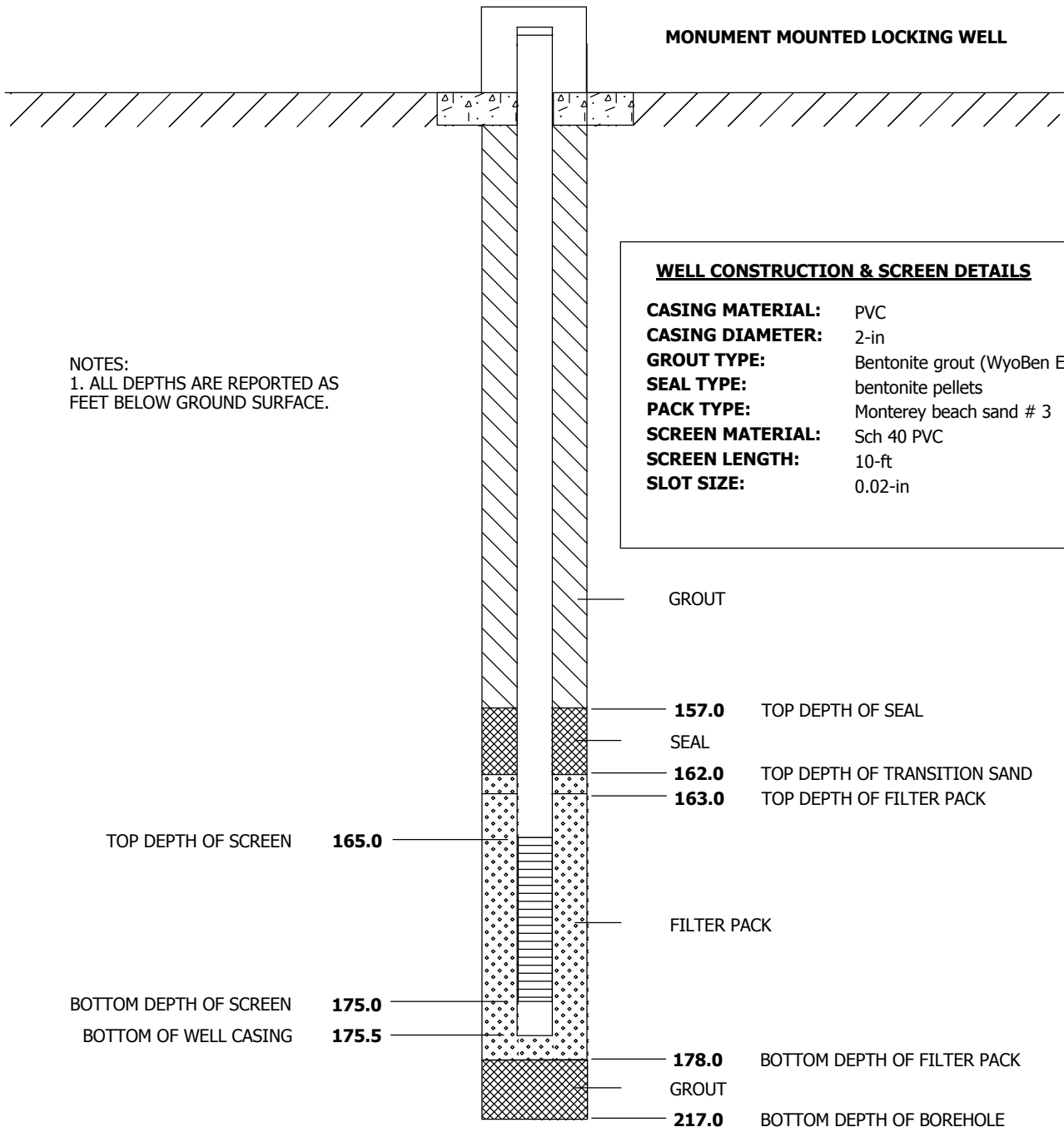


WELL COMPLETION DIAGRAM

PROJECT NO: 326128.01.16.EN	PROJECT: IMPM Drill Program	WELL NO: <i>MW-46-175</i>
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California		
DRILLING CONTRACTOR: Prosonic (Denzel Roberts = Driller)	DRILLING START DATE: 2/7/2006	
DRILLING METHOD: Rotosonic	DRILLING END DATE: 2/13/2006	
LOGGER: Rob Tweidt	WELL COMPLETION DATE: 2/13/2006	
TOP OF WELL CASING (NGVD 29): 482.20	NORTHING COORDINATE (CCS DAND 27, ZONE 5): 2102939.85	
GROUND SURFACE ELEVATION (NGVD 29): 480.82	EASTING COORDINATE (CCS NAD 27 ZONE 5): 7616196.75	



