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SECTION 2 OF 2

APPENDIX D

ANALYTICAL RESULTS FOR THE PREDEVELOPMENT AND AQUIFER TESTS OF GROUND-WATER SAMPLES

APPENDIX D

ANALYTICAL RESULTS FOR THE PREDEVELOPMENT AND AQUIFER TESTS OF GROUND-WATER SAMPLES

This appendix presents analytical results for predevelopment and aquifer tests of ground-water samples collected during the construction of 16 monitoring wells in the 200-East Area and 19 in the 200-West Area. These samples were collected prior to final construction and development of these monitoring wells; thus the results cannot be considered representative of the actual ground-water quality.

These results are presented in two tables: Table D.1 presents the analytical data for the 200-East Area wells and Table D.2 presents the analytical data for the 200-West Area wells.

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TABLE D.1. Constituents Measured in Water Samples Before and During Aquifer Testing, 200-East Area Low-Level Burial Grounds

		299-E27-8	299-E27-9			
		8/14/87 (B)	8/03/87 (B)	8/15/87 (P)		
				1815 hr	1940 hr	2040 hr
1,1,1-T	ppb	<10	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<	<
ALUMNUM	ppb					
AMMONIU	ppb					
ANTIMONY	ppb					
ARSENIC	ppb					
BARIUM	ppb					
BETA	pCi/l	17.0+/-4.90	8.45+/-1.83	12.1+/-4.34	6.17+/-3.76	8.75+/-3.96
BIS2EPH	ppb	<10	<10	<10	<10	<10
CADMIUM	ppb					
CALCIUM	ppb					
CHLBENZ	ppb	<10	<10	<10	<10	<10
CHLFORM	ppb	<10	<10	<10	<10	<10
CHLORID	ppb					
CHROMUM	ppb					
Co-60	pCi/l	6.39+/-5.22	-5.1+/-3.8 scan	8.53+/-6.45	5.62+/-5.62	2.26+/-3.20
CONDUCT	umho					
COPPER	ppb					
Cs-137	pCi/l	7.32+/-4.41	-5.1+/-3.8 scan	9.83+/-5.45	8.12+/-10.0	-1.72+/-6.82
CYANIDE	ppb	<10	<10	<10	<10	<10
FLUORID	ppb					
H-3	pCi/l	4,590+/-266	6,894+/-267	8,210+/-395	7,630+/-384	8,210+/-396
IRON	ppb					
LEAD	ppb					
LOALPHA	pCi/l	3.98+/-1.84	1.47+/-0.58	1.87+/-1.43	1.34+/-1.09	1.61+/-1.37
MAGNES	ppb					
MANGESE	ppb					
MERCURY	ppb					
METHONE	ppb	<10	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10	<10
NICKEL	ppb					
NITRATE	ppb					
NNIDIME	ppb	<10	<10	<10	<10	<10
PCB	ppb					
pH-LAB						
PHOSPHA	ppb					
Pu-239/240	pCi/l	.0055+/-.0137	-.0135+/-.0106	-.0014+/-.0068	.0007+/-.0041	.0005+/-.0038
Pu-238	pCi/l	.0472+/-.0362	(total)	-.0030+/-.0045	-.0007+/-.0061	-.0007+/-.0058
POTASUM	ppb					
RADIUM	pCi/l					
Ru-106	pCi/l	-33.0+/-60.2	-5.1+/-3.8 scan	25.5+/-66.6	-109+/-134	-67.6+/-68.0
SELENUM	ppb					
SILVER	ppb					
SODIUM	ppb					
Sr-total	pCi/l	1.47+/-0.27	1.50+/-0.67			
Sr-90	pCi/l	1.47+/-.535		-.200 +/-.219	-.0925+/-.295	-.0282+/-.264
SULFATE	ppb					
TETRANE	ppb	<10	<10	<10	<10	<10
THALLUM	ppb					
TOC	ppb					
TOLUENE	ppb	<10	<10	<10	<10	<10
TOX	ppb					
TRICENE	ppb	<10	<10	<10	<10	<10
UNKNOWN	ppb					
URANIUM	pCi/l					
URANIUM-234	pCi/l					
URANIUM-235	pCi/l					
URANIUM-238	pCi/l					
XYLENE(O,P)	ppb	<10	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10	<10
VANADUM	ppb					
ZINC	ppb					

TABLE D.1. (contd)

		299-E27-10	299-E28-26	299-E28-27			
		7/31/87 (B)	10/14/87 (B)	9/26/87 (B)	9/29/87 (P) 1115 hr	9/29/87 (P) 1400 hr	9/29/87 (P) 1530 hr
1,1,1-T	ppb	<10	<5	-----	<10	<10	<10
ACETONE	ppb	<	<	-----	<	<	<
ALUMNUM	ppb						
AMMONIU	ppb						
ANTIMONY	ppb						
ARSENIC	ppb						
BARIUM	ppb						
BETA	pCi/l	14.7+/-2.43	32.9+/-6.73	13.0+/-4.37	15.6+/-4.50	17.5+/-4.67	16.1+/-4.60
BIS2EPH	ppb	<10	<10	<10	<10	<10	<10
CADMIUM	ppb						
CALCIUM	ppb						
CHLBENZ	ppb	<10	<10	-----	<10	<10	<10
CHLFORM	ppb	<10	<5	-----	<10	<10	<10
CHLORID	ppb						
CHROMUM	ppb						
Co-60	pCi/l	-3.0+/-3.2 scan	2.02+/-2.85	-1.82+/-8.22	5.87+/-8.68	6.41+/-5.23	4.86+/-4.86
CONDUCT	umho						
COPPER	ppb						
Cs-137	pCi/l	-3.0+/-3.2 scan	-1.28+/-5.71	-11.3+/-10.8	1.33+/-6.52	-9.66+/-10.5	7.18+/-6.84
CYANIDE	ppb	<10	<10	<10	<10	<10	<10
FLUORID	ppb						
H-3	pCi/l	14,200+/-465	62,400+/-940	10,000+/-370	11,300+/-442	11,700+/-447	11,700+/-452
IRON	ppb						
LEAD	ppb						
LOALPHA	pCi/l	6.95+/-1.20	45.9+/-9.03	4.22+/-1.82	1.78+/-1.18	2.85+/-1.44	3.00+/-1.50
MAGNES	ppb						
MANGESE	ppb						
MERCURY	ppb						
METHONE	ppb	<10	<10	-----	<10	<10	<10
METHYCH	ppb	<10	<10	-----	<10	<10	<10
NICKEL	ppb						
NITRATE	ppb						
NNIDIME	ppb	<10	<10	<10	<10	<10	<10
PCB	ppb						
pH-LAB							
PHOSPHA	ppb						
Pu-239/240	pCi/l	-.0039+/-.0053	.0110+/-.0315	-.0014+/-.0031	.0025+/-.0055	.0002+/-.0066	-.0029+/-.0018
Pu-238	pCi/l	(total)	.0055+/-.0327	-.0021+/-.0028	.0255+/-.0152	.0484+/-.0260	.0167+/-.0124
POTASUM	ppb						
RADIUM	pCi/l						
Ru-106	pCi/l	-3.0+/-3.2 scan	-54.9+/-49.6	-27.9+/-88.3	-33.5+/-61.1	19.5+/-39.4	-25.2+/-53.5
SELENUM	ppb						
SILVER	ppb						
SODIUM	ppb						
Sr-total	pCi/l	2.85+/-1.29		2.88+/-0.60			
Sr-90	pCi/l		.692+/-.442	.604+/-.500	-.070+/-.314	.027+/-.400	-.035+/-.361
SULFATE	ppb						
TETRANE	ppb	<10	<5	-----	<10	<10	<10
THALLUM	ppb						
TOC	ppb						
TOLUENE	ppb	<10	<5	-----	<10	<10	<10
TOX	ppb						
TRICENE	ppb	<10	<5	-----	<10	<10	<10
UNKNOWN	ppb						
URANIUM	pCi/l						
URANIUM-234	pCi/l		21.8+/-.706				
URANIUM-235	pCi/l		.992+/-.151				
URANIUM-238	pCi/l		20.4+/-.683				
XYLENE(O,P)	ppb	<10	<5	-----	<10	<10	<10
XYLENE(M)	ppb	<10	<5	-----	<10	<10	<10
VANADUM	ppb						
ZINC	ppb						

TABLE D.1. (contd)

		299-E32-2			
		8/31/87 (B)	9/08/87 (P)		
			1130 hr	1330 hr	1530 hr
1,1,1-T	ppb	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	17.4+/-4.69	33.7+/-5.88	26.7+/-5.51	27.2+/-5.43
BIS2EPH	ppb	<10	<10	<10	<10
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	<10	<10	<10	<10
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	4.03+/-4.03	-.564+/-7.97	6.07+/-5.43	11.7+/-7.08
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	3.83+/-3.13	-4.82+/-8.37	-9.67+/-11.1	2.33+/-4.71
CYANIDE	ppb	<10	<10	<10	<10
FLUORID	ppb				
H-3	pCi/l	9,410+/-349	10,200+/-427	10,300+/-429	10,600+/-435
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	2.48+/-1.41	2.01+/-1.28	1.26+/-1.10	3.70+/-1.69
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb	<10	<10	<10	<10
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0014+/-.0163			.0028+/-.0082
Pu-238	pCi/l	-.00072+/-.0296			.0075+/-.0117
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	-5.24+/-48.0	-57.7+/-67.3	-12.6+/-58.2	2.78+/-58.2
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l	2.57+/-1.16			
Sr-90	pCi/l	1.16+/-.499			
SULFATE	ppb				
TETRANE	ppb	<10	<10	<10	<10
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<10	<10	<10
TOX	ppb				
TRICENE	ppb	<10	<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10
VANADUM	ppb				
ZINC	ppb				

TABLE D.1. (contd)

		299-E32-3				299-E32-4
		8/28/87 (B)	9/01/87 (P)			9/15/87 (B)
			1335 hr	1415 hr	1515 hr	
1,1,1-T	ppb	<10	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<	<
ALUMNUM	ppb					
AMMONIU	ppb					
ANTIMONY	ppb					
ARSENIC	ppb					
BARIUM	ppb					
BETA	pCi/l	11.6+/-4.22	8.52+/-4.00	17.5+/-4.81	11.4+/-4.47	76.4+/-7.86
BIS2EPH	ppb	<10	<10	<10	<10	<10
CADMIUM	ppb					
CALCIUM	ppb					
CHLBENZ	ppb	<10	<10	<10	<10	<10
CHLFORM	ppb	<10	<10	<10	<10	<10
CHLORID	ppb					
CHROMUM	ppb					
Co-60	pCi/l	0.00+/-0.00	3.64+/-3.51	-4.91+/-8.65	7.99+/-5.36	8.51+/-6.02
CONDUCT	umho					
COPPER	ppb					
Cs-137	pCi/l	5.75+/-3.83	2.24+/-4.87	4.70+/-6.51	1.60+/-4.70	-4.99+/-8.15
CYANIDE	ppb	<10	<10	<10	<10	<10
FLUORID	ppb					
H-3	pCi/l	5,020+/-278	7,860+/-389	7,830+/-389	8,320+/-398	-38.6+/-155
IRON	ppb					
LEAD	ppb					
LOALPHA	pCi/l	1.27+/-1.14	3.96+/-1.74	4.54+/-1.76	6.07+/-2.06	23.4+/-4.10
MAGNES	ppb					
MANGESE	ppb					
MERCURY	ppb					
METHONE	ppb	<10	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10	<10
NICKEL	ppb					
NITRATE	ppb					
NNIDIME	ppb	<10	<10	<10	<10	<10
PCB	ppb					
pH-LAB						
PHOSPHA	ppb					
Pu-239/240	pCi/l	-.0014+/-.018	.0010+/-.0047	-.0014+/-.0073		-.0014+/-.0367
Pu-238	pCi/l	.0110+/-.0361	-.0007+/-.0071	-.0007+/-.0073		.0299+/-.0381
POTASUM	ppb					
RADIUM	pCi/l					
Ru-106	pCi/l	23.6+/-41.4	8.06+/-38.0	3.62+/-44.6	13.4+/-39.5	32.9+/-26.8
SELENUM	ppb					
SILVER	ppb					
SODIUM	ppb					
Sr-total	pCi/l	1.79+/-0.81				1.14+/-0.25
Sr-90	pCi/l	.805+/-.454				1.14+/-.504
SULFATE	ppb					
TETRANE	ppb	<10	<10	<10	<10	<10
THALLUM	ppb					
TOC	ppb					
TOLUENE	ppb	<10	<10	<10	<10	<10
TOX	ppb					
TRICENE	ppb	<10	<10	<10	<10	<10
UNKNOWN	ppb					
URANIUM	pCi/l					
URANIUM-234	pCi/l					
URANIUM-235	pCi/l					
URANIUM-238	pCi/l					
XYLENE(O,P)	ppb	<10	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10	<10
VANADUM	ppb					
ZINC	ppb					

TABLE D.1. (contd)

		299-E33-28			
		10/16/87 (B)	10/21/87 (P)		
			1130 hr	1330 hr	1515 hr
1,1,1-T	ppb	<5	<5	<5	<5
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	19.9+/-4.72	13.1+/-4.31	14.5+/-4.38	8.87+/-3.86
BIS2EPH	ppb	<10	<10	<10	<10
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	<5	<5	<5	<5
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	3.19+/-3.69	5.29+/-4.73		6.42+/-5.24
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	4.66+/-3.52	1.32+/-5.91	5.26+/-8.10	2.98+/-4.87
CYANIDE	ppb	<10	<10	<10	<10
FLUORID	ppb				
H-3	pCi/l	2,860+/-267	2,820+/-236	2,830+/-236	2,880+/-237
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	2.28+/-1.27	1.15+/-.897	1.56+/-1.07	.807+/-.856
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb	<10	<10	<10	<10
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	.0030+/-.0088	-.0014+/-.0062	-.0042+/-.0057	-.0014+/-.0076
Pu-238	pCi/l	-.0007+/-.0132	-.0007+/-.0061	-.0007+/-.0085	-.0007+/-.0075
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	-8.21+/-55.3	-10.6+/-62.1	38.3+/-67.6	39.5+/-29.9
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l				
Sr-90	pCi/l	-.482+/-.419	.195+/-.459	.158+/-.523	.014+/-.468
SULFATE	ppb				
TETRANE	ppb	<5	<5	<5	<5
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<5	<5	<5	<5
TOX	ppb				
TRICENE	ppb	<5	<5	<5	<5
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l	.916+/-.191			
URANIUM-235	pCi/l	-.002+/-.029			
URANIUM-238	pCi/l	.861+/-.162			
XYLENE(O,P)	ppb	<5	<5	<5	<5
XYLENE(M)	ppb	<5	<5	<5	<5
VANADUM	ppb				
ZINC	ppb				

9 0 1 1 7 1 3 0 2 7 4

TABLE D.1. (contd)

		299-E33-29			299-E33-30		
		9/14/87 (B)	9/17/87 (P) 1440 hr	9/17/87 (P) 1620 hr	9/16/87 (B)	9/24/87 (P) 0815 hr	9/24/87 (P) 1015 hr
1,1,1-T	ppb	<10	<10	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<	<	<
ALUMNUM	ppb						
AMMONIU	ppb						
ANTIMONY	ppb						
ARSENIC	ppb						
BARIUM	ppb						
BETA	pCi/l	31.2+/-5.68	27.9+/-5.55	26.7+/-5.48	29.0+/-5.52		
BIS2EPH	ppb	<10	<10	<10	<10	<10	<10
CADMIUM	ppb						
CALCIUM	ppb						
CHLBENZ	ppb	<10	<10	<10	<10	<10	<10
CHLFORM	ppb	<10	<10	<10	<10	<10	<10
CHLORID	ppb						
CHROMUM	ppb						
Co-60	pCi/l	7.06+/-5.33	.534+/-7.85	-5.34+/-9.79	1.82+/-9.22		
CONDUCT	umho						
COPPER	ppb						
Cs-137	pCi/l	-8.30+/-7.11	5.99+/-4.00	-.333+/-6.86	-5.29+/-9.19		
CYANIDE	ppb	<10	<10	<10	<10	<10	<10
FLUORID	ppb						
H-3	pCi/l	3,980+/-257			3,750+/-393	4,240+/-312	4,050+/-308
IRON	ppb						
LEAD	ppb						
LOALPHA	pCi/l	1.80+/-1.18	1.38+/-1.12	1.25+/-1.10	1.62+/-1.06		
MAGNES	ppb						
MANGESE	ppb						
MERCURY	ppb						
METHONE	ppb	<10	<10	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	49	<10	<10
NICKEL	ppb						
NITRATE	ppb						
NNIDIME	ppb	<10	<10	<10	<10	<10	<10
PCB	ppb						
pH-LAB							
PHOSPHA	ppb						
Pu-239/240	pCi/l	-.0014+/-.0367	-.0034+/-.0041	-.0117+/-.0147	-.0068+/-.0077	.0011+/-.0085	-.0014+/-.0090
Pu-238	pCi/l	-.00072+/-.0366	-.0048+/-.0106	.0148+/-.0374	-.0116+/-.0316	.0116+/-.0191	.0183+/-.0220
POTASUM	ppb						
RADIUM	pCi/l						
Ru-106	pCi/l	26.9+/-20.9	-2.79+/-57.5	44.7+/-56.9	-3.10+/-63.7		
SELENUM	ppb						
SILVER	ppb						
SODIUM	ppb						
Sr-total	pCi/l	3.97+/-2.26			6.35+/-0.24		
Sr-90	pCi/l	3.97+/-4.52	.215+/-.486	.045+/-.438	.354+/-.477	.467+/-.469	.067+/-.441
SULFATE	ppb						
TETRANE	ppb	<10	<10	<10	<10	<10	<10
THALLUM	ppb						
TOC	ppb						
TOLUENE	ppb	<10	<10	<10	<10	<10	<10
TOX	ppb						
TRICENE	ppb	<10	<10	<10	<10	<10	<10
UNKNOWN	ppb						
URANIUM	pCi/l						
URANIUM-234	pCi/l						
URANIUM-235	pCi/l						
URANIUM-238	pCi/l						
XYLENE(O,P)	ppb	<10	<10	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10	<10	<10
VANADUM	ppb						
ZINC	ppb						

TABLE D.1. (contd)

		299-E34-2			299-E34-3	299-E34-5	299-E34-6
		7/29/87 (B)	8/07/87 (P) 1115 hr	8/07/87 (P) 1615 hr	7/27/87 (B)	7/13/87 (B)	7/14/87 (B)
1,1,1-T	ppb	<10	<10	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<	<	<
ALUMNUM	ppb	804					
AMMONIU	ppb	230					
ANTIMONY	ppb	<100					
ARSENIC	ppb	<5					
BARIUM	ppb	52					
BETA	pCi/l	54.5+/-7.46	12.7+/-4.32	14.7+/-4.75	14.6+/-4.36	26.7+/-5.60	14.5+/-2.5
BIS2EPH	ppb	<10	<10	<10	<10	<10	<10
CADMIUM	ppb	<2					
CALCIUM	ppb	54,200					
CHLBENZ	ppb	<10	<10	<10	<10	<10	<10
CHLFORM	ppb	<10	<10	<10	<10	<10	<10
CHLORID	ppb	9,970					
CHROMUM	ppb	<10					
Co-60	pCi/l	4.84+/-4.84	3.68+/-4.25	1.14+/-2.28	-8.06+/-8.55	2.13+/-3.01	.532+/-7.22
CONDUCT	umho						
COPPER	ppb	27					
Cs-137	pCi/l	3.40+/-5.55	10.6+/-9.09	6.21+/-4.14	-6.39+/-7.45	-1.66+/-6.59	3.66+/-5.07
CYANIDE	ppb	<10	<10	<10	<10	<10	<10
FLUORID	ppb	662					
H-3	pCi/l	217+/-164	295+/-212	230+/-209	4166+/-258	515+/-206	444+/-172
IRON	ppb	29,800					
LEAD	ppb	<5					
LOALPHA	pCi/l	3.83+/-2.27	1.39+/-1.19	2.91+/-2.04	4.96+/-1.93	8.35+/-2.73	.384+/-.962
MAGNES	ppb	16,370					
MANGESE	ppb	274					
MERCURY	ppb	<1					
METHONE	ppb	<10	<10	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10	<10	<10
NICKEL	ppb	30					
NITRATE	ppb	18,700					
NNIDIME	ppb	<10	<10	<10	<10	<10	<10
PCB	ppb	<1					
pH-LAB		7.897					
PHOSPHA	ppb	<1000					
Pu-239/240	pCi/l	-.0060+/-.012	-.0014+/-.0071	-.0014+/-.0073	0.00+/-0.00	-.0048+/-.0097	-.0038+/-.0076
Pu-238	pCi/l	0.00+/-.024	-.0007+/-.0071	-.0007+/-.0068	.0183+/-.0366	.0145+/-.0118	0.00+/-0.00
POTASUM	ppb	8,749					
RADIUM	pCi/l	.087+/-.199					
Ru-106	pCi/l	27.9+/-69.5	-20.0+/-51.7	6.13+/-58.8	47.1+/-58.3	-2.74+/-56.4	-71.3+/-70.2
SELENUM	ppb	<5					
SILVER	ppb	<10					
SODIUM	ppb	32,250					
Sr-total	pCi/l	1.77+/-0.80			1.69+/-.30	5.48+/-2.47	3.68+/-1.66
Sr-90	pCi/l	.798+/-.367			1.69+/-.592	2.47+/-.643	1.66+/-.607
SULFATE	ppb	140,755					
TETRANE	ppb	<10	<10	<10	<10	<10	<10
THALLUM	ppb	<5					
TOC	ppb	873					
TOLUENE	ppb	<10	<10	<10	<10	<10	<10
TOX	ppb	27.8					
TRICENE	ppb	<10	<10	<10	<10	<10	<10
UNKNOWN	ppb				34		
URANIUM	pCi/l	1.88+/-.33					
URANIUM-234	pCi/l						
URANIUM-235	pCi/l						
URANIUM-238	pCi/l						
XYLENE(O,P)	ppb	<10	<10	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10	<10	<10
VANADUM	ppb	20					
ZINC	ppb	53					

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TABLE D.2. Constituents Measured in Water Samples Before and During Aquifer Testing, 200-West Area Low-Level Burial Grounds

		299-W6-2			
		10/30/87 (B)	11/05/87 (P)		
			0830 hr	1000 hr	1115 hr
1,1,1-T	ppb	<5	<5	<5	<5
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	15.9+/-4.55	9.32+/-2.63	8.98+/-2.61	13.0+/-2.95
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	3	2	2	2
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	3.63+/-4.19	-1.52+/-6.87	-.565+/-7.99	.535+/-7.86
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	-4.53+/-8.27	2.86+/-5.01	-.685+/-6.28	-5.30+/-7.01
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	11,600+/-383	11,400+/-445	11,300+/-445	11,900+/-454
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	1.15+/-.894	.952+/-.997	.562+/-.943	2.43+/-1.45
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0083+/-.0139	-.0014+/-.0071	-.0014+/-.0074	-.0014+/-.0110
Pu-238	pCi/l	-.0077+/-.0773	-.0007+/-.0070	-.0007+/-.0079	-.0007+/-.0110
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	27.9+/-69.5	8.06+/-38.0	11.7+/-57.2	-67.5+/-72.9
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l				
Sr-90	pCi/l	.0663+/-.457	.0392+/-.437	-.1540+/-.443	-.0407+/-.448
SULFATE	ppb				
TETRANE	ppb	46	80	72	72
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<5	<5	<5	<5
TOX	ppb				
TRICENE	ppb	<5	<5	<5	<5
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<5	<5	<5	<5
XYLENE(M)	ppb	<5	<5	<5	<5
VANADUM	ppb				
ZINC	ppb				

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TABLE D.2. (contd)

		299-W7-1			
		7/09/87 (B)	7/15/87 (P)		
			1025 hr	1430 hr	1530 hr
1,1,1-T	ppb	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	20.6+/-6.17	8.73+/-4.11	4.11+/-3.43	8.62+/-3.91
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	<10	<10	<10	<10
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	8.47+/-6.41	-2.53+/-6.55	4.27+/-4.27	3.28+/-3.69
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	.755+/-8.41	3.19+/-2.86	6.32+/-5.73	-2.66+/-7.53
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	-129+/-221	-23.7+/-157	191+/-164	116+/-162
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	3.30+/-1.54	.427+/-.895	.726+/-.867	-.171+/-.437
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0014+/-.0173	0.00+/-0.00	0.00+/-0.00	-.0021+/-.0043
Pu-238	pCi/l	.0099+/-.0366	0.00+/-0.00	-.0019+/-.0038	.0021+/-.0074
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	-3.10+/-56.1	47.7+/-31.8	19.4+/-39.2	-11.1+/-44.3
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l	1.26+/-0.57			
Sr-90	pCi/l	.568+/-.450	.493+/-.290	.287+/-.285	.364+/-.286
SULFATE	ppb				
TETRANE	ppb	<10	<10	<10	<10
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<10	<10	<10
TOX	ppb				
TRICENE	ppb	<10	<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W7-2			
		9/09/87 (B)	9/15/87 (P) 1200 hr	9/16/87 (P) 1200 hr	9/16/87 (P) 1516 hr
1,1,1-T	ppb		<10	<10	<10
ACETONE	ppb		<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	8.52+/-3.92	8.59+/-3.87	3.63+/-3.60	4.75+/-3.43
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb		<10	<10	<10
CHLFORM	ppb		<10	<10	<10
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	11.2+/-7.91	1.09+/-5.59	5.78+/-5.78	-.868+/-12.3
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	.427+/-8.96	2.97+/-5.37	3.20+/-6.95	7.02+/-9.03
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l				
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	1.89+/-1.21	1.04+/-.932	1.42+/-1.05	.701+/-.827
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb		<10	<10	<10
METHYCH	ppb		<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l		-.0020+/-.0100	.0044+/-.0156	-.0093+/-.0104
Pu-238	pCi/l		.0121+/-.0227	.0053+/-.0201	-.0121+/-.0195
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	-67.7+/-104	-6.79+/-51.4	45.8+/-37.4	0.00+/-84.8
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l				
Sr-90	pCi/l		.0550+/-.596	.119+/-.609	.113+/-.548
SULFATE	ppb				
TETRANE	ppb		<10	<10	<10
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb		<10	<10	<10
TOX	ppb				
TRICENE	ppb		<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb		<10	<10	<10
XYLENE(M)	ppb		<10	<10	<10
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W7-3				
		9/09/87 (B)	10/28/87 (B) 0830 hr	10/30/87 (P) 0900 hr	10/30/87 (P) 1400 hr	10/31/87 (P) 1200 hr
1,1,1-T	ppb	<10	<5	<5	<5	<5
ACETONE	ppb	<	<	<	<	<
ALUMNUM	ppb		1059			
AMMONIU	ppb		86			
ANTIMONY	ppb		<100			
ARSENIC	ppb		<5			
BARIUM	ppb		35			
BETA	pCi/l	20.3+/-5.75	15.7+/-4.56	3.78+/-2.13	4.56+/-2.12	2.69+/-1.91
BIS2EPH	ppb		<10	<10	<10	<10
CADMIUM	ppb		<2			
CALCIUM	ppb		24,020			
CHLBENZ	ppb	<10	<10	<10	<10	<10
CHLFORM	ppb	<10	<5	<5	<5	<5
CHLORID	ppb		4090			
CHROMUM	ppb		<10			
Co-60	pCi/l	-.564+/-7.12	-.698+/-9.87	-1.51+/-6.85	2.27+/-3.21	-4.54+/-9.62
CONDUCT	umho		285.7			
COPPER	ppb		12			
Cs-137	pCi/l	.958+/-4.51	-3.84+/-9.12	5.08+/-3.59	2.47+/-5.00	4.24+/-3.46
CYANIDE	ppb		<10			
FLUORID	ppb		553			
H-3	pCi/l	41.8+/-158	-59+/-192	44+/-159	151+/-162	82.7+/-160
IRON	ppb		10,760			
LEAD	ppb		9			
LOALPHA	pCi/l	28.5+/-6.04	1.33+/-1.01	1.18+/-1.02	.0581+/-.658	.696+/-.968
MAGNES	ppb		10,530			
MANGESE	ppb		176			
MERCURY	ppb		<.1			
METHONE	ppb	<10	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10	<10
NICKEL	ppb		10			
NITRATE	ppb		528			
NNIDIME	ppb		<10			
PCB	ppb		<1			
pH-LAB			8.597			
PHOSPHA	ppb		<1000			
Pu-239/240	pCi/l	.0100+/-.0228	-.0049+/-.0071	-.0014+/-.0106	.0008+/-.0043	.0046+/-.0120
Pu-238	pCi/l	-.0121+/-.0394	.0134+/-.0530	-.0007+/-.0112	.0014+/-.0043	-.0007+/-.0180
POTASUM	ppb		5354			
RADIUM	pCi/l		-.0364+/-.0857			
Ru-106	pCi/l	23.5+/-41.2	-45.7+/-72.4	45.1+/-46.8	-74.2+/-67.7	-11.9+/-69.1
SELENUM	ppb		<5			
SILVER	ppb		<10			
SODIUM	ppb		18,650			
Sr-total	pCi/l	4.52+/-0.42				
Sr-90	pCi/l	4.52+/-.836	.384+/-.656	.041+/-.496	.472+/-.560	.107+/-.485
SULFATE	ppb		24,605			
TETRANE	ppb	<10	<5	<5	<5	<5
THALLUM	ppb		<5			
TOC	ppb		1309			
TOLUENE	ppb	<10	<5	<5	<5	<5
TOX	ppb		6.5			
TRICENE	ppb	<10	<5	<5	<5	<5
UNKNOWN	ppb					
URANIUM	pCi/l					
URANIUM-234	pCi/l					
URANIUM-235	pCi/l					
URANIUM-238	pCi/l					
XYLENE(O,P)	ppb	<10	<5	<5	<5	<5
XYLENE(M)	ppb	<10	<5	<5	<5	<5
VANADUM	ppb		9			
ZINC	ppb		22			

TABLE D.2. (contd)

		299-W7-4			
		11/05/87 (B)	11/12/87 (P)		
			1015 hr	1200 hr	1430 hr
1,1,1-T	ppb	<5	<5	<5	<5
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	22.0+/-5.22	17.8+/-4.77	15.8+/-4.67	12.3+/-4.32
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	6	5	4	5
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	4.50+/-4.50	2.13+/-3.62	7.67+/-5.34	-1.70+/-6.99
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	1.63+/-4.86	2.65+/-6.21	2.22+/-4.84	-2.83+/-8.00
CYANIDE	ppb	<10			
FLUORID	ppb				
H-3	pCi/l	173+/-171	409+/-211	469+/-213	368+/-209
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	.134+/-.443	.787+/-.858	2.01+/-1.32	2.59+/-1.36
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	.0014+/-.0491	.0020+/-.0068	-.0054+/-.0086	-.0014+/-.0063
Pu-238	pCi/l	-.0007+/-.0359	-.0007+/-.0103	-.0007+/-.0121	.0015+/-.0045
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	2.84+/-35.1	-47.2+/-47.7	26.5+/-23.7	-59.3+/-60.5
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l				
Sr-90	pCi/l	-.0366+/-.457	-.0516+/-.435	.2300+/-.448	-.1720+/-.395
SULFATE	ppb				
TETRANE	ppb	35	130	130	140
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<5	<5	<5	<5
TOX	ppb				
TRICENE	ppb	<5	<5	<5	<5
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<5	<5	<5	<5
XYLENE(M)	ppb	<5	<5	<5	<5
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W7-5			
		11/16/87 (B)	11/21/87 (P)		
			1300 hr	1510 hr	1645 hr
1,1,1-T	ppb	<5	<5	<5	<5
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	11.2+/-4.12	3.77+/-3.58	6.42+/-3.88	8.36+/-3.99
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	<5	<5	<5	<5
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	-4.26+/-9.98	-3.54+/-6.24	1.13+/-2.26	-.506+/-7.15
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	5.95+/-3.97	-1.27+/-5.68	-9.93+/-8.71	-1.27+/-5.68
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	229+/-194	302+/-170	298+/-170	359+/-172
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	1.97+/-1.27	.797+/-.825	.997+/-.996	.554+/-.746
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0027+/-.0027	-.0014+/-.0080	-.0014+/-.0061	-.0014+/-.0070
Pu-238	pCi/l	.0722+/-.0937	-.0007+/-.0079	-.0007+/-.0060	-.0007+/-.0070
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	-35.7+/-68.1	8.03+/-37.8	-32.0+/-54.6	16.0+/-53.5
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l				
Sr-90	pCi/l	.0936+/-.432	.0611+/-.267	-.0671+/-.246	-1.700+/-.498
SULFATE	ppb				
TETRANE	ppb	9	12	13	13
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<5	<5	<5	<5
TOX	ppb				
TRICENE	ppb	<5	<5	<5	<5
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<5	<5	<5	<5
XYLENE(M)	ppb	<5	<5	<5	<5
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W7-6			
		10/09/87 (B)	10/14/87 (P)		
			0900 hr	1200 hr	1500 hr
1,1,1-T	ppb	<10	<5	<5	
ACETONE	ppb	<	<	<	
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	26.8+/-6.91	6.96+/-3.66	2.70+/-3.24	.744+/-2.87
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	
CHLFORM	ppb	<10	<5	<5	
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	8.51+/-6.02	2.28+/-3.22	3.04+/-8.94	5.35+/-4.78
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	2.99+/-8.15	-3.56+/-7.92	1.51+/-6.76	-3.66+/-6.18
CYANIDE	ppb		<10	<10	<10
FLUORID	ppb				
H-3	pCi/l	550+/-175	968+/-225	1640+/-227	1150+/-232
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	1.80+/-1.82	.213+/-.490	.991+/-.699	1.40+/-.812
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	
METHYCH	ppb	<10	<10	<10	
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0014+/-.0433	-.0014+/-.0126	.0009+/-.0045	-.0014+/-.0058
Pu-238	pCi/l	-.0036+/-.0058	-.0007+/-.0126	-.0007+/-.0068	.0012+/-.0038
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	-60.2+/-71.8	6.01+/-52.4	3.17+/-66.6	67.4+/-38.9
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l				
Sr-90	pCi/l	.361+/-.408	.713+/-.470	-.235+/-.346	.0046+/-.337
SULFATE	ppb				
TETRANE	ppb	<10	<5	<5	
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<5	<5	
TOX	ppb				
TRICENE	ppb	<10	<5	<5	
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<5	<5	
XYLENE(M)	ppb	<10	<5	<5	
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W8-1 6/29/87 (B)	299-W9-1 10/08/87 (B)
1,1,1-T	ppb	<10	
ACETONE	ppb	<	
ALUMNUM	ppb		
AMMONIU	ppb		
ANTIMONY	ppb		
ARSENIC	ppb		
BARIUM	ppb		
BETA	pCi/l	25.5+/-12.0	21.4+/-5.02
BIS2EPH	ppb		
CADMIUM	ppb		
CALCIUM	ppb		
CHLBENZ	ppb	<10	
CHLFORM	ppb	<10	
CHLORID	ppb		
CHROMUM	ppb		
Co-60	pCi/l	4.53+/-3.02	3.36+/-17.0
CONDUCT	umho		
COPPER	ppb		
Cs-137	pCi/l	.160+/-3.70	-2.84+/-12.7
CYANIDE	ppb		
FLUORID	ppb		
H-3	pCi/l	-188+/-223	-89.0+/-154
IRON	ppb		
LEAD	ppb		
LOALPHA	pCi/l	8.45+/-5.13	2.13+/-1.39
MAGNES	ppb		
MANGESE	ppb		
MERCURY	ppb		
METHONE	ppb	<10	
METHYCH	ppb	<10	
NICKEL	ppb		
NITRATE	ppb		
NNIDIME	ppb		
PCB	ppb		
pH-LAB			
PHOSPHA	ppb		
Pu-239/240	pCi/l	-.0014+/-.0093	-.0014+/-.0064
Pu-238	pCi/l	.0016+/-.0063	.0701+/-.0902
POTASUM	ppb		
RADIUM	pCi/l		
Ru-106	pCi/l	19.6+/-33.3	-13.9+/-132
SELENUM	ppb		
SILVER	ppb		
SODIUM	ppb		
Sr-total	pCi/l	1.07+/-0.71	
Sr-90	pCi/l	1.07+/-1.42	.804+/-.496
SULFATE	ppb		
TETRANE	ppb	<10	
THALLUM	ppb		
TOC	ppb		
TOLUENE	ppb	<10	
TOX	ppb		
TRICENE	ppb	<10	
UNKNOWN	ppb		
URANIUM	pCi/l		
URANIUM-234	pCi/l		
URANIUM-235	pCi/l		
URANIUM-238	pCi/l		
XYLENE(O,P)	ppb	<10	
XYLENE(M)	ppb	<10	
VANADUM	ppb		
ZINC	ppb		

TABLE D.2. (contd)

		299-W10-13			
		9/09/87 (B)	9/14/87 (P)		
			1430 hr	1600 hr	1700 hr
1,1,1-T	ppb	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	13.7+/-4.57	6.35+/-3.76	10.2+/-4.19	9.81+/-4.86
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	<10	<10	<10	<10
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	.562+/-7.62	-2.42+/-10.9	4.84+/-5.59	2.89+/-4.09
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	2.75+/-8.76	-4.92+/-8.11	8.85+/-5.90	9.13+/-5.77
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	246+/-165			
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	5.39+/-2.05	.627+/-.888	1.63+/-1.10	1.10+/-.922
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	6	6	6
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0014+/-.0304	-.0020+/-.0123	.0014+/-.0068	-.0020+/-.0120
Pu-238	pCi/l	-.0007+/-.0303	-.0051+/-.0081	.0024+/-.0068	-.0010+/-.0119
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	25.6+/-41.8	-8.34+/-76.4	-16.7+/-74.5	-38.3+/-95.7
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l	0.51+/-0.23			
Sr-90	pCi/l	.514+/-.452	.461+/-.636	1.03+/-.905	.231+/-.816
SULFATE	ppb				
TETRANE	ppb	16	8	9	8
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<10	<10	<10
TOX	ppb				
TRICENE	ppb	<10	<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-236	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W10-14			
		9/09/87 (B)	10/21/87 (B) 1100 hr	10/26/87 (P) 1615 hr	1236 hr
1,1,1-T	ppb		<5	<5	<5
ACETONE	ppb		<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	36.7+/-7.57	16.2+/-4.65	3.56+/-3.38	8.05+/-3.97
BIS2EPH	ppb		<10	<10	<10
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb		<10	<10	<10
CHLFORM	ppb		<5	<5	<5
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	4.04+/-4.04	3.72+/-8.10	5.64+/-5.04	3.03+/-3.50
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	.958+/-4.52	.665+/-5.80	-4.11+/-5.48	4.45+/-3.36
CYANIDE	ppb		<10	<10	<10
FLUORID	ppb				
H-3	pCi/l		-111+/-139	386+/-172	550+/-178
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	10.8+/-4.90	5.31+/-1.93	.906+/-.999	.439+/-.806
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb		<10	<10	<10
METHYCH	ppb		<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb		<10	<10	<10
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l		-.0014+/-.0419	-.0014+/-.0102	-.0014+/-.0068
Pu-238	pCi/l		.0132+/-.0279	.0027+/-.0068	-.0007+/-.0067
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	15.9+/-53.0	-32.8+/-60.6	-23.3+/-49.3	10.7+/-52.3
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l				
Sr-90	pCi/l		-.097+/-.380	.067+/-.481	.096+/-.470
SULFATE	ppb				
TETRANE	ppb		<5	<5	<5
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb		<5	<5	<5
TOX	ppb				
TRICENE	ppb		<5	<5	<5
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb		<5	<5	<5
XYLENE(M)	ppb		<5	<5	<5
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W15-15			
		8/18/87 (B)	8/21/87 (P)		
			1300 hr	1430 hr	1645 hr
1,1,1-T	ppb	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	15.2+/-4.72	5.25+/-3.59	8.88+/-3.87	8.85+/-4.04
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	260	6	4	3
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	-5.58+/-11.8	2.02+/-2.86	7.48+/-5.65	5.64+/-5.05
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	4.70+/-6.50	-5.43+/-6.33	-7.33+/-7.65	-.344+/-4.61
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	149+/-161		278+/-205	228+/-203
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	5.12+/-2.31	3.89+/-1.57	3.82+/-1.55	4.66+/-1.77
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	<10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0014+/-.0227	-.0014+/-.0096	-.0014+/-.0068	-.0014+/-.0055
Pu-238	pCi/l	-.0158+/-.0239	.0025+/-.0212	-.0007+/-.0067	-.0007+/-.0050
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	63.3+/-42.2	26.7+/-23.9	42.0+/-48.1	11.6+/-52.0
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l	1.3+/-.22			
Sr-90	pCi/l	1.30+/-.440			
SULFATE	ppb				
TETRANE	ppb	1710	240	270	280
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<10	<10	<10
TOX	ppb				
TRICENE	ppb	<10	<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W15-16			
		8/18/87 (B)	8/20/87 (P)		
			1600 hr	1700 hr	1930 hr
1,1,1-T	ppb	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	58.9+/-9.17	9.33+/-4.40	10.3+/-4.54	12.1+/-4.64
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	22	63	54	51
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	2.66+/-8.38	5.05+/-4.52	4.27+/-4.26	2.25+/-3.19
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	-1.33+/-5.95	6.67+/-5.79	3.00+/-4.89	-5.16+/-6.08
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	-39.7+/-156	269+/-205	172+/-196	278+/-205
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	.511+/-.866	3.39+/-2.11	.673+/-1.18	4.01+/-2.26
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	10	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0071+/-.0081	-.0014+/-.0072	-.0014+/-.0084	-.0014+/-.0053
Pu-238	pCi/l	.0107+/-.0214	-.0007+/-.0071	-.0007+/-.0079	.0010+/-.0034
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	13.7+/-65.3	29.1+/-43.0	55.4+/-58.6	0.00+/-48.8
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l	1.84+/-0.29			
Sr-90	pCi/l	1.84+/-.584			
SULFATE	ppb				
TETRANE	ppb	<10	3900	3800	3800
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<10	<10	<10
TOX	ppb				
TRICENE	ppb	<10	<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W15-17			
		9/22/87 (B)	9/28/87 (P)		
			1500 hr	1700 hr	2000 hr
1,1,1-T	ppb	<10	<10	<10	<10
ACETONE	ppb	105	<	<	<
ALUMNUM	ppb	54,510	596		461
AMMONIU	ppb	2,250	<50	<50	<50
ANTIMONY	ppb	<100	<100	<100	<100
ARSENIC	ppb	11			
BARIUM	ppb	475	94	88	87
BETA	pCi/l	12.7+/-4.27	5.73+/-3.70	8.78+/-3.92	10.9+/-4.14
BIS2EPH	ppb	<10			
CADMIUM	ppb	<2	<2	<2	<2
CALCIUM	ppb	40,580	39,180	37,930	38,020
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	28	<10	<10	<10
CHLORID	ppb	16,625	15,500	15,150	15,130
CHROMUM	ppb	91	<10	<10	10
Co-60	pCi/l	-2.85+/-6.90	4.05+/-4.05	-3.95+/-8.95	.457+/-7.36
CONDUCT	umho	302			
COPPER	ppb	159	<10	<10	<10
Cs-137	pCi/l	4.33+/-7.70	2.88+/-5.03	1.83+/-4.87	-8.14+/-10.6
CYANIDE	ppb	<10			
FLUORID	ppb	497	423	412	416
H-3	pCi/l	36.5+/-196	-263+/-187	-156+/-192	-25.8+/-194
IRON	ppb	190,880	2216		2678
LEAD	ppb	44	9		7
LOALPHA	pCi/l	3.68+/-1.65	-.404+/-.452	.456+/-.809	1.24+/-.726
MAGNES	ppb	28,830	13,405	12,730	12,380
MANGESE	ppb	2,217	48	28	72
MERCURY	ppb	<.1			
METHONE	ppb	21	<10	<10	<10
METHYCH	ppb	40	<10	<10	<10
NICKEL	ppb	78	<10	<10	<10
NITRATE	ppb	2,318	27,323	27,209	27,156
NNIDIME	ppb	<10			
PCB	ppb	<1			
pH-LAB		8.588	7.581	7.578	7.603
PHOSPHA	ppb	<1000	<1000	<1000	<1000
Pu-239/240	pCi/l	.0167+/-.0256	-.0019+/-.0010	.0025+/-.0064	-.0014+/-.0063
Pu-238	pCi/l	-.0098+/-.0181	.0088+/-.0104	.0188+/-.0143	.0273+/-.0163
POTASUM	ppb	11,700	4388	4420	4288
RADIUM	pCi/l	1.63+/-.403			
Ru-106	pCi/l	-16.4+/-62.9	24.6+/-42.6	17.4+/-53.2	77.7+/-59.9
SELENUM	ppb	<5			
SILVER	ppb	<10	<10	<10	<10
SODIUM	ppb	26,890	14,620	13,750	14,140
Sr-total	pCi/l	3.06+/-0.69			
Sr-90	pCi/l	.685+/-.607	.131+/-.347	.052+/-.353	-.161+/-.528
SULFATE	ppb	32,315	29,879	29,546	29,571
TETRANE	ppb	<10	<10	<10	<10
THALLUM	ppb	<5			
TOC	ppb	1,715	461	378	556
TOLUENE	ppb	<10	<10	<10	<10
TOX	ppb	40.4	26.4	26.2	6.3
TRICENE	ppb	<10	<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10
VANADUM	ppb	251	48	32	35
ZINC	ppb	408	653	288	1367

TABLE D.2. (contd)

		299-W15-18			
		7/08/87 (B)	7/21/87 (P)		
			1400 hr	1500 hr	1600 hr
1,1,1-T	ppb	<10	<10	<10	<10
ACETONE	ppb	<	<	<	<
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	11.1+/-4.26	9.64+/-4.29	6.97+/-4.07	7.65+/-4.04
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	<10
CHLFORM	ppb	230	39	31	26
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	4.84+/-4.84	.582+/-8.25	-1.69+/-7.63	-4.54+/-5.88
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	-4.15+/-7.92	-5.85+/-5.92	10.3+/-5.33	.958+/-4.52
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	86.9+/-225	87.1+/-160	188+/-164	2590+/-229
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	1.28+/-1.20	.309+/-.784	.618+/-.894	3.64+/-1.57
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	<10
METHYCH	ppb	15	<10	<10	<10
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	-.0067+/-.0061	.0058+/-.0083	.0041+/-.0077	.0062+/-.0076
Pu-238	pCi/l	.0121+/-.0315	-.0007+/-.0072	-.0007+/-.0082	.0031+/-.0076
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	18.6+/-58.7	42.8+/-46.4	-11.4+/-45.6	28.9+/-42.6
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l	1.21+/-0.25			
Sr-90	pCi/l	1.21+/-.496	-.256+/-.182	-.695+/-.192	-.176+/-.182
SULFATE	ppb				
TETRANE	ppb	1450	1350	1450	1480
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<10	<10	<10
TOX	ppb				
TRICENE	ppb	<10	<10	<10	<10
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10	<10
VANADUM	ppb				
ZINC	ppb				

TABLE D.2. (contd)

		299-W18-21		
		7/08/87 (B)	7/14/87 (P)	
			1330 hr	1600 hr
1,1,1-T	ppb	<10	<10	<10
ACETONE	ppb	<	<	<
ALUMNUM	ppb			
AMMONIU	ppb			
ANTIMONY	ppb			
ARSENIC	ppb			
BARIUM	ppb			
BETA	pCi/l	35.6+/-6.55	9.84+/-3.90	4.76+/-3.38
BIS2EPH	ppb			
CADMIUM	ppb			
CALCIUM	ppb			
CHLBENZ	ppb	<10	<10	<10
CHLFORM	ppb	24	<10	<10
CHLORID	ppb			
CHROMUM	ppb			
Co-60	pCi/l	3.19+/-3.69	5.64+/-5.04	3.38+/-3.90
CONDUCT	umho			
COPPER	ppb			
Cs-137	pCi/l	5.32+/-6.79	6.60+/-6.46	5.51+/-3.89
CYANIDE	ppb			
FLUORID	ppb			
H-3	pCi/l	132+/-226	-49.5+/-156	181+/-164
IRON	ppb			
LEAD	ppb			
LOALPHA	pCi/l	22.7+/-6.05	10.8+/-2.48	12.7+/-2.76
MAGNES	ppb			
MANGESE	ppb			
MERCURY	ppb			
METHONE	ppb	<10	<10	<10
METHYCH	ppb	<10	<10	<10
NICKEL	ppb			
NITRATE	ppb			
NNIDIME	ppb			
PCB	ppb			
pH-LAB				
PHOSPHA	ppb			
Pu-239/240	pCi/l	-.0048+/-.0068	.0037+/-.0052	0.00+/-.0114
Pu-238	pCi/l	.0095+/-.0353	.0018+/-.0037	0.00+/-.0114
POTASUM	ppb			
RADIUM	pCi/l			
Ru-106	pCi/l	5.48+/-47.7	8.65+/-37.4	-118+/-75.2
SELENUM	ppb			
SILVER	ppb			
SODIUM	ppb			
Sr-total	pCi/l	1.11+/-0.29		
Sr-90	pCi/l	1.11+/-.582	.585+/-.368	.296+/-.282
SULFATE	ppb			
TETRANE	ppb	43	125	145
THALLUM	ppb			
TOC	ppb			
TOLUENE	ppb	<10	<10	<10
TOX	ppb			
TRICENE	ppb	<10	<10	<10
UNKNOWN	ppb			
URANIUM	pCi/l	6.94+/-1.41		
URANIUM-234	pCi/l			
URANIUM-235	pCi/l			
URANIUM-238	pCi/l			
XYLENE(O,P)	ppb	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10
VANADUM	ppb			
ZINC	ppb			

TABLE D.2. (contd)

		299-W10-22				
		7/09/87 (B)	8/10/87 (B) 1330 hr	8/25/87 (P) 1310 hr	8/26/87 (P) 1015 hr	8/26/87 (P) 1315 hr
1,1,1-T	ppb		<10	<10	<10	<10
ACETONE	ppb		180	<	<	<
ALUMNUM	ppb		33,360			
AMMONIU	ppb		1100			
ANTIMONY	ppb		<100			
ARSENIC	ppb		13			
BARIUM	ppb		322			
BETA	pCi/l	40.0+/-6.74	18.6+/-4.98	9.06+/-4.29	1.36+/-3.31	2.03+/-3.49
BIS2EPH	ppb		<10			
CADMIUM	ppb		3			
CALCIUM	ppb		42,970			
CHLBENZ	ppb		20	<10	<10	<10
CHLFORM	ppb		<10	<10	<10	<10
CHLORID	ppb		10,090			
CHROMUM	ppb		100			
Co-60	pCi/l	3.72+/-8.11	3.63+/-4.19	4.04+/-4.04	2.25+/-3.19	7.07+/-5.35
CONDUCT	umho					
COPPER	ppb		220			
Cs-137	pCi/l	-3.33+/-7.41	9.44+/-7.32	-5.11+/-7.67	-4.47+/-6.23	-1.92+/-5.57
CYANIDE	ppb		<10			
FLUORID	ppb		<500			
H-3	pCi/l		145+/-163	-87.2+/-192	88.2+/-199	34.4+/-197
IRON	ppb		250,600			
LEAD	ppb		249			
LDALPHA	pCi/l	3.10+/-1.00	5.54+/-2.03	2.29+/-1.49	1.20+/-1.04	.457+/-.856
MAGNES	ppb		1361			
MANGESE	ppb		2078			
MERCURY	ppb		<.1			
METHONE	ppb		140	<10	<10	<10
METHYCH	ppb		<10	<10	<10	<10
NICKEL	ppb		136			
NITRATE	ppb		11,973			
NNIDIME	ppb		<10			
PCB	ppb		<1			
pH-LAB			8.002			
PHOSPHA	ppb		<1000			
Pu-239/240	pCi/l		-.0014+/-.0259	-.0014+/-.0058	-.0014+/-.0057	
Pu-238	pCi/l		-.00072+/-.0259	-.0007+/-.0057	-.0007+/-.0056	
POTASUM	ppb		7,428			
RADIUM	pCi/l		2.09+/-.480			
Ru-106	pCi/l	49.3+/-57.0	-18.6+/-48.0	13.3+/-39.0	-31.7+/-53.5	37.1+/-28.1
SELENUM	ppb		<5			
SILVER	ppb		<10			
SODIUM	ppb		14,780			
Sr-total	pCi/l		0.97+/-0.24			
Sr-90	pCi/l		.967+/-.483			
SULFATE	ppb		18,089			
TETRANE	ppb		<10	<10	<10	<10
THALLUM	ppb		<5			
TOC	ppb					
TOLUENE	ppb		38	<10	<10	<10
TOX	ppb					
TRICENE	ppb		<10	<10	<10	<10
UNKNOWN	ppb					
URANIUM	pCi/l		.652+/-.300			
URANIUM-234	pCi/l					
URANIUM-235	pCi/l					
URANIUM-238	pCi/l					
XYLENE(O,P)	ppb		56	<10	<10	<10
XYLENE(M)	ppb		61	<10	<10	<10
VANADUM	ppb		127			
ZINC	ppb		220			

TABLE D.2. (contd)

		299-W18-23		
		6/18/87 (P)		6/22/87 (P)
		1420 hr	1515 hr	1640 hr
1,1,1-T	ppb	<10	<10	<10
ACETONE	ppb	<	<	<
ALUMNUM	ppb			
AMMONIU	ppb			
ANTIMONY	ppb			
ARSENIC	ppb			
BARIUM	ppb			
BETA	pCi/l			
BIS2EPH	ppb			
CADMIUM	ppb			
CALCIUM	ppb			
CHLBENZ	ppb	<10	<10	<10
CHLFORM	ppb	<10	<10	<10
CHLORID	ppb			
CHROMUM	ppb			
Co-60	pCi/l			
CONDUCT	umho			
COPPER	ppb			
Cs-137	pCi/l			
CYANIDE	ppb			
FLUORID	ppb			
H-3	pCi/l			
IRON	ppb			
LEAD	ppb			
LOALPHA	pCi/l			
MAGNES	ppb			
MANGESE	ppb			
MERCURY	ppb			
METHONE	ppb	<10	<10	<10
METHYCH	ppb	<10	<10	<10
NICKEL	ppb			
NITRATE	ppb			
NNIDIME	ppb			
PCB	ppb			
pH-LAB				
PHOSPHA	ppb			
Pu-239/240	pCi/l			
Pu-238	pCi/l			
POTASUM	ppb			
RADIUM	pCi/l			
Ru-106	pCi/l			
SELENUM	ppb			
SILVER	ppb			
SODIUM	ppb			
Sr-total	pCi/l			
Sr-90	pCi/l			
SULFATE	ppb			
TETRANE	ppb	610	670	850
THALLUM	ppb			
TOC	ppb			
TOLUENE	ppb	<10	<10	<10
TOX	ppb			
TRICENE	ppb	<10	<10	<10
UNKNOWN	ppb			
URANIUM	pCi/l			
URANIUM-234	pCi/l			
URANIUM-235	pCi/l			
URANIUM-238	pCi/l			
XYLENE(O,P)	ppb	<10	<10	<10
XYLENE(M)	ppb	<10	<10	<10
VANADUM	ppb			
ZINC	ppb			

TABLE D.2. (contd)

		299-W18-24			
		7/01/87 (B)	7/17/87 (P)		
			0915 hr	1110 hr	1410 hr
1,1,1-T	ppb	<10	<10	<10	LOST DUE TO INSTRUMENT
ACETONE	ppb	<	<	<	MALFUNCTION (VOA ONLY)
ALUMNUM	ppb				
AMMONIU	ppb				
ANTIMONY	ppb				
ARSENIC	ppb				
BARIUM	ppb				
BETA	pCi/l	14.4+/-5.22	9.71+/-4.10	1.76+/-3.24	6.45+/-3.76
BIS2EPH	ppb				
CADMIUM	ppb				
CALCIUM	ppb				
CHLBENZ	ppb	<10	<10	<10	SAMPLE LOST
CHLFORM	ppb	680	20	16	SAMPLE LOST
CHLORID	ppb				
CHROMUM	ppb				
Co-60	pCi/l	8.47+/-4.53	1.82+/-8.57	-7.69+/-9.48	4.50+/-4.50
CONDUCT	umho				
COPPER	ppb				
Cs-137	pCi/l	-1.51+/-5.34	.756+/-9.19	12.8+/-6.62	3.44+/-3.08
CYANIDE	ppb				
FLUORID	ppb				
H-3	pCi/l	-196+/-223	-60.2+/-156	1120+/-192	235+/-166
IRON	ppb				
LEAD	ppb				
LOALPHA	pCi/l	5.63+/-4.41	.449+/-.869	.404+/-.834	.449+/-.895
MAGNES	ppb				
MANGESE	ppb				
MERCURY	ppb				
METHONE	ppb	<10	<10	<10	SAMPLE LOST
METHYCH	ppb	250	<10	<10	SAMPLE LOST
NICKEL	ppb				
NITRATE	ppb				
NNIDIME	ppb				
PCB	ppb				
pH-LAB					
PHOSPHA	ppb				
Pu-239/240	pCi/l	.0099+/-.0159	0.00+/-.0212	0.00+/-.0069	0.00+/-.0239
Pu-238	pCi/l	.0260+/-.0253	0.00+/-.0212	0.00+/-.0065	0.00+/-.0239
POTASUM	ppb				
RADIUM	pCi/l				
Ru-106	pCi/l	-10.8+/-39.9	-112+/-91.8	-7.10+/-81.5	-8.61+/-58.6
SELENUM	ppb				
SILVER	ppb				
SODIUM	ppb				
Sr-total	pCi/l	0.94+/-0.35			
Sr-90	pCi/l	.942+/-.562	.481+/-.297	.239+/-.255	.306+/-.252
SULFATE	ppb				
TETRANE	ppb	1380	1280	1090	SAMPLE LOST
THALLUM	ppb				
TOC	ppb				
TOLUENE	ppb	<10	<10	<10	SAMPLE LOST
TOX	ppb				
TRICENE	ppb	<10	<10	<10	SAMPLE LOST
UNKNOWN	ppb				
URANIUM	pCi/l				
URANIUM-234	pCi/l				
URANIUM-235	pCi/l				
URANIUM-238	pCi/l				
XYLENE(O,P)	ppb	<10	<10	<10	SAMPLE LOST
XYLENE(M)	ppb	<10	<10	<10	SAMPLE LOST
VANADUM	ppb				
ZINC	ppb				

APPENDIX E

AQUIFER TESTING OF WELLS IN THE 200-EAST AREA

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APPENDIX E

AQUIFER TESTING OF WELLS IN THE 200-EAST AREA

INTRODUCTION

During 1987, aquifer tests were conducted on 13 of the 16 newly drilled wells that were designed to gather hydrologic and geologic data adjacent to waste management areas in the 200-East Area. The wells were not designed or drilled specifically as part of an aquifer testing program; however, the wells did provide an opportunity for conducting aquifer tests while the wells and equipment were available. Ideal conditions for obtaining maximally useful data were not, in general, met. For example, the screened intervals in the wells generally did not cover the full thickness of the aquifer, the well may not have been pumped at a sufficient rate for responses to be observed in pumping and observation wells, and in some cases, the pumping duration should have been longer. While part of the test data were of no use, some tests did furnish useful data that were analyzed for aquifer parameters and properties.

The following presents a summary of each aquifer test conducted in the 200-East Area. These aquifer test summaries include the purpose of each test, types of tests conducted, construction details of the tested well and observation well when used, pumping rates and duration of the tests, pre-test conditions, results of test data analysis, and related plots of test data. Raw data from the well development/step drawdown tests, constant discharge/recovery tests, and/or slug injection/withdrawal tests are also included.

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AQUIFER TEST SUMMARY FOR WELL 299-E27-8

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 229 ft. Bottom: 257 ft.

Depth of Screened Interval in Pumped Well, Top: 247 ft. Bottom: 257 ft.

Date of Test: 08/19/87 Start Time of Test: 1400 hr
Pumping Rate: 192 gpm Duration of Test: 375 min

Pre-test Water-level Elevation (Depth): 228.98 ft.
Water-level depth at maximum drawdown: 229.10 ft.

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	>68,000	>2,400

Remarks: The aquifer was not stressed sufficiently. The drawdown was not greater than 0.1 ft over one logarithmic time cycle at a discharge rate of 192 gpm; therefore, the estimate of transmissivity (68,000 ft^2/d) is a minimum. The assumption that the well fully penetrates the aquifer is not satisfied in the Cooper and Jacob analysis.

Aquifer Test Data

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Data for Well 299-E27-8

Pumping Well

Observation Wells

Location PCRA 200 EAST

Type of Aquifer Test DEVELOPMENT

How Q Measured ~~DIG AT~~ FLOW METER

How W.L.'s Measured E-TAPE / TRANSDUCER

Depth of Pump/Airpipe SET 248' T/C 253' BELOW LAND SURFACE

Rad./Dist. of/From Pumping Well —

Pump On: date time

Meas. Point for W.L.'s T/C 3.21 ABV LSD

Pump Off: date time

Elevation of Meas. Point TUBING WELL 3.57' ABV LSD

Duration of Aquifer Test

E-TAPE 3.57' ABV LSD TRANSDUCER 3.2' ABV LSD

Time: t = _____ at t' = 0

Water Level Data: Static Water Level 232.58 T/STATIC WELL

Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Discharge Reading	Discharge Q	Recorded By	Comments
8/9	1400	0			232.58						106		WORKING WITH TRANS SEEMS TO BE HUNG UP
		1			232.69								
		4			232.64								
	1409												Dropped transducer to full depth H_2O ~ 15' above transducer
	1411	11			232.67								
	1425	25			232.62						107		
		30			232.62						107		
		45			232.60						107		
		60			232.62								
	↑	63										1	Increased rate
		1			232.67						161		
		2											
		4			232.64						161		
	1515	12			232.64								
	1525	22			232.64								↑
↑		1									197		
↓		5			232.67						197		
	1535	10			232.69						197		
		17			232.67								
		20											PUMP OFF
		:30			232.58								
		1			232.57								
		2			232.54								
		3			232.54								
		9			232.54								

Aquifer Test Data

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Data for Well 299-E27-8
Pumping Well 299-E27-8
Observation Wells

Location 200 RCRL EAST
Type of Aquifer Test CONSTANT DISCHARGE
How Q Measured FLOWMETER
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 3.2' ABV LSD
Elevation of Meas. Point T/PIPE 3.57' ABV LSD

Depth of Pump/~~Airpipe~~ 253' below lsd
Pump On: date 8/19/87 time 1600
Pump Off: date 8/19/87 time 2215
Duration of Aquifer Test 6.25 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 232.55'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q gpm		
	1600	0			232.55			0			200		TRANSDUCER SET
		30			232.64			0.09					AT 248' BELOW T/C
		2											
													Times coincide
	1604	4			232.61			0.06			194		with transducer
		10			232.67			0.12			194		
		20			232.62			0.07			193		
		28			232.62			0.07			193		
		45			232.66			0.11			193		
		50			232.65			0.10			193		
	1700	60			232.65			0.10			192		Front moving in
		70			232.63			0.08			192		Atm Press. dropping.
		80			232.64			0.09			193		Kept barometer
		100			232.63			0.08			192		field
	1900	120			232.62			0.07			192	MAC	
	1900	180			232.61			0.06			191	MAC	
	2000	240			232.63			0.08			192	MAC	
	2100	300			232.66			0.11			191	MAC	
	2130	330			232.66			0.11			191	MAC	
		395			232.67	max. dd.		.12			191	MAC	
	2214				232.66			0.11			191	MAC	
	2215		0										shut pump off
	2216		1		232.57							MAC	
	2218		3		232.57							MAC	
	2222		7		232.56							MAC	
	2225		10		232.56							MAC	
	2230		15		232.55							MAC	
	2235		20		232.56							MAC	
	2240		25		232.57							MAC	
	2245		30		232.58							MAC	
	2255		40		232.575							MAC	

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AQUIFER TEST SUMMARY FOR WELL 299-E27-9

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 222 ft. Bottom: 245 ft.

Depth of Screened Interval in Pumped Well, Top: 234 ft. Bottom: 244 ft.

Date of Test: 08/15/87 Start Time of Test: 1150 hr
Pumping Rate: 170 gpm Duration of Test: 570 min

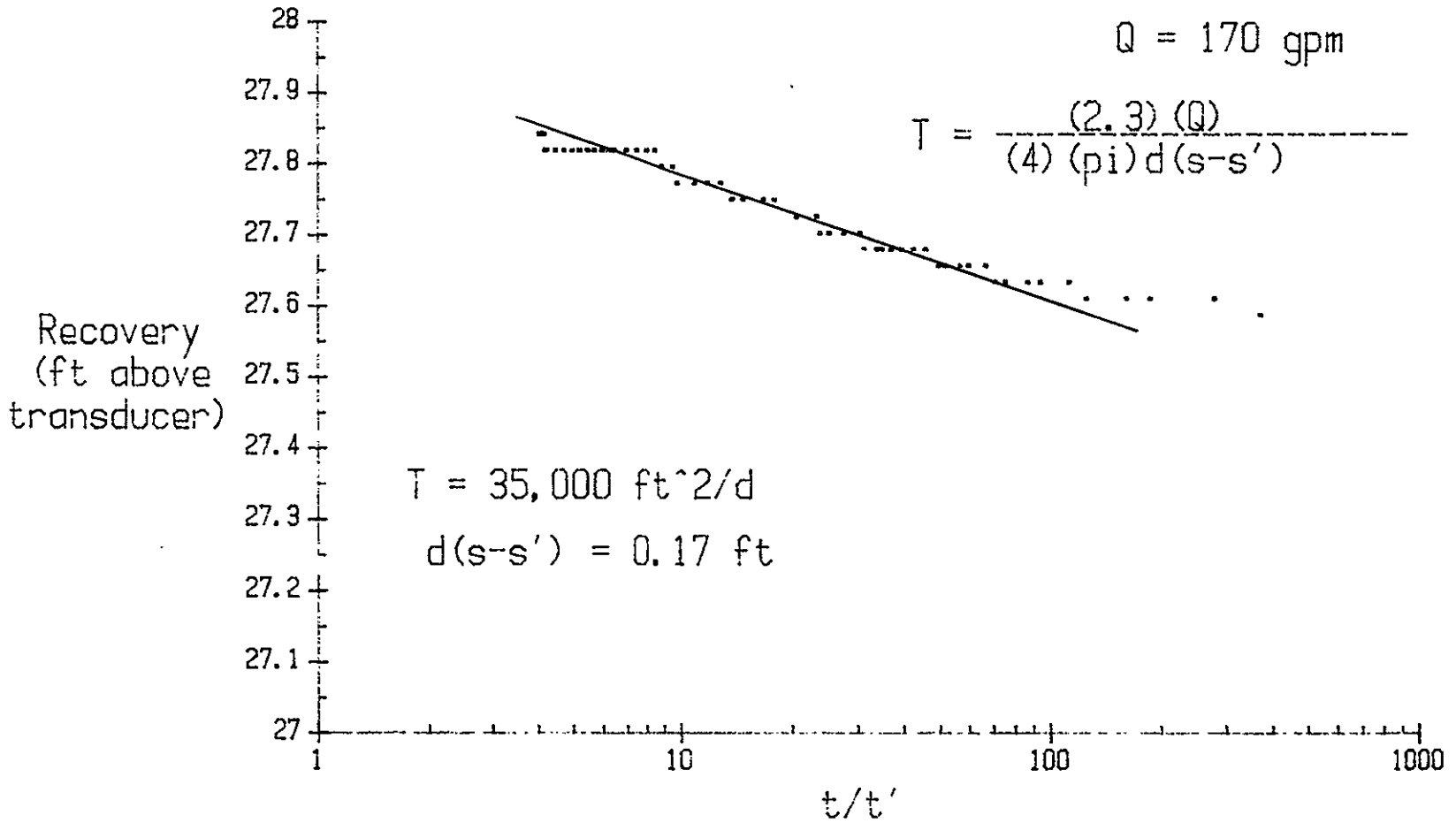
Pre-test Water-level Elevations (Depth): 224.52 ft (unknown measuring point).

