Tetra Tech, Inc.
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VOICE (805) 681-3100 FAX (805) 681-3108

Project: **RL-41, Vandenberg Air Force Base IRP**
Log of Well No. **5-MW-17**

Location: Approximately 150 feet southwest of bldg. 576 SLC-3E.

Date Started: 9/25/01	Completed: 10/2/01
Logged By: J. Moore	Checked By: R.J. Elliot R.G. R.J. Elliot #6618
Drilled By: Phillip Cramer, Boart Longyear	
Drilling Equipment: Boart Longyear Sonic Drill	
Sampling Equipment: 10' Stainless Steel Bailer	
GS Elev.: 460.5 ft above MSL	TD: 308 ft bgs

4" Sch. 80 PVC Bank Casing:	from	0 ft bgs to	273.5 ft bgs
4" Stainless Steel Screen:	from	273.5 ft bgs to	293.5 ft bgs
Bentonite/Sand Slurry:	from	4 ft bgs to	250 ft bgs
Bentonite Transitional Seal:	from	250 ft bgs to	268 ft bgs
Sand Filter Pack:	from	268 ft bgs to	304 ft bgs
TOC Elev.: 462.68 ft above MSL			

Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
	sand, yellowish brown (10YR 5/4), fine grained, poorly graded, dry, trace silt, trace root material, Orcutt Sand		SP			NA	100	0/0	9/25/01 1445 Begin drilling
5	slightly moist, no root material.								
10	yellowish brown (10YR 5/6).							0/0	
15	moist.								
20							100	0/0	

275 ft bgs ▼ Groundwater depth during drilling. 264.97 ft bgs ▽ Groundwater depth after well development.

TC Number: A250-42

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Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
20	sand, yellowish brown (10YR 5/6), fine grained, poorly graded, rounded, moist, trace silt, Orcutt Sand.		SP				100	0/0	
25	strong brown (7.5YR 4/6).								
30	few silt.								
35								0/0	
40	trace medium grained, rounded sand.								
45							100	0/0	

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Log of Well No. **5-MW-17**

Location: Approximately 150 feet southwest of bldg. 576 SLC-3E.

Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
45	sand with silt, strong brown (7.5YR 4/6), fine grained, poorly graded, rounded, moist, few silt, trace organic material, Orcutt Sand.		SP				100	0/0	
50									
55	trace silt.								
60	yellowish brown (10YR 5/6), less moist.							0/0	
65									9/25/01 1915 End drilling 9/26/01 0700 Resume drilling
70							100	0/0	

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Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
70	sand, strong brown (7.5YR 4/6), fine to medium grained, poorly graded, rounded, slightly moist, trace silt, Orcutt Sand.		SP				100	0/0	
75									
80	yellowish brown (10YR 5/6).								
85								0/0.3	
90									
95							100	0/0	

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Log of Well No. **5-MW-17**

Location: Approximately 150 feet southwest of bldg. 576 SLC-3E.

Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
95	sand, strong brown (7.5YR 4/6), fine to medium grained, poorly graded, rounded, slightly moist, trace silt, Orcutt Sand.		SP				100	0/0	
	dark yellowish brown (10YR 4/6).								
100									
105								0/0	
110									
115									
120							100	0/0	

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Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
120	sand, dark yellowish brown (10YR 4/6), fine to medium grained,poorly graded, rounded, slightly moist, trace silt, Orcutt Sand.		SP				100	0/0	
125	strong brown (7.5YR 4/6).								
130								0/0	
135									
	dark yellowish brown (10YR 4/4).								
140	strong brown (7.5YR 4/6).								
	very dark brown (7.5YR 2.5/2), medium grained.								
145	brown (7.5YR 4/4).						100	0/0	

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Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
145	sand, brown (7.5YR 4/4), medium grained, poorly graded, subrounded slightly moist, trace silt, Orcutt Sand.		SP				100	0/0	
150	strong brown (7.5YR 5/6), fine to medium grained, no silt.								
	trace silt.								
155								0/0	
	lens up to 1/4" thick of trace organic material, 1-2" in length.								
160									
	very dark brown (7.5YR 2.5/2)								9/26/01 1900 End drilling 9/27/01 0740 Resume drilling
165									
170	yellowish brown (10YR 5/4).						100	0/0	

