

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.1.3.1.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.1.3.1.2-1
Explicit description of the needed information:	Map sketch of the Walker Lane Belt and associated selected faults and earthquakes.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	N/A
Information Source Description:	N/A
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.1.3.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Report on Alternative Tectonic Models
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.1.4.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	N/A
Explicit description of the needed information:	Seismic Hazard Methodology
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Topical Report
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.1.4.1-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.1.4.1-1
Explicit description of the needed information:	A regional map showing the major seismotectonic elements in the western great basin with an overlay of regional seismicity.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Literature
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.1.4.2.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.1.1.4.2.1-1
Explicit description of the needed information:	Southern Great Basin Seismic Network Catalog.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	Southern Great Basin Seismic Network Catalog
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.2.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Additional information on the stratigraphy and distribution of Pre-Cenozoic aged rocks beneath Yucca Mountain.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Results from boreholes from Study 8.3.1.4.2.1
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.2.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Additional data on the volcanic stratigraphy at Yucca Mountain, including revised stratigraphic nomenclature.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Results from Surface and ESF based testing programs (all drilling, field mapping, and geophysical studies).
Information Source Description:	Stratigraphic Compendium
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.2.3-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	TBD
Explicit description of the needed information:	Additional data on the Calico Hills stratigraphic section.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Results from boreholes USW G-5, USW G-6, UE-25G#7, and UE-25G#8/WT#19, collected as part of SP 8.3.1.4.2.1.
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.2.5-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	TBD
Explicit description of the needed information:	Additional data on the Quaternary stratigraphy at Yucca Mountain.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Results from SP 8.3.1.17.4.2 and 8.3.1.5.1.2
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.3.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figures 3.1.1.2.3.2-1 and 3.1.1.2.3.2-2
Explicit description of the needed information:	Maps of Quaternary faults (site and regional scale). Figure 1: A preliminary map of known and suspected quaternary faults within 100 km of Yucca Mountain. Figure 2: A preliminary map of known and suspected quaternary faults in the vicinity of Yucca Mountain.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	U.S. Geological Survey Open-file reports (L.W. Anderson and others; W.F. Simonds and J.W. Whitney)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.3.5.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Additional information on silicic volcanism in the YMR
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.3.5.2.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.3.5.2.1-1
Explicit description of the needed information:	Caldera-related volcanic activity of the ring-fracture zone of the Timber Mountain caldera complex
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.3.5.2.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.3.5.2.2-2
Explicit description of the needed information:	Generalized geologic map of the basalt of southeast Crater Flat
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.3.5.2.2-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.1.2.3.5.2.2-1
Explicit description of the needed information:	K-Ar and $^{40}\text{Ar}/^{39}\text{Ar}$ age determinations for the Quaternary basalt of Crater Flat and Buckboard Mesa
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.3.5.2.2-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Map and cross section showing the generic (feeder and vent) relationships between Crater Flat basalt centers and feeder dikes.
Information will be used to support:	Subsection 3.1.1.2.3.5.2.2(5)(d) Eruptive models for the Quaternary basalt of Crater Flat
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.3.5.2.2-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Data to verify the stratigraphic position of the western lava flow associated with the Hidden Cone Center
Information will be used to support:	Subsection 3.1.1.2.3.5.2.2(6)(b) Hidden Cone Center
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.1-1
Explicit description of the needed information:	Data from the UNR Northern Nevada and Southern Great Basin networks; Map of quaternary faults (unpublished).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	TBD
Explicit description of the needed information:	Detailed map of the Ghost Dance fault.
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	USGS open-file report
Information Source Description:	TBD
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-1
Explicit description of the needed information:	Location of seismic recording stations of the Southern Great Basin Seismic Network. Source: Sheehan et al. (1993).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-2