WELL DIAGRAM IS NOT TO SCALE

WELL COMPLETION DIAGRAM

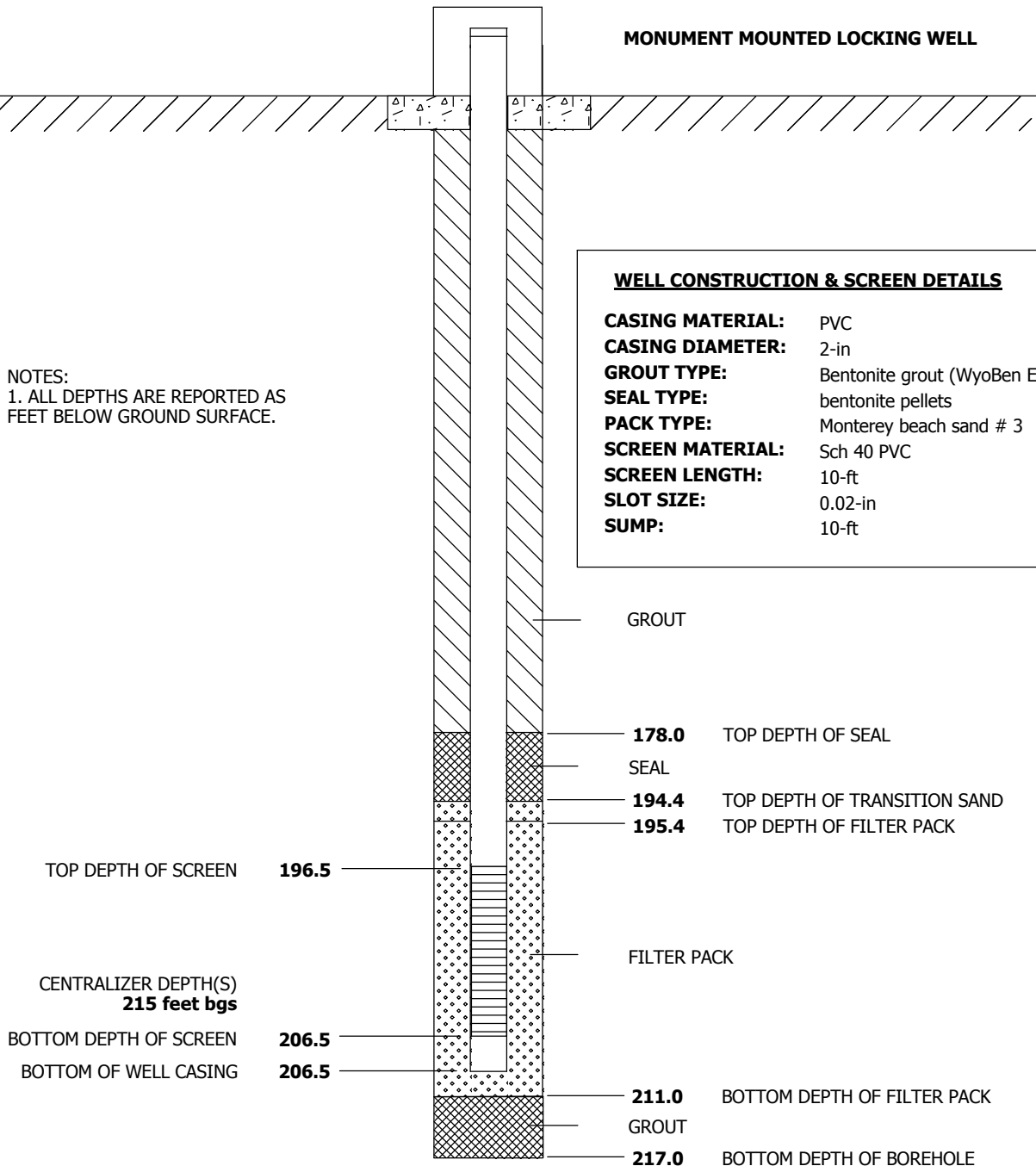
PROJECT NO: 326128.01.16.EN	PROJECT: IMPM Drill Program	WELL NO: <i>MW-46-205</i>
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California		
DRILLING CONTRACTOR: Prosonic (Denzel Roberts = Driller)	DRILLING START DATE: 2/7/2006	
DRILLING METHOD: Rotosonic	DRILLING END DATE: 2/13/2006	
LOGGER: Rob Tweidt	WELL COMPLETION DATE: 2/13/2006	
TOP OF WELL CASING (NGVD 29): 482.23	NORTHING COORDINATE (CCS DAND 27, ZONE 5): 2102940.09	
GROUND SURFACE ELEVATION (NGVD 29): 480.82	EASTING COORDINATE (CCS NAD 27 ZONE 5): 7616196.89	

