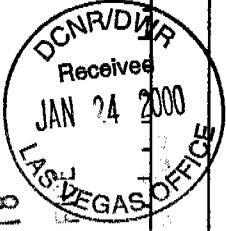


DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY (%)	U.S.C.S.		SOIL DESCRIPTION
					NAME	SYMBOL	
SWL measured at 18.95 feet below ground surface on October 23, 1999.							
155					SP		SAND - with gravel and little silt, medium to coarse grained, fine gravel, dark red brown (2 yr 3/4), dense, moderately calcareous
160							- no gravel, with some silt, reddish brown (2.5 yr 4/4)
165							- fine to coarse grained sand, fine gravel, reddish brown (2 yr 5/4)
170							
175	Bentonite grout				SP		GRAVELLY SAND - with trace to some silt, reddish brown (2 yr 4/4), cemented with caliche, slightly calcareous
180							- slightly finer with less gravel, making more water
185							- more gravel, cemented
190							- 5% gravel, fine sand
195							- hard cemented zone at 186.5'
195					SP		SAND - with silt, mottled dark gray and red sand, medium to coarse grained, black volcanic gravel to 2"; 1/4" to 1/2" wide caliche cemented zones;
195					GP		GRAVEL - coarse gravel to 2" with one to two inch layers of calcareous cemented silty sand
200					SP		GRAVELLY SAND - medium to coarse grained, dense, sand and gravel composed of black gray andesite and red basalt up to 3/4", non calcareous
200							- Sand with silt, dark reddish brown (2.5 yr 3/3), caliche nodules



00 JAN 10 PM 2:18
STATE ENGINEERS OF NV

DATE DRILLED: 10-24-99
 LOGGED BY: Randy Harris
 REVIEWED BY: Scott Ball

SURFACE ELEVATION (feet):
 TOTAL DEPTH (feet): 290.0
 DIAMETER OF BORING: 9-5/8"

DRILLING METHOD: ARCH
 SCREEN SIZE: 0.02"
 CASING SIZE: 4"

KLEINFELDER
 GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS
 SOILS AND MATERIALS TESTING
 PROJECT NUMBER 31-309302-009

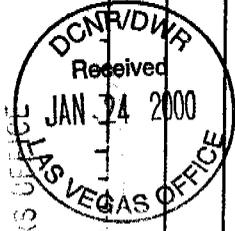
PROJECT: AMPAC
 MONITORING WELL
 DX270

PLATE
 1d
 PAGE 4 of 6

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S.		SOIL DESCRIPTION
					NAME	SYMBOL	
							SWL measured at 18.95 feet below ground surface on October 23, 1999.
205					SM		SILTY SAND - fine to medium grained, (2.5 yr 4/2), weak red, dense, moist, strongly cemented, few angular gray andesite gravel to 3/4", calcareous cement on fracture faces
					SP		GRAVELLY SAND - medium to coarse grained with black volcanic clasts to 3/4", non calcareous - trace silt
210							- some silt, occasional gravel
215							- some silt increasing to 216'
220					GM		SILTY GRAVELLY SAND - red brown (5 yr 5/4), dense
					SP		SAND - with some gravel - occasional gravel to 1/2" to 3/4"
225					GP		SANDY GRAVEL - some medium to coarse grained sand, little silt, gravel to 1/2"
	Bentonite grout				GM		SILTY GRAVEL - little sand, medium to coarse grained, gravel to 2", red-gray matrix (5 yr 5/2), black andesite gravel, slightly calcareous
230					SP		- decrease in gravel size
					SP		SAND - with fine gravel, medium to coarse grained sand, gravel to 1/2", trace silt, reddish brown (5 yr 4/4) with black and red vol, saturated, 5% quartz grains, angular to sub round
235					ML		VOLCANIC ASH - silt with sand, coarse to medium grained and fine gravel, light olive gray (5 y 7/2), some clay, non plastic, soft, moist, water flow shut off
							- clayey silt with some medium to coarse sand
240					CL		SILTY CLAY - with rare gray 1/2" gravel and coarse sand, light olive gray (5 y 7/2), trace fine sand, soft, stiff
					SM		CLAYEY SILTY SAND - fine grained
245							
					ML		CLAYEY SILT - with fine sand
250					CL		SILTY CLAY - with trace fine sand
					SP		SAND - fine grained with some silt and trace clay

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DATE DRILLED: 10-24-99 SURFACE ELEVATION (feet): DRILLING METHOD: ARCH
 LOGGED BY: Randy Harris TOTAL DEPTH (feet): 290.0 SCREEN SIZE: 0.02"
 REVIEWED BY: Scott Ball DIAMETER OF BORING: 9-5/8" CASING SIZE: 4"

 KLEINFELDER GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS SOILS AND MATERIALS TESTING PROJECT NUMBER 31-309302-009	PROJECT: AMPAC	PLATE
	MONITORING WELL	
	DX270	1e
		PAGE 5 of 6

THIS SUMMARY APPLIES ONLY AT THIS LOCATION AND AT THE TIME OF LOGGING. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH TIME. DATA PRESENTED IS A SIMPLIFICATION.

DEPTH (feet)	WELL CONSTRUCTION	WATER LEVEL	CORE RUN	RECOVERY(%)	U.S.C.S.		SOIL DESCRIPTION
					NAME	SYMBOL	
							SWL measured at 18.95 feet below ground surface on October 23, 1999.
255	Bentonite chips from 255' to 263'					CL	SILTY CLAY - light olive gray (5 y 7/2), very slight plasticity, soft, wet, moderately calcareous
260						GC	CLAYEY GRAVELLY SAND - (15:10:75) fine to coarse grained sand, red brown (5 yr 4/4), dense, wet, moderate caliche cement
265	#1/20 sand from 263' to 264'						- 1" clasts are cemented, sand color change to 7.5 yr 6/4, light brown
270						SM SP	SILTY SAND - with some gravel (20:60:20), pale brown (10 yr 6/3), dense, wet, 1-2" caliche nodules, cemented silty sand, matrix moderate to high calcareous SAND - with some silt, fine to medium, dark red brown (5 yr 3/3), dense, wet, 1/2" slightly cemented nodules
275	#3 sand from 264' to 290'					SM	SILTY SAND - fine, light yellow brown (10 yr 6/4) loose to medium dense, wet, highly calcareous, friable nodules
280						SC	CLAYEY SILTY SAND - fine to coarse, pale yellow (2.5 yr 7/4), loose to moderate dense, wet, friable, slightly calcareous, nodules of clay
285						SM	SILTY SAND - (40:60) no clay, fine, pale yellow (2.5 y 7/4), loose, wet
290						SM	GRAVELLY SILTY SAND - (10:30:60) fine to coarse gravel 1/4", medium dense, red to black volcanic gravel, 1/4" nodules of cemented moderately fine sand, light yellow brown (10 yr 6/4)

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LOGGED BY: Randy Harris	TOTAL DEPTH (feet): 290.0	SCREEN SIZE: 0.02"
REVIEWED BY: Scott Ball	DIAMETER OF BORING: 9-5/8"	CASING SIZE: 4"

 KLEINFELDER GEOTECHNICAL AND ENVIRONMENTAL ENGINEERS SOILS AND MATERIALS TESTING PROJECT NUMBER 31-309302-009	PROJECT: AMPAC	PLATE
	MONITORING WELL	1f
	DX270	PAGE 6 of 6

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 APPROV: _____
 BY: _____