Explicit description of the needed information:	Stations recording the Little Skull Mountain earthquake of 29 June, 1992 in southern Nevada. Source: URS/Blume & Associates (1992).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-3
Explicit description of the needed information:	Attenuation of peak acceleration and peak velocity of the Little Skull Mountain, Nevada earthquake of 29 June 1992 in southern Nevada compared with the average of the estimates derived from Joyner and Boore (1988) and Campbell (1990). Source: URS/Blume & Associates (1992).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-5
Explicit description of the needed information:	Locations of the Little Skull Mountain earthquake, the Rock Valley earthquake, and the recording station at Midway Valley. Source: Sheehan et al. (1993).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-5
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-7
Explicit description of the needed information:	Velocity seismograms of the first 2 earthquakes recorded in Midway Valley. Source: Sheehan et al. (1993).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-6
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-7 and Figure 3.1.1.2.4.2.2-8
Explicit description of the needed information:	Velocity seismograms of the Eureka Valley aftershocks of June 8, 1993 (magnitude 3.9, depth 5.9 km and magnitude 4.0, depth 1.7 km). Source: Sheehan et al. (1993).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-7
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-11
Explicit description of the needed information:	Ratios of measured PSRV at Station W-14 to average values for NTS sites. Source: Phillips (1991).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-8
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-12
Explicit description of the needed information:	Ratios of measured PSRV at Station W-23 to average values for NTS sites. Source: Phillips (1991).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-9
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-13
Explicit description of the needed information:	Ratios of measure PSRV at Station W-22 to average values for NTS sites. Source: Phillips (1991).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-10
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-14
Explicit description of the needed information:	Ratios of measured PSRV at Station W-21 to average values for NTS sites. Source: Phillips (1991).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-11
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-15
Explicit description of the needed information:	Location map of strong motion stations that recorded the Pipkin nuclear explosion at Pahute Mesa. Source: Weetman et al. (1970).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.2.2-12
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.2.2-16
Explicit description of the needed information:	Profile of radial velocity time histories of the Pipkin nuclear explosion at Pahute Mesa recorded to the south at stations shown in Figure 3.1.1.2.4.2.2-15. Source: Weetman et al. (1970).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.3.4-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.3.4-1
Explicit description of the needed information:	Seismograms recorded in a downhole array at Jackass Flats (Station 10, Well J-11) from a nuclear explosion at Pahute Mesa. Top row: acceleration; middle row: velocity; bottom row: displacement. Left column: surface station on alluvium; middle column: -61 meters near the base of alluvium; right column: +356 meters in tuff. Source: Vortman and Long (1982).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.3.4-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.1.2.4.3.4-2
Explicit description of the needed information:	Location map of downhole ground motion recording stations at Yucca Mountain and regional topography. Source: Phillips (1991).
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.4.4-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.1.2.4.4-1
Explicit description of the needed information:	Table of fault parameters for faults considered to be potential seismic sources for the Yucca Mountain Site.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Piety, et al., 1993 (in review)
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.1.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figures 3.1.1.2.7.1-1 and 3.1.1.2.7.1.1-1 and Table 3.1.1.2.7.1.1-1
Explicit description of the needed information:	<p>Information about the spatial location of the various units of the thermomechanical stratigraphy in and in the vicinity of the repository block.</p> <p>Elevations of the contacts between the various units of thermomechanical stratigraphy. The spacing between the holes should preferably be in the range of one-half to three-quarters of a mile. Additional drilling may be necessary depending on the variability of the data encountered.</p>
Information will be used to support:	
The Information is needed by/for (date or event):	<p>Information on the TMS with intermediate spacing between drillholes is needed before the advanced conceptual design of the repository.</p> <p>Information about the TMS with appropriate spacing between drillholes is needed before the License Application Design of the repository.</p>
Most likely source of the Information:	Study Plan
Information Source Description:	Holes to be drilled under the Systematic Drilling Program (Study Plan 8.3.1.4.3.1) will provide majority of the information for the TMS. Additional information will come from drilling under the study "Characterization of Percolation in the Unsaturated Zone-surface-based studies" (8.3.1.2.2.3) and the NRG and SRG holes in Study Plan 8.3.1.14.2. (Document Numbers 8.4.1.4.3.1, 8.3.1.2.2.3, 8.3.1.1.4.2).
Does the supporting data need to be QA?	