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Recovery (Cooper and Jacob 1946)	35,000	1,500

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The discharge rate was not constant during the initial part of the constant discharge test. The recovery data indicate that boundary effects influenced the test.

RCRA WELL 299-E27-9
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
8/15/87



Aquifer Test Data

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Data for Well 299-E27-9
Pumping Well 299-E27-9
Observation Wells

Location 299-E27-9
Type of Aquifer Test drawdown test – Development
How Q Measured
How W.L.'s Measured transducer + E-tape
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 8/14/87 time 1902
Pump Off: date 8/14/87 time
Duration of Aquifer Test 150 min

Time t = 1902 at t' = 0					Water Level Data Static Water Level					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/14	1902	0			224.88								
		5			227.19					68.9			
		10			227.16					68.0			
		15			227.04					67.2			increased discharge to
		20			227.21					68.0			[illegible] flow rate around
		40			227.22					68.2			68 gal/min
		45			227.23					68.2			
	1947												increased discharge rate
		50			228.48					108			
		55			228.57					108			
		65			228.58					108			
		70			228.59					107			
		75			228.59					107			
	2022	80			230.20					152			increased discharge rate
		85			230.07					150			
		90			230.22					151			
		118			230.23					151			
	2102												increased discharge rate
		125			230.07					171			
		130			230.98					172			
		135			230.98					171			
		140			230.98					172			
		141											increased discharge rate
		145			228.61					195			
		150											turned pump off
		152			225.12								recovery
		155			225.08								
		159			225.06								
						37 sec to fill 55 gal drum at 78 gpm = 88.7 gpm							

Aquifer Test Data

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Data for Well 299-E27-9
Pumping Well 299-E27-9
Observation Wells

Location 299 - E27 - 9
Type of Aquifer Test constant discharge
How Q Measured
How W.L.'s Measured transducer, E-tape
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 8/15/87 time 1150
Pump Off: date 8/15/87 time 2112
Duration of Aquifer Test 9.5 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 224.52					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/15	1150	0			224.52							SPA	Failed to note discharge rate
1		2.5			231.17			6.65		~220		SPA	on initial measurements. Note
		4.0			230.68			6.16				SPA	discharge rate high @ first
		5.0			230.54			6.02		178		SPA	178 (6.5 min 1291)
		25.0			230.33			5.81		170		SPA	27 min 1326
		65.5			230.40			5.88		169		SPA	70 min 1399
		120			230.44			5.92		170		SPA	121.5 min 1487
		150			230.44			5.92		170		SPA	150.5 min 1537
		180			230.44			5.92		171		SPA	180.5 min 1589
		210			230.44			5.92		170		SPA	210 min 1638
		240			230.44			5.92		170		SPA	241.5 min 1692
		270			230.44			5.92		171		MAC	271 min 1743
		300			230.45			5.93		171		MAC	301 min 1795
		332			230.45			5.93		170		MAC	335 min 1852
		360			230.46			5.94		170		MAC	370 min 1913
		390			230.48			5.96		171		MAC	391 min 1948
		420			230.46			5.94		169		MAC	420 min 2007
		490			230.56			6.04		172		MAC	492 min 2126
	2109	510			230.63			6.11		173		MAC	570 min 2240
	2112	522											turned off discharge
	2112.5	522.5											turned off pump
	2113	523			224.8							MAC	
		525			224.78							MAC	
	2356				224.6							MAC	
										at end of test			15.25 sec for
													55 gal drum
													= 221 gpm
													Digital readout
													read 211 gpm

AQUIFER TEST SUMMARY FOR WELL 299-E27-10

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 216 ft. Bottom: 240 ft.

Depth of Screened Interval in Pumped Well, Top: 230 ft. Bottom: 240 ft.

Observation Well Used: 299-E26-1 Distance to Pumped Well: 280 ft.

Elevation (Depth) of Screened Interval, Top: 217 ft. Bottom: 227 ft.

Date of Test: 08/11/88 Start Time of Test: 1400 hr
Pumping Rate: 105 gpm Duration of Test: 480 min

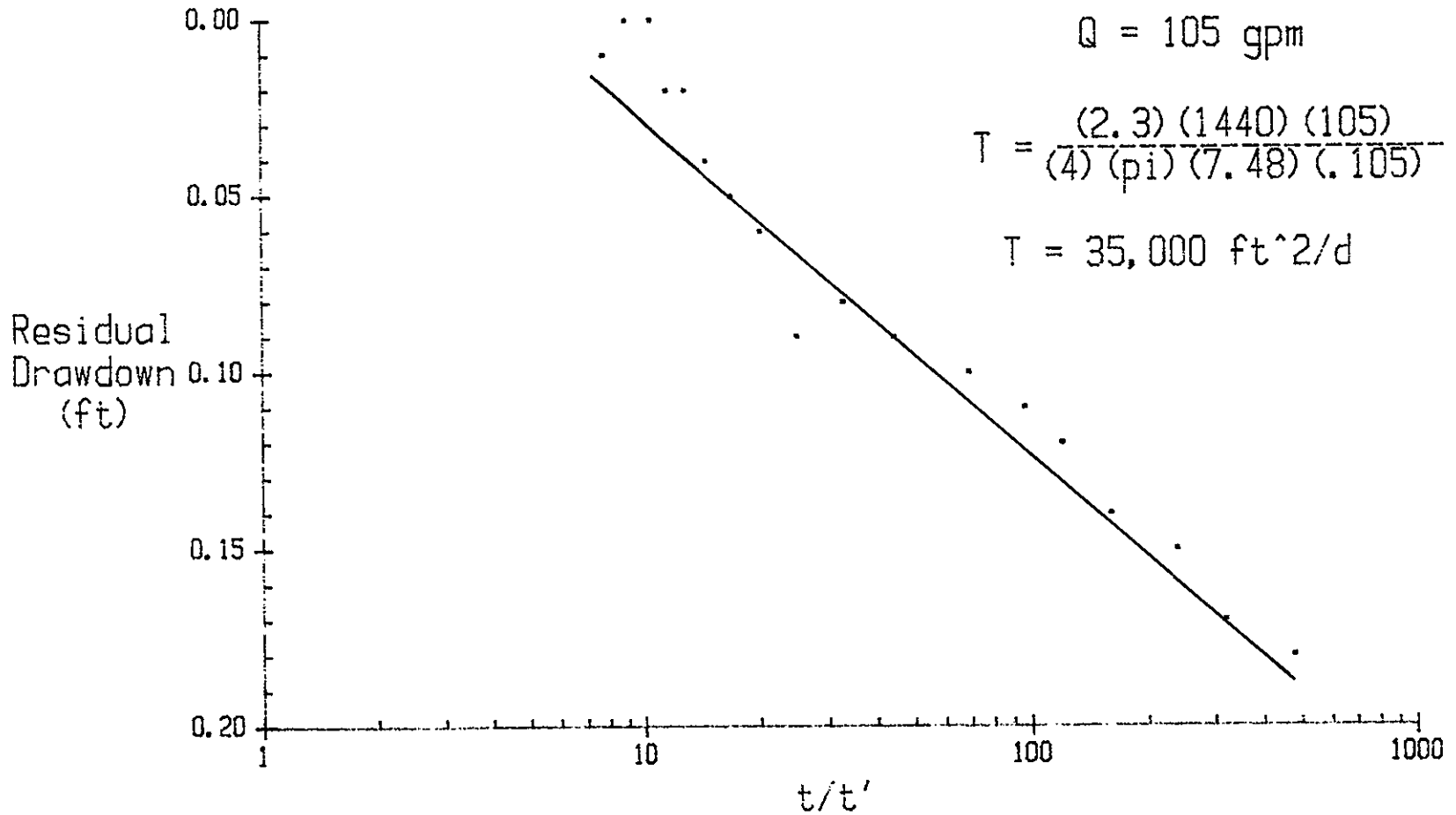
Pre-test Water-level Elevation (Depth): 216.10 ft.

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Recovery (Cooper and Jacob 1946)	35,000	1,500	NA

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The drawdown data are invalid because the discharge rate was not constant during the initial part of the test. Drawdown was negligible in the observation well.

RCRA WELL 299-E27-10
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
8/11/87



Q = 105 gpm

$$T = \frac{(2.3)(1440)(105)}{(4)(pi)(7.48)(.105)}$$

T = 35,000 ft^2/d

Aquifer Test Data

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Data for Well 299-E27-10
Pumping Well 299-E27-10
Observation Wells 299-E26-1

Location 200 East RCRA
Type of Aquifer Test CONSTANT-DISCHARGE DEVELOPMENT
How Q Measured FLOW METER / BUCKET / 55 gal drum
How W.L.'s Measured E-TAPE TRANSDUCER
Depth of Pump/Airpipe 242.5'
Rad./Dist. of/From Pumping Well
Pump On: date 8/11/87 time
Meas. Point for W.L.'s T/STILLING WELL 2.4' ABV LSD
Pump Off: date 8/11/87 time
Elevation of Meas. Point
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 218.5					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/11	1140	0			218.5								
		.5											
		1									86		according to
		1.5			219.05								Digital flowmeter
		2									86.1		
		3			220.05								
		4			220.07								
		5			220.03								
		7			220.01						85.9		
		9									84.3		
		11			219.97						82.2		
		13											
		15			219.92						83.0		
		20			219.94						82.2		
		25			219.93						81.6		
		30			219.95						82.4		
		35			219.93						81.9		
		40			219.94						83.1		
		45			219.94						81.8		
		50			219.96						82.1		
↑		60			219.95						82.2		
		:30											
		1											Hose [illegible]
		1:30			220.36								blow [illegible]
		2			220.38						42		
		3											
		4			220.38								
		5			220.33								
		7			220.31						103		
		9			220.33						102		
		15			220.3						103		
		20			220.35						103		
		25			220.35								
		30											
Recovery		:30			218.6								Recovery
		1			218.69								
		1:30											
		2			218.59								
		3			218.59					58200			

5 218.57
9 218.56
15 218.56 →

~~E.65~~

changes every 100 gal

20 218.53
25 218.54
30 218.51

Aquifer Test Data

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Data for Well 299-E27-10
Pumping Well 299-E27-10
Observation Wells 299-E26-1

Location 200 East RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER (DIGITAL)
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s Top Stilling Pipe 2.4' LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 242.5 DKN 30-88
Pump On: date 8/11/87 time 1415 hrs
Pump Off: date 8/11/87 time 2215 hrs
Duration of Aquifer Test 8 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 218.50					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/11	1415	0			218.50			0		58200		CSC	
		30			220.50			2.0			118	CSC	DIGITAL FLOWMETER
		1			220.40			1.9			112	CSC	(not absolute
		1:30											discharge rate)
		2			220.35			1.85			109	CSC	
		3			220.39			1.89			107	CSC	
		4											
		5			220.41			1.91			106	CSC	
		7			220.33			1.83			105	CSC	
		9 10			220.3			1.80			103	CSC	
		12			220.33			1.83			103	CSC	
	15	15			220.31			1.81			104	CSC	
	22	20			220.33			1.83			104	CSC	
	27	25			220.35			1.85			104	CSC	
		30											
		35			220.37			1.87			104	CSC	
		40			220.36			1.86			104	CSC	
		45			220.37			1.87			104	CSC	
		50			220.39			1.89			104	CSC	
		60			220.37			1.87			104	CSC	
		70			220.39			1.89			104	CSC	
		80			220.40			1.90			104	CSC	
		90			220.39			1.89			104	CSC	
		100			220.39			1.89			104	CSC	
		110			220.40			1.90			104	CSC	
		120			220.40			1.90			104	CSC	
		150			220.41			1.91			104	CSC	
		180			220.39			1.89			104	CSC	220.7 min
		210			220.40			1.90			104	CSC	81200 220.7/60 min
		240			220.40			1.90			104	CSC	
		270			220.41			1.91			102	CSC	
		300			220.41			1.91			105	CSC	
		360			220.42			1.92			104	CSC	
		420			220.46			1.24		108800	104	CSC	
		480						1.94		108800		CSC	108600 @ 480

Aquifer Test Data

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Data for Well 241-E27-[illegible]

Pumping Well

Observation Wells

Location 200 East RCRA

Type of Aquifer Test CONSTANT DISCHARGE RECOVERY

How Q Measured

How W.L.'s Measured

Rad./Dist. of/From Pumping Well

Meas. Point for W.L.'s

Elevation of Meas. Point

Depth of Pump/Airpipe

Pump On: date 9/11/87 time 1415

Pump Off: date 9/11/87 time 2215

Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 218.50					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
			0		220.44							CSC	/PW
			.5		218.71							CSC	/PW
			1		218.68							CSC	/PW
			1.5		218.67							CSC	/PW
			2		218.65							CSC	/PW
			3		218.64							CSC	/PW
			4		218.62							CSC	/PW
			5		218.61							CSC	/PW
			7		218.60							CSC	/PW
			9										
			11		218.59							PW	
			13										
			15		218.58							PW	
			20		218.59							PW	
			25		218.56							CSC	
			30		218.55							CSC	
			35		218.54							CSC	
			40		218.52							CSC	
			45		218.52							CSC	
			50		218.50							CSC	
			60		218.50							CSC	
			70		218.51							CSC	

9 0 1 1 7 / 3 0 3 1 1

Aquifer Test Data

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Data for Well 299-E26-1
Pumping Well 299-E27-10
Observation Wells 299-E26-1

Location 200 East RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER (DIGITAL)
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C
Elevation of Meas. Point

Depth of Pump/Airpipe 242.5
Pump On: date 9/11/87 time 1415
Pump Off: date 9/11/87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 210.61					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	0930				210.61								
	1030				210.61								
	1224				210.60								
	1415	0											Start Constant
	1438	23			210.59							Kmm	Discharge test.
	1512	57			210.60							CSC	
	1541	86			210.61							CSC	
	1626	126			210.61							CSC	
	1652	156			210.62							CSC	
	1722	186			210.62							CSC	
	1752	216			210.62							CSC	
	1822	246			210.62							CSC	
	1852	276			210.62							CSC	
	1922	306			210.62							CSC	
	2022	366			210.63							CSC	
	2122	426			210.63							CSC	
	2216	480			210.63							CSC	Recovery
			15		210.62							CSC	
			55		210.61							CSC	
			81		210.60							CSC	

AQUIFER TEST SUMMARY FOR WELL 299-E28-27

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 273 ft. Bottom: 310 ft.

Depth of Screened Interval in Pumped Well, Top: 291 ft. Bottom: 301 ft.

Date of Test: 09/29/87 Start Time of Test: 1200 hr
Pumping Rate: 136 gpm Duration of Test: 240 min

Pre-test Water-level Elevation (Depth): 272.96 ft.
Water-level depth at maximum drawdown: 273.05 ft.

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	>48,000	>1,300

Remarks: The aquifer was not stressed sufficiently. The drawdown was not greater than 0.1 ft over one logarithmic time cycle at a discharge rate of 136 gpm; therefore, the estimate of transmissivity (48,000 ft^2/d) is a minimum. The assumption that the well fully penetrates the aquifer is not satisfied in the Cooper and Jacob analysis.

Aquifer Test Data

page 1 of 2

Data for Well 299-E28-27
Pumping Well
Observation Wells

Location 200 EAST RCRA PROJECT
Type of Aquifer Test STEP-DRAWDOWN
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE # 10998
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s Top of stilling Pipe
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 9/29/87 time 10:16
Pump Off: date 9/29/87 time 11:40
Duration of Aquifer Test

Time t = 10:05 at t' = 0					Water Level Data Static Water Level 275.35'					5833 Discharge			
Day	Clock Time	min t	t'	t/t'	ft Reading	Conversions or Corrections	Water Level	s or s'		Reading	gpm Q	Recorded By	Comments
	10:15	0			275.35						170	CJC	
		.5			275.41								
		1			275.43						122		
		1.5			275.40						124		
		2			275.38						60		
		3			275.38						55		
		4			275.41						55		
		5			275.40								
		7			275.38						58.2		
		9			275.40						58.8		
		11			275.37								
		13			275.40						55.4		
		15			275.40						57.9		
		20			275.43						117		Increase Q ⇒ 120
		25			275.43						120		
		30			275.43						122		
		35			275.43						120		
		40			275.41						121		
		45			275.40						120		
		50			275.40						121		
		62			275.40						135		Increase Q → 135
		70			275.40						135		
		90			275.40						124		
		90	0		.29								
		90.5	.5	181	.32								
		91	1	91	.37								
		91.5	1.5		.36								
		92	2		.35								
		93	3		.35								
		94	4		.35								
		95	5		.33 .34								
			7		[illegible]								
			9										
			11										
			13										
			15										

Valve open all the way.

Aquifer Test Data

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Data for Well 299-E28-22
Pumping Well 299-E28-27
Observation Wells

Location 200 East Area RCRA
Type of Aquifer Test step drawdown/constant discharge
How Q Measured digital flowmeter
How W.L.'s Measured E-tape
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 9/29/87 time
Pump Off: date 9/29/87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
		9			235.20								
		11			235.19								
		13			235.19								
		15			235.20								
		20			235.19								

9011730316

Aquifer Test Data

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Data for Well 299-E28-27
Pumping Well 299-E28-27
Observation Wells

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STICKING PIPE 2.38' AW LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 288' AW LSD
Pump On: date 9/29/87 time 12:00
Pump Off: date 9/29/87 time 16 00
Duration of Aquifer Test 4 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 275.34					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
9/29	1200	0			275.34								START TEST
		:30			275.39								
		1			275.41						151		
		1:30			275.37								
		2			275.37						143		
		3			275.39								
		4			275.41						140		
		5			275.42					594200	136		
		7			275.42						136		
		9			275.43	max	dd	.09					
		11			275.39						137		
		13			275.38								
		15			275.36						137		
		20			275.37								
		25			275.39						136		
		30			275.40						136		
		35			275.37								
		40			275.32						136		
		45			275.32								
		50			2								
		60			275.31						136		
		70			275.31						135	CSC	
		80			275.30						136	CSC	
		90			275.30						136	CSC	
		100			275.30						136	CSC	
		110			275.30						136	CSC	
		120			275.31						136	CSC	
		150			275.30						135	CSC	
		180			275.30						135	CSC	
		210			275.27						136	SPA	
		240	0										STOP PUMP
			:30		275.20								
			1		275.21								
			1:30		275.21								
			2		275.21								
			3		275.20								
			4		275.20								
			5		275.19								
			7		275.19								

AQUIFER TEST SUMMARY FOR WELL 299-E32-2

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 262 ft. Bottom: 287 ft.

Depth of Screened Interval in Pumped Well, Top: 279 ft. Bottom: 289 ft.

Date of Test: 09/08/87 Start Time of Test: 0930 hr
Pumping Rate: 127 gpm Duration of Test: 420 min

Pre-test Water-level Elevation (Depth): 262.53 ft.
Water-level depth at maximum drawdown: 262.70 ft.

Remarks: The drawdown data are invalid because the discharge rate was not constant during the initial part of the test. Also, the aquifer was not stressed sufficiently.

Aquifer Test Data

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Data for Well 299-E32-2
Pumping Well 299-E32-2
Observation Wells NONE

Location 200 EAST 299-E32-2
Type of Aquifer Test STEP DRAWDOWN
How Q Measured Dwyer Flow Meter 900T, Ser. #020842
How W.L.'s Measured E-Tape # 11044
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP OF STILLING WELL, 22" above 16" casing
Elevation of Meas. Point

Bottom of pump at 280'. Inlet
Depth of Pump/Airpipe at 277.5'
Pump On: date 9/4/87 time 1427
Pump Off: date 9/4/87 time 1830
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 265.46'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/4/87	0				0		265.46'			4008	0	PRB	
	1427						265.53				22.5		
	1427.5						265.51				22.8		
	1428						265.5				20.9		
	1428.5						265.49				20.4		
	1429						265.49				20.2		
	1430						265.50				19.2		
	1431						265.49				19.0		
	1432						265.51				18.2		
	1433						265.48			4008	17.8		
	1435						265.51				21.7		
	1437						265.50			4009	20.7		
	1439						265.52				19.9		
	1441						265.51				20.1		
	1443						265.53			4010	20.9		
	1448						265.52			4011	20.3		
	1453						265.49				20.2		
	1458						265.52			4013	19.4		
	1503						265.48			4014	19.5		
	1508						265.47			4015	19.7		
	1513						265.47			4016	19.8		
	1518						265.47			4017	19.3		14.2 seconds to fill 5 gal on bucket.
	1523						265.49			4018	19.9		
	1528						265.49			4019	19.1		
	1539						265.44			4021	18.3		
	1542						265.48				50.2		
	1542.5						265.46				48.6		
	1543						265.48				48.0		
	1543.5						265.48				50.9		
	1544						265.48			4023	50.4		
	1545						265.48				51.4		
	1546						265.50				50.5		
	1548						265.49				51.4		
	1550						265.47				51.0		
	1552						265.46				49.4		
	1554						265.50			4028	50.5		
	1556						265.48			4029	50.3		
	1601						265.48			4031	50.4		
	1606						265.48			4034	49.9		

Aquifer Test Data

Data for Well 299-E32-2
Pumping Well 299-E32-2
Observation Wells NONE

Location 200 EAST 299-E32-2
Type of Aquifer Test STEP DRAWDOWN
How Q Measured Digital Flow Monitor, Ser.# 020842
How W.L.'s Measured E Tape # 11044
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s Top of stilling well 2'3" above 6" casing
Elevation of Meas. Point

Bottom of pump at 280'. Inlet
Depth of Pump/Airpipe at 277.5'.
Pump On: date 9/4/87 time 1427
Pump Off: date 9/4/87 time 1930
Duration of Aquifer Test

Time: t = ___ at t' = 0					Water Level Data: Static Water Level ___					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/4/87	1611						265.39			4036	41.5		
9/4/87	1620						265.45			4041	49.9		
9/4/87	1627						265.45			4045	47.9		
9/4/87	1630						265.47			4047	76.2		
9/4/87	1631						265.49			4049	95.2		
9/4/87	1632						265.50			4050	75.5		
[illegible]	1633						265.51			4051	75.8		
9/4/87	1634						265.50			4053	[illegible]		
[illegible]	1638						265.51			4055	75.8		
[illegible]	1640						265.49			[illegible]	[illegible]		
[illegible]	1645						[illegible]			[illegible]	[illegible]		
[illegible]	[illegible]						[illegible]			[illegible]	[illegible]		
[illegible]	[illegible]						[illegible]			4072	[illegible]		
[illegible]	1700						[illegible]			[illegible]	[illegible]		
9/4	1705						[illegible]			4081	[illegible]		
9/4	1710						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			[illegible]	95.8		
9/4	1720						265.53			4095	95.1		
9/4	[illegible]						265.50			[illegible]	95.1		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		changed Q at 1730.5
9/4	[illegible]						265.68			4107	[illegible]		
9/4	[illegible]						[illegible]			4109	142		
9/4	[illegible]						[illegible]			4110	[illegible]		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			4113	140		
9/4	[illegible]						265.60			[illegible]	142		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			4127	[illegible]		
9/4	[illegible]						[illegible]			4130	[illegible]		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			[illegible]	[illegible]		[illegible]
9/4	[illegible]						[illegible]			[illegible]	[illegible]		
9/4	[illegible]						[illegible]			4161	[illegible]		
9/4	[illegible]						[illegible]			4165	141		
9/4	1925						[illegible]			[illegible]	[illegible]		
9/4/87	[illegible]						[illegible]			4190	[illegible]		

Aquifer Test Data

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Data for Well 299-E32-2
Pumping Well 299-E32-2
Observation Wells NONE

Location 200 EAST 299-E32-2
Type of Aquifer Test STEP DRAWDOWN - Recovery Portion
How Q Measured Digital Flow Monitor Ser # D20842
How W.L.'s Measured E Tape # 11044
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s Top of stilling well 2'2" above 16" casing
Elevation of Meas. Point

Depth of Pump/Airpipe Bottom of Pump at 280'; Inlet at 277.5'
Pump On: date 9/4/87 time 14:27
Pump Off: date 9/4/87 time 18:30
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	1830.5						—			—	—		
	1831						265.43			—	—		
	2315						265.42			—	—		
	1932						265.42			—	—		
	1935						265.42			—	—		
	1940						265.42			—	—		
	1943						265.41			—	—		
													E tape broken - unable to take further measurements

Aquifer Test Data

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Data for Well 299-32-2
Pumping Well 299-32-2
Observation Wells

Location 200 RCRA EAST
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE / TRANSDUCER
Depth of Pump/Airpipe 293'
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING PIPE 2.73' LSD
Elevation of Meas. Point
Pump On: date 9/8/87 time 0930
Pump Off: date 9/8/87 time 1630
Duration of Aquifer Test 7 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 265.26' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
9/8	0930	0											
		:30			265.42			0.16					
		1											
		1:30			[illegible]			0.16		4191	121		419100
		2			[illegible]	max. dd		.17			120		
		3			265.40			0.14		4193	120		
		4			265.41			0.15		4194	120		
		5			265.40			0.14			120		F pump decreased to
		8			265.38			0.12		4109	125		~170 gpm to
													maintain constant
		11			265.40			0.14		4203	125		discharge
		13			265.39			0.13			127	CSC	
		15			265.40			0.14			125	CSC	
		20			265.37			0.11			127	CSC	
		25			265.36			0.10			123	CSC	
		35			265.37			0.11			125	CSC	
		40			265.38			0.12			127	CSC	
		45			265.39			0.13			127	CSC	
		50			265.40			.14			127	CSC	
		60			265.40			0.14			125	CSC	
		70			265.38			0.12			126	CSC	
		80			265.37			0.11			126	CSC	
		90											
		100			265.36			0.10			127	CSC	
		110			265.35			0.09			126	CSC	
		120			265.35			0.09			126	CSC	
		150			265.34			0.08			127	CSC	
		180			265.34			0.08			128	CSC	
		210			265.33			0.07			128	CSC	
		240			265.30			0.04			126	CSC	
		270			265.39			0.13			127	CSC	
		300			265.39			0.13			126	CSC	
		360			265.30			0.04			127	CSC	
		420			265.36			0.10		4224	128	CSC	422400

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Aquifer Test Data

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Data for Well 299-E32-2
Pumping Well 299-E32-2
Observation Wells

Location 200 RCRA EAST
Type of Aquifer Test CONSTANT DISCHARGE - RECOVERY
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING TUBE 2.73' LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 293
Pump On: date 9/8/97 time 0930
Pump Off: date 9/8/97 time 1630
Duration of Aquifer Test 7 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 265.26					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
		420	0		265.36							CSC	Recovery
			:30										
			1		265.11								
			1:30										
			2		265.12								
			3										
			4		265.08								
			5		265.12								
			7		265.11								
			9										TRANSDUCER
			11										APPEARS TO BE
			13									"	"HUNG UP" FREE IT
			15										
			20										
			25		265.11								
			30		265.08								
			50		265.12								FIXED E-TAPE W/
			60		265.20								TYCOON TUBING
			70		265.20								
			80		265.21								
			90									CSC	

AQUIFER TEST SUMMARY FOR WELL 299-E32-3

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the Hanford and Ringold Formations in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation/Ringold Formation
Depth of Formation, Top: 270 ft. Bottom: 310 ft.
[Hanford 270 - 299 ft; Ringold 299 - 310(?) ft]

Depth of Screened Interval in Pumped Well, Top: 291 ft. Bottom: 301 ft.

Observation Well Used: 299-E32-2 Distance to Pumped Well: 314 ft.

Elevation (Depth) of Screened Interval, Top: 258 ft. Bottom: 278 ft.

Date of Test: 08/07/88 Start Time of Test: 1320 hr
Pumping Rate: 107 gpm Duration of Test: 225 min

Pre-test Water-level Elevation (Depth): 270.08 ft.
Water-level depth at maximum drawdown: 277.28 ft.

Remarks: The drawdown data are invalid because the discharge rate was not constant during the initial part of the test. Also, the data indicate that well entrance loss occurred. No response was observed in the observation well. Also, the aquifer lies within both the Hanford and Ringold Formations.

Aquifer Test Data

page 1 of 3

Data for Well 299-E32

Pumping Well

Observation Wells 299-E3

Location 299-E32-3 200 EAST

Type of Aquifer Test STEP DRAWDOWN

How Q Measured Digital Flow Model 900T Ser # 020842

How W.L.'s Measured E-Tape #16178

Rad./Dist. of/From Pumping Well

Meas. Point for W.L.'s Top of stilling well, 1.92' above ground surface

Elevation of Meas. Point

Depth of Pump/Airpipe Bottom of pump at 292.4' surface. Inlet at 289.

Pump On: date 9/1/87 time 1137

Pump Off: date time

Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data 1137 Static Water Level 271.92					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/1/87	1137						271.92			3105			
	1143						273.12						Discharge fluctuating from 100 gpm to 0 gpm.
	1146						272.92			3108			Discharge fluctuating between 0 & 80 gpm.
	1152						272.36			3110			Discharge fluctuating between 0 & 30 gpm.
	1154						272.27				20.2		Discharge steady at
	1156						272.30			3110	20.0		~20 g.p.m.
	1158						272.27			3112	20.2		
	1200						272.27			3112	20.0		
	1202						272.27			3112	20.0		
	1204						272.3			3113	19.9		
	1206						272.27			3113	20.3		
	1208						272.27			3114	20.2		
	1210						272.27			3114	19.7		
	1215						272.24			3115	19.2		
	1220						272.23			3116	19.3		Gallon bucket measurement. 17.9 gpm
	1225						272.24			3117	19.2		
	1230						272.23			3118	19.3		
	1235						272.24			3119	19.3		
	1236.5						273.07				51.4		
	1237						273.07				51.3		
	1237.5						273.09				50.9		
	1238						273.07				50.5		
	1239						273.04				50.2		
	1240						273.04			3121	49.[illegible]		
	1241						273.03				50.4		
	1243						273.04			3123	49.7		
	1245						273.04			3124	50.0		
	1247						273.01			3125	50.1		
	1249						273.02			3126	50.4		
	1251						273.02			3127	50.3		Gallon bucket measurement. 45.2 g

Aquifer Test Data

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Data for Well 299-E32-3
Pumping Well 299-E32-3
Observation Wells 299-E32-2

Location 299-E32-3 200 EAST
Type of Aquifer Test Step Drawdown
How Q Measured
How W.L.'s Measured E-tape #10178
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s Top of stilling well, 1.92' above ground surface
Elevation of Meas. Point

Depth of Pump/Airpipe Bottom of pump at 282.42' below ground surface. Intake at 289.9'
Pump On: date 9/1/87 time 1137
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 271.92'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/1/87	1256						273.01			3129	50.4		
	1301						273.02			3132	49.4		
	1306						273.03			3134	49.8		
	1311						273.00			3137	50.0		
	1316						273.00			3139	50.1		
	1322						273.00			3142	49.7		
	1326						273.00			3144	49.7		
	1336						273.00			3149	49.6		
	1337.5						275.25				104		
	1338						275.20				99.2		
	1338.5						274.88				94.2		
	1339						274.93				94.0		
	1339.5						275.04				94.7		
	1340						275.17				96.6		
	1340.5						275.18				99.0		
	1341						275.25				99.6		
	1343						275.23			3156	99.1		
	1345						275.25			3158	101		
	1349						275.23			3160	101		
	1350						275.25			3162	101		
	1351						275.26			3165	101		
	1357						275.25			3170	99.9		
	1402						275.25			3176	100		
	1406						275.26			3180	99.8		
	1411						275.24			3184	100		
	1416						275.24			3189	98.7		
	1421						275.22			3194	99.3		
	1426						275.22			3199	99.4		
	1436						275.22			3209	99.2		
	1437.5						278.50				150		
	1438						278.51				150		
	1438.5						278.57				151		
	1439.0						278.59				150		
	1439.5						278.59				150		
	1440.0						278.53				149		
	1440.5						278.49				149		
	1441.0						278.46			3217	149		
	1443						278.44			3220	148		
	1445						278.44			3222	148		

Aquifer Test Data

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Data for Well 299-E32-3
Pumping Well 299-E32-3
Observation Wells 299-E32-2

Location 299-E32-3 200 EAST
Type of Aquifer Test Step Drawdown
How Q Measured
How W.L.'s Measured E-tape #10179
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s Top of stilling well, 1.92' above ground surface.
Elevation of Meas. Point

Depth of Pump/Airpipe Bottom of pump at 292.4 below ground surface. Inlet at 289.9'
Pump On: date 9/1/87 time 1137
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/1/87	1447						278.45			3227	147		
	1446						278.45			3224	149		
	1451						278.49			3232	148		
	1456						278.44			3239	148		
	1501						278.45			3247	148		
	1506						279.04			3255	156		Discharge line broken & sample taken 100' from well at this time
	1511						279.00			3263	156		Sampling completed.
	1516						278.41			3270	147		
	1521						278.42			3277	149		
	1526						278.50			3285	148		
	1531						278.68			3292	152		valve opened at this time
	1537												Pump shut off.
	15												
	15												
	15												

Aquifer Test Data

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Data for Well 299-E32-2
Pumping Well 299-E32-3
Observation Wells 2-E32-2

Location 200 EAST RCRA
Type of Aquifer Test Step DD
How Q Measured 5 gal. bucket / digital Flowmeter
How W.L.'s Measured E. TAPE /
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.33' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 290' Below lsd
Pump On: date 9/2/87 time 0735
Pump Off: date 9/2/87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 264.87 T/C					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	1205				264.87						1		
	1220										17.9		5 gal. calib. bucket
	1225				264.89								
	1235												increased
	1240				264.88								discharge to 50 gpm
	1245				264.88								
	1250										45.8		5 gal / 6.57 5/6:72
	1255				264.87								
	1310				264.87								
	1315				264.85						95.4		5 gal / 6.66 5 gal / 6.55
	1345				264.85								← Now pumping 100 gpm
	1355				264.84								
	1415										106		
	1420				264.84								

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Aquifer Test Data

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Observation Well

Data for Well 299-E32-2
Pumping Well 299-E32-3
Observation Wells 299-E32-2

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured DIGITAL FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well 314'
Meas. Point for W.L.'s T/C 2.33' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 290' Below LSD
Pump On: date 9/2/87 time 07:35
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
		0			264.90							ST	STAVE TEAM C.J. CLINE
		:30			264.90								
		1			264.89								
		1:30			264.90								
		2			264.90								
		3			264.90								
		4			264.90								
		5			264.89								
		7			264.90								
		9			264.90								
		11			264.90								
		13			264.90								
		15			264.90								
		20			264.91							V	
		25			264.89							CSC	
		30			264.90							CSC	
		35			264.90							CSC	
		40			264.89							CSC	
		45			264.90							CSC	
		50			264.90							CSC	
		60			264.89							CSC	
		70			264.90							CSC	
		80			264.90							CSC	
		90			264.89							CSC	
		100			264.89							CSC	
		110			264.90							CSC	
		120			264.90							CSC	
		150			264.88							CSC	wind picking up
		180			264.88							CSC	
		210			264.87							CSC	
		240			264.86							CSC	
		270			264.86							CSC	
		300			264.86							CSC	
		360			264.85							CSC	
		420			264.87							CSC	
		450			264.87							CSC	
		480			264.87							CSC	
		50			264.86							CSC	Recovery

Aquifer Test Data

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Data for Well 299-E32-3
Pumping Well 299-E32-3
Observation Wells 299-E32-2

Location 200 East RCRA
Type of Aquifer Test Constant Discharge
How Q Measured Digital Flowmeter
How W.L.'s Measured E-tape / transducer
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s T/casing PIPE
Elevation of Meas. Point

Depth of Pump/Airpipe 290' Below LSD
Pump On: date 9/2/89 time 0735
Pump Off: date 9/2/89 time 1535
Duration of Aquifer Test 8 hr

Time (t = ____ at t' = 0)					Water Level Data (Static Water Level 272.00 T/Pipe)					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	0735	0						0					STARTED TEST
		:30											
		1									160		
		1:30											
		2											
		3									163		
		4			278:7.75" 7.75/12		278.65	6.65					
		5			278.7.5" 7.5/12		278.63	6.63					
		7									150		
		9									154		
		11			278.64		278.64	6.64					
		13									153		
	0750	15			278.64		278.64	6.64			153	SSC	
		20			278.64		278.64	6.64			152	SSC	
		25			278.60		278.60	6.60			152	SST	
		30			278.50		278.50	6.50			151	SST	
		35			278.55			6.55			151	SST	Valve wide open
		40			278.55			6.55			149	SST	GPM fluctuating bet. 140-151
		45			278.54			6.54			150	SST	" "
		50			278.53			6.53			151	SST	" "
		60			278.50			6.50			151	SST	" "
		70			278.50			6.50			151	SST	" "
		80			278.40			6.40			149	SST	GPM 147-150
		90			278.43			6.43			150	SST	" "
		100			278.45			6.45			148	SST	" "
		110			278.37			6.37			148	SST	" "
		120			278.35			6.35			149	SST	" "
		150			278.31			6.31			149	SST	" "
		180			278.30			6.30			149	SST	" "
		210			278.31			6.31			148	SST	" "
		240			278.38			6.38			149	SST	" "
		270			278.34			6.34			147	SST	GPM 146-149
		300			278.33			6.33			148	SST	
		360			279.20			7.20			163	SST	Collected water sample
		370			278.42			6.42			149	SST	GPM 147-149
		390			278.30			6.30			147		
		420			278.24			6.24			148		
		480			278.13			6.13			146		

overcome 6.17% 14%

Aquifer Test Data

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Data for Well 299-E32-3
Pumping Well 299-E32-3
Observation Wells 299-E32-2

Location 200 East RCRA
Type of Aquifer Test Recovery (constant-discharge)
How Q Measured —
How W.L.'s Measured E-tape / transducer
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s +/- stilling pipe
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 9/2/87 time 0735
Pump Off: date 9/2/87 time 1535
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 272.0					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
		0	0		~~272.0~~								
			:30		272.0								
			1		271.97								
			1'30										
			2		271.96								
			3		272.0								
			4		272.0								
			5										
			7										
			9										
			11										
			13										

AQUIFER TEST SUMMARY FOR WELL 299-E32-4

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford and Ringold Formations in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation/Ringold Formation
Depth of Formation, Top: 280 ft. Bottom: 320(?) ft.
[Hanford 280 - 297 ft.; Ringold 297 - 320(?) ft]

Depth of Screened Interval in Pumped Well, Top: 298 ft. Bottom: 308 ft.

Date of Test: 09/21/87 Start Time of Test: 1430 hr
Pumping Rate: 27 gpm Duration of Test: 240 min

Pre-test Water-level Elevation (Depth): 281.63 ft (unknown elevation of measuring point).

Water-level depth at maximum drawdown: 293.96 ft (unknown elevation of measuring point).

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	>9,500	>240

Remarks: The drawdown data indicate that well entrance loss occurred. The aquifer was not stressed sufficiently. The drawdown was not greater than 0.1 ft over one logarithmic time cycle at a discharge rate of 27 gpm; therefore, the estimate of transmissivity (9,500 ft^2/d) is a minimum. The assumption that the well fully penetrates the aquifer is not satisfied in the Cooper and Jacob analysis. Also, the aquifer lies within both the Hanford and Ringold Formations.

Aquifer Test Data

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Data for Well 299-E33-4
Pumping Well _____
Observation Wells _____

Location 200 WEST RCRA
Type of Aquifer Test DEVELOPMENT STEP-DD
How Q Measured FLOW METER ARAD 053068 5gal bucket
How W.L.'s Measured E TAPE TRANSDUCER Depth of Pump/Airpipe 217' Below lsd
Rad./Dist. of/From Pumping Well _____ Pump On: date 9/15/97 time _____
Meas. Point for W.L.'s T/C 3.77' abv LSD Pump Off: date _____ time _____
Elevation of Meas. Point _____ Duration of Aquifer Test _____

Time t = _____ at t' = 0					Water Level Data Static Water Level 216.45' T/C					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
		0								11000			2" DISCHARGE PIPE
		150			216.25								

Aquifer Test Data

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Data for Well 299-E32-4
Pumping Well 299-E32-4
Observation Wells _____

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT - DISCHARGE
How Q Measured DIGITAL FLOW METER
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well _____
Meas. Point for W.L.'s T/STILLING PIPE
Elevation of Meas. Point _____

Depth of Pump/~~Airpipe~~ 297' below
Pump On: date 9/21/87 time 1435
Pump Off: date 9/21/87 time 1836
Duration of Aquifer Test _____

Time t = ____ at t' = 0					Water Level Data Static Water Level 291.63'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/21	1400	0			291.63								
		:30			284.71						14.6		
		1			285.99								
		1:30			286.63								
		2			287.00								
		3			287.40								
		4			287.52								ABORT
		5			287.55						14.2		
		7											~~restart test~~
		9											~~valve not open~~
		11											~~from sunrise~~
		13											
	1430	0				291.63		0			26.8		
		:30			287.84			6.21					
		1			289.97			8.34					
		1:30			291.65			10.02			27.2		
		2			292.03			10.40					
		3			293.19			11.56			27.0		
		4			293.60			11.97					
		5			293.67			12.04					
		7			293.83			12.20			26.7		
		9			293.89			12.26			26.[illegible]		
		11			293.92			12.29			26.4		
		13			293.90			12.27			26.2		
		15			293.91			12.28			26.3		
		20			293.87			12.24			26.7	cc	
		25			293.96			12.33			26.3	cc	
		30			293.95			12.32				cc	Discharge varies
		35			293.96			12.33			26.6		between 26.0 & 27.3
		40			293.88			12.25			26.8		
		45			293.90			12.23			26		
		50			293.89			12.26			26.3		
		60			293.78			12.15					
		70											
		80			293.50			11.97			26.6		
		90			293.52			11.90			27		
		100			293.52			11.89			26.4		
		110			293.53			11.90			26.7		
		120			293.50			11.97			26.3	cc	

Aquifer Test Data

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Data for Well 299-E32-4
Pumping Well 299-E32-4
Observation Wells

Location 200 EAST Rock
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/STILLING P.P.
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 297' Below Pipe
Pump On: date 9/21/87 time 1430
Pump Off: date 9/21/87 time 1830
Duration of Aquifer Test 4 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 281 63'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
9/21	1700	150			293.51			11.86			26.9	CSC	
		180			293.52			11.89			26.5	CSC	
		210			293.52			11.89			27	CSC	
		240	0		293.52			11.89			26.6	CSC	
			:30	481	288.46			6.83		532300			
			1	241	285.60			3.97					
			1:30	161	284.05			2.42					
			2	121	283.04			1.41					
			3	81	282.18			.55					
			4	61	281.86			.23					
			5.5	44.6	281.67			.04					
			7	35.3	281.61			-.02					
			9	27.7	281.59			-.04					
			11	22.8	281.56			-.07					Well has been
			13	19.5	281.55			-.08					developed further
			15	17	281.54			-.09					or recovery beyond
			20	13	281.53			-.10					static because of
			25	10.6	281.55			-.08					reduced storage i.e.
			30	9	281.55			-.08					air in voids
			35	7.9	281.55			-.08					
			40	7	281.56			-.07					
			45	6.3	281.54			-.09					
			50	5.8	281.54			-.09					

AQUIFER TEST SUMMARY FOR WELL 299-E33-28

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 257 ft. Bottom: 278 ft.

Depth of Screened Interval in Pumped Well, Top: 268 ft. Bottom: 278 ft.

Date of Test: 10/21/87 Start Time of Test: 1200 hr
Pumping Rate: 150 gpm Duration of Test: 240 min

Pre-test Water-level Elevation (Depth): 257.08 ft.
Water-level depth at maximum drawdown: 257.14 ft.

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	>53,000	>2,500

Remarks: The aquifer was not stressed sufficiently. The drawdown was not greater than 0.1 ft over one logarithmic time cycle at a discharge rate of 150 gpm; therefore, the estimate of transmissivity (53,000 ft^2/d) is a minimum. The assumption that the well fully penetrates the aquifer is not satisfied in the Cooper and Jacob analysis.

Aquifer Test Data

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Data for Well 299-E33-28
Pumping Well 299-E33-29
Observation Wells —

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE DD
How Q Measured FLOW METER DIGITAL DATA INDUSTRIAL MODEL 900T
How W.L.'s Measured E-TAPE / TRANSDUCER
Depth of Pump/Airpipe
Rad./Dist. of/From Pumping Well —
Pump On: date 10/21/87 time 1200
Meas. Point for W.L.'s T/STILLING PIPE 2.93' ABV. LSD
Pump Off: date 10/21/87 time 1600
Elevation of Meas. Point
Duration of Aquifer Test 4 hr

Time (t = ____ at t' = 0)					Water Level Data (Static Water Level 260.01)					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
10/21	1200	0			260.01					635700		CSC	SLOPE INDICATOR CO.
													E-TAPE # 10978
	1200	0											PUMP ON
		:30			260.03								
		1			260.05						150		
		1:30											
		2			260.04								
		3			260.04								
		4			260.05						151		
		6			260.07	MAX. DD	.06				150		
		7			260.07						150		
		9			260.05								
		11			260.05								
		13			260.05						151		
		15			260.07						151		
		20			260.03					635730	150		
		25			260.04						148		
		30			260.05						150		
		35			260.04						151		
		40			260.05						150		
		45			260.05						150		
		50			260.05						150		
		60			260.04					645700	149		
		70			260.03						149		
		80			260.03						148		
		90			260.04						150		
		100			260.03						148		
		110			260.06						150		
		120			260.03						149		
		150			260.03						147		
		180			260.0						148		
		210			259.99						148		
		240	0		259.99								
			:30		260.01								
			1		259.97								
			1:30		259.97								
			2		259.97								
			3		259.96								
			4		259.96								
			5		259.96								

Aquifer Test Data

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Data for Well 299-E33-29
Pumping Well 299-E33-29
Observation Wells

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured DIGITAL FLOW METER
How W.L.'s Measured E. TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING PIPE 2.93' Abv isol
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 10/21/87 time 1200 hr
Pump Off: date 10/21/87 time 1600 hr
Duration of Aquifer Test 4 hr

Time t = 240 at t' = 0					Water Level Data Static Water Level					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
10/21	1607	247	7		259.95								Possible leakage
			9		259.94								from pump column
			11		259.95								
			13		259.95								
			15		259.95								Transducer not
			20		259.95								working correctly
			25		259.96								S/N 00421
			30		259.96								Transducer
			45		259.96								

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AQUIFER TEST SUMMARY FOR WELL 299-E33-29

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 266 ft. Bottom: 290 ft.

Depth of Screened Interval in Pumped Well, Top: 279.5 ft. Bottom: 289.5 ft.

Date of Test: 09/17/87 Start Time of Test: 1400 hr
Pumping Rate: 145 gpm Duration of Test: 180 min

Pre-test Water-level Elevation (Depth): 265.83 ft.
Water-level depth at maximum drawdown: 265.93 ft.

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	>51,000	>2,100

Remarks: The aquifer was not stressed sufficiently. The drawdown was not greater than 0.1 ft over one logarithmic time cycle at a discharge rate of 145 gpm; therefore, the estimate of transmissivity (51,000 ft^2/d) is a minimum. The assumption that the well fully penetrates the aquifer is not satisfied in the Cooper and Jacob analysis.

Aquifer Test Data

Note: all measurements for this test were taken at the middle mark on the E-tape

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Data for Well 299-E33-29
Pumping Well 299-E33-29
Observation Wells —

Location 200 East RCRA
Type of Aquifer Test Step - Drawdown
How Q Measured Digital Flowmeter
How W.L.'s Measured E-tape (#12176)
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s stilling pipe (2.85' above l.s.)
Elevation of Meas. Point

Depth of Pump/Airpipe 274' (intake)
Pump On: date 9-17-87 time 0902
Pump Off: date 9-17-87 time
Duration of Aquifer Test

Time: t = _____ at t' = 0
Water Level Data: Static Water Level 268.65

Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Discharge: Reading	Discharge: Q	Recorded By	Comments (Flowmeter reading at beginning = 4724; stilling pipe bottom @ 270.15)
9/17	0902	:30			—							SST	80 gpm
		1:00			—								adjusting flow
		1:30			—								
		2			268.45								
		3			268.52								25 gpm
		4			268.64								
		5			268.62								
		7			268.62								
		9			268.60								
		11			268.61								
		13			268.62								
		15			268.60								
		20			268.55								25-29 gpm
		25			268.60								
		30			268.62								
		:30			268.63								54 gpm
		1:00			268.63								50 gpm
		1:30			268.61								
		2			268.61								
		3			268.61								
		4			268.59								
		5			268.67								48 gpm
		7			268.62								52 gpm
		9			268.62								54 gpm
		11			268.62								53 gpm
		13			268.63								
		17			268.62								
		20			268.62								
		25			268.63								
		30			268.56								
		35			268.61								
		40			268.59								
		45			268.62								
		50			268.62								
		60			268.62								

Aquifer Test Data

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Data for Well 299-E33-29
Pumping Well 299-E33-29
Observation Wells —

Location 200 East RCRA
Type of Aquifer Test Step drawdown
How Q Measured Digital Flowmeter
How W.L.'s Measured E-tape (#12176)
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s t/stilling pipe 2.85' above L.S.
Elevation of Meas. Point

Depth of Pump/Airpipe 274' (intake)
Pump On: date 9-17-87 time 0902
Pump Off: date 9-17-87 time 1252
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 268.65					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/17	1032	1:30			—						100	SST	100 gpm
		1:00			268.60								
		1:30			268.64								
		2			268.62								
		3			268.60								
		4			—								
		5			268.63								
		7			268.71								
		9			268.61								
		11			—								
		13			268.61								
		15			268.61								
		20			268.62								
		25			268.63								
		30			268.60								
		35			268.60								
		40			268.62								
		45			268.61								
		50			268.60								
		60			268.57								
9/17	11:32	1:30			268.64						144		144 gpm (valve wide open)
		1:00			268.66								
		1:30			—								
		2			268.67								
		3			268.65								
		4			—								
		5			264.64								
		7			268.60								
		9			268.60								
		11			268.65								
		13			268.62								
		15			268.66								
		20			268.65								
		25			268.67								
		30			268.63								
		35			—						143		
		40			268.60								
		45			268.62								

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Aquifer Test Data

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Data for Well 299-E33-29
Pumping Well " " "
Observation Wells —

Location 200 East RCRA
Type of Aquifer Test Step-drawdown
How Q Measured Digital Flowmeter
How W.L.'s Measured E-tape (#12176)
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s 4" stilling pipe (2.85' above L.S.)
Elevation of Meas. Point

Depth of Pump/Airpipe 274' (intake)
Pump On: date 9-17-87 time 0902
Pump Off: date 9-17-87 time 1252
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
9/17		50			268.61						143-144		
	12:32	60			268.60								
		70			268.65								
	12:52	80			268.60								

Aquifer Test Data

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Data for Well 299-E33-29
Pumping Well 299-E33-29
Observation Wells —

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE DD
How Q Measured DIGITAL FLOW METER
How W.L.'s Measured E-TAPE (#12176)
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s T/PIPE (2.85' above L.S.)
Elevation of Meas. Point

Depth of Pump/Airpipe 274' (intake)
Pump On: date 9-17-87 time 1400:30
Pump Off: date 9-17-87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 268.68					Discharge		Recorded By	Stilling pipe bottom @ 270.15 Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	1400	0			268.68						TLC	SST	CAULD N[illegible]
		.30			268.80								TRANSDUCER [illegible]
		1			268.79								
		2			268.79						15		
		3			268.77						150		
		4			268.70						140		
		5			268.77								
		7			268.75								
		9			268.76						145		
		11			268.77								
		13			268.76						145		
		15			268.78	max dd .10							
		20			268.76						144		Valve wide open
		25			268.76								
		30			268.76								
		35			268.77						145		
		40			268.76								
		45			268.77						145		
		50			268.75								
		60			268.75						144		
		70			268.74								
		80			268.75								
		90			268.75								
		100			268.74						143		
		110			268.73						144-145		
		120			268.72						144-145		
		150			268.73						144-145		
	1700	180	0		268.70					5225			RECOVERY
			:10										
			:20										
			:30		268.71								
			:40		268.68								
			:50		268.65								
			1:00		268.69								
			1:30		268.64								
			2		268.64								
			3		268.64								
			4		268.64								
			5		268.64								
			7		268.64		13	268.64		35	268.63		
			9		268.64		15	268.64		40	268.64		
			11		268.62		25	268.64		50	268.64		
							30	268.64					

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AQUIFER TEST SUMMARY FOR WELL 299-E33-30

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 257 ft. Bottom: 279 ft.

Depth of Screened Interval in Pumped Well, Top: 267 ft. Bottom: 277 ft.

Date of Test: 09/24/87 Start Time of Test: 0730 hr
Pumping Rate: 160 gpm Duration of Test: 218 min

Pre-test Water-level Elevation (Depth): 256.97 ft.
Water-level depth at maximum drawdown: 256.99 ft.

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	>56,000	>2,500

Remarks: The aquifer was not stressed sufficiently. The drawdown was not greater than 0.1 ft over one logarithmic time cycle at a discharge rate of 160 gpm; therefore, the estimate of transmissivity (56,000 ft^2/d) is a minimum. The assumption that the well fully penetrates the aquifer is not satisfied in the Cooper and Jacob analysis.

Aquifer Test Data

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Data for Well 299-E33-30
Pumping Well 299-E33-30
Observation Wells _____

Location 200 EAST RCRA
Type of Aquifer Test STEP TEST / DEVELOPMENT
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well _____
Meas. Point for W.L.'s T/STAINLESS TAPE 1' ABV LSD
Elevation of Meas. Point _____

Depth of Pump/Airpipe _____
Pump On: date 9/23/87 time _____
Pump Off: date _____ time _____
Duration of Aquifer Test _____

Time t = _____ at t' = 0					Water Level Data Static Water Level _____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/23	17:19	0					259' 7 7/8"						Hose connecting two
		.5					259' 8 3/4"						sections of pipe has
		1					259' 7 7/8"						2 kinks in it, possibly
		1.5					259' 7 7/8"						decreasing flow
		2					259' 7 7/8"						
		3					259' 8 1/2"			34.1		NR	Jeff Robinson (ICF)
		4					259' 8"			34.2			
		5					259' 8"			34.2			
		7					259' 7 7/8"			33.5			
		9					259' 8"			33.5			
		11					259' 8"			33.8			
		13					259' 7 7/8"			34.3			
		15					259' 7 7/8"			33.2			
		20					259' 8 1/4"			105			
		25					259' 8 1/4"			109			
		30					259' 8 1/4"			110			
		35					259' 8 1/2"			110			
		40					259' 8 1/4"			111			
		45					259' 8 1/4"			112			
		50					259' 8 1/2"			111			
		60					259' 8 1/2"			111			
		9					259' 8 1/4"			110			
		11					259' 8 1/4"			110			
		13					259' 8"			110			
		15					259' 8"			112			
		20					259' 7 7/8"			111			
		25					259' 7 1/4"			109			
		30					259' 7 1/2"			111			
		35					259' 7 1/2"			110			
		40					259' 7 1/2"			110			
		45					259' 7 3/8"			111			
		50					259' 7 7/8"			112			
		60					259' 7 7/8"			111			

Aquifer Test Data

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Data for Well 299-E33-30
Pumping Well 299-E33-30
Observation Wells

Location 299-E33-30
Type of Aquifer Test step drawdown/development
How Q Measured digital flowmeter
How W.L.'s Measured Electrical
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s top of shitwell
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date time
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	1836	.5					259'2 3/4"			149			
		1					259'2 1/4"			150			
		1.5					259'2"			152			
		2					259'2 7/8"			152			
		3					259'2 7/8"			154			
		4					259'2 3/4"			155			
		5					259'2 7/8"			155			
		7					259'3"			154			
		9					259'2 5/8"			155			
		11					259'3"			155			
		13					259'2 5/8"			155			
		1920					259'2 5/8"			155			
		20					259'2 5/8"			155			
		25					259 2 5/8"			155			
		30					259 2 7/8"			156			
		35					259 2 5/8"			156			
		40					259 3 1/4"			156			
		70					259 2 5/8						
Recovery													let the pump run at 170 gpm for approx. 1/2 hr after the last step. would not pump any faster let it develop a little longer
		0.5					259'2 3/4"			—			
		1					259'2 5/8"						
		1.5					259'2 5/8"						
		2					259'2 5/8"						
		3					259'2 3/4"						
		4					259'2 3/4"						
		5					259'2 3/4"						
		7					259'2 5/8"						
		9					259'2 1/2"						

Aquifer Test Data

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Data for Well 299-E33-30
Pumping Well 299-E33-30
Observation Wells

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING PIPE 2.67' LSD (T/surface casing)
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 267' from lsd
Pump On: date 9/24/87 time 0730
Pump Off: date 9/24/87 time 1108
Duration of Aquifer Test 218 min.

Time t = ____ at t' = 0					Water Level Data Static Water Level 259.64					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
		0			259.64								Transducer probably
		1:30			259.64								set below pump intake
		1			259.65								intake may be at top of
		1:30			259.65								screen
		2			259.64								@2:50 - [illegible]
		3			259.64								
		4			259.65						160		@ 160 gpm
		5			259.65								
		7			259.64								
		9			259.64						159		159 gpm
		11:30			259.64								* @ 11:30
		13			259.64								@ 160gpm
		15			259.69								
		20			259.66								
		25			259.64								
		30			259.64								
		35			259.63								
		40			259.64								
		45			259.64								
		50			259.64								
		60			259.64							CSC	
		70			259.64							CSC	
		80											
		90			259.64							CSC	
		100			259.64						158	CSC	
		110			259.64						160	CSC	
		120			259.64						159	CSC	
		150			259.64						160	CSC	
		180			259.63						158	CSC	
		200			259.62					583300			TURNED OFF @ 11:05 hr

AQUIFER TEST SUMMARY FOR WELL 299-E34-2

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 224 ft. Bottom: 241 ft.

Depth of Screened Interval in Pumped Well, Top: 230 ft. Bottom: 240 ft.

Observation Well Used: 299-E34-1 Distance to Pumped Well: 60 ft.

Elevation (Depth) of Screened Interval, Top: 215 ft. Bottom: 230 ft.

Date of Test: 08/07/87 Start Time of Test: 1320 hr
Pumping Rate: 194 gpm Duration of Test: 225 min

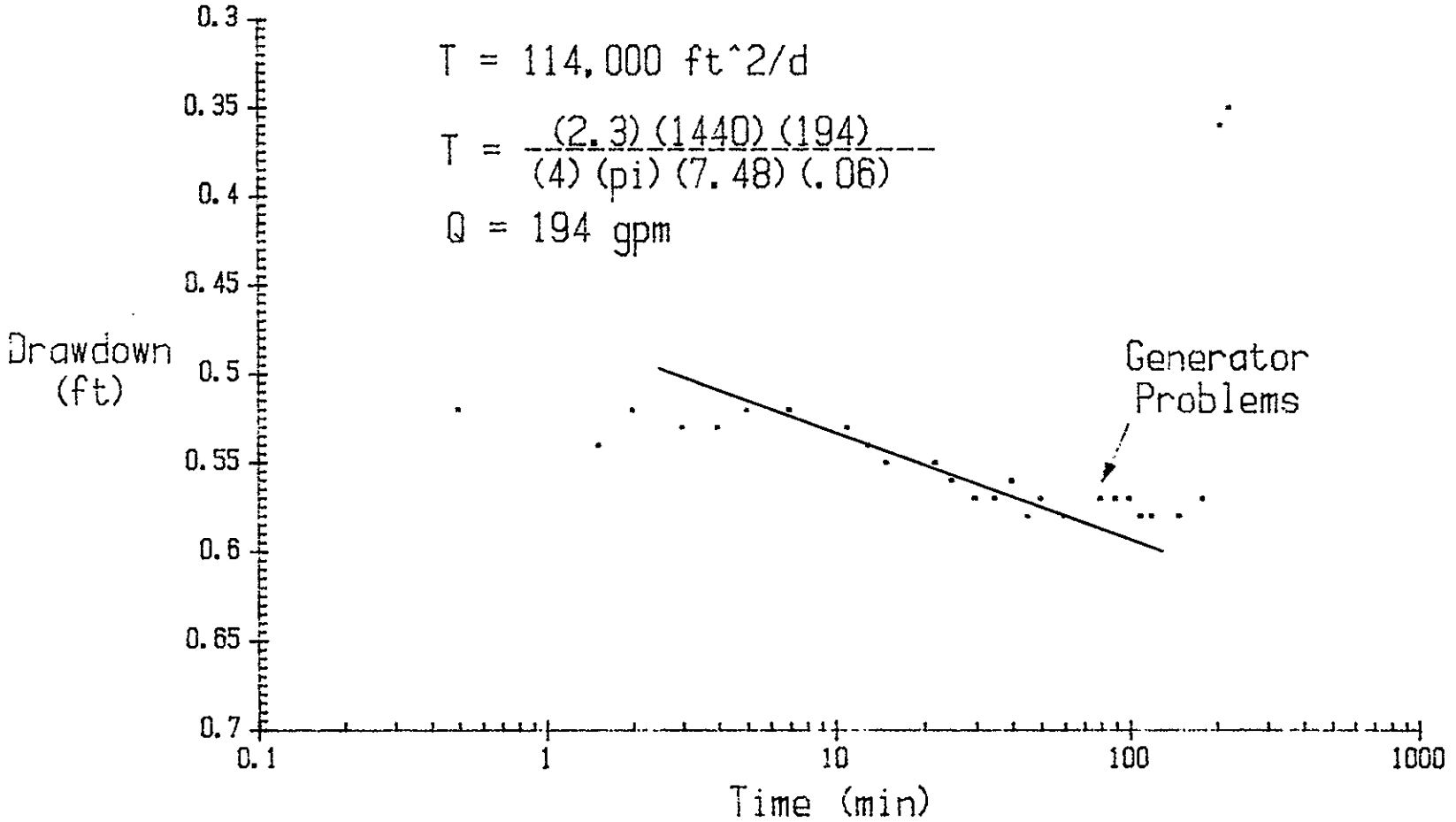
Pre-test Water-level Elevations (Depths):
Pumping well: 223.75 ft.
Observation well: 221.34 ft.

Analysis Methods and Results:

Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Constant Discharge (Cooper and Jacob 1946)	114,000	6,700	NA
Recovery (Cooper and Jacob 1946)	85,000	5,000	NA

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The constant discharge test was shortened because of generator problems. As a result, the drawdown data from the observation well are insufficient for analysis.

