00		10897.56	13829.42	409.77	tp21m
2297	21	60	222	-1.1	348.94	-5.00		10897.95	13828.94	409.77	tp21m
2299	21	61	221.9	-1.1	348.84	-5.00		10898.47	13828.60	409.77	tp21m
2301	22	1	46.9	-0.2	372.20	-5.00		10953.58	13769.00	414.69	tp21l
2303	22	2	46.9	-0.1	372.20	-5.00		10953.58	13769.00	415.34	tp21l
2305	22	3	33.6	-1	381.74	-5.00		10893.07	13832.64	409.33	tp21m
2307	22	4	34.5	-1	381.84	-5.00		10898.09	13829.37	409.32	tp21m
2309	22	5	34.7	-0.9	381.85	-5.00		10899.20	13828.62	409.99	tp21m
2311	22	6	23.6	-0.5	408.18	-5.00		10845.23	13888.73	412.43	tp21r
2313	22	7	23.7	-0.5	408.08	-5.00		10845.84	13888.35	412.43	tp21r
2315	22	8	23.8	-0.5	408.28	-5.00		10846.58	13888.25	412.43	tp21r
2317	22	9	24.9	-1	392.04	0.00	15042.12	10846.88	13870.28	404.15	th
2318	22	10	24.9	-1	391.94	-5.00	15042.12	10846.83	13870.19	409.15	ws
2320	22	11	23.5	-1	363.24	0.00	15072.36	10826.66	13847.80	404.65	th
2321	22	12	22.1	-1	325.85	0.00	15110.69	10804.41	13816.59	405.30	th
2322	22	13	20.7	-0.9	296.76	0.00	15140.75	10786.71	13792.29	406.33	th
2323	22	14	17	-0.8	260.47	0.00	15181.24	10757.97	13763.78	407.35	th
2324	22	15	16.8	-1.6	260.40	-5.00	15181.24	10757.08	13763.97	408.72	ws
2326	22	16	8.2	-1.4	220.83	0.00	15235.33	10713.31	13733.26	405.59	th
2327	22	17	4.3	-2.2	190.56	0.00	15268.66	10696.10	13704.71	403.67	th
2328	22	18	4.3	-2.2	190.56	-5.00	15268.66	10696.10	13704.71	408.67	ws
2330	22	19	351.6	-2.6	140.16	0.00	15330.69	10661.34	13653.33	404.63	th
2331	22	20	345.8	-2.2	130.80	0.00	15347.28	10649.73	13641.49	405.96	th
2332	22	21	340.3	-2.4	97.41	0.00	15382.38	10648.98	13606.40	406.91	th
2333	22	22	328	-2.5	84.02	0.00	15405.94	10637.29	13585.94	407.32	th rc
2334	22	23	328	-1.6	83.97	0.00	15405.94	10637.32	13585.89	408.64	ws
2335	22	24	302.3	-2.9	86.99	0.00	15444.09	10608.29	13561.16	406.58	th
2336	22	25	289.6	-2.8	95.79	0.00	15466.11	10591.58	13546.81	406.30	th
2337	22	26	272.9	-4.2	95.04	0.00	15493.83	10586.89	13519.49	404.01	th
2338	22	27	263.1	-3.1	97.06	3.71	15510.36	10585.46	13503.02	402.02	th
2340	22	28	263	-3.2	97.65	3.71	15510.98	10584.89	13502.78	401.82	th
2342	22	29	250.1	-3.2	111.63	0.00	15538.28	10576.85	13476.69	404.75	th
2344	22	30	236.1	-2	130.62	0.00	15573.31	10573.40	13441.83	406.43	th
2345	22	31	226.6	-1.5	158.15	0.00	15609.70	10566.91	13406.02	406.85	th
2346	22	32	223.3	-1.4	174.15	0.00	15628.34	10562.38	13387.94	406.73	th
2347	22	33	223.3	-0.8	174.18	0.00	15628.34	10562.36	13387.92	408.56	ws
2348	22	34	218.7	-1.1	200.56	0.00	15658.72	10556.41	13358.16	407.14	th
2349	22	35	215.3	-0.9	224.47	0.00	15685.74	10552.10	13331.48	407.46	th rc
2350	22	36	211	-0.9	269.67	0.00	15734.56	10542.93	13283.53	406.75	th
2351	22	37	211.2	-1.5	269.81	-5.00	15734.56	10542.05	13283.90	408.92	ws
2353	22	38	209.4	-0.9	312.86	0.00	15778.51	10528.23	13242.11	406.07	th
2354	22	39	207.9	-1.2	337.43	0.00	15804.50	10523.92	13216.48	403.92	th
2355	22	40	207.9	-1.3	337.21	-5.00	15804.50	10524.02	13216.66	408.34	ws
2357	22	41	218.4	0.9	532.43	0.00		10351.09	13097.42	419.35	lvbd
2358	22	42	201.2	1.8	269.57	0.00		10584.33	13263.36	419.46	lvbd
2359	22	43	187.6	2.9	108.96	0.00		10667.40	13406.68	416.51	lvbd
2360	22	44	137.4	5.8	70.34	0.00		10729.42	13462.91	418.13	lvbd
2361	22	45	76.9	5.7	107.57	0.00		10786.58	13539.06	421.73	lvbd

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
2362	22	46	59.2	4.6	216.60	0.00		10867.86	13625.59	428.42	lvbd
2363	22	47	46.2	3.2	517.09	0.00		11055.03	13872.58	439.90	lvbd
2364	22	48	33.7	0.9	1038.37	0.00		11257.95	14378.56	427.30	rvbd
2365	22	49	17.9	2.4	456.80	0.00		10822.21	13949.37	430.14	rvbd
2366	22	50	5.6	3	297.19	0.00		10710.81	13810.46	426.56	rvbd
2367	22	51	344.3	4.1	175.75	0.00		10634.26	13683.87	423.59	rvbd
2368	22	52	302.9	5.2	124.19	0.00		10577.54	13582.14	422.29	rvbd
2369	22	53	267.6	6.7	146.89	0.00		10535.05	13508.53	428.25	rvbd
2370	22	54	250.2	4.2	216.92	0.00		10477.72	13441.20	426.92	rvbd
2371	22	55	237	1.7	288.37	0.00		10439.96	13357.62	419.55	rvbd
2372	22	56	206	-0.4	338.79	-5.00		10533.30	13210.18	413.62	tp22l
2374	22	57	206.1	-0.4	338.59	-5.00		10532.85	13210.62	413.63	tp22l
2376	22	58	206	-0.4	338.89	-5.00		10533.25	13210.09	413.62	tp22l
2378	22	59	222.2	-1.2	321.23	-5.00		10466.04	13276.71	409.26	tp22m
2380	22	60	222.5	-1.2	321.23	-5.00		10464.79	13277.85	409.26	tp22m
2382	22	61	222.4	-1.2	321.23	-5.00		10465.21	13277.47	409.26	tp22m
2384	22	62	227.6	-0.3	324.00	-5.00		10442.56	13296.21	414.29	tp22r
2386	22	63	227.7	-0.3	323.90	-5.00		10442.25	13296.70	414.29	tp22r
2388	22	64	227.6	-0.2	324.10	0.00		10442.48	13296.14	409.86	tp22r
2390	23	1	73.3	0	302.50	0.00		10464.94	13278.22	409.26	tp22m
2392	23	2	73.5	0	302.40	0.00		10465.15	13277.18	409.26	tp22m
2394	23	3	73.4	0	302.40	0.00		10465.00	13277.69	409.26	tp22m
2396	23	4	68.4	0	286.70	-5.00		10441.77	13296.84	414.26	tp22r
2398	23	5	68.4	0	286.80	-5.00		10441.86	13296.88	414.26	tp22r
2400	23	6	68.3	0	286.80	0.00		10441.68	13297.34	409.26	tp22r
2402	23	7	87.1	-0.1	359.30	-5.00		10534.04	13209.48	413.63	tp22l
2404	23	8	87.1	-0.1	359.50	-5.00		10534.24	13209.49	413.63	tp22l
2406	23	9	87.2	0	359.30	-5.00		10534.07	13208.85	414.26	tp22l
2408	23	10	86.3	-0.9	348.16	0.00	15807.51	10522.63	13213.77	403.79	th
2409	23	11	86.5	-1	347.65	-5.00	15807.51	10522.20	13212.52	408.19	ws
2411	23	12	88.3	-1	341.55	0.65	15821.24	10516.60	13201.43	402.65	th
2413	23	13	90.2	-0.8	318.87	0.00	15846.42	10494.07	13190.18	404.81	th
2414	23	14	94.1	-1.2	283.84	0.00	15887.00	10458.31	13171.00	403.32	th rc
2415	23	15	97.3	-1.1	260.25	3.71	15915.04	10433.34	13158.23	400.55	th
2417	23	16	98.7	-1.2	251.54	3.71	15925.76	10423.85	13153.25	400.28	th
2419	23	17	104.2	-1.5	221.82	9.00		10390.25	13136.88	394.45	
2421	23	18	104.9	-1.4	206.24	7.50	15977.33	10374.50	13138.27	396.72	th
2423	23	19	109	-1.7	179.72	7.50	16007.21	10345.13	13132.79	396.43	th rc
2425	23	20	114.6	-1	158.48	7.50	16034.11	10319.29	13125.33	399.00	th
2427	23	21	122.1	-0.1	140.00	7.50	16060.96	10293.80	13116.90	401.52	th rc
2429	23	22	129.7	-1.9	131.33	7.50	16080.91	10276.24	13107.41	397.41	th
2431	23	23	142.1	-1.2	96.58	7.50	16123.33	10234.53	13115.09	399.74	th
2433	23	24	158	-2.5	89.02	3.71	16150.07	10208.55	13108.76	401.67	th
2435	23	25	168.8	-3.8	83.42	0.00	16167.23	10191.40	13109.47	403.72	th
2437	23	26	169	-4.1	83.69	-5.00	16167.23	10191.17	13109.15	408.26	ws
2439	23	27	196.6	-2.8	76.21	0.00	16206.21	10153.43	13118.26	405.53	th
2440	23	28	210.6	-2	83.65	0.00	16227.04	10132.62	13119.30	406.34	th
2441	23	29	219.8	-1.4	102.67	0.00	16251.18	10109.48	13112.42	406.75	th
2442	23	30	218.8	-0.9	118.99	0.00	16267.61	10100.64	13098.57	407.39	th rc
2443	23	31	219	-2.9	118.65	-5.00	16267.61	10100.53	13099.09	408.25	ws
2445	23	32	220.6	-0.7	156.09	0.00	16304.96	10073.62	13072.78	407.35	th
2446	23	33	222.2	-1.1	175.27	0.00	16324.69	10057.47	13061.46	405.90	th
2447	23	34	222.3	-2	175.39	-5.00	16324.69	10057.16	13061.57	408.14	ws
2449	23	35	229.4	-0.9	186.58	0.00	16350.06	10033.54	13069.88	406.33	th
2450	23	36	232.9	-1	207.67	0.00	16374.34	10009.57	13066.03	405.64	th
2451	23	37	240.4	-0.9	249.57	0.00	16425.74	9958.20	13068.03	405.34	th

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
2452	23	38	240.5	-0.4	249.89	0.00	16425.74	9957.70	13068.24	407.52	ws
2453	23	39	245.2	-1	265.46	1.50	16452.52	9934.22	13079.95	403.13	th
2455	23	40	248.9	-0.7	283.58	0.00	16477.86	9910.63	13089.21	405.80	th
2456	23	41	251.9	-0.6	300.48	3.71	16500.65	9889.59	13097.94	402.41	th
2458	23	42	252.1	-0.3	301.00	0.00	16500.65	9888.77	13098.78	407.69	ws
2459	23	43	261.7	2.3	395.88	0.00		9783.47	13134.15	425.16	lvbd badlands
2460	23	44	234.8	2.9	247.38	0.00		9973.05	13048.70	421.79	lvbd
2461	23	45	203.5	4.1	153.01	0.00		10114.19	13050.98	420.23	lvbd
2462	23	46	163.4	5.5	134.98	0.00		10213.76	13061.95	422.26	lvbd
2463	23	47	128.9	3.1	170.85	0.00		10308.16	13084.01	418.51	lvbd
2464	23	48	100.4	3.1	285.68	0.00		10456.19	13139.73	424.73	lvbd
2465	23	49	86.9	2.2	367.03	0.00		10541.69	13211.15	423.36	lvbd
2466	23	50	75.3	2.1	474.48	0.00		10634.15	13311.70	426.66	lvbd
2467	23	51	54.6	10.3	124.66	0.00		10276.81	13263.51	431.92	rvbd
2468	23	52	336.5	9.8	54.69	0.00		10153.39	13241.45	418.71	rvbd
2469	23	53	311.1	6.8	115.88	0.00		10087.88	13267.47	423.08	rvbd
2470	23	54	250.4	2.1	337.97	0.00		9856.81	13077.92	421.65	lbf
2471	23	55	250.3	-0.2	308.60	-5.00		9884.66	13087.27	413.18	tp23l
2473	23	56	250.4	-0.3	308.60	-5.00		9884.49	13087.78	412.65	tp23l
2475	23	57	261.3	-1.3	258.43	-5.00		9919.74	13152.21	408.40	tp23m
2477	23	58	261.4	-1.4	258.32	-5.00		9919.78	13152.67	407.95	tp23m
2479	23	59	261.3	-1.4	258.42	-5.00		9919.75	13152.21	407.95	tp23m
2481	23	60	285.7	0	305.40	0.00		9881.19	13273.94	409.26	tp23r
2483	23	61	285.6	0	305.50	0.00		9880.95	13273.45	409.26	tp23r
2485	23	62	285.6	0	305.40	0.00		9881.05	13273.43	409.26	tp23r
2487	24	1	133.1	-2.2	214.74	-5.00		9879.59	13272.71	409.26	tp23r
2489	24	2	133	-2.2	214.64	-5.00		9879.77	13273.05	409.26	tp23r
2491	24	3	132.5	-2.2	214.64	-5.00		9881.04	13274.43	409.26	tp23r
2493	24	4	143.4	-1.6	331.67	-5.00		9920.54	13153.17	408.24	tp23m
2495	24	5	143.4	-1.6	331.37	-5.00		9920.36	13153.41	408.25	tp23m
2497	24	6	143.5	-1.6	331.57	-5.00		9920.02	13152.90	408.24	tp23m
2499	24	7	154	-0.8	369.86	-5.00		9884.93	13087.00	412.34	tp23l
2501	24	8	154	-0.7	369.87	-5.00		9884.93	13087.00	412.99	tp23l
2503	24	9	154	-0.7	370.07	-5.00		9885.02	13086.82	412.98	tp23l
2505	24	10	153.6	-1.4	354.39	0.00	16510.72	9880.37	13102.00	403.84	th
2506	24	11	153.2	-1.6	354.46	-5.00	16510.72	9882.61	13103.05	407.60	ws
2508	24	12	155.3	-1.2	337.43	0.00	16530.55	9863.79	13112.88	405.44	th
2509	24	13	155.5	-1.5	313.49	0.00	16554.51	9852.79	13134.17	404.30	th
2510	24	14	154.5	-1.9	313.43	-5.00	16554.51	9857.72	13136.54	407.11	ws
2512	24	15	153.7	-1.5	268.11	0.00	16600.80	9841.58	13179.08	405.49	th
2513	24	16	151.7	-2.2	243.12	0.00	16627.33	9838.05	13205.37	403.17	th
2514	24	17	151	-2.4	217.21	0.00	16653.39	9828.10	13229.46	403.40	th
2515	24	18	151.1	-2.9	182.67	0.00	16687.94	9811.07	13259.52	403.25	th
2516	24	19	151.3	-3.1	181.43	-5.00	16687.94	9809.92	13260.29	407.68	ws
2518	24	20	150.8	-4.5	129.40	0.00	16741.21	9785.92	13306.48	402.32	th
2519	24	21	140.7	-5.2	89.93	0.00	16785.01	9779.75	13349.85	404.32	th
2520	24	22	121.8	-7	69.18	0.00	16818.20	9781.59	13382.98	404.01	th
2521	24	23	104.3	-7.1	62.72	0.00	16839.26	9783.56	13403.95	404.69	th rc
2522	24	24	104.4	-9.7	61.80	-5.00	16839.26	9782.65	13404.07	406.94	ws
2524	24	25	81.7	-6.9	72.67	0.00	16867.52	9794.70	13429.93	403.71	th
2525	24	26	67.7	-6.1	88.20	0.00	16892.46	9804.39	13452.90	403.08	th
2526	24	27	59.1	-5.6	100.82	0.00	16911.41	9809.30	13471.21	402.62	th
2527	24	28	59.1	-4	101.85	0.00	16911.41	9810.19	13471.74	405.38	ws
2528	24	29	49.7	-5.3	111.72	0.00	16931.94	9808.00	13491.70	402.14	th
2529	24	30	36.2	-5	122.83	0.00	16961.63	9795.33	13518.56	401.76	th
2530	24	31	28.9	-4.5	154.22	0.00	16997.59	9797.32	13554.45	400.37	th

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
2531	24	32	26.6	-4.5	165.89	0.00	17010.90	9797.07	13567.76	399.45	th
2532	24	33	26.7	-3.3	165.92	0.00	17010.90	9797.34	13567.67	402.94	ws
2533	24	34	24.1	-4	190.43	3.71	17036.64	9800.55	13593.27	395.48	th pool
2535	24	35	18.3	-3.9	204.53	5.71	17061.08	9787.01	13613.62	392.85	th
2537	24	36	13.6	-3.1	229.66	11.44	17091.87	9776.79	13642.66	388.63	th
2539	24	37	13.3	-3.8	229.59	-5.00	17091.87	9775.61	13642.87	402.26	ws
2541	24	38	9.8	-2.7	240.53	11.44	17110.87	9763.73	13656.46	389.72	th
2543	24	39	5.1	-3.1	262.81	11.44	17141.23	9746.15	13681.21	386.83	th
2545	24	40	2.4	-2.7	279.89	12.95	17162.56	9734.51	13699.08	386.36	th
2547	24	41	358.8	-2.6	312.08	11.44	17199.72	9716.25	13731.45	386.89	th
2549	24	42	358.8	-2.6	312.08	-5.00	17199.72	9716.25	13731.45	403.33	ws
2551	24	43	356.3	1	351.65	0.00		9700.10	13770.35	418.64	rvbd
2552	24	44	25.6	0.9	215.47	0.00		9815.89	13613.76	415.89	rvbd
2553	24	45	67.5	2	189.28	0.00		9897.67	13491.87	419.12	rvbd
2554	24	46	102.9	1.7	217.30	0.00		9934.61	13370.92	418.96	rvbd
2555	24	47	119.1	0.6	276.08	0.00		9964.03	13285.17	415.40	rvbd
2556	24	48	125.1	0.5	608.38	0.00		10220.53	13069.62	417.81	lvbd
2557	24	49	142.6	0.9	488.04	0.00		10019.21	13031.73	420.17	lvbd
2558	24	50	160.8	3	342.63	0.00		9835.47	13095.86	430.46	lvbd
2559	24	51	174.4	5	270.57	0.00		9749.19	13150.16	436.18	lvbd badlands
2560	24	52	213.4	6.1	104.70	0.00		9665.15	13332.02	423.70	lvbd bad
2561	24	53	263.9	4.9	88.08	0.00		9635.21	13410.08	420.06	lvbd bad
2562	24	54	297.8	3	214.01	0.00		9533.48	13519.25	423.72	lvbd bad
2563	24	55	314.8	2.1	356.36	0.00		9469.93	13670.54	425.57	lvbd
2564	24	56	356.6	-1.9	334.32	-5.00		9702.96	13753.16	406.42	tp24r
2566	24	57	356.8	-1.8	334.43	-5.00		9704.12	13753.35	407.00	tp24r
2568	24	58	356.7	-1.8	334.43	-5.00		9703.54	13753.32	407.00	tp24r
2570	24	59	337.4	-0.7	287.18	-5.00		9612.43	13684.56	414.00	tp24m
2572	24	60	337.4	-0.6	287.18	-5.00		9612.43	13684.57	414.50	tp24m
2574	24	61	328	0.5	280.49	-5.00		9574.15	13657.30	419.95	tp24l
2576	24	62	327.9	0.5	280.69	0.00		9573.63	13657.21	414.96	tp24l
2578	24	63	328.4	0.5	280.69	0.00		9575.71	13658.51	414.96	tp24l
2580	24	64	327.9	0.5	280.69	0.00		9573.63	13657.21	414.96	tp24l
2582	25	1	154.6	1.9	318.32	-5.00		9571.46	13658.61	419.34	tp24l
2584	25	2	154.4	2.1	318.59	-5.00		9572.58	13658.85	420.47	tp24l
2586	25	3	154.5	2.1	318.49	0.00		9572.03	13658.70	415.46	tp24l
2588	25	4	145.9	1	314.95	-5.00		9611.50	13685.36	414.28	tp24m
2590	25	5	145.8	1	314.85	-5.00		9611.89	13685.76	414.28	tp24m
2592	25	6	145.8	1	314.95	-5.00		9611.95	13685.67	414.28	tp24m
2594	25	7	125.8	-0.4	332.39	-5.00		9704.51	13751.73	406.46	tp24r
2596	25	8	125.8	-0.3	332.40	-5.00		9704.51	13751.73	407.04	tp24r
2598	25	9	129	-0.5	350.29	11.44	17210.48	9707.14	13725.72	389.29	th
2600	25	10	129.1	-0.9	349.26	-5.00	17210.48	9705.96	13725.90	403.30	ws
2602	25	11	129	-0.8	317.97	3.71	17242.80	9682.03	13746.06	395.63	th
2604	25	12	127.4	-0.6	291.18	3.71	17270.90	9666.24	13769.31	397.02	th
2606	25	13	126.2	-1	269.26	0.00	17293.59	9652.20	13787.14	399.08	th
2608	25	14	127.7	-0.9	237.47	0.00	17326.06	9622.81	13800.94	400.05	th
2609	25	15	131.8	-1.5	223.02	0.00	17347.97	9601.18	13797.51	397.94	th
2610	25	16	132	-1.6	223.31	-5.00	17347.97	9600.87	13796.74	402.55	ws
2612	25	17	134.4	-1.8	189.41	0.00	17382.85	9570.25	13813.64	397.83	th
2613	25	18	134.3	-1.8	160.52	0.00	17411.74	9549.80	13834.05	398.74	th
2614	25	19	130.5	-1.8	130.44	0.00	17443.32	9534.10	13861.45	399.68	th
2615	25	20	120.1	-2.1	96.64	0.00	17482.77	9518.52	13897.70	400.24	th
2616	25	21	111.3	-2.6	76.82	0.00	17506.59	9506.49	13918.26	400.30	th rc
2617	25	22	97.5	-3.6	54.99	0.00	17533.43	9489.44	13938.99	400.32	th
2618	25	23	97.9	-6.1	54.69	-5.00	17533.43	9489.09	13938.65	402.94	ws

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
2620	25	24	39.3	-4.3	52.95	0.00	17585.96	9468.46	13987.14	399.80	th pool
2621	25	25	39.4	-1.3	53.09	0.00	17585.96	9468.62	13987.19	402.58	ws
2622	25	26	20	-3.8	77.43	0.00	17618.52	9461.40	14018.92	398.64	th
2623	25	27	0.3	-3.3	101.23	0.00	17657.04	9435.45	14047.39	397.95	th
2624	25	28	349.6	-2.8	119.56	0.00	17684.55	9413.34	14063.76	397.94	th
2625	25	29	340.8	-1.9	149.62	0.00	17720.95	9385.72	14087.46	398.82	th
2626	25	30	338.2	-1	188.67	0.00	17760.74	9364.85	14121.34	400.49	th
2627	25	31	338.2	-1.8	188.81	-5.00	17760.74	9364.80	14121.47	402.85	ws
2629	25	32	338.1	-1.2	251.94	0.00	17824.01	9340.95	14179.93	398.51	th
2630	25	33	336.6	-0.8	272.97	0.00	17846.13	9326.51	14196.69	399.97	th
2631	25	34	334.8	-0.6	284.38	0.00	17860.51	9313.84	14203.48	400.81	th rc
2632	25	35	334.7	-1.2	284.64	-5.00	17860.51	9313.28	14203.50	402.82	ws
2634	25	36	335.5	1.8	394.11	0.00		9271.49	14304.78	416.17	rvbd
2635	25	37	356.8	3	210.41	0.00		9423.18	14156.25	414.81	rvbd
2636	25	38	77.7	3	129.22	0.00		9561.18	13973.69	410.56	rvbd
2637	25	39	110.4	4.4	218.65	0.00		9639.86	13869.95	420.61	rvbd
2638	25	40	128.6	1	421.24	0.00		9764.13	13683.36	411.14	rvbda
2639	25	41	170.7	3.6	283.44	0.00		9480.73	13666.45	421.62	lvbd
2640	25	42	183.4	7.4	161.05	0.00		9425.37	13785.40	424.70	lvbd
2641	25	43	224.5	8.7	95.69	0.00		9367.85	13877.92	418.43	lvbd
2642	25	44	263.2	9.1	136.95	0.00		9298.93	13929.95	425.72	lvbd
2643	25	45	297	6.5	294.69	0.00		9172.35	14079.95	437.36	lvbd
2644	25	46	343.1	0.3	282.60	-5.00		9352.77	14216.56	410.26	tp25r
2646	25	47	343	0.3	282.70	-5.00		9352.27	14216.51	410.26	tp25r
2648	25	48	343	0.3	282.60	-5.00		9352.30	14216.41	410.26	tp25r
2650	25	49	338.2	-0.7	260.88	-5.00		9338.04	14188.39	405.60	tp25m
2652	25	50	338.1	-0.6	260.79	-5.00		9337.65	14188.13	406.05	tp25m
2654	25	51	338.3	-0.6	260.89	-5.00		9338.46	14188.56	406.05	tp25m
2656	25	52	323.8	-0.3	245.70	0.00		9289.81	14144.43	402.50	tp25l
2658	25	53	323.8	-0.3	245.60	0.00		9289.87	14144.35	402.50	tp25l
2660	25	54	323.9	-0.3	245.50	0.00		9290.28	14144.52	402.50	tp25l
2662	26	1	129.1	0.5	317.79	-5.00		9289.18	14144.47	407.95	tp25l
2664	26	2	129.1	0.4	317.89	-5.00		9289.26	14144.40	407.39	tp25l
2666	26	3	129.1	0.4	317.89	0.00		9289.26	14144.40	402.39	tp25l
2668	26	4	117.8	0.1	334.60	-5.00		9338.54	14188.84	405.76	tp25m
2670	26	5	117.9	0.2	334.20	-5.00		9337.91	14188.51	406.34	tp25m
2672	26	6	117.8	0.1	334.40	-5.00		9338.37	14188.93	405.76	tp25m
2674	26	7	112.6	0.9	335.56	-5.00		9352.35	14215.94	410.44	tp25r
2676	26	8	112.5	0.9	335.56	-5.00		9352.58	14216.48	410.44	tp25r
2678	26	9	112.6	0.8	335.67	-5.00		9352.45	14215.89	409.86	tp25r
2680	26	10	114.2	-0.1	275.50	0.00	17895.30	9293.85	14231.96	399.69	th
2681	26	11	114	0.3	275.60	0.00	17895.30	9294.33	14232.79	401.62	ws
2682	26	12	113.3	-0.4	256.39	0.00	17914.86	9278.05	14243.47	398.38	th
2683	26	13	112.1	-0.5	233.49	0.00	17938.33	9258.90	14257.04	398.13	th
2684	26	14	112.1	0	233.50	0.00	17938.33	9258.91	14257.04	400.17	ws
2685	26	15	107.8	-0.6	201.89	0.00	17973.88	9234.79	14283.17	398.06	th
2686	26	16	101.7	-0.8	173.68	0.00	18008.42	9212.64	14309.67	397.75	th
2687	26	17	98.2	-1	155.08	0.00	18029.55	9196.05	14322.77	397.47	th
2688	26	18	97.4	-1.5	143.35	0.00	18041.46	9184.72	14326.43	396.42	th
2689	26	19	95.3	-2.1	126.51	0.00	18059.00	9168.54	14333.20	395.53	th
2690	26	20	93.8	-2.3	100.82	0.00	18084.87	9143.16	14338.21	396.12	th
2691	26	21	85	-3.7	71.95	0.00	18116.56	9114.24	14351.16	395.52	th
2692	26	22	69.4	-5.4	51.87	0.00	18142.60	9091.11	14363.14	395.27	th
2693	26	23	69.4	-1.1	51.59	0.00	18142.60	9090.85	14363.04	399.18	ws
2694	26	24	43.3	-7.9	40.91	0.00	18166.11	9070.62	14374.66	394.50	th
2695	26	25	24	-9.5	35.21	0.00	18180.06	9056.88	14377.06	394.28	th pool

Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
2696	26	26	24	-9.5	35.21	-5.00	18180.06	9056.88	14377.06	399.28	ws
2698	26	27	20.8	7.8	89.76	-5.00		9074.44	14428.80	417.47	xs3 p3
2700	26	28	20.8	7.8	89.96	-5.00		9074.51	14428.99	417.50	xs3 p3
2702	26	29	20.6	7.8	89.96	-5.00		9074.21	14429.10	417.50	xs3 p3
2704	26	30	20.7	7.8	89.96	-5.00		9074.36	14429.04	417.50	xs3 p3
2706	26	31	20.5	15.5	112.36	-5.00		9081.91	14450.13	436.33	xs3 p4
2708	26	32	20.5	15.4	112.32	-5.00		9081.90	14450.09	436.11	xs3 p4
2710	26	33	20.6	15.4	112.41	-5.00		9082.11	14450.12	436.14	xs3 p4 no cap
2712	26	34	195.6	6.1	138.21	0.00		9005.39	14211.77	414.94	xs3 p2
2714	26	35	195.6	6.2	138.19	0.00		9005.40	14211.79	415.18	xs3 p2
2716	26	36	199.1	12.4	250.03	0.00		8960.75	14108.63	455.14	xs3 p1
2718	26	37	199.2	12.4	250.03	0.00		8960.34	14108.77	455.14	xs3 p1
2720	26	38	199.6	12.3	250.42	0.00		8958.56	14108.98	454.77	xs3 p1
2901	100	1						9006.90	14323.42	403.06	begin 10/7/98
2902	100	2						9006.90	14323.42	403.06	sta 1 by xs#3
2903	100	3	193.3	11.4	196.90	-5.00		8961.60	14131.80	447.76	bt 3.1
2904	100	4	193.4	11.4	196.90	-5.00		8961.26	14131.88	447.76	bt3.1
2905	100	5	193.6	11.4	196.90	-5.00		8960.60	14132.04	447.76	bt 3.1
2906	100	6	193.7	11.5	196.80	-5.00		8960.29	14132.22	448.09	bt 3.1
2907	100	7	193.2	13.4	228.40	0.00	0.00	8954.74	14101.05	457.47	gs
2908	100	8	193	13.3	222.20		6.25	8956.91	14106.91	455.58	gs
2909	100	9	193	13.3	219.40		9.05	8957.54	14109.64	454.92	gs
2910	100	10	193	13.4	219.70		8.75	8957.47	14109.35	455.40	xs3 p1
2911	100	11	193	13.4	219.60			8957.50	14109.44	455.37	xs3 p1
2912	100	12	193	13.3	219.60		8.85	8957.50	14109.44	454.97	gs
2913	100	13	192.5	13.2	216.10		12.86	8960.12	14112.44	453.74	gs
2914	100	14	191.9	12.4	206.40		22.81	8964.34	14121.45	448.44	gs
2915	100	15	192.1	12.5	195.70	3.71	33.53	8965.87	14132.06	442.73	gs
2916	100	16	192.1	12	189.00	7.50	40.23	8967.28	14138.61	435.73	gs
2917	100	17	192.1	12.2	179.90	11.44	49.33	8969.19	14147.51	430.51	gs
2918	100	18	191.3	12.4	170.80	11.44	58.75	8973.43	14155.93	429.17	gs
2919	100	19	191	9	162.60	0.00	67.00	8975.87	14163.80	428.81	gs
2920	100	20	186.7	8.8	147.80		85.82	8989.65	14176.63	425.94	gs
2921	100	21	185.5	8.4	132.80		101.11	8994.17	14191.23	422.67	gs
2922	100	22	184.9	7.6	128.00		106.10	8995.96	14195.88	420.13	gs
2923	100	23	182.6	6.7	119.80		123.06	9001.46	14203.74	417.13	gs
2924	100	24	181.2	6.1	114.30		133.95	9004.50	14209.14	415.27	lac
2925	100	25	181.7	6.1	114.30		128.85	9003.51	14209.17	415.27	gs
2926	100	26	181.1	6.1	111.90		137.20	9004.75	14211.54	415.01	gs
2927	100	27	183.1	8	131.40		111.40	8999.79	14192.21	421.52	lbf
2928	100	28	181.1	6.1	111.70			9004.75	14211.74	414.99	xs3 p2
2929	100	29	181	6.1	111.60			9004.95	14211.83	414.98	xs3 p2
2930	100	30	181.3	6.1	111.70			9004.36	14211.74	414.99	xs3 p2
2931	100	31	181.2	6.1	111.80			9004.55	14211.64	415.00	xs3 p2
2932	100	32	181.4	6.1	111.80		131.42	9004.16	14211.65	415.00	xs3 p2
2933	100	33	181.2	6	111.50		136.75	9004.56	14211.94	414.77	gs
2934	100	34	180.1	5.7	105.90		143.49	9006.71	14217.52	413.63	gs
2935	100	35	178.1	6.7	96.80		153.26	9010.11	14226.67	414.43	gs
2936	100	36	175.6	6.9	88.40		162.57	9013.68	14235.28	413.75	gs
2937	100	37	171.9	7.6	79.20		173.24	9018.06	14245.01	413.62	gs
2938	100	38	168.9	6.4	71.30		182.07	9020.62	14253.45	411.05	gs
2939	100	39	166	5.8	65.00		189.25	9022.62	14260.35	409.66	gs
2940	100	40	158.1	3.8	54.40		202.65	9027.19	14272.94	406.67	gs
2941	100	41	143.4	2.4	44.00		218.92	9033.13	14288.09	404.90	gs
2942	100	42	127.5	0.6	37.90		231.76	9036.96	14300.34	403.45	gs instr leveled
2943	100	43	107.9	-1.8	35.00		244.49	9040.20	14312.66	401.96	gs



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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
2944	100	44	82	-3	39.30		261.66	9045.81	14328.89	401.00	gs
2945	100	45	65	-4.1	50.80		279.18	9052.94	14344.88	399.41	gs
2946	100	46	61.1	-4.2	55.40		345.79	9055.40	14350.19	398.99	lew
2947	100	47	56.7	-5.9	61.10		353.03	9057.96	14356.96	396.74	gs
2948	100	48	52.5	-7	68.70		415.03	9061.40	14365.24	394.62	gs
2949	100	49	49.9	-7	73.80		421.07	9063.35	14370.95	393.99	gs
2950	100	50	44.5	-4.2	75.40	3.71	384.72	9059.74	14377.20	393.81	gs
2951	100	51	39.9	-4	74.80	3.71	315.18	9054.88	14380.80	394.11	gs
2952	100	52	41.7	-4.5	71.00	3.71	310.74	9054.13	14376.43	393.76	gs
2953	100	53	41.1	-6	78.90		378.96	9058.76	14382.87	394.76	gs
2954	100	54	40.9	-5.4	83.20		393.97	9061.37	14386.30	395.19	gs
2955	100	55	38.9	-4.2	90.20		443.73	9063.54	14393.61	396.43	gs
2956	100	56	38.4	-4.1	91.50		445.26	9063.73	14395.12	396.50	bdrc
2957	100	57	38.4	-4.2	92.90		446.66	9064.60	14396.22	396.23	bdrc
2958	100	58	38.2	-2.8	93.70		447.52	9064.84	14397.05	398.47	gs
2959	100	59	38.3	-2.5	93.70		447.68	9064.97	14396.95	398.96	rew
2960	100	60	38	-1.8	94.70		448.80	9065.20	14398.04	400.08	gs
2961	100	61	37.5	-1.6	96.40		450.69	9065.58	14399.90	400.36	gs
2962	100	62	36.8	-0.4	99.70		454.20	9066.62	14403.25	402.36	gs
2963	100	63	36.2	0.6	102.70		457.38	9067.55	14406.29	404.13	bdrc
2964	100	64	35.1	1.6	107.00		462.13	9068.42	14410.96	406.04	bdrc
2965	100	65	34.1	3.5	112.30		467.77	9069.86	14416.41	409.92	gs
2966	100	66	33.8	4.2	117.80		473.30	9072.43	14421.31	411.71	gs
2967	100	67	33.4	5.8	123.00		478.57	9074.61	14426.10	415.55	gs
2968	100	68	33.6	6.2	125.40		483.31	9076.29	14427.86	416.68	gs
2969	100	69	32.6	6.4	125.70			9074.62	14429.31	417.15	xs3 p3
2970	100	70	33.1	6.4	125.70			9075.54	14428.72	417.15	xs3 p3
2971	100	71	32.8	4.3	125.70	-5.00		9074.99	14429.08	417.51	xs3 p3
2972	100	72	32.9	4.2	125.60	-5.00		9075.12	14428.87	417.28	xs3 p3
2973	100	73	32.9	4.3	125.90	-5.00		9075.28	14429.12	417.52	xs3 p3
2974	100	74	33	6.4	125.70		481.96	9075.36	14428.84	417.15	gs
2975	100	75	32.6	7.7	130.20		488.60	9077.04	14433.10	420.66	gs
2976	100	76	30.3	11.8	141.00		500.69	9078.03	14445.15	432.51	gs
2977	100	77						9006.90	14323.42	403.06	p4 1/2buried,no cap
2978	100	78	31.1	12.5	147.30		507.31	9082.98	14449.54	435.71	gs
2979	100	79	30.9	10.9	147.70	-5.00		9082.75	14450.15	436.50	xs3 p4
2980	100	80	31.1	10.8	147.70	-5.00		9083.19	14449.89	436.23	xs3 p4
2981	100	81	31.3	10.8	147.70	-5.00		9083.63	14449.62	436.23	xs3 p4
2982	100	82	31.3	10.8	147.80	-5.00		9083.68	14449.70	436.25	xs3 p4
2982	100	82	31.3	10.8	147.80	-5.00	508.06	9083.68	14449.70	436.25	xs3 p4
2983	100	83	31.3	12.5	147.70	0.00	507.96	9083.63	14449.62	435.80	gs
2984	100	84	30.7	15.5	155.40	0.00	515.82	9086.23	14457.04	446.15	gs
2985	100	85	30.6	15.7	161.30	-5.00	521.73	9089.00	14462.25	453.39	gs
2986	100	86	37.5	-3.3	78.70	3.71	18189.09	9054.81	14385.85	394.81	th pool
2987	100	87	23.5	-3.7	73.90	3.71	18208.29	9036.36	14391.19	394.57	th
2988	100	88	6.4	-4.8	84.80		18234.23	9016.35	14407.69	395.93	th
2989	100	89	355.6	-4	92.40		18252.54	8999.81	14415.54	396.59	th
2990	100	90	349.2	-4	104.50		18268.88	8987.31	14426.06	395.75	th
2991	100	91	343.3	-3.2	112.90		18282.86	8974.45	14431.55	396.74	th
2992	100	92	336.1	-2.8	129.70		18305.51	8954.35	14441.99	396.71	th
2993	100	93	336.1	-1.9	129.30		18305.51	8954.51	14441.63	398.77	ws
2994	100	94	343.5	0.7	158.50			8961.88	14475.39	404.99	rac
2995	100	95	343	3.9	174.30			8955.94	14490.10	414.94	rpf
2996	100	96	344.5	6	187.10			8956.90	14503.71	422.72	rvw
2997	100	97	329.2	-2.4	152.60		18333.99	8928.76	14454.49	396.66	th
2998	100	98	321.6	-2.5	179.60		18368.79	8895.34	14464.17	395.21	th

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
2999	100	99	318.5	-2.8	189.10			8881.59	14465.04	393.81	th (-5 + ws)
3000	100	100	315.5	-2.5	194.20		18393.45	8870.78	14461.93	394.58	th
3001	100	101	313.5	-2.6	197.70		18401.13	8863.49	14459.50	394.08	th
3002	100	102	313.2	-1.5	202.20	3.71	18405.75	8859.50	14461.83	394.05	th
3003	100	103	310.5	-1.4	212.30	3.71	18419.80	8845.46	14461.29	394.16	th
3004	100	104	308.6	-1.3	223.10	3.71		8832.54	14462.60	394.28	th bdrc
3005	100	105	306.4	-1.6	227.90	3.71		8823.46	14458.66	392.98	th bdrc
3006	100	106	302.9	-1.5	246.40	3.71		8800.01	14457.25	392.89	th bdrc
3007	100	107	302.3	-1.3	257.00	3.71	18475.60	8789.66	14460.74	393.51	th
3008	100	108	299.2	-1.8	270.50	0.00	18495.24	8770.77	14455.38	394.55	th
3009	100	109	299.1	-0.8	271.10	0.00	18495.24	8770.02	14455.26	399.27	ws
3010	100	110	302.6	-0.9	310.90	-5.00		8744.98	14490.92	403.17	Btp1r
3011	100	111	304.1	-1	310.80	-5.00		8749.53	14497.66	402.63	Btp1r
3012	100	112	302.5	-1	310.80	-5.00		8744.77	14490.41	402.63	Btp1r
3013	100	113	282.2	-0.2	250.90	-5.00		8761.66	14376.44	407.18	Btp1m
3014	100	114	280.6	-0.2	251.00	-5.00		8760.18	14369.59	407.18	Btp1m
3015	100	115	280.6	-0.2	250.90	-5.00		8760.28	14369.57	407.18	Btp1m
3016	100	116	258.8	0.9	227.00	-5.00		8784.22	14279.32	411.62	Btp1l
3017	100	117	258.8	0.9	227.00	-5.00		8784.22	14279.32	411.62	Btp1l
3018	200	1	97.6	-0.1	297.10	-5.00		8785.53	14278.56	411.75	Btp1l
3019	200	2	97.4	-0.1	297.20	-5.00		8785.77	14279.57	411.75	Btp1l
3020	200	3	97.5	-0.1	297.20	-5.00		8785.70	14279.06	411.75	Btp1l
3021	200	4	78.9	-1	274.90	-5.00		8760.80	14370.78	407.47	Btp1m
3022	200	5	78.9	-1	274.70	-5.00		8760.60	14370.74	407.47	Btp1m
3023	200	6	78.9	-1.1	274.70	-5.00		8760.60	14370.74	406.99	Btp1m
3024	200	7	55.2	-1.8	308.90	-5.00		8744.69	14494.14	402.56	Btp1r
3025	200	8	55.1	-1.8	309.50	-5.00		8744.88	14494.93	402.54	Btp1r
3026	200	9	55.3	-1.8	309.50	-5.00		8745.49	14494.04	402.54	Btp1r
3027	200	10	48.3	-0.2	288.70	3.71		8706.59	14509.90	402.55	rac
3028	200	11	46.5	1.7	298.80	0.00		8707.78	14523.53	416.14	rbf
3029	200	12	41.8	3	336.50			8715.33	14568.70	424.90	rww
3030	200	13	63.6	-2.3	312.50		18496.67	8770.95	14456.80	394.72	th
3031	200	14	63.3	-2.2	284.30		18524.91	8745.03	14445.59	396.35	th
3032	200	15	64.4	-2.2	265.10		18544.82	8730.12	14432.40	397.08	th
3033	200	16	64.5	-1.8	264.70		18544.82	8729.95	14431.81	398.95	ws
3034	200	17	66	-2.4	236.30		18574.46	8706.91	14413.96	397.36	th
3035	200	18	66.3	-2.7	218.80		18592.00	8691.39	14405.80	396.95	th rc
3036	200	19	65.4	-3	200.90		18610.20	8673.71	14401.48	396.74	th
3037	200	20	65.4	-2.5	200.50		18610.20	8673.34	14401.32	398.51	ws
3038	200	21	67.4	-3.8	162.70		18648.91	8641.25	14380.38	396.46	th
3039	200	22	64.8	-5	123.40		18688.74	8602.70	14370.39	396.47	th
3040	200	23	61	-6.7	99.10		18714.12	8577.72	14365.90	395.63	th
3041	200	24	55.4	-8.1	81.50		18733.79	8558.13	14364.13	395.67	th
3042	200	25	38.4	-11.7	62.50		18762.18	8529.86	14366.83	394.33	th
3043	200	26	31.9	-12.8	57.80		18770.46	8521.58	14366.92	394.14	th
3044	200	27	21.2	-13	55.60		18781.26	8511.15	14369.69	394.43	th
3045	200	28	6.8	-15.6	45.70		18797.31	8496.45	14363.23	394.51	th
3046	200	29	347.9	-13.9	51.80		18814.41	8480.18	14368.50	394.45	th
3047	200	30	340	-13.5	57.20			8471.48	14371.60	393.54	th (-5+ws)
3048	200	31	331.6	-9	66.00	3.71	18836.24	8459.65	14375.91	393.11	th
3049	200	32	316.8	-7.9	75.80	3.71	18856.93	8439.15	14373.11	393.04	th
3050	200	33	311	-6.2	92.70	7.50	18875.84	8421.08	14378.67	389.70	th
3051	200	34	305.3	-6	104.70	7.50	18891.33	8405.59	14378.35	388.76	th
3052	200	35	306.3	-5.6	117.60	7.50	18904.37	8396.26	14387.47	388.24	th
3053	200	36	306.2	-5.8	126.70	7.50	18913.47	8388.80	14392.68	386.90	th
3054	200	37	307.4	-3.8	142.20	11.44		8378.07	14404.22	386.38	th bdrc

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
3055	200	38	310.6	-5.2	148.80	12.44		8378.06	14414.69	381.29	th bdrc (-5=ws)
3056	200	39	313	-4.9	159.40	13.44		8374.46	14426.56	380.16	th bdrc
3057	200	40	314.6	-4.3	180.00	13.44		8362.88	14444.24	380.29	th (-5=ws)
3058	200	41	316.3	-3.4	192.00	13.44	18984.31	8358.39	14456.66	382.42	th
3059	200	42	318.4	-2.9	206.00	13.44	19000.10	8354.27	14471.90	383.39	th
3060	200	43	316.8	-2.7	222.40	7.50	19017.55	8338.80	14479.97	389.28	th
3061	200	44	316.8	-2.7	233.70	3.71	19028.85	8331.06	14488.21	392.54	th
3062	200	45	319.8	-3.1	249.40			8330.06	14508.34	393.76	th (-5=ws)
3063	200	46	321.8	-2.4	268.10		19069.60	8325.25	14528.54	396.03	th
3064	200	47	326.1	-1.7	311.30		19117.93	8317.41	14576.23	398.03	th rc
3065	200	48	326.1	-1.6	311.60		19117.93	8317.25	14576.48	398.57	ws
3066	200	49	316.7	-1.8	318.80	-5.00		8272.40	14549.87	402.25	Btp2l
3067	200	50	316.6	-1.8	318.90	-5.00		8271.93	14549.56	402.25	Btp2l
3068	200	51	321.7	-2.3	322.40	-5.00		8291.22	14570.86	399.32	Btp2m
3069	200	52	321.6	-2.3	322.50	-5.00		8290.72	14570.59	399.32	Btp2m
3070	200	53	321.7	-2.3	322.30	-5.00		8291.29	14570.78	399.32	Btp2m
3071	200	54	335.6	-1.3	319.60	-5.00		8359.01	14608.91	405.02	Btp2r
3072	200	55	335.6	-1.4	319.50	-5.00		8359.05	14608.81	404.46	Btp2r
3073	200	56	133	0.9	101.80			8565.49	14248.42	408.87	lac
3074	200	57	137.1	5.4	111.90			8567.21	14235.88	417.85	lbf
3075	200	58	143.4	8.6	120.20			8562.71	14221.35	425.45	lvw
3076	200	59	276.6	0.9	37.50			8453.79	14322.16	407.86	lac
3077	200	60	272.7	10.2	42.50			8448.59	14319.85	414.92	lbf
3078	200	61	269.9	15.1	49.00			8442.04	14317.77	420.49	lvw
3079	300	1	138.3	0.1	32.90	-5.00		8182.94	14803.68	404.11	Btp2r
3080	300	2	138.1	0.1	328.90	-5.00		8380.70	14583.44	404.63	Btp2r
3081	300	3	137.7	0.1	329.00	-5.00		8382.47	14584.91	404.63	Btp2r
3082	300	4	138.3	0.1	329.00	-5.00		8379.91	14582.60	404.63	Btp2r
3083	300	5	151.6	-0.8	319.70	-5.00		8313.11	14547.02	399.59	Btp2m
3084	300	6	151.6	-0.8	319.90	-5.00		8313.20	14546.84	399.59	Btp2m
3085	300	7	151.5	-0.8	319.80	-5.00		8313.65	14547.20	399.59	Btp2m
3086	300	8	156.3	-0.3	330.40	-5.00		8293.85	14525.71	402.32	Btp2l
3087	300	9	156.3	-0.3	330.40	-5.00		8293.85	14525.71	402.32	Btp2l
3088	300	10	153.6	-0.1	336.60		19167.87	8310.72	14526.75	398.47	th rc
3089	300	11	153.4	-0.1	336.40		19169.06	8311.68	14527.45	398.47	th
3090	300	12	153.4	-0.1	336.50		19169.06	8311.72	14527.36	398.47	ws
3091	300	13	155.4	-0.5	328.80		19182.94	8297.92	14529.29	396.18	th
3092	300	14	156.9	-0.8	319.20		19195.74	8286.29	14534.64	394.60	th
3093	300	15	156.3	-0.4	306.50		19208.86	8284.25	14547.59	396.91	th pool
3094	300	16	155.8	-0.6	296.10		19219.59	8282.43	14558.17	395.95	th
3095	300	17	155.8	-1	296.20	-5.00	19219.59	8282.47	14558.07	398.88	ws
3096	300	18	156.1	-0.8	274.50		19241.24	8272.26	14577.28	395.22	th
3097	300	19	156.9	-1	260.10		19256.11	8263.10	14589.00	394.51	th
3098	300	20	155.8	-0.6	239.10		19277.65	8259.06	14610.16	396.55	th
3099	300	21	152.1	-0.5	215.80		19305.19	8262.03	14637.53	397.17	th
3100	300	22	135.7	0.9	272.70	-5.00		8351.51	14633.07	408.34	rac, rbf, rvw bdrc
3101	300	23	144.8	-0.7	177.40		19350.96	8263.31	14683.28	396.89	th
3102	300	24	139.3	-1	147.80		19384.39	8257.43	14716.19	396.47	th
3103	300	25	132.9	-1.1	123.70		19412.83	8251.67	14744.04	396.68	th
3104	300	26	118.8	-1.3	102.40		19447.71	8250.79	14778.91	396.73	th
3105	300	27	102.7	-3.4	94.90			8253.63	14807.38	393.42	th (-5=ws)
3106	300	28	99	-1.4	91.40	3.71	19482.75	8251.33	14813.95	393.11	th
3107	300	29	92.3	-1.6	84.00	3.71	19495.38	8244.98	14824.87	393.00	th
3108	300	30	80	-3.1	76.30	3.71	19514.18	8236.19	14841.49	391.21	th
3109	300	31	67.9	-4.4	74.80			8230.36	14856.39	393.30	th (-5=ws)
3110	300	32	42.3	-3.4	68.00		19561.46	8206.82	14878.54	395.01	th