Date: 03/31/95

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.1.2.7.3.1-1
Explicit description of the needed information:	<p>Data to verify whether measurements of elastic properties of the thermomechanical units, especially the emplacement unit, made under conditions of zero confining pressure, room temperature (23° C) and full saturation (baseline conditions) are applicable to the values of these properties for in situ conditions.</p> <p>Results of tests in which the elastic properties are measured on comparable samples of the thermomechanical units under the baseline conditions as well as under the expected state of these conditions in situ. If the results show that measurements made under baseline conditions are not applicable to values of these properties under expected conditions, additional testing under the expected conditions may have to be performed.</p>
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study Plan for the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.13).
Does the supporting data need to be QA?	

SKELETON TEXT

Date: 03/31/95

YMP/94-05, Rev. 0

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.1-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.1.2.7.3.1-1
Explicit description of the needed information:	Sufficient test results on the measurement of Young's Modulus and Poisson's Ratio of the various thermomechanical units to adequately characterize these properties of the repository block.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study Plan for laboratory determination of the properties of intact rock (8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.1-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Sufficient test results to determine the anisotropy of elastic properties of the various thermomechanical units including values of Young's Modulus and Poisson's Ratio measured perpendicular and parallel to the rock fabric.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan for the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.1.2.7.3.1-1
Explicit description of the needed information:	<p>Unconfined compressive strength of the various units of the thermomechanical stratigraphy.</p> <p>Sufficient test results on the unconfined compressive strength of TSw2 unit of the thermomechanical stratigraphy so as to adequately characterize the spatial variability, if any, of the strength of this unit within the zone of interest in the repository block.</p>
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan for the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.2-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	<p>Test results on the unconfined compressive tests of various units of the thermomechanical stratigraphy under as close to the in situ moisture content as possible.</p> <p>Values of confined compressive strength.</p>
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.2-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Effect of elevated temperatures on the strength of various units of the thermomechanical stratigraphy. Values of unconfined compressive strengths at elevated temperatures.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.2-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Test results to evaluate the strength anistropy of TSw2. Values of compressive strength of TSw2 measured both perpendicular and parallel to the rock fabric.
Information will be used to support:	
The Information is needed by/for (date or event):	Before advanced conceptual design of the repository.
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.2-5
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Geological maps of the ESF exposures showing the locations, if any, of zones of high lithophysae content in the TSw2. Information is needed to verify whether there are zones of high lithophysae content within the proposed emplacement zone of TSw2.
Information will be used to support:	
The Information is needed by/for (date or event):	For advanced conceptual design of the repository.
Most likely source of the Information:	Study Plan
Information Source Description:	Activity of geologic mapping of the exploratory studies facilities under Study Plan number 8.3.1.4.2.2. (Document Number 8.3.1.4.2.2)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.2-6
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Test results that show the effect of lithophysae content on the mechanical properties of the Topopah Spring tuff.
Information will be used to support:	
The Information is needed by/for (date or event):	For advanced conceptional design.
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Information on the tensile strength of the various units of the thermomechanical stratigraphy.
Information will be used to support:	
The Information is needed by/for (date or event):	For license application design.
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.4-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Triaxial tests on various units of the thermomechanical stratigraphy, especially TSw2 and CHn. Specifically, values of cohesion and angle of internal friction at various confining pressures and temperatures.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.3.5-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Long-term time-dependent deformational behavior of TSw2 at elevated temperatures expected in emplacement areas during the preclosure period. Specially, values for steady state creep strain rate at various temperatures.
Information will be used to support:	
The Information is needed by/for (date or event):	For advanced conceptual design of the repository.
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan for laboratory determination of the mechanical properties of intact rock. (Document Number 8.3.1.15.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.4.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Test results to evaluate the effect of normal stress level on the coefficient of friction of natural joints. Specifically, measured values of coefficient of friction at various levels of normal stress.
