



LOG OF WELL MW-14

SEE SITE PLAN

ALISTO PROJECT NO: 10-320-06 DATE DRILLED: 07/14-15/97
 CLIENT: Pacific Gas and Electric Co.
 LOCATION: Topock Compressor Station
 DRILLING METHOD: Resonant Sonic, Continuous Coring
 DRILLING COMPANY: Boart Longyear CASING ELEVATION: 570.54
 LOGGED BY: Ted Moise/Ken Simas APPROVED BY: Dan Salices

WELL DIAGRAM		DEPTH feet	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	
<p>4" Sch. 80 PVC Casing</p> <p>Cement/Bent Grout</p>		0	GP		sandy GRAVEL: grayish orange pink; 70% gravel, 4-75 mm, rounded to subangular; 30% sand, fine to coarse grained; dry.	
		5	SP		gravelly SAND: pale yellowish brown; 80% sand, fine to coarse grained; 20% gravel, 4-50 mm, subangular; dry. At 8 feet, 80% sand, fine to coarse grained; 40% gravel, 4-70 mm, subangular.	
		10				
		15	GP		sandy GRAVEL: pale yellowish brown; 60% gravel, 4-35 mm; subangular; 40% sand, fine to coarse grained, dry.	
		20	SP		gravelly SAND: pale yellowish brown; 80% sand, fine to coarse grained; 10% gravel, 4-20 mm, subangular, dry. At 20 feet, 55% sand, fine to coarse grained; 45% gravel, 4-50 mm. At 22 feet, color change to light gray; 80% sand, fine to coarse grained; 40% gravel, 4-50 mm, angular to subrounded. At 25 feet, color change to light olive gray; 40% gravel, 4-25 mm, subangular. At 30 feet, color change to pale yellowish brown; 75% sand, fine to coarse grained; 25% gravel, 4-80 mm, subangular; dry.	



ALISTO ENGINEERING GROUP
WALNUT CREEK, CALIFORNIA

LOG OF WELL MW-14

Page 2 of 4

SEE SITE PLAN

ALISTO PROJECT NO: 10-320-06 DATE DRILLED: 07/14-15/97
 CLIENT: Pacific Gas and Electric Co.
 LOCATION: Topack Compressor Station
 DRILLING METHOD: Resonant Sonic, Continuous Coring
 DRILLING COMPANY: Boart Longyear CASING ELEVATION: 570.54
 LOGGED BY: Ted Moise/Ken Simas APPROVED BY: Dan Salaires

WELL DIAGRAM	DEPTH feet	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
<p>4" Sch. 80 PVC Casing</p> <p>Cement/Bent Grout</p>	40		SP	<p>At 38 feet, gravel, 4-40 mm, subangular.</p> <p>At 38 feet, color change to light olive gray; 80% sand, fine to coarse grained; 40% gravel, 4-75 mm, subrounded to subangular; dry.</p>
	45		GP SP	<p>sandy GRAVEL/gravelly SAND: Pale yellowish brown; 50% sand, fine to coarse grained; 50% gravel, 4-75 mm, subangular to subrounded; dry.</p>
	50		SP	<p>gravelly SAND: Pale yellowish brown; 70% sand, fine to coarse grained; 30% gravel, 4-75 mm, subangular.</p> <p>At 50 feet, 80% sand, fine to coarse grained; 40% gravel, 4-85 mm, subrounded to subangular; dry.</p>
	55		SP	<p>At 54 feet; color change to light gray, 55% sand, fine to coarse grained; 40% gravel, 4-35 mm, subangular to subrounded; 5% fines; dry.</p> <p>At 57 feet, 85% sand, fine to coarse grained; 30% gravel, subangular to subrounded, 4-75 mm; 5% fines.</p>
	65		GP	<p>sandy GRAVEL: light gray; 80% gravel, subangular to subrounded, 4-75 mm; 40% sand, fine to coarse grained.</p>



SEE SITE PLAN

ALISTO PROJECT NO: 10-320-06 DATE DRILLED: 07/14-15/97
 CLIENT: Pacific Gas and Electric Co.
 LOCATION: Topock Compressor Station
 DRILLING METHOD: Resonant Sonic, Continuous Coring
 DRILLING COMPANY: Boart Longyear CASING ELEVATION: 570.54
 LOGGED BY: Ted Moise/Ken Simas APPROVED BY: Dan Salaiques

