

# Log of Borehole

Project <u>Andersen AFB</u> <u>IRP Phase II, Stage 2</u> Location <u>LF-26</u> Geologic Log by <u>Jeffrey A. Smith</u> Driller <u>Ted Lund of Ted Lund</u> <u>Drilling and Supply</u> Geophysics by <u>N.A.</u> Weather <u>Sunny, 32°C, Dry</u>	Total Depth <u>491.90 feet</u> Borehole Dia <u>9.5 - inch</u> Depth to Fluid <u>453.95 feet bal</u> Rig <u>CP - 650</u> Bit(s) <u>Percussion Hammer</u> Fluid <u>Fresh Water and Foam</u>	START FINISH Date <u>4-26-89</u> <u>5-17-89</u> Time <u>1253</u> <u>1358</u> How Left <u>CASED WITH</u> <u>SIN. DIA. SCHEDULE</u> <u>80 PVC.</u>
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Depth	Pene. Rate/Blow	Circulation Q (gpm)	# 4 OVA/HNU-PPM	Sample		Geologic and Hydrologic Description		% Core Recovery
				#	Interval	Lith. Symbol		
0								
			0	1	0-15		Soil - organic, humus. 10YR 3/4	
	2.0				10-20		Bottom Assem - hvy wt collar + sub	22.78'
			2.0				OVA - 2.0 PPM drilling foam odor	
25			0	2	20-30		LS-coraline, 10% snd, 1-12 mm. FG - MG and subang. hrd. 10YR 8/3. some discoloration	
	0.12		0	3	30-40		LS-coraline, 4-12 mm. FG, ang-subang, v. hrd, 10YR 8/2. some discoloration	
			0	4	40-50		LS-coraline, 10% snd, 2-5 mm. FG. subang-subrnd, v. hrd, 10YR 8/2	
50			0	5	50-60		LS-coraline 2-8 mm. FG. subang-subrnd v. hrd. 10YR 8/2	
	0.09		2.0	6	60-70		LS-coraline, 3-8 mm FG, ang-subang. hrd, 10YR 8/2	
		1.22	0	7	70-80		LS-coraline, 50% snd, 1-8 mm, FG subang-subrnd, hrd, 10YR 8/3	
75		0.28	1.6	8	80-90		LS-coraline, 50% snd, 1-8 mm, FG, subang-subrnd, hrd, 10YR 8/2	
			2.3	9	90-100		LS-coraline - 15% snd, 1-5 mm. FG, subang-subrnd, v. hrd, 10YR 8/2, some discolor.	
100		0.06	0	10	100-110		LS-coraline - 10% snd, 1.5-6 mm, FG, subang-subrnd, hrd, 10YR 8/2, some discolor.	
			4.8	11	110-120		LS-coraline - 30% snd, 1-5 mm, FG, subang-subrnd, hrd, 10YR 8/2	
125			0	12	120-130		WOR - 400 psi (hydraulic)	
			0				Comp. Air - 60 psi (450 ft <sup>3</sup> pump)	
	0.14		0	13	130-140		Bit RPM = 88	
			0					
150			0		140-150		No circulation at surface, smooth drilling through this area	
	0.77		0	14	150-160		LS-coraline, 10% snd, 1-5 mm, FG-MG, subang-subrnd, hrd, 10YR 8/1, some discoloration	
			0	15	160-170		LS-coraline, 10% snd, 1-5 mm, FG-MG, subang-subrnd, hrd, 10YR 8/2, some discoloration	

# Log of Borehole

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Borehole IRP-21

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Project <u>Andersen AFB IRP Phase II, Stage 2</u>	Total Depth <u>491.90 feet</u>	START <u>          </u> FINISH <u>          </u>
Location <u>LF-26</u>	Borehole Dia <u>9.5 - inch</u>	Date <u>4-26-87</u> <u>5-17-89</u>
Geologic Log by <u>Jeffrey A. Smith</u>	Depth to Fluid <u>453.95 feet bal</u>	Time <u>1253</u> <u>1358</u>
Driller <u>Ted Lund of Ted Lund Drilling and Supply</u>	Rig <u>CP - 650</u>	How Left <u>CASED WITH</u>
Geophysics by <u>N.A.</u>	Bit(s) <u>Percussion Hammer</u>	<u>5 IN DIA. SCHEDULE</u>
Weather <u>Sunny, 32°C, Dry</u>	Fluid <u>Fresh Water and Foam</u>	<u>80 PUC.</u>

Depth	Pene. Rate/ Blow-Count	Circulation Q (gpm)	#4 OVA/HNU ppm	Sample		Geologic and Hydrologic Description		% Core Recovery
				#	Interval	Lith. Symbol		
175	0.24		0	16	170-180		LS-coraline 1-4 mm, FG-MG, subang-subbrnd, hrd, 10YR 8/2	
			0	17	180-190		LS-coraline, 10% snd, 1-4 mm, FG-MG, subang-subbrnd hrd, 10YR 8/2, some discoloration	
200	0.57		0		190-200		WOB - 450 psi	
			0		200-210		Comp. Air - 55 psi Bit RPM - 84	
	0.06		3.6	18	210-220		No circulation at surface until ~ 210 feet LS-coraline, 10% snd, 1-4 mm, FG, subang-subbrnd, v. hrd, 10YR 8/2, some discoloration	
225			0	19	220-230		OVA reading, drilling foam odor Hard drilling, rig vibrating	
	0.23		0	20	230-240		LS-coraline, 10% snd 1-4 mm, FG-MG, subang-subbrnd, hrd, 10YR 8/2, some discoloration	
250		1.22	0	21	240-250		LS-coraline, 10% snd, 2-4 mm FG-MG, subang-subbrnd, hrd, 10YR 8/2, discoloration	
	0.26		0	22	250-260		LS-coraline, 2-4 mm, FG-MG, subbrnd-subang, hrd, 10YR 8/2	
			0	23	260-270		LS-coraline, 1-6 mm FG-MG, subbrnd-subang, hrd, 10YR 8/2, some discoloration	
275	0.32		0	24	270-280		LS-coraline, 1-5 mm, FG-MG, subang-subbrnd, hrd, 10YR 8/2	
			0	25	280-290		LS-coraline 10% snd, 1-5 mm, FG-MG, subang-subbrnd, v. hrd, 10YR 8/2	
300	0.29		0	26	290-300		LS-coraline, 10% snd, 1-4 mm, FG-MG, subang-subbrnd, hrd, 10YR 8/2	
			0	27	300-310		LS-coraline, 2-6 mm, MG, subang-subbrnd, hrd, 10YR 8/2	
	0.23		0	28	310-320		LS-coraline, 2-6 mm MG, subang-subbrnd, hrd, 10YR 8/2, some discoloration	
325			0	29	320-330		LS-coraline, 10% snd, 1-5 mm, FG-MG, subang-subbrnd, hrd, 10YR 8/2	
	0.36		0	30	330-340		LS-coraline, 10% snd 1-5 mm, FG-MG, subang-subbrnd, hrd, 10YR 8/2	
			0	31	340-350		LS-coraline 10% snd 1-4 mm, FG-MG	