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
3111	300	33	22.9	-2.4	79.30		19588.67	8191.91	14901.29	395.73	th
3112	300	34	7.9	-2.3	97.30		19617.82	8174.42	14924.62	395.15	th
3113	300	35	357.8	-1.7	124.40		19651.13	8156.28	14952.55	395.36	th
3114	300	36	354.8	-1.5	149.30		19677.03	8147.52	14976.93	395.14	th
3115	300	37	352.8	-1.4	173.50		19701.87	8139.31	15000.38	394.81	th
3116	300	38	352.5	-1.7	192.30			8135.95	15018.90	393.35	th (-5=ws)
3117	300	39	351.8	-1.1	207.70	3.71	19736.23	8131.43	15033.82	391.36	th
3118	300	40	351.7	-0.6	217.70	7.50	19746.24	8129.62	15043.66	389.27	th
3119	300	41	351.1	-0.6	214.90	7.50	19749.84	8127.80	15040.56	389.30	th
3120	300	42	349.1	-0.5	223.50	7.50	19761.35	8118.79	15047.71	389.60	th
3121	300	43	347.3	-0.4	236.20	7.50	19775.96	8109.12	15058.67	389.91	th
3122	300	44	345.9	-1.2	256.60			8098.54	15077.11	393.68	th (-5=ws)
3123	300	45	343.2	-0.8	270.90		19815.10	8082.75	15087.58	395.27	th
3124	300	46	341	-0.7	292.60		19839.34	8065.79	15104.90	395.48	th
3125	300	47	338	-0.6	314.20		19866.15	8043.35	15119.56	395.76	th
3126	300	48	338	-1	314.40	-5.00	19866.15	8043.27	15119.75	398.57	ws
3127	300	49	323.4	1.8	254.00			8009.61	15032.16	407.04	Btp3l
3128	300	50	323.5	1.7	253.70			8010.14	15032.18	406.58	Btp3l
3129	300	51	323.5	1.8	253.90			8010.03	15032.34	407.03	Btp3l
3130	300	52	326.5	0	275.40			8009.05	15057.90	399.05	Btp3m
3131	300	53	326.5	0	275.40			8009.05	15057.90	399.05	Btp3m
3132	300	54	346.1	-1	287.90	-5.00		8091.89	15107.71	399.03	Btp3r
3133	300	55	346	-1	288.10	-5.00		8091.35	15107.79	399.03	Btp3r
3134	300	56	346	-1	287.90	-5.00		8091.40	15107.59	399.03	Btp3r
3135	300	57						8161.05	14828.24	399.05	end survey 10/7/98
3136	400	1	158.6	0.4	353.60	-5.00		8010.17	15032.07	406.46	Btp3l
3137	400	2	158.7	0.4	353.60	-5.00		8009.59	15031.84	406.46	Btp3l
3138	400	3	157.2	-0.8	329.90	-5.00		8008.99	15057.17	399.38	Btp3m
3139	400	4	157.2	-0.8	329.60	-5.00		8008.87	15057.44	399.39	Btp3m
3140	400	5	157.2	-0.9	329.80	-5.00		8008.95	15057.26	398.81	Btp3m
3141	400	6						7881.15	15361.29	398.99	instr. leveled
3142	400	7	140.2	-0.9	328.50	-5.00		8091.42	15108.91	398.83	Btp3r
3143	400	8	140.1	-0.9	328.70	-5.00		8091.99	15109.12	398.83	Btp3r
3144	400	9	140.2	-0.9	328.70	-5.00		8091.55	15108.75	398.83	Btp3r
3145	400	10	157.1	-0.8	329.80	-5.00		8009.48	15057.48	399.38	Btp3m
3146	400	11	157.1	-0.8	329.80	-5.00		8009.48	15057.48	399.38	Btp3m
3147	400	12	158.7	0.5	353.50	-5.00		8009.56	15031.94	407.07	Btp3l
3148	400	13	158.7	0.5	353.40	-5.00		8009.52	15032.03	407.07	Btp3l
3149	400	14	144.3	-0.9	335.90	-5.00	19911.96	8077.16	15088.51	398.71	ws
3150	400	15	144.3	-0.8	335.80	0.00	19911.96	8077.10	15088.59	394.30	th
3151	400	16	146	-0.8	312.40		19937.25	8055.84	15102.30	394.63	th
3152	400	17	147.8	-0.7	292.10		19959.66	8036.80	15114.12	395.42	th
3153	400	18	149.5	-0.7	272.50		19980.97	8019.45	15126.49	395.66	th
3154	400	19	152.6	-0.7	253.30		20004.86	7997.72	15136.40	395.89	th
3155	400	20	152.6	-0.1	253.40		20004.86	7997.76	15136.32	398.55	ws
3156	400	21	154.8	-0.7	230.30		20029.66	7979.21	15152.91	396.18	th
3157	400	22	158	-0.8	210.30		20053.14	7959.93	15166.30	396.05	th
3158	400	23	160.9	-0.8	189.20		20076.53	7943.06	15182.50	396.35	th
3159	400	24	166.4	-1	162.30		20108.25	7919.31	15203.54	396.16	th
3160	400	25	170.5	-1.2	140.40		20132.67	7904.32	15222.81	396.05	th
3161	400	26	175	-1.6	128.00		20148.93	7892.30	15233.78	395.41	th
3162	400	27	179	-2.3	102.10		20176.03	7882.93	15259.20	394.89	th
3163	400	28	189.3	-2.7	84.90		20200.02	7867.43	15277.50	394.99	th
3164	400	29	201.8	-2.7	67.40		20224.05	7856.12	15298.71	395.81	th
3165	400	30	219.2	-2.6	58.70		20244.97	7844.05	15315.80	396.32	th
3166	400	31	219.3	-0.9	58.50		20244.97	7844.10	15316.02	398.07	ws

Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3167	400	32	240.1	-2.4	58.60		20266.25	7830.35	15332.08	396.53	th
3168	400	33	266.8	-2.1	68.50		20297.14	7812.76	15357.46	396.48	th
3169	400	34	261.9	3.9	98.50			7783.63	15347.41	405.70	lac
3170	400	35	266.7	4.6	101.10			7780.22	15355.47	407.12	lbf
3171	400	36	56	4	100.70			7964.63	15417.60	406.03	rac
3172	400	37	55.9	7.3	117.80			7978.69	15427.33	414.08	rbf
3173	400	38	57.2	8.3	128.60			7989.25	15430.95	417.75	rvw
3174	400	39	286.4	-2.3	61.20		20320.35	7822.44	15378.57	396.53	th
3175	400	40	286.7	-0.8	61.70		20320.35	7822.05	15379.02	398.13	ws
3176	400	41	298.8	-1.7	91.80		20354.97	7800.70	15405.51	396.26	th
3177	400	42	301.7	-2.3	117.60		20381.30	7781.09	15423.08	394.27	th
3178	400	43	308.4	-1.8	131.50		20401.41	7778.09	15442.97	394.86	th
3179	400	44	315.2	-2.1	144.70		20422.44	7779.19	15463.96	393.68	th
3180	400	45	318.5	-1.8	159.20		20439.37	7775.66	15480.52	393.99	th
3181	400	46	323	-1.5	181.10		20465.01	7772.16	15505.92	394.25	th
3182	400	47	325.5	-1.1	197.80		20483.64	7769.11	15524.30	395.19	th
3183	400	48	325.4	-1.6	197.80	-5.00	20483.64	7768.83	15524.10	398.46	ws
3184	400	49	327.2	-0.7	219.80		20506.49	7762.08	15546.04	396.30	th
3185	400	50	328.6	-0.4	247.80		20535.06	7752.04	15572.80	397.26	th
3186	400	51	330.2	-0.6	287.20		20575.16	7738.42	15610.51	395.98	th
3187	400	52	331.6	-0.6	297.20		20587.45	7739.79	15622.72	395.88	th
3188	400	53	333.2	-0.4	311.20		20603.82	7740.84	15639.06	396.82	th
3189	400	54	333.8	-0.5	325.90		20618.90	7737.26	15653.70	396.15	th
3190	400	55	332.9	-0.9	329.20	-5.00		7731.18	15654.35	398.82	Btp4l
3191	400	56	332.9	-0.9	329.00	-5.00		7731.27	15654.17	398.82	Btp4l
3192	400	57	345.4	-1	316.60	-5.00		7801.34	15667.67	398.46	Btp4m
3193	400	58	345.5	-1	316.60	-5.00		7801.88	15667.80	398.46	Btp4m
3194	400	59	359.7	-0.6	322.00	-5.00		7879.46	15683.28	400.62	Btp4r
3195	400	60	359.6	-0.5	322.20	-5.00		7878.90	15683.48	401.18	Btp4r
3196	400	61	359.7	-0.5	322.10	-5.00		7879.46	15683.38	401.18	Btp4r
3197	500	1	135.5	-0.2	320.30	-5.00		7879.18	15683.88	400.89	Btp4r
3198	500	2	135.6	-0.3	320.20	-5.00		7878.71	15683.56	400.33	Btp4r
3199	500	3	149.3	-0.6	285.50	-5.00		7800.44	15666.85	399.02	Btp4m
3200	500	4	148.7	-0.8	285.60	-5.00		7803.05	15668.30	398.02	Btp4m
3201	500	5	148.9	-0.9	285.60	-5.00		7802.20	15667.78	397.52	Btp4m
3202	500	6	163.3	-0.1	269.20	-5.00		7732.04	15654.49	401.54	Btp4l
3203	500	7	163.4	-0.8	269.30	-5.00		7731.61	15654.26	398.25	Btp4l
3204	500	8	163.8	-0.8	269.40	-5.00		7729.84	15653.63	398.25	Btp4l
3205	500	9	162.2	-0.3	163.60		20726.79	7704.69	15756.56	396.15	th
3206	500	10	160.1	-0.3	252.50		20816.00	7740.62	15674.91	395.69	th
3207	500	11	160.7	-0.1	252.60		20816.00	7738.17	15673.93	396.57	ws
3208	500	12	153.8	-0.4	226.80		20852.77	7754.81	15708.83	395.43	th
3209	500	13	148.7	-0.5	192.80		20891.53	7754.84	15747.59	395.33	th rc
3210	500	14	144	-0.6	163.70		20924.08	7750.90	15779.90	395.30	th
3211	500	15	137.8	-1	128.40		20962.70	7740.93	15817.21	394.77	th
3212	500	16	137.7	-0.2	127.90		20962.70	7740.76	15817.73	396.56	ws
3213	500	17	125.9	-1.3	105.30		20996.09	7739.98	15850.59	394.62	th
3214	500	18	112.8	-2	95.60		21020.95	7742.81	15875.29	393.67	th pool
3215	500	19	102.2	-2.7	90.30		21038.91	7742.94	15893.25	392.75	th
3216	500	20	91.9	-3.2	80.90		21056.91	7735.53	15909.65	392.49	th
3217	500	21	74.8	-4	75.20		21080.79	7727.25	15932.05	391.75	th
3218	500	22	67.9	-4.3	74.60			7723.80	15940.40	391.40	th (-5=ws)
3219	500	23	55.8	-1.7	69.30	3.71	21105.34	7711.99	15951.29	391.24	th
3220	500	24	44.2	-2.4	67.00	3.71	21119.30	7701.39	15960.37	390.49	th
3221	500	25	30.6	-4.3	73.90	3.71	21137.34	7692.30	15975.94	387.74	th
3222	500	26	23.2	-3.5	78.10	3.71	21148.01	7685.44	15984.12	388.52	th

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
3223	500	27	25.6	3.7	92.40	-5.00		7694.60	15995.66	407.99	rac, rbf, rvw
3224	500	28	19.7	-3	80.00	3.71	21153.19	7681.65	15987.65	389.11	th
3225	500	29	8.5	-3.4	90.60	3.71	21172.90	7668.07	16001.94	387.92	th
3226	500	30	359.7	-3	104.20	3.71	21193.08	7654.13	16016.53	387.84	th
3227	500	31	347.5	-2.6	118.30	4.21	21220.57	7629.07	16027.83	387.43	th
3228	500	32	341.2	-0.9	138.00	7.50	21244.76	7610.21	16042.97	387.34	th
3229	500	33	338.6	-1.5	155.10	3.71	21263.11	7598.09	16056.74	389.24	th
3230	500	34	337.7	-1.3	167.90	3.71	21276.15	7590.97	16067.68	389.49	th
3231	500	35	335.2	-0.8	182.70	3.71	21292.81	7578.04	16078.18	390.75	th
3232	500	36	333.9	-0.7	196.30	3.71	21307.07	7568.32	16088.62	390.90	th
3233	500	37	333.5	-0.6	211.80	3.71	21322.64	7560.17	16101.88	391.08	th
3234	500	38	331.7	-1.2	219.20	0.00	21332.67	7550.76	16105.33	392.42	th
3235	500	39	331.7	-1.4	218.70	-5.00	21332.67	7550.99	16104.89	396.67	ws
3236	500	40	327	-1.2	241.60	0.00	21361.96	7523.09	16114.96	391.95	th
3237	500	41	326.6	-1.2	252.80	0.20	21373.29	7515.52	16123.38	391.51	th
3238	500	42	323.5	-1	265.00	3.71	21391.86	7497.05	16125.36	388.67	th
3239	500	43	322.9	-0.9	274.20	3.71	21401.48	7489.28	16131.03	388.99	th
3240	500	44	322	-0.6	282.70	3.71	21411.04	7480.63	16135.10	390.34	th
3241	500	45	319.8	-0.7	291.60	3.71	21425.21	7466.46	16135.06	389.74	th
3242	500	46	318.9	-0.6	297.90	3.71	21433.03	7458.85	16136.82	390.18	th
3243	500	47	318.7	-1	297.50	-5.00	21433.03	7458.33	16135.83	396.82	ws
3244	500	48	279.3	3.5	113.50	0.00		7542.67	15930.68	403.95	lac
3245	500	49	274	7.7	117.80			7537.17	15920.55	412.94	lbf
3246	500	50	270.2	10.8	117.90			7536.78	15912.74	419.50	lvw
3247	500	51	319.4	-0.8	302.20	-5.00		7458.01	16141.78	397.79	Btp5r
3248	500	52	319.3	-0.8	302.30	-5.00		7457.55	16141.52	397.79	Btp5r
3249	500	53	306.1	0.3	263.10	0.00		7442.10	16067.35	398.39	Btp5m
3250	500	54	306.2	0.3	263.30	0.00		7442.21	16067.84	398.39	Btp5m
3251	500	55	306	0.3	263.40	0.00		7441.58	16067.16	398.39	Btp5m
3252	500	56	296.1	0.4	260.40	-5.00		7420.83	16026.89	403.83	Btp5l
3253	500	57	296.2	0.4	260.40	-5.00		7421.03	16027.30	403.83	Btp5l
3254	600	1	108.4	0.5	301.80	-5.00		7420.50	16026.09	403.87	Btp5l
3255	600	2	108.4	0.4	301.70	-5.00		7420.40	16026.13	403.34	Btp5l
3256	600	3	100.1	-0.4	312.20	-5.00		7441.49	16066.61	399.06	Btp5m
3257	600	4	99.8	-0.5	312.50	-5.00		7442.07	16068.17	398.51	Btp5m
3258	600	5	99.8	-0.5	312.40	-5.00		7441.97	16068.18	398.51	Btp5m
3259	600	6	86.3	-0.6	325.00	-5.00		7458.45	16142.33	397.83	Btp5r
3260	600	7	86.3	-0.7	325.00	-5.00		7458.45	16142.33	397.27	Btp5r
3261	600	8	87.7	-0.5	324.50	3.71	21435.52	7458.36	16134.38	389.70	th
3262	600	9	87.4	-0.8	302.90	0.00	21457.18	7436.71	16135.10	392.01	th
3263	600	10	85.2	-0.4	283.40	3.71	21479.69	7416.53	16145.07	390.55	th
3264	600	11	84.1	-0.9	268.40	0.00	21495.60	7401.10	16148.95	392.02	th
3265	600	12	84.1	-1	268.40	-5.00	21495.60	7401.10	16148.95	396.55	ws
3266	600	13	84.1	-0.4	236.00	0.00	21528.00	7368.87	16145.62	394.59	th
3267	600	14	86.6	-0.6	198.60		21566.57	7332.38	16133.14	394.16	th
3268	600	15	89.7	-0.8	170.90		21596.01	7305.02	16122.25	393.85	th
3269	600	16	95.7	-0.6	130.90		21638.97	7264.38	16108.36	394.87	th
3270	600	17	101.3	-0.7	107.80		21664.82	7239.84	16100.23	394.92	th
3271	600	18	106.7	-0.8	89.90		21684.98	7220.23	16095.52	394.98	th
3272	600	19	120.9	-1.7	65.10		21716.16	7189.99	16087.93	394.31	th
3273	600	20	140.7	-2.2	45.10		21743.50	7162.69	16086.46	394.51	th
3274	600	21	172.1	6.9	147.90			7154.45	15974.86	414.14	lac
3275	600	22	174.2	7.5	152.60			7149.55	15969.54	416.33	lbf
3276	600	23	167.6	-1.6	51.50		21766.81	7145.18	16071.06	394.80	th rc
3277	600	24	167.4	-0.3	51.60		21766.81	7145.38	16071.00	395.97	ws
3278	600	25	354.3	2.2	158.40			7118.39	16278.97	402.32	rac

Salyer Survey Data - October, 1998												
Record #	Sta	SS	HA	VI	HD	TC	TH or XS	DIST	X	Y	Z	Feature
3279	600	26	350.5	5.5	171.60				7105.80	16290.60	412.76	rbf
3280	600	27	349.3	7.4	179.30				7100.84	16297.54	419.53	rvw
3281	600	28	214.4	-1.9	60.20			21811.89	7100.11	16071.69	394.24	th
3282	600	29	236.3	-2	84.30			21848.13	7063.99	16074.58	393.29	th
3283	600	30	246.5	-1.4	110.30			21879.27	7032.97	16077.38	393.54	th
3284	600	31	252.4	-1.3	136.30				7004.21	16080.14	393.15	thp
3285	600	32	255	-1.4	157.30			21930.16	6982.18	16080.65	392.39	th
3286	600	33	259.5	-1.2	181.00			21957.32	6956.16	16088.37	392.45	th
3287	600	34	261.4	-1.2	205.30			21982.44	6931.13	16090.66	391.94	th
3288	600	35	264.2	-1.1	230.10			22009.42	6905.20	16098.10	391.82	th
3289	600	36	264.9	-1	246.00			22025.58	6889.10	16099.49	391.94	th
3290	600	37	266	-1	259.90			22040.31	6874.86	16103.23	391.70	th
3291	600	38	266.6	-1.1	267.40	0.30		22048.30	6867.20	16105.50	390.80	th
3292	600	39	267.6	-0.9	280.80			22062.53	6853.57	16109.60	391.83	th
3293	600	40	267.8	-0.7	302.20			22083.95	6832.15	16109.76	392.55	th
3294	600	41	267.8	-1	301.10	-5.00		22083.95	6833.25	16109.80	395.98	ws
3295	600	42	265.7	-0.9	279.10	-5.00			6855.81	16100.43	396.85	Btp6l
3296	600	43	265.7	-0.9	279.00	-5.00			6855.91	16100.44	396.86	Btp6l
3297	600	44	278.2	-0.8	272.80	-5.00			6864.11	16160.27	397.43	Btp6m
3298	600	45	278.2	-0.8	272.10	-5.00			6864.81	16160.17	397.44	Btp6m
3299	600	46	278.2	-0.8	272.10	-5.00			6864.81	16160.17	397.44	Btp6m
3300	600	47	299.5	-0.3	304.50	-5.00			6869.10	16271.30	399.64	Btp6r
3301	600	48	299.4	-0.3	304.40	-5.00			6868.93	16270.79	399.64	Btp6r
3302	700	1	87.4	-0.2	424.60	-5.00			6869.29	16271.09	399.98	Btp6r
3303	700	2	87.5	-0.2	424.60	-5.00			6869.33	16270.35	399.98	Btp6r
3304	700	3	102.3	-0.5	428.80	-5.00			6864.09	16160.48	397.72	Btp6m
3305	700	4	102.3	-0.6	429.70	-5.00			6864.97	16160.29	396.96	Btp6m
3306	700	5	102.3	-0.6	428.80	-5.00			6864.09	16160.48	396.97	Btp6m
3307	700	6	109.6	-0.7	405.10	0.00		22092.15	6826.76	16115.94	391.51	th
3308	700	7	109.8	-0.8	402.20	-5.00		22092.15	6823.55	16115.59	395.84	ws
3309	700	8	109.7	-0.8	375.30	0.00		22121.96	6798.46	16125.32	391.22	th
3310	700	9	110.2	-0.7	350.10			22147.36	6773.70	16130.94	392.18	th
3311	700	10	111	-0.8	321.30			22176.54	6745.09	16136.68	391.97	th
3312	700	11	112.7	-1	295.40			22204.00	6717.65	16137.83	391.30	th
3313	700	12	113.4	-1	267.90			22231.72	6691.00	16145.43	391.78	th
3314	700	13	114.3	-0.9	237.20			22262.67	6661.31	16154.22	392.73	th
3315	700	14	116	-1.1	213.40			22287.39	6636.93	16158.28	392.36	th
3316	700	15	118.5	-1.3	181.70			22320.23	6604.81	16165.13	392.34	th
3317	700	16	121	-1.4	153.50			22349.36	6576.70	16172.77	392.71	th
3318	700	17	124.2	-1.5	133.70			22370.71	6555.71	16176.68	392.96	th
3319	700	18	124	-2.4	133.80	-5.00		22370.71	6556.05	16177.01	395.85	ws
3320	700	19	130.6	-1.7	110.50			22397.59	6529.03	16179.92	393.18	th
3321	700	20	138.2	-1.7	95.30			22417.99	6508.65	16180.78	393.63	th
3322	700	21	149.6	-1.5	87.30			22437.79	6489.31	16176.53	394.17	th
3323	700	22	166.4	-1.5	82.50			22463.05	6464.53	16171.64	394.30	th
3324	700	23	183.8	-1	85.50			22488.63	6439.46	16166.52	394.97	th
3325	700	24	194.3	-1	99.70			22510.70	6420.50	16155.22	394.72	th
3326	700	25	200.5	-0.9	115.30			22530.14	6404.75	16143.83	394.65	th
3327	700	26							6445.13	16251.83	396.46	begin xs#4
3328	700	27	338.6	19.6	198.40			402.24	6372.74	16436.55	467.11	gs
3329	700	28	338.4	19.5	197.80			401.32	6372.31	16435.74	466.50	gs
3330	700	29	338.4	19.6	197.40				6372.46	16435.37	466.75	xs4 p4
3331	700	30	338.2	19.5	198.10				6371.56	16435.76	466.61	xs4 p4
3332	700	31	338.1	19.5	197.50				6371.46	16435.08	466.40	xs4 p4
3333	700	32	338.4	19.5	197.80			401.32	6372.31	16435.74	466.50	xs4 p4
3334	700	33	338.3	19.4	197.40			400.79	6372.14	16435.24	465.97	gs

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3335	700	34	338	19	195.60		398.72	6371.86	16433.19	463.81	gs
3336	700	35	337.9	18.8	194.30		397.38	6372.03	16431.85	462.60	gs
3337	700	36	337.3	18.6	191.80		394.16	6371.11	16428.77	461.01	gs
3338	700	37	337.5	18.2	190.70		392.87	6372.15	16428.01	459.16	gs
3339	700	38	337	18.2	190.70		391.21	6370.62	16427.37	459.16	gs
3340	700	39	336.5	17.9	188.30		388.30	6370.05	16424.51	457.28	gs
3341	700	40	336.7	17.8	186.70		386.57	6371.28	16423.30	456.40	gs
3342	700	41	335.4	16.1	180.60		379.18	6369.95	16416.04	448.59	gs
3343	700	42	334.1	9.6	153.90		352.21	6377.91	16390.27	422.49	gs
3344	700	43	334.1	9.3	153.40		351.71	6378.12	16389.82	421.58	gs
3345	700	44	334.1	9.4	153.10		351.41	6378.26	16389.55	421.80	xs4 p3
3346	700	45	334.2	9.4	153.30			6378.41	16389.85	421.84	xs4 p3
3347	700	46	334	9.3	153.00			6378.06	16389.34	421.51	xs4 p3
3348	700	47	334.1	9.3	153.00		351.31	6378.30	16389.46	421.51	gs
3349	700	48	334	8.8	151.40		349.69	6378.76	16387.91	419.90	gs
3350	700	49	333.2	7	145.40		343.34	6379.57	16381.61	414.31	gs
3351	700	50	331.1	5.6	139.50		335.47	6377.71	16373.96	410.14	rbf
3352	700	51	331.7	4.5	136.20		331.87	6380.56	16371.75	407.18	gs
3353	700	52	330.7	3.7	132.90		327.81	6380.09	16367.73	405.05	gs
3354	700	53	329.2	2.7	129.40		322.91	6378.87	16362.98	402.56	gs
3355	700	54	328.2	1.9	125.80		318.68	6378.84	16358.75	400.63	gs
3356	700	55	371.1	1.1	120.80			6468.39	16370.37	398.78	rac
3357	700	56	326.6	0.8	116.40		308.69	6381.05	16349.00	398.08	gs
3358	700	57	325.4	0.9	111.30		303.06	6381.93	16343.44	398.21	gs
3359	700	58	324.4	1	107.60		298.90	6382.49	16339.32	398.34	gs
3360	700	59	322.8	1.5	103.10		293.52	6382.80	16333.95	399.16	gs
3361	700	60	321.6	1.9	99.40		289.26	6383.39	16329.73	399.76	gs
3362	700	61	319.5	1.9	93.90		282.72	6384.15	16323.23	399.57	gs
3363	700	62	316.9	1.8	87.10		274.77	6385.62	16315.43	399.20	gs
3364	700	63	314.7	1.4	83.10		269.61	6386.06	16310.28	398.49	gs
3365	700	64	312.2	1.2	79.60		264.62	6386.16	16305.30	398.13	gs
3366	700	65	307.8	0.9	73.80		256.36	6386.82	16297.06	397.62	gs
3367	700	66	303.7	0.9	69.50		249.67	6387.31	16290.39	397.55	gs
3368	700	67	299	0.7	65.70		242.95	6387.67	16283.68	397.26	gs
3369	700	68	295.7	0.7	64.20		238.92	6387.28	16279.67	397.24	gs
3370	700	69	291.6	0.8	62.20		233.98	6387.30	16274.73	397.33	gs
3371	700	70	285.6	0.5	60.40		227.32	6386.95	16268.07	396.99	gs
3372	700	71	277.5	0.3	58.50		218.71	6387.13	16259.46	396.76	gs
3373	700	72	270.3	0	57.30		211.34	6387.83	16252.13	396.46	gs
3374	700	73	262.5	-0.4	57.40		203.54	6388.22	16244.34	396.06	gs
3375	700	74	258.6	-0.6	57.70		199.61	6388.57	16240.42	395.85	rew
3376	700	75	255.5	-0.8	58.40		196.39	6388.59	16237.21	395.64	rew
3377	700	76	250.1	-1.2	58.80		190.86	6389.84	16231.81	395.23	gs
3378	700	77	247.9	-1.3	59.80		188.37	6389.72	16229.33	395.10	gs
3379	700	78	245.1	-1.3	60.50		185.35	6390.25	16226.36	395.09	gs
3380	700	79	242.1	-1.5	61.80		181.89	6390.51	16222.91	394.84	gs
3381	700	80	238.1	-1.6	64.90		176.49	6390.03	16217.53	394.65	gs
3382	700	81	235.3	-1.7	68.90		171.33	6388.48	16212.61	394.41	gs
3383	700	82	232.8	-1.7	72.40		166.67	6387.46	16208.06	394.31	gs
3384	700	83	230.7	-2.1	75.20		162.77	6386.94	16204.20	393.70	gs
3385	700	84	229.5	-2.1	76.60		160.66	6386.88	16202.08	393.65	gs
3386	700	85	227	-1.9	80.00		155.84	6386.62	16197.27	393.80	gs
3387	700	86	224.9	-1.6	83.40		151.31	6386.26	16192.75	394.13	gs
3388	700	87	222.6	-1.4	86.20		146.90	6386.78	16188.38	394.35	gs
3389	700	88	220.6	-1.2	89.10		142.68	6387.15	16184.18	394.59	gs
3390	700	89	218.6	-1.1	93.30		137.41	6386.92	16178.91	394.67	gs