MONUMENT MOUNTED LOCKING WELL

NOTES:
1. ALL DEPTHS ARE REPORTED AS FEET BELOW GROUND SURFACE.

WELL CONSTRUCTION & SCREEN DETAILS

CASING MATERIAL:	PVC
CASING DIAMETER:	2-in
GROUT TYPE:	Bentonite grout (WyoBen Enviroplug)
SEAL TYPE:	bentonite pellets
PACK TYPE:	Monterey beach sand # 3
SCREEN MATERIAL:	Sch 40 PVC
SCREEN LENGTH:	10-ft
SLOT SIZE:	0.02-in
SUMP:	10-ft



WELL DIAGRAM IS NOT TO SCALE

SOIL BORING LOG

PROJECT NAME: IMPM Drill Program		HOLE DEPTH (ft): 217.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 480.8 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,942.15	EASTING (CCS NAD 27 Z 5): 7,616,194.03	DATE STARTED: 2/7/2006	DATE COMPLETED: 2/13/2006
DRILLING METHOD: Rotosonic			DRILLING EQUIPMENT: Sonic AT (track mounted)	
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California			LOGGED BY: R. Tweidt	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION	COMMENTS
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
5		GB	5	SM	SILTY SAND (SM) - v pale brn (10YR7/4), 0% gravel, 85% f sand, 15% silts, well sorted, dry, no odor	
10		GB	5			
15		GB	5	SP	SAND (SP) - pale brn (10YR6/3), 0% gravel, 95% f sand, 5% fines, slightly moist, no odor	
20		GB	5			
25		GB	5			
30		GB	5	SM	- encountered groundwater - color change to dr yellowish brn (10YR4/4) SILTY SAND (SM) - dk yellowish brn (10YR3/4), 0% gravel, 85% f sand, 15% fines, well sorted, rapid dilatency, low strength, non-plastic, saturated, no odor	
35		GB	5	SP	SAND (SP) - brn (10YR4/3), 0% gravel, 90% f sand, 10% fines, well sorted, rapid dilatency, low strength, saturated, no odor	
				ML	SILT (ML) - v dk gray (10YR3/1), 0% gravels, 5% f sand, 90% fines,	