RCRA WELL 299-E34-2
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
8/07/87

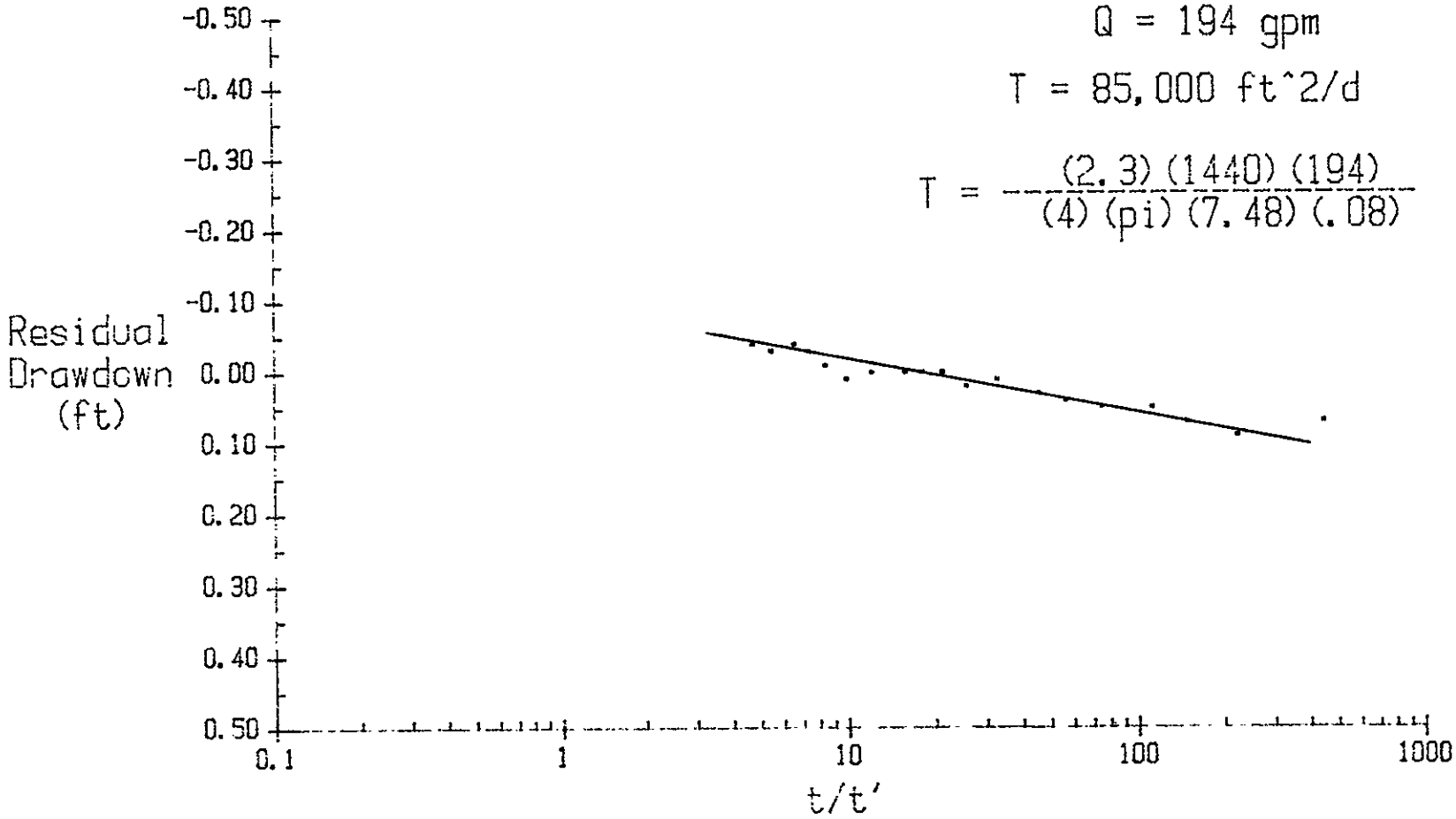


RCRA WELL 299-E34-2
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
8/07/87

Q = 194 gpm

T = 85,000 ft^2/d

$$T = \frac{(2.3)(1440)(194)}{(4)(pi)(7.48)(.08)}$$



Aquifer Test Data

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Data for Well 299-E34-2
Pumping Well 299-E34-2
Observation Wells 299-E34-1

Location 200 East Area
Type of Aquifer Test Step drawdown
How Q Measured Dwyer Flowmeter / 5 gal bucket
How W.L.'s Measured INL 300' E-TAPE # 11044
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s top of stilling well
Elevation of Meas. Point 2.83' above ground surface

Depth of Pump/Airpipe intake at 233' 9"
Pump On: date 8/2/82 time 0900
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 226.69'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/2	0835	0			226.69'							KRO	
	0857	0			226.69'							KRO	Pump ON.
		.5			226.96'							KRO	
		1			226.99'						64	KRO	Adjusting Valve
		1.5			226.94'							KRO	↓
		2			226.73'							KRO	
		2.5			226.71'							KRO	
		3			226.86'						8.6	KRO	
		4			226.71'						22	KRO	
		5			226.73'					201	15.1	KRO	
		7			226.72'						14.9	KRO	
		9			226.73'						14.9	KRO	
		11			226.73'						14.6	KRO	
		13			226.70'						14.7	KRO	11 sec. / 5 gal bucket
		15			226.67'						14.4	KRO	(27.3 gpm)
		17			226.73'						14.4	KRO	
		19			226.72'						14.5	KRO	
		21			226.73'						14.4	KRO	
		23			226.71'						14.5	KRO	
		25			226.73'					204	14.4	KRO	12 sec / 5 gal bucket
		30			226.70'					205	14.5	KRO	(25 gpm)
		35			226.72'					205	14.0	KRO	
		40			226.68					205	14.5	KRO	11 sec / 5 gal bucket
		45			226.70					207	14.4	KRO	(27.3)
		50			226.71'					207	14.2	KRO	
		60			226.72'						14.2	KRO	Adjust Valve
		65			226.71'						19.5	KRO	↑
		69			226.73'							KRO	↓
		69.5			226.79'						29.9	KRO	
		62.5			226.70'							KRO	
		63			226.78'						37.8	KRO	
		64			226.78						30.2	KRO	
		65			226.85'							KRO	
		67			226.80'						30.2	KRO	
		69			226.78'						30.1	KRO	
		71			226.77'						29.9	KRO	
		73			226.77							KRO	
		75			226.75					214	30.1	KRO	
		77			226.78							KRO	5 sec / 5 gal bucket (60 gpm)

Aquifer Test Data

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Data for Well 299-E34-2
Pumping Well 299-E34-2
Observation Wells 299-E34-1

Location 200 East Area
Type of Aquifer Test Step drawdown
How Q Measured ~~Digital Flowmeter~~ / 5 gal bucket
How W.L.'s Measured ENL300's-TAPE #11044
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s top of stilling well
Elevation of Meas. Point 2.83' above ground surface

Depth of Pump/Airpipe intake at 233'9"
Pump On: date 8/7/87 time 0900
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 226.62'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
		79			226.77							KRD	
		81			226.77							RKT	
		83			226.76							RKP	
		85			226.77						30.4	RKP	
		90			226.80'						30.6	RKP	
		95			226.75'						29.9	KRD	
		100			226.77'					221	30.4	KRD	
		105			226.76'					222	30.3	KRD	6 sec / 5 gal bucket
		110			226.77'					224	30.0	KRD	
		120			226.77'							KRD	Adjust valve
		120.5			226.81'							KRD	!
		121			226.87'						-	KRD	✓
		121.5			226.83'						50.6	KRD	
		122			226.87'							KRD	
		123			226.84'							KRD	
		124			226.85'						51.3	KRD	
		125			226.85'						51.0	KRD	
		127			226.85'						51.2	KRD	
		129			226.87'						51.6	KRD	
		131			226.87'						51.1	KRD	
		133			226.86'						51.4	KRD	
		135			226.85					235	51.5	KRD	SAMPLED WELL
		140			226.85					238	50.4	KRD	(1ST SAMPLE)
		145			226.87'						51.0	KRD	
		150			226.87'						50.9	KRD	3 sec / 5 gal bucket
		155.5			226.85'						50.9	KRD	100 gpm
		160			226.78						29.3		Generator slow.
		165			226.75						30		fuel-filter
		170											
		183			226.78'						42.6		Adjusting Valve
		198			226.64'								OFF!
		199			226.64'								

Aquifer Test Data

page 1 of 2

Data for Well 299-E34-2
Pumping Well 299-E34-2
Observation Wells 299-E34-1

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured DIGITAL FLOWMETER / 5 gal bucket
How W.L.'s Measured E-TAPE #1104a
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP TRENCHING PIPE / 2.83' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe Intake at 233.
Pump On: date 8/7/87 time 1320 hr
Pump Off: date 8/7/87 time 1705
Duration of Aquifer Test 3.75 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 226.58					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/7	1320	0			226.58			0				csc	
		:30			227.10			.52				csc	
		1											
		1:30			227.12			.54					
		2			227.10			.52			110	csc	
		3			227.11			.53					
		4			227.11			.53					
		5			227.10			.52			109	csc	
		7			227.10			.52			108	csc	
		9											
		11			227.11			.53			107	csc	
		13			227.12			.54			107	csc	
		15			227.13			.55			107	csc	
	22	20			227.13			.55			107	csc	
		25			227.14			.56			107	csc	
		30			227.15			.57			107	csc	
		35			227.15			.57			106	csc	
		40			227.14			.56			106	csc	
		45			227.16			.58			107	csc	
		50			227.15			.57			107	csc	checked with
		60			227.16			.58			107	csc	55 gal drum
		70											55/17 sec 194 gpm
		80			227.15			.57			106.5		hose leaks
		90			227.15			.57			106		had to cut back
		100			227.15			.57			107		to repair 7 min
		110			227.16			.58			107		
		120			227.16			.58			107		55 gal / 17 sec 194 gpm
		150			227.16			.58			107		
		180			227.15			.57			107		55 gal / 17 sec 199 gpm
		210			226.94			.36			75^		generator
	1705	225			226.93			.35					setting up again
Recovery			:30		226.65								End of test
			1		226.67								
			1:30		226.65								
			2		226.63								
			3		226.63								
			4		226.62								
			5		226.61								
			7		226.59								

Aquifer Test Data

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Data for Well 299-E34-2
Pumping Well 299-E34-2
Observation Wells 299-E34-1

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCH Recovery
How Q Measured DIG. FLOW METER / 5 gal bucket
How W.L.'s Measured E. TAPE # 11044
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP TRANSMISSION STILLING WELL 2.83' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 8/7/87 time 1320 hr
Pump Off: date 8/7/87 time 1705 hr
Duration of Aquifer Test 3.75 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 226.58					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
		234	9		226.60							CSC	
			11		226.58							CSC	
			13		226.58							CSC	
			15		226.58							CSC	
			20		226.58							CSC	
			25		226.59							CSC	
			30		226.57							CSC	Possible leakage
			35		226.55							CSC	from pipe column
			40		226.54							CSC	or expanding [illegible]
			45		226.55								(warm outside
			50		~~223.55~~							CSC	pipe)
			60		223.54	226.54						CSC	

Aquifer Test Data

OBSERVATION WELL

page 1 of 1

Data for Well 299-E34-1
Pumping Well 299-E34-2
Observation Wells 299-E34-1

Location 200 East Area
Type of Aquifer Test Step Drawdown
How Q Measured Digital Flowmeter / 5 gal bucket
How W.L.'s Measured Dall 300' E-TAPE # 10998
Depth of Pump/Airpipe intake at 233'9"
Rad./Dist. of/From Pumping Well
Pump On: date 8/7/87 time 0900
Meas. Point for W.L.'s top of casing
Pump Off: date time
Elevation of Meas. Point 2.42' above brass cap
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 223.76'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
8/7	0855	0			223.76'							KRD	
		26			223.79							KRD	
		37			223.78'							KRD	
		42			223.75							KRD	
		52			223.79							KRD	
		84			223.79'							KRD	
		102			223.79'							KRD	
		111			223.78'							KRD	
		137			223.80'							KRD	
		142			223.80'							KRD	

Aquifer Test Data

OBSERVATION WELL

page 1 of 2

Data for Well 299-E34-1
Pumping Well 299-E34-2
Observation Wells

Location 200 EAST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE TEST
How Q Measured FLOW METER / 5 gal bucket
How W.L.'s Measured E-TAPE #10098
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.42' ABV brass cap
Elevation of Meas. Point

Depth of Pump/Airpipe intake at 232.75'
Pump On: date 5/7/87 time 1320 hr
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 223.71					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
		0			223.71'			0				KRD	Pumping at
		.5			223.72'			.01				KRD	110 gpm
		1			223.73'			.02				KRD	
		1.5			223.72'			.01				KRD	
		2			223.73'			.02				KRD	
		2.5			223.73'			.02				KRD	
		3			223.73'			.02				KRD	Pumping at
		4			223.73'			.02				KRD	107 gpm
		5			223.74'			.03				KRD	
		7			223.75'			.04				KRD	
		9			223.77'			.06				KRD	
		11			223.77'			.06				KRD	
		13			223.78'			.07				KRD	Pumping at
		15			223.78'			.07				KRD	107 gpm
		20			223.78			.07				CSC	
		25			223.78			.07				CSC	
		30			223.79			.08				CSC	
		35			223.79			.08				CSC	
		40			223.79			.08				CSC	
		45			223.80			.09				CSC	
		50			223.80			.09				CSC	
		60			223.80			.09				CSC	
		70											hose blew loose to
		80			223.79			.08				CSC	cut back discharge
		90			223.80			.09				CSC	80 gpm
		100			223.79			.08				CSC	
		110			223.80			.09				CSC	
		120			223.80			.09				CSC	
		150			223.81			.10				CSC	
		180			223.78			.07				CSC	
		210			223.77			.06				MAC	generator begins down
		215			223.75			.04				MAC	

9011730357

Aquifer Test Data

OBSERVATION WELL

page 2 of 2

Date for Well 299-E34-1

Pumping Well 299-E34-2

Observation Wells

Location 200 WEST RCRA

Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY

How Q Measured DIGITAL FLOWMETER, 55 gal. drum

How W.L.'s Measured E-TAPE

Rad./Dist. of/From Pumping Well

Meas. Point for W.L.'s TOP CASING, 2.42' ABV ~~meas~~ cap

Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ Intake at 233.75 ft

Pump On: date 9/7/87 time

Pump Off: date time

Duration of Aquifer Test

Time t = _____ at t' = 0					Water Level Data Static Water Level _____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	225	0					233.75						
		.5		451			233.75						
		1					233.75						
		1.5					233.75						
		2					233.745						
		3					233.74						
		4					233.73						
		5					233.72						
		7					233.71						
		9					233.705						
		11					233.7						
		13					233.69						
		15					233.68						
		20					233.68					CSC	
		25					233.67					CSC	
		30					233.65					CSC	
		35					233.65					CSC	
		40					233.64					CSC	
		45											
		50					233.67					CSC	
		60					233.60					CSC	
		70											
		80											
		90											
		100											
		110											
		120											

AQUIFER TEST SUMMARY FOR WELL 299-E34-3

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 203 ft. Bottom: 213 ft.

Depth of Screened Interval in Pumped Well, Top: 203.5 ft. Bottom: 213.5 ft.

Date of Test: 08/05/87 Start Time of Test: 1500 hr
Pumping Rate: 60 gpm Duration of Test: 180 min

Pre-test Water-level Elevation (Depth): 203.10 ft.

Analysis Methods and Results:

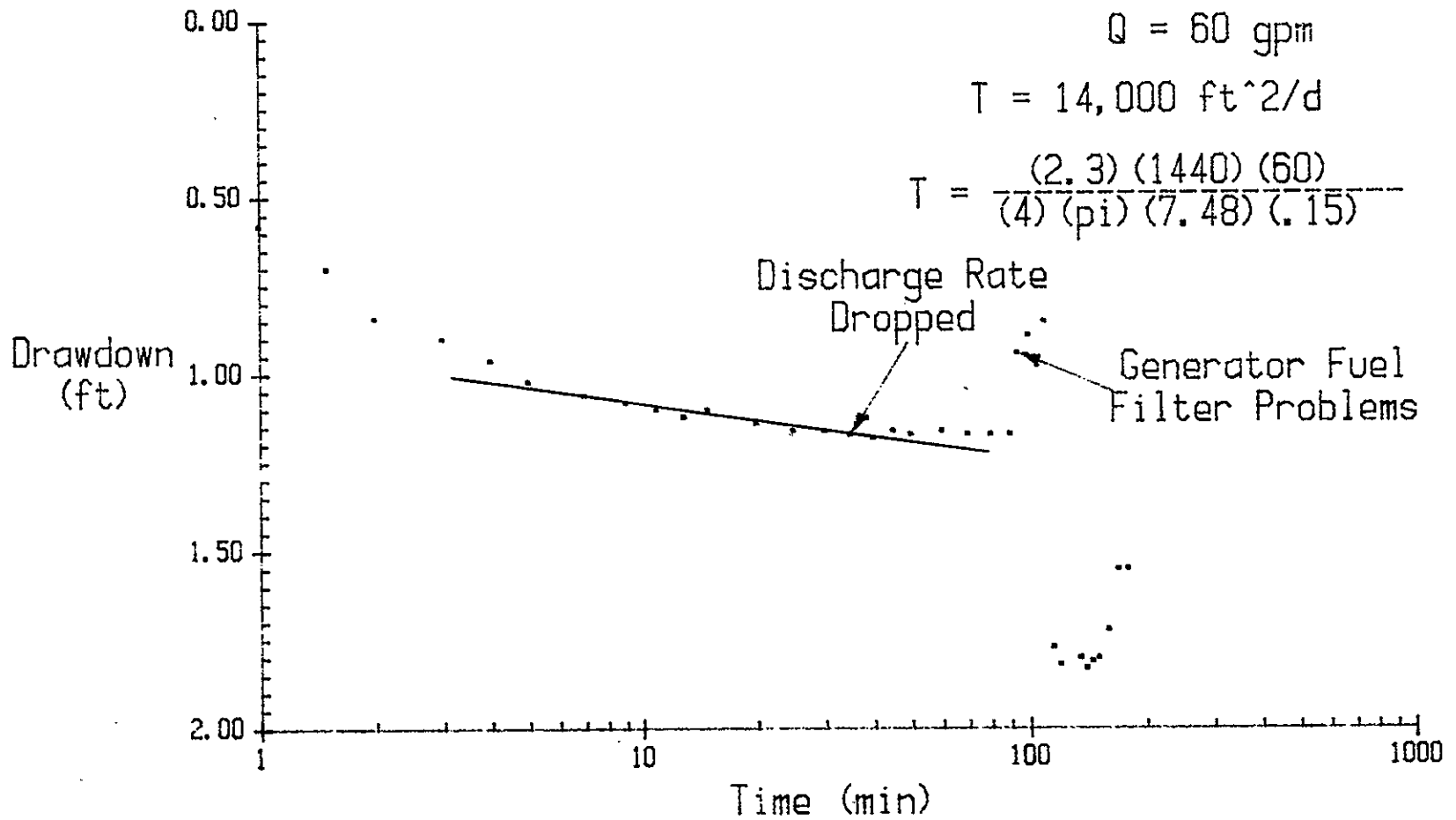
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	14,000	1,400
Recovery (Cooper and Jacob 1946)	14,000	1,400

Corrections Used:

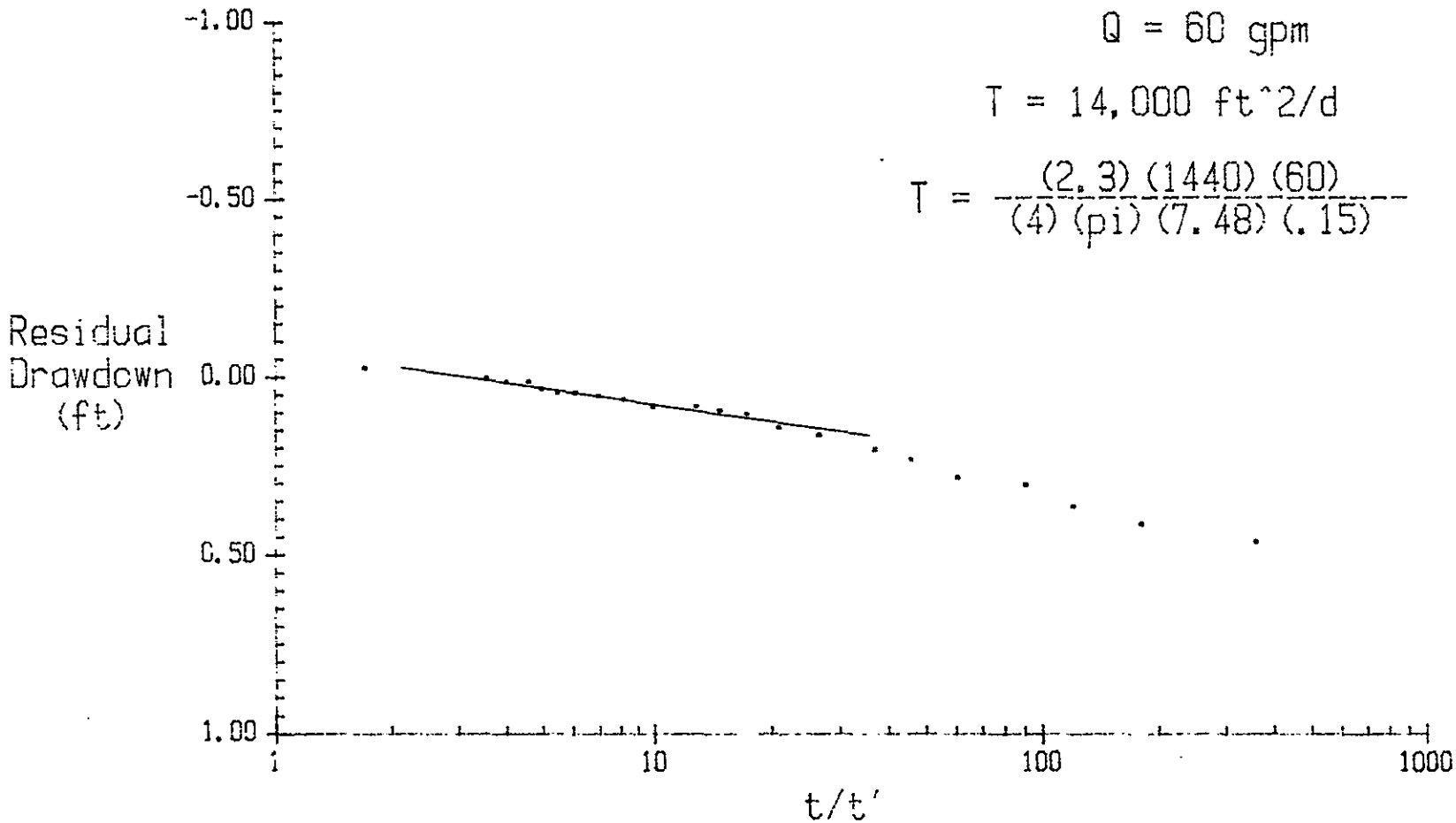
Borehole Storage Effects
t_c = 1.9 min (Hargis 1979)

Remarks: The discharge rate varied after 90 min of pumping because of generator problems.

RCRA WELL 299-E34-3
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
8/05/87



RCRA WELL 299-E34-3
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
8/05/87



Q = 60 gpm

T = 14,000 ft^2/d

$$T = \frac{(2.3)(1440)(60)}{(4)(pi)(7.48)(.15)}$$

Aquifer Test Data

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Data for Well 299-E34-3
Pumping Well SAME
Observation Wells

Location 200E
Type of Aquifer Test STEP DRAWDOWN
How Q Measured DIGITAL FLOW METER
How W.L.'s Measured E-tape # 11044
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP of stilling well
Elevation of Meas. Point 2.25' above ground surface

Depth of Pump/Airpipe Intake at ~209'
Pump On: date 8/5/87 time
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data @ 0820 Static Water Level 205.35' below stilling well					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Flow Q		
8/5	0920	0			205.33'					040			Digital flow meter
		.5			205.63'								jumps around from
		1.0			205.52'								0-29 just like
		1.5			205.96'								one w/ needle
		2.0			205.60'								
		3.0			205.55'								
		4.			205.46'						49%/min		
		5			205.45'						4.85		
		7			205.43'								
		9			205.42'								Adjust valve try to get
		11			205.50'								to 5 gal/min
		13			205.67'								↓
		15			205.65'						7.25	gal/min	& by 5 gal bucket.
		20			205.72'					043	19.6	gal/min	Adjust valve no to get
		25			205.71'					044			constant flow rate
		30			205.72'					044	18.7		= 18 by bucket
		35			205.71'						18.5		(? on bucket reading)
		40			205.71'						18.3		calculations could be wrong
		45			205.74'					047	18.4		
		50			205.69'						18.0		filled 5/gal bucket in 7.5 sec
		60			205.70'						17.7		Adjust in flow ↑ 40 gpm
		60.5											
		61			205.79'								
		61.5			205.85'						27.8		
		62			205.84'						27.9		Pump Stopped
		63			205.82'						18.5		restarted Pump
		64			205.89'						18.5		readjust valve ↑ again
		65			205.89'						21.4		
		67			205.80'						22		Pump Stopped again
		69			205.74'						2.9		on again at 67.5 min.
		71			205.72'						30.1		Adjusting valve
		73			205.79'						24.4		Pump OFF + ON
		75			205.82'					053	22.4		" " "
		78			205.43'								Pump OFF again
		79	1		205.43'								Stopped test.
		80	2		205.41'								Recovery
		81	3		205.38'								
		83	5		205.37'								
		85	7		205.36'								

Aquifer Test Data

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Data for Well 299-E34-3
Pumping Well
Observation Wells

Location 200 EAST RCRA
Type of Aquifer Test DEVELOPMENT
How Q Measured DIGITAL FLOWMETER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP STILLING PIPE 2.25' AW LSD
Elevation of Meas. Point

Depth of Pump/Airpipe INTAKE 209'
Pump On: date 8/5/87 time
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
		87	9		205.36								
		89	11		205.35								Back to static

Aquifer Test Data

page 1 of 1

Data for Well 299-E34-3
Pumping Well same
Observation Wells 299-E27-10

Location 200 E
Type of Aquifer Test STEP DRAWD
How Q Measured DIGITAL FLOW METER
How W.L.'s Measured E-tape # 11044 long-tape
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP OF 8" casing
Elevation of Meas. Point

Depth of Pump/Airpipe intake at ~209'
Pump On: date 8-4-97 time
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 205.05					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	17:00	0					205.05			0040		GVL	
	17:01	:45					205.21						WATER SURGING - NO DISCHARGE
	17:04						—						STOPPED PUMP (SWITCH WIRE
	17:31						(204.84)					GVL	
	17:33												START PUMP
	17:34						204.73						
	17:48										30gpm		STOPPED PUMP.
											↑		PUMP SEEM LEAKS
											5gal		SO BAD E-TAPE
											bucket		READS CONSTANTLY
												1	TRYED 2 E-TAPES.
													NEED STILLING WELL

Aquifer Test Data

page 1 of 1

Data for Well 299-E27-10
Pumping Well 299-E34-3
Observation Wells 299-E27-10

Location 200 EAST AREA
Type of Aquifer Test STEP DRAWDOWN
How Q Measured
How W.L.'s Measured Electric Tape
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s
Elevation of Meas. Point Top of 8" casing. 2.1' of stick up above ground surface.

Depth of Pump/Airpipe N/A
Pump On: date 8/5/87 time 1230
Pump Off: date 8/5/87 time ~1800
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
8/5	1250						217.88						
	1300						217.89						
	1310						217.89						
	1320						217.89						
	1330						217.89						
	1350						217.89						
	1430						217.89						
	1617						217.89						
	1700						217.89						
	1759						217.89						

Aquifer Test Data

page 1 of 1

Data for Well 299-E27-10
Pumping Well 299-E34-7
Observation Wells 299-E27-10

Location 200 East Area
Type of Aquifer Test Step Drawdown
How Q Measured
How W.L.'s Measured DNL 300' STEEL TAPE #(10??) Depth of Pump/Airpipe N/A
Rad./Dist. of/From Pumping Well
Pump On: date 9/4/87 time 1700
Meas. Point for W.L.'s
Pump Off: date time
Elevation of Meas. Point Ground surface
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 215.70' below land surface					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
9/4	1653	0					215.70'						

Aquifer Test Data

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Data for Well 299-E34-3
Pumping Well
Observation Wells

Location 200 E 34-3
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER / 5 gal bucket
How W.L.'s Measured E-TAPE /
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/P 2.25' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 207' LSD
Pump On: date 8/5/87 time 1230
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 205.35' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
8/5	1230	0										JJT	
		:30			205.69								
		1			206.15								
		1:30			206.32								
		2			206.42					56.2			
		3			206.47					53.5			
		4			206.52					53.6			
		5			206.53					53.9			
		7			206.58					53.7			
		9			206.60					53.6			
		11			206.61					56.3			
		13			206.61					53.9			
		15			206.62					53.7			
		20			206.67					54.0			
		25			206.68					53.5			
		30			206.68					52.6			
		35			206.70					53.3			
		40			206.70					52.6			
		45			206.73					52.7		*	PUMP STOPPED FOR
		50			206.73					52.6			10 SECS AT 62 MINS
		60			206.74					53.0			206.60 AT 63 MINS
		70			206.68					59.2			206.70 64 MINS
		75	0		206.68					57.6			206.70 65 "
		75:30	30		205.84							*	PUMP STOPPED FOR
		76	1		205.70								5 SECS. AT 68 MINS
		77	2		205.62								
		78	3		205.57							*	PUMP SHUT-DOWN
		79	4		205.55								FOR REPAIR AT 75 MIN.
		82	8		205.47								
		84	9		205.45								
		86	11		205.43								
		90	15		205.40								
		98	23		205.36								
		105	30		205.35								
		115	40		205.35								

Aquifer Test Data

page 2 of 3

Data for Well 299-E 34-3
Pumping Well 299-E 34-3
Observation Wells

Location 200 E 34-3
Type of Aquifer Test CONSTANT DISCHARGE
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/P 2.25' ABV LSD
Elevation of Meass. Point

Depth of Pump/Airpipe 209'
Pump On: date 8-5-87 time 1500
Pump Off: date 8/6/87 time 1500
Duration of Aquifer Test 3 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 205.35					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
8/6	1500	0										S.S.E	
		:30			205.60								
		1			205.93					45.9			
		1:30			206.05					49.7			
		2			206.19					50.5			
		3			206.35					51.7			
		4			206.31					53.8			
		5			206.37					53.4			
		7			206.41					53.7			
		9			206.43					54.4			
		11			206.45					54.3			
		13			206.47					53.3			
		15			206.45					53.9	✓		
		20			206.49					54.3	✓		
		25			206.51					53.7	✓		
		30			206.51					53.9	✓		
		35			206.53					53.1	✓		
		40			206.53					52.7	✓		
		45			206.51					51.7	✓		
		50			206.52					51.8	✓	CSC	
		60			206.51					51.8	✓	CSC	
		70			206.52					51.8	✓	CSC	
		80			206.52					51.9	✓	CSC	
		90			206.52					52.0	✓	CSC	
		92											Generator labored
		94			206.29					41.4	✓		discharge dropped
		100			206.22					40.4	✓		laboring could
		110			206.20					38.4	✓		be seen
		115			207.12					80	✓	↑	appears the value
		120			207.17					[illegible]	✓		FUEL FILTER
		135			207.15					75.5	✓		
		140			207.12					[illegible]	✓		
		145			207.16					76.4	✓		
		150			207.15					75.0	✓		
		160			207.07					72.0	✓		
		170			206.90					64.6	✓		
		180			206.90					63.6	✓		
													AVG Q = 58.75 gpm

Aquifer Test Data

page 3 of 3

Data for Well 2-E34-3

Pumping Well

Observation Wells

Location 200 East RCRA

Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY

How Q Measured DIGITAL FLOWMETER

How W.L.'s Measured E-TAPE

Rad./Dist. of/From Pumping Well

Meas. Point for W.L.'s T/P 2.25' ABV LSD

Elevation of Meas. Point

Depth of Pump/Airpipe 209' LSD

Pump On: date 8/5/87 time 1500

Pump Off: date 8/5/87 time 1800

Duration of Aquifer Test 3 hr

Time t = _____ at t' = 0					Water Level Data Static Water Level _____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'	s-s'	Reading	Q		
8/5	1800	180	0		206.90				0				
			:30		205.81				1.09				
			1		205.76				1.14				
			1:30		205.71				1.19				
			2		205.65				1.25				
			3		205.63				1.27				
			4		205.58				1.32				
			5		205.55				1.35				
			7		205.51				1.39				
			9		205.49				1.41				
			11		205.45				1.45				
			13		205.44				1.46				
			15		205.43				1.47				
			20		205.43				1.47				Could hear water
			25		205.41				1.49				trickling' tolerated
			30		205.40				1.50				you initially to make
			35		205.39				1.51				sure water wasn't
			40		205.39				1.51				running back down
			45		205.375				1.525				into well
			50		205.36				1.54				
			60		205.36				1.54				
			70		205.35				1.55				
	2055		~~165~~ 175		205.32				1.58				

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AQUIFER TEST SUMMARY FOR WELL 299-E34-5

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the Hanford formation in the 200-East Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery ( )

Hydrogeologic Unit Tested: Hanford formation
Depth of Formation, Top: 185 ft. Bottom: 189 ft.

Depth of Screened Interval in Pumped Well, Top: 180.5 ft. Bottom: 190.5 ft.

Observation Well Used: 299-E34-6 Distance to Pumped Well: 600 ft.

Elevation (Depth) of Screened Interval, Top: 175 ft. Bottom: 195 ft.

Date of Test: 07/21/88 Start Time of Test: 0800 hr
Pumping Rate: Variable Duration of Test: 25 min

Pre-test Water-level Elevation (Depth): 185.09 ft.
Water-level depth at maximum drawdown: 184.06 ft.

Remarks: The drawdown and recovery data are insufficient for analysis. No response was observed in the observation well.

Aquifer Test Data

page 1 of 2

Data for Well 299-E34-5
Pumping Well 299-E34-5
Observation Wells 299-E34-6

Location 200 EAST RCRA
Type of Aquifer Test STEP DD
How Q Measured FLOW METER / 5 gal. bucket
How W.L.'s Measured E. tape
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/C 2.24' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 7/20/87 time
Pump Off: date 7/20/87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 185.33 MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
7/20		0					185.34			0000006			DATA INDUSTRIAL
		:30											DIGITAL FLOW
		1											MONITOR 900 T
		1:30											S/N 020642
		2											3" PUMP COLUMN
		3											GAL. X 1000
		4											
		5											
		7											
		9											
		11											
		13					185.41				15		
		15					185.41						
		20					185.42						↑
		1:30					186.17				42		
		6					186.20				38.7		
		9					186.30				38.7		
		15					186.25				38.9		
		20					186.12				41.2		*
		2									41.7		
		4					186.11				41.6		
		30					186.64				34		
		45					186.56						
		60					186.55				33.7		
→		4					185.57						Recovery
		5					185.54						
		7					185.55						
		20					185.42						
		30					185.43						
		45					185.42						
	1700	60					185.39						
	1722	70					185.39						
	1732	80					185.38						
	1743	90					185.37						
	1753	100					185.355						
	1813	120					185.35						
	1841	150					185.35						
	1910	180					185.34						
	1945	210					185.335						
	2013	240					185.33			2115		185.33	
	2042	270					185.325						

Aquifer Test Data

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Data for Well 2-E34-5
Pumping Well 2-E34-5
Observation Wells

Location 200 East RCRA
Type of Aquifer Test CONSTANT - DISCHARGE
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.24 ABV LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~
Pump On: date 7/21/87 time 0900
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 185.28'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
7/21	0800	0					185.28					csc	
		4					185.86				25	csc	
		7					185.76				14	csc	Well apparently
		15					185.27				9.96	csc	silted - in overnight
		20					186.75				10.5		- holding around
		25					186.14				6.1		10-11 gpm
													- varying from
		Recovery				turned	pump	off					1-6 gpm
		6					185.33						Determined later
		15					185.29						impeller damaged
													during test

Aquifer Test Data

2.32'

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Data for Well 2-E34-6
Pumping Well 2-E32-5
Observation Wells

Location 200 East RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER DATA INDUSTRIAL 020842
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/c 2.24' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 190'
Pump On: date 7/21/87 time
Pump Off: date time
Duration of Aquifer Test
Measurements by S. Dudziak

Note: Test started a little after 800 AM get true time from Chuck

Time t = ____ at t' = 0					Water Level Data Static Water Level 193.72					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
7/21	0900	0											Test started a little after 800 AM (I believe it was 801 but need to get exact time from Chuck)
		:15											
		:30											
		:45											
		1			193.75								
		1:15											
		1:30			193.75'								
		1:45											
		2			193.75'								
		3			193.75'								
		4			193.75'								
		5			195.75'								
		7			193.75'								
		9			193.75'								
		11			193.74'								
		13			193.75'								
		15			193.74'								
		20			193.75'								
		25			193.74'								
		30			193.75'								
		35			193.75'								
		40			193.74'								
		45			193.75'								
		50			193.75'								
		60											
		70											
		80											
		90											
		100											
		110											
		120											
		150											
		180											
		210											

REFERENCES

Cooper, H. H., and C. E. Jacob. 1946. "A Generalized Graphical Method for Evaluating Formation Constants and Summarizing Well-Field History." Transactions of the American Geophysical Union 27 (IV):526-534.

Hargis, D. R. 1979. Analysis of Factors Affecting Water Level Recovery Data. Dissertation, University of Arizona. University Microfilms International, Ann Arbor, Michigan.

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APPENDIX F

AQUIFER TESTING OF WELLS IN THE 200-WEST AREA

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APPENDIX F

AQUIFER TESTING OF WELLS IN THE 200-WEST AREA

INTRODUCTION

During 1987, aquifer tests were conducted on the 19 newly drilled wells that were designed to gather hydrologic and geologic data adjacent to waste management areas in the 200-West Area. The wells were not designed or drilled specifically as part of an aquifer testing program. However, the wells did provide an opportunity for conducting aquifer tests while the wells and equipment were available. Ideal conditions for obtaining maximally useful data were not, in general, met. For example, the screened intervals in the wells generally did not cover the full thickness of the aquifer, the well may not have been pumped at a sufficient rate for responses to be observed in pumping and observation wells, and in some cases, the pumping duration should have been longer. While part of the test data were of no use, some tests did furnish useful data that were analyzed for aquifer parameters and properties.

The following presents a summary of each aquifer test conducted in the 200-West Area. These aquifer test summaries include the purpose of each test, types of tests conducted, construction details of the tested well and observation well when used, pumping rates and duration of the tests, pre-test conditions, results of test data analysis, and related plots of test data. Raw data from the well development/step drawdown tests, constant discharge/recovery tests, and/or slug injection/withdrawal tests are also included.

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AQUIFER TEST SUMMARY FOR WELL 299-W6-2

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 230 ft. Bottom: 472 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 238 ft. Bottom: 248 ft.

Date of Test: 11/05/87 Start Time of Test: 0730 hr
Pumping Rate: 22 gpm Duration of Test: 300 min

Pre-test Water-level Elevation (Depth): 227.64 ft.

Analysis Methods and Results:

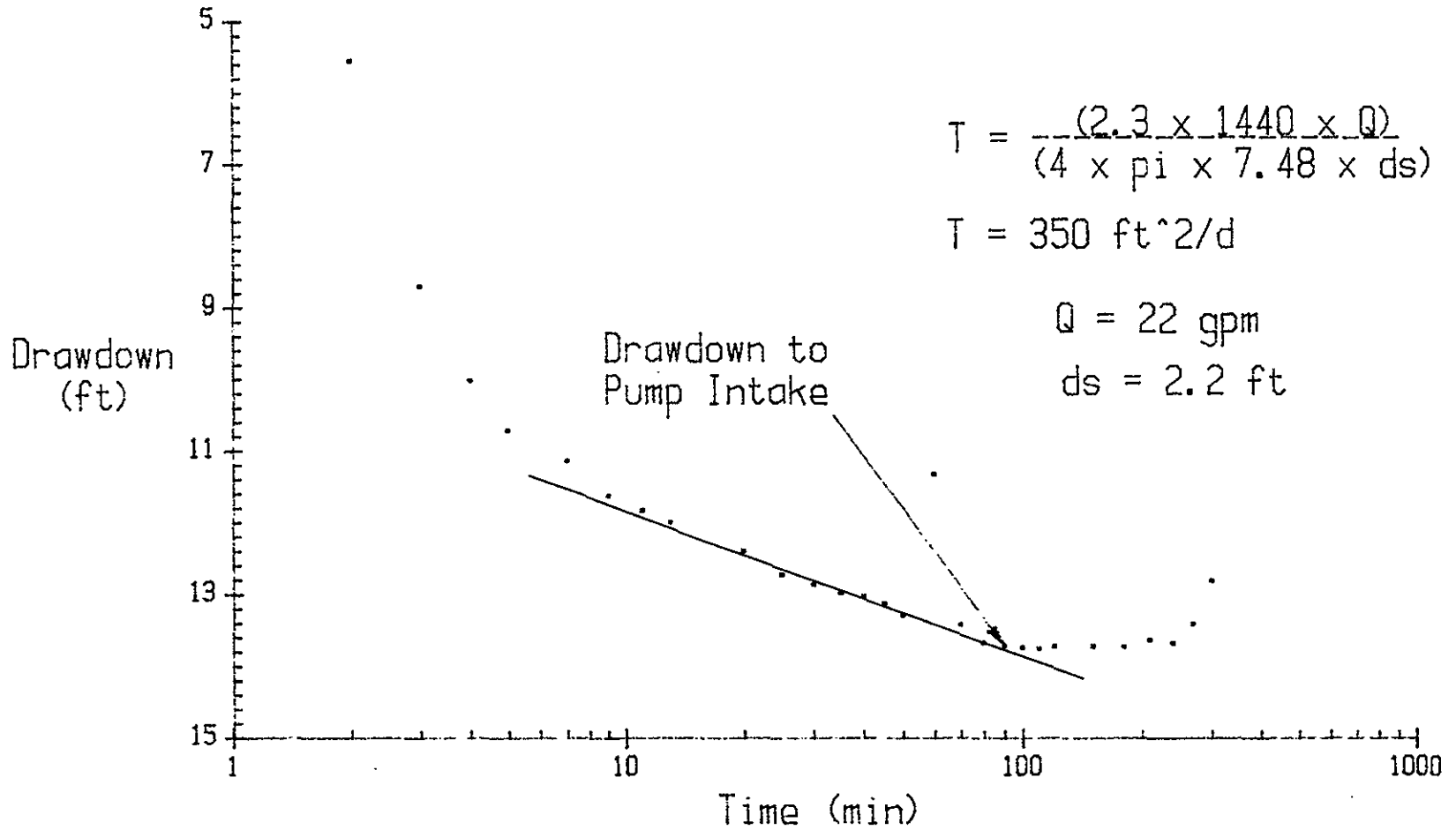
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	350	1.5
Recovery (Cooper and Jacob 1946)	500	2

Corrections Used:

Borehole Storage Effects
t_c = 53 min (Hargis 1979)

Remarks: The assumption that the well fully penetrates the aquifer is not satisfied in the Cooper and Jacob analysis. The top of the basalt is assumed to be the bottom of the aquifer. The lower Ringold unit does not exist at this location.

RCRA WELL 299-W6-2
CONSTANT-DISCHARGE DRAWDOWN
COOPER-JACOB METHOD
11/5/87



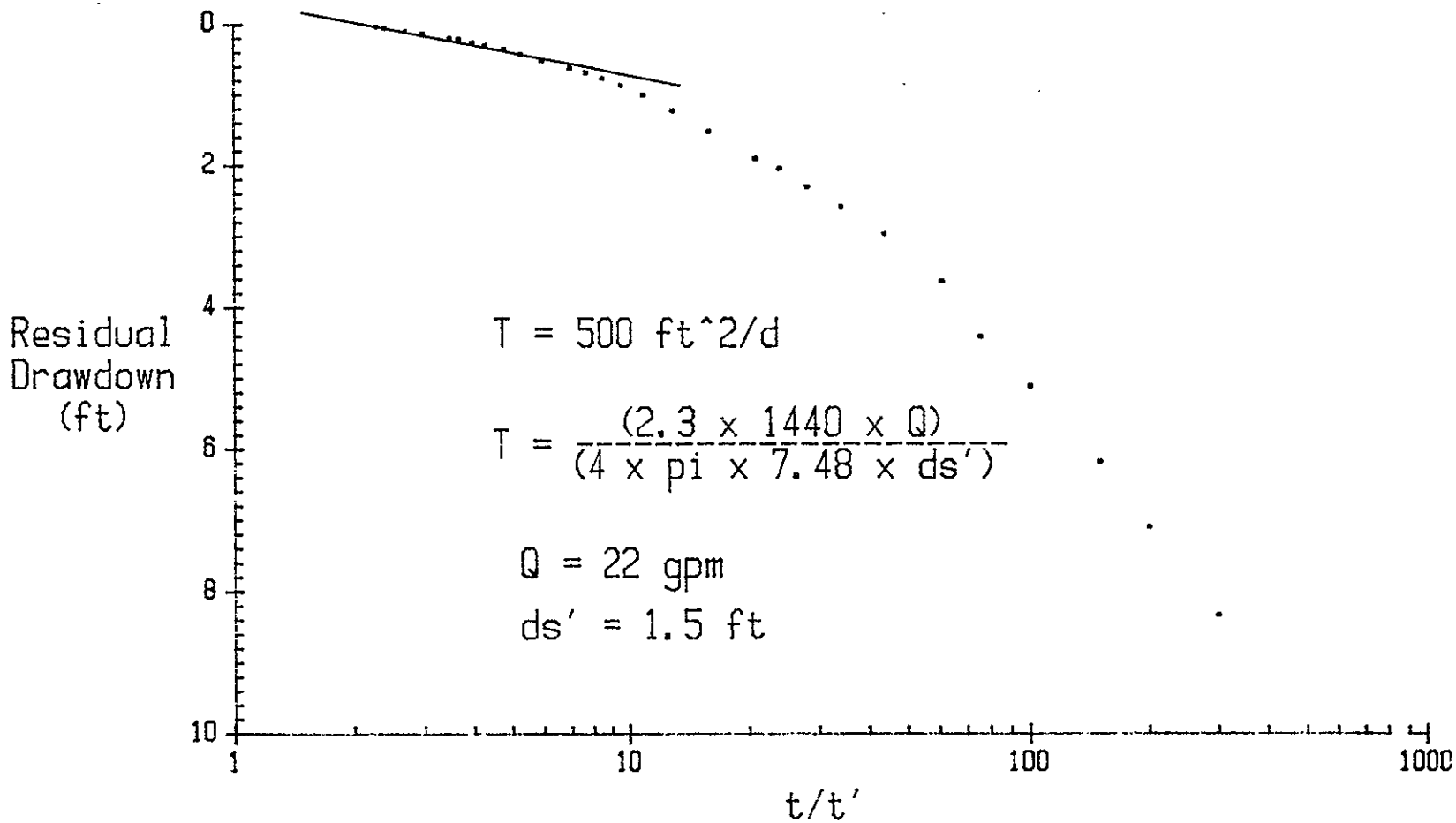
$$T = \frac{(2.3 \times 1440 \times Q)}{(4 \times pi \times 7.48 \times ds)}$$

T = 350 ft^2/d

Q = 22 gpm

ds = 2.2 ft

RCRA WELL 299-W6-2
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
11/5/87



Aquifer Test Data

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Data for Well 299-W6-2
Pumping Well 299-W6-2
Observation Wells _____

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE / ~~RECOVERY~~
How Q Measured FLOW METER / 5 gal. bucket
How W.L.'s Measured E-TAPE / TRANSDUCER Depth of Pump/Airpipe 243' below lsd
Rad./Dist. of/From Pumping Well _____ Pump On: date 11/5/87 time 0730
Meas. Point for W.L.'s T/STILLING PIPE 2.24' Abv lsd Pump Off: date 11/5/87 time 1230
Elevation of Meas. Point _____ Duration of Aquifer Test 5 hr

Time t = _____ at t' = 0					Water Level Data Static Water Level 227.88' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
11/4	1500									17962			ARA's METER
													2" # 286 053068
11/5	0730	0			229.88			0		18242			START DD TEST
		:30											
		1			232.22			3.34					
		1:30			234.41			4.53					
		2			235.43			5.55			40		10 gal / 15 sec
		3			238.58			8.70					need to keep water
		4			239.90			10.02					flow out sand
		5			240.60			10.72			26.1		10 gal / 23 sec
		7			241.02			11.14			25		10 gal / 24 sec
		9			241.51			11.63			21.4		10 gal / 28 sec
		11			241.71			11.83			19.4		10 gal / 31 sec
		13			241.85			12.00			23.1		10 gal / 26 sec
		15			242.02			12.14			23.3		20 gal / 51.5 sec
		20			242.28			12.40			24		10 gal / 25 sec
		25			242.60			12.72			24		10 gal / 25 sec 10 gal / 30 sec
		30			242.74			12.86			22.2		10 gal / 27 sec
		35			242.86			12.98			23.1		10 gal / 26 sec 10 gal / 31
		40			242.91			13.03			20.2		10 gal / 27 sec
		45			243.00			13.12					
H_2O sample →		50			242.17			13.29			20.7		10 gal / 29 sec
		60			241.2			11.32			20.7		~~water sample~~ broke open hose 10/29 sec
		70			243.3			13.42			19.1		10/21 sec 10/26 sec
		80			243.55			13.67			22.1		10 gal / 27 sec
		90			243.60			13.72			22.2		10 gal / 27 sec
		100			243.62			13.74			22.2		10 gal / 27 sec
		110			243.64			13.76			22.2		10 gal / 27 sec
H_2O sample →		120			243.60			13.72			24		10 gal / 25 sec
		150			243.60			13.72			24		10 gal / 25 sec water sample
	1030	180			243.61			13.73			23.1		10 gal / 26 sec
H_2O sample →		210			243.52			13.64		10/26	23.1		water stopped between 1030 and 1100 hr
		240			243.56			13.68		10/29	20.7		10 gal / 32
		270			243.28			13.40					5 gal bucket 23.1 gpm
		300			242.88			12.80		24716			broke hose open
													in H_2O level with
													decreased head

Aquifer Test Data

page 2 of 2

Data for Well 299-W6-2
Pumping Well 299-W6-2
Observation Wells —

Location 200 WEST REP1
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/STILLING PIPE 2.24' abv LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 243' Below LSD
Pump On: date 11/5/97 time 0730
Pump Off: date 11/5/97 time 1230
Duration of Aquifer Test 5 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 229.88					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s' or s'		Reading	Q		
11/5	1230	300	0		242.63					247.16	CSC		START RECOVERY
			:30		N/A								
		301	1	301	238.27			8.33					
		301.5	1:30	201	236.98			7.1					
		302	2	151	236.06			6.18					
		305	3	101	234.99			5.11					
		304	4	76	234.29			4.41					
		305	5	61	233.51			3.63					
		307	7	43.9	232.84			2.96					
		309	9	34.3	232.46			2.58			CSC		
		311	11	28.3	232.18			2.30					
		313	13	24.1	231.92			2.04					
		315	15	21	231.78			1.90					
		320	20	16	231.39			1.51					
		325	25	13	231.10			1.22					
		330	30	11	230.88			1.00					
		335	35	9.6	230.74			.86					
		340	40	8.5	230.64			.76					
		345	45	7.7	230.56			.68					
		350	50	7	230.49			.61					
	1330	360	60	6	230.39			.51					
		370	70	5.3	230.30			.42					
		380	80	4.8	230.23			.35					
		390	90	4.3	230.18			.30					
		400	100	4	230.14			.26					
		410	110	3.7	230.09			.21					
	1430	420	120	3.5	230.08			.20					
	1500	450	150	3	230.01			.13					
		480	180	2.7	229.97			.09					
		510	210	2.4	229.93			.05					
		540	240	2.3	229.91			.03					

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AQUIFER TEST SUMMARY FOR WELL 299-W7-1

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 225 ft. Bottom: 495 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 233 ft. Bottom: 243 ft.

Observation Well Used: 299-W8-1 Distance from Pumped Well: 599 ft.
Elevation (Depth) of Screened Interval, Top: 236 ft. Bottom: 256 ft.

Date of Test: 07/15/87 Start Time of Test: 1230 hr
Pumping Rate: 17.5 gpm Duration of Test: 480 min

Pre-test Water-level Elevations (Depths): 228.49 ft.
Pumping Well: 225.65 ft.
Observation Well: 235.95 ft.

Analysis Methods and Results:

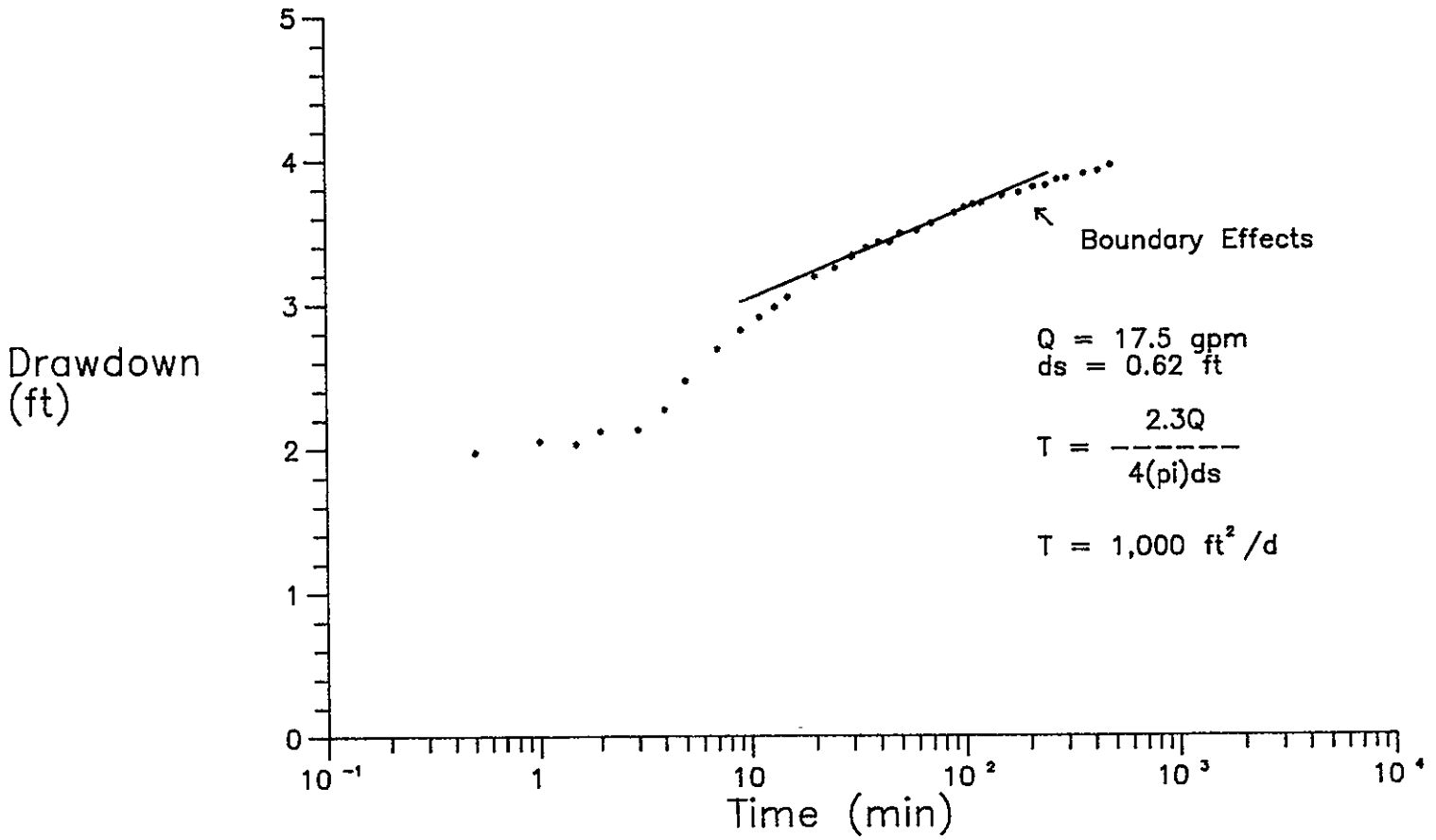
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Constant Discharge (Cooper and Jacob 1946)	1,000	4	NA
Recovery (Cooper and Jacob 1946)	1,400	5	NA

Corrections Used:

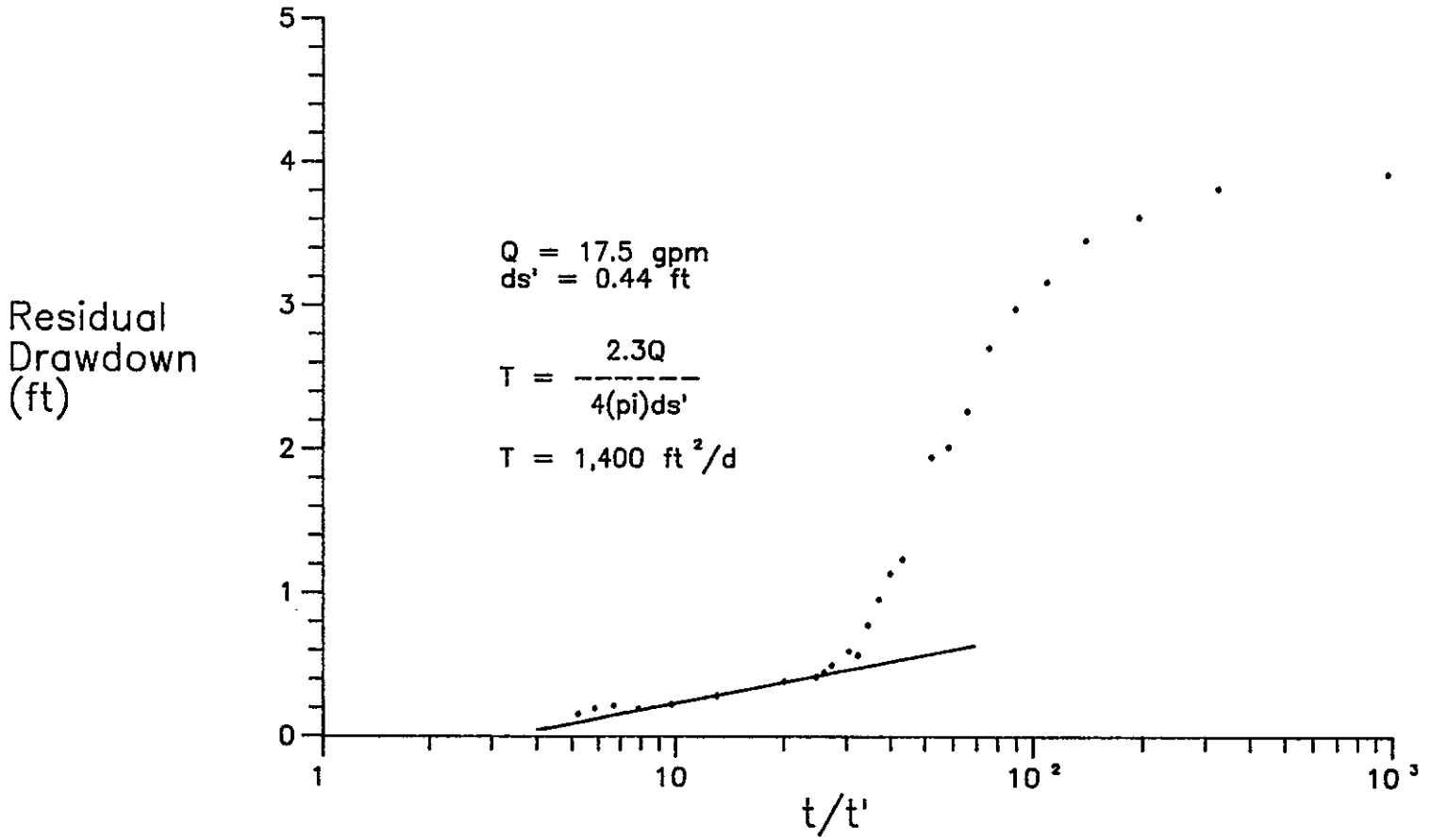
Borehole Storage Effects
t_c = 26 min (Hargis 1979)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The drawdown and recovery data indicate that well entrance loss occurred (Hargis 1979). The drawdown data indicate boundary effects. No response was observed in the observation well.

RCRA WELL 299-W7-1
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
7/15/87



RCRA WELL 299-W7-1
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
7/15/87



Aquifer Test Data

1st TEST

page 1 of 2

Data for Well 2-W7-1
Pumping Well 2-W7-1
Observation Wells 2-W8-1

Location 200 West RCRA
Type of Aquifer Test CONSTANT-DISCHARGE DD
How Q Measured FLOW METER / 5 gal. bucket
How W.L.'s Measured E-TAPE / STEEL TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/TRANSMIT 2.84' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 235 FROM TRANSMIT 236 LSD
Pump On: date 7/15/87 time 0925
Pump Off: date 7/15/87 time 1025
Duration of Aquifer Test 1 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 228.43					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	0925	0					228.43	2.39		587			ARAD METER
		:30					230.82	2.39					#286 05308
		1					231.30	2.87					2" diameter
		1 30					231.65	3.22					
		2					231.70	3.27			18.6		
		3					231.98	3.55					
		4					232.40	3.97					
		5					232.38	3.95					
		7					232.76	4.33		717			
		9					233.15	4.72			34.7		820 @ 10 min
		11					233.44	5.01					
		~~14~~								960			normal pipe
		15					234.81	6.38			32.5		removed block
		20					235.07	6.64					pressure form was
		25					235.07	6.64		1317.5	31		1286.5 @ 24 min,
		30					235.07	6.64					← no hc at
		35					235.06	6.63					table
		40											1784 @ 42 min
		45					235.1	6.67					27.4
		50					235.08	6.65			28.5		
	1025	60	0							2293.5			
		~~70~~	:30	121			234.0	5.57					
		~~80~~	1	61			233.6	5.17					
		~~90~~	1:30	41			~~233.21~~	233.21	4.78				
		~~100~~	2	31			233.0	5.17	4.57				
		~~110~~	3	21			232.7	4.27					
		~~120~~	4	16			232.4	4.02					
		~~150~~	5	13			232.25	3.82					
		~~180~~	7	9.6			231.8	3.37					
		~~210~~	9	7.7			231.3	2.87					
		~~240~~	11	6.5			230.46	2.03					
		~~270~~	13	5.6			229.89	1.46					
		~~300~~	15	5			229.57	1.14					
		360	20	4			229.0	0.57					
		~~420~~	25	3.4			228.87	0.44					
		~~480~~	30	3			228.78	0.35					
			35	2.7			228.75	0.32					
			40	2.5									
			45	2.3			228.67	0.23					

Aquifer Test Data

page 2 of 2

Data for Well 3 W 7-1
Pumping Well 2 W 7.1
Observation Wells

Location 200 West RCRA
Type of Aquifer Test constant Discharge recovery
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP TRUNNIE 2.84' ABV LED
Elevation of Meas. Point

Depth of Pump/Airpipe 235 T/C
Pump On: date 7/15/87 time 0925
Pump Off: date 7/15/87 time 1025
Duration of Aquifer Test 1 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
7/15			50	2.2			228.65						
			60	2			228.63						
			70	1.9			228.58						
			80	1.75			228.56						
			90				228.53						
			100				228.52						
			110				228.49						
			120				228.44						

1st Test

Aquifer Test Data

page 1 of 1

Data for Well 2-W8-1
Pumping Well 2-W7-1
Observation Wells 2-W8-1

Location RCRA 200 West
Type of Aquifer Test CONSTANT - DISCHARGE
How Q Measured FLOW METER/CALIB. 5 gal bucket
How W.L.'s Measured E-TAPE/ STEEL TAPE
Depth of Pump/~~Airpipe~~ 235 T/C
Rad./Dist. of/From Pumping Well
Pump On: date 7/15/87 time 0925
Meas. Point for W.L.'s T/C
Pump Off: date 7/15/87 time 1025
Elevation of Meas. Point
Duration of Aquifer Test 1 hr

	Time (t = ____ at t' = 0)				Water Level Data (Static Water Level ____)					Discharge		Recorded By	Comments
	Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
		0				239.25'								
		30				239.25'								
		1:30				239.25'								
		2				239.25								
		3				239.3'								
		4				239.43'								
		5				239.25'								
		7				239.62'								
		9				239.64'								
9440		11				239.66'								
9460		13				239.66								
9480		15				239.66'								
9530		20				239.65'								
9580		25				239.64'								
1003		30				239.63'								
1003		35				239.62'								
1013		40				239.60'								
1018		45				239.5'								
1023		50				239.6'								
1033		60				239.27'								
1045		70				239.22'								
1055		80				239.21'								
1103		90												
		100												
		110												
		120												
		150												
		180												
		210												
		240												
		270												
		300												
		360												
		420												
		480												

Aquifer Test Data

page 1 of 2

Data for Well 2 W7-1
Pumping Well W7-1
Observation Wells 2 W8-1

Location 200 West RCRA
Type of Aquifer Test CONSTANT-DISCHARGE DD TST #2
How Q Measured FLOW METER / 5 gal bucket
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP TREMMIE 2.84 ABI
Elevation of Meas. Point _____ USD

Depth of Pump/Airpipe ~~2.36~~ 235 T/C
Pump On: date 7/15/87 time 1230 hrs
Pump Off: date 7/15/87 time 2030 hrs
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 228.49					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
7/15	1230	0					228.49	0		2293	5		CHANGED
		:30					230.46	1.97					
		1					230.54	2.05					
		1:30					230.52	2.03					
		2					230.61	2.12					
		3					230.62	2.13			17.3		
		4					230.76	2.27					CHANGED DISCHARGE
		5					230.96	2.47					INCREASED 1/2 hr
		6											
		7					231.18	2.69		2393	5		
		9					231.31	2.82		2428	17.25		
		11					231.4	2.91		2463	17.5		
		13					231.47	2.98		2498	17.5		
		15					231.54	3.05		2533	17.5		
		20					231.68	3.19		2620	17.4		
		25					231.74	3.25		2706	17.2		
		30					231.82	3.33					5.06/17.2 gpm
		31					~~231.88~~			2810	17.3		(17.7 gpm)
		35					231.88	3.39		2800	17.5		
		40					231.92	3.43		~~2825~~			
		41					~~231.92~~			2985	17.5		
		45					231.92	3.43		3054	17.25		
		50					231.98	3.49		3142	17.6		
		60					232.0	3.5		3317	17.5		
		70					232.05	3.56		3443	17.6		
		~~80~~											Pickup came by
		90					232.12	3.63		3842	17.5		[illegible] BWIP Well
		100					232.16	3.67		4017	17.5		
		110					232.18	3.69		4193	17.6		
		120					232.19	3.70		4379	18.6		5.06/17.3 gpm
		150					232.24	3.75		4895	17.2		(17.5 gpm)
		180					232.26	3.77		5422.5	17.6		
		210					232.3	3.81					
		240					232.31	3.82		6480	17.6		
		270					232.35	3.86		7009			
		300					232.36	3.87		7538.5			avg. 17.5 gpm
	1832	360					232.39	3.90		8634.5		PLO	
	19:30	420					232.41	3.92				PLO	
	20:30	480					232.45	3.96		11881		PKO	OFF

← time off for this reading

Phil time off for discharge rate

F.141
140

Aquifer Test Data

page 2 of 2

Data for Well 2W7-1
Pumping Well 2W7-1
Observation Wells 2W8-1

Location 200 West RCRA
Type of Aquifer Test CONSTANT DISCHARGE - RECOVERY
How Q Measured FLOWMETER/CALIBRATED 5gal bucket
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s
Elevation of Meas. Point TOC

Depth of Pump/Airpipe 235 T/C
Pump On: date 7/15/92 time 1230
Pump Off: date 7/15/92 time 2050
Duration of Aquifer Test 8 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 228.49					GAL Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
7-15	20:35	30			232.40			3.91		11881		PLD	OFF - 30 sec
"	20:36				232.30			3.81				PLD	
"	20:37				232.12			3.61				PLD	
"	20:38				231.94			3.45				PLD	
"	20:39				231.65			3.16				PLD	
"	20:40				231.46			2.97				PLD	
"	20:41				231.19			2.70				PLD	
"	20:42				230.75			2.26				PLD	
"	20:43				230.50			2.01				PLD	
"	20:44				230.18			1.94				PLD	
"	20:45				—			—				PLD	
"	20:46				229.72			1.23				PLD	
"	20:47				229.62			1.13				PLD	
"	20:48				229.44			0.95				PLD	
"	20:49				229.26			0.77				PLD	
"	20:50				229.15			0.56				PLD	- SOUNDS IN
"	20:51				229.18	?		0.59	?			PLD	DISCHARGE PIPE
"	20:53				229.08			0.49				PLD	SHUT GATE VALVE
"	20:54				229.03			0.44				PLD	
"	20:55				229.00			0.41				PLD	
"	21:00				228.97			0.38				PLD	
"	21:15				228.87			0.28				PLD	
"	21:30				228.81			0.22				PLD	
"	21:45				228.78			0.19				PLD	
"	22:00				228.80			0.21				PLD	STARTING TO
"	22:15				228.78			0.19				PLD	DRIFT DUE TO
"	22:30				228.74			0.15				PLD	STRONG FRONTAL
													SYSTEM ?

2nd Test

Aquifer Test Data

page 1 of 2

Data for Well 2-W8-1
Pumping Well 2-W7-1
Observation Wells 2-W8-1

Location RCRA 200 West
Type of Aquifer Test Constant - Discharge
How Q Measured Flow meter / CALIP, Sand bucket
How W.L.'s Measured E-TAPE / Steel TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 3.25' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 235 T/C
Pump On: date 7/15/87 time 1230
Pump Off: date 7/15/87 time 2030
Duration of Aquifer Test 8 hrs

...sing above ...und 3'3" ...l measurements ...m top of ...sing.

	Time t = ____ at t' = 0					Water Level Data Static Water Level 239.2'					Discharge		Recorded By	Comments
	Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
12360		0				239.2'								
		30				239.2'								
		1:00				239.23'								
		1:30				239.22'								
1238.00		2				239.23'								
1239		3				239.22'								
1240		4				239.23'								
1241		5				239.21'								
1243		7				239.19'								
1245		9				239.2'								
1247		11				239.2'								
1249		13				239.2'								
1251		15				239.2'								
1256		20				239.19'								
101		25				239.2'								
106		30				239.2'								
111		35				239.2'								
116		40				239.19'								
121		45				239.18'								
126		50				239.17'								
136		60				239.18'								
146		70				239.2'								
156		80				239.18'								
206		90				239.21'								
216		100				239.2'								
226		110				239.18'								
236		120				239.19'								
306		150				239.17'								
336		180				239.19'								
406		210				239.17'								
436		240				239.17'								
506		270				239.14'								
536		300				239.16							CSC	
1830 636		12:30	360			239.14							PLO	
736		17:30	420			239.12							PLO	
836		18:30				239.13							PLO	
		19:30				239.14							PLO	
		20:30				239.12							PLO	
		21:05				239.17							PLO	
		21:21				239.22								

Aquifer Test Data

page 2 of 2

Data for Well 2-W8-1

Pumping Well 2-W7-1

Observation Wells

Location RCRA 200 West

Type of Aquifer Test CONSTANT-DISCHARGE

How Q Measured FLOWMETER / CALIB 5 gal bucket

How W.L.'s Measured E-TAPE - STEEL TAPE

Rad./Dist. of/From Pumping Well

Meas. Point for W.L.'s T/C 3.25' ABV LSD

Elevation of Meas. Point

Depth of Pump/Airpipe

Pump On: date 7/15/87 time 1230

Pump Off: date 7/15/87 time 2030

Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
7-15	21:32				239.22							PKO	
"	21:47				239.20							PKO	
"	22:02				239.20							PKO	
	22:33				239.17							PKO	

AQUIFER TEST SUMMARY FOR WELL 299-W7-2

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 212 ft. Bottom: 472 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 212 ft. Bottom: 222 ft.