Information will be used to support:	
The Information is needed by/for (date or event):	For the advanced conceptual design of the repository.
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of fractures. (Document Number 8.3.1.15.1.4)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.4.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Information on the effect of infilling materials on the mechanical properties of joints. Specifically, results of tests in which natural joints with various types of infilling material are tested for their mechanical properties.
Information will be used to support:	
The Information is needed by/for (date or event):	For advanced conceptual design of the repository.
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of fractures. (Document Number 8.3.1.15.1.4)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.4.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	<p>a) Test results to show the differences, if any, of the mechanical properties of healed and unhealed natural joints;</p> <p>b) Test results to show the effects, if any, of various test conditions such saturation level, temperature, etc., on the mechanical properties of natural joints.</p> <p>The measured values of joint properties under various test conditions from these tests are needed.</p>
Information will be used to support:	
The Information is needed by/for (date or event):	For the advanced conceptual design.
Most likely source of the Information:	Study Plan
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of fractures. (Document Number 8.3.1.15.1.4)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.4.5-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Test results on the effect of short-term time-dependent factors on the mechanical properties of joints. Specifically, values of mechanical properties parameters under various displacement rates, etc.
Information will be used to support:	
The Information is needed by/for (date or event):	For advanced conceptual design of the repository.
Most likely source of the Information:	Study Plans
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of fractures. (Document Number 8.3.1.15.1.4)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.1.2.7.4.6-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Test results on the effect of short-term time-dependent factors on the mechanical properties of joints. Specifically, values of mechanical properties parameters under various displacement rates, etc.
Information will be used to support:	
The Information is needed by/for (date or event):	For advanced conceptual design of the repository.
Most likely source of the Information:	Study Plans
Information Source Description:	Study plan on the laboratory determination of the mechanical properties of fractures. (Document Number 8.3.1.15.1.4)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.2.1.4-1
Explicit description of the need information:	Surface water monitoring data such as flow duration data that indicate maximum, minimum and average historical observations of surface water bodies, water quality data, snow pillow and precipitation data that is currently being recorded at all recording stations.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Characterization of Streamflow and Runoff. (Document Number 8.3.2.1.2)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.1-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Provide information on the characteristics of playas including location, discharge and chemical quality of water.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Study Plan Activity 8.3.1.2.1.3.4, Evapotranspiration Studies. (Document Number 8.3.1.2.1.3)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.1-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.2.1.1-3
Explicit description of the need information:	Figure showing the location of all surface water bodies in the Yucca Mountain region including springs and major playas.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	Source documents have been provided to EG&G.
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.1-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.2.1.1-3
Explicit description of the need information:	Update of phreatophyte data in Table 3.1.2.1.1-3
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.4-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	More geologic evidence of Quaternary flooding in the region of Yucca Mountain with emphasis on the Holocene may be developed during site characterization studies.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Characterization of the Quaternary Regional Hydrology. (Document Number 8.3.1.5.2.1)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.5-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Additional flooding study results.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study Plan
Information Source Description:	Characterization of Flood Potential of the Yucca Mountain Site. (Document Number 8.3.1.16.1.1)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.5-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Design basis water levels and evaluations of all surface facilities and underground openings may be available, but could not be collected for this revision. These design basis water levels and elevations and locations of all surface facilities and underground openings may change during advanced conceptual design.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.1.5-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Information from "Floodplain Assessment of Surface-Based Investigations at the Yucca Mountain Site, Nye County, Nevada" dated 8/91 and "Floodplain Assessment of Site Characterization Activities at the Yucca Mountain Site, Nye County, Nevada" dated 8/92.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	See description above
