

Well Number/Name: MW-9D												Name: A2AD KAD/644				
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content Dry Moist Saturated	Particle % Dist.	Fine	Grain Size Sand	Grain Size Gravel	Sorting	Grain Shape Angular	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment		
				Cobbles	Gravel	Sand	Silt	Clay	Fine	Medium	Coarse	Fine	Sub-Angular Sub-Rounded Rounded	None Low Medium High	None Weak Moderate Strong	Quartz Feldspar Mica Amphibole Evaporites Other
19.5		GLEY 1 2.5/5Gy Greenish Black	S	90/10 XX	X	/	X	X	/	X	X	X X X X			SP	- HAS SOME THIN BODS OF CLAY & SILT
27		GLEY 1 4/5Gy Dark Cyanobion	S	100 X	XX	/	X	XX	/	X	X	XXX X			SP	
29.5		GLEY 1 Cyan	S	75/15/10 XXX X	X	/	X	/	XX	X	X	X X X X			SM	SAND W/ SILT & CLAY SILTY SAND w/ CLAY
33		11	S	75/15/10 XXX X	X	/	X	X	XX	X	X	X X X X			SP	
37		11	S	100 X	X	/	X	X	XX	X	X	X X X X			SP	
37		GLEY 1 5/N Cyan	S	100 X	XX	/	X	X	XX	X	X	X X X X			SP	
39.5																
Drilling Contractor:				Sampling Method:				Descriptive Location:								
Drilling Rig Type:																

Well Number/Name: MW-9D												Name: AZAD KAALIGH		
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content Dry Moist Saturated	Particle % Dist.	Grain Size	Grain Size	Sorting	Grain Shape	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment	
				Fine	Sand	Gravel	Fine Coarse Max	Well Medium Poor	Angular Sub-Angular Sub-Rounded Rounded	None Low Medium High	None Weak Moderate Strong			
39.5		GLEY 7 3/5G V. DARK GRAY SILT GLEY	M	30 40 30 XX X	X			X	/	XX	Y	xx xx	MH	CLAYEY / SANDY SLT
45.5														
45.5			11	M	70 15 15 XX Y	X			/	XX	Y	xx xx	SP	SAND W CLUMPS OF SILT & CLAY.
47														
47			11	5	95 5%	XX X	XXX			XX		xx xx	SP	* SEA SHOALS @ Central Silt
48														
48		GLEY 1 3/5Gy V. DARK GRAY SILT GLEY	M	520 75 XX X	Y								X CH	
50														
50		GLEY 1 2.5/5Gy GLEYISH BLACK	5	100	X								SP	
53														
Drilling Contractor: CASCADE				Sampling Method:				Descriptive Location:						
Drilling Rig Type:														

Drilling Contractor:

Sampling Method:

Drilling Rig Type:

Well Number/Name: MW-QD												Name: Azad Khalighi		
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content	Particle % Dist.	Grain Size	Grain Size	Sorting	Grain Shape	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment	
			Dry	Fine	Sand	Gravel	Fine	Sub-Angular Sub-Rounded	None	Low	Medium	High		
127		Grey 1 3/5GY V. DARK GREENISH GRAY	X		X /oo									
131		Grey 1 4/5GY DARK GREENISH GRAY	X	8-10	X		X							
140		11	X	10-20-20 X X X	X X X	X X X	X	X X					SP	SAND : 100%
149		Grey 1 3/5GY V. DARK GREENISH GRAY	X	8										GRAVELY SAND w/ COBBLES ~ ROUNDED GRAVEL ~ 1-2.5 CM ROCKS
150		Grey 1 4/5GY DARK GREENISH GRAY		5-5	NN	X X X	X X						SP	CLAY: 100%, CLTY
155		Grey 1 4/5GY DARK GREENISH GRAY											X CH	SAND w/ TRIM GRAVEL
Drilling Contractor: CASCAD			Sampling Method: CORER			Descriptive Location: MW-QD								
Drilling Rig Type: PROSONIC 600T														