WELL DIAGRAM	DEPTH feet	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
<p>4" Sch. 80 PVC Casing</p> <p>Cement/Bent Grout</p> <p>Bentonite</p>	75		GP	Same
	75		SP	gravelly SAND: pale yellowish brown; 80% sand, fine to coarse grained; 40% gravel, 4-50 mm, subangular.
	80		GP SP	sandy GRAVEL/gravelly SAND: light olive brown; 50% sand, fine to coarse grained; 50% gravel, 4-50 mm, subangular.
	80			At 79.5 feet, 1.5 foot long boulder core, 8-inches wide. Rock flour is light gray.
	85		SP	gravelly SAND: light olive gray; 80% sand, fine to coarse grained; 40% gravel, 4-50 mm, subangular.
	90		SP GP	sandy GRAVEL/gravelly SAND: light olive gray, 50% sand, fine to coarse grained; 50% gravel, 4-50 mm, subangular.
	95		SP	gravelly SAND: light gray; 80% sand, fine to coarse grained; 20% gravel, 4-50 mm, subangular.
100		GP	sandy GRAVEL: light gray; 75% gravel, 4-50 mm, subangular to subrounded; 25% sand, fine to coarse grained, dry.	

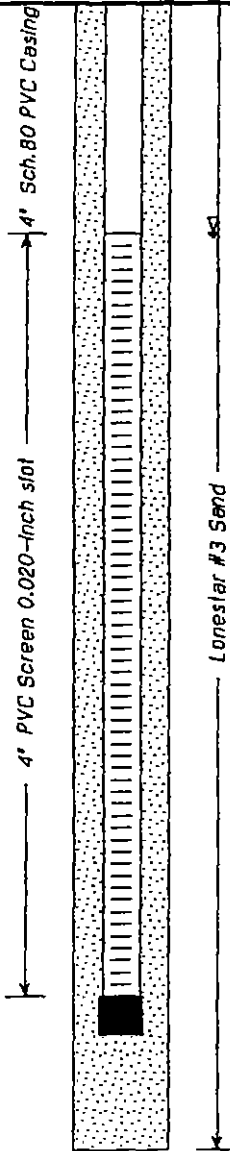
SP
GP



SEE SITE PLAN

ALISTO PROJECT NO: 10-320-08 DATE DRILLED: 07/14-15/97
 CLIENT: Pacific Gas and Electric Co.
 LOCATION: Topock Compressor Station
 DRILLING METHOD: Resonant Sonic, Continuous Coring
 DRILLING COMPANY: Bort Longyear CASING ELEVATION: 570.54
 LOGGED BY: Ted Moise/Ken Simas APPROVED BY: Dan Salaiques

WELL DIAGRAM



DEPTH feet	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
		GP SP	sandy GRAVEL/gravelly SAND: moderate brown; 50% gravel, 4-75 mm, subrounded to subangular; 50% sand, fine to coarse grained; damp.
		SP	gravelly SAND: light olive brown; 80% sand, fine to coarse grained; 40% gravel, subangular, 4-40 mm; moist to wet.
110		GP	sandy GRAVEL: light olive gray; 80% gravel, subangular to subrounded, 4-75 mm; 40% sand, fine to coarse grained; wet at 111 feet.
115			At 116 feet, color change to light brown; gravel 4-75 mm. At 117.5 feet, 140 mm cobble, light gray rock flour.
120		SP	gravelly SAND: pale yellowish brown; 85% sand, fine to coarse grained, 30% gravel, subangular, 4-75 mm; 5% fines; wet.
125		GP GM	sandy silty GRAVEL: pale yellowish brown; 55% gravel, subangular, 4-50 mm, occasional cobble to 80 mm; 35% sand, fine to coarse grained; 10% fines; wet.
130		SP	gravelly SAND: pale yellowish brown; 80% sand, fine to coarse grained; 35% gravel, subangular, 4-20 mm; 5% fines; wet.
		SM	gravelly silty SAND: pale yellowish brown; 80% sand, fine to coarse grained; 20% gravel, subangular, 4-30 mm; 20% fines; wet.
135		SP	gravelly SAND: light olive gray; 85% sand, fine to coarse grained; 30% gravel, subangular, 4-25 mm; 5% fines; wet. Total depth of the boring is 135 feet.