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.2.2.2-1
Explicit description of the need information:	Summary of selected wells monitored for water levels at Yucca Mountain.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Literature
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.2.2.3-1
Explicit description of the need information:	Hydraulic properties for the Lower Carbonate Aquifer.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.3-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.2.2.3-2
Explicit description of the need information:	Pumping response data for the weled tuff aquifer.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.3-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.2.2.3-3
Explicit description of the need information:	Analyses using the finite-conductivity, vertical fracture model.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.3-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Aquifer test results from C-well multi-well cluster in 1995
Information will be used to support:	
The Information is needed by/for (date or event):	Next revision
Most likely source of the Information:	USGS
Information Source Description:	OFR
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.3-5
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Aquifer properties from the Upper Carbonate Aquifer
Information will be used to support:	
The Information is needed by/for (date or event):	1998
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.4-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Analysis and modeling results of the water table and deeper aquifer to evaluate recharge/discharge relationships
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.5-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Analysis and evaluation of regional groundwater ages.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.6-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Groundwater flow path analysis.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.6-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Groundwater interchange between aquifer analysis and evaluation.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.6-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Evaluation of geologic and aquifer parameter variability downgradient of the repository before the regulatory receptor.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.7-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.2.2.7-1
Explicit description of the needed information:	Map or diagram showing former high levels of the water table in the south-central Great Basin during the Quaternary Period
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.7-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.2.2.7-2
Explicit description of the needed information:	Diagram of variations in flow-path length for the Ash Meadows area in response to different water-table levels
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.7-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Confirmation of the reconnaissance observations of Mifflin and Wheat (1979) regarding shorelines of late Pleistocene age
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.7-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Evaluation of recharge along Fortymile Wash
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.7-5
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Evaluation of the apparant ground-water ages presented by Benson and McKinley (1985)
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.7-6
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Age of marsh deposits in southern Indian Springs Valley of presumed ground-water origin that occur as much as 20 to 50 m above the modern water table in the valley-fill aquifer
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.7-7
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Quantitative interpretation of the carbon-14 data to measure ground-water velocity (will require test wells that permit water to be sampled selectively from several depths in the zone of saturation)
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.2.8-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Update of water appropriations data used in tables.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.2.3.1-1
Explicit description of the needed information:	Table of the saturated zone monitoring system composed of 25 holes from which water level measurements of the saturated zone are obtained
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.3.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828 Jerry Fairley (702) 794-7461
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	This subsection will need to be revised as new information becomes available. Of particular importance will be data on UZ potentials gathered from USW UZ-series holes. Most of these holes are not currently instrumented, but will be in the future.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	SP 8.3.1.2.2
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.3.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828 Jerry Fairley (702) 794-7461
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Reason for the flatness of the potentiometric surface in the region of the small hydrologic gradient. According to Ervin, et al. (1993): "The area of small gradient, where the water table is nearly horizontal, could result either from flow through highly permeable rocks or from low groundwater flux through the aquifer in that area. It is difficult to ascertain the degree to which each factor affects water levels in the small-gradient area."
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	TBD
Information Source Description:	
Does the supporting data need to be QA?	

