

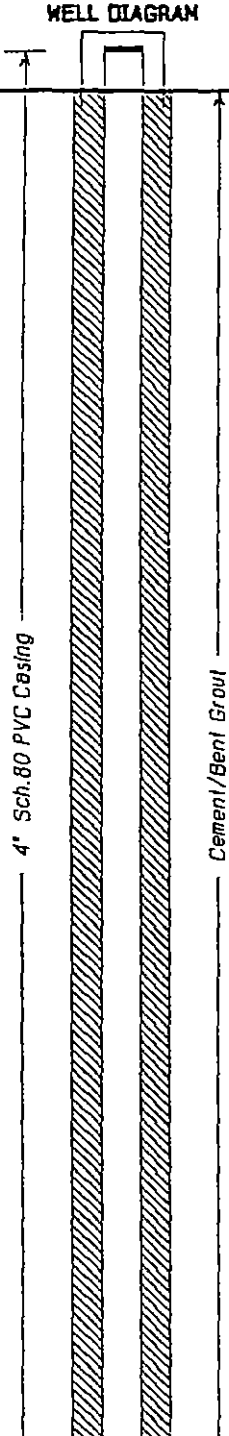





**ALISTO ENGINEERING GROUP**  
WALNUT CREEK, CALIFORNIA

# LOG OF WELL MW-17

SEE SITE PLAN

ALISTO PROJECT NO: 10-320-08      DATE DRILLED: 05/17-18/96  
 CLIENT: Pacific Gas and Electric Co.  
 LOCATION: Topack Compressor Station  
 DRILLING METHOD: Rotasonic  
 DRILLING COMPANY: Boart Longyear      CASING ELEVATION:  
 LOGGED BY: Ted Moise      APPROVED BY: Dan Salicss

WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
 <p>4" Sch. 80 PVC Casing</p> <p>Cement/Bent Grout</p>				<p>GP GP ML SP GP CL</p>	<p>gravely silty SAND: light brown; ~50% sand, fine- to coarse-grained; ~40% gravel, angular to subrounded, to 20 mm; ~10% fines.</p> <p>sandy GRAVEL: light olive-gray; ~55% gravel, angular to subrounded, to 40 mm; ~40% sand, fine- to coarse-grained; ~5% fines.</p> <p>sandy SILT: grayish-orange-pink; ~90% fines; ~10% sand, fine- to coarse-grained; dry.</p> <p>SAND: grayish-orange; fine- to coarse-grained; dry.</p> <p>sandy GRAVEL: grayish-orange-pink to light gray; ~80% gravel, angular to subrounded, to 50 mm; ~40% sand, fine- to coarse-grained; cobble, to 140 mm; dry.</p> <p>silty CLAY: light gray.</p>



WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
	<p>40</p> <p>45</p> <p>50</p> <p>55</p> <p>60</p> <p>65</p> <p>70</p> <p>75</p>			<p>CL</p> <p>ML</p> <p>GP</p> <p>GH</p> <p>SP</p> <p>GP</p>	<p>silty CLAY continued.</p> <p>sandy SILT: very pale orange; ~35% sand, fine- to medium-grained; damp.</p> <p>sandy silty GRAVEL: yellowish-gray; ~50% gravel, angular to subrounded, to 40 mm; ~40% sand, fine- to coarse-grained; 10% fines; dry.</p> <p>gravelly SAND: light-gray; ~55% sand, fine- to coarse-grained; ~45% gravel, subangular to rounded, to 50 mm.</p> <p>At 61 feet, Cobble, to 100 mm.</p> <p>Color change to pale yellowish-brown at 64 feet.</p> <p>sandy GRAVEL: light gray; ~50 gravel, subangular to subrounded, to 80 mm; ~45% sand, fine- to coarse-grained; ~5% fines.</p>



WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
<p>4' Sch. 80 PVC Casing</p> <p>Cement/Bent Grout</p> <p>Bentonite</p>	<p>85</p> <p>90</p> <p>95</p> <p>100</p> <p>105</p> <p>110</p> <p>115</p> <p>120</p>			<p>GP</p> <p>SP SM</p> <p>SP</p> <p>GP</p>	<p>sandy GRAVEL: light gray; ~85 gravel, subangular to subrounded, to 70 mm; ~30% sand, fine- to coarse-grained; ~5% fines.</p> <p>gravelly silty SAND: light gray to pale yellowish-brown; ~55% sand, fine- to coarse-grained; ~35% gravel, subangular to subrounded, to 80 mm; ~10% fines.</p> <p>gravelly SAND: light gray to pale yellowish-brown; ~85% sand, fine- to coarse-grained, ~30% gravel, subangular to subrounded, to 50 mm; ~5% fines.</p> <p>gravelly SAND: light gray to pale yellowish-brown; ~55% sand, fine- to coarse-grained, ~40% gravel, subangular to subrounded, to 80 mm; ~5% fines.</p> <p>sandy GRAVEL: light gray to pale yellowish-brown; ~50% gravel, subangular to subrounded, to 80 mm; ~45% sand, fine- to coarse-grained; ~5% fines.</p>

GP  
SM



WELL DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
	<p>130</p> <p>135</p> <p>140</p> <p>145</p> <p>150</p>			<p>GP GM</p> <p>GP SP</p> <p>GP GM</p>	<p>sandy silty GRAVEL: light gray to light brownish-gray; ~55% gravel, subangular to subrounded, to 70 mm; ~35% sand, fine- to coarse-grained; ~10% fines.</p> <p>damp at 128 feet.</p> <p>sandy GRAVEL: light olive-gray; ~30% sand, fine- to coarse-grained; ~35% gravel, angular to subrounded, to 55 mm; ~5% fines; wet.</p> <p>gravelly SAND: light olive gray to pale-brown; ~55% sand, fine- to coarse-grained; ~40% gravel, subangular to subrounded, to 55 mm; ~5% fines.</p> <p>sandy silty GRAVEL: olive-gray to brownish-gray; ~50% gravel, subangular to subrounded, to 70 mm; ~40% sand, fine- to coarse-grained; ~10% fines.</p>
<p>Total depth of borehole is 150.5 feet.</p>					
<p>155</p> <p>160</p> <p>165</p>					