SOIL BORING LOG

PROJECT NAME: IMPM Drill Program		HOLE DEPTH (ft): 217.0		DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 480.8 ft. MSL		NORTHING (CCS NAD 27 Z 5): 2,102,942.15		EASTING (CCS NAD 27 Z 5): 7,616,194.03	
DRILLING METHOD: Rotasonic			DRILLING EQUIPMENT: Sonic AT (track mounted)		
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California				LOGGED BY: R. Tweidt	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
40		GB	5	SM	well sorted, lateral layering, coarsening downward, saturated, no odor SILTY SAND (SM) - v dk greyish brn(10YR3/2), 0% gravel, 80% f sand, 20% fines, wells sorted, rapid dilatency, non-plastic, saturated, no odor	Stop drilling for day (02/07/06) Harder drilling at 37'
				SP	SAND (SP) - brn (10YR4/3), 0% gravel, 90% f sand, 10% fines, well sorted, rapid dilatency, non-plastic, saturated, no odor	
45		GB	5	ML	SILT w/ CLAY (ML) - v dk grayish brn (10YR3/2), slow dilatency, high dry strength, m plasticity, wet, no odor	
				SM	SILTY SAND (SM) - v dk grayish brn (10YR3/2), 0% gravel, 80% f sand, 20% fines, well sorted, saturated, no odor SAND (SP) - v dk grayish brn (10YR3/2), 0% gravel, 90% f sand, 10% fines, well sorted, saturated	
50		GB	5		- dk grayish brn (10YR4/2), thin layer of silt with clay, trace vf sand - subrnd chert pebble (1.5cm), coarsening downwards	
55		GB	5	SP	- 40% m sand, 60% f sand, <2% trace fines, coarsening downward - subang pebbles up to 2.5cm, <5% met schist fluvial material - subrnd chert up to 1cm, 65% m sand, 35% f sand, <5% pebbles	
60		GB	5	SP	- increased gravel, subrnd to subang up to 4cm, chert and met, coarsening downwards, 50% m sand, 45% f sand, <2% fines	
65		GB	5	SP	- gravel layer >20%, subang to subrnd, chert	
						WELL GRADED SAND w/ GRAVEL - dk yellowish brn (10YR4/4) (changes to 10YR3/2 at 71'), sand (c/m/f) (50/40/5), 5% subrnd to subang gravel up to 8cm, wet, no odor - begin fining down sequence, sand (c/m/f) (20/70/5), 5% gravel
70		GB	5	SW		

SOIL BORING LOG

PROJECT NAME: IMPM Drill Program		HOLE DEPTH (ft): 217.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 480.8 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,942.15	EASTING (CCS NAD 27 Z 5): 7,616,194.03	DATE STARTED: 2/7/2006	DATE COMPLETED: 2/13/2006
DRILLING METHOD: Rotasonic			DRILLING EQUIPMENT: Sonic AT (track mounted)	
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California			LOGGED BY: R. Tweidt	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
75		GB	5		WELL GRADED SAND w/ GRAVEL - dk yellowish brn (10YR4/4) (changes to 10YR3/2 at 71'), sand (c/m/f) (50/40/5), 5% subrnd to subang gravel up to 8cm, wet, no odor	Stop drilling for day (02/08/06)
				ML	CLAYEY SILT w/ GRAVEL (ML) - yellowish brn (10YR5/4), 10% subang to subrnd gravel, slow dilatency, high dry strength, m plasticity, wet, no odor - gravelly sand with silt layer	
80		GB	5		CLAYEY SILT w/ GRAVEL (ML) - yellowish brn (10YR3/4), 10% subang to subrnd gravel up to 6cm, sand (20/30/20), 20% fines, poorly sorted, m dilatency, low dry strength, low plasticity, wet, no odor	
				GM		
85		GB	5		SANDY SILT w/ GRAVEL (ML) - dk yellowish brn (10YR3/4), 5% gravel, sand (c/m/f) (5/20/20), 50% fines, poorly sorted, low to med dilatency, med dry strength, low plasticity, wet, no odor	
				ML		
90		GB	5		SILTY SAND w/ GRAVEL (SM) - dk yellowish brn (10YR3/4), 10% subang to subrnd gravel up to 6cm, sand (20/30/20), 20% fines, mostly met gravel, poorly sorted, med dilatency, low dry strength, low plasticity, wet, no odor	
				SM		
95		GB	5			
100		GB	5		SANDY SILT w/ GRAVEL (ML) - brn (7.5YR4/4), 10% subang gravel up to 3cm, sand (c/m/f) (5/10/10), 65% fines, poorly sorted, low to med dilatency, high dry strength, low plasticity, wet, no odor	Drilling Rate Slows
				ML		
105		GB	5		SILTY SAND w/ GRAVEL (SM) - brn (7.5YR4/4), 10% subang f gravel up to 5cm, sand (10/15/40), 25% fines, mostly met gravel, poorly sorted, rapid dilatency, non-plastic, wet, no odor	
				SM		