SKELETON TEXT

Date: 03/31/95

YMP/94-05, Rev. 0

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.3.2-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828 Jerry Fairley (702) 794-7461
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	The exact reason for the low permeability nature of the Solitario Canyon fault, and the amount of flux that actually crosses the fault into the region of the proposed repository block, is a matter of conjecture.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	The information may be determined by the Solitario Canyon fault studies (YMP-USGS-SP 8.3.1.2.3.1, R0, Activity #8.3.1.2.3.1.1).
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.4-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828 Jerry Fairley (702) 794-7461
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	Discussion on the characteristics of hydrogeologic units.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Study 8.3.1.2.2.3, Percolation in the unsaturated zone-surface based study, Study 8.3.1.2.2.4, Percolation in the unsaturated zone-ESF study, Study 8.3.1.2.3.1, Characterization of site saturated zone groundwater flow system, other studies?
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.5-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Information on the recharge of site ground water
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.7-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Collection of data for the chemical and isotopic characterization of the infiltrating pore water as a function of depth at the site
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.8-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828 Jerry Fairley (702) 794-7461
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the need information:	At the present time, the hydrologic characteristics of faults in the vicinity of Yucca Mountain are largely conjectural. Similarly, the generation of locally saturated (i.e., perched water zones) areas through capillary barrier effects or inhibition of fracture flow to nonwelded vitric tufts, and subsequent lateral flow, has not been proven to date.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	
Information Source Description:	
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.9-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.2.3.9-1
Explicit description of the needed information:	Decline in the water level with well J-13 in continuous service
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.10-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Parameters used to model the hydrologic system more effectively and any variations induced by climatic or tectonic changes
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.2.3.10-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Results of additional paleospring investigations
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.3.2.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	N/A
Explicit description of the need information:	Analyses of samples from additional boreholes and the ESF, mineralogy, petrology, and chemistry of the Topopah Spring Member.
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	Los Alamos technical reports
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.3.2.1.1.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	N/A
Explicit description of the need information:	Hydrothermal alteration of the Topopah Spring Member.
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	Results of Study Plan 8.3.1.3.2.2 (History of mineralogic and geochemical alteration at Yucca Mountain).
Information Source Description:	Los Alamos technical reports
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figures 3.1.4.1.1-1 and 3.1.4.1.1-2
Explicit description of the need information:	Locations of the regional and site-specific meteorological monitoring stations.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Results of: Study Plan 8.3.1.2.1.1 (Characterization of Meteorology for Regional Hydrology), and Study Plan 8.3.1.12.2.1 (Meteorological Data Collection at Yucca Mountain).
Information Source Description:	Regional and site-specific station locations
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1-1
Explicit description of the need information:	List of parameters measured at the regional and site-specific meteorological monitoring stations.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	Results of: Study Plan 8.3.1.2.1.1 (Characterization of Meteorology for Regional Hydrology), and Study Plan 8.3.1.12.2.1 (Meteorological Data Collection at the Yucca Mountain Site).
Information Source Description:	Table 3.1.4.1.1-1
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.4.1.1.2-1
Explicit description of the need information:	Average position of the polar front in January
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	TBD
Information Source Description:	Average position of the polar front in January (Document Number TBD)
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.1.2-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figures 3.1.4.1.1.1.2-2 through 3.1.4.1.1.1.2-6
Explicit description of the need information:	Time-lapse movements of winter storms systems.
Information will be used to support:	
The Information is needed by/for (date or event):	
Most likely source of the Information:	TBD
Information Source Description:	Time-lapse movements of winter storms systems.
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.1.2-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.4.1.1.1.2-7
Explicit description of the needed information:	Summer southwest monsoon showing a lobe of the Bermuda high over the four corners region
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.4.1.1.3-1
Explicit description of the needed information:	Dominant summer and winter moisture sources for the southern Nevada area
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.1.3-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Effect of varying air flow regime on the Yucca Mountain Site
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.1.3-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.4.1.1.1.3-2
Explicit description of the needed information:	Plot of average annual precipitation as a function of station elevation
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.1-1
Explicit description of the needed information:	Summary data on temperature from the Yucca Mountain site and regional monitoring sites
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.2-1
Explicit description of the needed information:	Precipitation data from weather stations and gages in the Yucca Mountain vicinity
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.2-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.4.1.1.2.2-1
Explicit description of the needed information:	Precipitation amounts for each month, based on average data from INN 3.1.4.1.1.2.2-1
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need