Observation Well Used: 299-W7-3 Distance to Pumped Well: 35 ft.
Elevation (Depth) of Screened Interval, Top: 449 ft. Bottom: 470 ft.

Date of Test: 09/16/87 Start Time of Test: 0800 hr
Pumping Rate: 10 gpm Duration of Test: 480 min

Pre-test Water-level Elevations (Depths):
Pumping Well: 211.89 ft.
Observation Well: 212.28 ft.

Analysis Methods and Results:

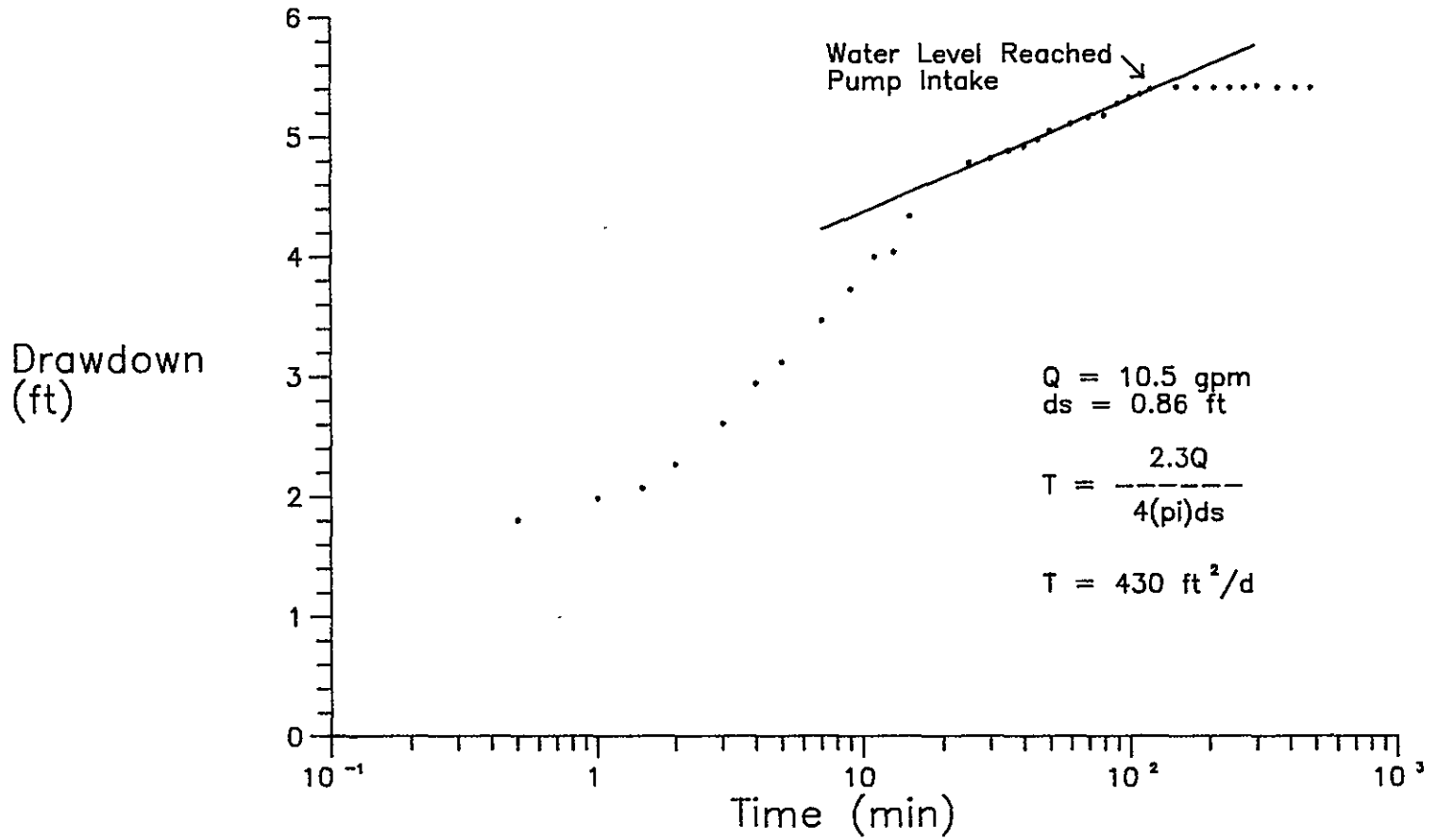
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Constant Discharge (Cooper and Jacob 1946) Pumping Well	430	2	NA
Recovery (Cooper and Jacob 1946) Pumping Well	740	3	NA

Corrections Used:

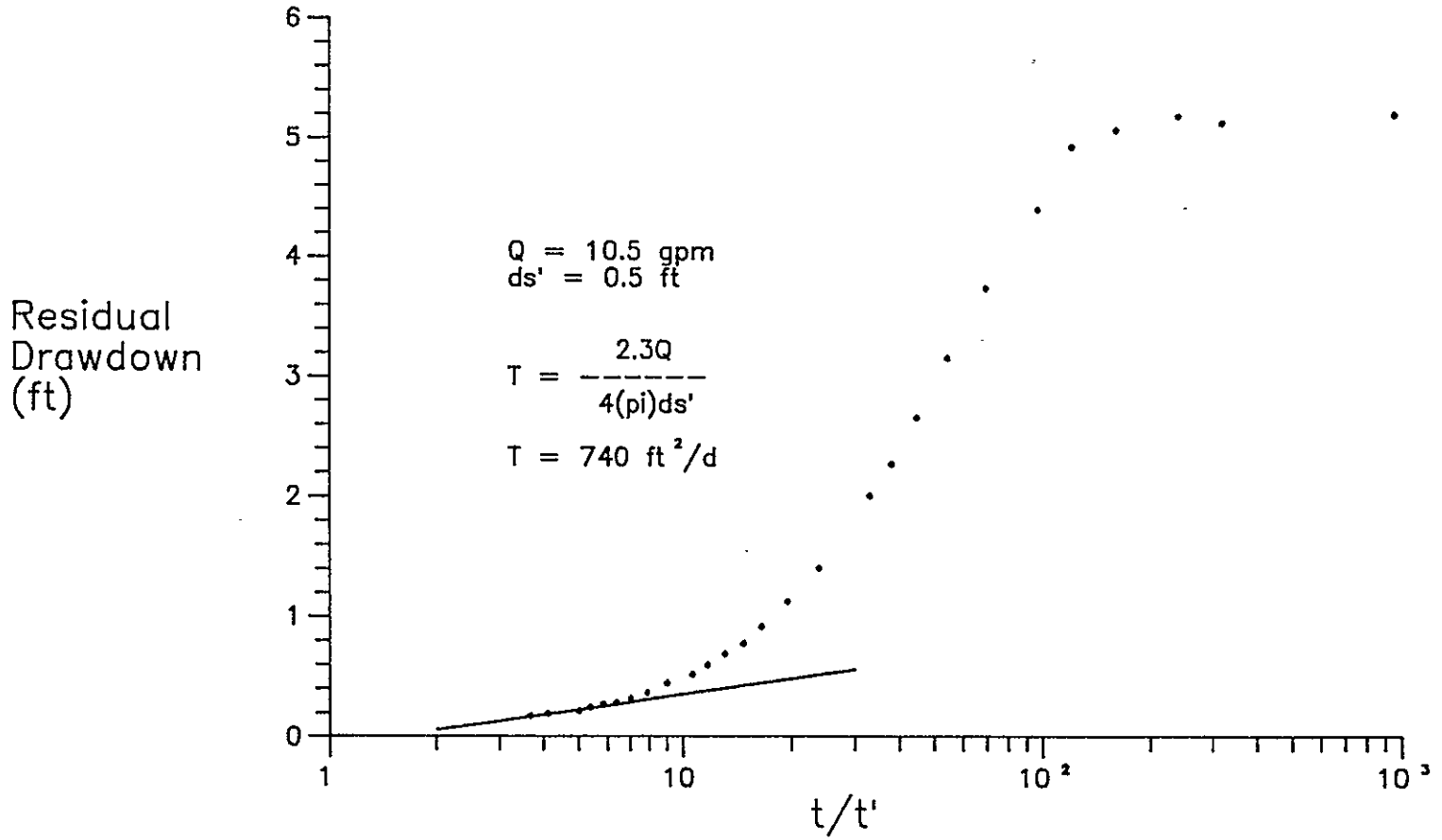
Borehole Storage Effects
t_c = 8 min (Schafer 1978)
t_c = 61 min (Hargis 1979)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The residual drawdown data from the pumping well indicate that well entrance loss occurred during pumping (Hargis 1979). Drawdown reached the level of the pump intake after 120 min of pumping. The condition that u is equal to or less than 0.01 is not satisfied in analyzing data from the observation well using the Cooper and Jacob method.

RCRA WELL 299-W7-2
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
9/16/87



RCRA WELL 299-W7-2
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
9/16/87



Aquifer Test Data

page 1 of 3

Data for Well 299-W7-2
Pumping Well 299-W7-2
Observation Wells 299-W7-3

Location 200 WEST RCRA
Type of Aquifer Test DEVELOPMENT / STEP DD
How Q Measured FLOWMETER 2" ARAD# 053068 / 5 gal bucket
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING PIPE 2.55' ABV LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 5 HP PUMP 217' Below lsd
Pump On: date 9/15/87 time 1035
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 214.52' T/P					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q gpm		
	1035	0								11880			2" line pipe column [illegible]
		:30			217.76								
		1			218.86								>10 gpm pumped
		1:30											down to intake
		2			219.68								had to valve
		3			219.89								down to ~10 gpm
		4			219.72								
		5											
		7											Trying to
		9			219.72								[illegible]
		11			219.6								H_2O dirty [illegible]
		13			219.70								shutting valve
		20			219.77								
		110			219.87						9.7		
		150			219.88								
		180	0		219.87					12782.5			
			:30		219.83								
			1		219.76								
			1:30		219.68								
			2		219.64								
			3		219.52								
			4		219.38								
			5		218.96								
			7		218.17								
			9		217.48								
			11		216.99								
			13		216.58								
			15		216.37								
			20										
			30		215.32								
			40		215.03								
			50		214.82								
			60		214.77								

: 5.. 3 @ 8:04 1) 5.8443

Aquifer Test Data

2) 5.544

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Data for Well 299-W7-2
Pumping Well 299-W7-2
Observation Wells 299-W7-3

Location 200 West RCRA
Type of Aquifer Test constant discharge
How Q Measured Flowmeter 2" ARAD # 053068 / 5gal bucket
How W.L.'s Measured E-tape / transducer
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s T/stilling pipe 2.55' Above L.S.
Elevation of Meas. Point

Depth of Pump/Airpipe 217 bls
Pump On: date 9/16/87 time 0800
Pump Off: date 9/16/87 time 1600
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 214.44					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
9/16		1:30			216.24			1.80		12782	5		
		1:00			216.42			1.98					
		1:30			216.51			2.07					
		2			216.70			2.26					
		3			217.05			2.61					
		4			217.38			2.94					
		5			217.56			3.12					
		7			217.91			3.47					
		9			218.17			3.73					
		11			218.44			4.00					
		13			218.48			4.04					
		15			218.78			4.34					11-12 gpm flowmeter
		20			—								
		25			219.22			4.78					flow meter ≈ 9.9 gpm
		30			219.26			4.82					flowmeter ≈ 10.5 gpm
		35			219.32			4.88					" "
		40			219.36			4.92					
		45			219.42			4.98					
		50			219.49			5.05					
		60			219.55			5.11					
		70			219.60			5.16					
		80			219.62			5.18					
		90			219.72			5.28					
		100			219.77			5.33					
		110			219.80			5.36					
		120			219.84			5.40					
		150			219.85			5.41					
		180			219.85			5.41					10.5 gpm - flowmeter
		210			219.85			5.41					
		240			219.85			5.41					10.5 gpm flowmeter
		270			219.85			5.41					
		300			219.86			5.42					
		360			219.85			5.41					≈ 10.25 gpm
		420			219.85			5.41					5 gal bucket
		480			219.85			5.41		[illegible]		[illegible]	32 sec 18 sec } 10 g

Aquifer Test Data

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Data for Well 299-W7-2
Pumping Well 299-W7-2
Observation Wells 299-W7-3

Location BCRA 200 WEST
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured FLOW METER / 5 gal bucket
How W.L.'s Measured E-TAPE TRANSDUCER
Depth of Pump/~~Airpipe~~ 217' Below Isol
Rad./Dist. of/From Pumping Well
Pump On: date 9/16/87 time 0800
Meas. Point for W.L.'s T/STILLING PIPE 2.55' ALV LAD
Pump Off: date 9/16/87 time 1600
Elevation of Meas. Point
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 214.44' T/PIPE					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
			0		~~219.63~~					17705		CSC	
			1:30		219.63			5.19					
			1										
			1:30		219.56			5.12					
			2		219.62			5.18					
			3		219.50			5.06					
			4		219.36			4.92					
			5		218.93			4.39					
			7		218.17			3.73					
			9		217.59			3.15					
			11		217.09			2.65					
			13		216.70			2.26					
			15		216.44			2.00					
			21		215.84			1.40					
			26		215.56			1.12					
			31		215.35			0.91					
			35		215.21			0.77					
			40		215.12			0.68					
			45		215.03			0.59					
			50		214.95			0.51					
			60		214.88			0.44					
			70		214.80			0.36					
			80		214.75			0.31					
			90		214.72			0.28					
			100		214.71			0.27					
			110		214.68			0.24					
			120		214.65			0.21					
			155		214.63			0.19					
			180		214.61			0.17					

Aquifer Test Data

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Data for Well 299-W7-3
Pumping Well 299-W7-2
Observation Wells 299-W7-3

Location 200 West RCRA
Type of Aquifer Test Constant discharge
How Q Measured Flowmeter ARAD 052068
How W.L.'s Measured E-tape / transducer
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/c 3.77' abv LS
Elevation of Meas. Point

Depth of Pump/Airpipe 217' bls
Pump On: date 9/16/87 time 0800
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 216.05					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	8:10	10			216.05			0				SST	
	8:29	29			216.05			0					
	10:15	145			216.18			.13					
	12:12	232			216.32			.27					
	12:22	262			216.32			.27					
	12:30	270			216.35			.30					
	1300	300			216.38			.33					
	1330	330			216.40			.35					
	1400	360			216.43			.38					
	1430	390			216.45			.40					
	1500	420			216.48			.43				CSC	
	1600	480	0		216.52			.47					
		498	18	27.67	216.55			.50					
		508	28	18.14	216.54			.49					
		518	38	13.63	216.54			.49					
		528	48	11	216.53			.48					
		540	60	9	216.50			.45					
		550	70	7.86	216.49			.44					
		560	80	7	216.47			.42					
		570	90	6.33	216.43			.38					
		580	100	5.8	216.40			.35					
		590	110	5.36	216.38			.33					
		600	120	5	216.35			.30					
		637	157	4.06	216.28			.23					
		660	180	3.67	216.25			.20					

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AQUIFER TEST SUMMARY FOR WELL 299-W7-3

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle/basal Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle/basal Ringold unit
Depth of Formation, Top: 212 ft. Bottom: 476 ft.

Depth of Screened Interval in Pumped Well, Top: 467 ft. Bottom: 477 ft.

Observation Wells Used: 299-W7-2 Distance to Pumped Well: 35 ft.
Elevation (Depth) of Screened Interval, Top: 202 ft. Bottom: 222 ft.

Date of Test: 10/30-31/87 Start Time of Test: 0800 hr
Pumping Rate: 2.8 gpm Duration of Test: 1680 min

Pre-test Water-level Elevations (Depths):
Pumping Well: 212.31 ft.
Observation Well: Unavailable.

Remarks: The data indicate that drawdown in the pumping well is mainly attributed to casing storage effects caused by the well configuration (screen open to the bottom of the aquifer). The water level stabilized after casing storage effects dissipated. The discharge rate varied during the first 30 min of the pumping test. No response was observed in the observation well.

Aquifer Test Data

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Data for Well 299-W7-3
Pumping Well 299-W7-3
Observation Wells 2

Location 200 West RCRA
Type of Aquifer Test Step D.D. Development
How ~~Q~~ WL Measured E-TAPE SINCO TRANSDUCER/DATALOGGER
How ~~W.L.'s~~ Q Measured 5 gal calib bucket
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING PIPE 409' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 451' below lsd
Pump On: date 10/29 time 16:00
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 212.4 LSD					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		M. Crometer
		0								289315			#82-2-435
		:30			211.0								
		4			256.25								
		5			254.98								had to open valve
		9			309.4						60		5 gal/5 sec
		15			364.15								had too much no
											5.9		water going out end
		25			368.49								
											3.5		5 gal/51 sec
													5 gal/1:25
		30			368.54						3		5 gal/1:40
		35			368.59								
		43			368.47						3		5 gal/1:40
		50			368.50								
		55			368.90								
		60			368.80						2.5		5 gal/2 min
		70			368.51								
		80			369.00						3		5 gal/1:41
		90			369.21								
		100			369.25						2.8		
		110			368.25								
		120	0										pump off
			:30		367.85								
			1		366.98								
			1:30		366.58								
			2		365.82								
			3		364.55								
			4		363.23								
			5		362.0								
			7		359.37								
			9		356.80								
			11		354.38								
			13		351.95								
			15		349.45								
			20		343.47								
[illegible]	0730				216.28	MP							

Aquifer Test Data

Data for Well 299-W7-3
Pumping Well 299-W7-3
Observation Wells 299-W7-2

Location 200 WEST ROAD
Type of Aquifer Test CONSTANT-DISCHARGE TEST
How Q Measured FLOW METER / 5 gal. calibrated bucket
How W.L.'s Measured E-TAPE / TRANSDUCER
Depth of Pump/Airpipe 451' below lsd
Rad./Dist. of/From Pumping Well —
Pump On: date 10/30/87 time 0800
Meas. Point for W.L.'s T/STILLING PIPE 4.09'
Pump Off: date 10/31/87 time 1215
Elevation of Meas. Point
Duration of Aquifer Test 1680 min. 28.25 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 216.42 MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		McCrometer # 82-2-435
10/30	0750				216.42					289965			RAIN !!
	0800	0			216.42								PUMP ON
		:20			239.00			22.6		SLOPE INDICATOR CO			ELECTRO-PIEZO
		1			242.00			25.6		SEATTLE, WA			SCANNER/RECORDER MODEL 5420
		1:30			247.20			30.8					SIN 1978 SINCO
		2			253.00			36.6			2.5		5 gal/12 sec 0-100 Transducer
		4:30			259.77			43.37					
		5			271.25			54.85					
		7			315.8			99.4			3.6		5 gal/16 sec 5 gal/14 sec
		15			349.47			133.07					
		17			358.17			141.75					
		20			362.10			145.7			3.7		5 gal/47 5 gal/45
		25			369.54			152.44					5 gal/1:25 5 gal/1:25
		30			369.77			153.37			3.3		
		35			369.54			153.14					
		40			369.4			153.0			3.2		5 gal/1:34
		45			369.06			152.66					
		50			368.9			152.4					
		60			369.12			152.72			2.9		5 gal/1:46
		70			369.33			152.93					
		80			369.32			152.92			3.7		5 gal/1:55
		90			369.62			153.22					
		100			369.10			152.7			3.1		5 gal/1:27 1.4
		110			369.30			152.9					
		120			369.45			153.05			2.9		5 gal/1:45
		150			371.13			154.73					
		180			371.19	← Max. drawdown after first 180 min of test.		154.79			3.0		5 gal/1:28, 1:52
		210			371.00			154.6			2.65		5 gal/1:42 2:00
		240			370.49		SPA	12/11/87	154.08		2.9		5/1:45
		270			370.93			154.53			2.7		5/1:50
		300			370.35			153.95			2.9		5/1:42
		360			370.66			154.26			2.6		
		420			370.46			154.06					
		480			369.90			153.50			2.8		5 gal/1:46
		540			370.35			153.95					← 5 gal/2:00
		600			369.57			153.17					5 gal/1:53
		660			369.27			152.87					5 gal/1:49
		720			370.03			153.63					5 gal/1:51
		780			370.40			154.00					5 gal/1:49

Aquifer Test Data

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Data for Well 299-W7-3
Pumping Well 299-W7-3
Observation Wells 299-W7-2

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE DD
How Q Measured FLOWMETER / 5 gal. calibrated bucket
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/STILLING PIPE 4.09' LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 451' below lsd
Pump On: date 10/30/87 time 0800
Pump Off: date 10/31/87 time 12:5
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 216.40					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	840				370.1			153.70				KSO	5 GLS /
	900				370.27			153.87			2.5		748 - 1:58
	960				370.45			154.05			2.9		900 - 1:45
	1020				370.4			154.00			2.7	963	~~[illegible]~~ - 1:53
	1080				370.28			153.88			2.7	1020	~~[illegible]~~ - 1:50
	1140				370.65			154.25			2.3	1080	~~[illegible]~~ - 1:46
	1200				370.25			154.10			2.7		1140 - 1:50
	1260				369.6			153.20			2.3		1200 - 1:48
	1320				369.3			152.90			2.9		1260 - 1:44
	1380				369.43			153.03			2.7		1320 - 1:50
	1440				369.59			153.19			2.5		1380 - 2:01
	1500				369.02			152.62			2.8		1440 - 1:47
	1560				367.9			151.40			2.7		1500 - 1:53
	1620				367.99			151.49			2.7		1560 - 1:50
	1680				367.6			151.20			2.9		1620 - 1:44
	1695										3.1		1680 1:38

mean Q = 2.8 gpm SPA 12/1/87
First 30 min of test disregarded for figuring mean.

Aquifer Test Data

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Data for Well 299-W7-3

Pumping Well 299-W7-3

Observation Wells

Location 200 WEST RCRA

Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY

How Q Measured 5 gal calibrated bucket

How W.L.'s Measured E-TAPE / TRANSDUCER

Depth of Pump/~~Airpipe~~ 451' below Abv lsd

Rad./Dist. of/From Pumping Well —

Pump On: date 10/30/87 time 0800

Meas. Point for W.L.'s T/STILLING PIPE 4.09' Abv LSD

Pump Off: date 10/31/87 time 1215

Elevation of Meas. Point

Duration of Aquifer Test 28.25 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 216.40					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
10/3	1200												
	1215	1695	0		367.09			150.69				KCO	PUMP OFF
		1695.5	1:30	2391	366.56			150.16					
		1696	1	1696	365.87			149.47					
		1696.5	1:30	1131	364.97			148.57					
		1697	2	848.5	364.44			148.04					
		1698	3	566	363.08			146.68					
		1699	4	424.8	362.00			145.6					
		1700	5	340	360.77			144.37					
		1702	7	243.1	358.27			141.87				CSC	
		1704	9	189.3	355.76			139.36					
		1706	11	155.1	353.22			136.82					
		1708	13	131.4	350.84			134.44					
		1710	15	114	348.39			131.99					
		1715	20	85.8	342.35			125.95					
		1720	25	68.8	336.64			120.24					
		1725	30	57.5	331.00			114.6					
		1730	35	49.4	325.67			109.27					
		1735	40	43.4	320.14			103.74					
		1740	45	38.7	315.24			98.84					
		1745	50	34.9	310.26			93.86					
		1755	60	29.3	300.79			84.39					
		1765	70	25.2	292.30			75.9					
		1775	80	22.2	284.20			67.8					
		1785	90	19.8	276.56			60.16					
		1795	100	18	269.72			53.32					
		1805	110	16.4	263.22			46.82					
		1815	120	15.1	257.48			41.08					
		1845	150	12.3	242.95			26.55					
		1875	180	10.4	232.22			15.82					

Aquifer Test Data

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Data for Well 299-W7-2
Pumping Well 299-W7-3
Observation Wells 299-W7-2

Location 200 WEST RCRA
Type of Aquifer Test STEP DD DEVELOPMENT
How Q Measured 5 gal calib. bucket flowmeter
How W.L.'s Measured E-TAPE TRANSDUCER 0-10 psi range
Rad./Dist. of/From Pumping Well 30'
Meas. Point for W.L.'s T/C 2.5' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 451' LSD
Pump On: date 10/29/87 time 1600 hr
Pump Off: date 10/29/87 time 1800 hr
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 214.41' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
10/29	1557	0			214.46							CSC	3.5" O.D. Pump Column
													8" I.D. CASING
	1600	0											START PUMP
		20			214.42								
		25			214.42								
		50			214.42								
		70			214.42								
		90			214.42								
		100			214.42								
		120			214.42								Pump Off
	0750				214.50								
10/30	0800	0			214.50								START OF
		15			214.50								CONSTANT-DISCHARGE
		25			214.50								AQUIFER TEST
		35			214.51								
		60			214.50								
		45			214.50								
		110			214.51								Pumping ~ 3 gpm
		120			214.51								
		150			214.51								
		210			214.50								
		240			214.50								
		270			214.48								
		300			214.47								
		360			214.47								
		480			214.46								
		540			214.46								
		[illegible]			[illegible]								
		[illegible]			[illegible]								
		[illegible]			[illegible]								
		[illegible]			[illegible]								
		720			214.46								
		780			214.46								
		840			214.49								
		900			214.46								
		960			214.47								
		1020			214.46								
		1140			214.46								

Aquifer Test Data

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Data for Well 299-W7-2
Pumping Well 299-W7-2
Observation Wells 299-W7-2

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured 5 gal calibrated bucket
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well 30'
Meas. Point for W.L.'s T/C 2.5' Abv LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 451 LSD
Pump On: date 10/30/87 time 0900
Pump Off: date 10/31/87 time 1215
Duration of Aquifer Test 29 hr 28.25 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	1200				214.45								
	1260				214.46								
	1320				214.47								
	1380				214.45								
	1440				214.46								
	1500				214.46								
	1560				214.46								
	1620				214.45								
	1686				214.43								
	1695		0										Recovery
	1711		16		214.42								
			42		214.42								
			60		214.42								
			20		214.42								
			30		214.42								
			90		214.42								
			110		214.42								

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AQUIFER TEST SUMMARY FOR WELL 299-W7-4

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 205 ft. Bottom: 470 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 203 ft. Bottom: 233 ft.

Date of Test: 11/12/87 Start Time of Test: 0745 hr
Pumping Rate: 48 gpm Duration of Test: 420 min

Pre-test Water-level Elevation (Depth): 205.11 ft.

Analysis Methods and Results:

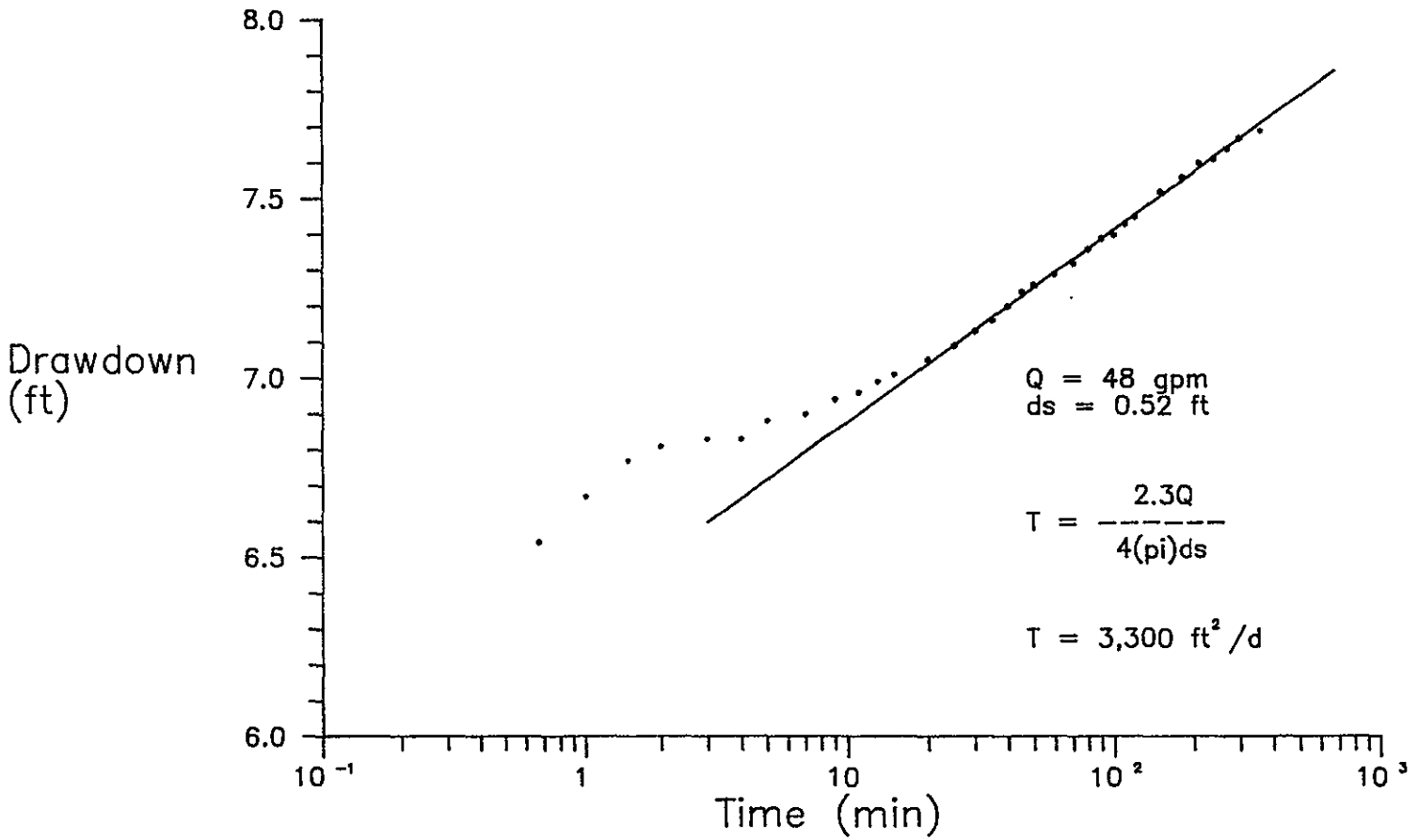
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	3,300	12
Recovery (Cooper and Jacob 1946)	2,800	11

Corrections Used:

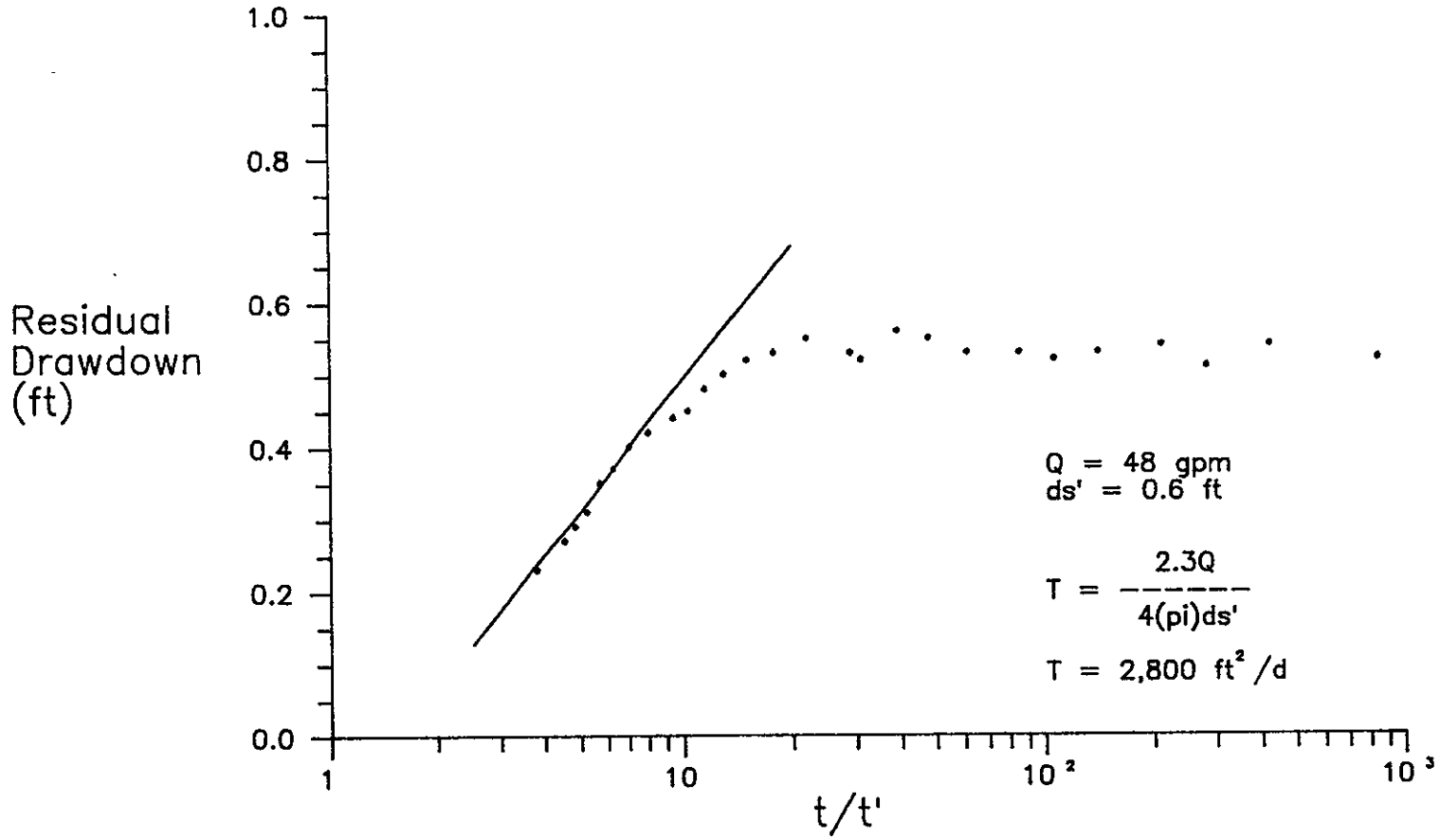
Borehole Storage Effects
t_c = 3 min (Hargis 1979)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. This test was conducted after the well was completed (4-in.-diameter screen).

RCRA WELL 299-W7-4
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
11/12/87



RCRA WELL 299-W7-4
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
11/12/87



Aquifer Test Data

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Data for Well 299-W7-4
Pumping Well 299-W7-4
Observation Wells

Location 200 West RCRA
Type of Aquifer Test Constant-Discharge DD
How Q Measured 5 gal bucket/ARAD FLOWMETER # 286 · 055 068
How W.L.'s Measured E-TAPE
Depth of Pump/~~Airpipe~~ 229.5' below lsd
Rad./Dist. of/From Pumping Well —
Pump On: date 11/12/87 time 0745
Meas. Point for W.L.'s T/Stilling Pipe 3.48' Abv lsd
Pump Off: date 11/12/87 time 1445
Elevation of Meas. Point
Duration of Aquifer Test 7 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 208.59					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or ~~s~~		Reading	Q		
11/12	0725				208.59			0		30916.5		csc	4" screen/casing
	0740	0			208.59			0					too tight to get trans
		240			215.13			6.54					down
		1			215.26			6.67					
		1:30			215.36			6.77					
		2			215.40			6.81					
		3			215.42			6.83			48		10 gal/12.5 sec (meter)
		4			215.42			6.83					
		5			215.47			6.88			47.6		10 gal/12.6 sec
		7			215.49			6.90					
		9			215.53			6.94					
		11			215.55			6.96			48.8		10 gal/12.3 sec
		13			215.58			6.99					
		15			215.60			7.01			51.7		5 gal bucket/5.8 sec
		20			215.64			7.05					max well head
		25			215.68			7.09					
		30			215.72			7.13			48.4		10 gal/12.4 sec
		35			215.75			7.16			48.7		10 gal/12.3 sec
		40			215.79			7.20			48.4		10 gal/12.4 sec
		45			215.83			7.24			48		10 gal/12.5 sec
		50			215.85			7.26			47.6		10 gal/12.6 sec 5 gal/5.8 sec
		60			215.88			7.29		32745	48		10 gal/12.5 sec
		70			215.91			7.32			48.8		10 gal/12.3 sec
		80			215.95			7.36			48		10 g/12.5 sec
		90			215.98			7.39			48.4		10 g/12.4 sec
		100			215.99			7.40			47.6		10 g/12.6 sec
		110			216.02			7.43			47.6		10 g/12.6 sec
		120			216.04			7.45			48		10 g/12.5 sec
		150			216.11			7.52			47.6		10 g/12.6 sec
		180			216.15			7.56			48.8		10 g/12.3 sec
		210			216.19			7.60			48		10 g/12.5 sec
		240			216.20			7.61			48		10 g/12.5 sec
		270			216.23			7.64			48		10 g/12.5 sec
		300			216.26			7.67			47.6		10 g/12.6 sec
		360			216.28			7.69		48218	47.6		10 g/12.6 sec
		420								51093	48		10 g/12.5 sec
													Avg. 48 gpm

Aquifer Test Data

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Data for Well 299-W7-4
Pumping Well 299-W7-4
Observation Wells —

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured FLOWMETER / 5 gal bucket
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/STICKING PIPE 3.42' Abv lsd
Elevation of Meas. Point
Depth of Pump/~~Airpipe~~ INTAKE 229.5' below lsd
Pump On: date 11/12/97 time 0745
Pump Off: date 11/12/97 time 1445
Duration of Aquifer Test 7 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 209.59' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
11/12	1445	420	0					0					Pump Off
			:30		209.11			0.52					
			1		209.13			0.54					
			1:30		209.10			0.51					
			2		209.13			0.54					
			3		209.12			0.53					
			4		209.11			0.52					
			5		209.12			0.53					
			7		209.12			0.53					
			9		209.14			0.55					
			11		209.15			0.56					
			14		209.11			0.52					
			15		209.12			0.53					
			20		209.14			0.55					
			25		209.12			0.53					
			30		209.11			0.52					
			35		209.09			0.50					
			40		209.07			0.48					
			45		209.04			0.45					
			50		209.03			0.44					
			60		209.01			0.42					
			70		208.99			0.40					
			80		208.96			0.37					
			90		208.94			0.35					
			100		208.90			0.31					
			110		208.88			0.29					
			120		208.86			0.27					
			150		208.82			0.23					
			180										

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AQUIFER TEST SUMMARY FOR WELL 299-W7-5

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery ( )

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 210 ft. Bottom: 460 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 208 ft. Bottom: 228 ft.

Date of Test: 11/21/87 Start Time of Test: 1100 hr
Pumping Rate: 4.4 gpm Duration of Test: 360 min

Pre-test Water-level Elevation (Depth): 209.75 ft (unknown measuring point).

Analysis Method and Results:

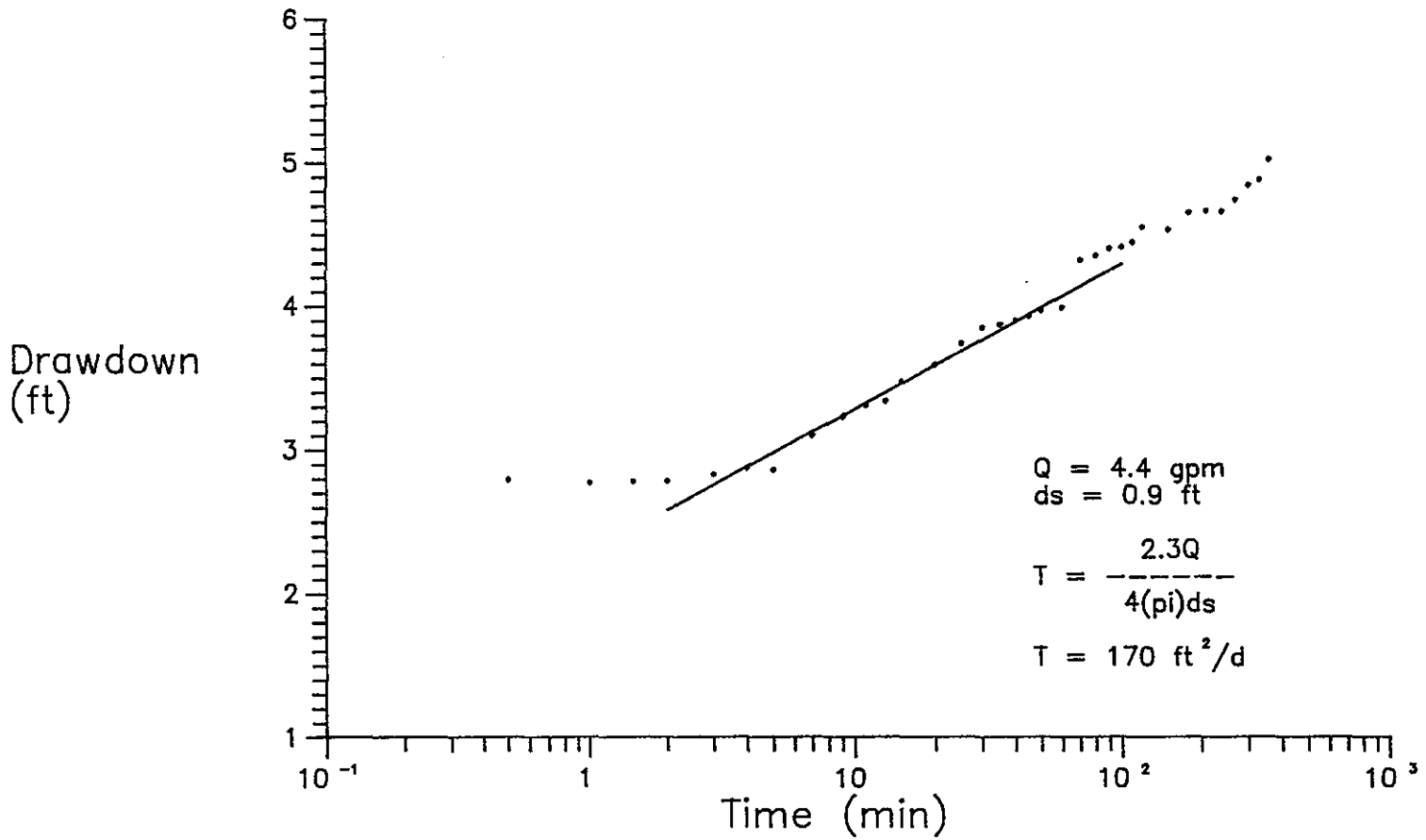
Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	170	0.7

Corrections Used:

Borehole Storage Effects
t_c = 59 min (Hargis 1979)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. This test was conducted after the well was completed (4-in.-diameter screen).

RCRA WELL 299-W7-5
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
11/21/87



Aquifer Test Data

53,842

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Data for Well 299-W7-5
Pumping Well
Observation Wells

Location 200 West Area RCRA Wells
Type of Aquifer Test Constant - Discharge
How Q Measured Flow Meter / 5 gal bucket
How W.L.'s Measured E-Tape
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 11/21/87 time 11 00
Pump Off: date 11/21/87 time 17 00
Duration of Aquifer Test 6 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 209.75					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	10:59						209.75						
	11:00	0:30					212.54	2.79					
		1:00					212.52	2.77					
		1:30					212.53	2.78					
		2:00					212.53	2.78					
		3					212.58	2.83					
		4					212.62	2.87					
		5					212.61	2.86					
		7					212.85	3.10					
		9					212.98	3.23					
		11					213.06	3.31					
		13					213.09	3.34					
		15					213.22	3.47					
		20					213.34	3.59			~6 GPM		50 sec 5 gal bucket
		25					213.49	3.74					
		30					213.60	3.85					
		35					213.62	3.87					
		40					213.65	3.90					
		45					213.68	3.93					
		50					213.72	3.97					
	12:00	60					213.74	3.99					
		70					214.07	4.32					
		80					214.10	4.35					Flow meter reads 53157
		90					214.15	4.40					@ 12:21 - ~5gpm 1:04 to
		100					214.16	4.41					fill 5gal bucket
		110					214.19	4.44					
	13:00	120					214.30	4.55					Flow meter reads 53327
		150					214.28	4.53					took first set of samples
	14:00	120					214.40	4.65				GVL	~5gpm 1:06 to fill a
		210					214.41	4.66				GVL	5gal bucket.
	15:00	240					214.41	4.66 took	samples			GVL	
		270					214.49	4.74		~5gpm		GVL	5gal bucket/56 sec.
	16:00	300					214.59	4.84				GVL	Flow meter reads 54010 at 15:56
	16:30	330					214.63	4.88		~5gpm		GVL	5gal bucket/58 sec.
	17:00	360					214.77	took	samples			GVL	Pump off
		--						5.02					TOTAL IN FLOW METER
													= 54399

AVG DISCHARGE ≈ 4.4 gpm

Aquifer Test Data

page 2 of 2

Data for Well 299-W7-5
Pumping Well 299-W7-5
Observation Wells

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured FLOWMETER/CALIBRATED 5 gal bucket
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 11/21/87 time 1100
Pump Off: date 11/21/87 time 1700
Duration of Aquifer Test 6 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 209.75					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s' or s'		Read-ing	Q		
	1700	360	0				214.77	5.02				GVL	
			:30				213.6	3.41				GVL	
			1				212.80	3.05				GVL	
			1:30				212.67	2.92				GVL	
			2				212.33	2.58				GVL	
			3				211.81	2.06				GVL	
			4				211.47	1.72				GVL	
			5				211.14	1.39				GVL	
			7				210.46	0.71				GVL	
			9				210.08	0.33				GVL	
			11				209.91	0.16				GVL	
			13				209.84	0.09				GVL	
	1715		15				209.83	0.08				GVL	
	1720		20				209.82	0.07				GVL	
	1725		25				209.83	0.08				GVL	
			30				209.85	0.10				GVL	
			35				209.87	0.12				GVL	
			40				209.89	0.14				GVL	
			45				209.82	0.07				GVL	
			50				209.88	0.13				GVL	
			60				209.87	0.12				GVL	
			70				209.93	0.18				GVL	
			80										
			90										
			100										
			110										
			120										
			150										
			180										

AQUIFER TEST SUMMARY FOR WELL 299-W7-6

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 215 ft. Bottom: 460 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 231 ft. Bottom: 241 ft.

Date of Test: 10/14/87 Start Time of Test: 0745 hr
Pumping Rate: 7 gpm Duration of Test: 480 min

Pre-test Water-level Elevation (Depth): 215.12 ft.

Analysis Methods and Results:

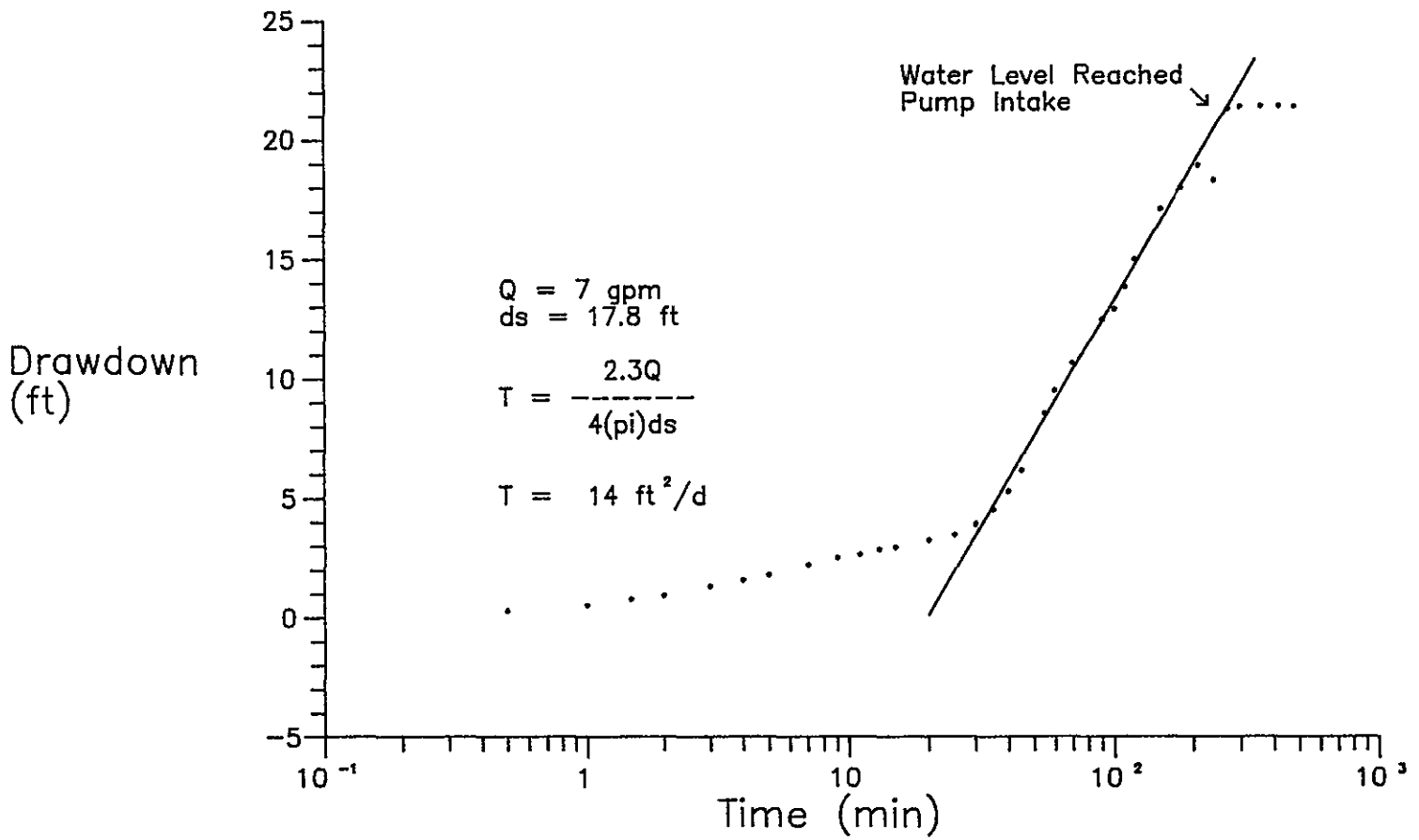
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	14	0.06
Recovery (Cooper and Jacob 1946)	40	0.16

Correction Used:

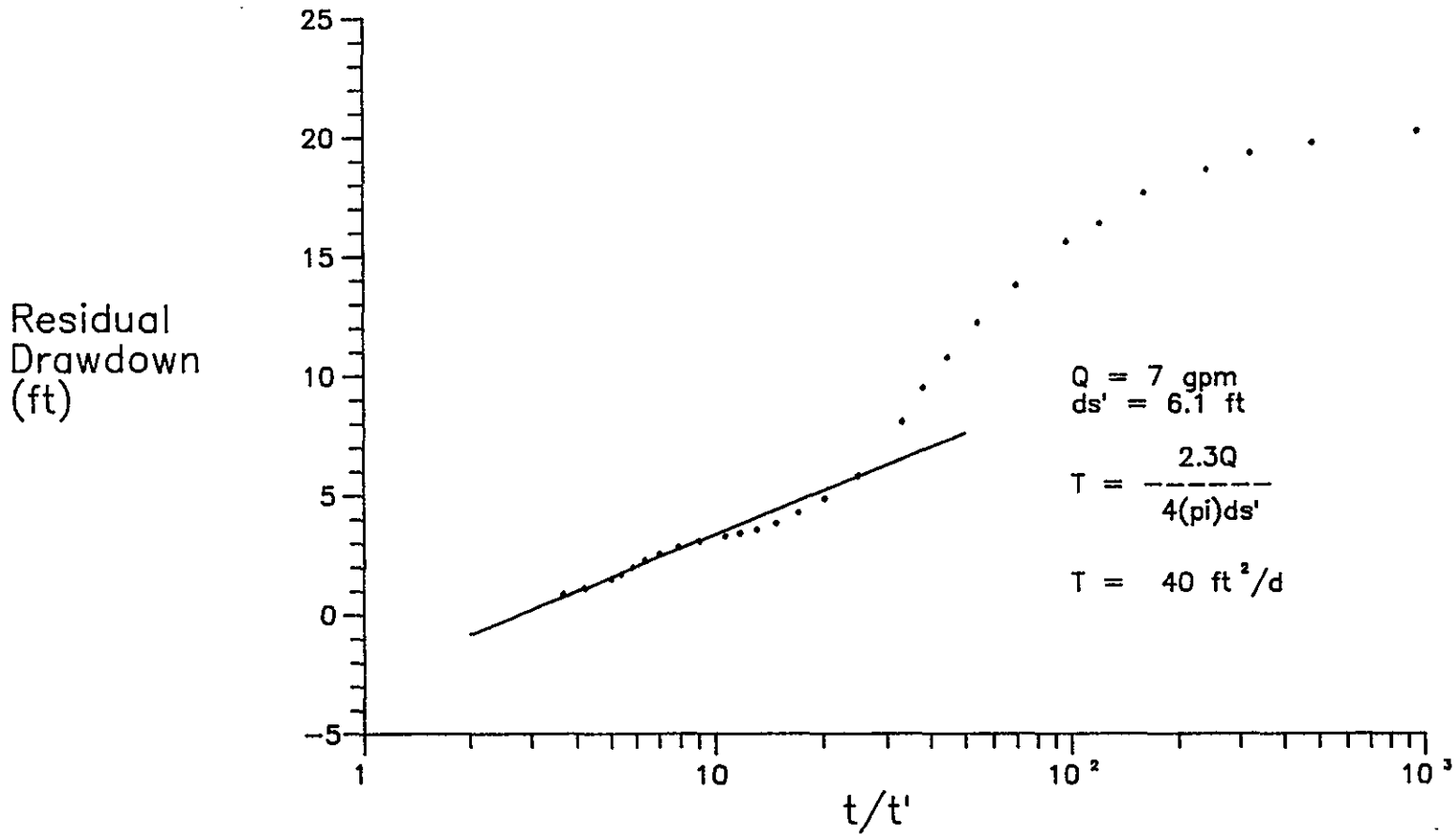
Borehole Storage Effects
t_c = 39 min (Schafer 1978)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The recovery data indicate that well entrance losses occurred (Hargis 1979).

RCRA WELL 299-W7-6
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
10/16/87



RCRA WELL 299-W7-6
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
10/14/87



D/INTAKE = 238' below land surface
TOP OF TREMIE = 3.44' above land

Water Level Data

Well or Date 299-W7-6

Project 200 W RCRA

Measuring Point Top of 3/4" tremie

~~Well Location~~ STEP DRAWDOWN

Elevation: Mercury Point —

Time Pump on: 13:36

Elevation: Ground Level —

Time Pump off:

meter = 18,857

Well or Date	Time	Measuring Device	Reading	Conversions or Corrections	Water Level Depth	Water Level Elevation	By	Comments/ Weather
	0		218.58'					
	1:30		220.59					
	1:00		221.14					meter - rate = 20 gpm
	1:30		221.65					
	2		221.96					
	3		222.44					
	4		223.05					
	5		224.69					
	7		232.14					disconnected discharge hose
	9		240.05					while pump was running discharge rate = 42 gpm
	11		240.06					
	12		—					
	13:25		238.66					valve was closed slightly
	15		238.80					(manual) = 11 gpm
	20		240.06					
	25		240.03					
	30		238.51					valve was closed slightly
	35		235.59					@ 29:40 minutes (manual) → 4.28 gpm
	40		234.24					opened valve slightly
	45		234.81					(manual) → 8.1 gpm
	50		235.45					
	60		235.92					
	70		235.28					
	95		234.15					(manual) → 6.5 gpm
	110		233.60					Disconnected discharge line across road for
								trailer to cross.
								→ opened valve slightly
								→ water drawing down to intake.
	120		240.05					shut valve slightly
	130		239.12					7.5 gpm. (manual)
	140		238.62					~7.5 gpm (manual)
	150		238.53					
	160		238.39					7 gpm (manual)
	170		238.26					7.3 gpm (manual)
1636	180		237.60				18962	PUMP OFF

F.~~162~~ 161

Aquifer Test Data

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Data for Well 299-W7-6
Pumping Well 299-W7-6
Observation Wells —

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE DD
How Q Measured 5 gal calibrated bucket / FLOWMETER NRATS 286-053068
How W.L.'s Measured E-TAPE / TRANSDUCER
Depth of Pump/Airpipe 238' Below LSD
Rad./Dist. of/From Pumping Well 0
Pump On: date 10/14/87 time 0745
Meas. Point for W.L.'s TOP STILLING PIPE
Pump Off: date 10/14/87 time 1545
Elevation of Meas. Point
Duration of Aquifer Test 8 hr
217.91 + .77 TOP STILLING PIPE LSD TO TOP STILLING PIPE 2.8 + 77

STEEL TAPE 21868

Time t = ____ at t' = 0					Water Level Data Static Water Level 218.69					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	0745	:30			218.96			~~.30~~	.27	18962			FLOWMETER
		1:00			219.22			.53					NOT WORKING
		1:30			219.46			.77					2" diameter pipe con...
		2			219.62			.93					5" diameter ...
		3			220.00			1.31					
		4			220.26			1.57					Checking bucket rate
		5			220.48			1.79			7.5		Bucket = 7.5 gpm
		7			220.90			2.21					re-connected hose
		9			221.20			2.51					
		11			221.33			2.64					
		13			221.52			2.83					
	0800	15			221.64			2.95					
		20			221.93			3.24				CSC	
		25			222.16			3.47				CSC	
		30			222.58			3.89			7.5	CSC	
		35			223.22			4.53				CSC	
		40			223.98			5.29				CSC	
		45			224.85			6.16			7.5		
		55 ~~50~~			227.24			8.55				CSC	
		1:00 ~~60~~			228.20			9.51					
		1:10 ~~70~~			229.35			10.66					
		1:20 ~~80~~											SAMPLES COLLECTED
		99 ~~90~~			231.17			12.48			6.8		
		109 ~~100~~			231.61			12.92			6.5		adjusting valve to
		119 ~~150~~			232.55			13.86					bring back up to 7.5 gpm
		129 ~~200~~			233.70			15.01			7.3		5/gal/
		159 ~~250~~			235.80			17.11			7.0		5 gal/42
		189 ~~300~~			236.70			18.01			7.1		5 gal/42 sec
		219 ~~350~~			237.64			18.95			7.1		5/gal/42
		249 ~~400~~			237.0			18.31			6.8		Samples collected
		279 ~~450~~			240.0			21.31			7.2		increased discharge
		309 ~~470~~			240.10			21.41			7.0		
		339 ~~480~~			240.11			21.42			7.0		Water down at intake
		420			240.11			21.42			7.0		Gathered Samples
		480			240.11								

1 3/4" O.D. 1 1/2" I.D.

Aquifer Test Data

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Data for Well 299-W7-6
Pumping Well 299-W7-6
Observation Wells —

Location RCRA 200 WEST
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured 5 gal. calibrated bucket
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP STILLING PIPE 3.57' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airline 238' BIW lsd
Pump On: date 10/14/87 time 0745
Pump Off: date 10/14/87 time 1545
Duration of Aquifer Test 8-hr

Time: t = 480 at t' = 0					Water Level Data: Static Water Level 218.69'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
10/14	1545	480	0		240.11			21.42				CSC	
			30		238.95			20.26					
			1		238.47			19.78					
			1.30		238.03			19.34					
			2		237.34			18.65					
			3		236.35			17.66					
			4		235.07			16.38					
			5		234.31			15.62					
			7		232.47			13.78					
			9		230.91			12.22					
			11		229.46			10.77					
			13		228.17			9.48					
			15		226.77			8.08					
			20		224.50			5.81					
			25		223.54			4.85					
			30		222.95			4.26					
			35		222.51			3.82					
			40		222.24			3.55					
			45		222.09			3.40					
			50		221.98			3.29					Front moving in
			60		221.76			3.07					wind increasing
			70		221.51			2.82					
			80		221.21			2.52					
			90		220.94			2.25					
			100		220.65			1.96					
			110		220.37			1.68					
			120		220.17			1.48					
			150		219.78			1.09					
			180		219.54			0.85					
													—

AQUIFER TEST SUMMARY FOR WELL 299-W8-1

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 236 ft. Bottom: 510 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 257 ft. Bottom: 267 ft.

Date of Test: 07/11/87 Start Time of Test: 0800 hr
Pumping Rate: 8.7 gpm Duration of Test: 360 min

Pre-test Water-level Elevation (Depth): 236.10 ft.

Analysis Method and Results:

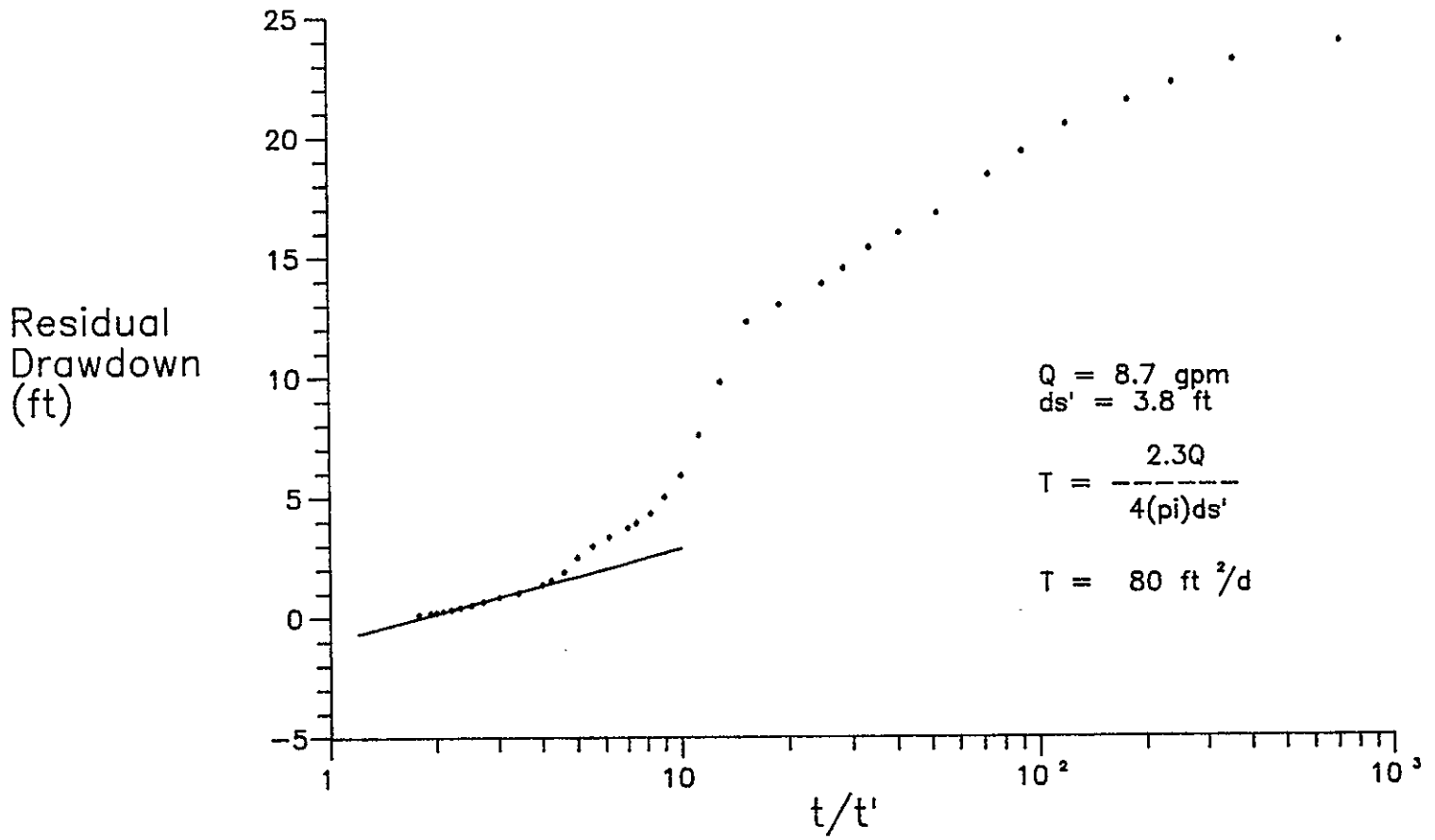
Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Recovery (Cooper and Jacob 1946)	80	0.3

Correction Used:

Borehole Storage Effects
t_c ~ 20 min (Schafer 1978)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The drawdown data indicate that the aquifer test was influenced by boundary effects.

RCRA WELL 299-W8-1
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
7/11/87



Aquifer Test Data

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Data for Well 2W8-1
Pumping Well 2W8-1
Observation Wells —
Recip Wells

Location 200 West
Type of Aquifer Test STEP DD
How Q Measured 5 gal bucket
How W.L.'s Measured E-TAPE / STEEL TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s Trammie Pipe 2.72' AW
Elevation of Meas. Point _____ LSD

SCREEN DOWN TO 267'
Depth of Pump/Airpipe 264'
Pump On: date 7/10/87 time _____
Pump Off: date _____ time _____
Duration of Aquifer Test _____

Time t = ____ at t' = 0					Water Level Data Static Water Level 238.75'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
7/10	1730	0			238.75					101530			
		:30			242.4								
		1			243.1						25		
		1:30			244.71								
		2			247.49					107580			
		3			251.28								
		4			252.27								
		5			253.92								
		7			259.58								NO MEASUREMENT BELOW 263
		9											
		11											
		13											
		15											
		17											
		19											
		20											
		25											
	→	30 36			—								RECOVERY
35.37	5:22			6.59	261		263	24.25					8" 1.96 O.D.
36.11	6:06		8.	5.91	262		262	23.25					Trammie 1 1/16"
36.61	6:36			5.59	261		261	22.25					to calculate
37.28	7:16.5	50		5.12	260		260	21.25					
38.11	8:06.5	51		4.7	259		259	20.25					
38.89	8:53	45		4.37	258		258	19.25					
39.81	9:48	33		4.06	257		257	18.25					
40.85	10:51	11		3.77	256		256	17.25					
42.70	12:41	82		3.36	255		255	16.25					
45.05	15:03	04		2.99	254		254	15.25					
47.12	17:01	95		2.75	253		253	14.25					
50.97	20:58	36		2.43	252		252	13.25					
56.40	21:24	—		2.14	251		251	12.25					
58.43	28:26			2.06	250		250	11.25					
59.57	29:34			2.01	249		249	10.25					
61.17	31:10	.08		1.96	248		248	9.25					
62.67	32:40	.26		1.92	247		247	8.25					
64.89	34:53	22		1.86	246		246	7.25					
66.89	36:53	.64		1.81	245		245	6.25					
70.44	40:24	.23		1.74	244		244	5.25					
75.39	45:28	.42		1.66	243		243	4.25					
89.72	59:43	.57		1.50	242		242	3.25					

Aquifer Test Data

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Data for Well 299-W8-1
Pumping Well 2-W8-1
Observation Wells BWIP D.
6-49-79

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured Calibrated 5 gal bucket off of hose
How W.L.'s Measured E-tape
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP TREMIE / 2.72' ABV WSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 264'
Pump On: date 7/11/87 time 0800
Pump Off: date 7/11/87 time 1400
Duration of Aquifer Test 6 hr.