Well Number/Name: MW-90												Name: AED KHALIGI		
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content Dry Moist Saturated	Particle % Dist.	Grain Size	Grain Size	Sorting	Grain Shape	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment	
				Fine	Sand	Gravel								
155			D	102565 XXX	XX X	XXX	X	XXX	/	X	XX X	SP-GP	GRANULAR SAND w/ COBBLES - RND GRAINS & COBS - MURKY SHADE	
159		11	D	157015 XXX	XX X	XX X	A	XX	/	X	XX X	GP-SP	SANDY GRANULAR COBBLES - SUBRAD GRAINS & COBS - MURKY SHADE	
163		11	D	1090 XX	XX X	X	X	XXX	/	X	XX X	SP	SAND w/ COARSE	
164.5		2.5Y 5/2 GRAYISH Brown	D	107020 XX	XX X	X X	X	XXX	/	X	XX XX	GP-SP	SANDY COARSE w/ COBBLES - RND GRAIN & COBS - MURKY SHADE	
167		2.5Y 4/3 OLIVE Brown	X	107020 XXX	X X	X X	X	XX X	/	X	XX PP	SP-GP	GRANULAR SAND	
167		GLEY 1 3/5GY V. DARK GREENISH GRAY	S	2070 XX	XX X	XX X	A	XX X	/	X	XX PP	GP-SP	SANDY GRANULAR	
172			S	2070 XX	XX X	XX X	A	XX X	/	X	XX PP	GP-SP		
Drilling Contractor:				Sampling Method:				Descriptive Location:						
Drilling Rig Type:														

P 8 or 17

Well Number/Name: MW-9D												Name: AZAD KHALIGHI			
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content Dry Moist Saturated	Particle % Dist.	Fine	Grain Size Sand	Grain Size Gravel	Sorting	Grain Shape Angular Sub-Angular Sub-Rounded Rounded	Plasticity None Low Medium High	Cementation None Weak Moderate Strong	Mineral Composition Quartz Feldspar Mica Amphibole Evaporites Other	Rock Type (USCS Group)	Comment	
				Cobbles	Gravel	Sand	Clay	Fine Medium Coarse	Fine Coarse Max						
172		2.5Y 4/2 DARK GRAYISH Brown	y		xx	x			x	xx					SAND
174.5		2.5Y 3/3 DARK OLIVE Brown		15750 xxx		xx	xx	xx	xx	xx					
177		2.5Y 5/1 CorAY	y		xx	x	xx		x	xx					SAND w/ clay
177		2.5Y 5/1 CorAY	y		xx	x	xx		x	xx					SAND w/ clay
182		11	y	157015 xxx		xx	xx	xx	xx	xx					GRAVEL w/ SAND NO COBBLES
187		2.5Y 4/2 DARK Grayish Brown	y	2050		xx	xx	x	xx xx xx xx	xx					GRAVEL w/ SAND -morning Silt
194		2.5Y 4/2 DARK Grayish Brown	y		xx	xx	xx	x	xx xx xx xx	xx					SP- G
Drilling Contractor: CASCADE			Sampling Method:			Descriptive Location:									
Drilling Rig Type:															

Pg 9 or 17

Well Number/Name: MW - 90												Name: AZAD KHALID	
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content	Particle % Dist.	Grain Size	Grain Size	Sorting	Grain Shape	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment
			Dry	Fine	Sand	Gravel		Fine					
Cobbles			Moist										
Gravel			Saturated										
Sand													
Silt													
Clay													
232		GRAY 1 5/10Y Greenish/ Gray	X										
238.5		2.5Y 5/2 Grayish/ Brown	X										
238.5		2.5Y 5/2 Grayish/ Brown	X										
241													
241		"	X										
245													
245		2.5Y 5/3 Brown Clayey Brown	X										
247													
247		GRY 4 4/10Y Dark Greenish/ Gray	X										
248.5													

Drilling Contractor:

Sampling Method:

Drilling Rig Type:

Descriptive Location:

PG 11 or 17

Well Number/Name: MW - 9D												Name: AZAD KHALID H		
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content	Particle % Dist.	Grain Size	Grain Size	Sorting	Grain Shape	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment	
			Dry	Fine	Sand	Gravel	Fine	Medium	Poor	Angular	Sub-Angular	Sub-Rounded		
249.5		54 3/2 DARK OLIVE BROWN	X	90 10 70 20	X X	/	X	X 10	/	10	10 10 10	SM	SILTY SAND	
251		CLAY 1 4/10Y DARK GRAYISH BROWN	X	/	10	/	/	/	/	10	/	CH	CLAY - very Dense	
256		2.5 Y 4/3 OLIVE BROWN	X	205 75 50 10 X 10	/	/	/	/	/	/	/	CH	SANDY CLAY w/ SILT. TRAC - V. DENSE - SAND common FLUSSATED	
271		2.54 sil LIGHT BROWN	X	X 2075 X XX	XXX	XXX	f	XX Y	/	10	XY NN	SP-GP	- GRANULAR SAND w/ few COBBLES - SUBANG-RND GRAV 3 cobb - mostly SHAFT & BEDS	
275		2.54, 4/4 OLIVE BROWN	X	195 X X	Y XXX	X	XX	/	X	XX	XX 10	SW-GP	SAND w/ few GRAVEL	
277														
Drilling Contractor:				Sampling Method:				Descriptive Location:						
Drilling Rig Type:														