Information Need Number:	INN 3.1.4.1.1.2.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.3-2
Explicit description of the needed information:	Relative humidity data from sites in the vicinity of Yucca Flat
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.3-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.3-3
Explicit description of the needed information:	Wet-bulb depression values in relation to ambient temperature and humidity
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.4-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figures 3.1.4.1.1.2.4-1 through 3.1.4.1.1.2.4-(n)
Explicit description of the needed information:	Surface wind data as wind rose plots for all monitoring stations
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.4-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Wind roses with data split for daytime versus nighttime wind frequencies (data plotted on terrain maps).
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.5.1-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.5.1-1 and Figure 3.1.4.1.1.2.5.1-1
Explicit description of the needed information:	Wind speed and direction data at 1524 m above mean sea level
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.5.1-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.5.1-2 and Figure 3.1.4.1.1.2.5.1-2
Explicit description of the needed information:	Wind speed and direction data at 1829 m above mean sea level
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.5.1-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.5.1-3 and Figure 3.1.4.1.1.2.5.1-3
Explicit description of the needed information:	Summary data from upper air winds
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.5.1-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Comparison of Desert Rock data with historical Yucca Flat upper air data
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.5.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Average morning and afternoon mixing height in the Yucca Mountain area
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.6-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Standard atmospheric pressure at the Yucca Mountain site
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.7-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.7-1
Explicit description of the needed information:	Monthly and daily average insolation at the Yucca Mountain site
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.8-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Evidence of tornadic weather at Yucca Mountain
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.8-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	
Explicit description of the needed information:	Evidence of dust devil activity at Yucca Mountain
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.8-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.4.1.1.2.8-1
Explicit description of the needed information:	Pattern of detected lightning at the Yucca Mountain site
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.8-4
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Confirmation that lightning data indicates where the heaviest surface-water runoff will occur
Explicit description of the needed information:	
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.8-5
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figure 3.1.4.1.1.2.8-2
Explicit description of the needed information:	Illustration of the spatial relationships between lightning-strike data and rainfall-runoff data
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.8-6
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.8-1
Explicit description of the needed information:	Frequency of occurrence of hail at Yucca Mountain
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.8-7
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.8-2
Explicit description of the needed information:	Frequency of occurrence of fog and sandstorms at Yucca Mountain
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.9-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Tables 3.1.4.1.1.2.9-1 and 3.1.4.1.1.2.9-2
Explicit description of the needed information:	Extreme wind speeds and probability of occurrence for the NTS and for Yucca Mountain
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.9-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.9-4
Explicit description of the needed information:	Probability of occurrence of extreme temperatures at Yucca Flat
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.1.2.9-3
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.1.2.9-5
Explicit description of the needed information:	One- and 24-hour maximum precipitation and probability of occurrence at Yucca Mountain
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.2-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.2-1
Explicit description of the needed information:	Map of the Yucca Mountain Site showing meteorological monitoring sites
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.3-1
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Figures 3.1.4.1.3-1 through 3.1.4.1.3-7
Explicit description of the needed information:	Wind roses for each Pasquill stability class based on the temperature lapse rate
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	

Date: 03/31/95

MGDS LA Annotated Outline Form A: Information Need	
Information Need Number:	INN 3.1.4.1.3-2
Section Number and Title:	3.1 DESCRIPTION OF INDIVIDUAL SYSTEMS AND CHARACTERISTICS OF THE SITE
Lead Author/Support Author and Phone:	Martha Pendleton (702) 794-1828
Primary LA AO Table or Figure INN supports (if applicable):	Table 3.1.4.1.3-1
Explicit description of the needed information:	Stability class distributions for the vertical temperature difference method to calculate atmospheric stability
Information will be used to support:	
The Information is needed by/for (date or event):	TBD
Most likely source of the Information:	
Information Source Description:	None identified
Does the supporting data need to be QA?	

INTEGRATOR (PMO):	
Date information will be available:	
Deliverable providing information:	
If the data needed is QA, then the QA source document number is:	