Time t = ____ at t' = 0					MP Water Level Data Static Water Level E-TAPE 238.82					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or ~~s~~		Reading	Q gpm		
	0800	0					238.82	0					E-TAPE MEASUREMENTS
		:30					241.89	3.07					should be made
		1:00					242.18	3.36					at bottom of
		1:30					242.24	3.42					Vent
		2					242.38	3.56					Water discharge rate
		3					242.66	3.84					measured from end
		4					243.0	4.18					of firehose ~5 ft
		5					243.66	4.84					from gate valve
		6					244.34	5.52					
		9					246.65	7.83			8.7		5 gal / 35 sec
	12	11					248.43	9.61			8.7		5.06 gal / 35 sec
		13											
		15					249.81	10.99					
		20					251.05	12.23					
		25					251.42	12.60			8.9		5.06 / 34 sec
		30					251.71	12.89					
		35					252.08	13.26			8.9		5.06 / 34 sec
		40					252.38	13.56					
		45					252.81	13.99			8.8		5.06 / 34.5 sec
		50					253.24	14.42					
	0900	60					254.32	15.50			8.7		5.06 / 35 sec
	71	70					255.01	16.19			8.6		5.06 / 35.5 sec
		80					255.62	16.80			8.7		5.06 / 35 sec
	97	90					257.58	18.76					
		100					257.76	18.94			8.8		5.06 / 34.5 sec
		110											
	1000	120					259.18	20.36			8.9		5.06 / 34 sec
		150					260.22	21.40			8.6	(8.55)	5.06 / 35.5 sec
	1100	180					260.22	21.4			8.4	(8.45)	5.06 / 36 sec
		210					261.11	22.29			8.9		5.06 / 34 sec
	1200	240					261.95	23.13			8.6	(8.55)	5.06 / 35.5 sec
		270					262.40	23.58			8.7		5.06 / 35 sec
	1300	300					262.70	23.88			8.4		5.06 / 36 sec
	330	360					262.96	24.14					
		360									8.7		5.06 / 35 sec
	360												Start Recovery
													below 268'
													no measure

avg. 8.7 gpm

Aquifer Test Data

page 2 of 2

Data for Well 2W8-1
Pumping Well 2W8-1
Observation Wells

Location 200 West
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured Calibrated 5 gal bucket
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP TROMMIE 2.72' ABV LID
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 264'
Pump On: date 7/11/87 time 0900
Pump Off: date 7/11/87 time 1400
Duration of Aquifer Test 6 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 238.82					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	~~s~~ or s'		Reading	Q		
	1400	360	0				263					CSC	
			:30	721			262.9	23.88				CSC	
			1	361			261.95	23.13				CSC	
			1:30	241			261.	22.18				CSC	
			2	181			262.27	21.45				CSC	
			3	121			259.38	20.46				CSC	
			4	91			255.15	19.33				CSC	
			5	73			257.15	18.36				CSC	
			~~6~~				~~255.6~~	~~[illegible]~~				CSC	
			7	52.4			255.6	16.78				CSC	
			9	41			254.79	15.97				CSC	
			11	33.7			254.10	15.35				CSC	
			13	28.7			253.3	14.48				CSC	
			15	25			252.67	13.85				CSC	
			20	19			251.80	12.98				CSC	
			25	15.4			251.09	12.27				CSC	
			30	13			248.59	9.77				CSC	
			35	11.3			246.38	7.56				CSC	
		400	40	10			244.70	5.88				CSC	
			45	9			243.8	4.98				CSC	
		410	50	8.2			243.13	4.31				CSC	
	56	416	55	7.4			242.72	3.90				CSC	
		420	60	7			242.53	3.71				CSC	
		430	70	6.14			242.14	3.32				CSC	
		440	80	5.5			241.76	2.94				CSC	
		450	90	5			241.28	2.46				CSC	
		460	100	4.6			240.68	1.86				CSC	
		471 ~~470~~	111 ~~110~~	4.2			240.33	1.51				CSC	
		480	120	4			240.16	1.34				CSC	
		510	150	3.4			239.82	1.0				CSC	
	1700	540	180	3.0			239.63	.81				GVL	
	1730	570	210	2.71			239.46	.64				GVL	
	1800	600	240	2.5			239.33	.49				GVL	
	1830	630	270	2.33			239.22	.40				GVL	
	1900	660	300	2.2			239.13	.31				GVL	
	1930	690	330	2.09			239.07	.25				GVL	
	2000	720	360	2.0			239.02	.20				GVL	
	2030	750	390	1.92			238.99	.17				GVL	
	2140	820	460	1.78			238.93	.11				GVL	

7/12/87 1325 1765 1405 1.26 238.72 -.10 ← PIDCOR

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AQUIFER TEST SUMMARY FOR WELL 299-W9-1

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test (x) Specific Capacity ( ) Constant Discharge ( ) Recovery ( )

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 272 ft. Bottom: 487 ft (interpolated to top of lower Ringold).

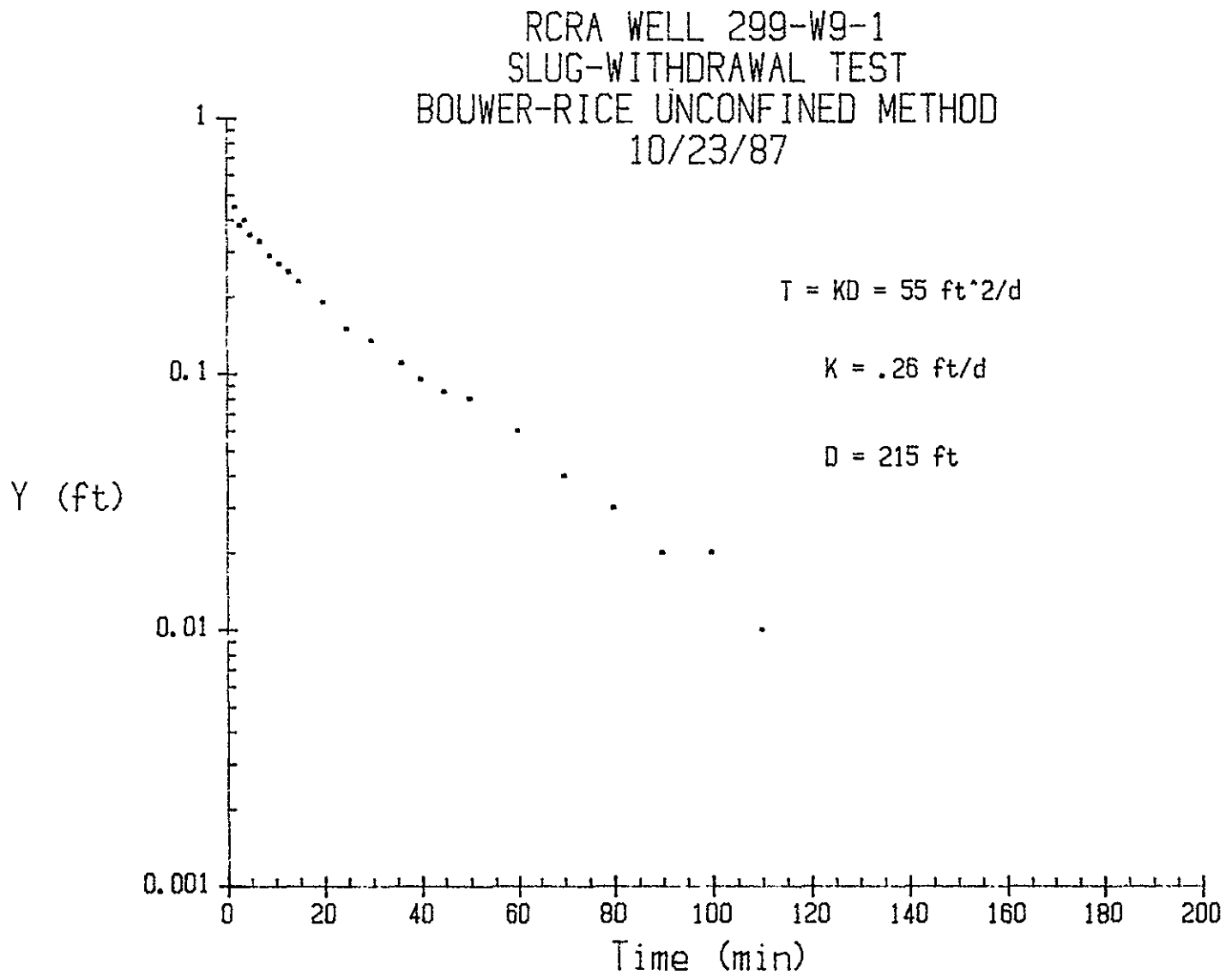
Depth of Screened Interval in Pumped Well, Top: 266 ft. Bottom: 286 ft.

Date of Test: 10/23/87

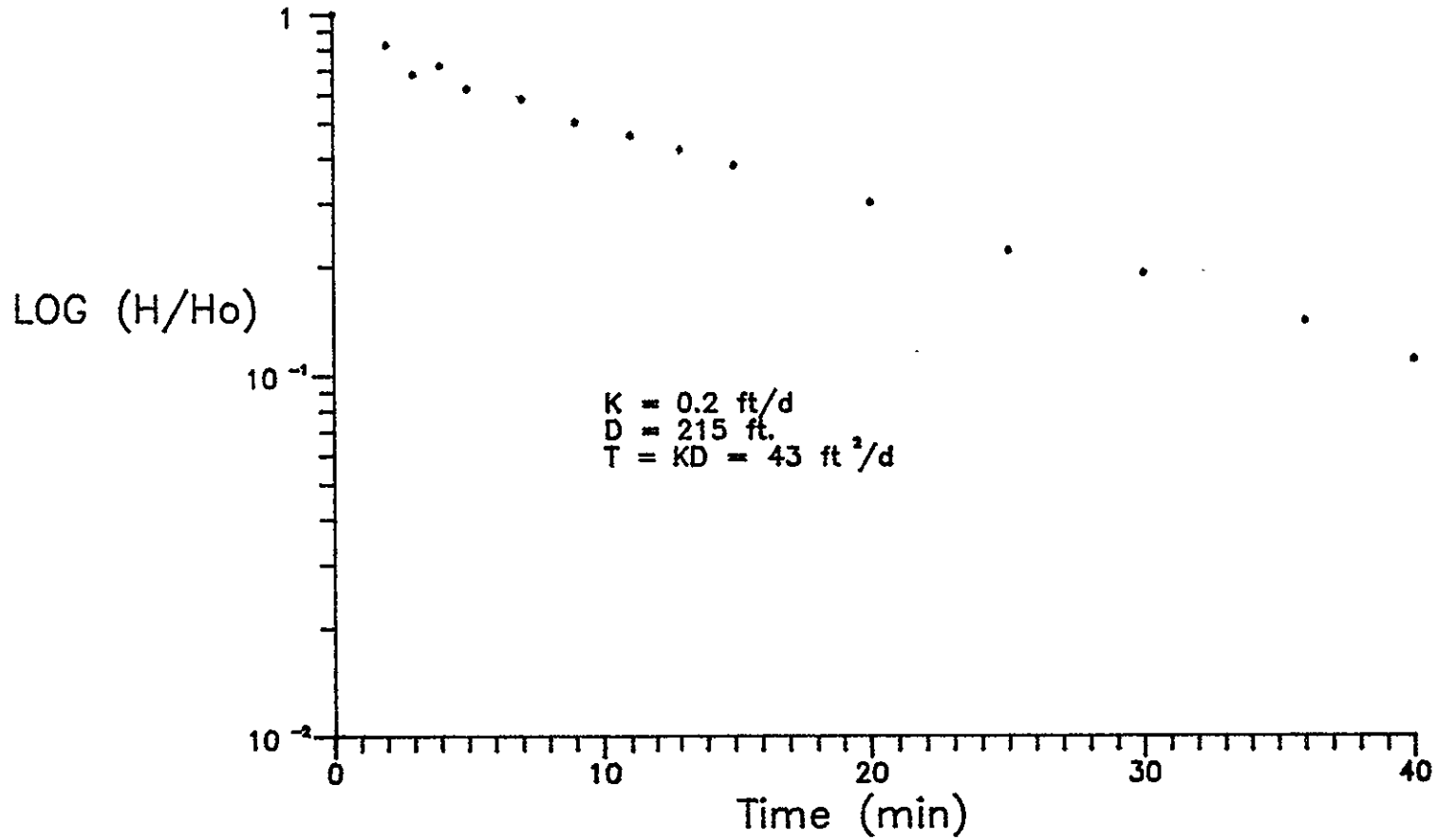
Pre-test Water-level Elevation (Depth): 271.70 ft.

Analysis Methods and Results:

Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Slug Withdrawal		
(Bouwer and Rice 1976)	55	0.26
(Hvorslev 1951)	43	0.2


RCRA WELL 299-W9-1
SLUG-WITHDRAWAL TEST
BOUWER-RICE UNCONFINED METHOD
10/23/87
T = KD = 55 ft^2/d
K = .26 ft/d
D = 215 ft
Y (ft)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
200
Time (min)

RCRA WELL 299-W9-1
SLUG WITHDRAWAL TEST
HVORSLEV METHOD
10/23/87



Aquifer Test Data

SLUG TEST

page 1 of 2

Data for Well 299-W9-1
~~Pumping Well~~
~~Observation Wells~~

Location 200 WEST RCRA
Type of Aquifer Test SLUG TEST
How Q Measured —
How W.L.'s Measured E-TAPE - TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.57' Abv GSD
Elevation of Meas. Point

Depth of Pump/Airpipe NO PUMP — NA
Pump On: date 10/23/87 time 1100 hr
Pump Off: date 10/23/87 time
Duration of Aquifer Test

Time: t = _____ at t' = 0
Water Level Data: Static Water Level 271.70 (STEEL TAPE)

	Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	Residual Head s or s'		Discharge Reading	Discharge Q	Recorded By	Comments
	10/22	1040				272.05	E-TAPE	H/H₀					CSC	SLUG = 10' LONG
														2 3/8" O.D.
1/4								1.00	(.89)					PIPE W/SAND
	10/23	1100	0	-		271.16	← from	displacement						START TEST
.5			2			271.59	E-TAPE	.517	.46	Calculation				DROP SLUG
.33			3			271.62		.483	.43					
.25			4			271.64		.461	.41					2 3/8" = .1979' ~.2
.20			5			271.67		.427	.38					$\pi r^2 = \pi(.1)^2$
.14			7			271.71		.382	.34					$\pi(.1)^2 \times 10' = .31\ ft^3$
.10			10			271.77		.315	.28				8" D	$.31\ ft^3 / .348' = .81'$
.09			11			271.77		.315	.28					$.31\ ft^3 / .087\ ft^2 = 3.56$
.077			13			271.79		.292	.26					← area of 4"
.067			15			271.83		.247	.22					(A SLUG)
.05			20			271.86		.213	.19					$(.31\ ft^3)(7.48\ gal/ft^3)$
.04			25			271.90		.169	.15					
.033			30			-								= 2.32 gal
.029			35			271.93		.135	.12					
.025			40			271.95		.112	.10					
.022			45			271.96		.101	.09					
.02			50			271.97		.090	.08					
.017			60			271.99		.067	.06					
.014			70			272.00		.056	.05					
.013			80			272.00 +		.056	.05					
.011			90			272.01		.045	.04					
.010			100			272.01		.045	.04					
.009			110			272.01		.045	.04					
.008			120			272.01		.045	.04					
.007			150			272.00		.056	.05					
.006			180	0		272.89	← from calculation of displacement							PULLED SLUG, OPEN
				.30		275.56								WELL
				1										
				1.30										
.5				2		272.41			.45					
.33				3		272.34			.39					
.25				4		272.36			.40					
.20				5		272.31			.35					
.14				7		272.29			.33					
.11				9		272.25			.29					
.09				11		272.23			.27					

SLUG TEST

Aquifer Test Data

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Data for Well 299-W9-1
Pumping Well —
Observation Wells —

Location 200 WEST RCRA
Type of Aquifer Test SLUG TEST WITHDRAWAL
How Q Measured —
How W.L.'s Measured ~~S~~-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.57' AW LSD
Elevation of Meas. Point

Depth of ~~Pump/Airpipe~~ SLUG TEST
Pump On: date 10/23/87 time 1100 hr
Pump Off: date time
Duration of Aquifer Test

	Time t = ____ at t' = 0					Water Level Data Static Water Level use 271.96					Discharge		Recorded By	Comments
	Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
.077	10/23	14:13		13		272.21			.25				CSC	
.067				15		272.19			.23					
.05				20		272.15			.19					
.04				25		272.11			.15					
.033				30		272.095			.135					
.026			30	35		272.07			.11					
.025				40		272.055			.095					
.022				45		272.045			.085					
.02				50		272.04			.08					
.017				60		272.02			.06					
.014				70		272.00			.04					
.013				80		271.99			.03					
.011				90		271.98			.02					
.010				100		271.98			.02					
.009				110		271.97			.01					
.008				120		271.96			.00					
.007				150		271.95			-.01					
.006				180		271.91			.00					

9011130437

Aquifer Test Data

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Data for Well 299-W9-1
~~Pumping~~ Well 299-W9-1
Observation Wells

Location 200 WEST RCRA
Type of Aquifer Test SLUG TEST
How Q Measured —
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.57' Abv LSD
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 10/22/87 time 1030 hr
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data (STEEL TAPE) Static Water Level 271.72'					Discharge		Recorded By	Comments
Day	Clock Time	t.	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
10/22		0											SLUG 2 3/8 O.D.
		:30											Pipe 10' LONG
		1			271.6								TO SHACKLE
		1:30											Transducer #SN 0042
		2			271.62								Apparently drifting
		3											replace w/ #SN 00419
		4											00419 not operating
		5											.00420 will be used
		7											
		9											Aborted - transducer
		11											coupling pulled up
		13											by sand line

AQUIFER TEST SUMMARY FOR WELL 299-W10-13

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 229 ft. Bottom: 450 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 227.5 ft.
Bottom: 237.5 ft.

Observation Well Used: 299-W10-14 Distance to Pumped Well: 34 ft.
Elevation (Depth) of Screened Interval: Drilled to a depth of 240 ft for aquifer test (no screen).

Date of Test: 09/14/87 Start Time of Test: 0900 hr
Pumping Rate: 30 gpm Duration of Test: 480 min

Pre-test Water-level Elevations (Depths):
Pumping Well: 229.04 ft.
Observation Well: Unavailable.

Analysis Methods and Results:

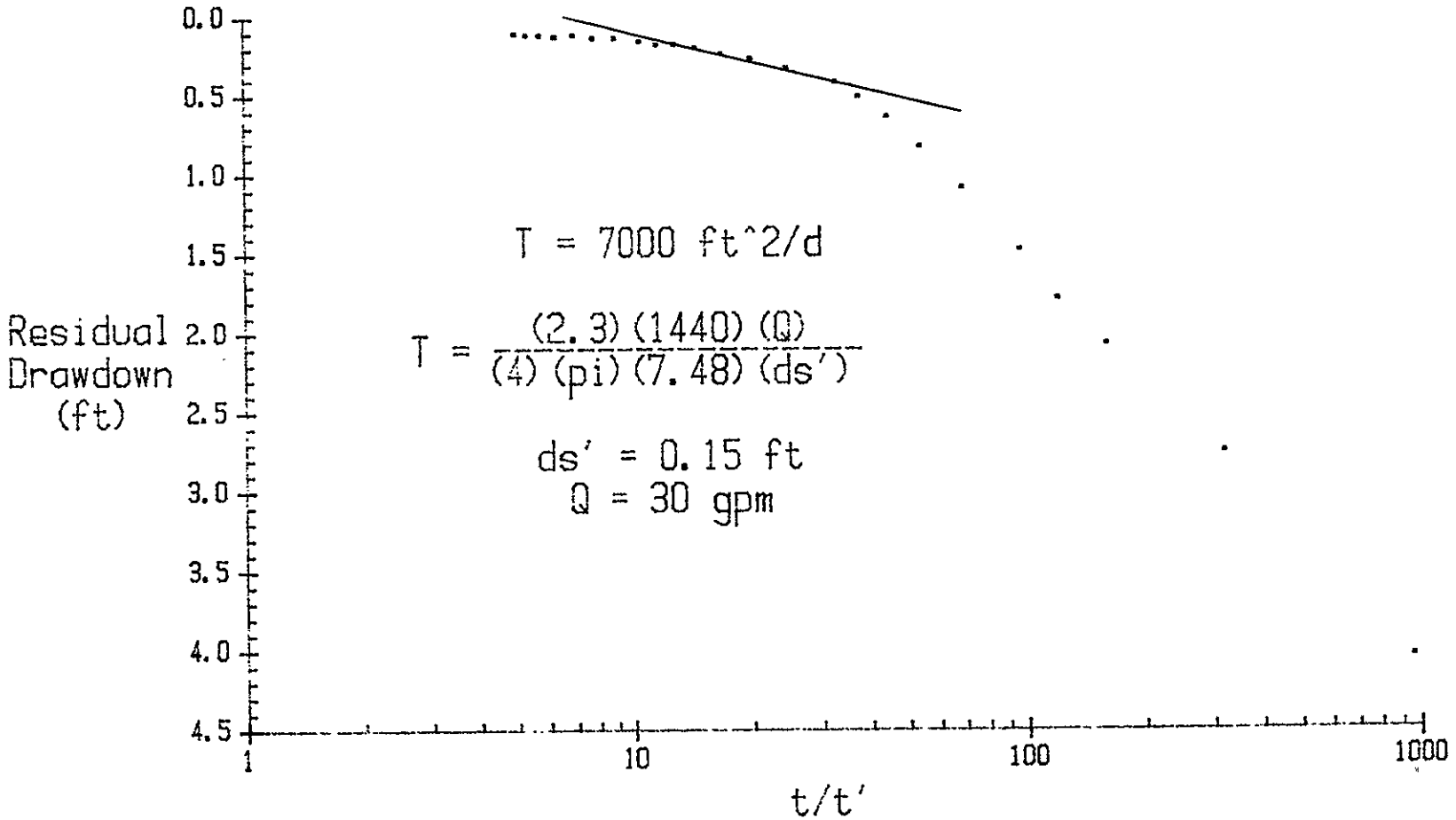
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Recovery (Cooper and Jacob 1946)			
Pumping Well	7,000	32	NA
Observation Well	3,500	16	0.009

Corrections Used:

Borehole Storage Effects
t_c = 10 min (Schafer 1978)
t_c = 4 min (Hargis 1979)

Remarks: The drawdown data indicate that well entrance loss occurred during pumping. The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The latter part of the recovery data was probably influenced by daily water-level fluctuations.

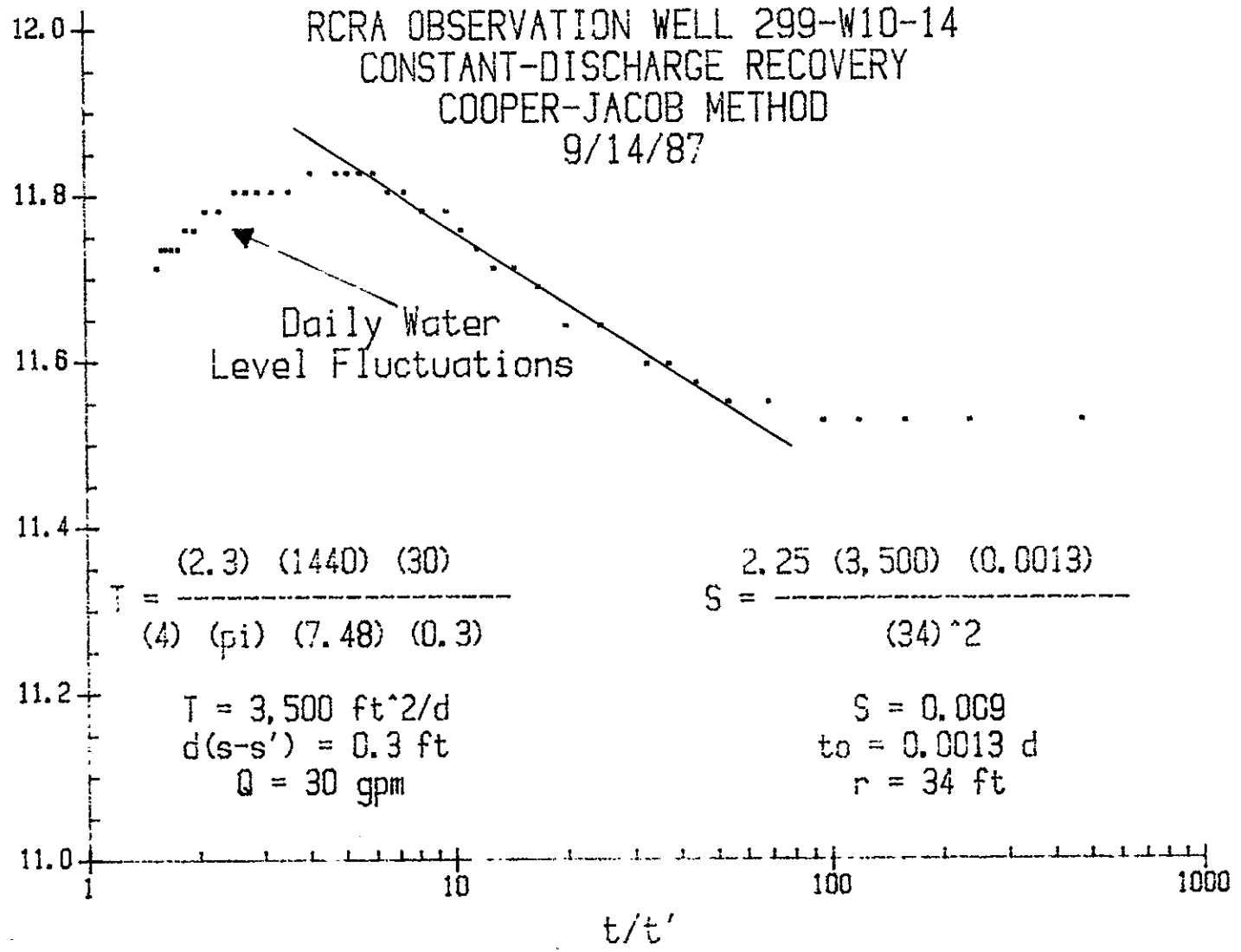
RCRA WELL 299-W10-13
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
9/14/87



$$T = 7000 \text{ ft}^2/\text{d}$$

$$T = \frac{(2.3)(1440)(Q)}{(4)(pi)(7.48)(ds')}$$

$ds' = 0.15$ ft
$Q = 30$ gpm



$$T = \frac{(2.3)\ (1440)\ (30)}{(4)\ (pi)\ (7.48)\ (0.3)}$$

T = 3,500 ft^2/d
d(s-s') = 0.3 ft
Q = 30 gpm

$$S = \frac{2.25\ (3,500)\ (0.0013)}{(34)^2}$$

S = 0.009
to = 0.0013 d
r = 34 ft

Aquifer Test Data

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Data for Well 299-W10-13
Pumping Well 299-W10-13
Observation Wells 299-W10-14

Location 200W RCRA
Type of Aquifer Test Constant discharge
How Q Measured Flowmeter
How W.L.'s Measured E-tape
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s stilling pipe
Elevation of Meas. Point

Depth of Pump/Airpipe 246' (intake)
Pump On: date 9-14-87 time 8:30
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 233.0					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		281110 Flowmeter
9/14		1:30			233.25								
		1			233.19								
		1:30			233.21								
		2			233.18								
		3			233.13								
		4					stop-valve not open enough						
		5											
		7											
		9											
		11											
		13											
		15											
		20											
		25											
		30											
		35											
		40											
		45											
		50											
		60											
		70											
		80											
		90											
		100											
		110											
		120											

43
1:03

Aquifer Test Data

page 1 of 2

Data for Well 299-W10-13
Pumping Well 299-W10-13
Observation Wells 299-W10-14

Location 200W RCRA
Type of Aquifer Test Constant discharge
How Q Measured Flowmeter / bucket
How W.L.'s Measured E-tape
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s stilling pipe 3'11½" above L.S.
Elevation of Meas. Point 396' Abv LSD

Depth of Pump/Airpipe 246 (intake)
Pump On: date 9-14-87 time 9:00
Pump Off: date 9/14/87 time 17:00
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 233.0					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		281110 Flowmeter
9/14	9:00	:30			233.95			0.95				SST	
		1:00			234.74			1.74					
		1:30			235.18			2.18					
		2			238.60			5.6					
		3			242.84			9.84					
		4			—								
		5			243.15			10.15					
		6			244.77			11.77					
		7			243.06			10.06					
		9			243.19			10.19					
		11			243.8			10.18					
		13			244.89			11.89					Hard to measure W.L. -
		15			243.66			10.66					- beyond stilling pipe
		20			244.62			11.62					Flowrate - bucket = 30 gpm
		25			243.48			10.48					
		30			244.23			11.23					
		35			244.05			11.05					
		40			243.90			10.90					
		45			243.79			10.79					
		50			243.90			10.90					
		60			243.29			10.29					
		70			242.95			9.95					Flowmeter not reading
		80			242.73			9.73					
		90			242.80			9.80					30 gpm - bucket
		100			242.80			9.80					
		110			242.86			9.86					
		120			242.92			9.92					
		130			242.85			9.85					
		140			242.85			9.85					
		150			242.95			9.95					
		180			243.08			10.08					
		210			243.05			10.05					
		240			243.47			10.47					30 gpm - bucket
		270			243.50			10.50					
		300			243.76			10.76					
		360			243.65			10.65					WIND BEKING UP
		420			243.65			10.65				CSC	
		480			244.05			11.05		28			
										281990			

Aquifer Test Data

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Data for Well 299-W10-13
Pumping Well 299-W10-13
Observation Wells 299-W10-14

Location 200 W RCRA
Type of Aquifer Test CONSTANT DISCHARGE
How Q Measured FLOWMETER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s STILLING PIPE
Elevation of Meas. Point

Depth of Pump/Airpipe 246' (INTAKE)
Pump On: date 9-14-87 time 9:00 hr
Pump Off: date 9/14/87 time 1700 hr
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 233.0					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		281150 FLOWMETER
9/14	1700	480	0		244.05			11.05		281990		CSC	WIND HAS BEEN
			:30		237.04			4.04					BLOWING HARD
			1										SINCE 1600 HRS
			1:30		235.75			2.75					
			2										
			3		235.07			2.07					
			4		234.78			1.78					
			5		234.47			1.47					
			7		234.08			1.08					
			9		233.82			0.82					
			11		233.63			0.63					
			13		233.50			0.50					
			15		233.41			0.41					
			20		233.32			0.32					
			25		233.26			0.26					
			30		233.23			0.23					
			35		233.19			0.19					
			40		233.17			0.17					
			45		233.17			0.17					
			50		233.15			0.15					
			60		233.13			0.13					
			70		233.13			0.13					
			80		233.11			0.11					
			90		233.12			0.12					
			100		233.11			0.11					
			110		233.11			0.11					
			120		233.10			0.10					
9/15	0715				233.28			0.28					

Aquifer Test Data

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Data for Well 299-W10-14
Pumping Well 299-W10-13
Observation Wells 299-W10-14

Location RCRA 200 WEST
Type of Aquifer Test STEP-DD / ~~[illegible]~~ RECOVERY
How Q Measured FLOW METER / 5 gal bucket
How W.L.'s Measured E-TAPE / TRANSDUCER Depth of Pump/Airpipe 246'
Rad./Dist. of/From Pumping Well 34'
Pump On: date 9/14/87 time 0900 hrs
Meas. Point for W.L.'s T/C 3.08' ABV LSD
Pump Off: date 9/14/87 time 1700 hrs
Elevation of Meas. Point
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
9/14	1700	480	0									CSC	MEASURING W/
			55		233.40							CSC	TRANSDUCER
			85		233.42							CSC	
	0720				233.41							CSC	

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AQUIFER TEST SUMMARY FOR WELL 299-W10-14

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 230 ft. Bottom: 448 ft.

Depth of Screened Interval in Pumped Well, Top: 427 ft. Bottom: 447 ft.

Observation Well Used: 299-W10-13 Distance to Pumped Well: 34 ft.
Elevation (Depth) of Screened Interval, Top: 227 ft. Bottom: 247 ft.

Date of Test: 10/26/87 Start Time of Test: 0900 hr
Pumping Rate: 14 gpm Duration of Test: 225 min

Pre-test Water-level Elevations (Depths):
Pumping Well: 230.93
Observation Well: Unavailable.

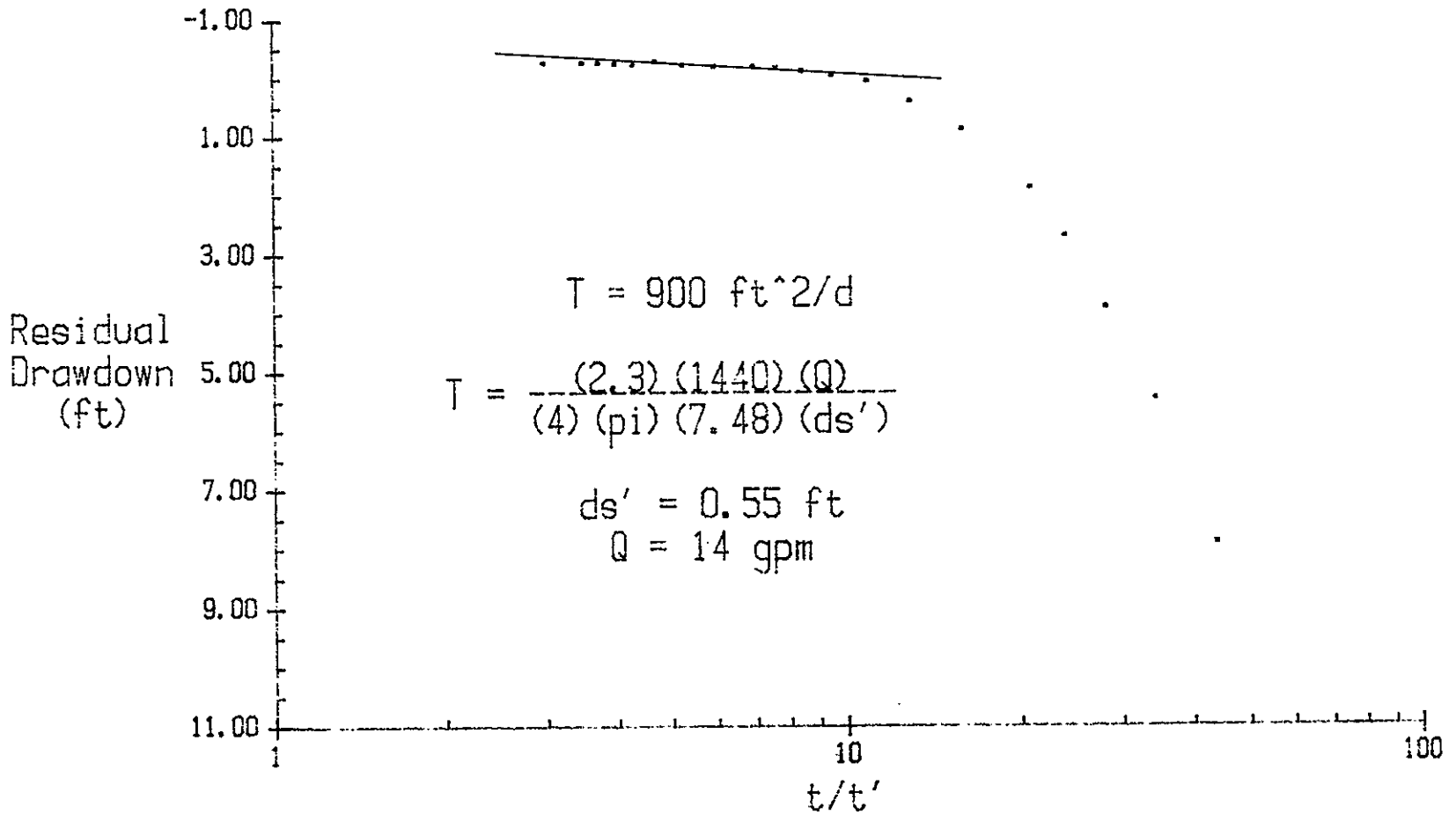
Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Recovery (Cooper and Jacob 1946) Pumping Well	900	4	NA

Remarks: The data indicate that drawdown in the pumping well is mainly attributed to casing storage effects caused by the well configuration (screen open to the bottom of the aquifer). The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. No response was observed in the observation well.

9 0 . 1 / / 5 0 4 4 .

RCRA WELL 299-W10-14
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
10/26/87



28840 flowmeter

Aquifer Test Data

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Data for Well 299-W10-14

Pumping Well " "

Observation Wells 299-W10-13

Location 200W - RCRA

Type of Aquifer Test Step drawdown

How Q Measured flowmeter

How W.L.'s Measured E-tape

Rad./Dist. of/From Pumping Well 0

Meas. Point for W.L.'s top of stilling pipe

Elevation of Meas. Point

Depth of Pump/Airpipe 444'2" (intake at 441'8")

Pump On: date 10-23-87 time 9:50

Pump Off: date 10-23-87 time

Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 233.35					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
10/23	9:50	1:30			236.79								
		1:00			236.49								
		1:30			236.22								
		2			236.85								
		3			235.38								
		4			235.0								no water coming out
		5			~~2~~								Opened valve more
		7			252.67			19.32					≈10 gpm - meter
	8	~~8~~			256.70			23.35					
	9	~~9~~			260.22			24.87					
	10	~~10~~			263.10			29.75					
	11	~~11~~			265.21			31.86					
		12			267.15			33.80					
		13			268.61			35.26					
		14			269.80			36.45					
		15			270.73			37.38					
		17			272.05			38.70					Checking discharge w/ bucket
		20			272.41			39.06					19 gpm - bucket
		25			272.30			38.95					
		30			272.42			39.07					flowmeter not working
		40			272.26			38.91					
		50			271.57			38.22					
		60			271.49								
		75			271.47								Had trouble w/ tape
		1:30			277.25								
		1:00			280.52								
		1.30			284.33								
		2			287.10								
		3			291.80								
		4			294.72								
		5			297.72								10 ft back valve
	1:53	1:30			274.09								
	1:55	1:30			278.42								
		1:00			282.74								
		1:30			285.95								
		2			288.34								
		2			292.43						43		7 sec to fill 5 gal

Aquifer Test Data

page 2 of 2

Data for Well 299-W10-14
Pumping Well
Observation Wells

Location 200 W - RCRA
Type of Aquifer Test Step drawdown
How Q Measured bucket
How W.L.'s Measured E-tape
Rad./Dist. of/From Pumping Well 0
Meas. Point for W.L.'s top of stilling pipe
Elevation of Meas. Point

Depth of Pump/Airpipe (intake at 441'8")
Pump On: date 10-23-87 time 9:50
Pump Off: date 10-23-87 time 1340
Duration of Aquifer Test

Time t = _____ at t' = 0					Water Level Data Static Water Level 232.35					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	12:16				287.07								Cut back
	1250	180			285.15								25gpm - bucket
	1300				285.45								
	1320				284.99								
	1340				284.97								
			:30		279.65								Recovery
			1:00		275.60								(Valve left open)
			1:30		271.70								
			2		268.19								
			3		262.52								
			4		257.65								
			5		253.81								
			7		247.83								
			9		243.73								
			11		240.91								
			13		238.90								
			15		237.49								
			20		235.30								
			25		234.39								
			30		233.89								
			40		233.39								
			50		233.40								
			60		233.35								
	1504				233.33								

Aquifer Test Data

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Data for Well 299-W10-13
Pumping Well 299-W10-14
Observation Wells 299-W10-13

Location 200 W - RCRA
Type of Aquifer Test Stepdrawdown
How Q Measured Flow meter / 5 gal. bucket
How W.L.'s Measured E-tape
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s top of casing (3.17' above ground)
Elevation of Meas. Point

Depth of Pump/Airpipe —
Pump On: date 10/23/87 time 9:50
Pump Off: date 10/23/87 time 13:40
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 231.72'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
10/23		1:30			231.72							SPA	
		1:00			231.72							SPA	
		1:30			231.72							SPA	
		2			231.72							SPA	
		3			231.72							SPA	
		4			231.72							SPA	
		5			231.72							SPA	
		7			231.72							SPA	
		9			231.72							SPA	
		11			—							—	
		13			231.72							SPA	
		15			231.72							SPA	
		20			231.73							SPA	
		25			231.72							SPA	
		30			231.73							ST	
		40			231.73							↓	
		50			231.72								
		60			231.72								
		80			231.72								
		5			231.72								
	1140				231.72								
	1148				231.72								
	1204				231.72								
	1209				231.72								
	1250	180			231.70								
	1320				231.69								
	1340				231.68								
			9		231.68								
			11		231.68								
			13		231.68								
	1505				231.66								

Aquifer Test Data

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Data for Well 299-W10-19
Pumping Well 299-W10-19
Observation Wells 299-W10-13

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT DISCHARGE DD
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP OF STILLING TUBE 3.09' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 444' INTAKE 441.66
Pump On: date 10/26/87 time 0900
Pump Off: date 10/26/87 time 1400
Duration of Aquifer Test 5 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 234.03 MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
10/26	0900	0			234.03					289325		CSC	McCormick
		4			252.64			18.62					82-2-475
		5			254.62			20.60					0900 hr start
		7			256.42			22.40					STANDARD TIME
		9			258.28			24.26			14.3		5 gal/21 sec
		12			259.62			25.40					Flow meter not operating
		13			259.89			25.87					either reset in or
		15			260.34			26.32					flow too low for meter
		20			260.87			26.85					
		25			261.41			27.39			13.6		5 gal/23 5 gal/21 sec
		30			261.50			27.48					avg 5 gal/22 sec
		35			261.51			27.49			14.3		5 gal/23 5 gal/19
		40			261.50			27.48					
		45			261.57			27.55					
		50			261.54			27.52					
	1000	60			261.27			27.25			13.6		5 gal/22 5 gal/22
Sample H_2O		70			261.49			27.47					
		80			261.45			27.43					
S		90			261.24			27.22					
		100			261.15			27.13					
		110			261.13			27.11			12.2		5 gal/24.5 5 gal/24.5
	1100	120			261.47			27.45			14.3		inverse rate 5/24 sec
		150			261.14			27.12			13.6		5 gal/22 5 gal/21
	1200	180			261.12			27.10					5 gal/24 5 gal/22
Sample H_2O	1350	210			260.95			26.93			13		pumping against
		240			261.54			27.52		open valve slightly!			head in discharge pipe
		270			261.45			27.43					when measure disch.
Recovery		300	0										using 5 gal bucket
			:30		260.63								break at hose
			1		257.72								10' from valve
			1.30		255.63								this changes head
			2		253.90								we are pumping against
			3		250.50								
			4		247.68								
			5		245.40								
			7		241.91								
			9		239.47								
			11		237.92								
			13		236.71								

Aquifer Test Data

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Data for Well 299-W10-14
Pumping Well 299-W10-14
Observation Wells 299-W10-13

Location 200 WEST RCRA
Type of Aquifer Test ~~CONSTANT-DISCHARGE~~ RECOVERY
How Q Measured 5 gal calibrated bucket
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING PIPE 3.09' ABV LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 444' INTAKE 441.66
Pump On: date 10/26/87 time 0500 hr
Pump Off: date 10/26/87 time 1400 hr
Duration of Aquifer Test 5 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 234.02					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	t or s'		Read-ing	Q		
10/26			15		~~234.09~~	?						CSC	
			20		234.09								
			25		234.41								
			30		234.06								
			35		233.96								
			40		233.89								
			45		233.83								
			50		233.82								
	1500	~~1500~~	60		233.81								
			70		233.79								
			80		233.77								
			90		233.78								
			100		233.76								
			110		233.74								
			120		233.74								
			150		233.75								

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AQUIFER TEST SUMMARY FOR WELL 299-W15-15

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 225 ft. Bottom: 455 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 245 ft. Bottom: 255 ft.

Date of Test: 08/21/87 Start Time of Test: 1245 hr
Pumping Rate: 20 gpm Duration of Test: 360 min

Pre-test Water-level Elevation (Depth): 225.52 ft.

Analysis Method and Results:

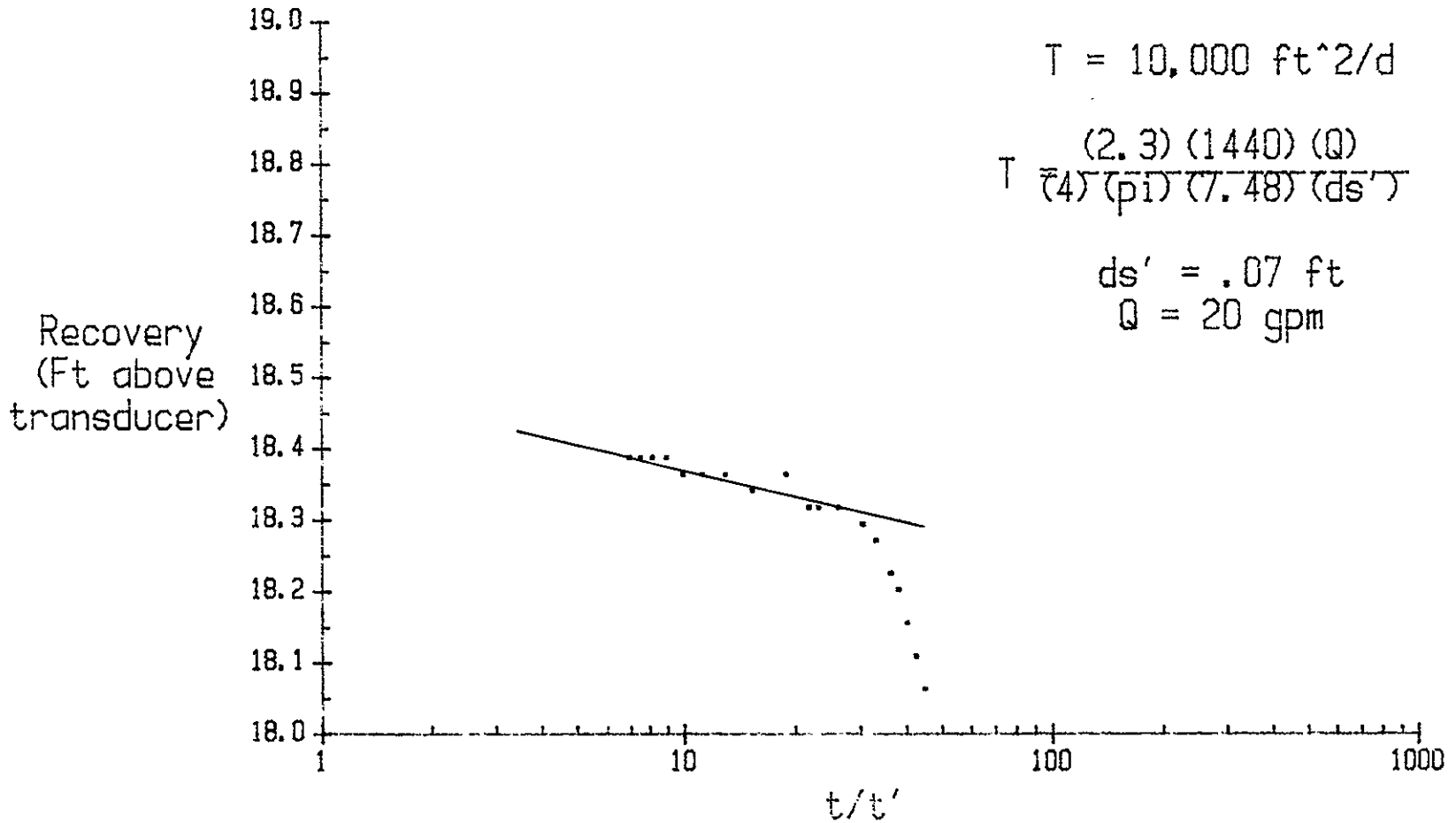
Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Recovery (Cooper and Jacob 1946)	10,000	43

Corrections Used:

Borehole Storage Effects
tc = 26 min (Schafer 1978)
t_c = <3 min (Hargis 1979)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis.

RCRA WELL 299-W15-15
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
8/21/87



T = 10,000 ft^2/d

$$T = \frac{(2.3)(1440)(Q)}{(4)(pi)(7.48)(ds')}$$

ds' = .07 ft
Q = 20 gpm

Aquifer Test Data

page 1 of 2

Data for Well 299-W15-15
Pumping Well 299-W15-15
Observation Wells

Location 200 West Area Well 299-W15-15
Type of Aquifer Test constant discharge test
How Q Measured 0 bucket & stop watch
How W.L.'s Measured E-tape / TRANSDUCER
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s top of ~~pumping~~ drilling well 2.35' LSD
Elevation of Meas. Point

Depth of Pump/Airpipe ~ 250'
Pump On: date 8/21/87 time 1245 hrs
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 227.87'					Discharge		Recorded By	Comments
Day	Clock Time	t	Δt'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	00:00				227.87							JSW	24809
	00:30		515		233.02								
	1:00		2.74		236.10								
	1:30		10.79		238.66								
	2:00		12.54		240.41								
	2:30		13.97		241.84								
	3:00		14.97		242.79								
	3:30		15.77		243.64								
	4:00		16.35		244.22								
	4:30		16.84		244.71								
	5:00		17.18		245.05								
	5:30		17.53		245.45								
	6:00		17.83		245.70								
	6:30		18.04		245.91								
	7:00		18.17		246.05								
	7:30		18.27		246.14								
	8:00		18.33		246.25								
	8:30		18.39		246.26								
	9:00		18.43		246.30								
	9:30		18.45		246.32								
	10:00		18.46		246.33								
	12:00		18.13		246.00						21.4		7.5 GPM OPENED
	14:00		18.13		246.00								HOSE CONNECTION
	16:00		18.11		246.04								5 gal/14 5 gal/10 sec
	18:00		18.09		246.16								
	20:00		18.35		246.22								24814
	25:00		18.47		246.34								
	30:00		18.46		246.33								
	35:00		18.50		246.37								
	40:00		18.48		246.35								
	45:00		18.50		246.37								
	60:00		18.56		246.43								
	70:00		18.59		246.46								
	80:00		18.70		246.57								
	100:00		18.52		246.39								
	120:00		18.50		246.37								
	150:00		18.50		246.37								
	190		18.64		246.51								
	235										20		5 gal/15 sec 5 gal/15 sec

Aquifer Test Data

page 2 of 2

Data for Well 299-W15-15
Pumping Well 299-W15-15
Observation Wells none

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured 5 gal bucket
How W.L.'s Measured E-TAPE/TRANSDUCER
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/STILLING WELL 2.35' AW LSD
Elevation of Meas. Point

Depth of Pump/Airline ~ 250'
Pump On: date 8/21/87 time 1245 hrs
Pump Off: date 8/21/87 time 1845 hrs
Duration of Aquifer Test 6 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 227.87'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/21	1245	240			246.32			18.45		—		csc	
	1715	270			246.34			18.47				csc	
	1745	300			246.36			18.49				csc	
	1845	360	0		246.40			18.53				csc	Recovery
			:30	721	241.96			14.09				csc	
			1	360	239.47			11.60				csc	
			1.30	241	236.93			9.06				csc	
			2	181	234.96			7.09				csc	
			3	121	232.52			4.65				csc	
			4	91	230.80			2.93				csc	
			5	73	229.70			1.83				csc	
			7	52.4	228.60			.73				csc	
			9	41	228.18			.31				csc	
			11	33.7	227.93			.06				csc	
			13	28.7	227.94			.07				csc	
			15	25	227.91			.04				csc	
			20	19	227.88			.01				csc	
			25	15.4	227.88			.01				csc	
			30	13	227.88			.01				csc	
			35	11.3	227.87			0				csc	
			40	10	227.87			0				csc	
			45	9	227.86			-.01				csc	
			50	8.2	227.86			-.01				csc	
			60	7	227.85			-.02				csc	

AQUIFER TEST SUMMARY FOR WELL 299-W15-16

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 212 ft. Bottom: 442 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 227.5 ft.
Bottom: 237.5 ft.

Observation Well Used: 299-W15-17 Distance to Pumped Well: 48 ft.
Elevation (Depth) of Screened Interval: Drilled to a depth of 220 ft (no screen) for this aquifer test.

Date of Test: 08/20/87 Start Time of Test: 1330 hr
Pumping Rate: 80 gpm Duration of Test: 420 min

Pre-test Water-level Elevations (Depths):
Pumping Well: 211.83 ft.
Observation Well: 211.90 ft.

Analysis Methods and Results:

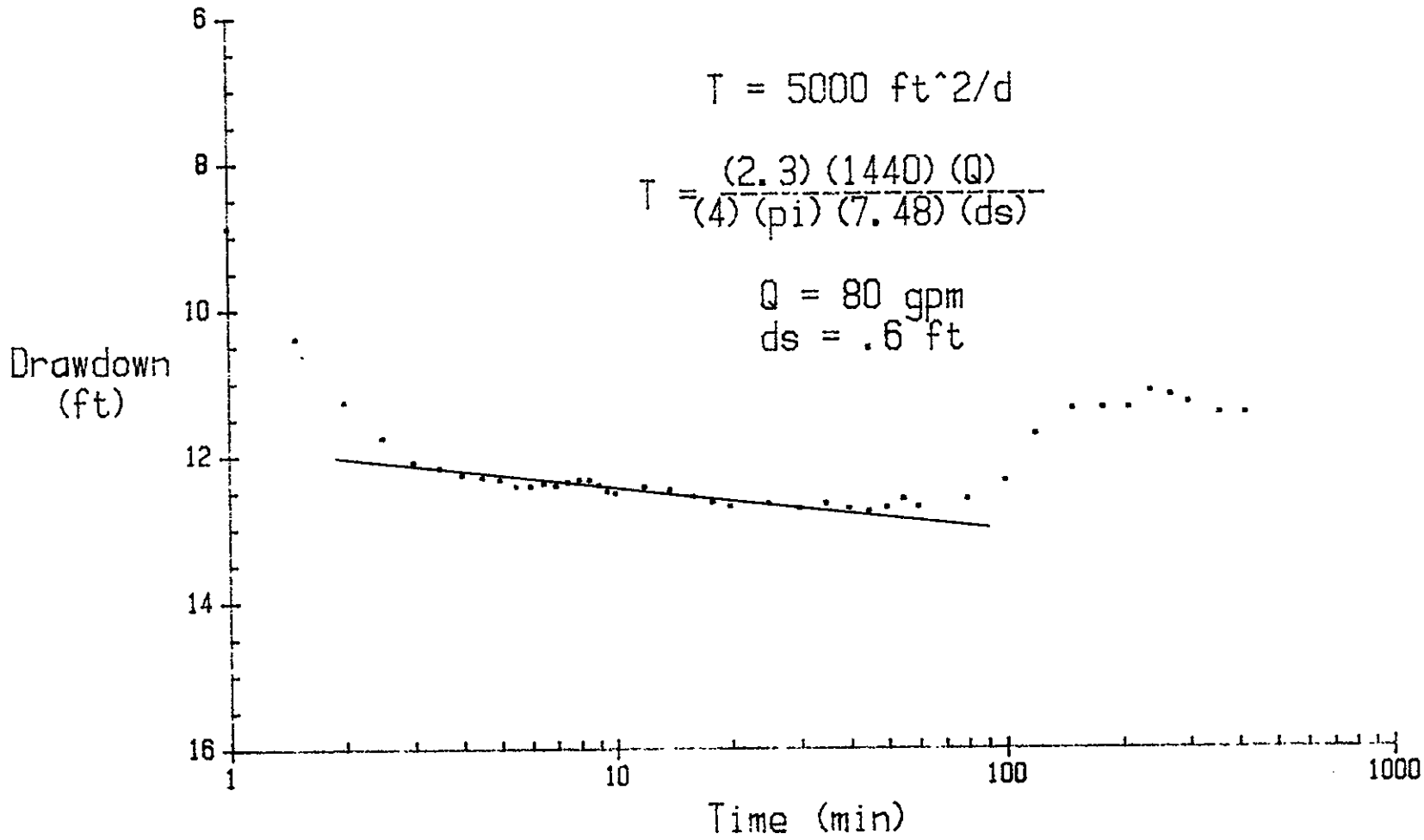
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Constant Discharge (Cooper and Jacob 1946) Pumping Well	5,000	22	NA
(Theis 1935) Observation Well	12,000	52	0.027
Recovery (Cooper and Jacob 1946) Pumping Well	12,000	52	NA
(Theis 1935) Observation Well	12,000	52	0.038

Corrections Used:

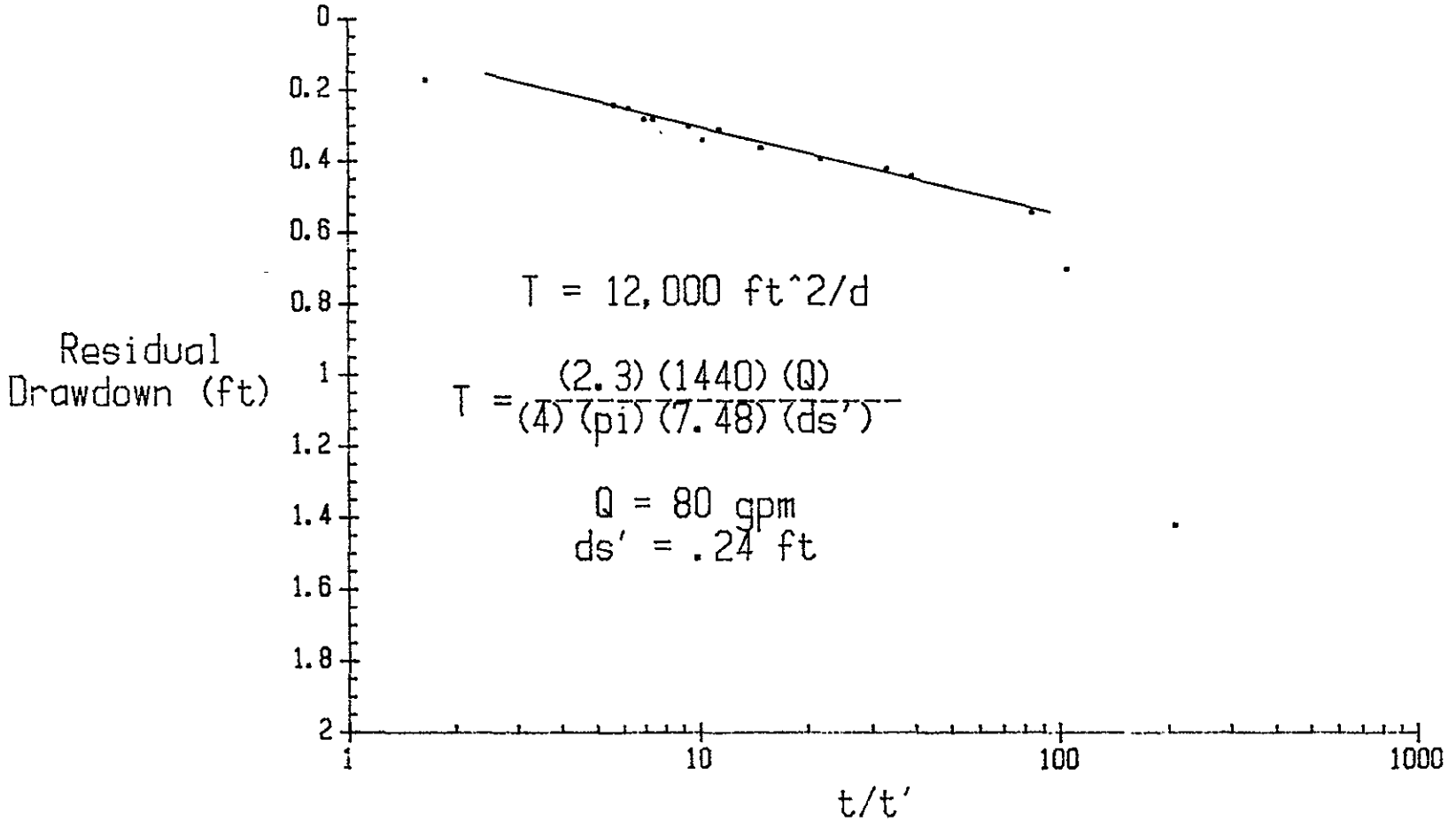
Borehole Storage Effects
t_c = 10 min (Hargis 1979)

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob and Theis analyses. A 55-gal drum was used to approximate the discharge rate. The decline in drawdown after 100 min of pumping is possibly due to further development of the well.

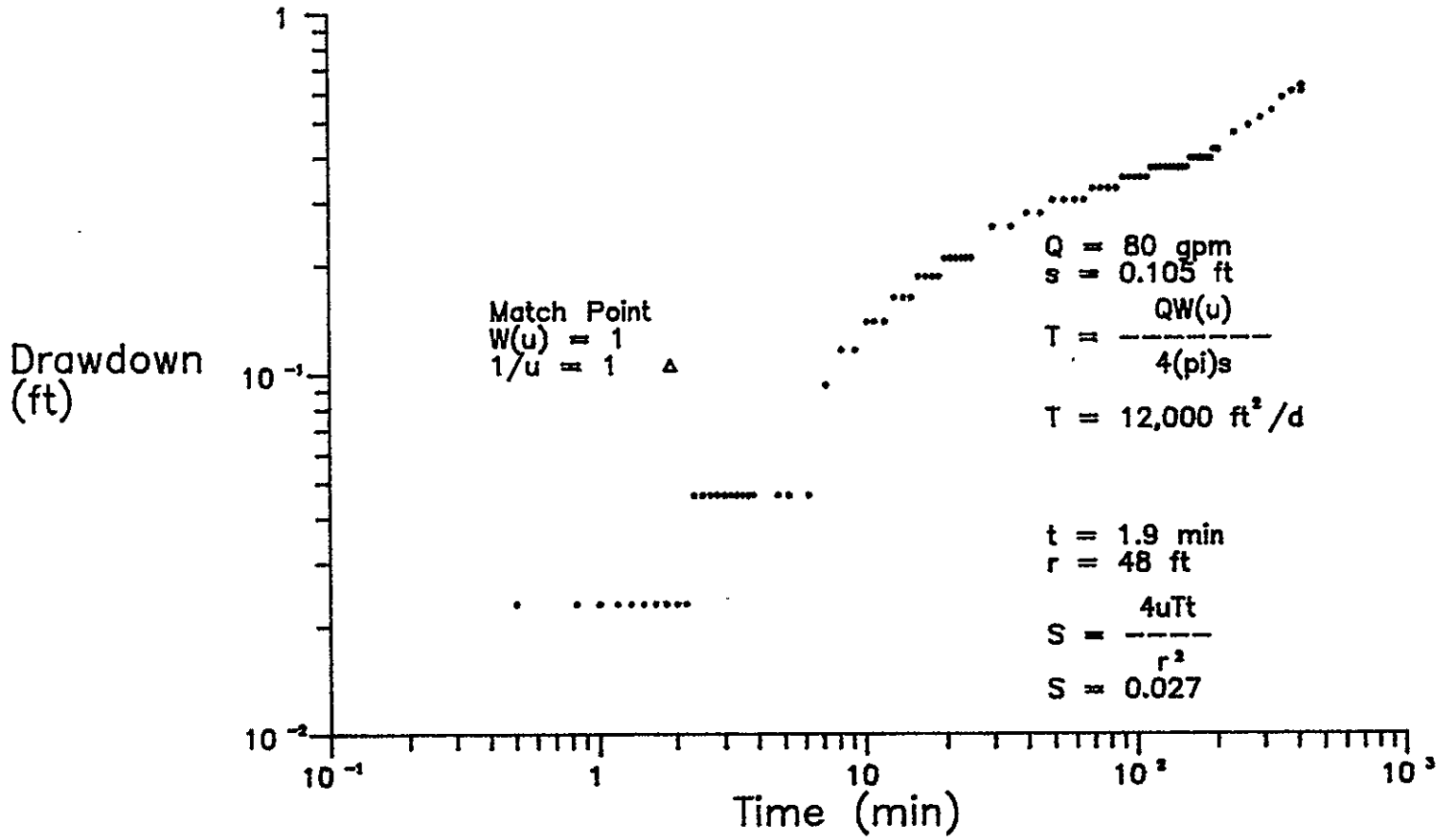
RCRA WELL 299-W15-16
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD8/20/87



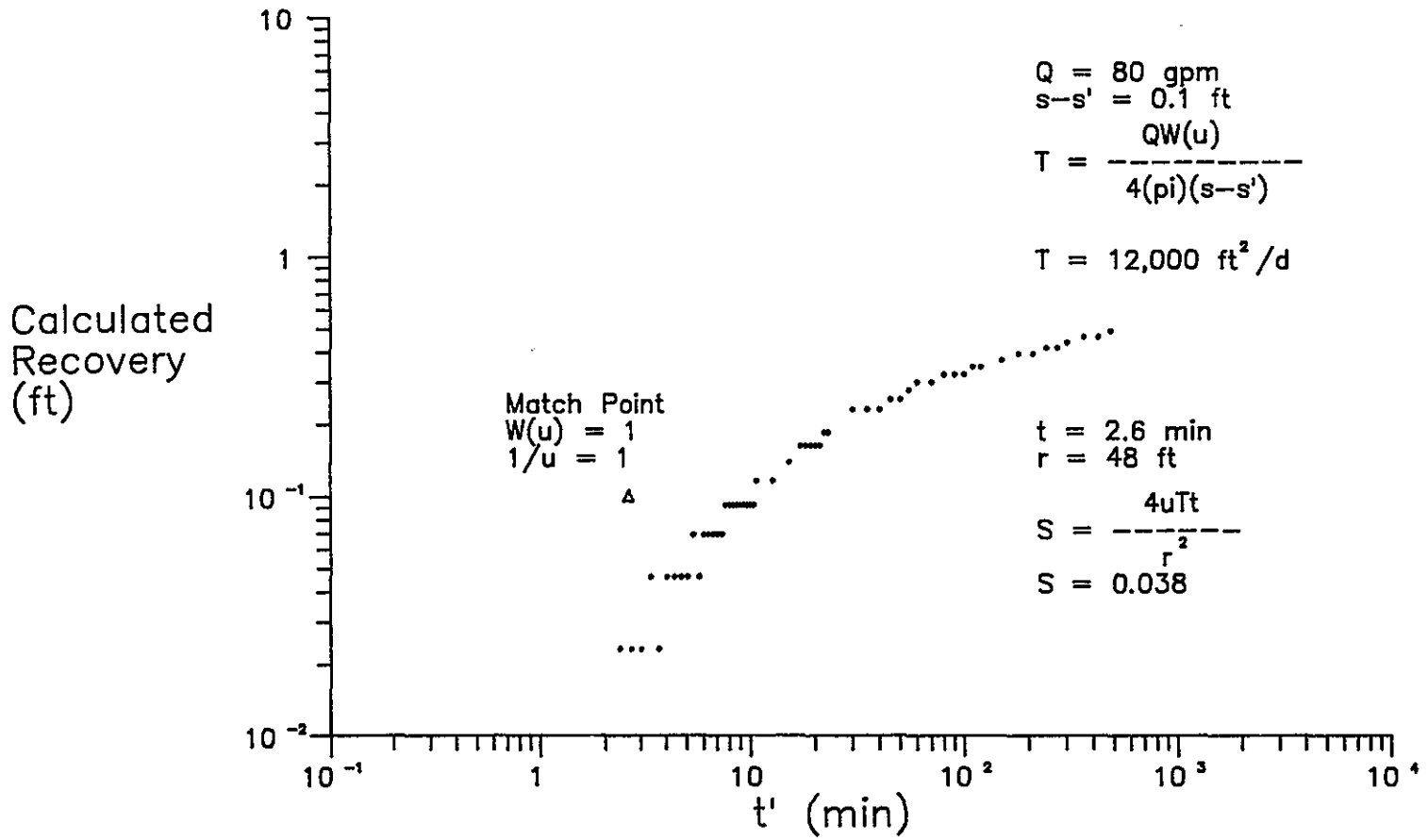
RCRA WELL 299-W15-16
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
8/20/87



RCRA OBSERVATION WELL 299-W15-17
CONSTANT-DISCHARGE DRAWDOWN TEST
THEIS METHOD
8/20/87



OBSERVATION WELL 299-W15-17
CONSTANT-DISCHARGE RECOVERY
THEIS METHOD
8/20/87



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Aquifer Test Data

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Data for Well 299-W15-16
Pumping Well 299-W15-16
Observation Wells 299-W15-17

Location RCRA 200 WEST
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER # 82-2-435 / 55 gal. drum
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/Stilling well 2.08' ABV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 233' ABV LSD
Pump On: date 8/20/87 time 13:30
Pump Off: date 8/20/87 time 2030
Duration of Aquifer Test 7 hr

Time t = 213.91 at t' = 0					Water Level Data Static Water Level 213.91					Discharge		Recorded By	Comments
Day	~~Clock Time~~ HH:MM:SEC	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/20	0:00				213.91			0					21936
	0:30				220.05			6.14					
	1:00				222.79			8.88					
	1:30				224.30			10.39					
	2:00				225.17			11.26					
	2:30				225.66			11.75					
	3:00				226.00			12.09					
	3:30				226.08			12.17					
	4:00				226.17			12.26					
	4:30				226.21			12.30					
	5:00				226.24			12.33					
	5:30				226.33			12.42					
	6:00				226.33			12.42					
	6:30				226.29			12.38					Drill working w/ leak
	7:00				226.32			12.41					in pipe
	7:30				226.27			12.36					
	8:00				226.24			12.33					
	8:30				226.24			12.33					
	9:00				226.32			12.41					
	9:30				226.40			12.49					total gals. time
	10:00				226.43			12.52			76		22010 — 13:10
	12:00				226.34			12.43					
	14:00				226.38			12.47					
	16:00				226.48			12.57					
	18:00				226.55			12.64					total gals time
	20:00				226.61			12.70			73		22093 13:50
	25:00				226.57			12.66					
	30:00				226.64			12.73			73		22156 14:00
	35:00				226.57			12.66					
	40:00				226.64			12.73			73		22229 14:10
	45:00				226.68			12.77					
	50:00				226.63			12.72			73		22302 14:20
	55:00				226.51			12.60					
	60:00				226.62			12.71			76		22373 14:30
	80:00				226.51			12.60					GW1- 8'5 measured
	100:00				226.26			12.35					w/ 55-gal drum.
	120				225.62			11.71			72.6		22801.0 1:58:20
	150												uncrossed ditch
	180												

Aquifer Test Data

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Data for Well 299-W15-16
Pumping Well 299-W15-16
Observation Wells 299-W15-17

Location RCRA 200 W
Type of Aquifer Test CONSTANT - DISCHARGE
How Q Measured FLOW METER #82-2-435 / 55 GAL. DRUM
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/ STILLING WELL 2.08' ABOV LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 233' BELOW LAND
Pump On: date 8/20/87 time 13:30
Pump Off: date 8/20/87 time 2030 hr
Duration of Aquifer Test 7 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 213.91					Discharge		Recorded By	Comments
Day	Min. Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	150				225.28			11.37					MEASURED DISCHARGE
	180				225.27			11.36					@ 77.7 GPM W/ 55
	210				225.27			11.36					GAL DRUM ~ 15:40 hrs.
	240				225.04			11.13			80.5	csc	
	270				225.10			11.19				csc	
	300				225.20			11.29				csc	
	360				225.35			11.44					
	420	0								247750		csc	Recovery
		:30										csc	
		1										csc	
		1:30			216.2			2.29				csc	
		2			~~216.2~~	215.33		1.42				csc	
		3											
		4			214.61			0.70				csc	
		5			214.45			0.54				csc	
		7											
		9											
		11			214.35			0.44				csc	
		13			214.33			0.42				csc	
		15											
		20			214.30			0.39				csc	
		25											
		30			214.27			0.36				csc	
		40			214.22			0.31				csc	
		45			214.25			0.34				csc	
		50			214.21			0.30				csc	
		55			214.19			0.28				csc	
		70			214.19			0.28				csc	
		80			214.16			0.25				csc	
	2200	90			214.15			0.24				csc	leaving for home
8/21	0700				214.08			0.17				JSW	

Aquifer Test Data

OBSERVATION WELL

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Data for Well 299-W15-17
Pumping Well 299-W15-16
Observation Wells 299-W15-17

Location RCRA 200 West
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER / 55 gal drum
How W.L.'s Measured E-TAPE - TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 3.1' AW LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 233' blw ~~AW~~ LSD
Pump On: date 8/20/87 time 1930 hrs
Pump Off: date 8/20/87 time 2030 hrs
Duration of Aquifer Test 7 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 215.0 T/C					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
8/20	1930	0			215.0	from 2. 6.88		0		~	80	CSC	TRANSDUCER SET
		15			215.15			.15				CSC	222' below T/C
		20			215.19			.19				CSC	TRANSDUCER ON
		25			215.21			.21				CSC	10 sec intervals
		30			215.22			.22				CSC	only ~2' open
		40			215.23			.23				CSC	between bottom
		50			215.26			.26				CSC	12" casing + Bottom
		60			215.28			.28				CSC	of hole
		70			215.28			.28			81.5	CSC	Pumped well was
		80			215.28			.28	55 gal. drum			CSC	~8' screen exposed
		90			215.29			.29				CSC	55 gal / 41 + 40 sec
		100		1	215.28			.28				CSC	
		110			215.30			.30				CSC	
		120			215.30			.30			77	CSC	increased rate
		150			215.31			.31				CSC	to bring up to ~80 gpm
	180 210	180			215.36	215.33		.36	.33		80.5	CSC	55 gal / 41 sec
		240			215.38			.38				CSC	
		270			215.41			.41				CSC	
		300			215.45			.45				CSC	
		360			215.50			.50				CSC	
	2030	420	0									CSC	START RECOVERY
		427	7	61	215.5			.50				CSC	
		440	20	22	215.41			.41				CSC	
		445	25	17.8	215.39			.39				CSC	
		455	35	13	215.35			.35				CSC	
		460	40	11.5	215.34			.34				CSC	
		475	55	8.6	215.30			.30				CSC	
		500	80	6.3	215.27			.27				CSC	
		510	90	5.7	215.25			.25				CSC	

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AQUIFER TEST SUMMARY FOR WELL 299-W15-17

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery ( )

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 213 ft. Bottom: 442 ft.