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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3391	700	90	216.5	-1	98.50		131.14	6386.54	16172.65	394.74	gs
3392	700	91	214.7	-1	102.70		125.88	6386.66	16167.39	394.67	gs
3393	700	92	212.9	-0.9	105.90		121.30	6387.61	16162.91	394.79	gs
3394	700	93	210.6	-0.8	110.10		115.27	6389.08	16157.06	394.92	gs
3395	700	94	209	-1	116.10		108.49	6388.84	16150.29	394.43	gs
3396	700	95	207.6	-1	122.80		101.18	6388.24	16143.00	394.31	gs
3397	700	96	206.6	-1.1	126.90		96.54	6388.31	16138.36	394.02	gs
3398	700	97	205.7	-1.2	129.70		93.09	6388.88	16134.96	393.74	gs bdr
3399	700	98	204.8	-1.2	133.40		88.85	6389.17	16130.73	393.66	gs bdr
3400	700	99	204.5	-0.2	134.50		87.54	6389.35	16129.44	395.99	lew
3401	700	100	203.4	0.1	137.00		83.93	6390.72	16126.10	396.70	lac bdr
3402	700	101	202.7	0.7	140.90		79.68	6390.76	16121.84	398.18	bdr
3403	700	102	201.9	1.6	142.90		76.87	6391.83	16119.24	400.45	bdr
3404	700	103	200.9	2.2	144.30		73.99	6393.65	16117.02	402.00	lbf
3405	700	104	199.3	4.7	148.60		68.06	6396.02	16111.58	408.68	bdr
3406	700	105	198.4	5.5	151.20		64.55	6397.40	16108.36	411.02	bdr
3407	700	106	198	4.9	153.00	-5.00		6397.85	16106.32	414.58	xs4 p2
3408	700	107	197.9	5	153.20	-5.00	62.15	6398.04	16106.04	414.86	xs4 p2
3409	700	108	197.9	4.9	153.10	-5.00		6398.07	16106.14	414.58	xs4p2
3410	700	109	198.4	6.4	152.70	0.00	60.73	6396.93	16106.94	413.59	bdr
3411	700	110	197.9	4.8	153.00	-5.00	59.36	6398.10	16106.23	414.31	bdr
3412	700	111	198.1	6.7	152.80		58.79	6397.66	16106.59	414.41	bdr
3413	700	112	198.5	7.3	152.70		57.72	6396.68	16107.02	416.02	bdr
3414	700	113	198.1	7.6	153.00		56.61	6397.60	16106.40	416.87	bdr
3415	700	114	197.6	7.6	154.40		54.67	6398.44	16104.66	417.06	bdr
3416	700	115	197.6	8.3	155.10		53.97	6398.23	16103.99	419.09	bdr
3417	700	116	199.4	8.5	156.00	-5.00		6393.31	16104.69	424.77	bt 4.1
3418	700	117	199.1	8.4	156.70	-5.00	49.59	6393.85	16103.76	424.60	bt 4.1
3419	700	118	197.1	9.6	158.10		43.92	6398.64	16100.72	423.20	gs
3420	700	119	196.7	10.5	161.30		40.53	6398.78	16097.33	426.35	gs
3421	700	120	196.5	10.9	163.80		37.97	6398.61	16094.77	428.00	gs
3422	700	121	196.3	11.2	165.10		36.54	6398.79	16093.36	429.15	gs
3423	700	122	196.2	9.8	165.30	-5.00	36.19	6399.01	16093.09	430.01	xs4 p1
3424	700	123	196.4	9.7	165.40	-5.00		6398.43	16093.16	429.73	xs4 p1
3425	700	124	196.2	11.2	165.30		36.19	6399.01	16093.09	429.19	gs
3426	700	125	196.4	11.8	168.10		33.33	6397.67	16090.57	431.58	gs
3427	700	126	194.6	14.1	188.50		12.18	6397.61	16069.42	443.81	gs
3428	700	127	193.6	14.7	200.20		0.00	6398.05	16057.24	448.98	gs
3429	700	128	207.6	-1.1	122.20		22546.38	6388.51	16143.53	394.11	th
3430	700	129	217.1	-1.1	140.70		22574.91	6360.26	16139.61	393.76	th
3431	700	130	222.2	-1	157.60		22596.38	6339.27	16135.08	393.71	th
3432	700	131	227.8	-1	179.60		22623.85	6312.08	16131.19	393.32	th
3433	700	132	231.4	-0.8	201.70		22648.97	6287.50	16125.99	393.64	th
3434	700	133	235.6	-0.9	230.80		22682.09	6254.69	16121.43	392.83	th
3435	700	134	235.7	-1.5	231.20	-5.00	22682.09	6254.14	16121.54	395.40	ws
3436	700	135	240.2	-0.8	259.90		22717.21	6219.60	16122.67	392.83	th
3437	700	136	242.3	-0.8	284.90		22744.13	6192.88	16119.40	392.48	th
3438	700	137	243.6	-0.8	305.30		22765.59	6171.67	16116.08	392.20	th
3439	700	138	251.1	-1	296.10	-5.00		6164.99	16155.92	396.29	Btp7l
3440	700	139	251.1	-1	296.10	-5.00		6164.99	16155.92	396.29	Btp7l
3441	700	140	260.3	-0.7	288.40	-5.00		6160.85	16203.24	397.93	Btp7m
3442	700	141	260.3	-0.8	288.30	-5.00		6160.95	16203.25	397.43	Btp7m
3443	700	142	271.4	-0.8	294.10	-5.00		6151.12	16259.01	397.35	Btp7r
3444	700	143	269.1	-0.8	294.60	-5.00		6150.57	16247.20	397.34	Btp7r
3445	700	144	271.4	-0.8	294.00	-5.00		6151.22	16259.01	397.35	Btp7r
3446	800	1	77.8	-0.7	361.30	-5.00		6150.75	16257.68	397.68	Btp7r

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3447	800	2	77.8	-0.8	361.00	-5.00		6150.45	16257.62	397.06	Btp7r
3448	800	3	86.7	-0.7	363.80	-5.00		6160.80	16202.27	397.65	Btp7m
3449	800	4	86.8	-0.7	363.80	-5.00		6160.84	16201.64	397.65	Btp7m
3450	800	5	94.1	-0.9	368.80	-5.00		6165.46	16154.96	396.30	Btp7l
3451	800	6	94.2	-0.9	368.80	-5.00		6165.42	16154.32	396.30	Btp7l
3452	800	7	100	-0.7	369.00		22776.33	6161.00	16117.25	392.59	th
3453	800	8	100	-1	369.10	-5.00	22776.33	6161.10	16117.23	395.65	ws
3454	800	9	100.9	-0.7	340.20		22805.66	6131.67	16117.00	392.94	th
3455	800	10	102.1	-0.8	314.70		22832.06	6105.32	16115.36	392.70	th
3456	800	11	104.1	-0.9	295.10		22854.36	6083.82	16109.44	392.46	th
3457	800	12	105.1	-1.2	286.60		22864.26	6074.31	16106.67	391.09	th
3458	800	13	105.5	-1.2	273.70		22877.31	6061.35	16108.18	391.36	th
3459	800	14	105	-1	254.60		22896.55	6043.53	16115.43	392.65	th
3460	800	15	105	-1.5	254.40	-5.00	22896.55	6043.34	16115.48	395.43	ws
3461	800	16	105.5	-1.6	231.70		22919.55	6020.88	16119.41	390.62	th rc
3462	800	17	105.5	-1.8	231.50	-5.00	22919.55	6020.69	16119.46	394.82	ws
3463	800	18	105	-1.4	199.60		22951.70	5990.41	16129.67	392.22	th
3464	800	19	105.8	-1.7	169.60		22981.81	5960.80	16135.15	392.06	th
3465	800	20	111.2	-1.9	143.20		23012.02	5931.12	16129.54	392.35	th
3466	800	21	118.6	-2.2	118.20		23042.14	5901.38	16124.75	392.56	th
3467	800	22	123.7	-2.9	97.80		23064.67	5878.97	16127.06	392.14	th
3468	800	23	134.4	-3.6	83.00		23087.06	5856.91	16123.26	391.87	th
3469	800	24	145.6	-3.6	78.40		23103.46	5841.90	16116.64	392.16	th
3470	800	25	145.6	-5.3	78.50	-5.00	23103.46	5841.96	16116.56	394.81	ws
3471	800	26	156.6	1.3	171.30			5865.64	16024.12	400.98	lac
3472	800	27	157.3	3.3	180.20			5867.15	16015.09	407.49	lbf
3473	800	28	157.8	5.7	184.80			5867.43	16010.23	415.54	lvw
3474	800	29	42.4	5.8	116.90			5876.43	16267.65	408.97	rac
3475	800	30	37.3	13	127.00	11.44		5874.57	16282.35	414.98	rbf
3476	800	31	31.3	11.7	130.00	0.00		5865.14	16292.41	424.02	rvw
3477	800	32	186.5	-1.6	133.10		23193.39	5782.54	16049.08	393.38	th
3478	800	33	194.5	-1.6	148.90		23218.60	5760.33	16037.17	392.94	th
3479	800	34	199.1	-2	169.20		23242.56	5742.24	16021.44	391.19	th
3480	800	35	203.2	-2.4	173.20		23255.45	5729.38	16022.13	389.84	th
3481	800	36	203.2	-2.4	173.20	-5.00	23255.45	5729.38	16022.13	394.84	ws
3482	800	37	206.6	-1.6	175.00	3.71	23265.93	5719.25	16024.85	388.50	th
3483	800	38	209.6	-1.6	178.20	3.71	23275.72	5709.59	16026.38	388.41	th
3484	800	39	212.8	-1.1	181.50	3.71	23286.29	5699.29	16028.76	389.90	th
3485	800	40	219.1	-0.7	202.00	3.71	23315.67	5670.21	16024.57	390.92	th
3486	800	41	223.9	-0.6	219.30	3.71	23340.36	5645.54	16023.31	391.09	th
3487	800	42	226.2	-0.2	244.60	7.50	23367.32	5621.06	16012.03	388.74	th
3488	800	43	227.3	-0.4	254.40	7.50	23378.23	5610.64	16008.80	387.82	th
3489	800	44	229.5	-0.6	258.50	7.50	23388.89	5601.04	16013.44	386.89	th
3490	800	45	231.4	-0.3	260.30	7.50	23397.68	5594.18	16018.93	388.23	th
3491	800	46	232.5	-0.2	265.90	7.50	23405.22	5586.65	16019.46	388.67	th
3492	800	47	233.6	-0.1	277.20	7.50	23417.66	5574.49	16016.83	389.11	th
3493	800	48	234.8	0	292.80	7.50	23434.37	5558.35	16012.55	389.60	th
3494	800	49	236.1	-1.4	292.70	0.00	23441.01	5554.66	16018.08	389.94	th
3495	800	50	231.8	0	276.40	-5.00		5580.40	16010.40	402.10	Btp8l
3496	800	51	231.7	0	276.40	-5.00		5580.69	16010.02	402.10	Btp8l
3497	800	52	246.1	-0.6	253.40	-5.00		5565.94	16078.66	399.44	Btp8m
3498	800	53	246.2	-0.7	253.30	-5.00		5565.85	16079.11	399.00	Btp8m
3499	800	54	264.4	0.7	277.00	0.00		5521.93	16154.30	400.48	Btp8r
3500	800	55	264.4	0.7	276.90	0.00		5522.03	16154.31	400.48	Btp8r
3501	900	1	50.8	0.9	425.00	0.00		5520.87	16155.49	400.53	Btp8r
3502	900	2	51	0.9	424.30	0.00		5521.26	16153.90	400.52	Btp8r

Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3503	900	3	62.7	0.1	420.80	-5.00		5565.44	16079.88	399.58	Btp8m
3504	900	4	63.1	0	420.70	-5.00		5566.69	16077.22	398.85	Btp8m
3505	900	5	72.5	0.5	408.80	-5.00		5581.39	16009.81	402.42	Btp8l
3506	900	6	72.4	0.4	408.80	-5.00		5581.18	16010.49	401.70	Btp8l
3507	900	7	71.4	-0.5	382.50	0.00	23450.22	5554.04	16008.88	390.51	th
3508	900	8	71.6	-0.6	382.00	0.00	23451.65	5553.98	16007.46	389.85	th
3509	900	9	71.5	-0.7	382.00	-5.00	23451.65	5553.77	16008.09	394.18	ws
3510	900	10	71.8	-0.3	362.00	0.00	23471.69	5535.40	15999.95	391.95	th
3511	900	11	72.7	-0.1	338.90	0.00	23495.44	5515.08	15987.66	393.26	th
3512	900	12	72.7	-0.7	338.60	-5.00	23495.44	5514.80	15987.57	394.71	ws
3513	900	13	73.7	-0.1	316.20	0.00	23518.84	5495.00	15975.63	393.30	th
3514	900	14	73.9	-0.2	299.50	0.00	23535.58	5479.27	15969.94	392.80	th rc
3515	900	15	75.7	-0.8	298.90	-5.00	23535.58	5481.15	15960.71	394.68	ws
3516	900	16	72.6	-0.2	272.00	0.00	23563.83	5451.07	15968.22	392.90	th
3517	900	17	68	-0.4	219.80	0.00	23619.60	5395.31	15969.22	392.32	th
3518	900	18	63.3	-0.4	193.20	0.00	23651.11	5364.11	15973.69	392.50	th
3519	900	19	59.8	-0.5	172.60	0.00	23674.54	5340.69	15973.70	392.34	th
3520	900	20	59.7	-1.6	172.50	-5.00	23674.54	5340.45	15973.91	394.03	ws
3521	900	21	54.5	-0.5	155.10	0.00	23697.67	5317.78	15976.95	392.50	th
3522	900	22	50.8	-0.4	153.20	0.00	23707.80	5310.24	15983.71	392.78	th
3523	900	23	42.7	-0.6	152.90	0.00	23729.43	5295.20	15999.25	392.25	th
3524	900	24	42.9	-2.1	153.20	-5.00	23729.43	5295.80	15999.11	393.23	ws
3525	900	25	36.4	-1.2	151.40	0.00	23746.21	5281.36	16008.74	390.68	th pool
3526	900	26	36.3	-2.5	151.30	-5.00	23746.21	5281.09	16008.82	392.24	ws
3527	900	27	27.9	-1.7	145.70	0.00	23768.95	5259.69	16015.65	389.53	th
3528	900	28	21.3	-1.8	136.00		23787.84	5240.92	16013.59	389.58	th
3529	900	29	14.7	-1.9	122.20		23808.11	5222.52	16005.08	389.80	th
3530	900	30	9.6	-2.5	108.20		23825.45	5209.56	15993.57	389.13	th
3531	900	31	359.4	-2.8	90.90		23850.15	5190.56	15977.78	389.40	th
3532	900	32	347.4	-3.2	89.90		23869.07	5171.90	15974.62	388.82	th
3533	900	33	347.2	-4.3	89.90	-5.00	23869.07	5171.60	15974.55	392.09	ws
3534	900	34	339.2	0.9	133.10			5144.25	16011.31	395.94	rac
3535	900	35	338.7	3.2	149.10			5137.35	16025.80	402.19	rbf
3536	900	36	337.7	8	177.00			5124.35	16050.64	418.73	rvw
3537	900	37	150.3	4.8	77.60			5229.96	15819.48	400.37	lac
3538	900	38	148	7.7	84.80			5236.45	15814.97	405.32	lbf
3539	900	39	150.3	10.3	120.30			5251.12	15782.38	415.71	lvw
3540	900	40	332.2	-3.4	83.70		23892.84	5152.48	15960.92	388.88	th
3541	900	41	307.6	-3.2	93.80		23931.92	5117.20	15944.11	388.61	th
3542	900	42	297.8	-3	106.70		23953.33	5097.13	15936.64	388.26	th
3543	900	43	288.6	-2.6	123.10		23977.97	5074.84	15926.14	388.26	th
3544	900	44	281.5	-2.6	137.70		23999.72	5056.58	15914.33	387.60	th
3545	900	45	276.4	-2.6	150.20		24017.61	5042.25	15903.62	387.03	th
3546	900	46	276.4	-2.6	150.20	-5.00	24017.61	5042.25	15903.62	392.03	ws
3547	900	47	273.2	-1.6	162.10	3.71	24032.36	5029.67	15895.93	385.61	th
3548	900	48	270.9	-1.3	171.70	3.71	24044.06	5019.84	15889.58	386.24	th
3549	900	49	268.6	-1.3	186.20	3.71	24060.24	5005.37	15882.33	385.91	th
3550	900	50	266.8	-1.2	199.90	3.71	24075.22	4991.93	15875.72	385.95	th
3551	900	51	264.9	-0.9	217.90	3.71	24094.51	4974.48	15867.51	386.72	th
3552	900	52	262.7	-0.9	226.20	3.71	24106.40	4967.15	15858.14	386.59	th
3553	900	53	262	-0.9	233.70	3.71	24114.41	4960.09	15854.36	386.47	th
3554	900	54	260.9	-0.9	246.60	3.71	24128.11	4948.02	15847.88	386.27	th
3555	900	55	259.7	-1.4	266.80	0.00	24149.01	4929.01	15839.18	387.33	th
3556	900	56	258.4	-1.2	279.10	0.00	24162.78	4918.11	15830.76	388.00	th
3557	900	57	258.2	-1.3	289.30	0.00	24173.03	4908.33	15827.72	387.28	th
3558	900	58	258.5	-1.3	289.20	-5.00	24173.03	4908.12	15829.22	392.29	ws

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3559	900	59	259.1	-0.7	289.40	0.00		4907.34	15832.16	390.31	Btp9r
3560	900	60	258.9	-0.7	289.70	0.00		4907.23	15831.11	390.31	Btp9r
3561	900	61	236.6	-1	274.30	-5.00		4962.52	15735.88	394.06	Btp9m
3562	900	62	236.9	-0.9	274.40	-5.00		4961.64	15737.03	394.54	Btp9m
3563	900	63	223.5	-0.2	286.40	-5.00		4994.37	15679.13	397.85	Btp9l
3564	900	64	223.4	-0.3	286.50	-5.00		4994.66	15678.72	397.35	Btp9l
3565	900	65	137	13.6	224.10	0.00		5344.35	15722.98	448.07	Btpa
3566	900	66	137.2	13.7	224.30	0.00		5343.91	15722.31	448.53	Btpa
3567	900	67	136.9	13.6	223.90	0.00		5344.50	15723.40	448.02	Btpa
3568	900	68	128.5	13.7	215.00	0.00		5359.77	15753.04	446.26	Btpb
3569	900	69	128.7	13.7	215.00	0.00		5359.31	15752.45	446.26	Btpb
3570	900	70	134.9	13.4	251.10	0.00		5369.38	15709.64	453.67	Btpc
3571	900	71	134.5	13.4	251.40	0.00		5370.83	15710.67	453.74	Btpc
3572	900	72	134.6	13.4	251.20	0.00		5370.37	15710.50	453.69	Btpc
3573	9A	1	288.3	-12	247.80	0.00		5344.18	15722.37	448.39	Btpa
3574	9A	2	288.1	-12.1	247.70	0.00		5344.00	15721.52	447.96	Btpa
3575	9A	3	288.3	-12	247.70	0.00		5344.27	15722.34	448.41	Btpa
3576	9A	4	295.5	-12.6	244.80	0.00		5358.49	15749.96	446.34	Btpb
3577	9A	5	295.6	-12.6	244.90	0.00		5358.59	15750.39	446.32	Btpb
3578	9A	6	287.1	-12.2	219.30	0.00		5369.84	15709.05	453.65	Btpc
3579	9A	7	287.9	-12.2	219.40	0.00		5370.67	15712.00	453.63	Btpc
3580	9A	8	287.6	-12.2	219.40	0.00		5370.32	15710.91	453.63	Btpc
3581	9A	9	289.2	-12.2	219.40	0.00		5372.25	15716.72	453.63	Btpc
3582	9A	10	246	-3.8	64.60	-5.00		5520.43	15618.29	501.77	BBM aluminium cap
3583	9A	11	244.5	-3.7	64.70	-5.00		5521.05	15616.71	501.88	BBM aluminium cap
3584	9A	12	244.4	-3.8	64.70	-5.00		5521.10	15616.61	501.76	BBM aluminium cap
3584	9A	12	244.4	-3.8	64.70	-5.00		5521.10	15616.61	501.76	BBM aluminium cap
3586	1000	1	78.8	0.4	412.60	-5.00		4995.73	15680.48	399.10	Btp9l
3587	1000	2	78.9	0.5	412.70	-5.00		4995.97	15679.79	399.82	Btp9l
3588	1000	3	69.9	-0.4	396.00	-5.00		4962.87	15736.42	393.46	Btp9m
3589	1000	4	69.9	-0.4	395.50	-5.00		4962.40	15736.25	393.46	Btp9m
3590	1000	5	53.9	-0.2	390.60	0.00		4906.59	15830.48	389.86	Btp9r
3591	1000	6	53.8	-0.3	390.30			4905.95	15830.85	389.18	Btp9r
3592	1000	7	53.7	-0.2	390.30			4905.54	15831.40	389.86	Btp9r
3593	1000	8	54.4	-0.6	378.20		24185.23	4898.50	15820.49	387.26	th
3594	1000	9	54.5	-0.4	356.10		24207.34	4880.89	15807.12	388.74	th
3595	1000	10	54.4	-0.8	356.10	-5.00	24207.34	4880.53	15807.63	391.25	ws
3596	1000	11	55.3	-0.4	326.30		24237.52	4859.25	15786.09	388.94	th
3597	1000	12	56.7	-0.4	309.80		24255.75	4849.92	15770.42	389.06	th
3598	1000	13	56.7	-0.5	287.70		24277.85	4831.45	15758.29	388.71	th
3599	1000	14	57.4	-0.5	269.90		24295.98	4818.37	15745.75	388.87	th
3600	1000	15	58.3	-0.9	258.10		24308.48	4810.58	15735.96	387.17	th
3601	1000	16	58.5	-0.5	243.50		24323.11	4798.61	15727.56	389.10	th
3602	1000	17	59.4	-0.4	225.60		24341.38	4785.17	15715.17	389.65	th
3603	1000	18	62	-0.4	198.70		24369.95	4766.43	15693.62	389.83	th
3604	1000	19	47.7	1.6	160.50	-5.00		4709.70	15708.35	400.70	rac
3605	1000	20	68.9	-0.5	144.10		24428.22	4725.43	15652.21	389.96	th
3606	1000	21	77.6	-0.6	138.40		24450.39	4726.16	15630.05	389.77	th
3607	1000	22	87.9	-0.8	133.40		24475.29	4724.30	15605.22	389.36	th
3608	1000	23	96.4	-1.3	134.40		24495.16	4724.55	15585.35	388.17	th
3609	1000	24	99.9	-1.9	133.70		24503.38	4722.70	15577.35	386.79	th
3610	1000	25	102.4	1.9	165.00	0.00		4752.14	15564.90	396.70	lac
3611	1000	26	107.5	4.7	168.40	0.00		4751.59	15549.70	405.07	lbf
3612	1000	27	101.5	-0.9	137.10	3.71	24508.46	4725.34	15573.00	385.36	th
3613	1000	28	106.7	-0.8	126.10	3.71	24524.69	4711.77	15564.10	385.75	th
3614	1000	29	114.5	-1	108.80	3.71	24548.21	4689.99	15555.22	385.61	th