SOIL BORING LOG

PROJECT NAME: IMPM Drill Program		HOLE DEPTH (ft): 217.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 480.8 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,942.15	EASTING (CCS NAD 27 Z 5): 7,616,194.03	DATE STARTED: 2/7/2006	DATE COMPLETED: 2/13/2006
DRILLING METHOD: Rotasonic			DRILLING EQUIPMENT: Sonic AT (track mounted)	
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California			LOGGED BY: R. Tweidt	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION SOIL NAME, USCS SYMBOL, COLOR, PERCENT COMPOSITION, GRADING, GRAIN SHAPE, MINERALOGY, DENSITY/CONSISTENCY, STRUCTURE, MOISTURE.	COMMENTS DRILLING OBSERVATIONS AND OPERATIONS, DAILY START AND END TIMES, DRILL RATE, REFUSALS, SAMPLING AND TESTING NOTES.
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
110		GB	5	ML	SANDY SILT w/ GRAVEL (ML) - brn (7.5YR4/4), 10% subang f gravel up to 4cm, sand (c/m/f) (5/5/20), 60% fines, poorly sorted, low to med dilatency, med dry strength, low to med plasticity, moist, no odor	Drilling Rate Slows
115		GB	5	SM	SILTY SAND w/ GRAVEL (SM) - brn (7.5YR4/4), 10% subang met gravel up to 5cm, sand (10/60/5), 15% fines, mostly met gravel, poorly sorted, med dilatency, non-plastic, wet, no odor	
120		GB	5	ML	SILT w/ GRAVEL (ML) - brn (7.5YR4/4), <10% subang to ang gravel up to 8cm, met sand (5/5/5), rapid dilatency, high dry strength, low plasticity, moist, no odor	
125		GB	5		- decomposed halos around met gravel evident - increased silt content (>80%), max gravel up to 3cm, trace clay	
130		GB	5	GM	SILTY GRAVEL (GM) - yellowish brn (10YR5/4), 50% ang to subang gravel up to 7cm, 10% c sand, 40% fines, poorly sorted, dry - increased c gravel (>30%), ang to subang up to 7cm, met	
135		GB	5		SILTY SAND w/ GRAVEL (SM) - brn (10YR4/3), 10% ang to subang met gravel up to 5cm, sand(10/60/5), 15% fines, poorly sorted, rapid dilatency, non-plastic, wet, no odor	
140		GB	5	SM	- increased fines (25%) - decreased fines (25%) - increased fines (30%), sand (15/15/30), 10% ang to subang met	