Depth of Screened Interval in Pumped Well, Top: 422.5 ft.
Bottom: 432.5 ft.

Observation Well Used: 299-W15-16 Distance to Pumped Well: 48 ft.
Elevation (Depth) of Screened Interval, Top: 208 ft. Bottom: 238 ft.

Date of Test: 09/28/87 Start Time of Test: 1445 hr
Pumping Rate: 6 gpm Duration of Test: 360 min

Pre-test Water-level Elevation (Depth): 212.72 ft.

Remarks: The data indicate that drawdown in the pumping well is mainly attributed to casing storage effects caused by the well configuration (screen open to the bottom of the aquifer). The drawdown and recovery data from the pumping well are insufficient for analysis. No response was observed in the observation well during pumping.

Aquifer Test Data

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Data for Well 299-W15.17
Pumping Well 299-W15-17
Observation Wells

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT DISCHARGE
How Q Measured 5 gal bucket
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/STILLING WELL 2.0' LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 423' ABV LSD
Pump On: date 9/28/87 time 1445 hr
Pump Off: date " time 1945 hr
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 214.72					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	1445	0											
		:30											
		1			215.00			0.28				CSC	
		1:30											
		2			217.77			3.05					
		3			220.80			6.08					
		4											
		5			223.70			8.98			6 gpm		5 gal/50 sec
		7			226.55			11.83					
		9											
		11			229.52			14.80					
		13			230.60			15.88					
		15			231.42			16.70					
		26			233.00			18.28					
		30			233.38			18.66					
		36			233.64			18.92					
		45			233.77								
		50			233.55						6		Put tygon tubing
		60			233.57								wash all probe
		70			233.55								good reading
		80			233.56							CSC	
		90			233.50			18.78			5.5	CSC	
		100			233.52							CSC	
		110			233.52							CSC	
		120			233.54							CSC	
		150			233.56							CSC	
		180			233.57			18.85				CSC	
		210			233.51							CSC	
		240			233.89						6	CSC	
		270			233.85							CSC	
		300			233.95			19.23			6.7	CSC	
		360			233.98								

Aquifer Test Data

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Data for Well 299-W15-17
Pumping Well 299-W15-17
Observation Wells 299-W15-16

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured 5 gal calibrated bucket
How W.L.'s Measured E-TAPE / TRANSDUCER
Depth of Pump/~~Airpipe~~ 423' below lsd
Rad./Dist. of/From Pumping Well
Pump On: date 1445 hr time 9/28/87
Meas. Point for W.L.'s T/STILLING WELL 2.0' lsd
Pump Off: date 9/28/87 time 2045 hr
Elevation of Meas. Point
Duration of Aquifer Test 6 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 214.72					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
1/28	2045		0		233.98								3" diameter
			.30		232.4								Pump Column
			1										8" diameter casing
			1:30										
			2		229.28								
			3		227.41								
			4		225.88								
			5		224.10								
			8		221.08								
			9		220.17								
			11		218.94								
			13		217.87								
			15		217.11								
			20		215.98								
			25		215.39								
			30		215.05								
			35		214.90								
			40		214.82								
			45		214.80								
			50		214.78								
			60		214.78								

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Aquifer Test Data

OBSERVATION WELL

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Data for Well 299-W15-16
Pumping Well 299-W15-17
Observation Wells 299-W15-16

Location 200 RCRA WEST
Type of Aquifer Test CONSTANT
How Q Measured
How W.L.'s Measured E-TAPE / TRANSDUCER
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.25' ABV LSD
Elevation of Meas. Point

Depth of Pump/~~Airline~~ 423 below lsd
Pump On: date 7/28/87 time 1445
Pump Off: date 7/28/87 time 2045
Duration of Aquifer Test 6 hr

Time t = _____ at t' = 0					Water Level Data Static Water Level 214.50' T/c					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
7/28	1445	0			214.50							CSC	
		37			214.50							CSC	
		57			214.50							CSC	
		155			214.48							CSC	
		181			214.46								
		310			214.48								
			28		214.47								

AQUIFER TEST SUMMARY FOR WELL 299-W15-18

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 212 ft. Bottom: 455 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 232 ft. Bottom: 242 ft.

Observation Well Used: 299-W18-4 Distance to Pumped Well: 355 ft.
Elevation (Depth) of Screened Interval, Top: 197 ft. Bottom: 254 ft.

Date of Test: 07/21/87 Start Time of Test: 1300 hr
Pumping Rate: 87 gpm Duration of Test: 450 min

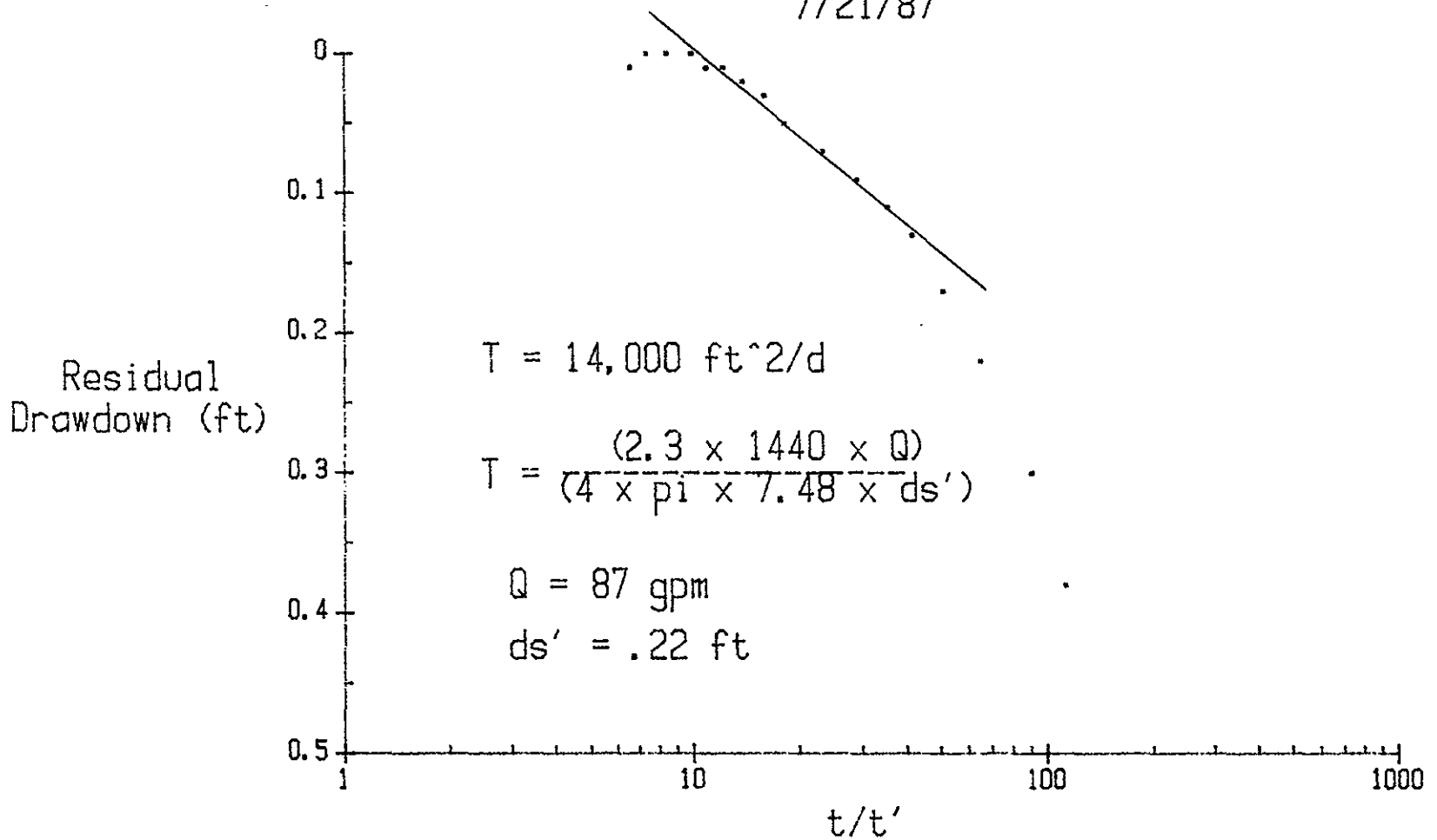
Pre-test Water-level Elevation (Depth): 211.80 ft.

Analysis Methods and Results:

Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Recovery (Cooper and Jacob 1946) Pumping Well	14,000	58	NA

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The drawdown data indicate that well entrance loss occurred during pumping. Drawdown in the observation well was insignificant.

RCRA WELL 299-W15-18
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
7/21/87



Aquifer Test Data

page 1 of 2

Data for Well 2-W15-18
Pumping Well 2-W15-18
Observation Wells 2-W18-4

Location 200 West RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/C
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 225' LSD
Pump On: date 7/21/87 time 1300
Pump Off: date 7/21/87 time 2030
Duration of Aquifer Test 7.5 hrs

Time t = ____ at t' = 0					Water Level Data Static Water Level 215.0 MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	1300	0								177695		csc	FLOW METER
		30			—							csc	#82-2-435
		1			—								
		1:30			219.4			4.40			79	csc	178090
		2			220.46			5.46				csc	177695
		3			221.41			6.41				csc	395
		4			221.90			6.90				csc	
		5			222.09			7.09		178090		csc	
		7			222.00			7.00				csc	
		10			222.18			7.18				csc	
		11			—								180515
		13			222.21			7.21			89.8	csc	177090 177695
		15			222.15			7.15				csc	2425
		20			222.10			7.10				csc	
		25			222.07			7.07				csc	
		30			221.86			6.86				csc	
		32			—					180515	85	csc	at 33min Flow 180600
		35											
		40			221.85			6.85				csc	
												csc	171375
		50			221.78			6.78			85.6	csc	132060
		60			221.80			6.80		187526		csc	Russ Core collected
		70			221.75			6.75		183795	86.5	csc	Samples every hr
		80			221.81			6.81			86.5	csc	
		90			221.81			6.81		185515	86.4	csc	
		100			221.81			6.81		186390	86.5	csc	
		110			221.82			6.82		187415	86.25	csc	
		120			221.87			6.87		189110	86.9	csc	Russ Core sampled
		150			221.90			6.90		191090	86.2	csc	
		180			221.90			6.90		193290	86.5	csc	Russ Core Sampled
		210			221.96			6.96		195395	86.8	csc	
		240			221.94			6.94		198510	87.2	csc	
		270			221.97			6.97		201390	87.3	csc	
		300			221.98			6.98		203750	87.4	csc	
		330			222.0			7.00		206370	87.3	csc	
		360			222.05			7.05		209005	87.8	csc	
		390			221.86			6.86		211625	87.3	csc	Grout running through
		420			221.85			6.85		214225	86	csc	
		450			221.86			6.86		216785		csc	

869 gpm avg. discharge

Aquifer Test Data

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Data for Well 2-W15-18
Pumping Well 2-W15-18
Observation Wells 2-W18-4

Location 200 West TRCRA
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured FLOWMETER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s Top of casing
Elevation of Meas. Point

Depth of Pump/Airpipe 225' LSA
Pump On: date 7/21/87 time 1300 hrs
Pump Off: date 7/21/87 time 2030 hrs
Duration of Aquifer Test 7.5 hrs

Time t = 450 at t' = 0					Water Level Data Static Water Level 215.0					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	2030	450	0	—			221.86	6.86		216785		CSC	
		450.5	.30	901			217.8	2.8				CSC	
		451	1	451								CSC	
		451.5	1.30	301			216.24	1.24				CSC	
		452	2	226			215.93	.93				CSC	
		453	3	151			215.65	.65				CSC	
		454	4	112.5			215.38	.38				CSC	
		455	5	91			215.30	.30				CSC	
		457	7	65.3			215.22	.22				CSC	
		459	9	51			215.17	.17				CSC	
		461	11	41.9			215.13	.13				CSC	
		463	13	35.6			215.11	.11				CSC	
		465	15	29.1			215.09	.09				CSC	
		470	20	23.5			215.07	.07				CSC	
		476	26 25	18.3			215.05	.05				CSC	
		480	30	16			215.03	.03				CSC	
		485	35	13.9			215.02	.02				CSC	
		490	40	12.25			215.01	.01				CSC	Radiation Monitors
		495	45	11			215.01	.01				CSC	check us out
		500	50	10			215.0	0				CSC	leaving E-Tapes
		510	60	8.5			215.0	0				CSC	in well because
		520	70	7.4			215.0	0				CSC	of wind
		530	80	6.6			215.01	.01				CSC	
	0745	1125					215.16						

Aquifer Test Data

OBSERVATION WELL

page 1 of 2

Data for Well 299-W18-4
Pumping Well 299-W15-18
Observation Wells 299-W18-4

Location 200 West RCRA
Type of Aquifer Test Constant Discharge Test
How Q Measured Flow meter
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well ~400' (recently measured)
Meas. Point for W.L.'s Top of Casing
Elevation of Meas. Point 2.05' above LS

Depth of Pump/Airpipe
Pump On: date 7/21/92 time
Pump Off: date time
Duration of Aquifer Test
Measurements made for 5 Days

Actual Time	Time t = ____ at t' = 0: Day	Clock Time	t	t'	t/t'	Water Level Data, Static Water Level 214.31': Reading	Conversions or Corrections	Water Level	s or s'		Discharge: Reading	Q	Recorded By	Comments
1252:30	0	00				214.31			0				SD	
1259:00	0	30				214.30			-.01					
1259:30	1	00				214.31			0					
1300:00	1	30				214.30			-.01					
1300:30	2	00				214.31			0					
1301:00	2	30				214.31			0					
1301:30	3	00				214.31			0					
1302:30	4					214.31			0					
1303:30	5					214.31			0					
1304:30	6					214.31			0					
1305:30	7					214.31			0					
1306:30	8					214.31			0					
1308:30	10					214.31			0					
1310:30	12					214.31			0					
1312:30	14					214.32			.01					
1314:30	16					214.32			.01					
1316:30	18					214.32			.01					
1318:30	20					214.32			.01					
1323:30	25					214.33			.02					
1328:30	30					214.33			.02					
1333:30	35					214.33			.02					
1338:30	40					214.34			.03					
1343:30	45					214.34			.03					
1348:30	50					214.34			.03					
1358:30	1	00:00				214.35			.04					
1408:30	1	10:00				214.34			.03					
1418:30	1	20:00				214.35			.04					
1428:30	1	30:00				214.35			.04					
1443:30	1	45:00				214.35			.04					
1458:30	2	00:00				214.35			.04					
1528:30	2	30:00				214.35			.04					
1558:30	3	00:00				214.34			.03					
1628:30	3	30:00				214.34			.03					
1658:30	4	00:00				214.33			.02					
1728:30	4	30:00				214.32			.01				CSC	
1758:30	5	00:00				214.30			-.01				TG	
1828:30	5	30:00				214.30			-.01					
1858:30	6	00:00				214.31			0					

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Aquifer Test Data

page 2 of 2

Data for Well 299-W18-4
Pumping Well 299-W15-18
Observation Wells 299-W18-4

Location 200 West
Type of Aquifer Test Constant Discharge Test
How Q Measured Flow Meter
How W.L.'s Measured E-Tape #10998
Rad./Dist. of/From Pumping Well ~400'
Meas. Point for W.L.'s Top of Casing
Elevation of Meas. Point 2.65' above LS.

Depth of Pump/Airpipe 225' LSD
Pump On: date 7/21/97 time 1300
Pump Off: date 7/21/97 time 2030
Duration of Aquifer Test 7.5 hrs

Actual Time	Time t = ____ at t' = 0					Water Level Data Static Water Level 214.31'					Discharge		Recorded By	Comments
	Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
19:28:30	6	:30	:00			214.32			.01				TG	[illegible]
19:58:30	7	:00	:00			214.33			.02					
20:28:30	7	:30	:00	0		214.35			.04					
				150		214.35			.04				TG	Recovery
				1		214.35			.04					
				130		214.34			.03					
				2		214.34			.03					
				3		214.34			.03					
				4		214.34			.03					
				5		214.34			.03					
				7		214.33			.02					
				9		214.31			0					
				11		214.32			.01					
				13		214.32			.01					
				15		214.32			.01					
				20		214.31			0					
				25		214.31			0					
				30		214.31			0					
				35		214.31			0					
				40		214.30			-.01					
				45		214.30			-.01					
				50		214.30			-.01					
				55		214.30			-.01					
				60		214.30			-.01					
									.15					
		0925		1167		214.46								

AQUIFER TEST SUMMARY FOR WELL 299-W18-21

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 195 ft. Bottom: 445 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 215.5 ft.
Bottom: 225.5 ft.

Observation Well Used: 299-W18-22 Distance to Pumped Well: 48 ft.
Elevation (Depth) of Screened Interval: Drilled to a depth of 205 ft (no screen) for aquifer tests.

Date of Test: 07/14/87 Start Time of Test: 1500 hr
Pumping Rate: 58 gpm Duration of Test: 480 min

Pre-test Water-level Elevations (Depth):
Pumping Well: 195.33 ft.
Observation well: 196.15 ft.

Analysis Methods and Results:

Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Constant Discharge (Cooper and Jacob 1946) Pumping Well	1,300	5	NA
Recovery (Cooper and Jacob 1946) Pumping Well	51,000	200	NA

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The drawdown data indicate that well entrance loss occurred during pumping, and that boundary effects influenced the test. No response was observed in the observation well.

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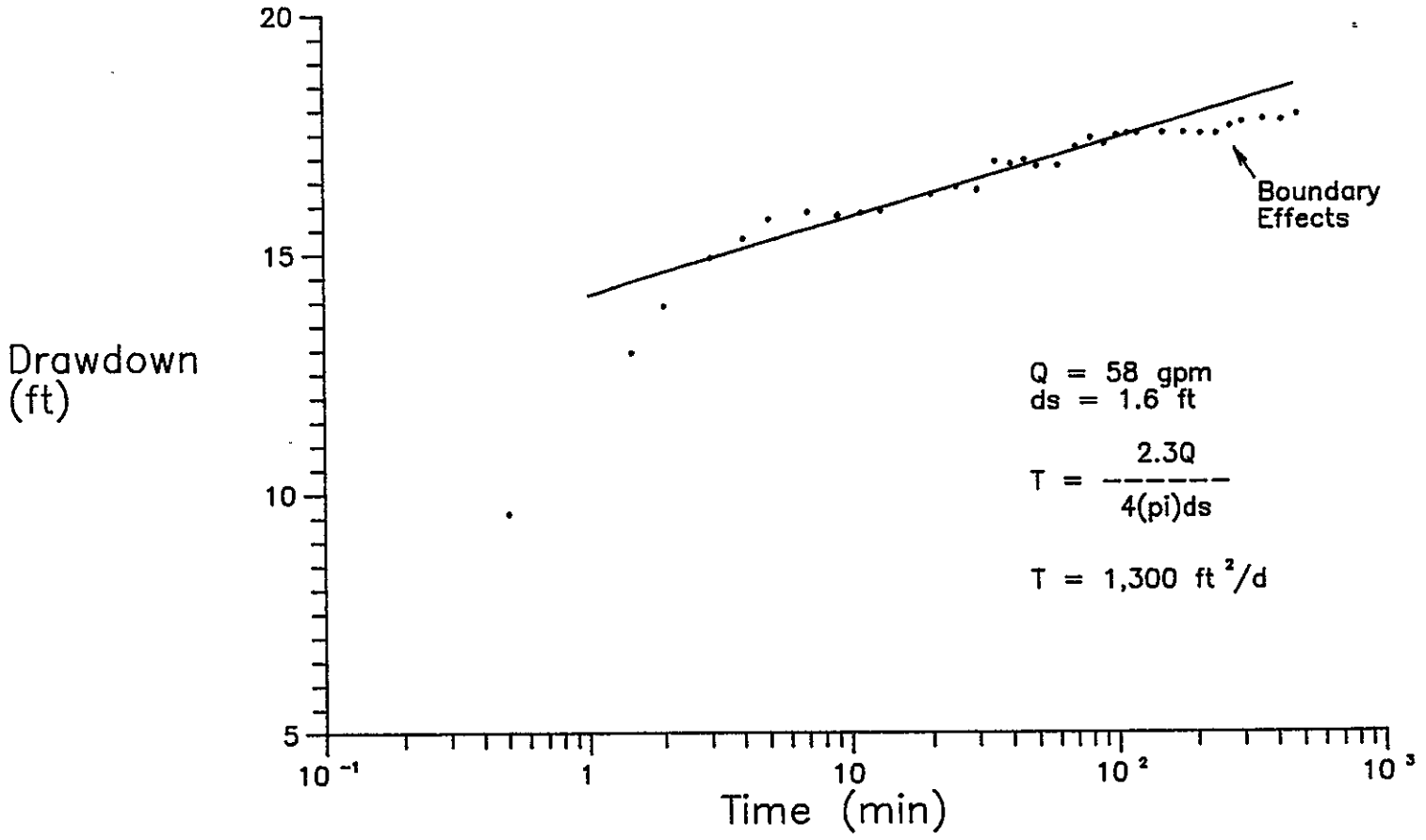
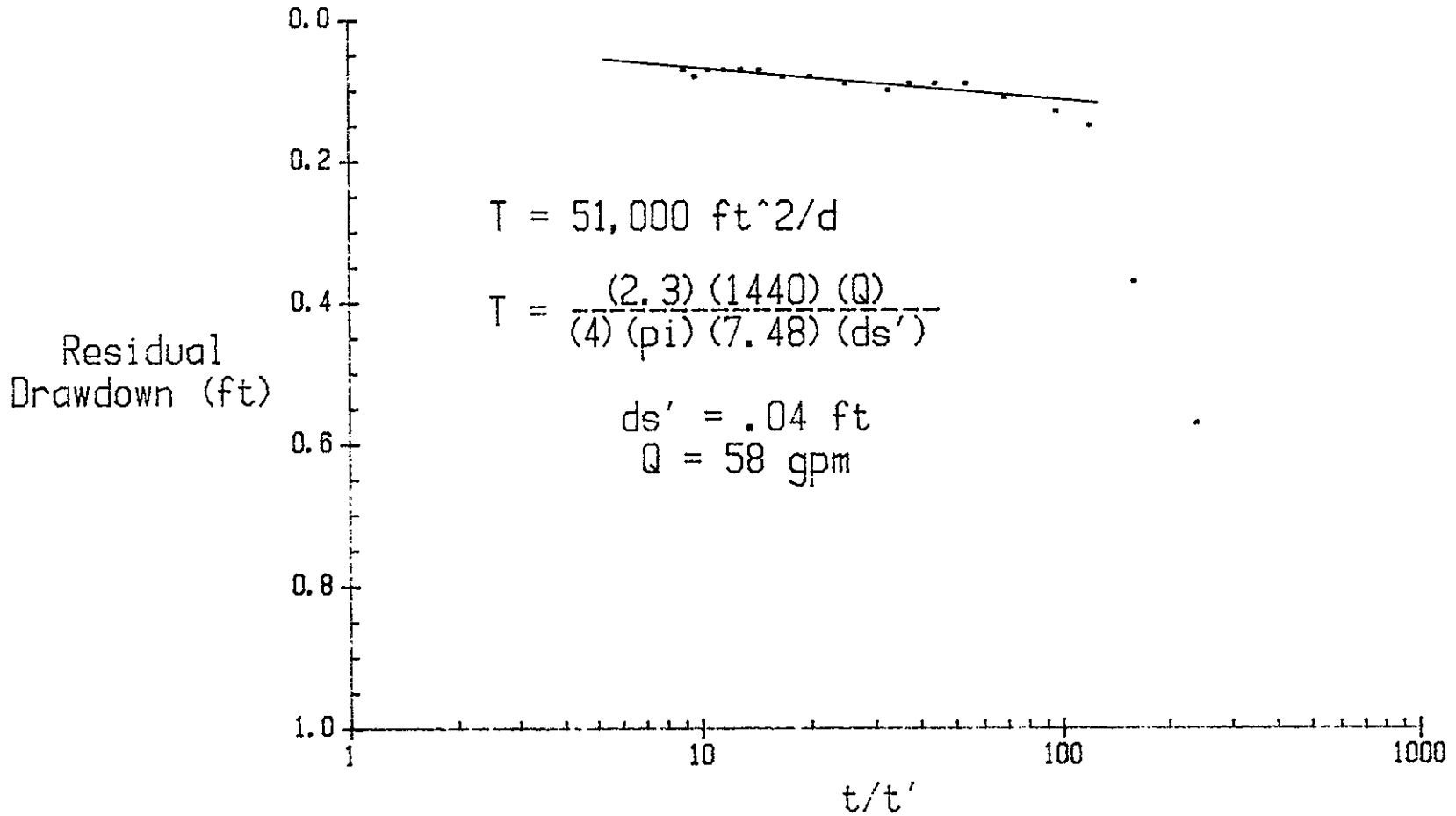
RCRA WELL 299-W18-21
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
7/14/87



RCRA WELL 299-W18-21
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
7/14/87



$$T = 51{,}000 \text{ ft}^2/\text{d}$$

$$T = \frac{(2.3)(1440)(Q)}{(4)(pi)(7.48)(ds')}$$

ds' = .04 ft
Q = 58 gpm

Aquifer Test Data

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Data for Well 299-W18-21
Pumping Well 2 W18-21
Observation Wells 2 W18 22

Location 200 West RCRA
Type of Aquifer Test ~~CONSTANT-DISCHARGE~~ step dd
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE / STEEL TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/C 2.9' ABV LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 330' TO INTAKE
Pump On: date 7/14/87 time
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 198.49					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
		0								010162	5		FLOW METER
		:30					199.64						#82-2-435
		1											
		1:30											Adjusting valve
		2					199.81						
		3					200.06						flowmeter not
		4					200.19						registering
		5					200.10						
		7					200.09						
		9					200.03						
		10											
		13											
		100					210.95				38		5.06 gal/8sec
		1:30											
		2					212.27						
		3					212.76						
		4											
		5					213.26						
		7					213.43						
		9					213.73						
		11					213.66						
		13					213.84						
		15					213.92						
		20					214.0						
		25					214.11						
		30					214.12						
		35					214.17						
		40					214.19						
		45					214.06						
		50					214.28						
		55					214.26						
		100					214.28						
		0											
		20			open full								Recovery
Recovery		:30					205.24						
		1:00					201.64						
		1:30					199.28						
		2					198.76						
		3					198.60						

Aquifer Test Data

page 2 of 2

Data for Well 299-W18-21
Pumping Well 299-W18-21
Observation Wells 299-W18-22

Location 200 West
Type of Aquifer Test ~~Constant discharge~~ step dd/recovery
How Q Measured Flow meter
How W.L.'s Measured Etape / steel tape
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/C 24' above LS
Elevation of Meas. Point

Depth of Pump/Airpipe 220' to intake
Pump On: date 7-14-87 time
Pump Off: date 7-14-87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 198.49					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
Recovery –	4						198.57						
	5						198.57						
	7						198.52						
	9						198.51						
	12						198.51						
	15						198.50						
	20						198.50						
	25						198.49						
	30						198.47						
	35						198.42						
	40						198.45						
	45						198.44						
	50						198.44						
	55						198.44						
	60						198.45						

Aquifer Test Data

OBSERVATION WELL

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Data for Well 2-W18-22
Pumping Well 2-W18-21
Observation Wells 2-W18-22

Location 200 WEST RCRA
Type of Aquifer Test Step-drawdown
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE / STEEL TAPE
Rad./Dist. of/From Pumping Well 48 ft
Meas. Point for W.L.'s T/c (3.1 ft. above L.S.)
Elevation of Meas. Point

Depth of Pump/Airpipe 220' to INTAKE
Pump On: date 7/14/87 time
Pump Off: date time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 199.32 ft TOC					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
7/14	30				199.3		199.43						
	1:00				199.3								
	1:30				199.3								
	2:00				199.3								
	3				199.3								
	4				199.29								
	5				199.29								
	7				199.30								
	9				199.30								
	10				199.30								
	1:30				199.30								
	1:45				"								
	1:60				199.30								
	1:30				199.30								
	2:00				199.295								
	3				199.3								
	4				199.3								
	5				199.3								
	7				199.3								
	9				199.3								
	11				199.29								
	13				199.29								
	15				199.30								
	20				199.30								
	25				199.30								
	30				199.30								
	35				199.30								
	40				199.30								
	45				199.28								
	50				199.28								
	55				199.27								
	60				199.27								
	65				199.27								
	70				199.27								
	70:30				199.27								
	71:00				199.27								
	72:00				199.27								
	75				199.27								
	80				199.27								

Aquifer Test Data

page 2 of 2

Data for Well 2-W-18-22
Pumping Well 2-W-18-21
Observation Wells

Location 200 West
Type of Aquifer Test Step-drawdown
How Q Measured Flowmeter
How W.L.'s Measured E-tape - Steel tape
Rad./Dist. of/From Pumping Well 48'
Meas. Point for W.L.'s T/C 3.1' above L.S.
Elevation of Meas. Point

Depth of Pump/Airpipe 220' to intake
Pump On: date 7-14-87 time
Pump Off: date 7-14-87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	85				197.27								
	90				179.25								

Aquifer Test Data

page 1 of 2

Data for Well 2-W19-21
Pumping Well 2-W18-21
Observation Wells 2 W 18-22

Location 200 West RCRA
Type of Aquifer Test CONSTANT DISCHARGE
How Q Measured FLOW METER / 5 gal bucket
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s T/TRCMMIS 2.9' abv LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 220'
Pump On: date 7/14/87 time 1500 hr
Pump Off: date 7/14/87 time 2300 hr
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 198.42					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or ~~s'~~		Reading	Q		
	1500	0								101625	47 gpm		# 82-2-435
		:30					208.0	9.57				csc	
		1											
		1.30					211.37	12.94				csc	
		2					212.34	13.91				csc	
		3					213.35	14.92				csc	
		4					213.75	15.32				csc	
		5					214.15	15.72				csc	
		7					214.3	15.87				csc	
		9					214.22	15.79				csc	102210 @ 10 min
		11					214.28	15.85				csc	(58.5 gpm)
		13					214.32	15.89				csc	
		15											
		20					214.67	16.24				csc	
		25					214.92	16.39				csc	
		30					214.75	16.32				csc	
		35					215.35	16.92				csc	
		40					215.29	16.86				csc	
		45					215.38	16.95				csc	
		50					215.25	16.82				csc	
		60					215.26	16.83				csc	104640 @ 52 min
		70					215.65	17.22					(56.5 gpm)
		80					215.84	17.41					
		90					215.71	17.28					105859 @ 73 min
		100					215.89	17.46				csc	(58 gpm)
		110					215.93	17.50				csc	106380 @ 82 min
		120					215.93	17.50					(57.9 gpm)
		150					215.94	17.51					107720 @ 105 min
		180					215.94	17.51					(58.3)
		210					215.92	17.49					108810 @ 124
		240					215.92	17.49				EJJ	(57.4)
		270					216.08	17.65				EJJ	110595 @ 155 min
		300					216.16	17.73				EJJ	(57.6 gpm)
		360					216.22	17.79				EJJ	112315 @ 185 min
		420					216.20	17.77				EJJ	(57.3 gpm)
	2300	480					216.32	17.89				EJJ	114080 @ 215 min
													(57.2 gpm)
													115780 @ 245 min

AVG 57.8 gpm

12614 @ 420
FINAL → 129350 @ 480

117520 @ 275 min
119200 @ 305 min
122690 @ 3-5 min

Aquifer Test Data

page 2 of 2

Data for Well 2-W18-21
Pumping Well 2-W18-21
Observation Wells 2-W18-22

Location 200 W RCRA
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP TRANSMIC 2.91' A&J
Elevation of Meas. Point _____ LSD

Depth of Pump/~~Airpipe~~ 220'
Pump On: date 7/14/87 time 1500 hrs
Pump Off: date 7/14/87 time 2300 hrs
Duration of Aquifer Test _____

Time t = ____ at t' = 0					Water Level Data Static Water Level 198.43					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
		480	0		216.32			17.89		EJT			
			234										
		481	1	481	203.35			5.42		EJT			
		481.5	1:30	321	199.95			1.52		EJT			
		482	2	241	199.00			.57		EJT			
		483	3	161	198.80			.37		EJT			
		484	4	121	198.58			.15		EJT			
		485	5	97	198.56			.13		EJT			
		487	7	69.6	198.54			.11		EJT			
		489	9	54.3	198.52			.09		EJT			
		491	11	44.6	198.52			.09		EJT			
		493	13	37.9	198.52			.09		EJT			
		495	15	33	198.53			.10		EJT			
		500	20	25	198.52			.09		EJT			
		505	25	20.2	198.51			.08		EJT			
		510	30	17	198.51			.08		EJT			
		515	35	14.7	198.50			.07		EJT			
		520	40	13	198.50			.07		EJT			
		525	45	11.7	198.50			.07		EJT			
		530	50	10.6	198.50			.07		EJT			
		535	55	9.7	198.51			.08		EJT			
		540	60	9	198.50			.07		EJT			
			70										
			80										
			90										

Gave 200' 11053 to Sagamore 7/15/87

260

9011717/30437

Aquifer Test Data

page 1 of 2

Data for Well 2-W18-22

Pumping Well 2-W18-21

Observation Wells

Location 200 West

Type of Aquifer Test Constant discharge DD

How Q Measured Flowmeter

How W.L.'s Measured E-tape - steel tape

Rad./Dist. of/From Pumping Well 48'

Meas. Point for W.L.'s T/c 3.1' above L.S.

Elevation of Meas. Point

Depth of Pump/Airpipe

Pump On: date 7-14-87 time 14:58

Pump Off: date 7-14-87 time

Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	1				199.25							SJT	
	2				199.25								
	3				199.25								
	4				199.25								
	5				199.25								
	7				199.24								
	9				199.24								
	11				199.23								
	13				199.23								
	15				199.23								
	20				199.23								
	25				199.23								
	30				199.23								
	35				199.23								
	40				199.23								
	45				199.23								
	50				199.23								
	55				199.23								
	60				199.23								
	70				199.23								
	80				199.23								
	90				199.22								
	100				199.23							✓	
	110				199.23								
	120				199.22						/	CSC	
	150				199.24							CSC	
	180				199.25							CSC	
	210				199.25							CSC	
	240				199.23							EJT	
	270				199.22							EJT	
	300				199.24							EJT	
	360				199.23							EJT	
	420				199.24							EJT	
	480				199.23							EJT	
	540												

Aquifer Test Data

page 2 of 2

Data for Well 2-W18-22
Pumping Well 2W 18-21
Observation Wells 2-W18-22

Location 200 West
Type of Aquifer Test Constant - Discharge Recovery
How Q Measured Flowmeter
How W.L.'s Measured E-tape - Steel tape
Rad./Dist. of/From Pumping Well 48'
Meas. Point for W.L.'s T/C 3.1' above L.S.
Elevation of Meas. Point

Depth of Pump/Airpipe
Pump On: date 7-14-87 time 14:58
Pump Off: date 7-14-87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level ____					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
			5				199.23					EJJ	
			10				199.25					EJJ	
			15				199.24					EJJ	
			20				199.24					EJJ	
			25				199.24					EJJ	
			30				199.25					EJJ	
			35				199.24					EJJ	
			40				199.25					EJJ	
			45				199.25					EJJ	
			50				199.24					EJJ	
			55				199.24					EJJ	
			60				199.24					EJJ	

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9 0 1 1 7 7 3 0 4 9 0

AQUIFER TEST SUMMARY FOR WELL 299-W18-22

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge ( ) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 197 ft. Bottom: 445 ft.

Depth of Screened Interval in Pumped Well, Top: 437.5 ft.
Bottom: 447.5 ft.

Observation Well Used: 299-W18-21 Distance to Pumped Well: 48 ft.
Elevation (Depth) of Screened Interval, Top: 195.5 ft. Bottom: 225.5 ft.

Date of Test: 08/26/87 Start Time of Test: 0715 hr
Pumping Rate: 51 gpm Duration of Test: 480 min

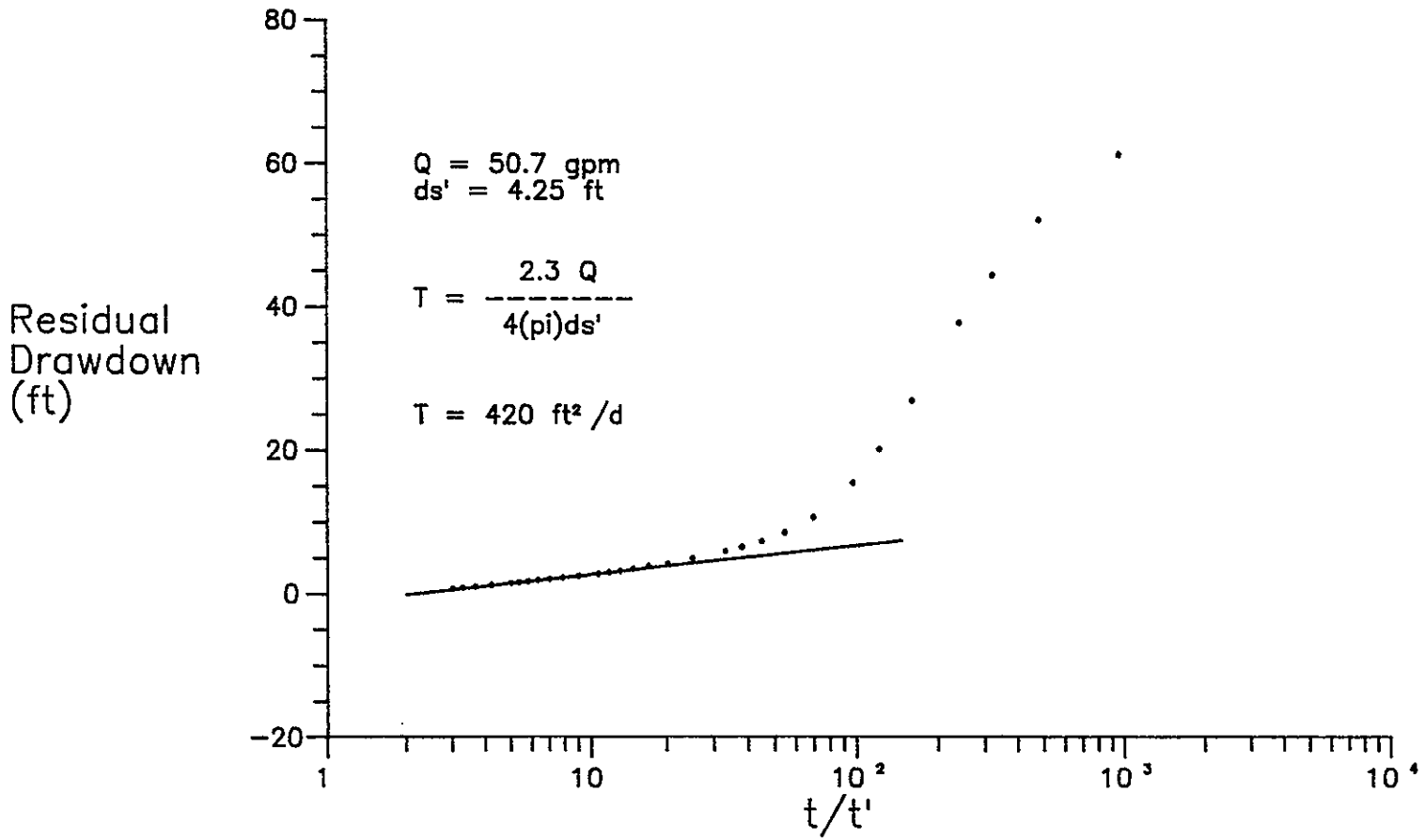
Pre-test Water-level Elevations (Depths):
Pumping Well: 196.80 ft.
Observation Well: 196.41 ft.

Analysis Method and Results:

Method	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Recovery (Cooper and Jacob 1946) Pumping Well	420	1.7	NA

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The data indicate that drawdown in the pumping well is mainly attributed to casing storage effects caused by the well configuration (screen open to the bottom of the aquifer). No response was observed in the observation well during pumping.

RCRA WELL 299-W18-22
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
8/26/87



Aquifer Test Data

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Data for Well 299-W18-22
Pumping Well 299-W18-22
Observation Wells

Location RCRA 200 WEST
Type of Aquifer Test CONSTANT DISCHARGE
How Q Measured FLOWMETER
How W.L.'s Measured E-TAPE / TRANSDUCER (in obs. well)
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s STILLING WELL 2.25' LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 442.92' LSD
Pump On: date 8/26/87 time 0715 hrs
Pump Off: date 8/26/87 time 1515 hr
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 199.05' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'	Corrected s-s'/2m	Reading	Q		
8/26	0715	0			199.05			0		255520		CSC	ALLOWED TO RECOVER
		:30			N/A							CSC	OVERNIGHT
		1			"							CSC	E-Tape "hung-up"
		1:30			"							CSC	in stilling well
		2			"							CSC	
		3			"							CSC	8" CASING
		4			"							CSC	3.25" O.D.
		5			"							CSC	Pump column
		7			263.79			64.74	56.36			CSC	
		9			265.4			66.35	57.55			CSC	
		11			266.09			67.04	58.05			CSC	
		13			266.0			66.95	57.99			CSC	
		15			266.11			67.06	58.07			CSC	
		20			266.70			67.65	58.50			CSC	24 min. 256785
		25			267.38			68.33	58.99			CSC	52.7 gpm
		30			267.65			68.60	59.19			CSC	
		35			267.83			68.78	59.32			CSC	
		40			267.90			68.85	59.37			CSC	
		45			267.92			68.87	59.38			CSC	
		50			267.96			68.91	59.41	258070		CSC	49.4 gpm @ 50 min.
		60			268.21			69.16	59.59			CSC	
		70			268.24			69.19	59.62			CSC	54.1 gpm 55 gal drum
		80			268.37			69.32	59.71			CSC	259316 @ 75 min.
		90			268.45			69.40	59.77			CSC	(49.4)
		100			268.75			69.70	59.98			CSC	
		110			269.00			69.95	60.16			CSC	261210 @ 112 min.
		120			268.80			69.75	60.02			CSC	(51.4 gpm)
		150			269.91			70.86	60.82			CSC	261705 @ 123 min
water sample collected		180			269.94			70.89	60.84			CSC	(45 gpm) opened
		210			269.60			70.55	60.60			CSC	valve slightly
		240			272.5			73.45	62.66			CSC	263160 152 min.
		270			272.93			73.88	62.91			CSC	(50.2 gpm)
		300			272.84			73.79	62.90	270640	51	CSC	264410 177 min
water sample		360			273.67			74.62	63.48	273710	51.2	CSC	(50.0)
		420			272.20			73.15	62.45	276805	51.6	CSC	265990 @ 209 min.
cut back discharge		480			271.87			72.82	62.21	279870			(49.4 gpm) (↑ increase rate)
													267520 @ 239
													(51 gpm)
													269060 @ 269 min.
													(51.3 gpm)

Avg. Discharge 50.7 gpm — 79 gpm = 55 gal / 57 sec 270640 @ 300 min (51 gpm)

Aquifer Test Data

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Data for Well 299 W 18-22
Pumping Well 299-W18-22
Observation Wells 299 W18-21

Location 200 West RCRA
Type of Aquifer Test Constant-Discharge Recovery
How Q Measured Flow Meter / 55 gal drum
How W.L.'s Measured E-Tape
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s Top Stilling Well 2.25' LSD
Elevation of Meas. Point

Depth of Pump/Airpipe 442.9' Below lsd
Pump On: date 8/26/87 time 0715 hr
Pump Off: date 8/26/87 time 1515 hr
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 199.05 MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'	Corrected s.s2/2m	Reading	Q		
8/26	1515	480	0		271.87			72.82	62.21	279870		CSC	
			:30	961	260.2			61.15	53.67			CSC	
			1	481	251.64			52.56	47.03			CSC	
			1:30	321	243.32			44.27	40.35			CSC	
			2	241	236.72			37.67	34.83			CSC	
			3	161	225.92			26.87	25.43			CSC	
			4	121	219.15			20.10	19.29			CSC	
			5	97	214.47			15.42	14.94			CSC	
			7	69.6	209.66			10.61	10.38			CSC	
			9	54.3	207.53			8.48	8.34			CSC	
			11	44.6	206.36			7.31	7.20			CSC	
			13	37.9	205.52			6.47	6.39			CSC	
			15	33	204.95			5.90	5.83			CSC	
			20	25	203.89			4.84	4.79			CSC	
			25	20.2	203.20			4.15	4.12			CSC	
			30	17	202.35			3.80	3.77			CSC	
			35	14.7	202.48			3.43	3.41			CSC	
			40	13	202.22			3.17	3.15			CSC	
			45	11.7	202.00			2.95	2.93			CSC	
			50	10.6	201.82			2.77	2.75			CSC	
			60	9	201.52			2.47	2.46			CSC	
			70	7.9	201.27			2.22	2.21			CSC	
			80	7	201.07			2.02	2.01			CSC	
			90	6.3	200.91			1.86	1.85			CSC	
			100	5.8	200.76			1.71	1.70			CSC	
			110	5.4	200.63			1.58	1.58			CSC	
			120	5	200.50			1.45	1.45			CSC	
			150	4.2	200.23			1.18	1.18			CSC	
			180	3.7	200.02			.97	.97			CSC	
			210	3.3	199.85			.80	.80			CSC	
			240	3	199.71			.66	.66			CSC	

Aquifer Test Data

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Data for Well 299 W-18-21
Pumping Well 299 W 18-22
Observation Wells 299 W 18-21

Location 200 West RCRA
Type of Aquifer Test Constant-Discharge
How Q Measured Flow meter #82-2-435/5 + 55 gal drum
How W.L.'s Measured E-Tape / Transducer
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 2.15' Abv LSD
Elevation of Meas. Point
LSD = cement pad brass cap

Depth of Pump/Airpipe 442.92' Abv LSD
Pump On: date 8/26/87 time 0715
Pump Off: date 8/26/87 time 1515
Duration of Aquifer Test 8 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 198.56' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
8/26	0715	0			198.56							CSC	
		12			198.55							CSC	
		22			198.58							CSC	
		27			198.59							CSC	
	0752	37			198.58							CSC	
		47			198.58							CSC	
		55			198.58							CSC	
		82			198.57							CSC	
		102			198.58							CSC	
		112			198.58							CSC	
		123			198.58							CSC	
		153			198.58							CSC	
		183			198.58							CSC	
		212			198.57							CSC	
		242			198.56							CSC	
		272			198.55							CSC	
		302			198.53							CSC	Front coming in
		362			198.52							CSC	pressure dropping
		422			198.49								
			0										Recovery
			62		198.43							CSC	
			122		198.41							CSC	

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AQUIFER TEST SUMMARY FOR WELL 299-W18-23

Purpose of Test: To estimate hydraulic properties (transmissivity and hydraulic conductivity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 224 ft. Bottom: 470 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 241 ft. Bottom: 251 ft.

Date of Test: 06/22/87 Start Time of Test: 0805 hr
Pumping Rate: 85 gpm Duration of Test: 480 min

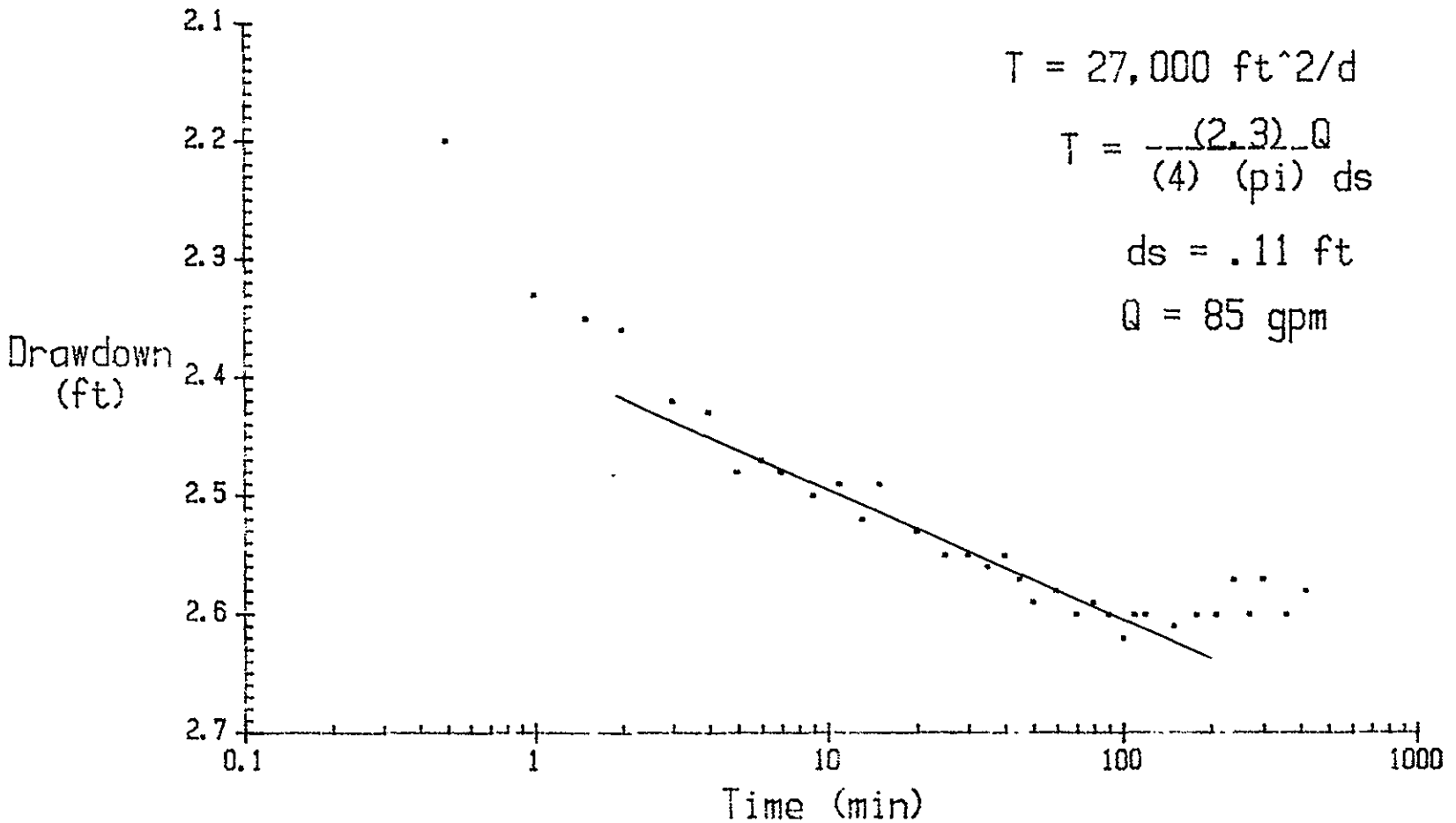
Pre-test Water-level Elevation (Depth): 224.02 ft.

Analysis Methods and Results:

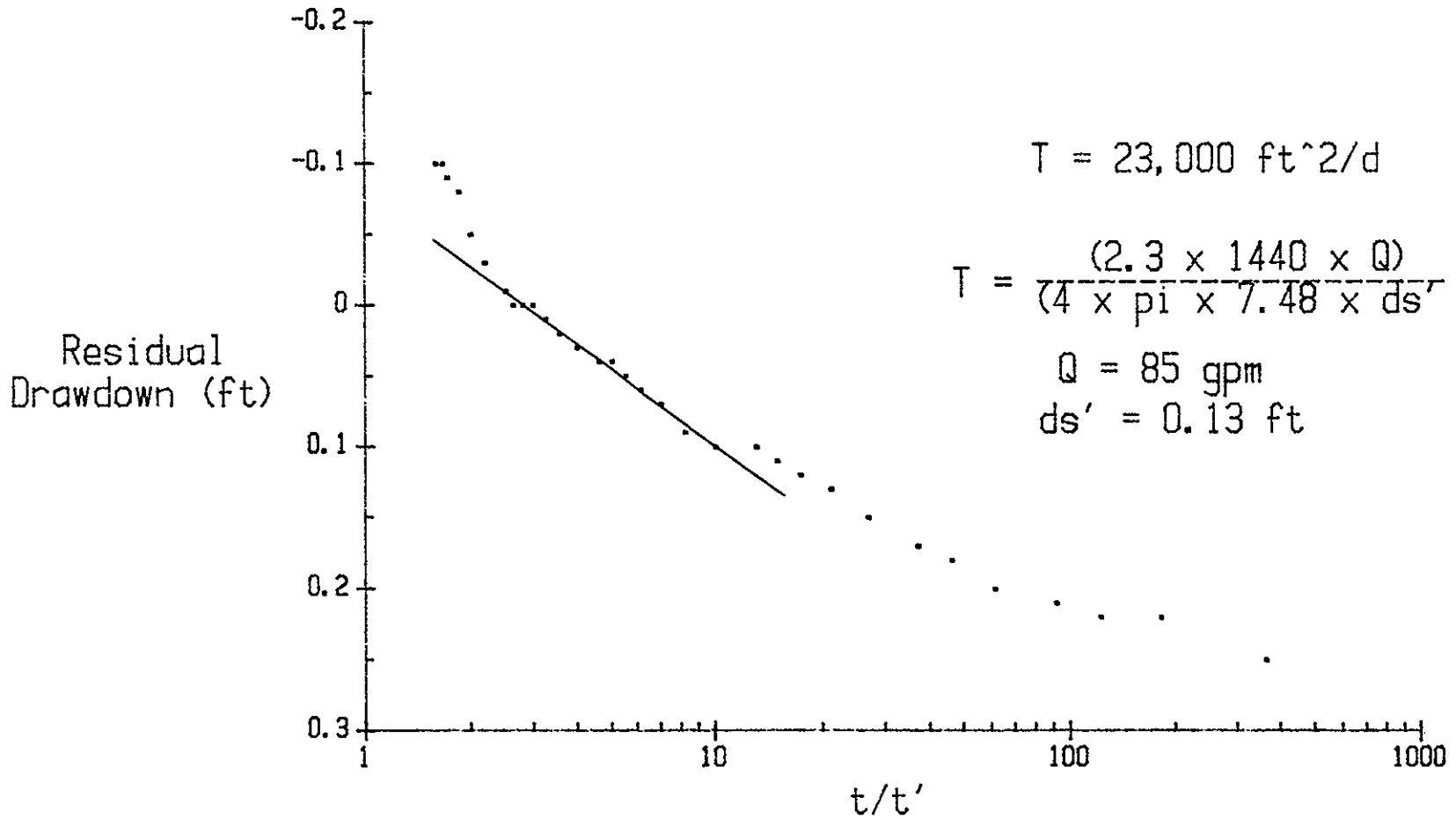
Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)
Constant Discharge (Cooper and Jacob 1946)	27,000	110
Recovery (Cooper and Jacob 1946)	23,000	95

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob analysis. The flowmeter was calibrated with a 55-gal drum, which measured a discharge rate of 85 gpm.

RCRA WELL 299-W18-23
CONSTANT-DISCHARGE DRAWDOWN TEST
COOPER-JACOB METHOD
6/22/87



RCRA WELL 299-W18-23
CONSTANT-DISCHARGE RECOVERY TEST
COOPER-JACOB METHOD
6/19/87



T = 23,000 ft^2/d

$$T = \frac{(2.3 \times 1440 \times Q)}{(4 \times pi \times 7.48 \times ds')}$$

Q = 85 gpm
ds' = 0.13 ft

Aquifer Test Data

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Data for Well 2W-18-~~24~~ 3

Pumping Well 2W 18-~~24~~ 3

Observation Wells

Location 200 AREA WEST RCRA

Type of Aquifer Test STEP-DRAWDOWN

How Q Measured FLOW METER McCrometer * 82-2-435

How W.L.'s Measured STEEL / E-TAPE

Rad./Dist. of/From Pumping Well

Meas. Point for W.L.'s TOP OF STILLING PIPE 1.5' ABOVE LSD

Elevation of Meas. Point

Depth of Pump/Airpipe ~~245~~ 243.5' Below LSD MP

Pump On: date 6/18/87 time 1

Pump Off: date time

Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 225.52' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or ~~s'~~		Reading	Q		
6/18	1215	0			225.52			0		~~15575~~			16060 FLOW METER
		.5			226.98			1.46			80		
		1			227.02								increased
		1.5			227.2						95		surging
		2			227.69								
		3			227.69								Pump Column
		4			227.8								outside
		5			227.85								diameter
		7			227.85						100		= 3 7/16"
		9											
		10											8" casing
		15			228.07								
		20			228.12								
		25			228.13								
		30											
		35			228.12								
		60			228.15								
		70			228.17						95-100		OPENED ALL THE
		80			228.20								WAY HOWEVER
		90			228.21								JUST TIME ON
		100			228.20								SAME
		120			228.25					29070			avg. 108 gpm
		0			2								Recovery
		30			225.9								
		1			225.77								
		2			225.85								
		3			225.83								
		4			225.71								
		5			225.80								
		7			225.78								
		9			225.76								
		11			225.76								
		13											
		15			225.74								
		20			225.72								

Aquifer Test Data

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Data for Well 2W-18-23

Pumping Well 2W-18-23

Observation Wells monitored by TWIP

Location 200 West RCRA

Type of Aquifer Test CONSTANT-DISCHARGE (DRAWDOWN)

How Q Measured McCrometer Flowmeter #82-2-435

How W.L.'s Measured STEEL/E-TAPE

Depth of Pump/Airpipe 243.5 below LSD

Rad./Dist. of/From Pumping Well –

Pump On: date 6/22/87 time 08:05

Meas. Point for W.L.'s T.P. OF STEEL LID = 1.5' ABV LSD

Pump Off: date 6/22/87 time 16:05

Elevation of Meas. Point

Duration of Aquifer Test 8 hrs

STATIC → 225.74 (steel tape) (225.96 E-tape)

Time t = ____ at t' = 0					Water Level Data Static Water Level 225.96'					Discharge		Recorded By	4999 @ 10 Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	08:05	0			225.96			0				SPA	McCrometer 48910
		.5			223.76			2.20				SPA	
		1			223.63			2.33				SPA	
		1.5			223.61			2.35				SPA	
		2			223.60			2.36			108	SPA	
		3			223.54			2.42				SPA	
		4			223.53			2.43				SPA	
		5			223.48			2.48				SPA	49450
		6			223.49			2.47			105	SPA	
		7			223.48			2.48				SPA	49660
		9			223.46			2.50			110	SPA	49880
		11			223.47			2.49			110	SPA	50100
		13			223.44			2.52				SPA	
		15			223.47			2.49			109	SPA	
		20			223.43			2.53				SPA	51080
		25			223.41			2.55			110	SPA	51630
		30			223.41			2.55			110	SPA	52180
		35			223.40			2.56			109	SPA	
		40			223.41			2.55				SPA	53270
		45			223.39			2.57			108	SPA	53810
		50			223.37			2.59			110	SPA	54360
		60			223.38			2.58			109	SPA	55450
		70			223.36			2.60			111	SPA	56560
		80			223.37			2.59			108	SPA	
		90			223.36			2.60				SPA	58720
		100			223.34			2.62			109	SPA	59810
		110			223.36			2.60			109	SPA	60900
		120			223.36			2.60			109	SPA	61990
		150			223.35			2.61			109	SPA	65260
		180			223.36			2.60			111	SPA	68600
		210			223.36			2.60			109.2	SPA	71870
		240			223.39			2.57			109.2	SPA	55 gal. drum → 39 sec. 75100
		270			223.36			2.60			109.2	SPA	78390
		300			223.39			2.57			109.2	SPA	81680
		360			223.36			2.60			109.9	SPA	88270
		420			223.37			2.58			111.8	SPA	94960
		480									109.2		55 gal drum → 41 sec. 101530

avg. 110 gpm

Aquifer Test Data

page 2 of 2

Data for Well 299-W18-23
Pumping Well 299-W18-23
Observation Wells MONITORED BY BWIP.

Location 200 WEST RCRA
Type of Aquifer Test CONSTANT - DISCHARGE (RECOVERY)
How Q Measured —
How W/L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP OF STILLING PIPE -
Elevation of Meas. Point 1.5' ABOVE LSD.

Depth of Pump/Airpipe 243.5 below LSD
Pump On: date 6/22/87 time 08:05
Pump Off: date 6/22/87 time 16:05
Duration of Aquifer Test 9 hrs.