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
3615	1000	30	123.9	-1.8	96.20	3.71	24569.18	4670.84	15546.68	384.49	th
3616	1000	31	125	-2.9	97.00	-5.00	24569.18	4670.45	15544.70	391.31	ws
3617	1000	32	132.4	-2.7	87.40	3.71	24585.37	4655.53	15541.40	383.39	th
3618	1000	33	145.8	-1.8	77.60	3.71	24606.94	4634.61	15536.15	385.07	th
3619	1000	34	162.6	-3.3	82.70	0.00	24630.90	4615.72	15521.42	386.45	th
3620	1000	35	167	3	106.50	0.00		4614.95	15496.56	396.80	lac
3621	1000	36	166	5.8	118.20	0.00		4619.58	15485.65	403.23	lbf
3622	1000	37	178.1	-3.4	78.50	0.00	24653.03	4593.59	15521.88	386.56	th
3623	1000	38	192.9	-1	90.40	3.71	24677.78	4570.81	15512.22	385.93	th
3624	1000	39	201.7	-2.6	102.90	3.71	24697.15	4552.94	15504.73	382.84	th
3625	1000	40	210.8	-1.4	110.10	3.71	24715.51	4534.61	15505.76	384.82	th
3626	1000	41	319.1	3.6	75.10	0.00		4541.82	15657.10	395.95	rac
3627	1000	42	219.3	-2	134.00	0.00	24745.43	4506.12	15496.64	386.54	th
3628	1000	43	219.3	-2	134.00	-5.00	24745.43	4506.12	15496.64	391.54	ws
3629	1000	44	321.6	6.2	100.20	0.00		4528.75	15678.86	402.11	rbf
3630	1000	45	222.9	-1.6	150.20		24763.92	4488.74	15490.31	387.03	th
3631	1000	46	227.1	-1.3	174.20		24790.69	4463.38	15481.75	387.27	th
3632	1000	47	317.2	8.2	113.00			4514.21	15683.25	407.51	rvw
3633	1000	48	230.5	-1.4	200.90		24819.61	4435.97	15472.55	386.31	th
3634	1000	49	232.6	-1.2	213.80		24834.58	4421.14	15470.48	386.74	th
3635	1000	50	234.8	-0.9	236.10		24858.49	4398.06	15464.24	387.51	th
3636	1000	51	235.7	-0.8	256.80		24879.54	4378.85	15455.62	387.64	th
3637	1000	52	237.7	-0.7	276.90		24901.69	4356.94	15452.37	387.84	th
3638	1000	53	238.5	-0.6	296.40		24921.60	4338.27	15445.47	388.12	th
3639	1000	54	233.6	-0.9	277.30	-5.00		4367.79	15435.78	391.87	Btp10l
3640	1000	55	233.5	-0.9	277.30	-5.00		4368.08	15435.39	391.87	Btp10l
3641	1000	56	258.9	-0.7	267.80	-5.00		4328.20	15548.78	392.95	Btp10m
3642	1000	57	259	-0.7	267.70	-5.00		4328.21	15549.26	392.95	Btp10m
3643	1000	58	268.9	-0.1	272.90	-5.00		4318.14	15595.10	395.75	Btp10r
3644	1000	59	269	-0.1	272.60	-5.00		4318.43	15595.58	395.75	Btp10r
3645	1000	60	269	0	272.90	-5.00		4318.13	15595.57	396.22	Btp10r
3646	1100	1	67.1	-0.1	319.60	-5.00		4318.08	15597.18	395.67	Btp10r
3647	1100	2	67.1	-0.1	319.50	-5.00		4317.99	15597.14	395.67	Btp10r
3648	1100	3	75.8	-0.6	313.90	-5.00		4327.98	15549.82	392.94	Btp10m
3649	1100	4	75.9	-0.4	313.90	-5.00		4328.11	15549.29	394.03	Btp10m
3650	1100	5	96.3	-0.8	346.70	-5.00		4368.27	15434.77	391.38	Btp10l
3651	1100	6	96.3	-0.6	346.60	-5.00		4368.17	15434.78	392.59	Btp10l
3652	1100	7	96.2	-0.8	346.40	-5.00		4368.04	15435.41	391.39	Btp10l
3653	1100	8	96.2	-0.7	346.50	-5.00		4368.14	15435.40	391.99	Btp10l
3654	1100	9	96.6	-0.8	346.40	-5.00		4367.77	15433.00	391.39	Btp10l
3655	1100	10	95.5	-0.6	307.10	0.00	24930.75	4329.35	15443.38	388.01	th
3656	1100	11	96.8	-1.1	292.60	-5.00	24930.75	4314.21	15438.17	390.61	ws
3657	1100	12	98.7	-0.6	277.00		24964.98	4297.48	15430.92	388.32	th
3658	1100	13	101.6	-0.6	254.70		24991.02	4273.16	15421.60	388.56	th
3659	1100	14	106.5	-0.7	224.60		25027.40	4239.02	15409.03	388.48	th
3660	1100	15	111.1	-0.8	202.80		25055.13	4212.87	15399.81	388.39	th
3661	1100	16	118.1	-0.9	182.10		25086.42	4184.30	15387.05	388.36	th
3662	1100	17	122.5	-1.4	176.20		25101.38	4172.27	15378.14	386.92	th
3663	1100	18	127.4	-0.9	167.00	3.71	25118.70	4156.33	15371.39	384.89	th
3664	1100	19	130.9	-0.6	159.30	3.71	25131.29	4144.07	15368.52	385.85	th
3665	1100	20	135.4	-1.8	148.50	0.00	25147.49	4127.94	15367.08	386.56	th
3666	1100	21	132.3	-1.8	139.70		25159.24	4126.99	15378.80	386.83	th
3667	1100	22	146	-1.8	135.30	0.00	25192.33	4099.33	15360.65	386.97	th
3668	1100	23	148	1.4	141.50	-5.00		4098.65	15352.82	399.68	lbf
3669	1100	24	148	1.4	141.50			4098.65	15352.82	394.68	lac
3670	1100	25	6	-0.3	71.80			4031.17	15544.22	390.85	rac

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
3671	1100	26	154.2	-1.5	133.40		25211.64	4081.73	15352.71	387.73	th
3672	1100	27	358	4.8	89.50			4020.54	15562.26	398.74	rbf
3673	1100	28	355.6	5.4	93.40			4016.50	15565.94	400.05	rvw
3674	1100	29	162.5	-1.4	127.60		25231.39	4062.04	15351.12	388.10	th
3675	1100	30	167.2	-2.1	130.30		25242.30	4052.53	15345.76	386.45	th
3676	1100	31	173.9	-1.6	132.20		25257.76	4037.71	15341.37	387.53	th
3677	1100	32	186.2	-1.4	136.50		25286.86	4008.92	15337.12	387.89	th
3678	1100	33	194.3	-1.4	139.70		25306.63	3989.16	15337.45	387.81	th
3679	1100	34	199.1	-2	146.10	0.20	25320.20	3975.86	15334.76	385.92	th
3680	1100	35	199.1	-2	146.10	-5.00	25320.20	3975.86	15334.76	391.12	ws
3681	1100	36	79.7	-0.1	135.80	0.00		4157.28	15497.10	390.99	potential xs
3682	1100	37	204.9	-0.9	153.30	3.71	25336.97	3959.12	15333.77	385.11	th
3683	1100	38	210.7	-1.7	165.40		25357.12	3939.22	15330.60	386.31	th
3684	1100	39	216.2	-1.2	179.70		25378.98	3917.53	15327.81	387.46	th
3685	1100	40	221.4	-1	196.90		25403.21	3893.45	15325.12	387.79	th
3686	1100	41	227	-0.9	215.70		25430.76	3865.91	15325.71	387.83	th
3687	1100	42	231	-0.7	242.90		25462.30	3834.90	15319.96	388.26	th
3688	1100	43	233.3	-0.5	265.10		25486.73	3811.12	15314.39	388.91	th
3689	1100	44	233.4	-0.5	265.10		25487.19	3810.84	15314.76	388.91	th
3690	1100	45	235	-0.5	280.30		25504.19	3794.06	15312.04	388.78	th
3691	1100	46	232.2	-0.8	297.50	-5.00		3788.60	15290.48	392.07	Btp11l
3692	1100	47	232.5	-0.9	297.50	-5.00		3787.64	15291.71	391.55	Btp11l
3693	1100	48	267.9	-0.7	284.40	-5.00		3739.46	15462.40	392.75	Btp11r
3694	1100	49	267.8	-0.7	284.40	-5.00		3739.48	15461.90	392.75	Btp11r
3695	1100	50	255.5	-1	278.10	-5.00		3754.42	15403.19	391.37	Btp11m
3696	1100	51	255.7	-1	278.20	-5.00		3754.09	15404.10	391.37	Btp11m
3697	1100	52	54.7	-1.1	152.80	-5.00		4148.37	15561.11	393.29	BBM nail rb
3698	1100	53	54.6	-1.1	152.70	-5.00		4148.14	15561.27	393.29	BBM nail rb
3699	1100	54	123.5	1.2	204.30	-5.00		4194.03	15360.06	400.50	BBM nail lb
3700	1100	55	123.8	1.2	204.30	-5.00		4193.44	15359.17	400.50	BBM nail lb
3701	1100	56	123.9	1.2	204.30	-5.00		4193.24	15358.87	400.50	BBM nail lb
3702	1100	57	54.3	-0.9	268.10	-5.00		4241.39	15629.26	392.01	Btp11r
3703	1100	58	54.3	-0.9	268.10	-5.00		4241.39	15629.26	392.01	Btp11r
3704	1200	1	67.4	-1.4	253.60	-5.00		3752.89	15403.99	390.63	Btp11m
3705	1200	2	67.5	-1.2	253.70	-5.00		3753.15	15403.62	391.52	Btp11m
3706	1200	3	93.3	-1	271.10	-5.00		3789.41	15290.93	392.10	Btp11l
3707	1200	4	93.3	-1	271.00	-5.00		3789.31	15290.93	392.10	Btp11l
3708	1200	5	50.4	1.3	279.80			3734.35	15484.89	398.18	rac
3709	1200	6	47.5	2.2	293.50			3735.15	15504.82	403.11	rbf
3710	1200	7	22.6	3	229.00			3606.76	15517.95	403.83	rbf
3711	1200	8	357.8	3	209.80			3510.71	15516.18	402.83	rbf
3712	1200	9	0.4	1.7	161.40			3519.89	15467.93	396.62	rac
3713	1200	10	96.8	0.6	273.30	-5.00		3790.14	15274.17	399.69	lbf,lac,lvw,bd
3714	1200	11	94.7	-0.8	255.20		25537.91	3773.10	15285.62	388.27	th
3715	1200	12	94.9	-1.3	255.10	-5.00	25537.91	3772.93	15284.74	391.04	ws
3716	1200	13	95.3	-1	246.80		25546.72	3764.50	15283.74	387.52	th
3717	1200	14	96.2	-0.7	232.70		25561.31	3750.10	15281.40	388.99	th
3718	1200	15	95.3	-0.5	212.80		25581.51	3730.65	15286.88	389.98	th
3719	1200	16	95.3	-1.5	212.30	-5.00	25581.51	3730.15	15286.92	391.27	ws
3720	1200	17	92.8	-0.6	180.40		25615.02	3698.94	15297.72	389.94	th
3721	1200	18	89	-0.9	157.60		25640.42	3676.33	15309.28	389.36	th
3722	1200	19	87.9	-1.3	137.50		25660.71	3656.17	15311.57	388.71	th
3723	1200	20	87.9	-2.4	137.30	-5.00	25660.71	3655.97	15311.57	391.08	ws
3724	1200	21	102	-1.1	97.10		25710.08	3613.74	15286.35	389.97	th rc
3725	1200	22	101.9	-3.6	97.00	-5.00	25710.08	3613.67	15286.53	390.73	ws
3726	1200	23	122.8	-2.6	73.50		25748.64	3580.54	15266.72	388.49	th

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
3727	1200	24	149	-3.6	68.10		25781.16	3553.83	15248.16	387.55	th
3728	1200	25	161.1	-3.4	72.30		25796.54	3542.18	15238.13	387.54	th
3729	1200	26	160.4	-6	74.30	-5.00	25796.54	3543.68	15236.54	389.02	ws
3730	1200	27	168.8	2.2	110.40			3540.20	15198.24	396.07	lac steep
3731	1200	28	171.5	-3.7	77.70		25811.16	3530.24	15229.69	386.81	th
3732	1200	29	186.1	-4.5	76.50		25830.79	3510.63	15230.47	385.81	th
3733	1200	30	198	-4.1	78.90		25847.07	3494.38	15231.50	386.18	th
3734	1200	31	216.7	-3.9	96.70		25880.58	3460.97	15229.00	385.24	th
3735	1200	32	216.7	-5.4	97.10	-5.00	25880.58	3460.73	15228.68	387.65	ws
3736	1200	33	228.8	-2.9	138.60		25929.06	3414.47	15215.24	384.81	th
3737	1200	34	225	-0.4	161.60	-5.00		3404.49	15192.27	395.70	lac
3738	1200	35	232.8	-2.8	167.20		25959.57	3385.58	15205.45	383.66	th
3739	1200	36	236.3	-2.4	192.70		25987.33	3358.44	15199.62	383.76	th
3740	1200	37	238.6	-1.9	213.10		26009.29	3336.87	15195.51	384.76	th
3741	1200	38	238.9	-1.6	214.20		26009.29	3335.35	15195.89	385.85	ws
3742	1200	39	241.5	-1.7	249.10		26047.13	3299.85	15187.67	384.44	th
3743	1200	40	246.3	-1.7	270.50		26077.64	3271.07	15197.81	383.80	th
3744	1200	41	248.9	-1.8	286.30		26097.87	3251.65	15203.47	382.84	th
3745	1200	42	248.6	-1.4	312.50	-5.00		3227.80	15192.51	389.20	Btp12l
3746	1200	43	248.7	-1.5	312.50	-5.00		3227.61	15193.02	388.65	Btp12l
3747	1200	44	248.8	-1.5	312.40	-5.00		3227.50	15193.56	388.65	Btp12l
3748	1200	45	259.8	-1.1	292.20	-5.00		3231.18	15254.79	391.22	Btp12m
3749	1200	46	259.8	-1	292.40	-5.00		3230.98	15254.75	391.73	Btp12m
3750	1200	47	259.8	-1.1	290.00	-5.00		3233.34	15255.18	391.26	Btp12m
3751	1200	48	280.9	-0.6	263.50	-5.00		3260.01	15356.36	394.07	Btp12r
3752	1200	49	281	-0.6	263.60	-5.00		3260.00	15356.83	394.07	Btp12r
3753	1200	50	319.3	0.4	256.00	-5.00		3351.82	15500.62	398.62	Btp12fr
3754	1200	51	319.3	0.4	256.00	-5.00		3351.82	15500.62	398.62	Btp12fr
3755	1200	52						3518.76	15306.53	391.83	endsurvey 10/6/98
3757	1300	1	322.5	-4.4	49.75	-5.00		4148.05	15559.02	393.51	Bbm nail rb
3759	1300	2	322.5	-4.4	49.85	-5.00		4147.99	15559.10	393.50	Bbm nail rb
3761	1300	3	60.8	-0.6	159.29	-5.00		4317.39	15597.26	395.67	Btp10r
3763	1300	4	60.8	-0.5	159.39	-5.00		4317.48	15597.31	395.95	Btp10r
3765	1300	5	60.7	-0.5	159.39	-5.00		4317.34	15597.55	395.95	Btp10r
3767	1300	6	78.6	-1.7	152.73	-5.00		4328.06	15549.74	392.81	Btp10m
3769	1300	7	78.6	-1.7	152.83	-5.00		4328.16	15549.76	392.80	Btp10m
3771	1300	8	113.8	-1.6	208.32	-5.00		4368.94	15435.48	391.52	Btp10l
3773	1300	9	113.8	-1.6	208.32	-5.00		4368.94	15435.48	391.52	Btp10l
3775	1300	10	168.2	3	160.98	-5.00		4211.26	15361.97	405.78	Bbt 5.1
3777	1300	11	168	3	160.98	-5.00		4211.81	15362.09	405.78	Bbt 5.1
3779	1300	12	168	3	160.88	-5.00		4211.79	15362.19	405.77	Bbt 5.1
3781	1300	13	168.1	3	160.98	-5.00		4211.53	15362.03	405.78	Bbt 5.1
3783	1300	14	174.6	1.2	161.86	-5.00		4193.57	15358.40	400.73	Bbm nail lb
3785	1300	15	174.4	1.2	162.06	-5.00		4194.15	15358.26	400.73	Bbm nail lb
3787	1300	16	174.4	1.2	161.76	-5.00		4194.12	15358.56	400.73	Bbm nail lb
3789	1300	17	169.8	14.6	205.54	0.00		4214.74	15317.26	445.88	bdrc
3791	1300	18	169.1	13.8	202.97	0.00	0.00	4216.72	15320.24	442.19	gs
3792	1300	19	169.4	12.2	200.57	0.00	2.60	4215.23	15322.41	435.70	gs
3793	1300	20	169.4	12.2	201.35	0.00	3.40	4215.38	15321.64	435.87	gs
3794	1300	21	169.4	12.4	200.80	-4.40	3.90	4215.28	15322.17	440.89	xs5 p1
3796	1300	22	169.1	13.3	198.14	0.00	6.80	4215.81	15324.98	439.18	gs
3798	1300	23	169.4	12.3	194.43	0.00	10.70	4214.10	15328.44	434.73	gs
3799	1300	24	169.3	11.4	191.84	0.00	13.30	4213.96	15331.05	431.02	gs
3800	1300	25	169	10.7	188.66	0.00	16.60	4214.34	15334.35	427.99	bdrc
3801	1300	26	169	9.8	185.06	0.00	20.20	4213.65	15337.89	424.31	gs
3802	1300	27	169.6	9.8	182.69	3.71	23.30	4211.32	15339.86	420.19	gs

Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3804	1300	28	170	7.2	181.36	0.00	25.10	4209.83	15340.95	415.25	gs
3805	1300	29	170.1	6	177.72	0.00	28.70	4208.89	15344.47	411.02	bdrc
3806	1300	30	170	6.2	175.27	0.00	31.20	4208.77	15346.94	411.38	bdrc
3807	1300	31	169.9	6.3	174.54	0.00	32.00	4208.95	15347.71	411.61	bdrc
3808	1300	32	169.9	5.8	173.81	0.00	32.70	4208.82	15348.44	409.99	bdrc
3809	1300	33	169.9	5.8	171.72	0.00	34.80	4208.45	15350.49	409.78	bdrc
3810	1300	34	169.9	5.8	171.02	0.00	35.50	4208.33	15351.18	409.71	bdrc
3811	1300	35	169.9	5	171.15	-5.00	35.70	4208.35	15351.06	412.31	xs5 p2
3813	1300	36	169.9	4.9	171.17	-5.00		4208.36	15351.03	412.01	xs5 p2
3815	1300	37	169.9	5.7	170.75	0.00	36.10	4208.28	15351.44	409.38	bdrc
3817	1300	38	-----	-----	#VALUE!	0.00		#VALUE!	#VALUE!	#VALUE!	p2 75cm out
3818	1300	39	169.6	5.8	169.73	0.00	37.40	4208.98	15352.61	409.58	bdrc
3819	1300	40	169.7	4.9	169.58	0.00	37.70	4208.66	15352.70	406.88	bdrc
3820	1300	41	169.5	4.9	167.78	0.00	39.60	4208.91	15354.57	406.72	bdrc
3821	1300	42	169.5	3.8	166.73	0.00	40.70	4208.72	15355.61	403.41	bdrc
3822	1300	43	169.5	3.8	165.14	0.00	42.30	4208.43	15357.18	403.31	bdrc
3823	1300	44	169.6	3.1	164.66	0.00	42.80	4208.06	15357.60	401.26	bdrc
3824	1300	45	169.6	3	163.38	0.00	44.10	4207.83	15358.86	400.90	bdrc
3825	1300	46	169.8	2.4	163.16	0.00	44.70	4207.23	15358.97	399.18	bdrc
3826	1300	47	169.8	1.7	159.83	0.00	48.10	4206.64	15362.25	397.08	gs
3827	1300	48	169.7	1.2	155.57	0.00	52.30	4206.15	15366.49	395.60	bdrc
3828	1300	49	169.5	1.7	160.43	0.00	57.20	4207.57	15361.81	397.10	lac
3829	1300	50	169.5	3.7	165.45	0.00	62.20	4208.49	15356.87	403.04	lbf
3830	1300	51	170.1	1.1	155.47	0.00	72.40	4205.07	15366.39	395.33	bdrc
3831	1300	52	170.3	0	153.90	0.00	74.00	4204.27	15367.85	392.34	bdrc
3832	1300	53	170.4	-0.4	153.10	0.00	74.90	4203.87	15368.60	391.27	lew
3833	1300	54	170.3	-1.7	150.33	0.00	77.70	4203.67	15371.36	387.88	bdrc
3834	1300	55	169.6	-1.8	149.33	0.00	79.70	4205.29	15372.68	387.65	gs
3835	1300	56	169.5	-1.9	142.42	0.00	86.70	4204.29	15379.51	387.62	gs
3836	1300	57	169.3	-1.8	136.43	0.00	92.70	4203.67	15385.49	388.05	gs
3837	1300	58	170	-1.6	128.55	0.00	100.70	4200.66	15392.95	388.75	gs
3838	1300	59	169.8	-1.7	115.95	0.00	113.30	4198.87	15405.43	388.90	gs
3839	1300	60	170.4	-1.8	102.55	0.00	126.80	4195.44	15418.44	389.12	gs
3840	1300	61	171	-1.9	87.05	0.00	142.30	4191.96	15433.57	389.45	gs
3841	1300	62	171.9	-2.2	73.85	0.00	155.60	4188.74	15446.44	389.50	gs
3842	1300	63	173.4	-2.4	59.95	0.00	169.60	4185.23	15460.00	389.83	gs
3843	1300	64	174.6	-2.8	45.05	0.00	184.50	4182.58	15474.70	390.14	gs
3844	1300	65	176.8	-2.8	35.56	0.00	194.10	4180.32	15484.05	390.60	gs
3845	1300	66	179.3	-2.7	28.07	0.00	201.70	4178.68	15491.48	391.02	gs
3846	1300	67	181.7	-2.8	23.67	0.00	206.30	4177.64	15495.89	391.18	rew
3847	1300	68	188.3	-2.3	16.29	0.00	214.00	4175.99	15503.43	391.69	gs
3848	1300	69	203.2	-1.9	8.80	0.00	222.10	4174.87	15511.47	392.05	gs
3849	1300	70	292.6	1.4	6.80	0.00	233.20	4172.06	15522.16	392.51	gs
3850	1300	71	317.8	1.5	9.80	0.00	237.80	4171.76	15526.81	392.60	gs
3851	1300	72	335.5	0.5	19.90	0.00	248.80	4170.09	15537.66	392.51	gs
3852	1300	73	343	-0.1	28.90	0.00	258.30	4169.89	15547.19	392.29	gs
3853	1300	74	342.9	0.1	41.10	0.00	270.50	4166.25	15558.83	392.41	gs
3854	1300	75	343.5	-1	47.69	0.00	277.10	4164.79	15565.28	391.51	gs
3855	1300	76	344.8	-1.4	50.48	0.00	280.10	4165.10	15568.27	391.11	gs
3856	1300	77	345.6	0.8	53.39	0.00	283.10	4165.06	15571.27	393.09	rac
3857	1300	78	346.4	-2.2	55.16	-5.00	285.10	4165.37	15573.16	395.22	gs
3859	1300	79	345.9	3	58.32	0.00	288.30	4164.13	15576.11	395.40	gs
3860	1300	80	346	3.5	63.18	0.00	293.10	4163.05	15580.85	396.20	gs
3861	1300	81	346.1	3.8	63.36	0.00	293.30	4163.12	15581.05	396.55	xs5 p3
3863	1300	82	346.2	3.8	63.36	0.00		4163.22	15581.08	396.55	xs5 p3
3865	1300	83	345.9	3.5	63.68	0.00	293.70	4162.82	15581.31	396.23	gs



Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
3866	1300	84	346.2	4	68.33	0.00	298.40	4162.04	15585.91	397.12	gs
3867	1300	85	346.1	4.6	72.37	0.00	302.40	4160.95	15589.80	398.16	gs
3868	1300	86	345.1	5.4	79.55	0.00	309.70	4157.88	15596.42	399.86	gs
3869	1300	87	345.3	6.5	84.16	0.00	314.30	4156.98	15600.95	401.93	gs
3870	1300	88	344.6	8.2	90.76	0.00	321.00	4154.24	15607.05	405.42	gs
3871	1300	89	344.8	9.1	93.80	0.00	324.10	4153.74	15610.07	407.37	gs
3872	1300	90	343.9	9.6	98.11	0.00	328.60	4151.13	15613.81	408.93	gs
3873	1300	91	343.5	10.9	101.24	0.00	331.90	4149.58	15616.62	411.84	gs
3874	1300	92	343.6	11.3	103.26	0.00	333.90	4149.18	15618.61	412.97	bdrc
3875	1300	93	343.4	13.2	104.27	-5.00	335.00	4148.55	15619.47	421.80	bdrc
3877	1300	94	343.8	16.8	109.52	-5.00	340.30	4147.78	15624.72	430.41	gs
3879	1300	95	344.2	18	113.75	-5.00		4147.37	15629.00	434.30	xs5 p4
3881	1300	96	344.1	18	113.94	-5.00	344.70	4147.12	15629.13	434.36	xs5 p4
3883	1300	97	343.9	18.1	113.78	-5.00		4146.79	15628.86	434.53	xs5 p4
3885	1300	98	344	20	113.05	0.00	345.60	4147.18	15628.22	433.49	gs
3887	1300	99	343.9	20	113.80	0.00	346.40	4146.78	15628.88	433.76	gs
3888	1300	100	344.3	21.9	118.39	0.00	351.10	4146.30	15633.52	439.93	gs
3889	1300	101	344.4	22.8	122.79	0.00	355.50	4145.32	15637.82	443.96	bdrc
3890	1300	102	339.7	21.7	126.18	-5.00		4134.56	15637.89	447.55	bt 5.2
3903	1300	103	339.5	21.8	126.09	-5.00		4134.18	15637.65	447.77	bt 5.2
3905	1300	104	343.2	6.6	83.84	0.00		4154.11	15599.81	402.04	rbf
3912	1400	1	88.4	-0.7	170.89	-5.00		3259.60	15355.98	394.30	Btp12r
3914	1400	2	88.4	-0.8	170.68	-5.00		3259.39	15355.98	394.00	Btp12r
3916	1400	3	60.2	0.5	304.49	-5.00		3353.00	15502.53	399.04	Btp12fr
3918	1400	4	60.1	0.5	304.49	-5.00		3352.74	15502.99	399.04	Btp12fr
3920	1400	5	60	0.5	304.69	-5.00		3352.65	15503.55	399.04	Btp12fr
3922	1400	6	60.3	0.5	304.59	-5.00		3353.35	15502.12	399.04	Btp12fr
3924	1400	7	124.6	-1.7	172.82	-5.00		3231.04	15253.07	391.25	Btp12m
3926	1400	8	124.6	-1.7	172.82	-5.00		3231.04	15253.07	391.25	Btp12m
3928	1400	9	139.3	-0.9	211.27	0.00		3226.55	15191.04	388.06	Btp12l
3930	1400	10	139.2	-0.9	211.37	0.00		3226.89	15191.20	388.06	Btp12l
3932	1400	11	136.2	-1.5	207.23	3.71	26117.40	3232.21	15201.64	382.25	th
3934	1400	12	136.3	-0.6	207.19	3.71	26117.40	3231.92	15201.42	385.50	ws
3936	1400	13	137.8	-0.7	194.79	7.50	26131.05	3219.62	15206.91	381.50	th
3938	1400	14	141.3	0.3	184.30	11.44	26146.66	3204.01	15207.38	380.91	th
3940	1400	15	146.2	-0.9	175.78	7.50	26164.25	3186.56	15205.14	381.12	th
3942	1400	16	150.3	-3.2	163.84	0.00	26181.28	3169.96	15208.89	382.22	th
3944	1400	17	150.5	-1.9	163.51	0.00	26181.28	3169.29	15208.90	385.96	ws
3946	1400	18	156.1	-3.4	150.83	0.00	26201.83	3149.89	15213.31	382.42	th
3947	1400	19	162.4	-3.6	141.22	0.00	26220.53	3131.48	15216.60	382.50	th
3948	1400	20	173	-3.8	132.81	0.00	26247.19	3104.96	15219.39	382.56	th
3949	1400	21	181.8	-3.8	123.63	0.00	26268.89	3084.89	15227.64	383.17	th
3950	1400	22	190.5	-3.9	122.52	0.00	26287.59	3066.45	15230.75	383.03	th
3951	1400	23	195.7	-4	107.04	0.00	26306.23	3059.81	15248.16	383.90	th
3952	1400	24	195.8	-3.1	106.94	0.00	26306.23	3059.66	15248.31	385.59	ws
3953	1400	25	205.5	0.6	139.79	0.00		3028.60	15225.04	392.85	lac
3954	1400	26	207.6	4.9	151.54	0.00		3018.57	15216.91	404.38	lbf
3955	1400	27	210.2	8.3	163.17	0.00		3006.70	15210.18	415.19	lwv
3956	1400	28	204.8	-4.3	95.13	0.00	26326.18	3048.87	15264.85	384.23	th
3957	1400	29	212.9	-5.5	82.42	0.00	26344.02	3044.01	15282.01	383.45	th
3958	1400	30	227.5	-6.9	72.87	0.00	26365.91	3035.05	15301.98	382.57	th
3959	1400	31	246	-6.9	69.79	0.00	26389.04	3025.02	15322.82	382.94	th
3960	1400	32	246.1	-4.9	70.04	0.00	26389.04	3024.74	15322.83	385.38	ws
3961	1400	33	276.4	-5.4	90.20	0.00	26435.38	2999.14	15361.26	382.86	th
3962	1400	34	288	-4.5	107.87	0.00	26462.02	2986.19	15384.54	382.89	th
3963	1400	35	297.4	-4.4	115.96	0.00	26482.05	2985.83	15404.57	382.46	th