Well Number/Name: MW - 9D												Name: Azad Khalid			
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content Dry Moist Saturated	Particle % Dist.	Fine	Grain Size Sand	Grain Size Gravel	Sorting	Grain Shape Angular Sub-Angular Sub-Rounded Rounded	Plasticity	Cementation	Mineral Composition Quartz Feldspar Mica Amphibole Evaporites Other	Rock Type (USCS Group)	Comment	
				Cobbles	Gravel	Sand	Silt	Clay	Fine Medium Coarse	Fine Coarse Max	Well Medium Poor	None Low Medium High	None Weak Moderate Strong	Alteration Visible	
277		2.5Y 5/4 Light Olive Brown	X		X	/	/	/	/	/	/	/	/	CL	- Very Dense - Particles HAVE THIN SPACES
287		2.5Y 5/4 Light Olive Brown	XX		XX	XX	XX	XX	XX	XX	XX	XX	XX	CL	SANDY CLAY w/ Thin Gravels. - GRAVEL = SANDSTONE/carbonate CHUNKS
297		2.5Y 5/3 Light olive brown	++	0	99X				XX					CH	CLAY(FAT) very 90% clay . 10% fine sand. High Plast.
302.5		"	X	85	57		X		XX			XXXX		SC	Clayey Sand, 85% Fine Sand Sub A-Sub R. 15% clay, high plast.
307		"	XX	+	100	X			XX		X	+	XX	CH	FAT CLAY 100% High Plast Fat Clay. Tr fine sand SubA-SubR(MA)
314															Mud Stone
Drilling Contractor: cascade				Sampling Method:				Descriptive Location: monte Road							
Drilling Rig Type: sonic															

Date: 5/27/15

BOREHOLE LITHOLOGICAL LOG

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Well Number/Name: MW - 9D

Name: *EW*

Drilling Contractor: Cascade

Sampling Method:

Drilling Rig Type:

Descriptive Location: Monte Rd N of river
Maring, CA

Drilling Method: Sonic

Date:

Q1/27/15
mewsp

Well Number/Name: 9D

BOREHOLE LITHOLOGICAL LOG

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Name: ECO

Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content	Particle % Dist.		Grain Size	Grain Size	Sorting	Grain Shape	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment
				Dry	Moist	Saturated	Cobbles	Gravel	Sand	Silt	Clay	Fine	Medium	Coarse

347		2.5y 5/2 grayish brown	x	+r 50	15 60	10	xxx x+f	70		xxx	x	x	xxxx	x	CH	Clay w sand & gravel 60% High Plast Clay, moderate cem, 40% Fmc sand A-sub P petrified wood
348.5		2.5y 6/3 light yellowish brown	x	+r 90	10	++ +f	++ ++	65		+++	x		xxxx	x	SP- SC	sand w/clay
351		"		15 60	25	4x	4x	25		xx			+++	x	SC	clayey sand w/gravel
354		"		50	5	4x	4x	35		xx			+++	x	SP	
357		"		5 90	5	4x	4x	50		xx			+++	x	SP	
362																

Drilling Contractor:

Sampling Method:

Drilling Rig Type:

Descriptive Location:

Drilling Method:

Date: 27/13

BOREHOLE LITHOLOGICAL LOG

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Well Number/Name: 9D

Name: Edu

Drilling Contractor:

Sampling Method:

Drilling Rig Type:

Descriptive Location:

Drilling Method:

Date: 1/26/15

BOREHOLE LITHOLOGICAL LOG

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Well Number/Name: MPWSP mw 9D

Name: *Ella*

Drilling Contractor:

Drilling Rig Type:

Drilling Method:

Sampling Method:

Descriptive Location:

Well Number/Name: MW-97												Name: ECW/Arad			
Sample Depth (ft)	Drilling Rate (ft/hr)	Color: Munsell Name and Class	Moisture Content	Particle % Dist.	Grain Size	Grain Size	Sorting	Grain Shape	Plasticity	Cementation	Mineral Composition	Rock Type (USCS Group)	Comment		
			Dry	Fine	Sand	Gravel		Fine			Fine				
294.7	2.5Y 5/4 light olive brown	+ +	30	70	x++ +x	xxo		xxx			xxx		Sp		
Drilling Contractor:				Sampling Method:				Descriptive Location:							
Drilling Rig Type:															