LDW = Lee Walker From BWIP

Time t = ____ at t' = 0					Water Level Data Static Water Level 225.96'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	16:05	480	0										
		485	.5	461	226.16			.20		SPA			
		481	1.0	481	226.10			.14		SPA			
		481.5	1.5	321	226.11			.15		SPA			
		482	2	241	226.11			.15		SPA			
		483	3	161	226.09			.13		SPA			
		484	4	121	226.08			.12		SPA			
		485	5	97	226.05			.09		SPA			
		486	6	81	226.06			.10		SPA			
		487	7	69.6	226.04			.08		SPA			
		489	9	54.3	226.01			.05		SPA			
		491	11	44.6	226.02			.06		SPA			
		493	13	37.9	226.01			.05		SPA			
		495	15	33	226.00			.04		SPA			
		500	20	25	225.98			.02		SPA			
	16:30	505	25	20.2	225.97			.01		LDW			measured back from
		510	30	17	225.97			.01		LDW			226' mark - add -.02'
		515	35	14.7	225.96			.0		LDW			to be same as from 225'
		520	40	13	225.94			-.02		LDW			mark
		525	45	11.7	225.94			-.02		LDW			
		530	50	10.6	225.94			-.02		LDW			
	17:05	540	60	9	225.93			-.03		LDW			From 225' mark
		550	70										225.73' at 17:10
		560	80										500' steel tape SPA
	17:35	590	90										
		590	100										
		590	110										
	18:05	630	120										
		680	150										

Aquifer Test Data

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Data for Well 2W-18-23

Pumping Well 2W-18-23

Observation Wells monitored by BWIP

Location 200 West RCRA

Type of Aquifer Test CONSTANT-DISCHARGE (DRAWDOWN)

How Q Measured McCrometer Flowmeter #82-2-435

How W.L.'s Measured STEEL/E-TAPE

Depth of Pump/Airpipe 243.5 below LSD

Rad./Dist. of/From Pumping Well —

Pump On: date 6/22/87 time 08:05

Meas. Point for W.L.'s TOP OF STILLING PIPE 1.5' ABV LSD

Pump Off: date 6/22/87 time 16:05

Elevation of Meas. Point

Duration of Aquifer Test 8 hrs

STATIC → 225.74 (steel tape) (225.96 E-tape)

Time t = ____ at t' = 0					Water Level Data Static Water Level 225.96'					Discharge		Recorded By	4999 @ in Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
	08:05	0			225.96			0				SPA	McCrometer 48910
		.5			225.16			2.20				SPA	
		1			228.29			2.33				SPA	
		1.5			228.31			2.35				SPA	
		2			228.32			2.36			108	SPA	
		3			228.38			2.42				SPA	
		4			228.39			2.43				SPA	
		5			228.44			2.48				SPA	49450
		6			228.43			2.47			105	SPA	
		7			228.44			2.48				SPA	49660
		9			228.46			2.50			110	SPA	49880
		11			228.45			2.49			110	SPA	50100
		13			228.48			2.52				SPA	
		15			228.45			2.49			109	SPA	
		20			228.49			2.53				SPA	51080
		25			228.51			2.55			110	SPA	51630
		30			228.51			2.55			110	SPA	52180
		35			228.52			2.56			50	SPA	
		40			228.51			2.55				SPA	52270
		45			228.53			2.57			109	SPA	52910
		50			228.55			2.59			110	SPA	54260
		60			228.54			2.58			106	SPA	55450
		70			228.56			2.60			111	SPA	56560
		80			228.55			2.59			108	SPA	
		90			228.56			2.60				SPA	58720
		100			228.58			2.62			109	SPA	59810
		110			228.56			2.60			104	SPA	60900
		120			228.56			2.60			104	SPA	61990
		150			228.57			2.61			106	SPA	65260
		180			228.56			2.60			111	SPA	68600
		210			228.56			2.60			107.1	SPA	71870
		240			228.53			2.57			107.2	SPA	55 gal. drum → 39 sec 75100
		270			228.56			2.60			107.2	SPA	78390
		300			228.53			2.57			107	SPA	81680
		360			228.56			2.60			109.9	SPA	88270
		420			228.54			2.58			111.8	SPA	94980
		480									109.2		55 gal drum → 41 sec. 101530

avg. 110 gpm

Aquifer Test Data

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Data for Well 2W 18-243

Pumping Well 2W 18-243

Observation Wells MONITORED BY BWIP

Location 200 West RCRA

Type of Aquifer Test RECOVERY

How Q Measured McCrometer #82-2-435

How W.L.'s Measured E-TAPE

Rad./Dist. of/From Pumping Well

Meas. Point for W.L.'s TOP/STILLING PIPE 1.5' ABOVE LSD

Elevation of Meas. Point

Depth of Pump/Airpipe 243.5' below LSD

Pump On: date 6/19/87 time 0715

Pump Off: date 6/19/87 time

Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 225.60'					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
	1018	183	0		228.22			2.62				CSC	
		183.5	.5	367	225.85			2.25				CSC	
	1019	184	1	184	225.82			.22				CSC	
		184.5	1.5	123	225.82			.22				CSC	
	1020	185	2	92.5	225.81			.21				CSC	
		186	3	62	225.80			.20				CSC	
		187	4	46.75	225.78			.18				CSC	
		188	5	37.6	225.77			.17				CSC	
		190	7	27.1	225.75			.15				CSC	
		192	9	21.33	225.73			.13				CSC	
		194	11	17.64	225.72			.12				CSC	
		196	13	15.08	225.71			.11				CSC	
		198	15	13.2	225.70			.10				CSC	
	1028	203	20	10.15	225.70			.10				CSC	
		208	25	8.32	225.69			.09				CSC	
	1033	213	30	7.10	225.67			.07				CSC	
		218	35	6.23	225.66			.06				CSC	
		223	40	5.58	225.65			.05				CSC	
		228	45	5.07	225.64			.04				CSC	
		233	50	4.66	225.64			.04				CSC	
		243	60	4.05	225.63			.03				CSC	
		253	70	3.61	225.62			.02				CSC	
		263	80	3.29	225.61			.01				CSC	
	1048	273	90	3.03	225.60			.00				CSC	
		283	100	2.83	225.60			.00					
		293	110	2.66	225.60			.00					
	1218	303	120	2.53	225.59			-.01					
		323	140	2.32	225.57			-.03					
		343	160	2.14	225.55			-.05					
		393	210	1.87	225.52			-.08					
		433	250	1.73	225.51			-.09					
		453	270	1.68	225.50			-.10					
		483	300	1.61	225.50			-.10					

AQUIFER TEST SUMMARY FOR WELL 299-W18-24

Purpose of Test: To estimate hydraulic properties (transmissivity, hydraulic conductivity, and storativity) for the middle Ringold unit in the 200-West Area.

Types of Tests Performed:

Slug Test ( ) Specific Capacity ( ) Constant Discharge (x) Recovery (x)

Hydrogeologic Unit Tested: Middle Ringold unit
Depth of Formation, Top: 210 ft. Bottom: 453 ft (interpolated).

Depth of Screened Interval in Pumped Well, Top: 230 ft. Bottom: 240 ft.

Observation Wells Used:
299-W15-18
299-W18-2

Distance to Pumped Well:
299-W15-18: 735 ft.
299-W18-2: 125 ft.

Elevations (Depths) of Screened Interval:
299-W15-18: Top: 208 ft. Bottom: 238 ft.
299-W18-2: Top: 205 ft. Bottom: 255 ft.

Date of Test: 07/17/87 Start Time of Test: 0810 hr
Pumping Rate: 100 gpm Duration of Test: 450 min

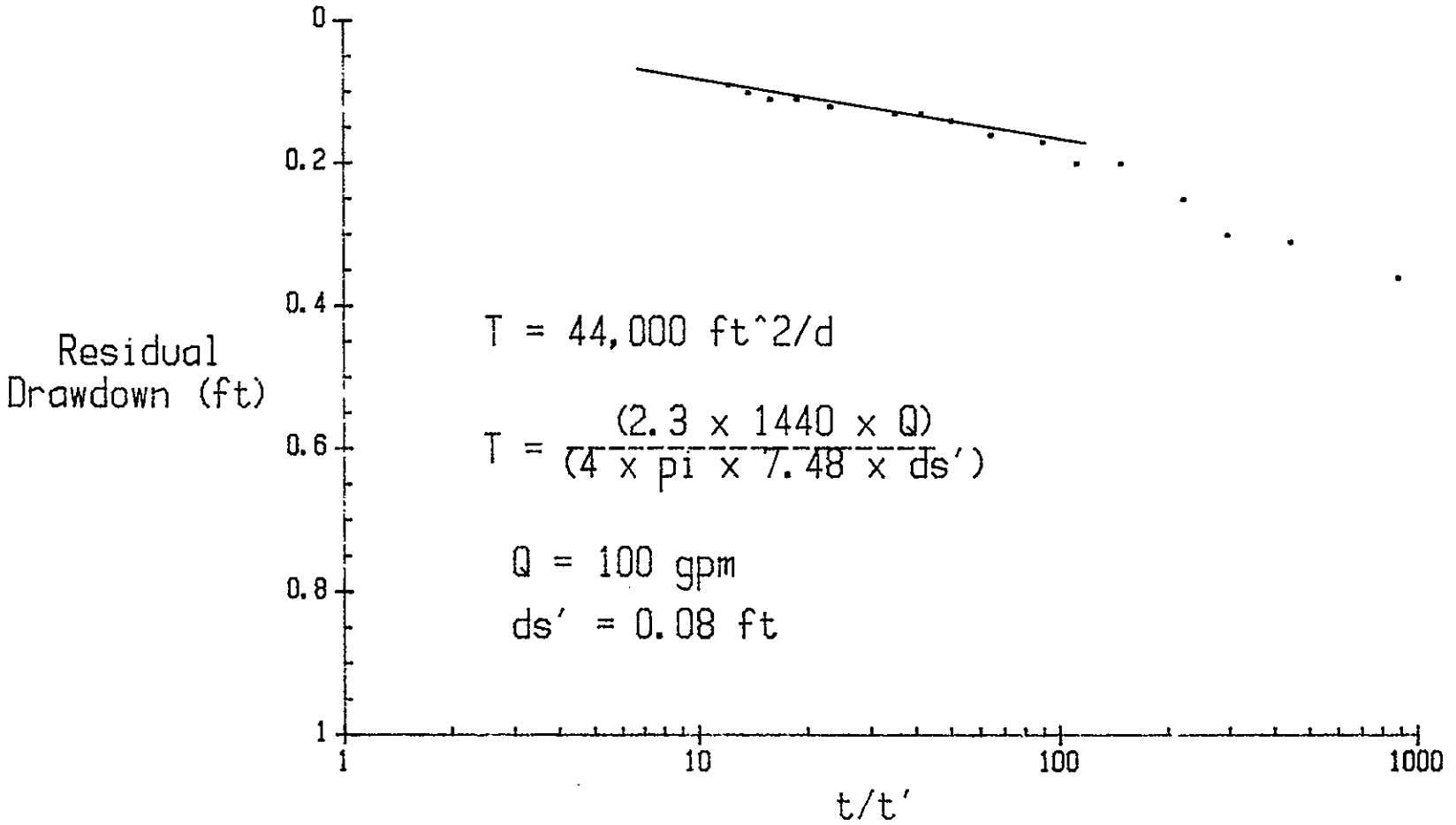
Pre-test Water-level Elevations (Depths):
Pumping Well: 299-W18-24 210.20 ft.
Observation Well: 299-W15-18 212.37 ft.
Observation Well: 299-W18-2 209.90 ft.

Analysis Methods and Results:

Methods	Transmissivity (ft^2/d)	Hydraulic Conductivity (ft/d)	Storativity
Recovery			
(Cooper and Jacob 1946)			
Pumping Well	44,000	180	NA
(Theis 1935)			
Observation Well 299-W18-2	17,000	70	0.001

Remarks: The assumption that the well is fully penetrating is not satisfied in the Cooper and Jacob and Theis analyses. Drawdown data from the observation wells are insufficient for analysis. No response was observed in observation well 299-W15-18 during pumping.

RCRA WELL 299-W18-24
CONSTANT-DISCHARGE RECOVERY
COOPER-JACOB METHOD
7/17/87



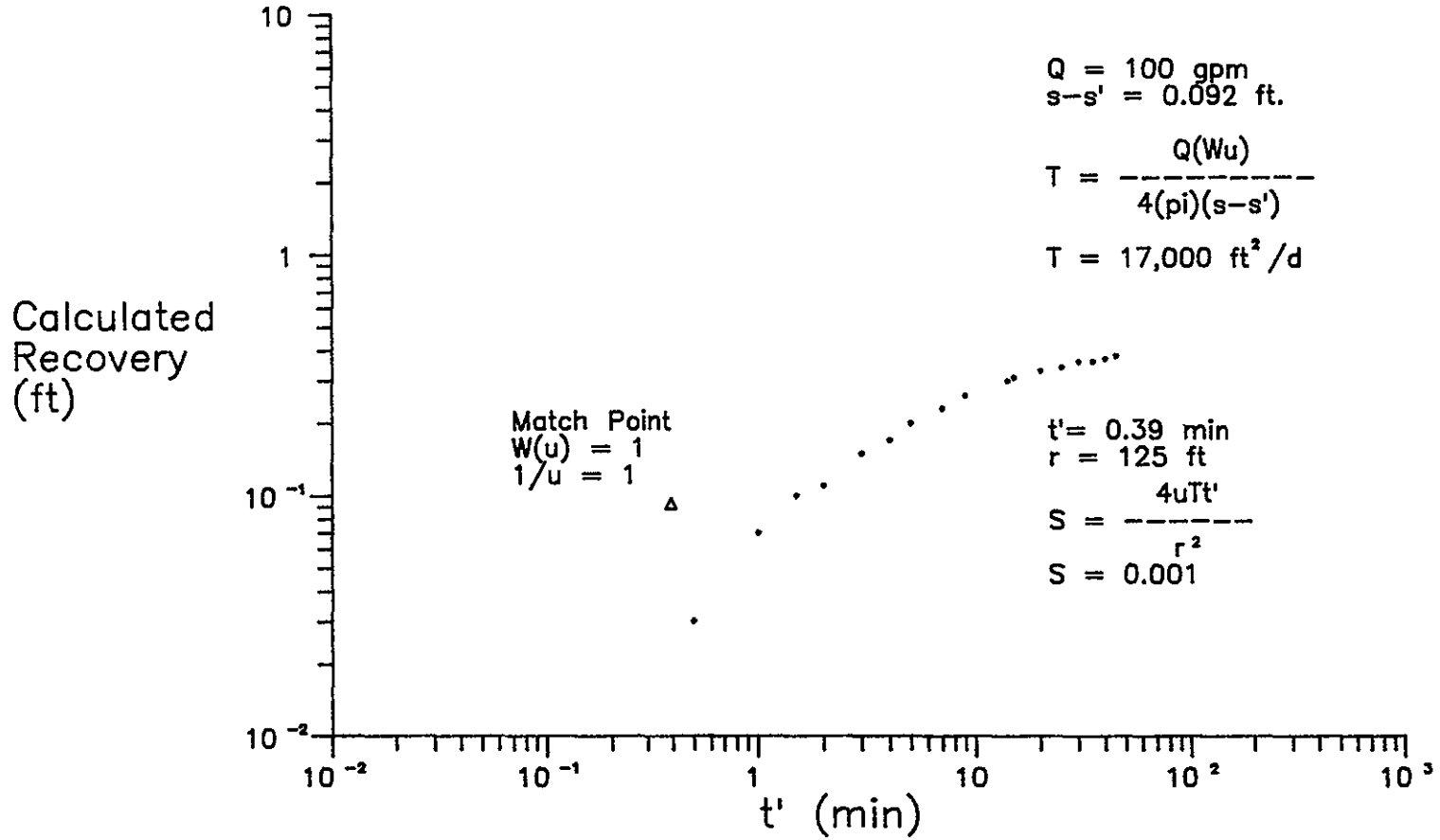
$$T = 44{,}000 \text{ ft}^2/\text{d}$$

$$T = \frac{(2.3 \times 1440 \times Q)}{(4 \times \text{pi} \times 7.48 \times ds')}$$

Q = 100 gpm

ds' = 0.08 ft

OBSERVATION WELL 299-W18-2
CONSTANT-DISCHARGE RECOVERY
THEIS METHOD
7/17/87



Aquifer Test Data

page 1 of 1

Data for Well 2-W18-24
Pumping Well 2-W18-24
Observation Wells

Location 200 West RCRA
Type of Aquifer Test STEP DD / DEVELOPMENT
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s TOP OF TREMMIE 3.3' ABV LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 236' LSD
Pump On: date 7/16/87 time
Pump Off: date 7/16/87 time
Duration of Aquifer Test

Static Water Level 213 57 E-TAPE

Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Discharge Reading	Q	Recorded By	Comments
7/16	1625	0								129350			Fwd Q2-2-435
		:30					214.46						
		1					214.4						
		1:30					214.36						
		2					214.37						
		3					214.33	(3.5)		129515			
		4					214.33				57.5		
		5					214.4	(5.87)		129630			
		7					214.38						
		9					214.38						@ 10 min.
		01					215.06						129920 ↑ increase
		03					215.13						
		05					215.14						@ 4 130325
		07 20					215.14						
		09 25											@ 10 130930
		30 14					215.07						100 gpm
	25	35											
		40	01				215.13						↑ increase
	/	45	02				215.14						
		50	03				215.19						
		60	05				215.14						
		5					215.16			131930	100		
		7					215.15			132130			100 gpm
		10					215.14						
	37	12											
		:10					213.85						132640 end
		2					213.70						
		3					213.65						
		4					213.62						
		5					213.62						
		7					213.57						
		9					213.53						
		13					213.54						
		20					213.50						

Aquifer Test Data

page 1 of 3

Data for Well 2 W 18-24
Pumping Well 2-W18-24
Observation Wells 2 W15-18

Location 200 West RCRA
Type of Aquifer Test CONSTANT-DISCHARGE
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP TRANSIC 3.3' ABV GSD
Elevation of Meas. Point

Depth of Pump/Airpipe 236' GSD
Pump On: date 7/17/87 time 0810
Pump Off: date 7/17/87 time 1540
Duration of Aquifer Test 7.5 hr

Time t = ____ at t' = 0					Water Level Data Static Water Level 213.50 MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Read-ing	Q		
7/17	0810	0			213.50			0		132640		CSS	METER #82-2-435
		:30			214.99			-1.49					
		1			215.05			1.55					Started chronograph at 2 min
		1:30			215.10			1.60			96.7		
		2			215.13			1.63					
		3			215.18			1.68		132930			
		4			215.18			1.68					
		5			215.17			1.67			107.5		
		7			215.18			1.68		133360			CCl_4
		9			215.17			1.67					>60 ppm down
		11											new 12"-8" pipe
		13											Measuring
		15											after 60
		20											
		30											
		35			215.10			1.60					37 136365
		40			215.08			1.58			99		
		55			215.09			1.59					42 136860
		60			215.09			1.59			98.9		
		90			215.09			1.59					56-138245
		100			215.12			1.62			99.5		72 141805
STARTS TO RAIN		120			215.14			1.64			99.7		(98.9 gpm)
		240			215.18			1.68					102 142890
													121 144695
											101		250 157730
		270			215.18			1.68		159770	102		
		300			215.14			1.64					303 163110
		360			215.14			1.64			99.2		362 168965
		420			215.15			1.65			99		423 175005
	1540	450								177700			
													AVG. Q = 100 gpm

Aquifer Test Data

page 2 of 2

Data for Well 2-W18-24
Pumping Well 2-W18-24
Observation Wells 2-W15-18
2-W18-2

Location 200 West TRCRA
Type of Aquifer Test CONSTANT-DISCHARGE RECOVERY
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well —
Meas. Point for W.L.'s TOP TREMMIE 3.3' ABV LSD
Elevation of Meas. Point

Depth of Pump/~~Airpipe~~ 226' LSD
Pump On: date 7/17/87 time 0810
Pump Off: date 7/17/87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 213.50' MP					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
		450	0		215.17			1.67					
		450.5	.5	901	213.86			.36					
		451	1	451	213.81			.31					
		451.5	1.5	301	213.8			.30					
		452	2	226	213.75			.25					
		453	3	151	213.7			.20					
		454	4	113.5	213.7			.20					
		455	5	91	213.67			.17					
		457	7	65.3	213.66			.16					
		459	9	51	213.64			.14					
		461	11	41.9	213.63			.13					
		463	13	35.6	213.63			.13					
		15			~~213.62~~								
		470	20	23.5	213.63			.12					
		475	25	19	213.61			.11					
		480	30	16	213.61			.11					
		485	35	13.9	213.60			.10					
		490	40	12.3	213.59			.09					

Aquifer Test Data

Observation
299 W15-18
299-W18-2

page 1 of 1

Data for Well 299-W15-18
Pumping Well 299-W18-24
Observation Wells 2-W15-18
2-W18-2

Location 200 West Area
Type of Aquifer Test CONSTANT, DD
How Q Measured FLOW METER
How W.L.'s Measured E-TAPE
Rad./Dist. of/From Pumping Well
Meas. Point for W.L.'s T/C 5.92' AKV LSD
Elevation of Meas. Point cut casing T/C = 1.75' AKV LSD

Depth of Pump/Airpipe 236' LSD
Pump On: date 7/17/87 time 0810
Pump Off: date 7/17/87 time
Duration of Aquifer Test

Time t = ____ at t' = 0					Water Level Data Static Water Level 214.12 T/C					Discharge		Recorded By	Comments
Day	Clock Time	t	t'	t/t'	Reading	Conversions or Corrections	Water Level	s or s'		Reading	Q		
7/16	1750	–			217.90	– 5.92	211.98	–					217.90 – 5.92 = 211.98
	0840				218.27	– 5.92	212.35						
7/17													cut off casing
		14			214.12	– 1.75	212.37						
		15			214.12								
		20			214.12								
		47			214.12								
	0850				214.10	STEEL TAPE				SPA			
	0854				213.85					SPA			STEEL TAPE MEAS.
		120			214.15					CSC			START WELL RUN
		255			214.12					CSC			
		300			214.12					CSC			Pulling tape out to install
		330			212.30	measuring point 2.0' AKV T/C				CSC			pressure tube
		360			212.35					CSC			in 2-W18-2
		390			212.36					CSC			
		420			212.39					CSC			
		450	0	–	212.37					CSC			
		450.5	.5	901	212.34			.44					Recovery
		451	1	451	212.30			.40					
		451.5	1.5	301	212.27			.37					
		452	2	226	212.26			.36					
		452	3	151	212.22			.32					
		454	4	113.5	212.20			.30					
		455	5	91	212.17			.27					
		457	7	65.3	212.14			.24					
		459	9	51	212.11			.21					
		464	14	33.1	212.07			.17					
		465	15	31	212.06			.16					
		470	20	23.5	212.04			.14					
		475	25	19	212.03			.13					
		480	30	16	212.01			.11					
		485	35	13.9	212.01			.11					assume static is ~211.90' from maximum of pump at 236'
		490	40	12.3	212.0			.10					
		495	45	11	211.99			.09					
												RM	Karen Swanson – I came by to check mic out in morning

Well 299-W15-18

Well 299-W18-2 125' from pumping well

checked out E-tape somewhat "crapped up" d:D:t or tank down

9011130011

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REFERENCES

Cooper, H. H., and C. E. Jacob. 1946. "A Generalized Graphical Method for Evaluating Formation Constants and Summarizing Well-Field History." In Transactions of the American Geophysical Union 27(IV):526-534.

Hargis, D. R. 1979. Analysis of Factors Affecting Water Level Recovery Data. Dissertation, University of Arizona. University Microfilms International, Ann Arbor, Michigan.

Schafer, D. C. 1978. "Casing Storage Can Affect Pumping Test Data." The Johnson Drillers Journal, January-February 1978, Johnson Division, UOP, Inc., St. Paul, Minnesota.

Theis, C. V. 1935. "The Relation Between the Lowering of the Piezometric Surface and the Rate and Duration of Discharge at a Well Using Ground-Water Storage." In Transactions of the American Geophysical Union 16:519-524.

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APPENDIX G

SURVEY DATA REPORTS FOR GROUND-WATER MONITORING WELLS AROUND WASTE MANAGEMENT AREAS 1, 2, 3, AND 4

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KAISER ENGINEERS HANFORD	SURVEY DATA REPORT	Request No. -874-265
Project/W.O. No. CR 0386	Title GROUNDWATER MONITORING WELLS	File No. WELL-113
KEH Job No. 242130	Prepared By Wesley Golladay	Date 12-07-87	Reviewer G.F. Brazil 14

DESCRIPTION OF WORK	ACCEPTABILITY (Within Plan Tolerance)	DISTRIBUTION	
Horizontal and vertical locations of monitoring wells in the 200E area	Yes ☐	Survey File	OR
	No ☐	Field Project File	0
	NA ☑	C. Hodge	1
	TBD by Requestor ☐	M. Chamness	1
		G. Last	1
		B. Poremba	1

SURVEY RESULTS AND COMMENTS

WELL NO.	COORDINATE	ELEVATION	DESCRIPTION
299-E27-8	N 44,496 W 49,642		Centerline of 4" casing
		637.83	"X" stamped in top north rim of casing
		634.64	Top of brass cap
299-E27-9	N 44,484 W 49,122		Centerline of 4" casing
		629.21	"X" stamped in top north rim of casing
		627.31	Top of brass cap
299-E27-10	N 44,520 W 48,522		Center line of 4" casing
		624.47	"X" stamped in top north rim of casing
		622.42	Top of brass cap

KEH-159.1 (6-84)

KAISER ENGINEERS
HANFORD

FIELD SKETCH 874-265
WELL-113

Attachment To Or Description:
GROUND WATER MONITORING WELL

Sheet 2 of 4

WELL NO.	COORDINATE	ELEVATION	DESCRIPTION
299-E28-26	N 44,446 W 55,606		Centerline of 4" casing
		687.26	"X" stamped in top north rim of casing
		684.84	Top of brass cap
299-E28-27	N 44,595 N 54,670		Centerline of 4" casing
		680.37	"X" stamped in top north rim of casing
		678.18	Top of brass cap
299-E32-2	N 45,904 W 56,565		Centerline of 4" casing
		670.06	"X" stamped in top north rim of casing
		667.91	Top of brass cap
299-E32-3	N 45,631 W 56,721		Centerline of 4" casing
		676.51	"X" stamped in top north rim of casing
		675.32	Top of brass cap
299-E32-4	N 44,985 W 56,713		Centerline of 4" casing
		685.88	"X" stamped in top north rim of casing
		684.64	Top of brass cap
299-E33-28	N 45,596 W 54,668		Centerline of 4" casing
		664.23	"X" stamped in top north rim of casing
		662.66	Top of brass cap

KEH-159.2 (4-82)

KAISER ENGINEERS
HANFORD

FIELD SKETCH 874-265
WELL-113

Attachment To Or Description:
GROUND WATER MONITORING WELL

Sheet 3 of 4

WELL NO.	COORDINATE	ELEVATION	DESCRIPTION
299-E33-29	N 45,124 W 54,665		Centerline of 4" casing
		673.77	"X" stamped in top north rim of casing
		671.53	Top of brass cap
299-E33-30	N 45,903 W 55,660		Centerline of 4" casing
		663.70	"X" stamped in top north rim of casing
		661.92	Top of brass cap
299-E34-2	N 45,076 W 50,048		Centerline of 4" casing
		630.80	"X" stamped in top north rim of casing
		629.03	Top of brass cap
299-E34-3	N 45,337 N 48,488		Centerline of 4" casing
		611.52	"X" stamped in top north rim of casing
		609.48	Top of brass cap
299-E34-4	N 46,791 W 49,419		Centerline of 4" casing
		587.56	"X" stamped in top north rim of casing
		585.17	Top of brass cap
299-E34-5	N 46,791 W 50,014		Centerline of 4" casing
		590.79	"X" stamped in top north rim of casing
		589.01	Top of brass cap

KEH-159.2 (4-82)

KAISER ENGINEERS
HANFORD

FIELD SKETCH

8 7 4 - 2 6 5
W E L L - 1 1 3

Attachment To Or Description:
GROUNDWATER MONITORING WELLS

Sheet 4 of 4

WELL NO.	COORDINATE	ELEVATION	DESCRIPTION
299-E34-6	N 46,784 W 50,609		Centerline of 4" casing
		597.83	"X" stamped in top north rim of casing
		596.56	Top of brass cap

N O T E : Wells were controlled by monument N 41,000 W 47,300 elevation equals 678.105. The line between monument N 41,000 W 47,300 and monument 2E-3 was held as N 00° 00' 00" E.

KEH-159.2 (4-82)

KAISER ENGINEERS HANFORD	SURVEY DATA REPORT	Request No. -874-265
Project/W.O. No. CR 0386	Title GROUND WATER MONITORING WELLS (200-W)	File No. WELL-114
KEH Job No. 242130	Prepared By Wesley Goldsday	Date 12-10-87	Reviewer G.F. Brazit 14

DESCRIPTION OF WORK	ACCEPTABILITY (Within Plan Tolerance)	DISTRIBUTION	
Horizontal and vertical locations of monitoring wells in the 200 W area	Yes ☐	Survey File	OR
	No ☐	Field Project File	Ø
	NA ☑	C. Hodge	1
	TBD by Requestor ☐	M. Chamness	1
		G. Last	1
		B. Poremba	1

SURVEY RESULTS AND COMMENTS

WELL NO.	COORDINATE	ELEVATION	DESCRIPTION
299-W-6-2	N 45,571 W 75,302		Centerline of 4" casing
		692.45	"X" stamped in top north rim of casing
		690.17	Top of brass cap
299-W-7-1	N 46,551 W 78,601		Centerline of 4" casing
		690.71	"X" stamped in top north rim of casing
		688.55	Top of brass cap
299-W-7-2	N 46,519 W 77,385		Cenerline of 4" casing
		675.59	"X" stamped in top north rim of casing
		673.19	Top of brass cap
299-W-7-3	N 46,520 W 77,420		Centerline of 4" casing
		676.14	"X" stamped in top north rim of casing
		673.71	Top of brass cap

KEH-159.1 (6-84)

KAISER ENGINEERS
HANFORD

FIELD SKETCH 874-265
WELL-114

Attachment To Or Description:
GROUND WATER MONITORING WELLS (200-W)

Sheet 2 of 4

WELL NO.	COORDINATE	ELEVATION	DESCRIPTION
299-W-7-4	N 45,435 W 77,040		Centerline of 4" casing
		671.69	"X" stamped in top north rim of casing
		669.02	Top of brass cap
299-W-7-5	N 46,509 W 76,816		Centerline of 4" casing
		671.14	"X" stamped in top north rim of casing
		670.41	Top of brass cap
299-W-7-6	N 46,509 W 76,219		Centerline of 4" casing
		678.64	"X" stamped in top north rim of casing
		676.25	Top of brass cap
299-W-8-1	N 46,551 W 79,200		Centerline of 4" casing
		701.33	"X" stamped in top north rim of casing
		699.45	Top of brass cap
299-W-9-1	N 44,508 W 79,507		Centerline of 4" casing
		737.73	"X" stamped in top north rim of casing
		735.36	Top of brass cap
299-W-10-13	N 43,137 W 78,297		Centerline of 4" casing
		699.04	"X" stamped in top north rim of casing
		696.58	Top of brass cap

KEH-159.2 (4-82)

KAISER ENGINEERS
HANFORD

FIELD SKETCH 874-265
WELL-114

Attachment To Or Description:
GROUND WATER MONITORING WELLS (200-W)

Sheet 3 of 4

WELL NO.	COORDINATE	ELEVATION	DESCRIPTION
299-W-10-14	N 43,143 W 78,330		Centerline of 4" casing
		699.43	"X" stamped in top north rim of casing
		697.09	Top of brass cap
299-W-15-15	N 40,330 W 78,103		Centerline of 4" casing
		697.96	"X" stamped in top north rim of casing
		695.74	Top of brass cap
299-W-15-16	N 40,269 W 77,387		Centerline of 4" casing
		684.89	"X" stamped in top north rim of casing
		682.62	Top of brass cap
299-W-15-17	N 40,221 W 77,387		Centerline of 4" casing
		684.64	"X" stamped in top north rim of casing
		682.85	Top of brass cap
299-W-15-18	N 39,705 W 77,383		Centerline of 4" casing
		685.71	"X" stamped in top north rim of casing
		683.55	Top of brass cap
299-W-18-21	N 37,794 W 78,080		Centerline of 4" casing
		668.62	"X" stamped in top north rim of casing
		666.50	Top of brass cap

KEH-159.2 (4-82)

KAISER ENGINEERS
HANFORD

FIELD SKETCH 874-265
WELL-114

Attachment To Or Description:
GROUND WATER MONITORING WELLS (200-W)

Sheet 4 of 4

299-W-18-22	N 37,831 W 78,109		Centerline of 4" casing
		668.49	"X" stamped in top north rim of casing
		666.49	Top of brass cap
299-W-18-23	N 38,987 W 78,120		Centerline of 4" casing
		696.81	"X" stamped in top north rim of casing
		694.75	Top of brass cap
299-W-18-24	N 38,998 W 77,180		Centerline of 4" casing
		684.35	"X" stamped in top north rim of casing
		682.18	Top of brass cap

N O T E : The vertical control used for wells came from monument N 46,545 - W 78,195 elevation equals 683.96

The horizontal control used for wells came from monument N 39,000 - W 77,200 and holding the line between said monument and monument N 39,000 W 71,000 (elephants) as N 90° 00' 00" E.

KEH-159.2 (4-82)

APPENDIX H

PROCEDURE, WATER-LEVEL DATA, AND HYDROGRAPHS

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APPENDIX H

PROCEDURE, WATER-LEVEL DATA, AND HYDROGRAPHS

This appendix presents the procedure used to collect water-level data from the 35 monitoring wells installed around the 200 Areas low-level burial grounds. Also presented in this appendix are the water-level data collected as of August 1, 1988, and the corresponding hydrographs.

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Procedure for Water-Level Measurements for the 100-H Area Water-Level Network, P-5 for RCRA Compliance/Hazardous Materials Monitoring

Introduction

Water-level measurements are taken approximately twice a month. All wells in the current network are measured on the same day. These measurements are taken as depth-to-water from the top of the well casing. They must be subtracted from the surveyed elevation of the casing to obtain the elevation of the water table. The water-table elevations obtained for all wells in the network can be used to produce a contour map showing the ground-water surface on the day that the measurements were made. These contour maps can be used to help characterize the ground-water flow system and to ensure that the sampling network is adequate.

Equipment

The following equipment will be needed:

- graduated steel measuring tape with attached weight
- blue carpenter's chalk
- 100-H Area Water-Level Network field notebook

Procedure

If the steel tape has a zero reading point, chalk the 1-ft section of tape below it. If the steel tape has no zero reading point and has divisions in hundredths of a foot all along it, then chalk several feet of the bottom portion of the tape.

Estimate the approximate depth to water by using the most recent of previous measurements.

Lower the steel tape into the well to the estimated water level. Read the value of the "hold point" from the tape while holding it even with the well's measuring point (marked with paint) on the top of the casing.

Remove the steel tape and check the wetted portion at the end of the tape.

NOTE: If the chalked portion is not wet repeat the procedure using a greater hold point. If the chalked portion is completely wet repeat the procedure using a lesser hold point.

If the tape has the 1-ft section of divisions then add the unwetted length of the chalked portion of the tape to the hold point value to obtain the depth-to-water measurement. If the

Approvals: Project Manager Leigh S. Prater 1-5-87		QAD Rep. DR Dahl 12/17/86	
Procedure No: P-5	Revision No: 0	Date Issued: 1-5-87	Page 1 of 2

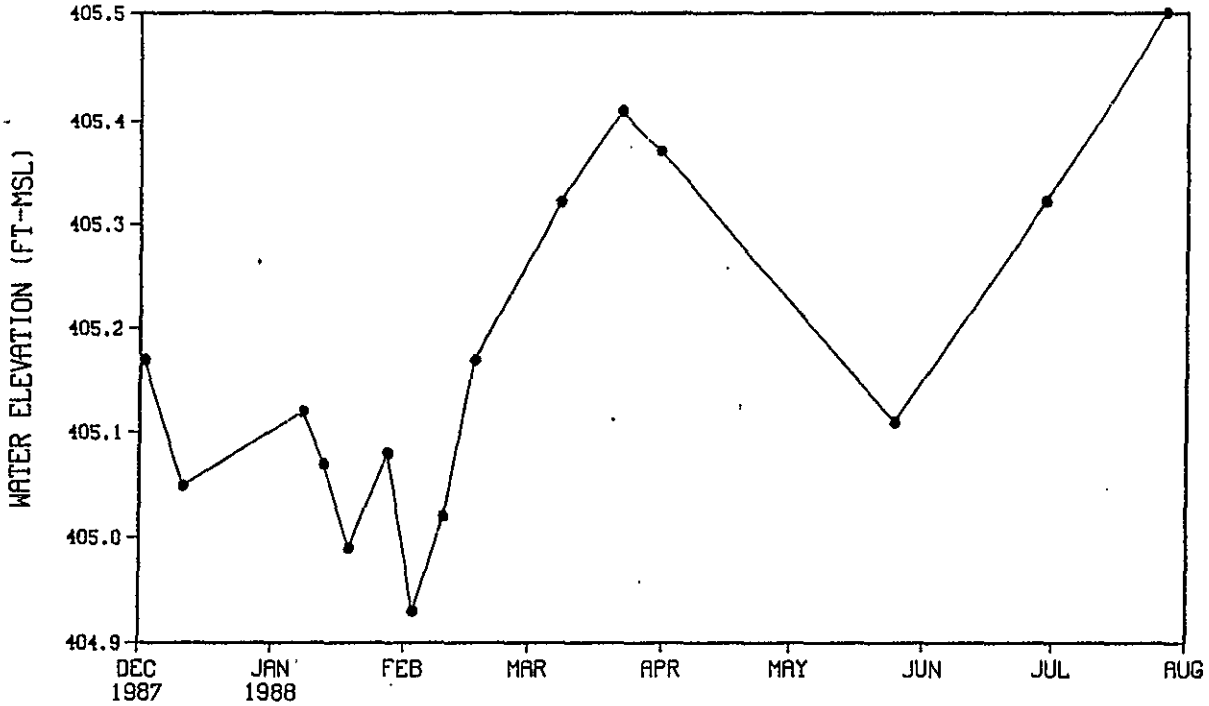
tape has divisions all along it's length then subtract the wetted length of the chalked portion of the tape from the hold point value to obtain the depth-to-water measurement.

Repeat the procedure until two steel tape measurements agree within at least ± 0.05 ft.

Record the date, well number, depth-to-water measurements, time of measurements, steel tape number, and the initials of the person taking the measurements in the 100-H Area Water-Level Network field notebook. If you must subtract the wetted length to obtain the depth to water measurement then record the hold point and the length of the wet portion as well as the depth-to-water measurements.

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E27-8

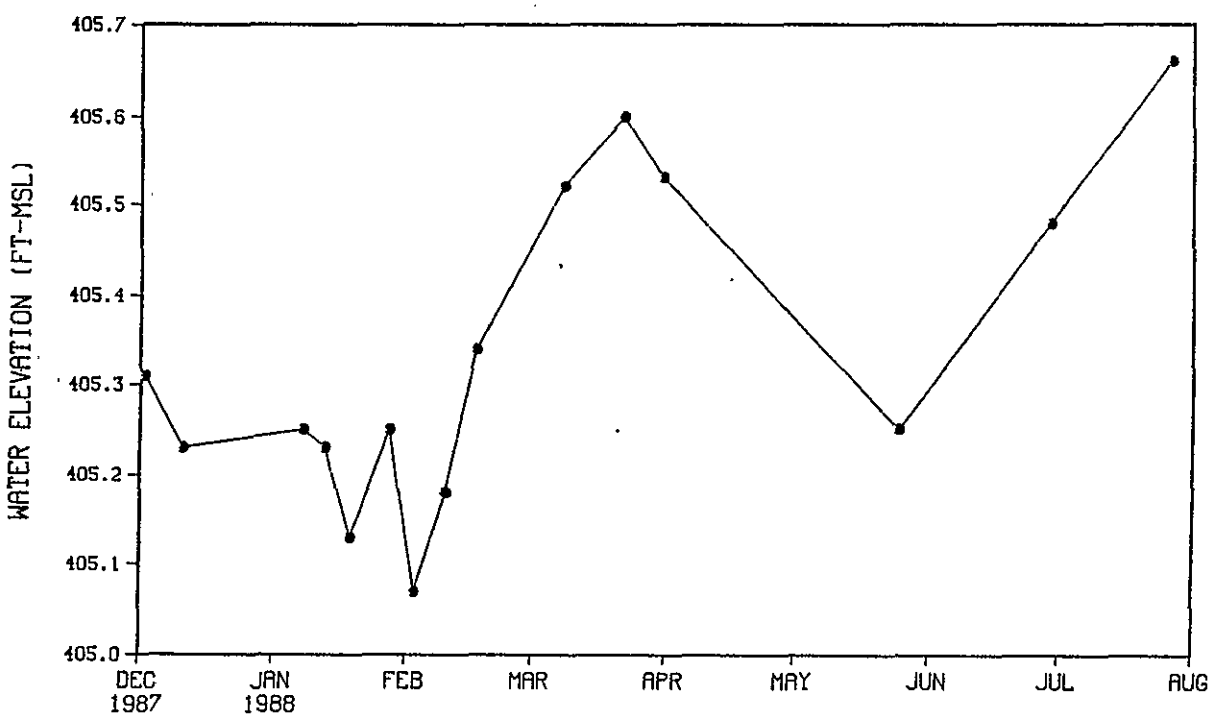
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E27-8	12/02/87	637.83	232.66	405.17
2-E27-8	12/11/87	637.83	232.78	405.05
2-E27-8	1/08/88	637.83	232.71	405.12
2-E27-8	1/13/88	637.83	232.76	405.07
2-E27-8	1/19/88	637.83	232.84	404.99
2-E27-8	1/28/88	637.83	232.75	405.08
2-E27-8	2/03/88	637.83	232.90	404.93
2-E27-8	2/10/88	637.83	232.81	405.02
2-E27-8	2/17/88	637.83	232.66	405.17
2-E27-8	3/08/88	637.83	232.51	405.32
2-E27-8	3/22/88	637.83	232.42	405.41
2-E27-8	3/31/88	637.83	232.46	405.37
2-E27-8	5/25/88	637.83	232.72	405.11
2-E27-8	6/29/88	637.83	232.51	405.32
2-E27-8	7/27/88	637.83	232.33	405.50



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E27-9

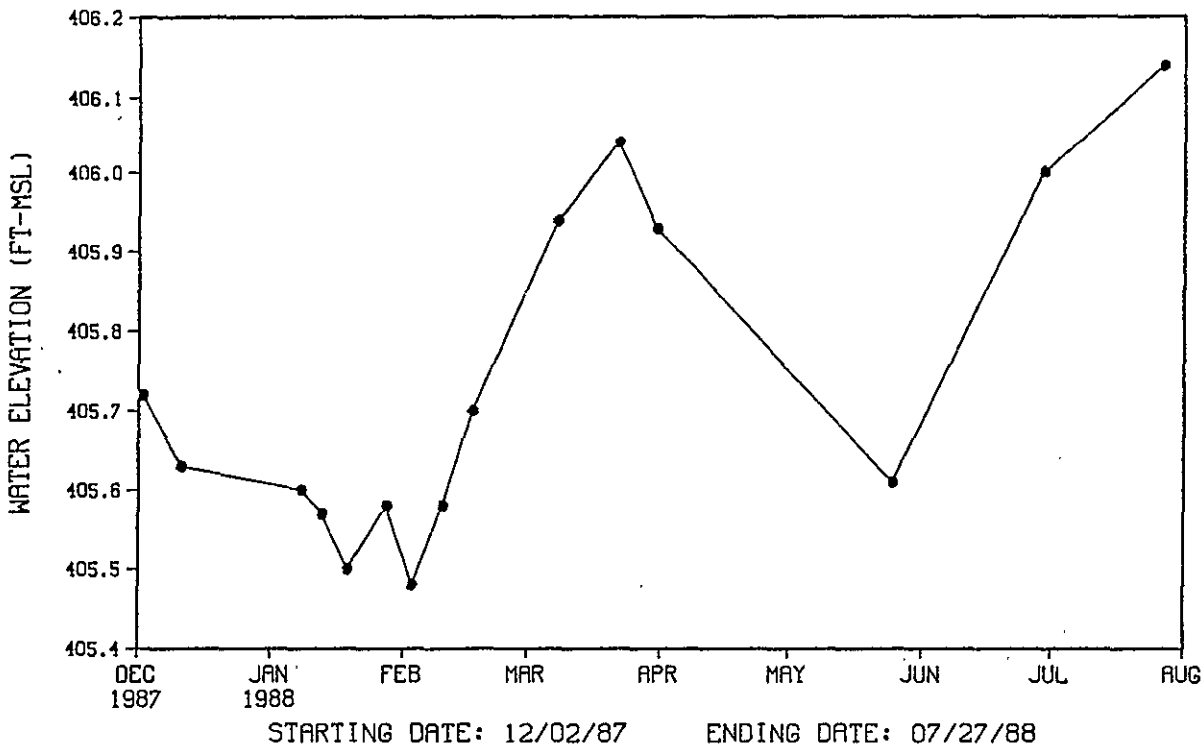
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E27-9	12/02/87	629.21	223.90	405.31
2-E27-9	12/11/87	629.21	223.98	405.23
2-E27-9	1/08/88	629.21	223.96	405.25
2-E27-9	1/13/88	629.21	223.98	405.23
2-E27-9	1/19/88	629.21	224.08	405.13
2-E27-9	1/28/88	629.21	223.96	405.25
2-E27-9	2/03/88	629.21	224.14	405.07
2-E27-9	2/10/88	629.21	224.03	405.18
2-E27-9	2/17/88	629.21	223.87	405.34
2-E27-9	3/08/88	629.21	223.69	405.52
2-E27-9	3/22/88	629.21	223.61	405.60
2-E27-9	3/31/88	629.21	223.68	405.53
2-E27-9	5/25/88	629.21	223.96	405.25
2-E27-9	6/29/88	629.21	223.73	405.48
2-E27-9	7/27/88	629.21	223.55	405.66



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

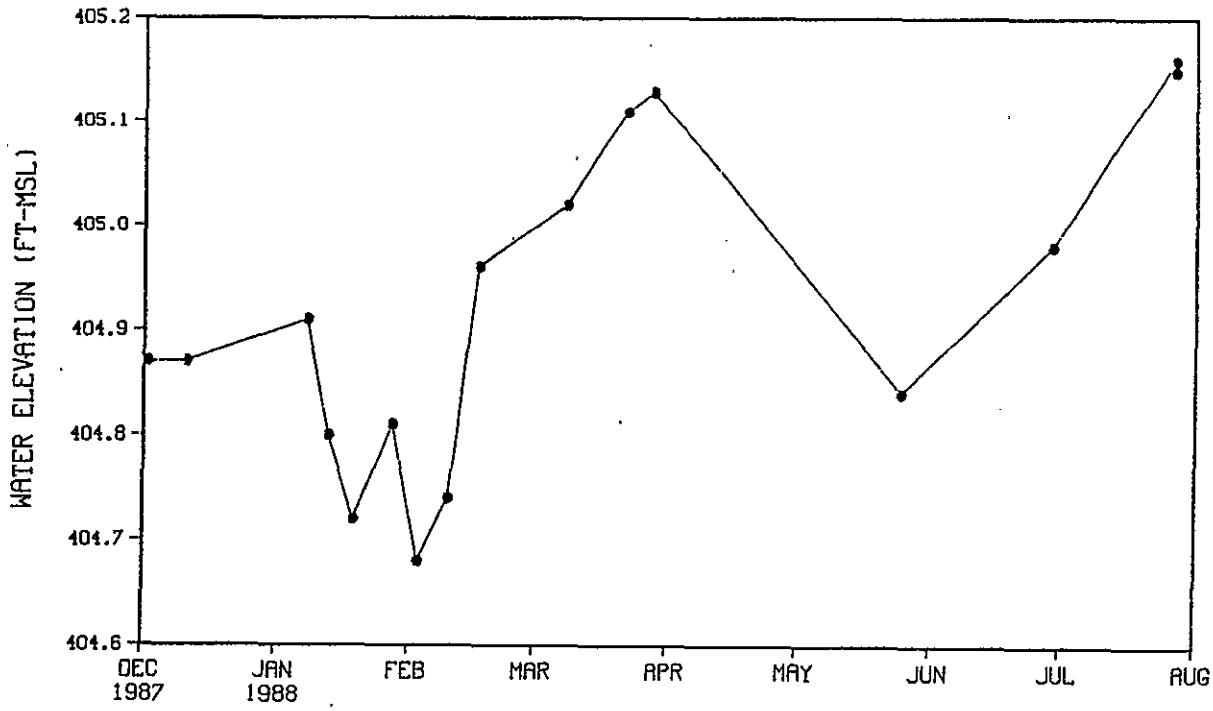
WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E27-10

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E27-10	12/02/87	624.47	218.75	405.72
2-E27-10	12/11/87	624.47	218.84	405.63
2-E27-10	1/08/88	624.47	218.87	405.60
2-E27-10	1/13/88	624.47	218.90	405.57
2-E27-10	1/19/88	624.47	218.97	405.50
2-E27-10	1/28/88	624.47	218.89	405.58
2-E27-10	2/03/88	624.47	218.99	405.48
2-E27-10	2/10/88	624.47	218.89	405.58
2-E27-10	2/17/88	624.47	218.77	405.70
2-E27-10	3/08/88	624.47	218.53	405.94
2-E27-10	3/22/88	624.47	218.43	406.04
2-E27-10	3/31/88	624.47	218.54	405.93
2-E27-10	5/25/88	624.47	218.86	405.61
2-E27-10	6/29/88	624.47	218.47	406.00
2-E27-10	7/27/88	624.47	218.33	406.14



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E28-26

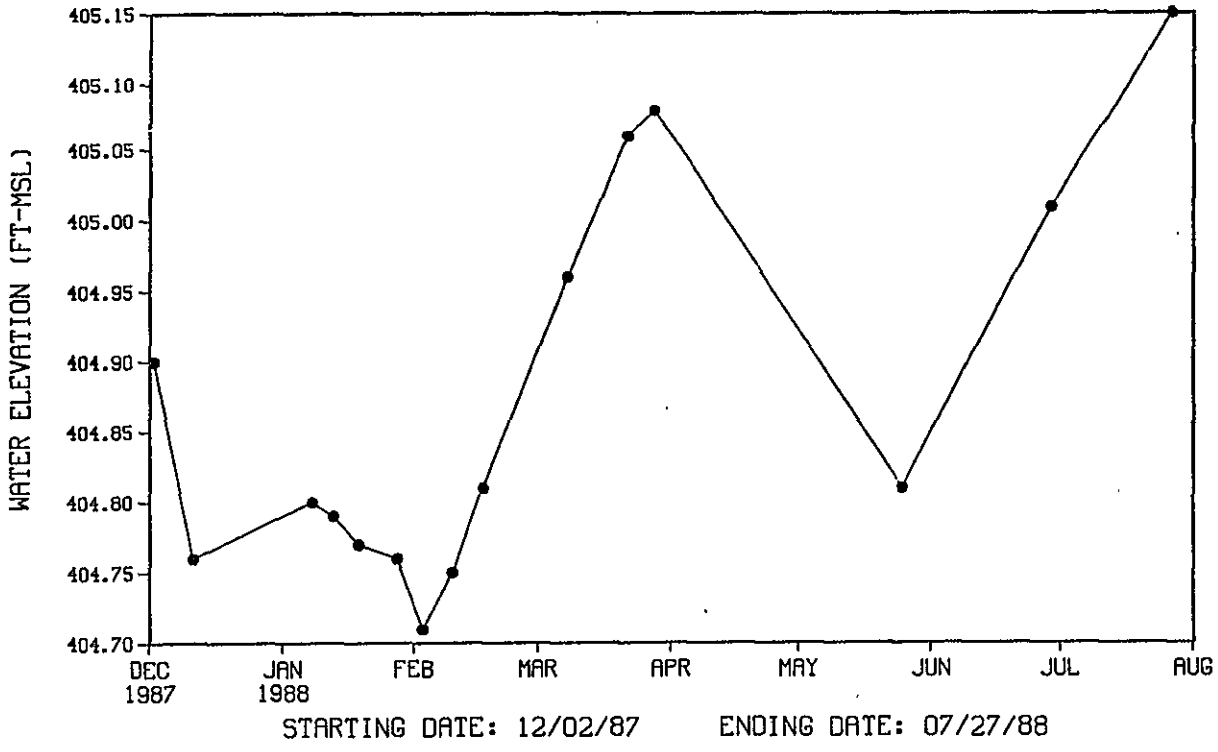
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E28-26	12/02/87	687.26	282.39	404.87
2-E28-26	12/11/87	687.26	282.39	404.87
2-E28-26	1/08/88	687.26	282.35	404.91
2-E28-26	1/13/88	687.26	282.46	404.80
2-E28-26	1/19/88	687.26	282.54	404.72
2-E28-26	1/28/88	687.26	282.45	404.81
2-E28-26	2/03/88	687.26	282.58	404.68
2-E28-26	2/10/88	687.26	282.52	404.74
2-E28-26	2/17/88	687.26	282.30	404.96
2-E28-26	3/08/88	687.26	282.24	405.02
2-E28-26	3/22/88	687.26	282.15	405.11
2-E28-26	3/28/88	687.26	282.13	405.13
2-E28-26	5/25/88	687.26	282.42	404.84
2-E28-26	6/29/88	687.26	282.28	404.98
2-E28-26	7/27/88	687.26	282.10	405.16
2-E28-26	7/27/88	687.26	282.11	405.15



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

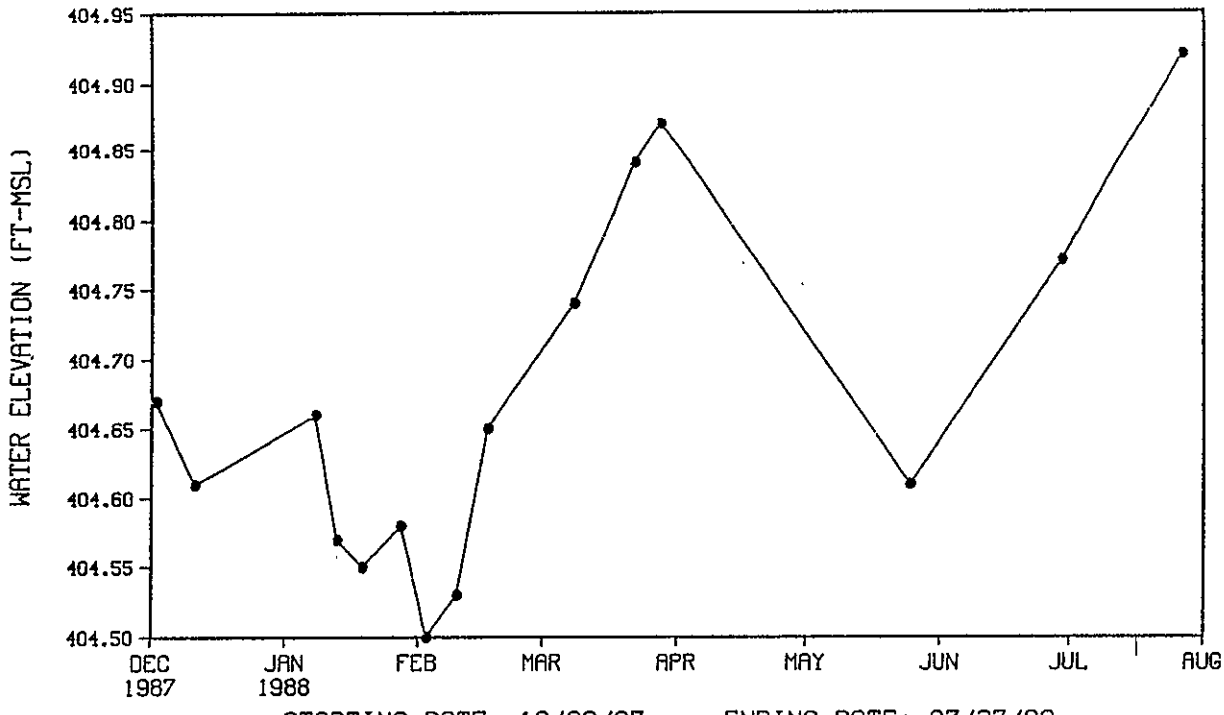
WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E28-27

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E28-27	12/02/87	680.37	275.47	404.90
2-E28-27	12/11/87	680.37	275.61	404.76
2-E28-27	1/08/88	680.37	275.57	404.80
2-E28-27	1/13/88	680.37	275.58	404.79
2-E28-27	1/19/88	680.37	275.60	404.77
2-E28-27	1/28/88	680.37	275.61	404.76
2-E28-27	2/03/88	680.37	275.66	404.71
2-E28-27	2/10/88	680.37	275.62	404.75
2-E28-27	2/17/88	680.37	275.56	404.81
2-E28-27	3/08/88	680.37	275.41	404.96
2-E28-27	3/22/88	680.37	275.31	405.06
2-E28-27	3/28/88	680.37	275.29	405.08
2-E28-27	5/25/88	680.37	275.56	404.81
2-E28-27	6/29/88	680.37	275.36	405.01
2-E28-27	7/27/88	680.37	275.22	405.15



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E32-2

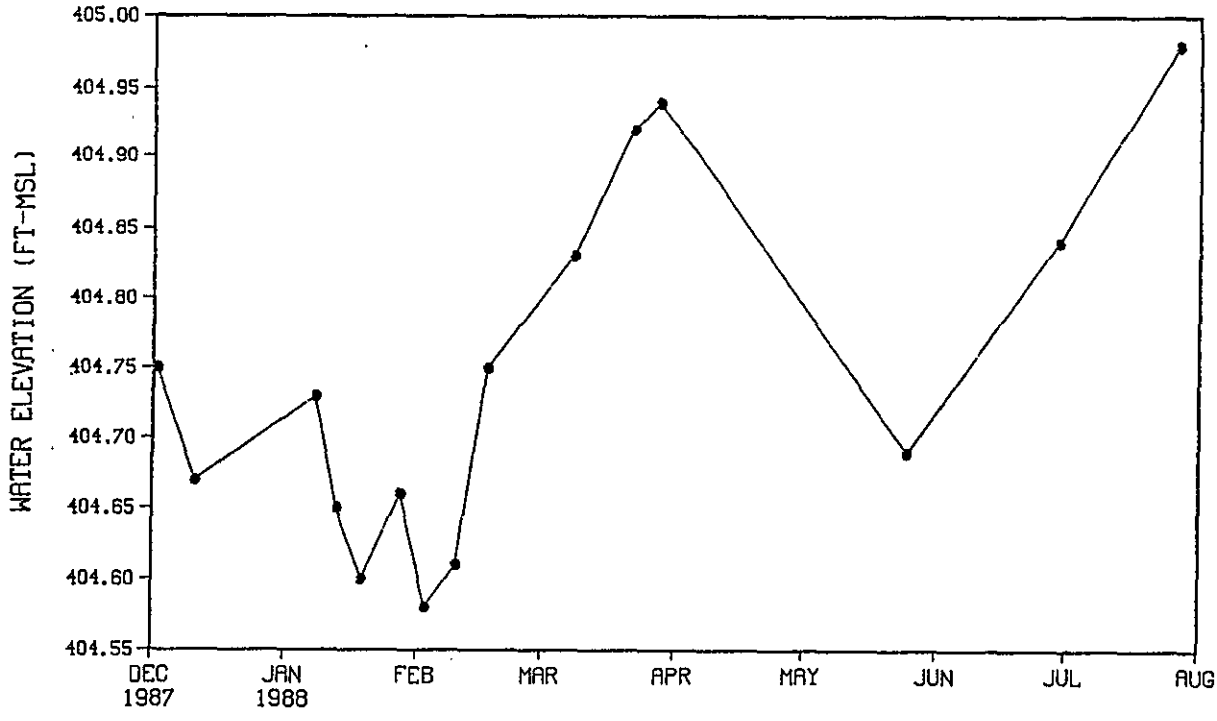
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E32-2	12/02/87	670.06	265.39	404.67
2-E32-2	12/11/87	670.06	265.45	404.61
2-E32-2	1/08/88	670.06	265.40	404.66
2-E32-2	1/13/88	670.06	265.49	404.57
2-E32-2	1/19/88	670.06	265.51	404.55
2-E32-2	1/28/88	670.06	265.48	404.58
2-E32-2	2/03/88	670.06	265.56	404.50
2-E32-2	2/10/88	670.06	265.53	404.53
2-E32-2	2/17/88	670.06	265.41	404.65
2-E32-2	3/08/88	670.06	265.32	404.74
2-E32-2	3/22/88	670.06	265.22	404.84
2-E32-2	3/28/88	670.06	265.19	404.87
2-E32-2	5/25/88	670.06	265.45	404.61
2-E32-2	6/29/88	670.06	265.29	404.77
2-E32-2	7/27/88	670.06	265.14	404.92



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E32-3

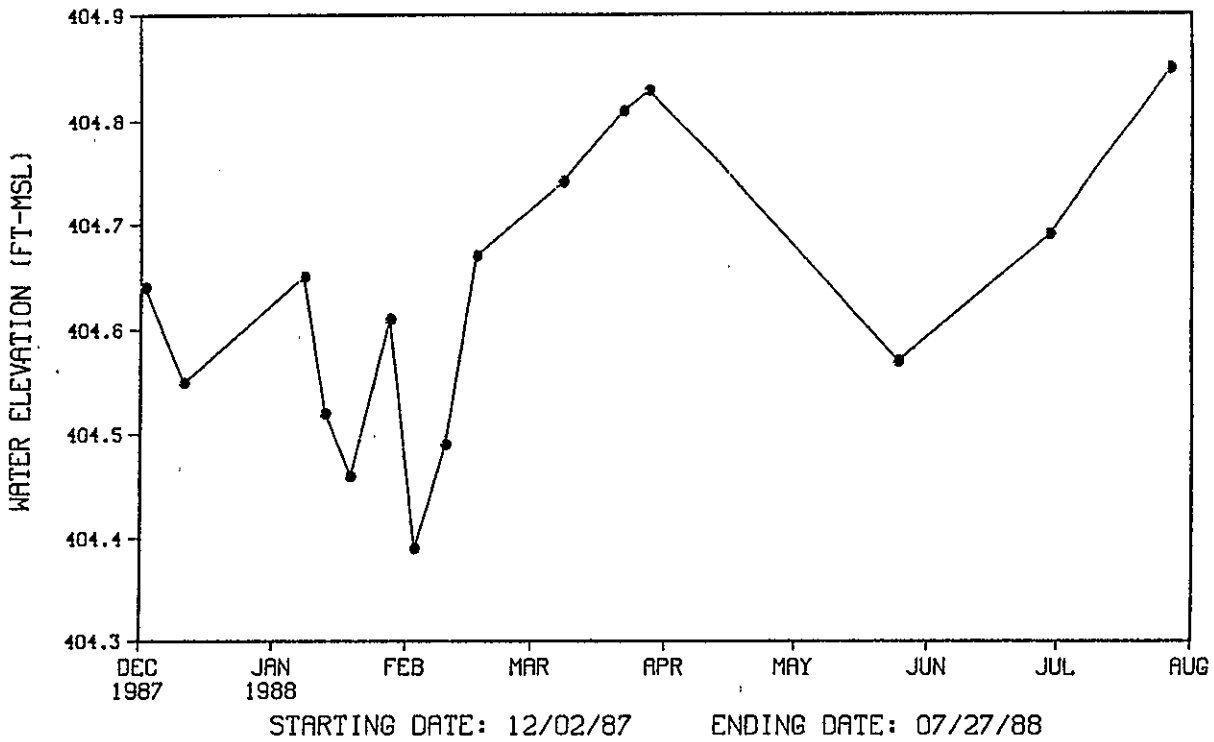
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E32-3	12/02/87	676.51	271.76	404.75
2-E32-3	12/11/87	676.51	271.84	404.67
2-E32-3	1/08/88	676.51	271.78	404.73
2-E32-3	1/13/88	676.51	271.86	404.65
2-E32-3	1/19/88	676.51	271.91	404.60
2-E32-3	1/28/88	676.51	271.85	404.66
2-E32-3	2/03/88	676.51	271.93	404.58
2-E32-3	2/10/88	676.51	271.90	404.61
2-E32-3	2/17/88	676.51	271.76	404.75
2-E32-3	3/08/88	676.51	271.68	404.83
2-E32-3	3/22/88	676.51	271.59	404.92
2-E32-3	3/28/88	676.51	271.57	404.94
2-E32-3	5/25/88	676.51	271.82	404.69
2-E32-3	6/29/88	676.51	271.67	404.84
2-E32-3	7/27/88	676.51	271.53	404.98



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

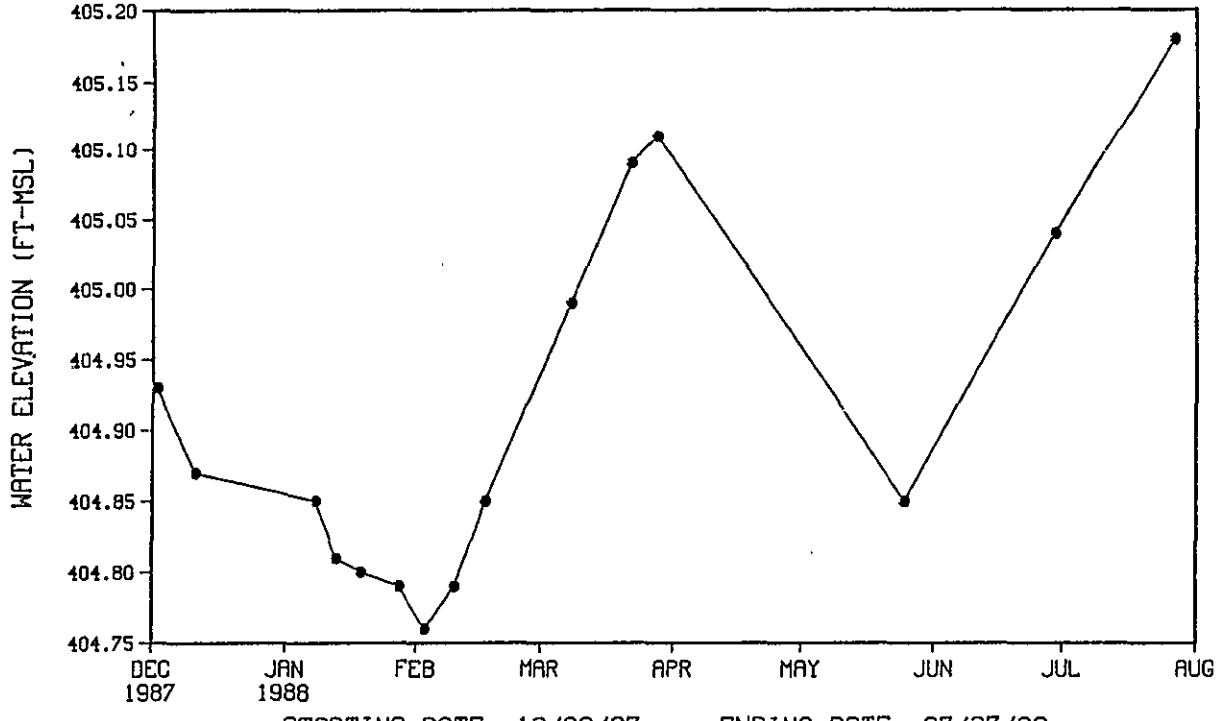
WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E32-4

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E32-4	12/02/87	685.88	281.24	404.64
2-E32-4	12/11/87	685.88	281.33	404.55
2-E32-4	1/08/88	685.88	281.23	404.65
2-E32-4	1/13/88	685.88	281.36	404.52
2-E32-4	1/19/88	685.88	281.42	404.46
2-E32-4	1/28/88	685.88	281.27	404.61
2-E32-4	2/03/88	685.88	281.49	404.39
2-E32-4	2/10/88	685.88	281.39	404.49
2-E32-4	2/17/88	685.88	281.21	404.67
2-E32-4	3/08/88	685.88	281.14	404.74
2-E32-4	3/22/88	685.88	281.07	404.81
2-E32-4	3/28/88	685.88	281.05	404.83
2-E32-4	5/25/88	685.88	281.31	404.57
2-E32-4	6/29/88	685.88	281.19	404.69
2-E32-4	7/27/88	685.88	281.03	404.85