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Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
3964	1400	36	303.8	-4	129.48	0.00	26501.29	2981.18	15423.24	382.33	th
3965	1400	37	50.9	2.1	371.55	0.00		3377.12	15585.54	405.01	rbf
3966	1400	38	304.7	-3	149.99	0.00	26521.92	2965.46	15436.60	383.52	th
3967	1400	39	51.7	1.2	353.72	0.00		3366.37	15570.44	398.79	rac
3968	1400	40	307.5	-2.7	184.40	0.00	26557.26	2942.49	15463.46	382.69	th
3969	1400	41	308.3	-2.5	203.11	0.00	26576.17	2929.38	15477.09	382.52	th
3970	1400	42	309	-2.1	202.86	0.00	26576.17	2931.12	15478.88	383.94	ws
3971	1400	43	28.1	2	398.76	0.00		3276.60	15702.96	405.31	rbf
3972	1400	44	310.4	-2.5	230.58	0.00	26604.76	2913.18	15500.65	381.32	th
3973	1400	45	312	-2.3	250.20	0.00	26625.50	2902.84	15518.62	381.33	th
3974	1400	46	313	-1.9	251.96	0.00	26625.50	2904.50	15523.05	383.03	ws
3975	1400	47	307.9	-0.5	283.09	0.00		2865.40	15525.11	388.91	lac
3976	1400	48	28.4	1	392.24	0.00		3275.34	15696.24	398.23	rac
3977	1400	49	307.5	0.8	304.47	0.00		2847.22	15536.56	395.64	lbf
3978	1400	50	317.6	-2.2	278.49	0.00	26663.78	2900.99	15556.87	380.68	th
3979	1400	51	318.9	-2.1	297.80	0.00	26684.16	2893.01	15575.62	380.46	th
3980	1400	52	319	-1.5	298.50	0.00	26684.16	2892.95	15576.49	383.57	ws
3981	1400	53	315.6	-1.7	308.66	-5.00		2872.82	15571.74	387.22	Btp13l
3983	1400	54	316.7	-1.7	308.96	-5.00		2876.88	15576.07	387.21	Btp13l
3985	1400	55	317.1	-1.7	308.96	-5.00		2878.46	15577.54	387.21	Btp13l
3987	1400	56	324.9	-2.3	292.36	-5.00		2920.67	15590.41	384.64	Btp13m
3989	1400	57	325.2	-2.3	292.26	-5.00		2921.98	15591.20	384.65	Btp13m
3991	1400	58	324.9	-2.3	292.36	-5.00		2920.67	15590.41	384.64	Btp13m
3993	1400	59	325.5	-2.3	292.26	-5.00		2923.24	15592.07	384.65	Btp13m
3995	1400	60	335.1	-2.1	290.30	-5.00		2966.55	15614.53	385.74	Btp13r
3997	1400	61	335.6	-2.1	290.01	-5.00		2968.98	15615.31	385.75	Btp13r
3999	1400	62	335.1	-2.1	290.40	-5.00		2966.51	15614.62	385.73	Btp13r
4001	1500	1	177.7	-0.2	238.40	0.00		2966.93	15615.67	385.27	Btp13r
4003	1500	2	177.5	-0.1	238.40	0.00		2967.76	15615.70	385.69	Btp13r
4005	1500	3	187.6	-1.4	264.12	-5.00		2922.43	15592.07	384.65	Btp13m
4007	1500	4	187.3	-1.5	264.21	-5.00		2923.79	15591.81	384.19	Btp13m
4009	1500	5	187.3	-1.4	264.12	-5.00		2923.80	15591.90	384.65	Btp13m
4011	1500	6	196.7	-0.7	292.28	-5.00		2873.37	15573.93	387.54	Btp13l
4013	1500	7	196.4	-0.7	292.28	-5.00		2874.84	15573.49	387.54	Btp13l
4015	1500	8	196.4	-0.7	292.28	-5.00		2874.84	15573.49	387.54	Btp13l
4017	1500	9	195.8	-1.2	225.25	0.00	26745.75	2896.03	15637.14	381.39	th
4018	1500	10	197.1	-1.4	216.84	0.00	26755.55	2893.60	15646.63	380.81	th
4019	1500	11	198.8	-1.5	207.63	0.00	26766.70	2890.45	15657.32	380.67	th
4020	1500	12	200.4	-1.6	198.32	0.00	26777.60	2888.23	15667.99	380.57	th
4021	1500	13	202.8	-1.8	186.71	0.00	26791.73	2885.01	15681.76	380.24	th
4022	1500	14	203.9	-1.8	178.31	0.00	26800.83	2885.12	15690.85	380.50	th
4023	1500	15	204.9	-1.8	171.02	0.00	26808.74	2885.36	15698.76	380.73	th
4024	1500	16	206	-2.1	165.79	0.00	26814.88	2884.68	15704.87	380.03	th
4025	1500	17	207.4	-1.3	167.46	0.00	26814.88	2880.30	15705.20	382.31	ws
4026	1500	18	207.1	-2	167.50	0.00	26818.51	2881.06	15704.77	380.26	th
4027	1500	19	209	-2.1	159.09	0.00	26828.51	2880.23	15714.73	380.27	th
4028	1500	20	211.2	-2.4	155.66	0.00	26835.46	2876.72	15720.73	379.58	th
4029	1500	21	46.7	3.4	170.00	0.00		3081.08	15970.46	396.21	rac
4030	1500	22	214.6	-2.6	147.05	0.00	26847.90	2873.86	15732.83	379.43	th
4031	1500	23	220.9	-3.2	138.58	0.00	26865.73	2866.62	15749.13	378.36	th
4032	1500	24	220.8	-2	138.32	0.00	26865.73	2866.98	15749.17	381.28	ws
4033	1500	25	223.6	-3.5	133.75	0.00	26873.76	2865.12	15757.02	377.93	th
4034	1500	26	41.6	1.8	268.57	0.00		3135.67	16054.71	394.55	rac
4035	1500	27	226.5	-3.6	127.45	0.00	26882.89	2864.91	15766.15	378.09	th
4036	1500	28	228.9	-4.5	117.94	0.00	26893.70	2868.49	15776.35	376.82	th
4037	1500	29	229.6	-4.4	115.46	0.00	26896.56	2869.43	15779.04	377.22	th pool

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Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
4038	1500	30	230	-4.7	111.32	0.00	26900.77	2872.08	15782.32	376.95	th
4039	1500	31	230.4	-5.3	111.82	-5.00	26900.77	2871.20	15782.60	380.73	ws
4041	1500	32	44.5	2.5	376.24	0.00		3221.07	16122.23	402.53	rbf
4042	1500	33	231.6	-5.3	103.06	0.00	26909.56	2876.60	15789.86	376.55	th
4043	1500	34	236.6	-4.8	94.37	3.71	26921.79	2878.58	15801.93	374.47	th
4045	1500	35	239.7	-5.4	86.91	3.71	26930.71	2882.32	15810.03	374.18	th
4047	1500	36	249.7	-5	71.03	3.71	26951.68	2890.74	15829.23	376.18	th
4049	1500	37	256.7	-5	68.34	3.71	26960.60	2890.86	15838.15	376.42	th
4051	1500	38	272.4	-8.2	63.64	0.00	26979.22	2893.77	15856.54	376.94	th
4053	1500	39	292.9	-8	69.32	0.00	27003.53	2893.51	15880.85	376.36	th
4054	1500	40	305	-7.5	75.25	0.00	27019.87	2895.72	15897.04	376.20	th
4055	1500	41	305.2	-8	75.46	-5.00	27019.87	2895.70	15897.37	380.50	ws
4057	1500	42	316.9	-6.9	80.12	0.00	27036.68	2902.62	15912.37	376.41	th
4058	1500	43	310.8	0.4	114.80	0.00		2870.46	15928.89	386.91	lac
4059	1500	44	309.3	3.2	136.99	0.00		2851.36	15940.64	393.77	lbf
4060	1500	45	322.3	-7	84.76	0.00	27045.73	2905.53	15920.94	375.70	th
4061	1500	46	330.4	-6.3	89.26	0.00	27058.81	2913.27	15931.48	376.25	th
4062	1500	47	334.4	-5.7	90.45	0.00	27065.20	2918.28	15935.45	377.08	th
4063	1500	48	340.7	-6	89.41	0.00	27075.14	2927.81	15938.26	376.71	th
4064	1500	49	344	-6.5	91.61	0.00	27080.79	2932.11	15941.93	375.67	th
4065	1500	50	349.9	-4.9	97.84	3.71	27092.36	2940.20	15950.20	374.01	th
4067	1500	51	353.4	-5	104.60	3.71	27101.52	2945.34	15957.78	373.25	th
4069	1500	52	354.9	-5.2	119.01	0.00	27116.22	2946.78	15972.41	375.28	th
4071	1500	53	354.9	-5.2	119.01	-5.00	27116.22	2946.78	15972.41	380.28	ws
4073	1500	54	0.7	-4	132.18	0.00	27134.51	2958.98	15986.04	376.86	th
4074	1500	55	4.7	-3.3	146.26	0.00	27151.61	2969.35	15999.64	377.67	th
4075	1500	56	9	-2.9	167.29	0.00	27175.69	2983.53	16019.10	377.63	th
4076	1500	57	10.7	-2.5	187.92	0.00	27196.99	2992.25	16038.53	377.90	th
4077	1500	58	11.9	-2.6	204.19	0.00	27213.76	2999.47	16053.68	376.83	th
4078	1500	59	13.2	-2.1	226.15	0.00	27236.26	3009.00	16074.05	377.81	th
4079	1500	60	14.2	-1.8	246.48	0.00	27257.00	3017.82	16092.82	378.36	th
4080	1500	61	2	0.5	267.19	0.00		2966.69	16120.90	388.44	lac
4082	1500	63	355.2	1	278.06	0.00		2934.09	16130.96	390.96	lbf
4083	1500	64	355.2	1	278.06	0.00		2934.09	16130.96	390.96	lvw
4084	1500	65	19	-2	231.76	0.00	27281.85	3032.81	16073.01	378.01	th
4085	1500	66	22.8	-1.6	234.01	0.00	27297.45	3048.04	16069.60	379.57	th
4086	1500	67	28.1	-2	247.05	0.00	27323.23	3073.72	16071.80	377.48	th
4087	1500	68	27.9	-1.3	247.04	0.00	27323.23	3072.96	16072.20	380.50	ws
4088	1500	69	30.7	-0.3	274.80	7.50	27353.39	3097.66	16090.16	377.17	th
4090	1500	70	31.6	-0.3	303.80	7.50	27382.74	3116.55	16112.63	377.02	th
4092	1500	71	31.5	-0.3	304.30	7.50	27383.47	3116.36	16113.33	377.01	th
4094	1500	72	31.4	-1.1	304.34	0.00	27383.47	3115.93	16113.65	380.26	ws
4096	1500	73	37.4	-0.4	300.09	0.00		3139.63	16092.27	384.01	Btp14r
4098	1500	74	37.3	-0.4	299.99	0.00		3139.15	16092.51	384.01	Btp14r
4100	1500	75	14.9	-1.2	332.73	-5.00		3042.92	16175.42	384.14	Btp14m
4102	1500	76	14.9	-1.2	332.73	-5.00		3042.92	16175.42	384.14	Btp14m
4104	1500	77	15	-1.2	332.63	-5.00		3043.45	16175.17	384.14	Btp14m
4106	1500	78	7	-0.3	334.90	-5.00		2998.17	16186.27	389.35	Btp14l
4108	1500	79	7	-0.4	334.89	-5.00		2998.17	16186.27	388.77	Btp14l
4110	1500	80	7	-0.4	334.99	-5.00		2998.19	16186.37	388.77	Btp14l
4112	1500	81	32.8	3.1	468.31	0.00		3211.05	16247.52	411.47	brass cap
4114	1500	82	32.6	3	468.06	0.00		3209.54	16248.19	410.64	Bbrass cap
4116	1500	83	32.7	3	468.16	0.00		3210.28	16247.84	410.64	Bbrass cap
4118	1600	1	183.6	9	191.81	0.00		3212.21	16245.60	411.08	Bbrass cap
4120	1600	2	183.5	9	191.71	0.00		3212.55	16245.68	411.06	Bbrass cap
4122	1600	3	183.5	9	191.91	0.00		3212.53	16245.48	411.09	Bbrass cap

Salyer Survey Data - October, 1998							TH or XS				
Record #	Sta	SS	HA	VI	HD	TC	DIST	X	Y	Z	Feature
4124	1600	4	185	8.4	210.02	0.00		3205.95	16227.81	411.71	bt bm
4126	1600	5	185.2	8.4	210.22	0.00		3205.20	16227.67	411.74	bt bm
4127	1600	6	194	-0.3	356.40	-5.00		3138.03	16091.22	383.83	Btp14r
4129	1600	7	193.7	-0.2	356.50	-5.00		3139.82	16090.67	384.45	Btp14r
4131	1600	8	215	-0.2	317.80	-5.00		3041.97	16176.70	384.59	Btp14m
4133	1600	9	215.1	-0.3	317.80	-5.00		3041.52	16177.02	384.03	Btp14m
4135	1600	10	215.2	-0.3	317.70	-5.00		3041.12	16177.43	384.04	Btp14m
4137	1600	11	222.4	0.4	336.39	-5.00		2997.42	16188.62	388.05	Btp14l
4139	1600	12	222.5	0.4	336.39	-5.00		2996.99	16189.01	388.05	Btp14l
4141	1600	13	227.4	0.8	299.37	0.00		3003.88	16234.39	384.88	lac
4142	1600	14	231.7	3.3	287.02	0.00		2999.00	16259.14	397.25	lbf
4143	1600	15	197.7	-0.8	313.57	0.00	27411.42	3128.91	16138.30	376.32	th
4144	1600	16	197.7	-0.9	313.66	-5.00	27411.42	3128.89	16138.22	380.77	ws
4146	1600	17	196	-0.9	282.07	0.00	27444.14	3146.50	16165.89	376.27	th
4147	1600	18	195.7	-1.3	264.23	0.00	27462.03	3152.75	16182.66	374.70	th
4148	1600	19	195.7	-1.3	264.23	-5.00	27462.03	3152.75	16182.66	379.70	ws
4150	1600	20	194.3	-0.6	248.29	3.71	27479.16	3162.92	16196.44	374.39	th
4152	1600	21	192.9	-0.7	222.48	3.71	27505.60	3174.58	16220.16	374.27	th
4154	1600	22	191.9	-1.1	199.66	3.71	27528.71	3183.08	16241.66	373.16	th
4156	1600	23	191.5	0.6	229.59	-5.00		3178.48	16212.05	388.10	rac
4158	1600	24	190.8	2	229.46	-5.00		3181.25	16211.63	393.71	rbf
4160	1600	25	191	-0.9	183.48	3.71	27545.17	3189.24	16256.92	374.11	th
4162	1600	26	187	-0.7	148.89	3.71	27581.63	3206.11	16289.25	375.17	th
4164	1600	27	185	-1.4	135.86	0.00	27595.58	3212.41	16301.69	377.38	th
4166	1600	28	173.2	-3.5	69.27	0.00	27665.09	3232.45	16368.25	376.46	th
4167	1600	29	156.4	-3.3	63.00	0.00	27685.38	3249.47	16379.30	377.07	th
4168	1600	30	140	-4.5	61.11	0.00	27703.18	3263.53	16390.22	375.89	th
4169	1600	31	133.3	-4.4	70.49	0.00	27715.30	3275.55	16388.68	375.27	th
4170	1600	32	133.3	-4.4	70.49	-5.00	27715.30	3275.55	16388.68	380.27	ws
4172	1600	33	123.8	-1.5	75.47	3.71	27728.37	3286.97	16395.04	375.01	th
4174	1600	34	117.3	-3.4	91.04	0.00	27746.55	3305.15	16395.27	375.29	th
4176	1600	35	118.6	-2.2	109.92	0.00	27765.57	3320.76	16384.41	376.48	th
4177	1600	36	121.1	-1.4	123.26	0.00	27779.84	3329.80	16373.36	377.69	th
4178	1600	37	123.5	-1	132.08	0.00	27790.15	3334.39	16364.13	378.39	th rc
4179	1600	38	123.3	-2.4	131.98	-5.00	27790.15	3334.56	16364.57	380.17	ws
4181	1600	39	134.7	2.2	96.43	0.00		3292.79	16369.20	384.40	rac
4182	1600	40	139.6	5.6	99.22	0.00		3288.56	16361.47	390.43	rbf
4183	1600	41	144	9.1	103.68	0.00		3285.19	16353.15	397.31	rvw
4184	1600	42	219.5	-0.4	293.69	0.00		3037.44	16210.41	378.65	th2
4185	1600	43	221.3	-0.3	258.60	0.00		3053.58	16242.75	379.34	th2
4186	1600	44	225.9	-0.1	222.00	0.00		3064.83	16282.54	380.31	th2
4187	1600	45	230.2	-0.5	194.29	0.00		3074.98	16312.66	379.00	th
4188	1600	46	230.2	-0.2	194.10	0.00		3075.13	16312.78	380.02	ws
4189	1600	47	233	-0.7	178.69	0.00		3081.54	16329.49	378.52	th2 bdrc
4190	1600	48	30.8	1.9	262.16	0.00		3358.49	16662.21	389.40	lac
4191	1600	49	242.9	-2.5	131.27	0.00	28017.53	3107.39	16377.23	374.97	th
4192	1600	50	242.9	-2.5	131.27	-5.00	28017.53	3107.39	16377.23	379.97	ws
4194	1600	51	252.4	-2.7	117.37	3.71	28042.35	3112.37	16401.54	371.45	th
4196	1600	52	252.4	-2.7	117.37	-5.00	28042.35	3112.37	16401.54	380.16	ws
4198	1600	53	30.2	4.7	385.80	0.00	28051.93	3418.31	16770.46	412.42	lbf
4199	1600	54	256.8	-2.8	113.76	7.50		3113.49	16411.05	367.63	th
4201	1600	55	256.8	-2.8	113.76	-5.00	28051.93	3113.49	16411.05	380.13	ws
4203	1600	56	261	-2.6	111.78	11.44	28060.43	3113.84	16419.54	364.18	th
4205	1600	57	265.3	-2.9	111.36	11.44	28068.81	3113.27	16427.90	363.62	th
4207	1600	58	268.3	-2.7	112.77	12.44	28074.85	3111.53	16433.68	362.94	th
4209	1600	59	273.1	-2.9	108.46	12.44		3115.95	16442.89	362.76	th2 bdrc

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
4211	1600	60	275.5	-2.3	99.12	11.44	28093.89	3125.59	16446.53	365.28	th
4213	1600	61	287.6	-2.2	95.73	7.50	28114.70	3133.00	16465.97	369.52	th
4215	1600	62	297.9	-3.1	89.07	3.71		3145.53	16478.71	372.17	th2
4217	1600	63	307	-0.4	83.40	7.50		3157.65	16487.22	372.62	th2
4219	1600	64	318.1	-2.9	80.40	3.71		3170.56	16496.87	372.92	th2
4221	1600	65	334.4	-2.9	84.39	3.71		3187.79	16513.14	372.71	th2
4223	1600	66	334.2	-3.7	84.62	-5.00		3187.42	16513.22	380.23	ws
4225	1600	67	350.6	-2.8	91.69	3.71	28212.69	3209.27	16527.49	372.50	th
4227	1600	68	0.4	-3.6	88.72	3.71		3224.87	16525.75	371.41	th2
4229	1600	69	0.4	-3.6	88.72	-5.00		3224.87	16525.75	380.12	ws
4231	1600	70	13	-4.1	76.60	4.71		3241.48	16511.67	370.50	th2
4233	1600	71	26.2	-1.9	78.36	7.50		3258.85	16507.34	370.60	th2
4235	1600	72	39.4	-0.1	70.70	7.50		3269.13	16491.66	373.08	th2
4237	1600	73	44.8	-2.6	76.12	3.71		3277.89	16491.04	373.53	th2
4239	1600	74	51.3	-3.2	78.48	0.00		3285.50	16486.10	376.31	th2
4241	1600	75	61.5	-2.2	84.54	0.00		3298.54	16477.37	377.45	th2
4242	1600	76	80.5	-2.2	87.94	0.00		3310.98	16451.54	377.32	th2
4243	1600	77	3.6	-0.4	149.10	0.00		3233.61	16585.83	379.66	olc cambl
4244	1600	78	0.3	1.7	209.21	0.00		3225.35	16646.23	386.91	old cambl
4245	1600	79	358.5	1.6	253.00	0.00		3217.63	16689.94	387.77	old cambl
4246	1600	80	355.5	1.4	289.11	0.00		3201.57	16725.25	387.76	old cambl
4247	1600	81	358.1	2.2	292.28	0.00		3214.56	16729.15	391.93	lac cambl
4248	1600	82	0.3	3.7	296.68	0.00		3225.80	16733.71	399.88	lbf cambl
4249	1600	83	5.6	3.4	316.24	0.00		3255.11	16751.76	399.49	gs
4250	1600	84	350.6	2.5	276.04	0.00		3179.17	16709.36	392.75	rac cambl
4251	1600	85	345.2	3.8	274.30	0.00		3154.18	16702.22	398.92	rbf cambl
4252	1600	86	339.5	6.2	272.80	0.00		3128.72	16692.55	410.33	rvw mcaml
4253	1600	87	337.8	5	251.64	0.00		3129.17	16670.01	402.71	lbf
4254	1600	88	337.3	3.3	214.84	0.00		3141.34	16635.23	393.09	lac
4255	1600	89	309.7	3.6	160.58	0.00		3100.70	16539.60	390.80	lac
4256	1600	90	308.6	5.5	180.96	0.00		3082.82	16549.93	398.12	lbf
4257	1600	91	132.8	-1.8	95.75	-5.00		3294.51	16371.97	382.69	Btp15r
4259	1600	92	132.7	-1.9	95.75	-5.00		3294.62	16372.10	382.52	Btp15r
4261	1600	93	133.3	-1.8	95.75	-5.00		3293.94	16371.36	382.69	Btp15r
4263	1600	94	108.6	-0.4	165.60	-5.00		3381.20	16384.21	384.54	Btp15m
4265	1600	95	108.7	-0.4	165.60	-5.00		3381.10	16383.94	384.54	Btp15m
4267	1600	96	110.3	0.3	231.80	-5.00		3441.65	16356.61	386.91	Btp15l
4269	1600	97	110.2	0.4	231.69	-5.00		3441.69	16357.03	387.32	Btp15l
4271	1600	98	110.2	0.4	231.69	-5.00		3441.69	16357.03	387.32	Btp15l
4273	1700	1	327.8	-0.8	155.88	-5.00		3441.59	16356.93	386.95	Btp15l
4275	1700	2	327.6	-0.8	155.78	-5.00		3441.19	16356.55	386.95	Btp15l
4277	1700	3	317.7	-1.3	213.84	-5.00		3380.74	16383.19	384.28	Btp15m
4279	1700	4	317.9	-1.3	213.94	-5.00		3381.23	16383.76	384.27	Btp15m
4281	1700	5	317.7	-1.2	213.95	-5.00		3380.67	16383.27	384.65	Btp15m
4283	1700	6	302.8	-1.3	273.23	-5.00		3294.99	16373.03	382.93	Btp15r
4285	1700	7	302.6	-1.3	273.03	-5.00		3294.65	16372.12	382.93	Btp15r
4287	1700	8	302.7	-1.3	273.13	-5.00		3294.82	16372.58	382.93	Btp15r
4289	1700	9	303.9	-1.5	231.52	0.00	28425.36	3332.50	16354.15	378.07	th
4290	1700	10	303.9	-1.2	231.25	0.00	28425.36	3332.72	16354.00	379.28	ws
4291	1700	11	300.4	-1.9	219.78	0.00	28443.46	3335.10	16336.24	376.84	th
4292	1700	12	300.4	-1.6	219.41	0.00	28443.46	3335.41	16336.05	378.00	ws
4293	1700	13	298.3	-2.5	212.10	0.00	28454.49	3337.91	16325.57	374.87	th pool
4294	1700	14	298.2	-2.8	208.95	0.00	28457.66	3340.51	16323.76	373.91	th
4295	1700	15	297.8	-3.1	208.10	0.00	28459.35	3340.58	16322.07	372.86	th
4296	1700	16	297.8	-3.1	208.10	-5.00	28459.35	3340.58	16322.07	377.86	ws
4298	1700	17	297.1	-1.2	207.05	7.50	28462.09	3340.34	16319.34	372.29	th