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Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
170	sand, yellowish brown (10YR 5/4), fine to medium grained, poorly graded, subrounded, slightly moist, trace silt, Orcutt Sand.		SP				100	0/0	
175	from 177.5 to 178 ft. bgs., very dark brown (7.5YR 2.5/2).								
180	strong brown (7.5YR 4/6), few organic material (plant material).							0/0	
185	dark yellowish brown (10YR 4/4), no organic material.								
	strong brown (7.5YR 4/6), trace silt, trace organic stringers (1/4" in size).								
	at 187.5 ft. bgs, light yellowish brown (2.5Y 6/4).								
190	strong brown (7.5YR 4/6), no silt.								
195							100	0/0	

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Location: Approximately 150 feet southwest of bldg. 576 SLC-3E.

Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
195	sand, brown (7.5YR 5/3), fine to medium grained, poorly graded, rounded, slightly moist, trace silt, Orcutt Sand.		SP				100	0/0	
200									
205									
	dark yellowish brown (10YR 4/6).						100	0/0	
	dark brown (7.5YR 3/4).								
210									
	brown (7.5YR 4/3), trace coarse sand, trace fine grained, rounded gravel.								
215	brown (7.5YR 4/3), subrounded, little rounded fine gravel (up to 1"), chert and shale clasts.								
	sand with silt and gravel, brown (7.5YR 4/3), moist, fine grained, rounded, little medium grained sand, little coarse grained sand to fine gravel, few silt, Orcutt Sand.		SP-SM						
220	very moist.						100	0/0	

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Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
220	sand, pale brown (10YR 6/3), few medium grained sand, no coarse grained sand or gravel, moist, Orcutt Sand.		SP				100	0/0	
225									9/27/01 1845 End drilling 9/28/01 0700 Resume drilling
	sand with silt, yellowish brown (10YR 5/6), few silt.		SP-SM						
230								0/0	
	silty sand, light yellowish brown (2.5Y 6/3), little silt.		SM						
235									
240	sandy silt, light yellowish brown (2.5Y 6/3), moist, low plasticity, some fine grained sand, rounded, poorly graded, Careaga.		ML						
245							100	0/0	

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Location: Approximately 150 feet southwest of bldg. 576 SLC-3E.

Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
245	silt, yellowish brown (2.5Y 6/3), slightly moist, low plasticity, trace fine grained sand, rounded, poorly graded, Careaga.		ML				100	0/0	
250	no fine sand.								
	10-15% dark yellowish brown (10YR 4/6) mottling.								
255	trace clay.							0/0	
260									9/28/01 1900 End drilling 9/29/01 0700 Resume drilling
	no clay.								
265	no dark yellowish brown mottling.		▽						
	light olive brown (2.5Y 5/3), very moist.								
270							100	0/0	

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Depth (ft bgs)	MATERIAL DESCRIPTION	Material Symbol	Material Type	Well Construction	Sample	Blow Counts per 6"	Percent Recovery	PID (ppm) Amb/Smp	REMARKS
270	silt, light olive brown (2.5Y 5/3), very moist, low plasticity, Careaga.		ML				100	0/0	
275			▼						
	pale olive (5Y 6/3) with mottled yellowish brown (10YR 5/6), moist.								
280								0/0	
									Collect soil sample V5MW17H293.5-273.5 for physical parameters testing
285	trace clay.								
	no yellowish brown mottling.								1000 Collect water sample V5MW17H-288
290	pale olive/yellowish brown mottling.								
295							100	0/0	4" Stainless steel sump from 293.5 to 303.5 ft bgs.

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295	silt, light olive brown (2.5Y 5/3) 50%, yellowish brown (10YR 5/6) 50%, low plasticity, trace clay, Careaga.		ML				100	0/0	
									1800 Collect water sample V5MW17H-297
300									9/29/01 1900 End drilling 9/30/01 0700 Resume drilling
305	light olive brown (2.5Y 5/4), wet.							0/0	0840 Collect water sample V5MW17H-307
									9/30/01 1915 End drilling TD = 308 ft bgs
310									
315									
320									

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