SOIL BORING LOG

PROJECT NAME: IMPM Drill Program		HOLE DEPTH (ft): 217.0	DRILLING CONTRACTOR: Prosonic Corp. Phoenix, AZ	
SURFACE ELEVATION: 480.8 ft. MSL	NORTHING (CCS NAD 27 Z 5): 2,102,942.15	EASTING (CCS NAD 27 Z 5): 7,616,194.03	DATE STARTED: 2/7/2006	DATE COMPLETED: 2/13/2006
DRILLING METHOD: Rotasonic			DRILLING EQUIPMENT: Sonic AT (track mounted)	
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California			LOGGED BY: R. Tweidt	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION	COMMENTS	
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)				
145		GB	5	ML	gravel up to 3cm, decomp halos around some met gravel SANDY SILT w/ GRAVEL (ML) - dk brn (10YR3/3), 10% ang to subang met gravel up to 7cm, sand (c/m/f) (5/5/20), 60% fines, poorly sorted, slow dilatency, med dry strength, low to med plasticity, wet, no odor	Blue clay starts at 142'	
150		GB	5				
155		GB	5				Stop drilling for day (02/09/06)
160		GB	5	SM	SILTY SAND w/ GRAVEL (SM) - v dk brn (10YR2/2), 10% ang to subang met gravel up to 3cm, stiff sand (5/50/20), 15% fines, poorly sorted. rapid dilatency, non-plastic, slightly moist, no odor SILT w/ GRAVEL (ML) - brn (7.5YR4/4), 15% ang to subang met gravel up to 8cm, 5% c sand, 80% fines, rapid dilatency, high dry strength, low plasticity, slightly moist, no odor. Possible top of reworked conglomerate?	Possible top of reworked Miocene Conglomerate	
165		GB	5				
170		GB	5				
175							

SOIL BORING LOG

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DRILLING METHOD: Rotasonic			DRILLING EQUIPMENT: Sonic AT (track mounted)	
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California			LOGGED BY: R. Tweidt	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION	COMMENTS
	INTERVAL	TYPE/NUMBER	RECOVERY (ft)			
180				ML	<p>SILT w/ GRAVEL (ML) - brn (7.5YR4/4), 15% ang to subang met gravel up to 8cm, 5% c sand, 80% fines, rapid dilatency, high dry strength, low plasticity, slightly moist, no odor. Possible top of reworked conglomerate?</p> <p>- decreased gravel (max dia 2cm), highly decomposed met gravel, dk reddish brn (5YR3/3)</p> <p>- soil becomes moist to wet, increased sand (5/10/15), 15% gravel</p>	
185						
190						
195						
200						
205						
210					<p>- increased gravel size (up to 6cm)</p> <p>- increased fines, decreased sand & gravel, trace clay, strong brn (7.5YR4/4)</p> <p>- increased sand & gravel gravel size increases up to 5cm, mod to highly weathered</p> <p>- soil becoming harder and more stiff, 75% fines (increase), sand (<5/5/10), 10% gravel, pebble size up to 4cm</p>	

SOIL BORING LOG

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DRILLING METHOD: Rotasonic			DRILLING EQUIPMENT: Sonic AT (track mounted)	
LOCATION: PG&E Compressor Station - Flood Plain, Topock, California			LOGGED BY: R. Tweidt	

DEPTH BGS (feet)	SAMPLE			USCS CODE	SOIL DESCRIPTION	COMMENTS
	INTERVAL	TYPE/ NUMBER	RECOVERY (ft)			
215				BR	<p>MIOCENE CONGLOMERATE (BR) - reddish brn (5YR4/4), mod to strong, matrix supported, gravel size up to 4cm, slightly moist</p> <p style="margin-left: 40px;">- bedrock becomes dry and more competent</p>	
					<p style="text-align: center;">Boring Terminated at 217 ft</p> <p>ABBREVIATIONS <i>cc = continuous core run</i> <i>brn = brown</i> <i>lt = light</i> <i>dk = dark</i> <i>vf = very fine-grained</i> <i>f = fine-grained</i> <i>m = medium-grained</i> <i>c = coarse-grained</i> <i>vc = very coarse-grained</i> <i>ang = angular</i> <i>subang = subangular</i> <i>subrnd = subrounded</i> <i>rnd = rounded</i> <i>br = bedrock formation</i> <i>ss = sandstone</i> <i>conglom = conglomerate</i> <i>comptd = compacted</i> <i>qtz = quartz</i></p>	