Salyer Survey Data - October, 1998											
Record #	Sta	SS	HA	VI	HD	TC	TH or XS DIST	X	Y	Z	Feature
4300	1700	18	289.3	-2.1	180.38	7.50	28499.54	3354.42	16284.64	370.01	th
4302	1700	19	280.4	-2.3	154.58	7.50	28536.11	3372.62	16252.92	370.42	th
4304	1700	20	272.1	-2	140.91	7.50	28561.47	3383.84	16230.18	371.71	th
4306	1700	21	265.8	-4.1	135.55	3.71	28577.57	3389.47	16215.09	370.70	th
4308	1700	22	263.8	-2.7	133.35	7.50	28582.76	3392.09	16210.62	370.34	th
4310	1700	23	258.9	-4.9	127.13	7.50	28595.51	3399.90	16200.54	365.73	th
4312	1700	24	254.1	-5.3	120.78	7.50	28607.68	3408.50	16191.93	365.42	th
4314	1700	25	254.1	-5.3	120.78	-5.00	28607.68	3408.50	16191.93	377.92	ws
4316	1700	26	246.5	-5.1	115.44	7.50	28624.21	3418.79	16178.99	366.33	th
4318	1700	27	239.3	-4.6	113.03	7.50	28638.76	3427.47	16167.31	367.53	th
4320	1700	28	232.4	-6.3	100.19	3.71	28656.90	3445.28	16163.89	369.36	th
4322	1700	29	221.7	-5.7	89.95	3.71	28677.35	3464.82	16157.86	371.44	th
4324	1700	30	208	-7.9	79.74	0.00	28699.99	3487.23	16154.62	373.06	th
4326	1700	31	187.9	-8.4	76.27	0.50	28727.43	3514.18	16149.47	372.37	th
4328	1700	32	187.9	-8.4	76.27	-5.00	28727.43	3514.18	16149.47	377.87	ws
4330	1700	33	177.4	-8.4	75.78	0.00	28741.35	3528.10	16149.32	372.94	th
4332	1700	34	157.8	-7.8	82.93	0.00	28769.26	3555.99	16148.24	372.77	th
4334	1700	35	144.2	-4.4	98.11	3.71	28795.47	3582.05	16145.45	372.87	th
4336	1700	36	137.5	-4.3	112.58	3.71	28814.45	3600.72	16142.02	371.95	th
4338	1700	37	130.9	-3.8	127.92	3.71	28835.09	3621.35	16141.27	371.92	th
4340	1700	38	125.6	-3.8	152.56	0.00	28862.92	3648.71	16136.21	374.00	th
4342	1700	39	121.9	-2.8	177.89	0.00	28890.39	3675.68	16131.02	375.43	th
4343	1700	40	118.1	-2.5	200.31	0.00	28916.06	3701.36	16130.67	375.38	th
4344	1700	41	116	-2.3	225.42	0.00	28942.35	3727.26	16126.20	375.08	th
4345	1700	42	116	-2.8	225.63	-5.00	28942.35	3727.46	16126.11	378.09	ws
4347	1700	43	112.8	-2.5	252.66	0.00	28972.68	3757.58	16127.11	373.10	th
4348	1700	44	118.2	0.2	271.50	0.00		3763.93	16096.72	385.08	rac
4349	1700	45	119.2	1.3	272.43	-5.00		3762.47	16092.11	395.31	rbf
4351	1700	46	122.5	2.6	274.82	-5.00		3756.44	16077.36	401.61	rvw
4353	1700	47	130.6	3.9	168.31	0.00		3652.45	16115.49	395.60	rvw
4354	1700	48	140.3	3.3	141.07	0.00		3614.77	16116.48	392.26	rvw
4355	1700	49	153.9	2.6	115.58	0.00		3575.51	16121.23	389.38	rvw
4356	1700	50	173.6	2.8	115.36	0.00		3537.52	16110.38	389.77	rvw
4357	1700	51	225.4	2.9	147.91	0.00		3419.34	16121.16	391.62	rvw
4358	1700	52	257.1	2	170.60	0.00		3358.37	16186.93	390.09	rvw
4359	1700	53	282.5	2.3	188.75	0.00		3340.39	16265.87	391.71	rvw
4360	1700	54	295.8	0.8	246.38	0.00		3302.84	16332.25	387.57	rvw
4361	1700	55	113	-1.8	288.66	3.71	29008.69	3790.37	16112.23	371.35	th
4363	1700	56	112.5	-2.1	301.30	3.71	29021.59	3803.02	16109.72	369.37	th
4365	1700	57	112.5	-2.1	301.30	-5.00	29021.59	3803.02	16109.72	378.08	ws
4367	1700	58	110.8	-1.7	317.56	3.71	29040.26	3821.52	16112.25	370.99	th
4369	1700	59	110.5	-1.5	334.79	3.71	29057.57	3838.24	16107.78	371.65	th
4371	1700	60	109.3	-1.8	350.33	0.00	29074.69	3855.30	16109.23	373.12	th
4373	1700	61	105.7	-1.4	394.48	7.50	29124.64	3904.42	16118.27	366.99	th
4375	1700	62	106.2	0.2	414.20	-5.00		3922.41	16109.46	390.57	nail alder
4377	1700	63	3.2	1	456.83	0.00		3550.16	16681.14	392.10	lac
4378	1700	64	8.6	2.7	545.79	0.00		3606.28	16764.68	409.87	lbf
4379	1700	65	11.7	3.6	602.71	0.00		3646.88	16815.21	422.05	l ter
4380	1700	66	30.7	2.4	586.39	0.00		3824.03	16729.22	408.71	lbf
4381	1700	67	33.4	0.7	475.56	0.00		3786.45	16622.04	389.94	lac
4382	1700	68	-----	-----	#VALUE!	0.00		#VALUE!	#VALUE!	#VALUE!	end

GPS Coordinates of Selected Features					
All Latitudes begin with 40 degrees west, only minutes and seconds are shown.					
All Longitudes begin with 123 degrees north, only minutes and seconds are shown.					
Reach	Feature	Latitude	Longitude	Elevation (m)	Elevation (ft)
Rte 30	Bridge pin	14'43.17277	07'34.09700	856.022	2808.5
	Brass cap	14'58.98381	08'02.68197	844.006	2769.0
	Pipe nipple	15'02.44938	08'17.87064	847.143	2779.3
Sulphur Glade	XS#5 pin#3	32'36.51192	27'13.84065	434.645	1426.0
	Brass Cap	31'37.52319	26'49.67729	437.993	1437.0
	XS#4 pin#3	31'47.34368	26'47.96455	436.528	1432.2
	Pipe Nipple	32'27.30822	27'02.50096	452.849	1485.7
	XS#3 pin#3	32'26.68622	27'04.45414	432.572	1419.2
	XS#4 pin#2	32'34.51386	27'08.10319	421.3	1382.2
Hyampom	XS#3 pin#2	36'17.62874	26'54.76723	365.536	1199.3
	Br Cap on Bridge	36'29.58066	27'02.11917	369.121	1211.0
	Our Brass Cap	36'32.82798	27'05.44660	358.573	1176.4
	XS#5 pin#3	36'35.60713	27'03.32514	363.273	1191.8
	Pipe Nipple	36'07.92655	26'54.58468	377.917	1239.9
	XS#2 pin#3	36'07.78669	26'55.41946	366.129	1201.2
	XS#1 pin#3	36'05.12314	26'55.57417	364.889	1197.1
	USGS Br Cap	36'05.43383	26'58.20848	370.518	1215.6
	XS#6 pin#3	37'04.51565	27'47.19236	358.416	1175.9
Salyer	Schocker's Cap	51'17.04074	34'39.96058	148.793	488.2
	XS#2 pin#3	51'27.56952	35'07.09261	140.406	460.6
	Pipe Nipple	52'24.10754	35'44.85983	153.891	504.9
	XS#3 pin#2	52'13.74870	35'39.28425	129.862	426.1
	XS#4 pin#3	52'42.19186	36'03.99328	128.101	420.3
	Our Br Cap	52'49.50974	36'44.20196	122.538	402.0

## Notes on landslide data tables:

Two tables are presented because the data from Grouse Creek was in a different format than the rest of the database. Meta-data defining each field was not available. I have deduced some of the definitions from similarities between this database and the data presented in Raines & Kelsey (1991) and Rains (1999).

### Geology

JIG = Jurassic igneous intrusives  
JGS = Galice Formation  
RCT = Rattlesnake Terrane  
SFM = South Fork Mountain Schist

### Size Class

1 = <0.32 acres  
2 = 0.32 – 1 acres  
3 = 1 – 3.2 acres  
4 = 3.2 – 10 acres  
5 = >10 acres

LS\_2            D = deep seated            S = shallow

### Cause

NL = natural  
RR = road related  
CD = cumulative off-site  
HR = harvest related  
FR = fire related

### Hillslope

MR = mid-slope with runout  
MS = mid-slope  
IG = inner gorge

Downstream effects    yes/no

### Trend

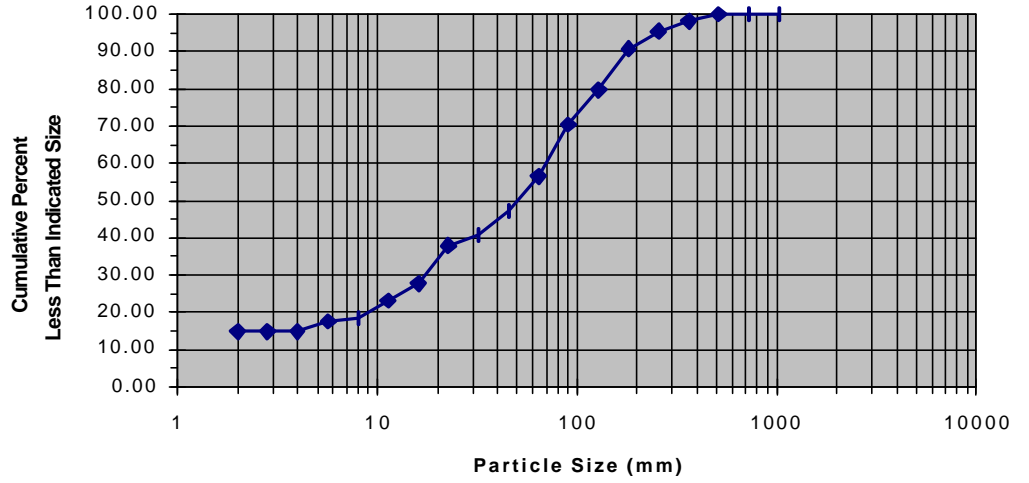
A = first appeared  
S = static  
E = enlarged since last photo  
R = recovering  
H = healed



Pebble Count Data Summary				
	Percent Less	D50	Dmean	D84
	Than 2 mm	(mm)	(mm)	(mm)
Rte 30 - XS#2	15	50.20	188.05	143.73
Rte 30 - XS#3	18	27.67	149.27	81.69
Rte 30 - XS#4	13	76.11	187.53	175.95
Rte 30 - XS#5	12	106.29	112.02	191.00
Sulphur Glade -XS#1	4	80.15	107.07	196.79
Sulphur Glade -XS#2	20	68.51	214.26	196.00
Sulphur Glade -XS#3	12	81.50	133.79	161.29
Sulphur Glade -XS#4	24	53.82	81.31	164.51
Sulphur Glade -XS#5	15	38.05	82.96	128.00
Hyampom - XS#1	40	4.05	42.84	34.03
Hyampom - XS#2	17	24.86	35.90	76.13
Hyampom - XS#3	12	14.47	34.81	32.29
Salyer - XS#2	15	66.50	180.53	227.51
Salyer - XS#4	10	21.79	33.91	69.10
Salyer - XS#5	20	7.19	8.98	16.67

Pebble Count Data  
 Route 30 - XS#2  
 11/11/98

	Size Parameters	
	m m	ø
Dmean =	188.05	-7.55
D90 =	175.62	-7.46
D84 =	143.73	-7.17
D65 =	78.71	-6.30
D50 =	50.20	-5.65
D35 =	20.54	-4.36
D16 =	4.66	-2.22
D10 =		

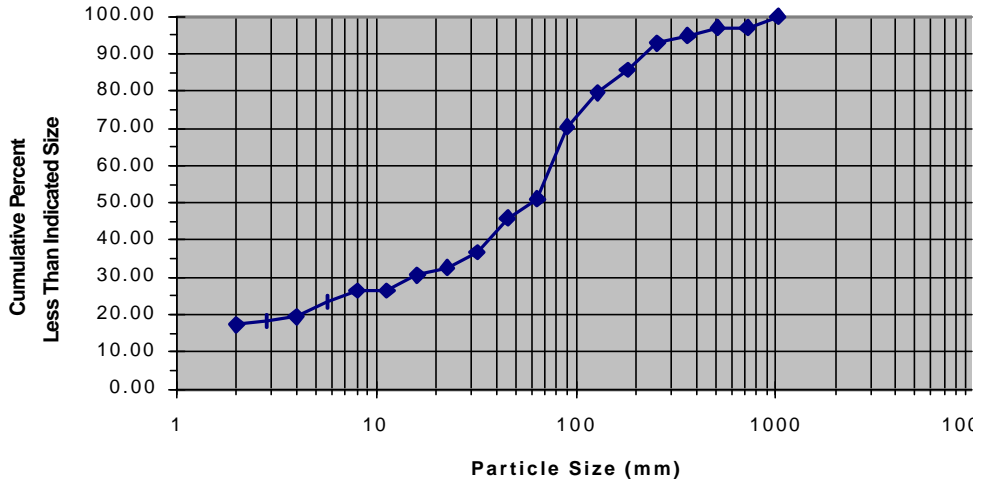


Raw Data:

1.5	8	16	31	51	70	91	130	190 bdc
1.5	9	16	32	52	75	95	140	200 bdc
1.5	10	16	35	55	75	95	140	200 bdc
1.5	10	17	40	60	80	99	146	210 bdc
1.5	12	20	42	60	80	100	146	240 bdc
1.5	12	20	44	60	80	100	150	280 bdc
4	12	20	45	60	80	110	150	280 bdc
4	12	22	45	65	82	111	170	280 bdc
4	15	22	50	65	85	120	175	380 bdc
7	16	24	50	70	90	125	180	380
8	16	30	50	70	90	130	180	bdc

Pebble Count Data  
Route 30 - XS#3

		Size Parameters	
		mm	ø
<b>Dmean =</b>		149.27	-7.22
		218.13	-7.77
<b>D90 =</b>		162.91	-7.35
<b>D84 =</b>		81.69	-6.35
<b>D65 =</b>		59.72	-5.90
<b>D50 =</b>		27.67	-4.79
<b>D35 =</b>			
<b>D16 =</b>			
<b>D10 =</b>			

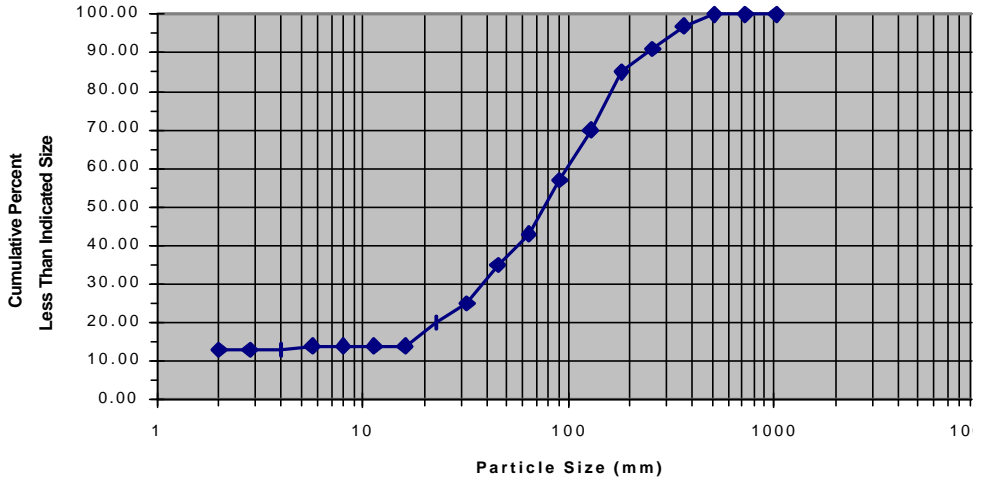


Raw Data:

1.5	1.5	6	30	42	75	82	120	185	365
1.5	1.5	6	30	50	75	85	125	185	750
1.5	1.5	12	35	50	75	85	125	190	750
1.5	2	12	35	50	75	90	125	190	750
1.5	3	15	35	52	75	90	130	198 bdcrc	
1.5	4	15	39	56	78	91	130	210 bdcrc	
1.5	4	16	40	65	78	110	140	230 bdcrc	
1.5	4	20	40	65	78	110	160	290 bdcrc	
1.5	4	25	40	70	80	120	175	345	
1.5	6	25	42	70	80	120	180	365	

Pebble Count Data  
 Route 30 - XS#4  
 11/11/98

	Size Parameters	
	mm	ø
Dmean =	187.53	-7.55
D90 =	239.31	-7.90
D84 =	175.95	-7.46
D65 =	111.44	-6.80
D50 =	76.11	-6.25
D35 =	45.25	-5.50
D16 =	18.12	-4.18
D10 =		

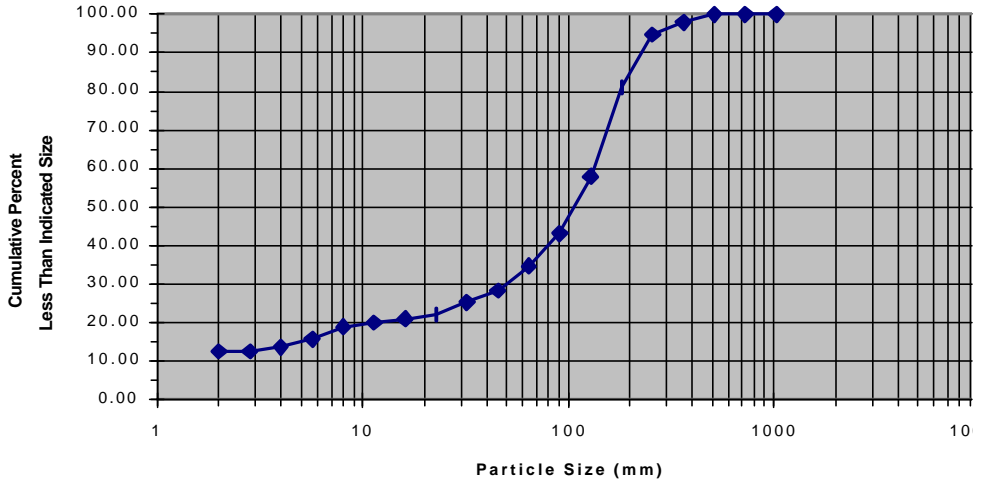


Raw Data

1.5	19	36	52	70	92	120	160	211	385
1.5	19	39	55	74	95	125	164	225	400
1.5	21	40	55	74	95	125	165	232	400
1.5	28	40	58	74	102	130	170	245 bdr	
1.5	28	41	60	74	105	132	175	260 bdr	
1.5	28	42	60	75	110	135	175	263 bdr	
5	30	44	65	76	110	142	180	330 bdr	
17	31	45	66	80	111	150	180	330 bdr	
18	35	47	68	82	115	155	185	360 bdr	
18	35	50	68	90	120	155	210	360 bdr	

Pebble Count Data  
 Route 30 - XS#5  
 11/11/98

	Size Parameters	
	mm	ø
Dmean =	112.02	-6.81
D90 =	218.49	-7.77
D84 =	191.00	-7.58
D65 =	140.71	-7.14
D50 =	106.29	-6.73
D35 =	64.72	-6.02
D16 =	5.80	-2.54
D10 =		

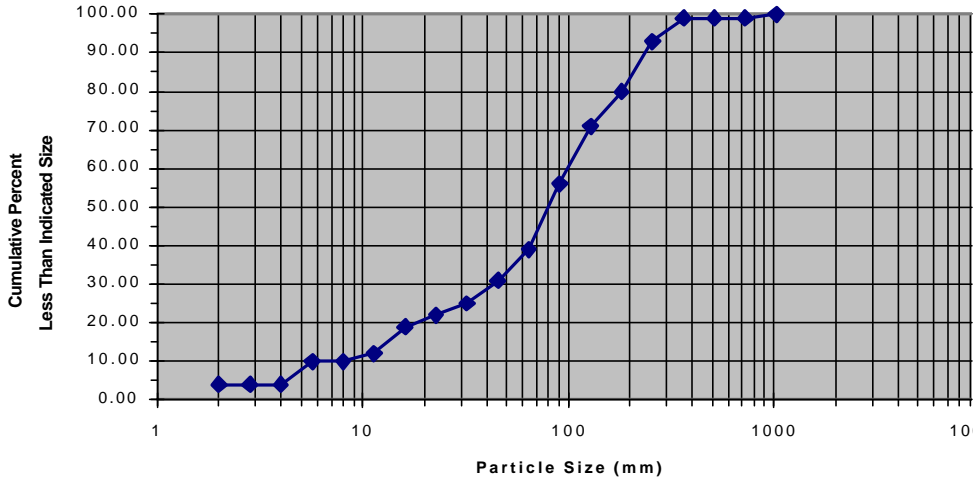


Raw Data

1.5	1.5	22	50	90	118	140	165	190	305
1.5	1.5	26	53	95	120	140	165	190	352
1.5	3	27	57	96	120	140	166	190	355
1.5	5	30	67	96	124	140	170	190	410
1.5	5	40	68	99	125	146	170	198	480
1.5	6	44	70	100	128	150	170	210	
1.5	6	45	73	108	131	153	180	218	
1.5	7	48	77	108	132	154	184	240	
1.5	8	48	80	110	136	155	185	242	
1.5	14	50	87	115	136	158	186	250	

Pebble Count Data  
 Sulphur Glade - XS#1  
 11/12/98

	Size Parameters	
	mm	∅
Dmean =	107.07	-6.74
D90 =	230.22	-7.85
D84 =	196.79	-7.62
D65 =	110.74	-6.79
D50 =	80.15	-6.32
D35 =	54.01	-5.76
D16 =	13.97	-3.8
D10 =	5.66	-2.5

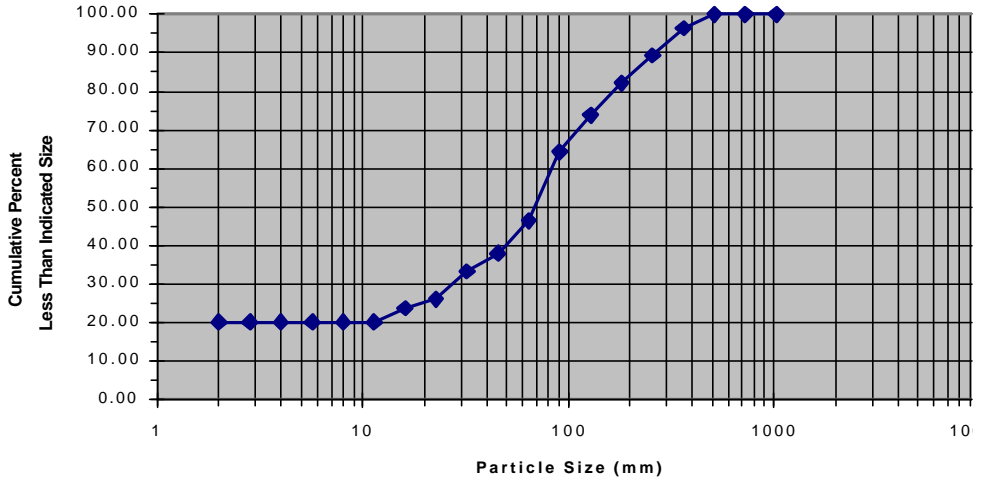


Raw Data:

1.5	9	22	40	65	83	110	126	186	230
1.5	11	22	48	65	85	114	130	188	242
1.5	12	23	50	70	86	115	135	190	250
1.5	12	25	50	74	87	116	140	195	290
4	12	30	52	75	89	116	140	200	294
4	12	32	54	79	90	120	150	206	295
4	14	35	58	80	91	120	155	210	310
4	15	36	60	80	91	120	160	215	340
5	15	39	60	80	102	125	160	220	352
5	21	40	64	80	107	125	180	220	735

Pebble Count Data  
 Sulphur Glade - XS#2  
 11/12/98

	Size Parameters	
	m m	ø
D mean =	214.26	-7.74
D90 =	262.36	-8.04
D84 =	196.00	-7.61
D65 =	92.76	-6.54
D50 =	68.51	-6.10
D35 =	36.20	-5.18
D16 =		
D10 =		

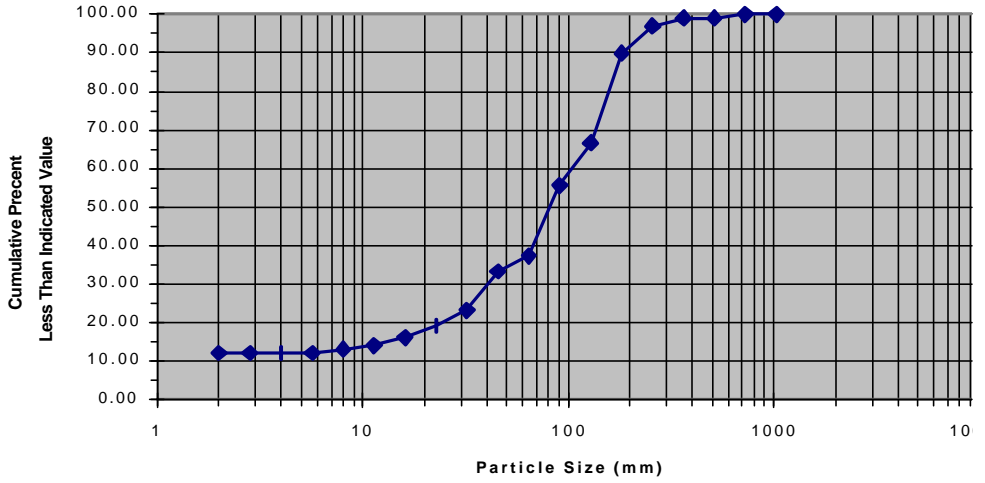


Raw Data:

1.5	14	40	60	82	114	175	295 bdc
1.5	15	40	65	85	115	182	330 bdc
1.5	20	40	65	87	115	200	344 bdc
1.5	21	42	72	88	125	220	385 bdc
1.5	23	47	75	88	130	230	440
1.5	25	52	75	90	130	230	480
1.5	28	53	75	91	140	245 bdc	
1.5	29	55	75	99	150	260 bdc	
1.5	30	56	77	105	160	270 bdc	
12	31	58	82	110	165	270 bdc	

Pebble Count Data  
 Sulphur Glade - XS#3  
 11/12/98

	Size Parameters	
	mm	ø
Dmean =	133.79	-7.06
D90 =	181.62	-7.50
D84 =	161.29	-7.33
D65 =	121.26	-6.92
D50 =	81.50	-6.35
D35 =	52.30	-5.71
D16 =	15.58	-3.96
D10 =		



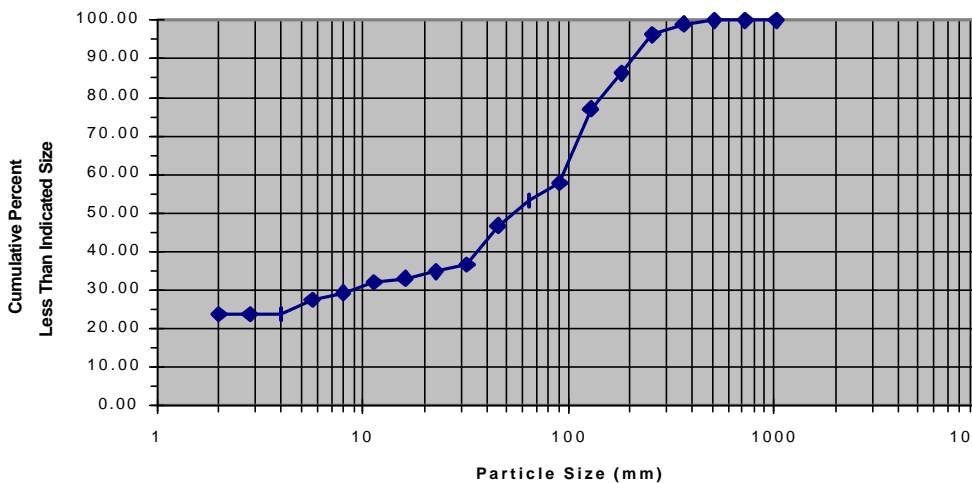
Raw Data:

1.5	10	34	49	75	90	115	148	177	211
1.5	12	35	55	75	90	120	150	180	225
1.5	12	35	58	75	100	125	152	180	227
1.5	17	35	58	77	101	130	152	180	245
1.5	18	38	64	78	102	132	160	180	275
1.5	19	40	65	80	105	135	160	180	280
1.5	25	40	65	80	107	135	170	180	548
1.5	26	42	67	82	109	140	170	185	bdrc
1.5	30	45	68	85	110	145	170	205	bdrc
7	31	45	70	85	111	145	170	207	bdrc



Pebble Count Data  
 Sulphur Glade - XS#4  
 11/12/98

	Size Parameters	
	mm	∅
Dmean =	81.31	-6.35
D90 =	198.94	-7.64
D84 =	164.51	-7.36
D65 =	102.05	-6.67
D50 =	53.82	-5.75
D35 =	23.23	-4.54
D16 =		
D10 =		



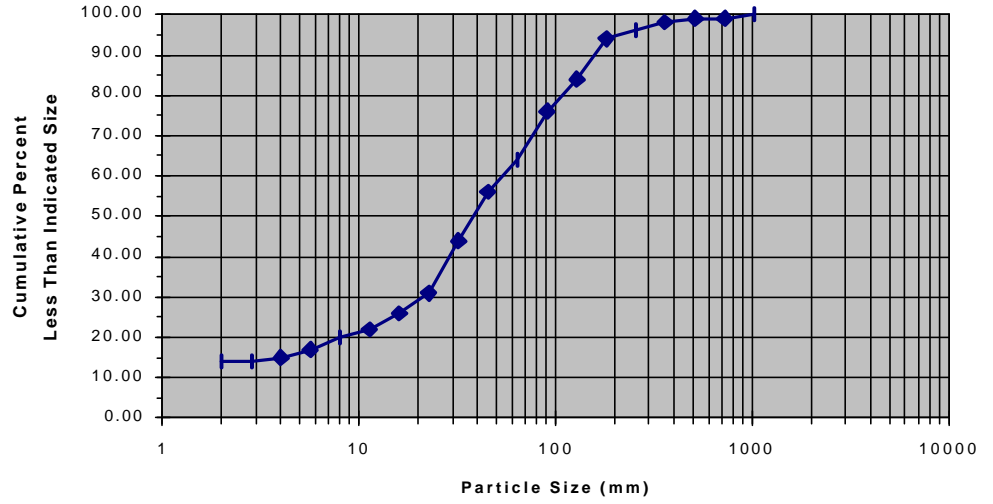
Raw Data:

1.5	1.5	1.5	6	28	40	65	100	117	141	195
1.5	1.5	1.5	6	31	40	65	104	120	142	200
1.5	1.5	1.5	7	32	45	73	105	121	145	210
1.5	1.5	1.5	7	35	47	74	106	122	152	222
1.5	1.5	1.5	10	35	52	90	107	122	156	225
1.5	1.5	1.5	11	35	53	91	108	122	170	230
1.5	1.5	4	11	36	56	92	109	132	182	245
1.5	1.5	4	15	36	56	96	112	132	185	256
1.5	1.5	5	20	38	58	97	115	135	189	292
1.5	1.5	5	22	39	60	99	117	140	195	320

Pebble Count Data  
 Sulphur Glade - XS#5  
 11/12/98

Size Parameters  
 mm       $\phi$

Dmean =      82.96      -6.37  
 D90 =      152.88      -7.26  
 D84 =      128      -7  
 D65 =      65.74      -6.04  
 D50 =      38.05      -5.25  
 D35 =      25.29      -4.66  
 D16 =      4.77      -2.26  
 D10 =

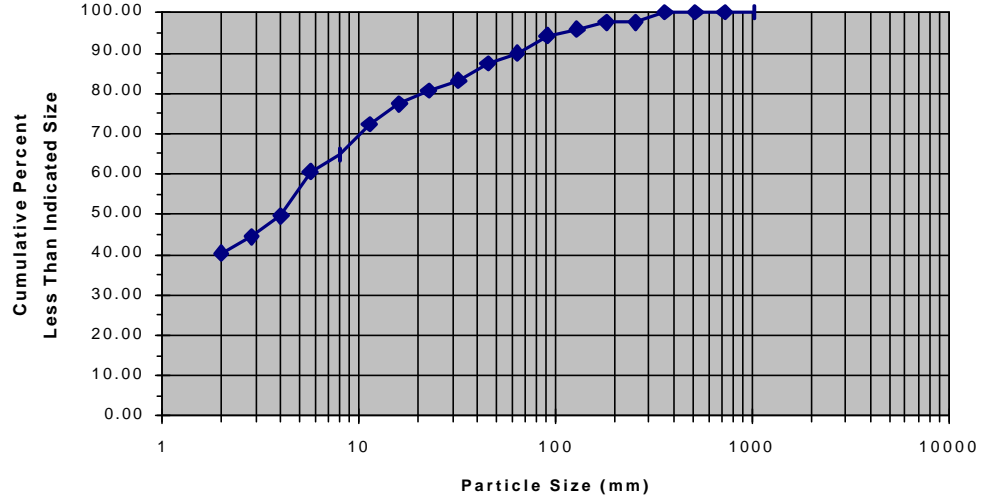


Raw Data:

1.5	1.5	10	23	30	40	56	80	120	165
1.5	1.5	12	25	30	44	58	82	120	175
1.5	1.5	15	25	30	44	60	85	125	180
1.5	3	15	25	33	45	64	85	136	185
1.5	4	15	25	33	45	68	90	138	210
1.5	5	17	25	35	50	68	100	140	300
1.5	6	20	25	39	50	72	107	150	318
1.5	6	20	30	40	52	75	110	155	450
1.5	6	20	30	40	55	78	110	160	900
1.5	9	22	30	40	55	80	110	160	1200

Pebble Count Data  
 Hyampom - XS#1  
 11/13/98

	Size Parameters	
	mm	∅
Dmean =	42.84	-5.42
D90 =	64.37	-6.01
D84 =	34.03	-5.09
D65 =	8.1	-3.02
D50 =	4.05	-2.02
D35 =		
D16 =		
D10 =		

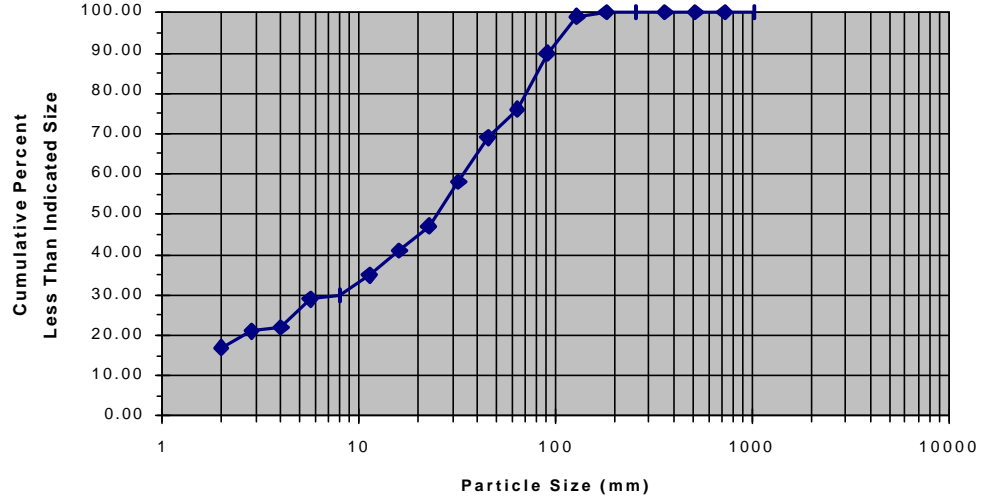


Raw Data:

1.5	1.5	1.5	1.5	1.5	2	4	6	10	20	45
1.5	1.5	1.5	1.5	1.5	3	4	6	10	20	45
1.5	1.5	1.5	1.5	1.5	3	4	6	11	22	48
1.5	1.5	1.5	1.5	1.5	3	4	6	11	22	50
1.5	1.5	1.5	1.5	1.5	3	4	7	12	23	50
1.5	1.5	1.5	1.5	1.5	3	5	8	13	25	65
1.5	1.5	1.5	1.5	2	3	5	8	13	28	72
1.5	1.5	1.5	1.5	2	4	5	9	14	40	75
1.5	1.5	1.5	1.5	2	4	5	9	15	40	85
1.5	1.5	1.5	1.5	2	4	5	9	15	42	90

Pebble Count Data  
 Hyampom - XS#2  
 11/13/98

	Size Parameters	
	mm	∅
Dmean =	35.9	-5.17
D90 =	90.51	-6.5
D84 =	76.13	-6.25
D65 =	39.72	-5.31
D50 =	24.86	-4.64
D35 =	11.31	-3.5
D16 =		
D10 =		

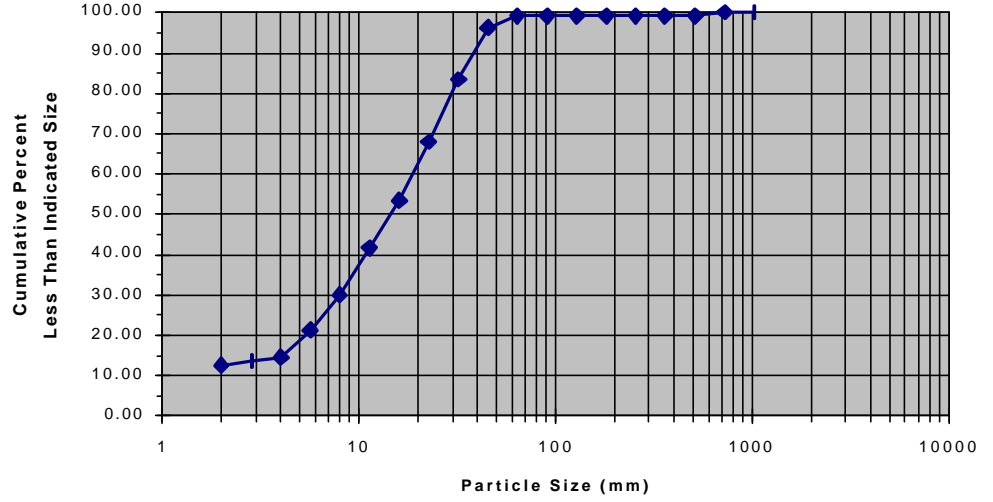


Raw Data:

1.5	1.5	2	8	15	26	33	50	70	95
1.5	1.5	3	9	16	27	35	50	71	95
1.5	1.5	4	10	18	29	35	50	72	95
1.5	1.5	4	10	19	29	35	51	72	95
1.5	1.5	4	10	20	29	39	54	75	100
1.5	1.5	4	12	20	30	40	60	77	100
1.5	1.5	5	12	22	31	41	64	80	110
1.5	2	5	12	23	31	41	65	85	117
1.5	2	5	15	25	32	41	66	85	120
1.5	2	6	15	25	33	48	70	90	140

Pebble Count Data  
 Hyampom - XS#3  
 11/13/98

	Size Parameters	
	mm	∅
Dmean =	34.81	-5.12
D90 =	36.62	-5.19
D84 =	32.29	-5.01
D65 =	21.01	-4.39
D50 =	14.47	-3.85
D35 =	9.3	-3.22
D16 =	4.34	-2.12
D10 =		

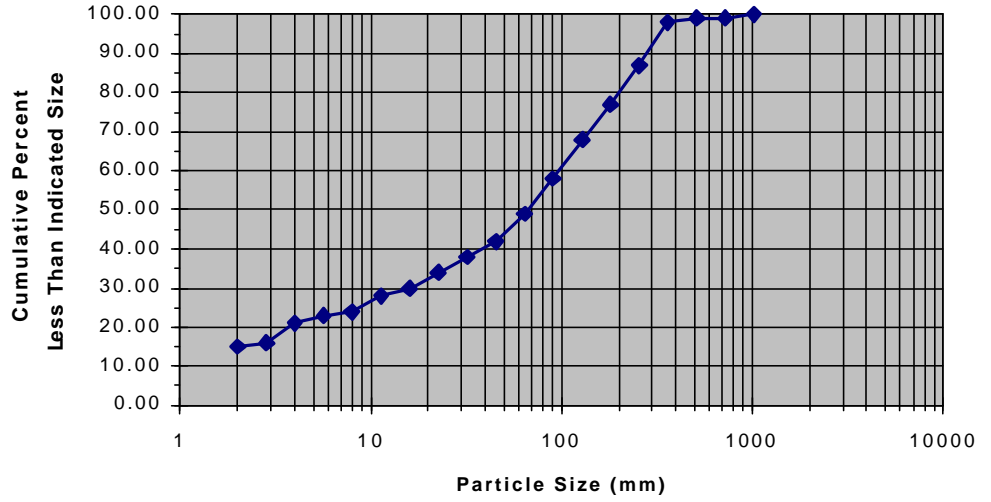


Raw Data:

1.5	1.5	5	8	10	15	19	24	29	35	50
1.5	1.5	6	8	11	15	19	25	29	36	56
1.5	2	6	8	12	15	19	25	30	37	58
1.5	3	6	9	12	15	19	25	30	39	585
1.5	4	6	9	12	16	20	25	30	40	1470
1.5	4	6	10	13	16	20	25	31	40	
1.5	4	6	10	13	17	20	25	32	41	
1.5	4	7	10	13	17	21	25	32	44	
1.5	4	7	10	15	17	22	26	35	45	
1.5	5	7	10	15	17	23	26	35	45	

Pebble Count Data  
 Salyer - XS#2  
 11/14/98

	Size Parameters	
	mm	∅
Dmean =	180.53	-7.5
D90 =	271.29	-8.08
D84 =	227.51	-7.83
D65 =	114.96	-6.84
D50 =	66.5	-6.06
D35 =	24.71	-4.63
D16 =	2.83	-1.5
D10 =		

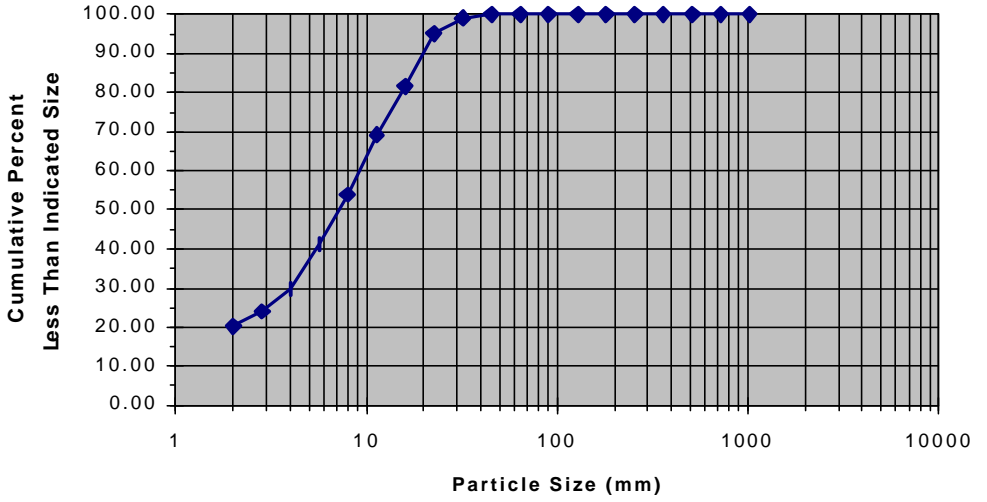


Raw Data

<1	3	8	25	52	84	119	166	254	332
<1	3	10	29	56	90	122	186	260	361
<1	3	12	35	62	92	131	198	267	497
<1	3	14	36	65	93	137	198	285	821
<1	3	17	39	68	94	139	204	307	br
<1	4	19	42	69	96	142	224	308	br
1	4	20	46	72	105	144	227	312	br
1	7	20	50	77	106	148	228	319	br
1	8	23	50	78	108	156	238	323	br
2	8	24	51	83	115	164	246	328	br

Pebble Count Data  
 Salyer - XS#5  
 11/14/98

	Size Parameters	
	mm	∅
Dmean =	8.98	-3.17
D90 =	19	-4.25
D84 =	16.67	-4.06
D65 =	10.24	-3.36
D50 =	7.19	-2.85
D35 =	4.7	-2.23
D16 =		
D10 =		



Raw Data

<2	<2	<2	3	5	7	8	11	15	17	24
<2	<2	2	4	5	7	8	11	15	18	27
<2	<2	2	4	5	7	8	12	15	20	28
<2	<2	2	4	6	7	9	12	15	20	39
<2	<2	2	4	6	7	9	12	15	20	bd
<2	<2	3	4	6	7	9	13	16	21	bd
<2	<2	3	4	6	8	10	14	16	21	bd
<2	<2	3	4	6	8	10	14	16	21	bd
<2	<2	3	4	6	8	10	14	17	22	
<2	<2	3	4	7	8	11	15	17	23	

## Appendix E: Updating Active Landslide Chronology from Aerial Photos

**Purpose:** to update the GIS coverage and associated data base for active landslide occurrence within selected areas of the South Fork Trinity watershed following a major storm event; information will be used to evaluate spatial and temporal patterns of landslide occurrence, possible associations with management activity, and degree of sediment delivery to streams from mass wasting processes.

### **Methodology**

#### ***Materials:***

- aerial photos for most recent year (currently 1998) and preceding time frame (currently 1990 or 1995) to cover selected study areas;
- 7.5-minute quad sheets to plot aerial photo centers for cross-referencing;
- transparent overlays;
- *fine* tip permanent markers;
- size template for 1:16,000 scale to estimate acreage;
- data recording sheets.

#### ***Preparations:***

- Arrange all aerial photos in sequential north-south flight lines; tape overlays on most recent photos; label roll & frame and register north & south fiducial (tic) marks.
- Delineate study area boundaries, using orthophotos in Monitoring Plan as a guide, as well as effective areas for mapping by equalizing overlap areas north-south and east-west.
- Prepare composite spot index on 1:24,000 quad sheets; highlight centers of photos that will be mapped on (generally, every other photo).

#### ***Mapping Procedure:***

- For each flight line of most recent photos, delineate landslide features visible within each effective area; number features sequentially from "1" on each overlay.
- Check against corresponding flight line(s) of earlier photo set to ascertain which slides on the later set are new and which have changed. Note differences under column on data sheet corresponding to most recent date as follows:
  - A - first appeared in newer photo
  - E - enlarged since preceding photo; estimate percent increase (e.g., 100% = doubled in size) and enter in %E column to right
  - S - minimal change (no more than 20% revegetated) since preceding photo
  - R - recovering (partly revegetated)
  - H - healed (at least 80% revegetated)



- Enter landslide data on data sheets grouped under aerial photo number corresponding to which overlay it's numbered sequentially on.

- When finished with a flight line, fill in remaining columns of data sheet as follows:
  - (a) airphoto number at beginning of sequence; (e.g., 3498-123)
  - (b) estimated *maximum* areal extent to nearest tenth acre (or whole acre if 10 or larger)
  - (c) type of slide:
    - S = shallow debris slide; planar to spoon-shaped cavity left on hillslope; generally minimal depositional area at toe;
    - T = debris flow/torrent; relatively long compared to width, forming a fairly smooth-sided, mass-erosional swath; not to be confused with an extensive depositional area below a debris slide;
    - R = rock slide/fall; usually rougher texture and steeper face than debris slide area; may be talus deposit at toe;
    - D = deep-seated slide; generally a distinct scarp and downdropped block are visible; most difficult type to distinguish between active and dormant - clues for active include fresh scarp, small active slides in toe zone, very rough texture of vegetation.
  - (d) confidence:
    - D = definite (>90% confidence; most larger slides should be);
    - P = probable (more likely *is* a slide than *is not*);
    - Q = questionable (more likely *is not* a slide; shouldn't be many of these, mostly smallest slides)
  - (e) hillslope position:
    - SS = streamside; roughly the lower 1/4 of a slope; may be visible break-in-slope above;
    - MS = midslope; roughly the middle 1/2 of a slope;
    - US = upper slope; roughly the upper 1/4 of a slope
  - (f) % delivery: estimate apparent percent delivery to stream overall: generally, SS will be 100% for "S" and "T" type slides; to use this default, leave blank; MS and US slides will usually be low delivery, but can be as high as 90% for large ones on steep valley sides.
  - (g) downstream adjustment (Y/N) - where substantial sediment deposition is apparent downstream from a feature or group of features, assign "Y" to all of those features *that appeared in the same time interval in which the deposition appeared*; e.g., if deposition first appeared on 1998 photos, upstream slides that also first appeared on 1998 photo would get a "Y", while upstream slides that first appeared in 1975 and didn't enlarge noticeably would get an "N"; also, delineate the approximate extent of substantial deposition on the appropriate photo overlay and designate with "x" symbols.
  - (h) management influence:
    - N = natural; apparently not associated with any management
    - R = road-related; slide is near road and it appears reasonably plausible that road may have influenced slide's occurrence

H = harvest-related; slide is within or immediately below timber harvest area

F = fire-related; slide is within or immediately below burned area; could be checked after-the-fact by overlaying with GIS fire coverage

C = cumulative offsite; this category implies a management influence upstream; slides (usually inner-gorge) downstream of managed areas that generated mass wasting debris to channel before or at the same time as slide's occurrence; may require post-inventory analysis

(i) a final ID number, sequential for the South Fork Trinity project.

A sample of hypothetical recorded data on the work sheet is shown below.

Aerial photo	No.	Acres	Type	Conf	1998	% E	Hillslope	% Deliv.	Dnstrm Adjust	Mgt. Infl.	Final ID No.
798-65	1	0.6	S	P	E	40	SS	*	N	N	
	2	2.6	S	D	E	20	MS	60	Y	H	
	3	1.1	S	P	S		MS	0	N	R	
	4	4.8	D	D	S		SS	*	N	N	
	etc										
								etc			
										etc	
798-67	1	2.0	S	D	E	30	SS		N	N	

\* no entry = default value (SS - 100)

- Proceed to next flight line, repeating above steps. Begin numbering sequentially from "1" again on each photo; be careful to avoid mapping & numbering the same slide twice where the effective areas abut between alternate photos or adjacent flight lines.

**Data Management:**

- Add new or enlarged landslide polygons to GIS coverage by digitizing directly over DOQ back coverage, using visual similarities between images. Enter **final ID number** from work sheets as each feature is digitized.
- Enter all recorded data from work sheets into spreadsheet by aerial photo number, including **final ID number** so data can be attached to coverage when spreadsheet is imported.

**Appendix F**  
**ERFO and Storm Driven Sedimentation Tracking**

Large storms have the potential to adversely impact road systems through restricting vehicular access and/or impacting water quality such as in the event of culvert failures, diversions, slumps or slides. When large storms occur the Forest Transportation system is inventoried under the ERFO process (Emergency Repair Federally Owned) to assess damages and repair costs. The purpose of this form is to initiate a sedimentation assessment process that will dove-tail to the existing ERFO process. The intent of this effort is to begin the process of documenting and keeping track of road related and storm driven sedimentation trends over time. It is hoped that this information will provide an adaptive management feedback loop to engineers and watershed staff as to how the transportation system is withstanding storm events and which floodproofing measures work and do not work in reducing sedimentation impacts. Outlined below is a sedimentation assessment form that will be attached to the standard ERFO inventory form.

Route No: \_\_\_\_\_ Name: \_\_\_\_\_ Sheet: \_\_\_\_ of

Site No: \_\_\_\_\_ Mile Post No: \_\_\_\_\_ Location:

Date: \_\_\_\_\_ Observer: \_\_\_\_\_ Photo Numbers:

Description of Damage:

1/ Did the culvert fail?: Y/N

Culvert Failure Mechanism: Sediment Slug \_\_\_\_ Woody Debris lodgement  
Hydraulic Exceedence

Did the culvert divert?: Y/N

2/ slump: Y/N Where: cutslope Y/N; Fillslope: Y/N

Failure Mechanism: Natural \_\_\_\_\_ Failed Road Structure: plugged ditch  
plugged culvert \_\_\_\_\_ culvert diversion

3/ landslide: Y/N Where: Harvest Unit Y/N; Native Ground: Y/N

Failure Mechanism: Natural \_\_\_\_\_ Failed Road Structure: plugged ditch  
plugged culvert \_\_\_\_\_ culvert diversion

Estimate of Sediment Mobilized (cubic yards): (width \_\_\_\_\_ x depth \_\_\_\_\_ x length \_\_\_\_\_)/27 =

Did the sediment deliver to a water body or riparian reserve: Y/N

If Yes, what percent of sediment actually delivered to a water body or riparian reserve?