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E33-28

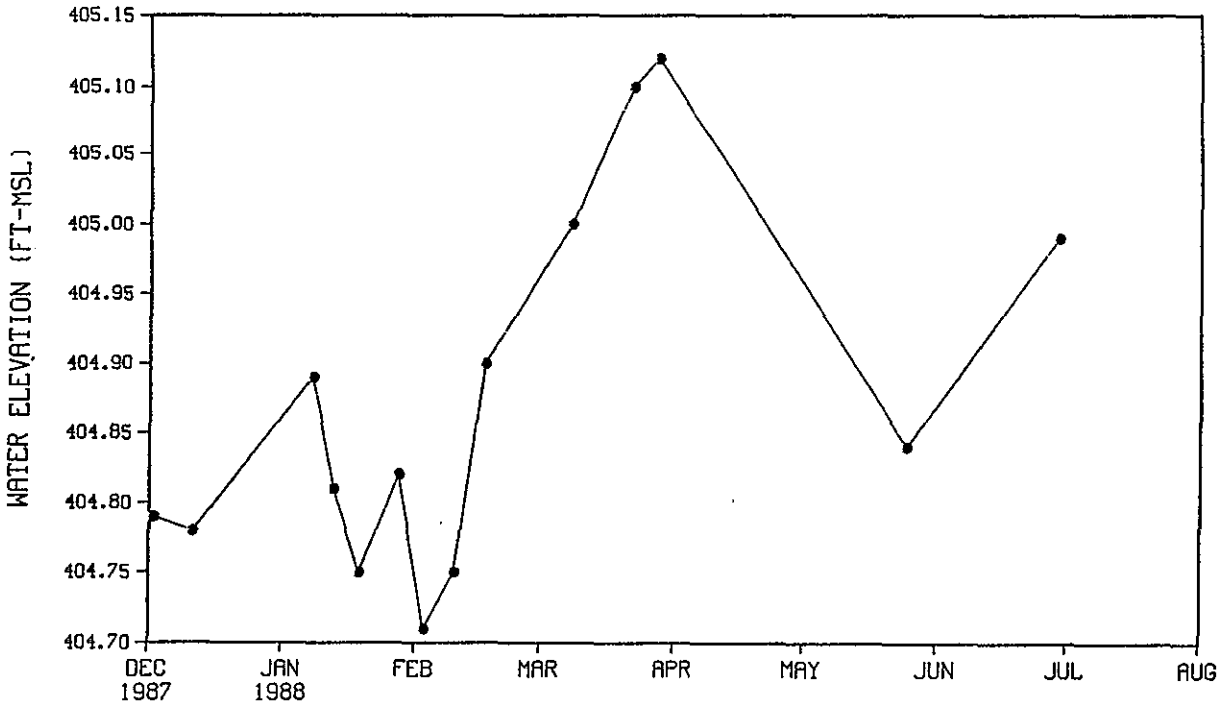
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E33-28	12/02/87	664.23	259.30	404.93
2-E33-28	12/11/87	664.23	259.36	404.87
2-E33-28	1/08/88	664.23	259.38	404.85
2-E33-28	1/13/88	664.23	259.42	404.81
2-E33-28	1/19/88	664.23	259.43	404.80
2-E33-28	1/28/88	664.23	259.44	404.79
2-E33-28	2/03/88	664.23	259.47	404.76
2-E33-28	2/10/88	664.23	259.44	404.79
2-E33-28	2/17/88	664.23	259.38	404.85
2-E33-28	3/08/88	664.23	259.24	404.99
2-E33-28	3/22/88	664.23	259.14	405.09
2-E33-28	3/28/88	664.23	259.12	405.11
2-E33-28	5/25/88	664.23	259.38	404.85
2-E33-28	6/29/88	664.23	259.19	405.04
2-E33-28	7/27/88	664.23	259.05	405.18



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E33-29

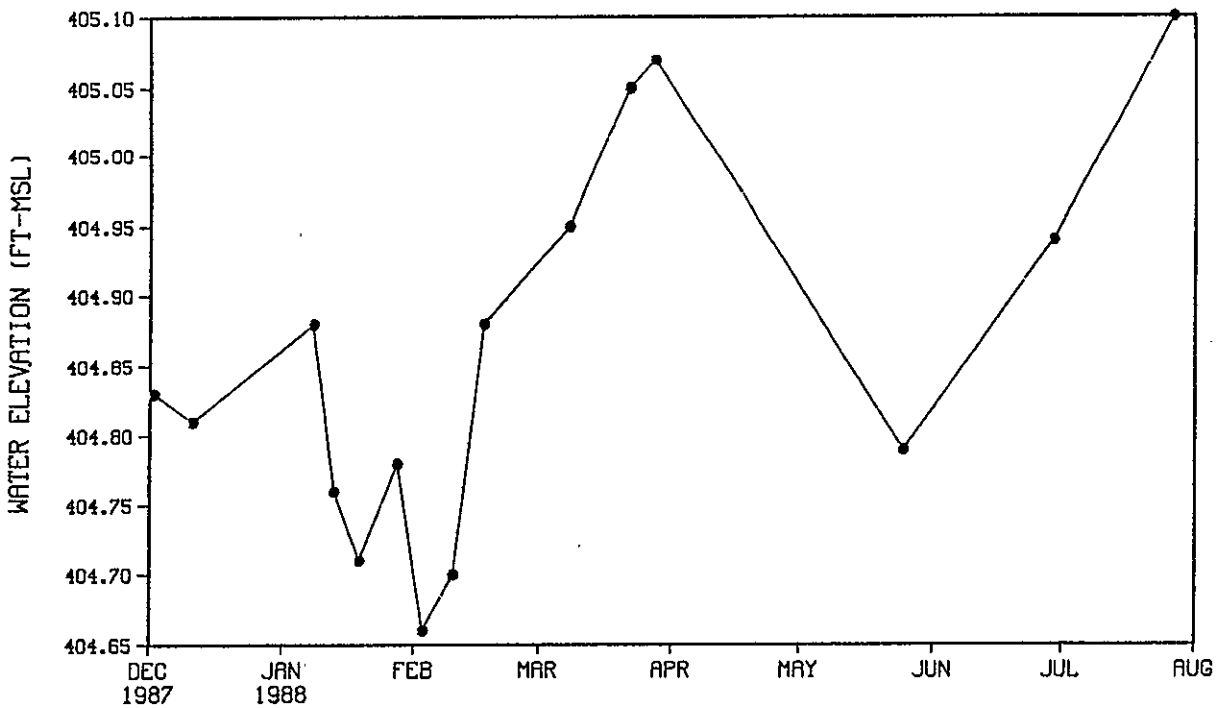
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E33-29	12/02/87	673.77	268.98	404.79
2-E33-29	12/11/87	673.77	268.99	404.78
2-E33-29	1/08/88	673.77	268.88	404.89
2-E33-29	1/13/88	673.77	268.96	404.81
2-E33-29	1/19/88	673.77	269.02	404.75
2-E33-29	1/28/88	673.77	268.95	404.82
2-E33-29	2/03/88	673.77	269.06	404.71
2-E33-29	2/10/88	673.77	269.02	404.75
2-E33-29	2/17/88	673.77	268.87	404.90
2-E33-29	3/08/88	673.77	268.77	405.00
2-E33-29	3/22/88	673.77	268.67	405.10
2-E33-29	3/28/88	673.77	268.65	405.12
2-E33-29	5/25/88	673.77	268.93	404.84
2-E33-29	6/29/88	673.77	268.78	404.99



STARTING DATE: 12/02/87 ENDING DATE: 06/29/88

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E33-30

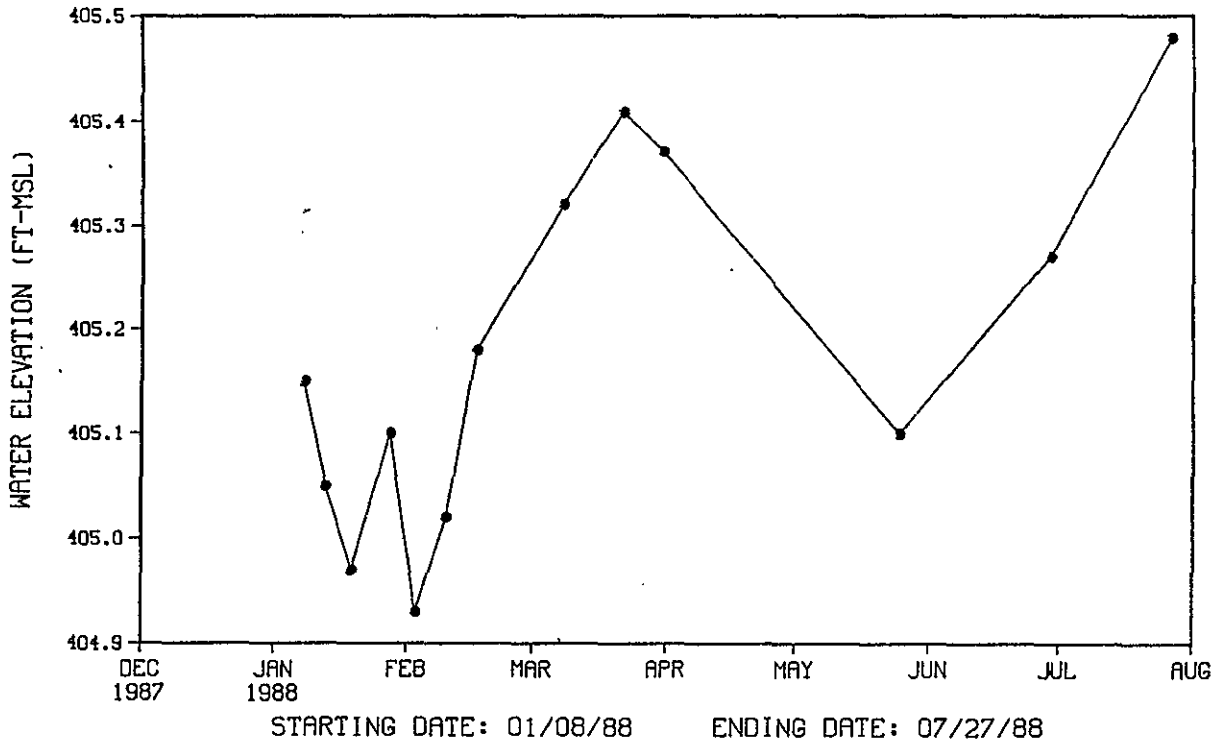
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E33-30	12/02/87	663.70	258.87	404.83
2-E33-30	12/11/87	663.70	258.89	404.81
2-E33-30	1/08/88	663.70	258.82	404.88
2-E33-30	1/13/88	663.70	258.94	404.76
2-E33-30	1/19/88	663.70	258.99	404.71
2-E33-30	1/28/88	663.70	258.92	404.78
2-E33-30	2/03/88	663.70	259.04	404.66
2-E33-30	2/10/88	663.70	259.00	404.70
2-E33-30	2/17/88	663.70	258.82	404.88
2-E33-30	3/08/88	663.70	258.75	404.95
2-E33-30	3/22/88	663.70	258.65	405.05
2-E33-30	3/28/88	663.70	258.63	405.07
2-E33-30	5/25/88	663.70	258.91	404.79
2-E33-30	6/29/88	663.70	258.76	404.94
2-E33-30	7/27/88	663.70	258.60	405.10



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

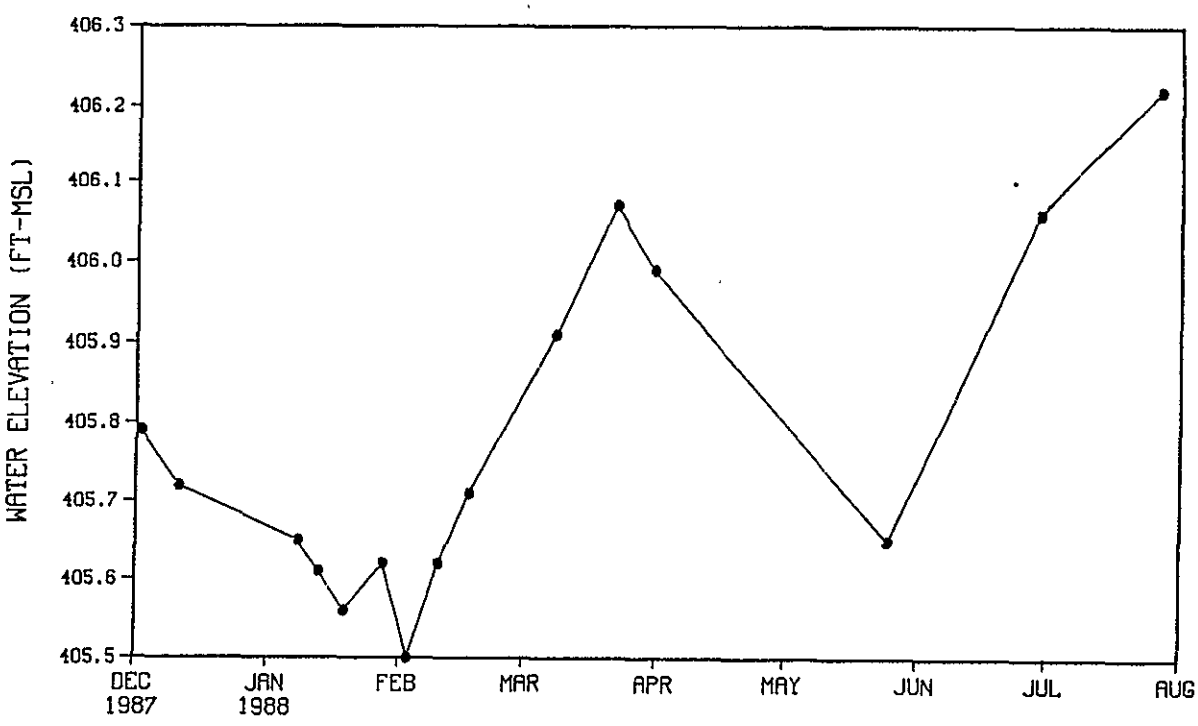
WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E34-2

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E34-2	12/02/87	630.80	0.00	0.00
2-E34-2	1/08/88	630.80	225.65	405.15
2-E34-2	1/13/88	630.80	225.75	405.05
2-E34-2	1/19/88	630.80	225.83	404.97
2-E34-2	1/28/88	630.80	225.70	405.10
2-E34-2	2/03/88	630.80	225.87	404.93
2-E34-2	2/10/88	630.80	225.78	405.02
2-E34-2	2/17/88	630.80	225.62	405.18
2-E34-2	3/08/88	630.80	225.48	405.32
2-E34-2	3/22/88	630.80	225.39	405.41
2-E34-2	3/31/88	630.80	225.43	405.37
2-E34-2	5/25/88	630.80	225.70	405.10
2-E34-2	6/29/88	630.80	225.53	405.27
2-E34-2	7/27/88	630.80	225.32	405.48



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E34-3

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E34-3	12/02/87	611.52	205.73	405.79
2-E34-3	12/11/87	611.52	205.80	405.72
2-E34-3	1/08/88	611.52	205.87	405.65
2-E34-3	1/13/88	611.52	205.91	405.61
2-E34-3	1/19/88	611.52	205.96	405.56
2-E34-3	1/28/88	611.52	205.90	405.62
2-E34-3	2/03/88	611.52	206.02	405.50
2-E34-3	2/10/88	611.52	205.90	405.62
2-E34-3	2/17/88	611.52	205.81	405.71
2-E34-3	3/08/88	611.52	205.61	405.91
2-E34-3	3/22/88	611.52	205.45	406.07
2-E34-3	3/31/88	611.52	205.53	405.99
2-E34-3	5/25/88	611.52	205.87	405.65
2-E34-3	6/29/88	611.52	205.46	406.06
2-E34-3	7/27/88	611.52	205.30	406.22



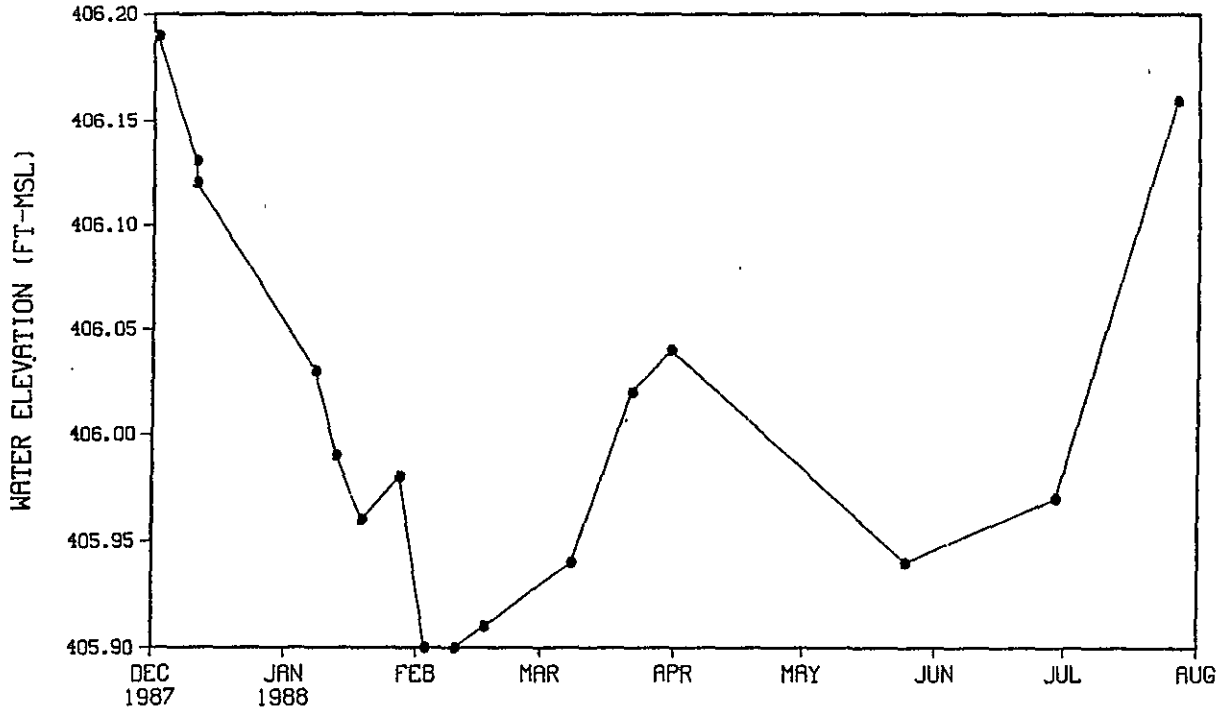
STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

WATER-LEVEL DATA FOR WELL 2-E34-4

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E34-4	12/02/87	587.56	0.00	0.00
2-E34-4	5/25/88	587.56	0.00	0.00
2-E34-4	6/29/88	587.56	0.00	0.00
2-E34-4	7/27/88	587.56	0.00	0.00

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E34-5

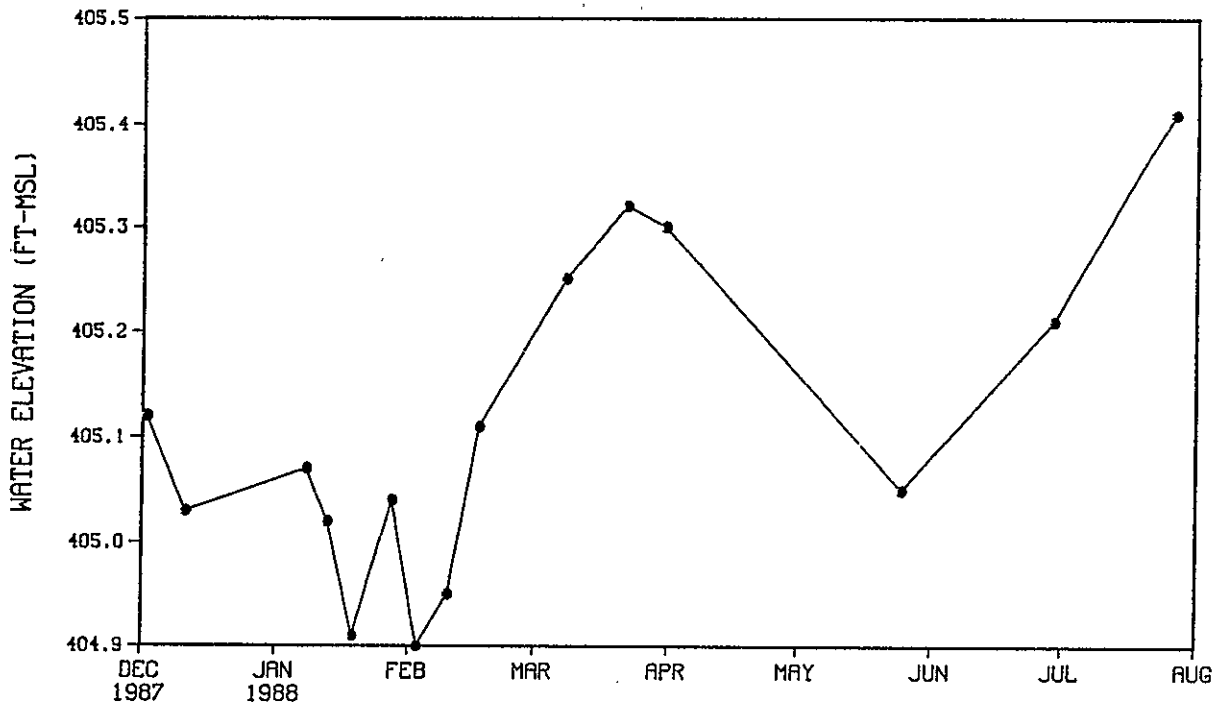
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E34-5	12/02/87	590.79	184.60	406.19
2-E34-5	12/11/87	590.79	184.66	406.13
2-E34-5	12/11/87	590.79	184.67	406.12
2-E34-5	1/08/88	590.79	184.76	406.03
2-E34-5	1/13/88	590.79	184.80	405.99
2-E34-5	1/19/88	590.79	184.83	405.96
2-E34-5	1/28/88	590.79	184.81	405.98
2-E34-5	2/03/88	590.79	184.89	405.90
2-E34-5	2/10/88	590.79	184.89	405.90
2-E34-5	2/17/88	590.79	184.88	405.91
2-E34-5	3/08/88	590.79	184.85	405.94
2-E34-5	3/22/88	590.79	184.77	406.02
2-E34-5	3/31/88	590.79	184.75	406.04
2-E34-5	5/25/88	590.79	184.85	405.94
2-E34-5	6/29/88	590.79	184.82	405.97
2-E34-5	7/27/88	590.79	184.63	406.16



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-E34-6

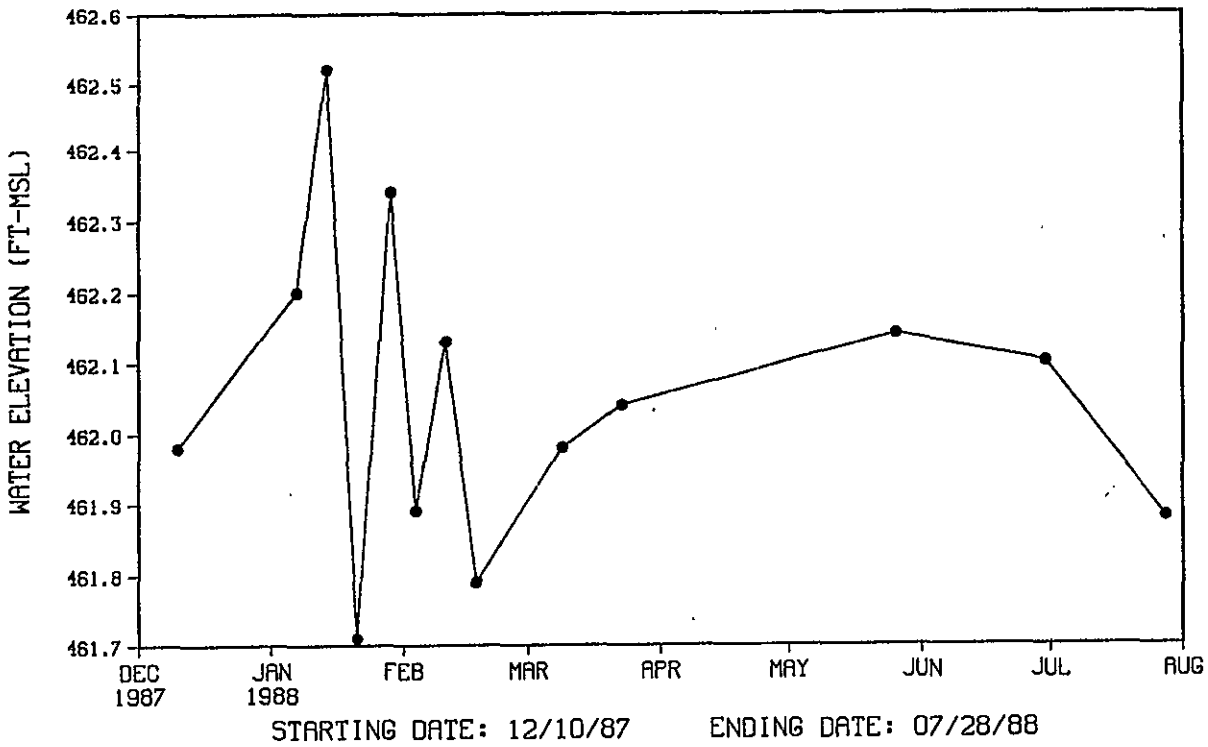
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-E34-6	12/02/87	597.83	192.71	405.12
2-E34-6	12/11/87	597.83	192.80	405.03
2-E34-6	12/11/87	597.83	192.80	405.03
2-E34-6	1/08/88	597.83	192.76	405.07
2-E34-6	1/13/88	597.83	192.81	405.02
2-E34-6	1/19/88	597.83	192.92	404.91
2-E34-6	1/28/88	597.83	192.79	405.04
2-E34-6	2/03/88	597.83	192.93	404.90
2-E34-6	2/10/88	597.83	192.88	404.95
2-E34-6	2/17/88	597.83	192.72	405.11
2-E34-6	3/08/88	597.83	192.58	405.25
2-E34-6	3/22/88	597.83	192.51	405.32
2-E34-6	3/31/88	597.83	192.53	405.30
2-E34-6	5/25/88	597.83	192.78	405.05
2-E34-6	6/29/88	597.83	192.62	405.21
2-E34-6	7/27/88	597.83	192.42	405.41



STARTING DATE: 12/02/87 ENDING DATE: 07/27/88

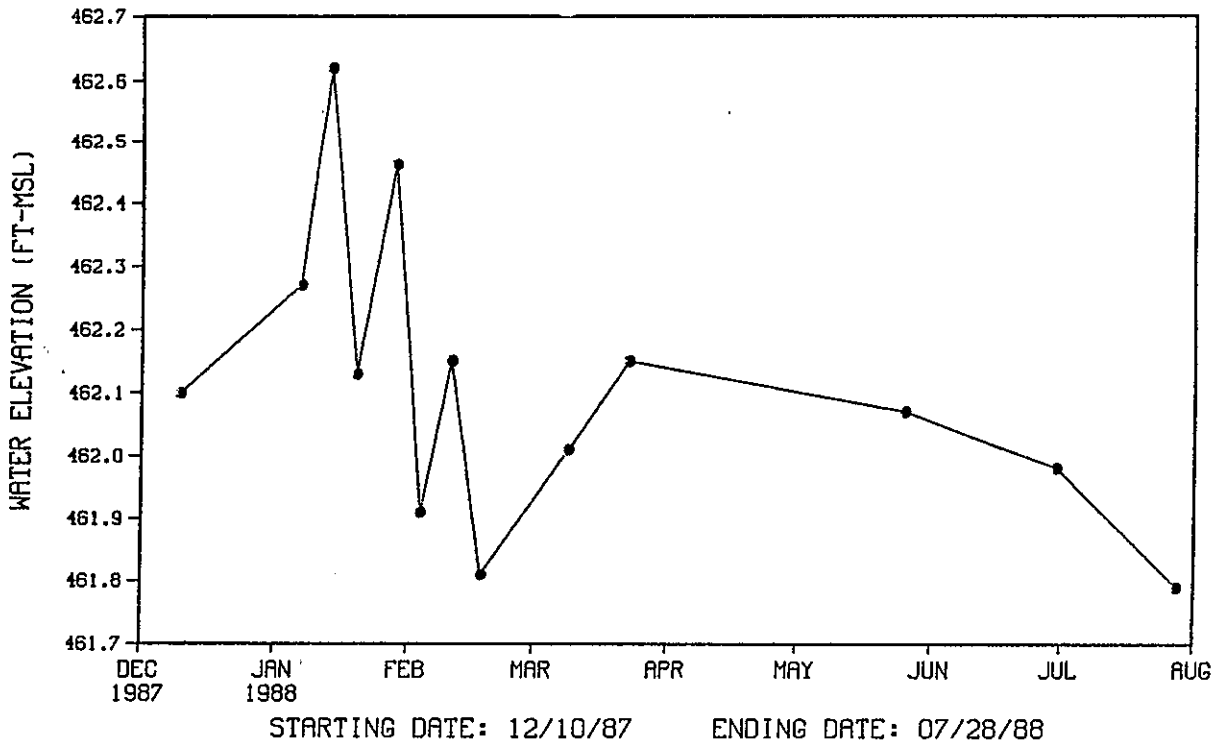
WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W6-2

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W6-2	12/10/87	692.45	230.47	461.98
2-W6-2	1/07/88	692.45	230.25	462.20
2-W6-2	1/14/88	692.45	229.93	462.52
2-W6-2	1/21/88	692.45	230.74	461.71
2-W6-2	1/29/88	692.45	230.11	462.34
2-W6-2	2/04/88	692.45	230.56	461.89
2-W6-2	2/11/88	692.45	230.32	462.13
2-W6-2	2/18/88	692.45	230.66	461.79
2-W6-2	3/09/88	692.45	230.47	461.98
2-W6-2	3/23/88	692.45	230.41	462.04
2-W6-2	5/26/88	692.45	230.31	462.14
2-W6-2	6/30/88	692.45	230.35	462.10
2-W6-2	7/28/88	692.45	230.57	461.88



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W7-1

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W7-1	12/10/87	690.71	228.61	462.10
2-W7-1	1/07/88	690.71	228.44	462.27
2-W7-1	1/14/88	690.71	228.09	462.62
2-W7-1	1/20/88	690.71	228.58	462.13
2-W7-1	1/29/88	690.71	228.25	462.46
2-W7-1	2/04/88	690.71	228.80	461.91
2-W7-1	2/11/88	690.71	228.56	462.15
2-W7-1	2/18/88	690.71	228.90	461.81
2-W7-1	3/09/88	690.71	228.70	462.01
2-W7-1	3/23/88	690.71	228.56	462.15
2-W7-1	5/26/88	690.71	228.64	462.07
2-W7-1	6/30/88	690.71	228.73	461.98
2-W7-1	7/28/88	690.71	228.92	461.79



WATER-LEVEL DATA FOR WELLS 2-W7-2 AND 2-W7-3

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W7-2	12/10/87	675.59	214.48	461.11
2-W7-2	1/07/88	675.59	214.32	461.27
2-W7-2	1/14/88	675.59	214.03	461.56
2-W7-2	1/15/88	675.59	214.33	461.26
2-W7-2	1/20/88	675.59	214.45	461.14
2-W7-2	1/21/88	675.59	214.77	460.82
2-W7-2	1/29/88	675.59	214.18	461.41
2-W7-2	2/04/88	675.59	214.62	460.97
2-W7-2	2/11/88	675.59	214.42	461.17
2-W7-2	2/18/88	675.59	214.73	460.86
2-W7-2	3/09/88	675.59	214.57	461.02
2-W7-2	3/23/88	675.59	214.49	461.10
2-W7-2	5/26/88	675.59	214.51	461.08
2-W7-2	6/30/88	675.59	214.55	461.04
2-W7-2	7/28/88	675.59	214.76	460.83

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W7-3	12/10/87	676.14	216.28	459.86
2-W7-3	1/07/88	676.14	216.15	459.99
2-W7-3	1/14/88	676.14	215.82	460.32
2-W7-3	1/20/88	676.14	216.22	459.92
2-W7-3	1/21/88	676.14	216.57	459.57
2-W7-3	1/29/88	676.14	215.95	460.19
2-W7-3	2/04/88	676.14	216.47	459.67
2-W7-3	2/11/88	676.14	216.26	459.88
2-W7-3	2/18/88	676.14	216.57	459.57
2-W7-3	3/09/88	676.14	216.37	459.77
2-W7-3	3/23/88	676.14	216.21	459.93
2-W7-3	5/26/88	676.14	216.31	459.83
2-W7-3	6/30/88	676.14	216.42	459.72
2-W7-3	7/28/88	676.14	216.58	459.56

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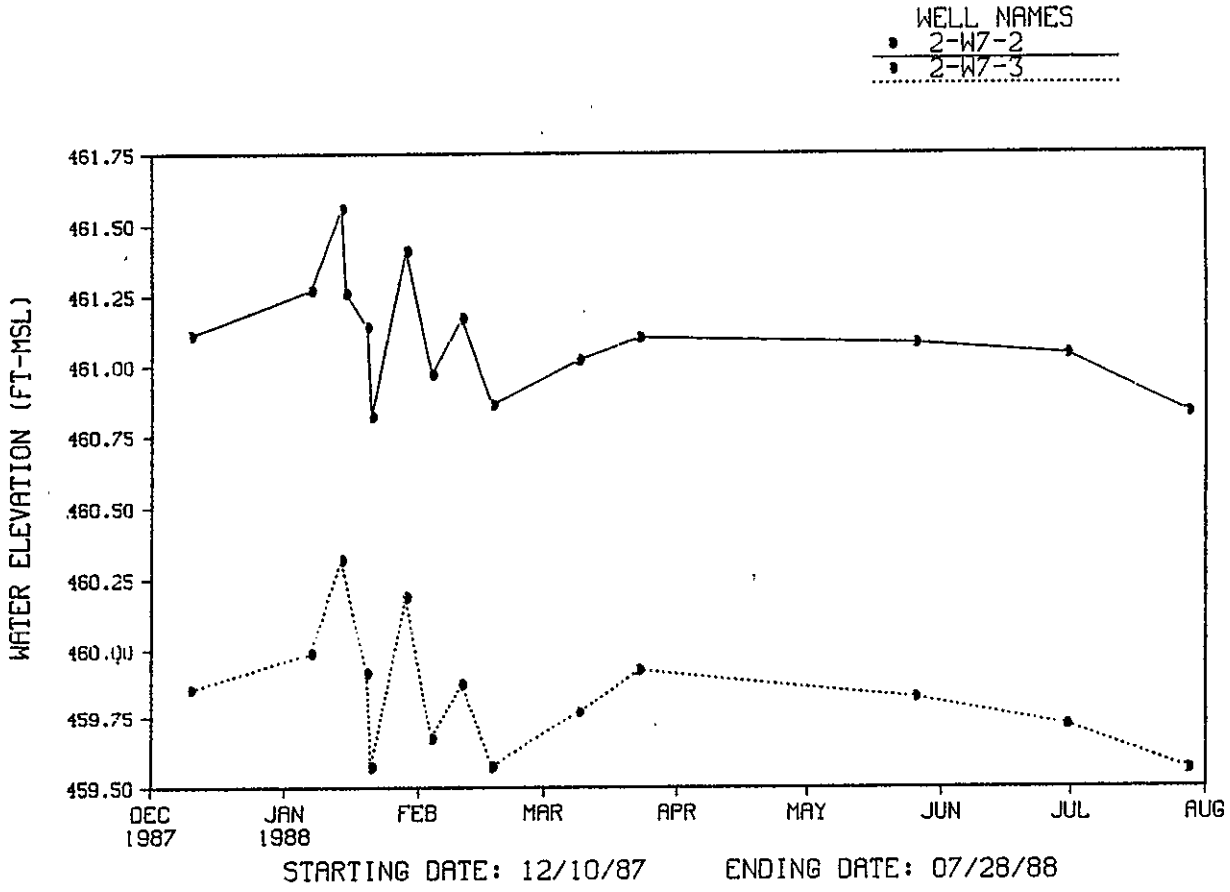
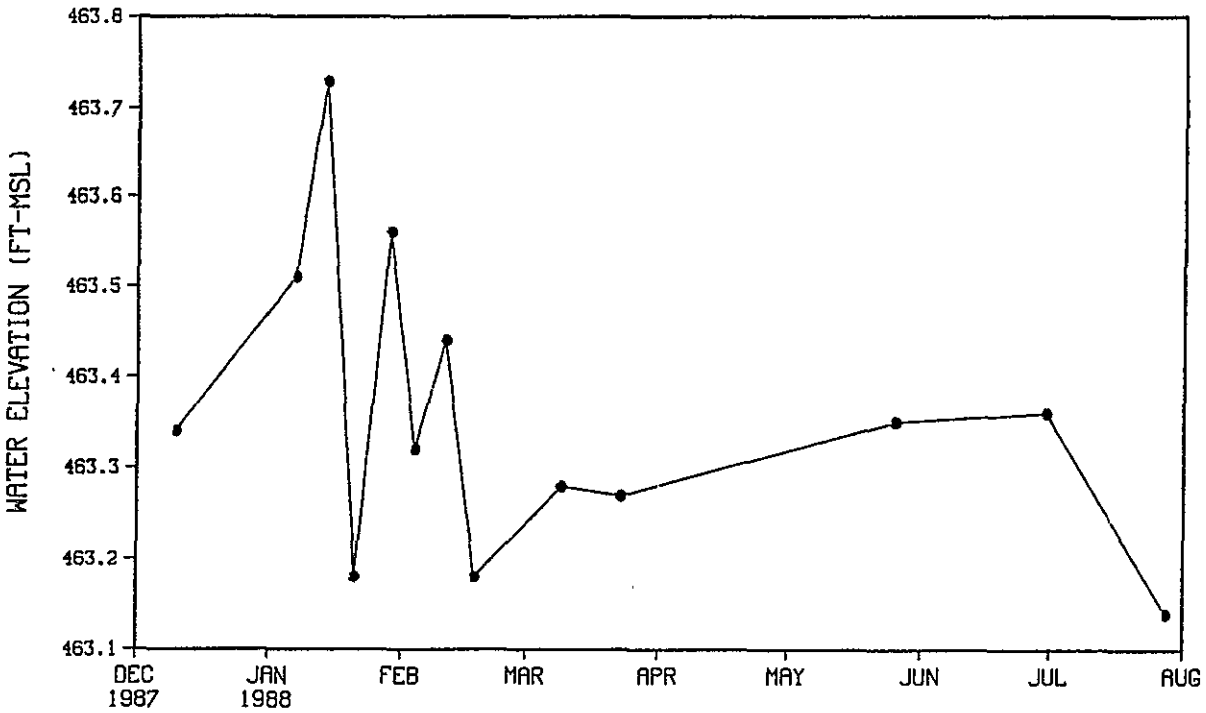
HYDROGRAPH FOR WELLS 2-W7-2 AND 2-W7-3



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W7-4

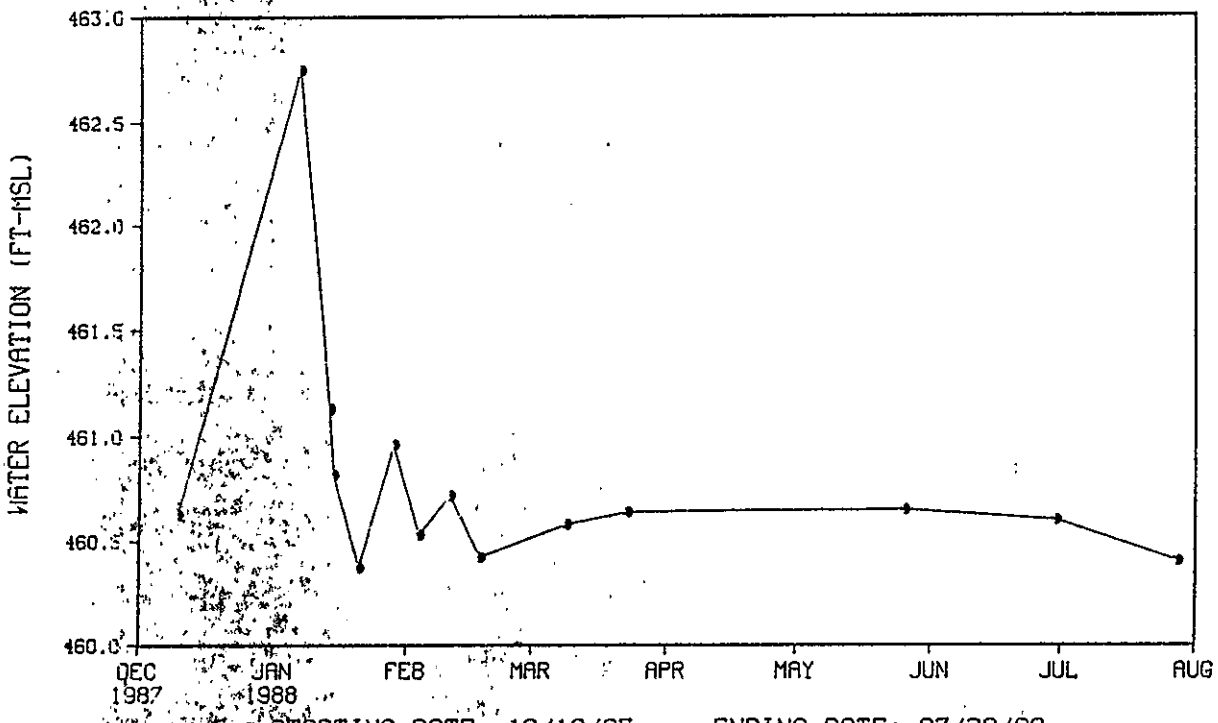
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W7-4	12/10/87	671.69	208.35	463.34
2-W7-4	1/07/88	671.69	208.18	463.51
2-W7-4	1/14/88	671.69	207.96	463.73
2-W7-4	1/21/88	671.69	208.51	463.18
2-W7-4	1/29/88	671.69	208.13	463.56
2-W7-4	2/04/88	671.69	208.37	463.32
2-W7-4	2/11/88	671.69	208.25	463.44
2-W7-4	2/18/88	671.69	208.51	463.18
2-W7-4	3/09/88	671.69	208.41	463.28
2-W7-4	3/23/88	671.69	208.42	463.27
2-W7-4	5/26/88	671.69	208.34	463.35
2-W7-4	6/30/88	671.69	208.33	463.36
2-W7-4	7/28/88	671.69	208.55	463.14



STARTING DATE: 12/10/87 ENDING DATE: 07/28/88

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W7-5

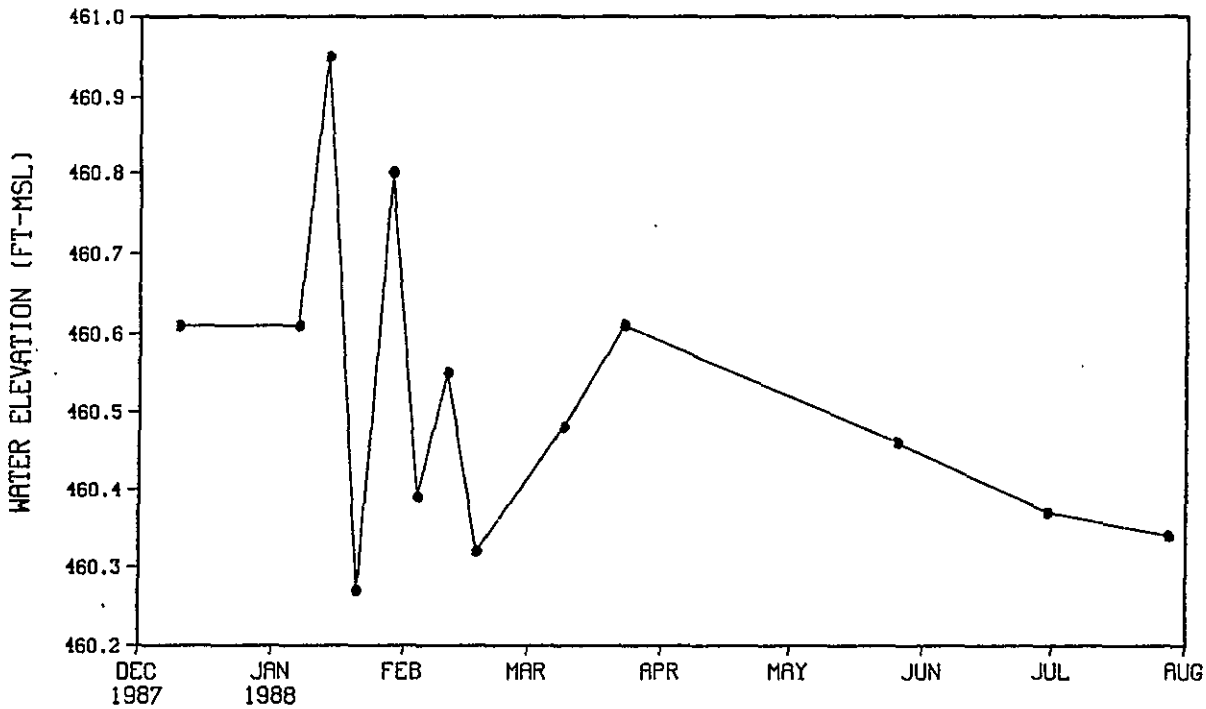
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W7-5	12/10/87	671.14	210.51	460.63
2-W7-5	1/07/88	673.03	210.28	462.75
2-W7-5	1/14/88	673.03	211.90	461.13
2-W7-5	1/15/88	673.03	212.21	460.82
2-W7-5	1/21/88	673.03	212.66	460.37
2-W7-5	1/29/88	673.03	212.07	460.96
2-W7-5	2/04/88	673.03	212.50	460.53
2-W7-5	2/11/88	673.03	212.31	460.72
2-W7-5	2/18/88	673.03	212.61	460.42
2-W7-5	3/09/88	673.03	212.45	460.58
2-W7-5	3/23/88	673.03	212.39	460.64
2-W7-5	5/26/88	673.03	212.38	460.65
2-W7-5	6/30/88	673.03	212.43	460.60
2-W7-5	7/28/88	673.03	212.63	460.40



STARTING DATE: 12/10/87 ENDING DATE: 07/28/88

WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W7-6

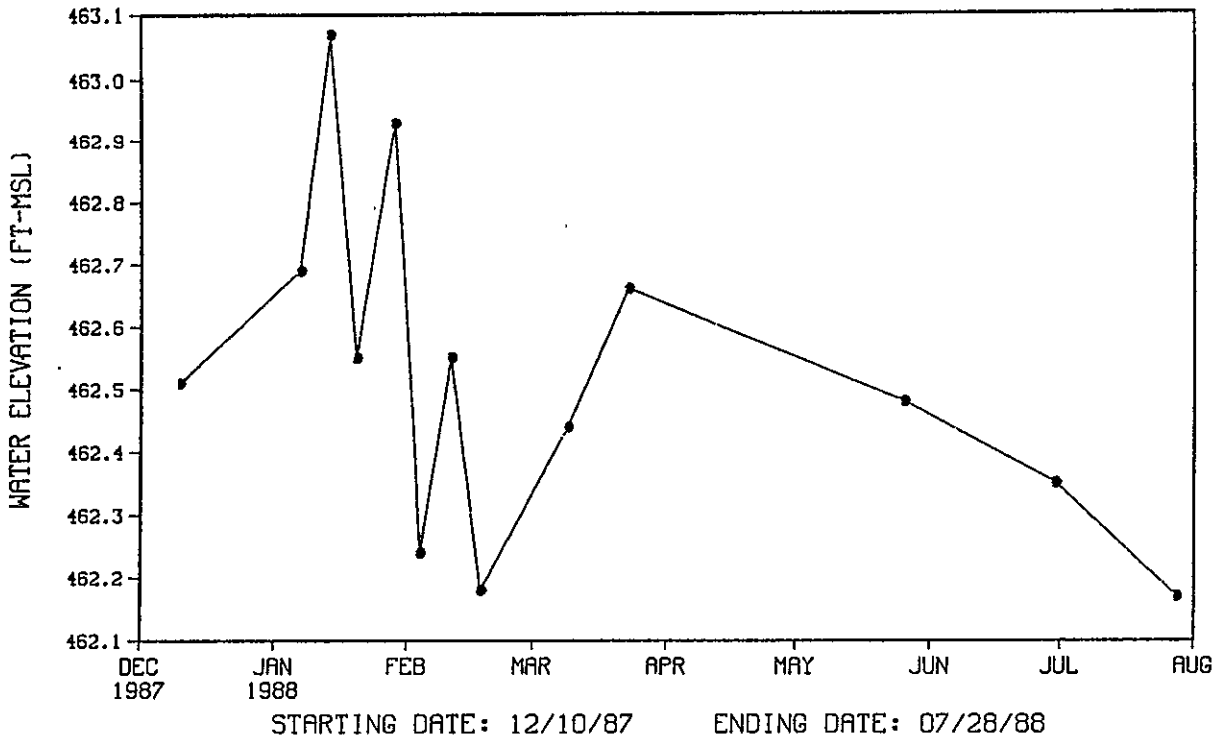
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W7-6	12/10/87	678.64	218.03	460.61
2-W7-6	1/07/88	678.64	218.03	460.61
2-W7-6	1/14/88	678.64	217.69	460.95
2-W7-6	1/21/88	678.64	218.37	460.27
2-W7-6	1/29/88	678.64	217.84	460.80
2-W7-6	2/04/88	678.64	218.25	460.39
2-W7-6	2/11/88	678.64	218.09	460.55
2-W7-6	2/18/88	678.64	218.32	460.32
2-W7-6	3/09/88	678.64	218.16	460.48
2-W7-6	3/23/88	678.64	218.03	460.61
2-W7-6	5/26/88	678.64	218.18	460.46
2-W7-6	6/30/88	678.64	218.27	460.37
2-W7-6	7/28/88	678.64	218.30	460.34



STARTING DATE: 12/10/87 ENDING DATE: 07/28/88

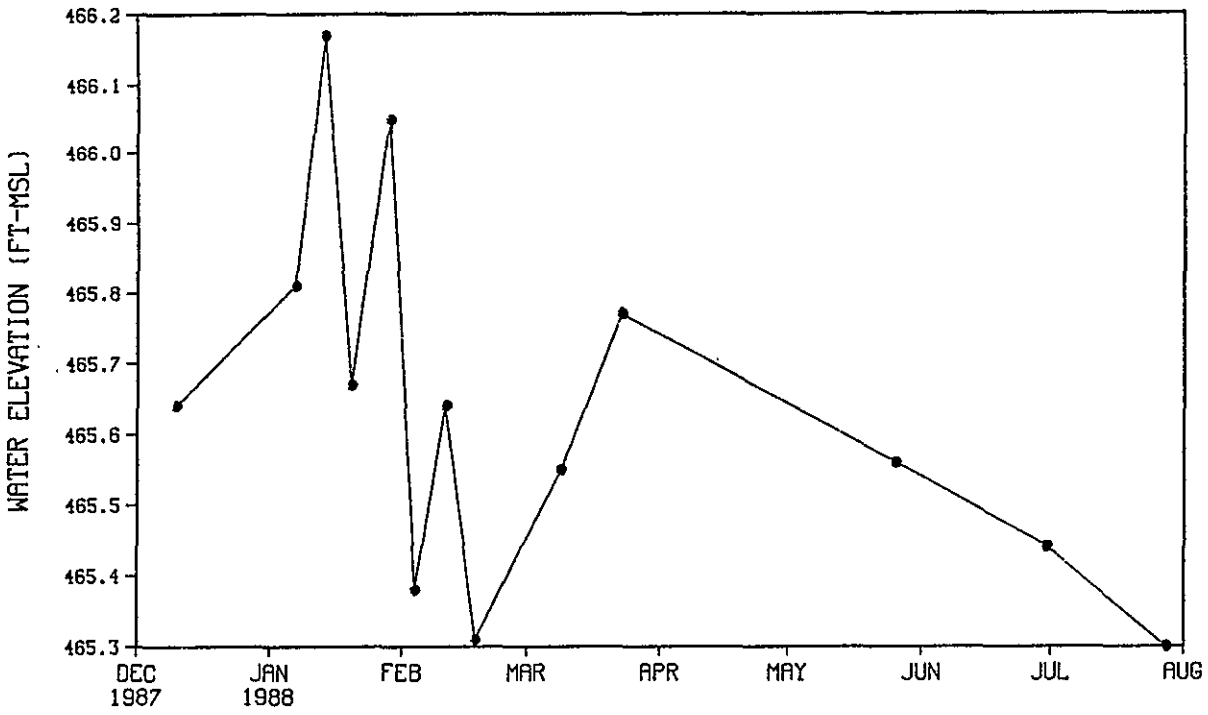
WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W8-1

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W8-1	12/10/87	701.33	238.82	462.51
2-W8-1	1/07/88	701.33	238.64	462.69
2-W8-1	1/14/88	701.33	238.26	463.07
2-W8-1	1/20/88	701.33	238.78	462.55
2-W8-1	1/29/88	701.33	238.40	462.93
2-W8-1	2/04/88	701.33	239.09	462.24
2-W8-1	2/11/88	701.33	238.78	462.55
2-W8-1	2/18/88	701.33	239.15	462.18
2-W8-1	3/09/88	701.33	238.89	462.44
2-W8-1	3/23/88	701.33	238.67	462.66
2-W8-1	5/26/88	701.33	238.85	462.48
2-W8-1	6/30/88	701.33	238.98	462.35
2-W8-1	7/28/88	701.33	239.16	462.17



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W9-1

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W9-1	12/10/87	737.73	272.09	465.64
2-W9-1	1/07/88	737.73	271.92	465.81
2-W9-1	1/14/88	737.73	271.56	466.17
2-W9-1	1/20/88	737.73	272.06	465.67
2-W9-1	1/29/88	737.73	271.68	466.05
2-W9-1	2/04/88	737.73	272.35	465.38
2-W9-1	2/11/88	737.73	272.09	465.64
2-W9-1	2/18/88	737.73	272.42	465.31
2-W9-1	3/09/88	737.73	272.18	465.55
2-W9-1	3/23/88	737.73	271.96	465.77
2-W9-1	5/26/88	737.73	272.17	465.56
2-W9-1	6/30/88	737.73	272.29	465.44
2-W9-1	7/28/88	737.73	272.43	465.30



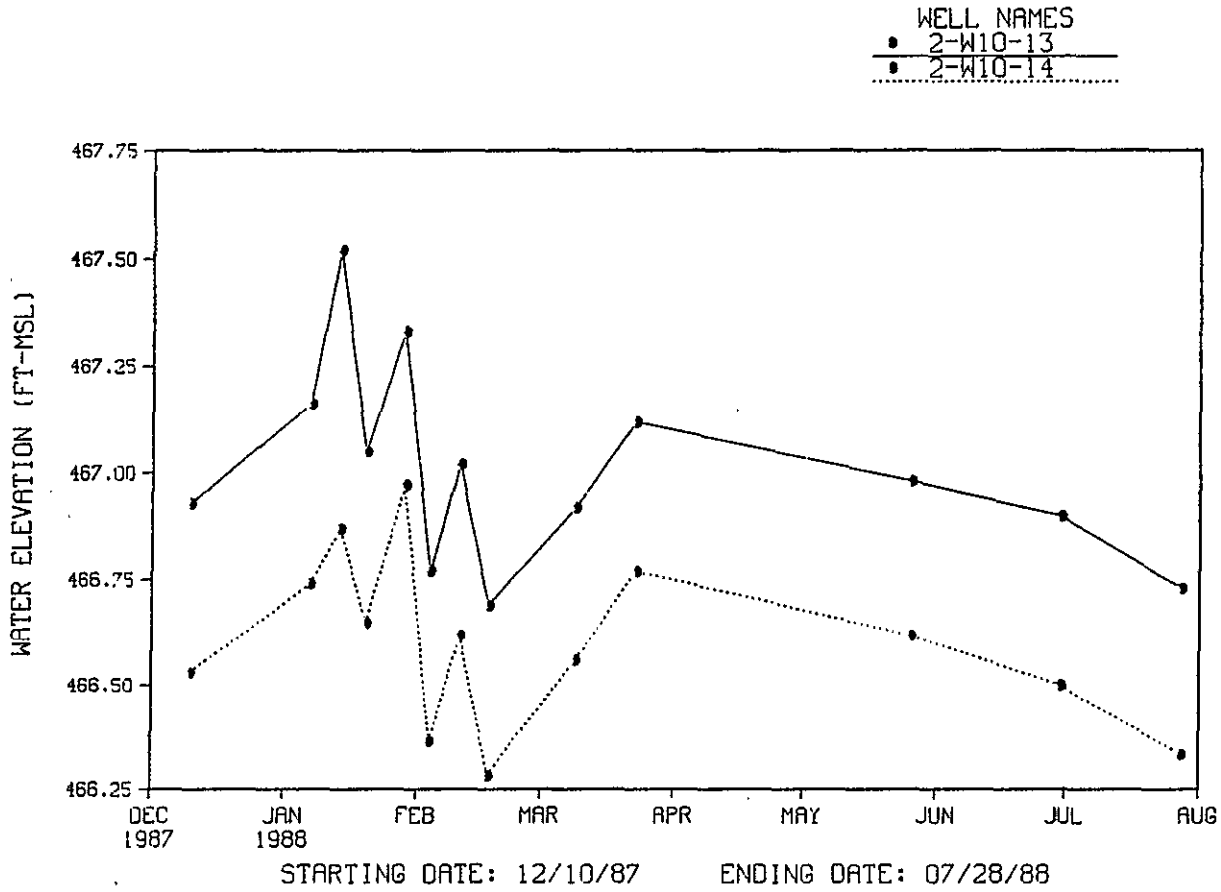
STARTING DATE: 12/10/87 ENDING DATE: 07/28/88

WATER-LEVEL DATA FOR WELLS 2-W10-13 AND 2-W10-14

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W10-13	12/10/87	699.04	232.11	466.93
2-W10-13	1/07/88	699.04	231.88	467.16
2-W10-13	1/14/88	699.04	231.52	467.52
2-W10-13	1/20/88	699.04	231.99	467.05
2-W10-13	1/29/88	699.04	231.71	467.33
2-W10-13	2/04/88	699.04	232.27	466.77
2-W10-13	2/11/88	699.04	232.02	467.02
2-W10-13	2/18/88	699.04	232.35	466.69
2-W10-13	3/09/88	699.04	232.12	466.92
2-W10-13	3/23/88	699.04	231.92	467.12
2-W10-13	5/26/88	699.04	232.06	466.98
2-W10-13	6/30/88	699.04	232.14	466.90
2-W10-13	7/28/88	699.04	232.31	466.73

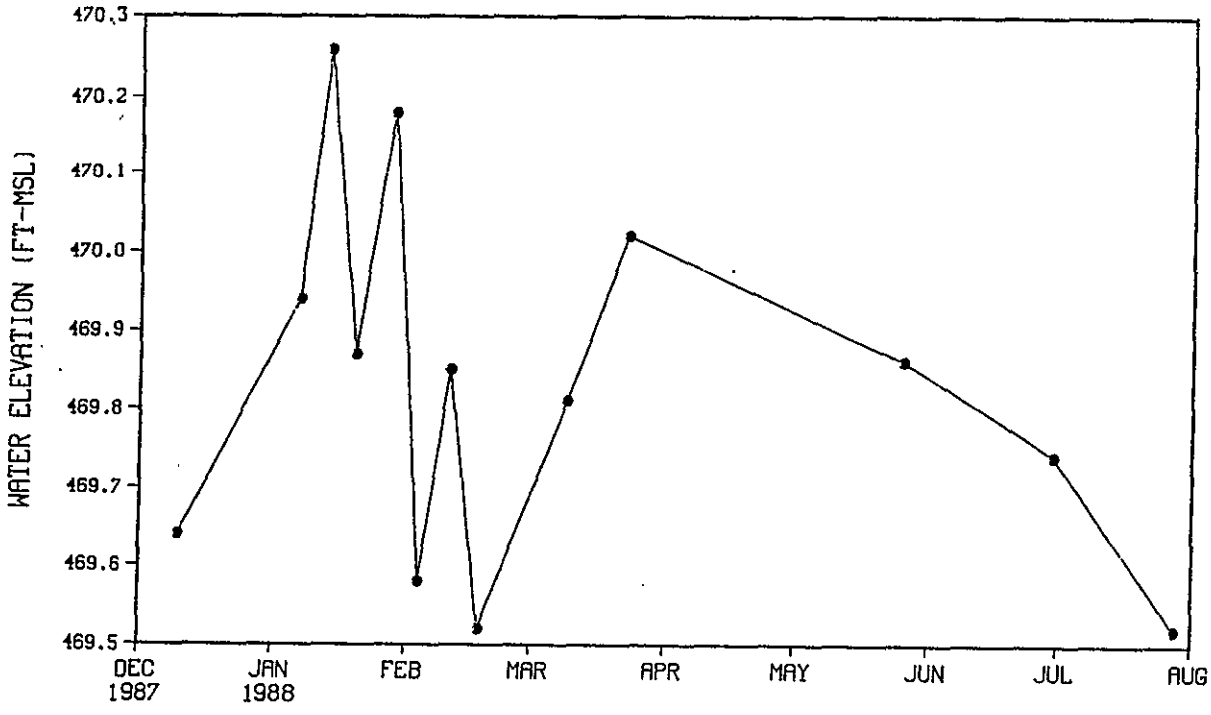
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W10-14	12/10/87	699.43	232.90	466.53
2-W10-14	1/07/88	699.43	232.69	466.74
2-W10-14	1/14/88	699.43	232.56	466.87
2-W10-14	1/20/88	699.43	232.78	466.65
2-W10-14	1/29/88	699.43	232.46	466.97
2-W10-14	2/04/88	699.43	233.07	466.36
2-W10-14	2/11/88	699.43	232.81	466.62
2-W10-14	2/18/88	699.43	233.15	466.28
2-W10-14	3/09/88	699.43	232.87	466.56
2-W10-14	3/23/88	699.43	232.66	466.77
2-W10-14	5/26/88	699.43	232.81	466.62
2-W10-14	6/30/88	699.43	232.93	466.50
2-W10-14	7/28/88	699.43	233.10	466.33

HYDROGRAPH FOR WELLS 2-W10-13 AND 2-W10-14



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W15-15

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W15-15	12/10/87	697.96	228.32	469.64
2-W15-15	1/07/88	697.96	228.02	469.94
2-W15-15	1/14/88	697.96	227.70	470.26
2-W15-15	1/20/88	697.96	228.09	469.87
2-W15-15	1/29/88	697.96	227.78	470.18
2-W15-15	2/04/88	697.96	228.38	469.58
2-W15-15	2/11/88	697.96	228.11	469.85
2-W15-15	2/18/88	697.96	228.44	469.52
2-W15-15	3/09/88	697.96	228.15	469.81
2-W15-15	3/23/88	697.96	227.94	470.02
2-W15-15	5/26/88	697.96	228.10	469.86
2-W15-15	6/30/88	697.96	228.22	469.74
2-W15-15	7/28/88	697.96	228.44	469.52



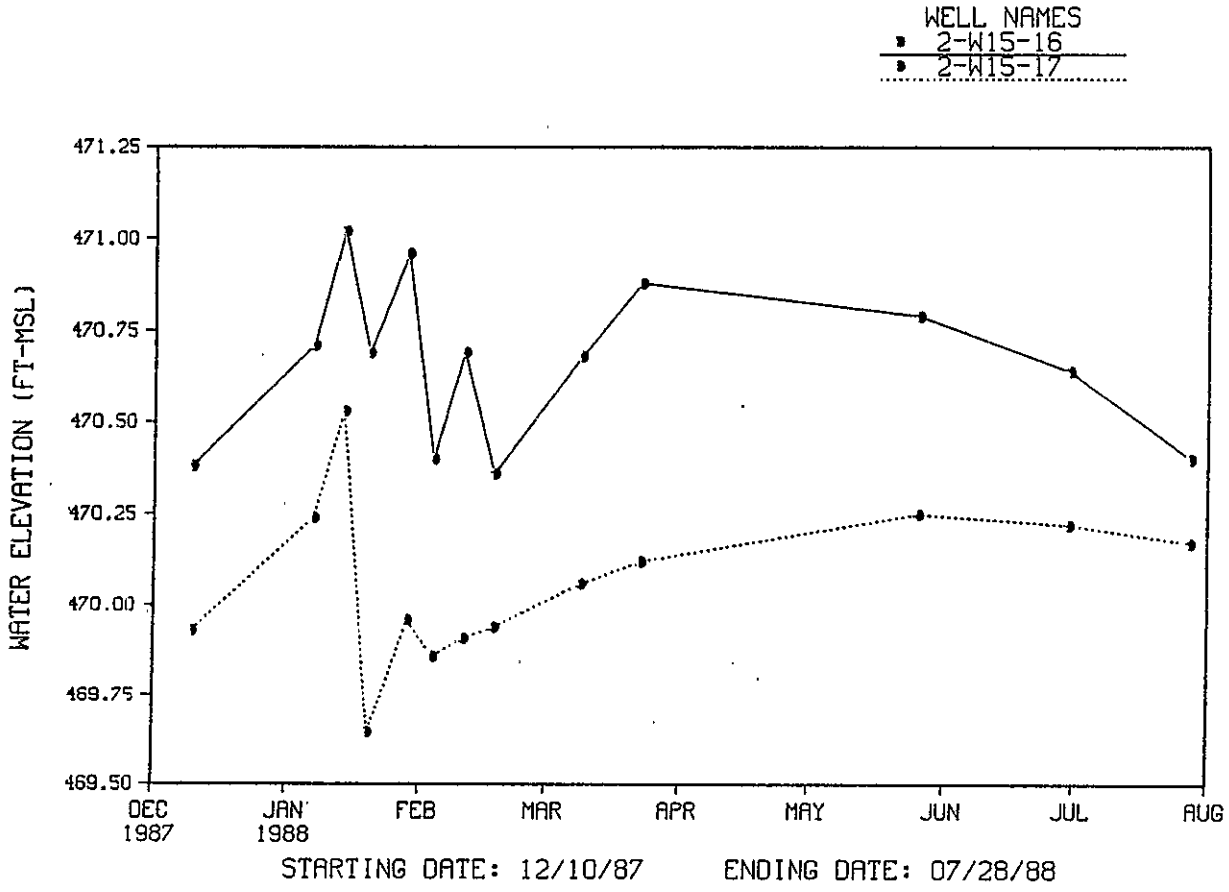
STARTING DATE: 12/10/87 ENDING DATE: 07/28/88

WATER-LEVEL DATA FOR WELLS 2-W15-16 AND 2-W15-17

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W15-16	12/10/87	684.89	214.51	470.38
2-W15-16	1/07/88	684.89	214.18	470.71
2-W15-16	1/14/88	684.89	213.87	471.02
2-W15-16	1/20/88	684.89	214.20	470.69
2-W15-16	1/29/88	684.89	213.93	470.96
2-W15-16	2/04/88	684.89	214.49	470.40
2-W15-16	2/11/88	684.89	214.20	470.69
2-W15-16	2/18/88	684.89	214.53	470.36
2-W15-16	3/09/88	684.89	214.21	470.68
2-W15-16	3/23/88	684.89	214.01	470.88
2-W15-16	5/26/88	684.89	214.10	470.79
2-W15-16	6/30/88	684.89	214.25	470.64
2-W15-16	7/28/88	684.89	214.49	470.40

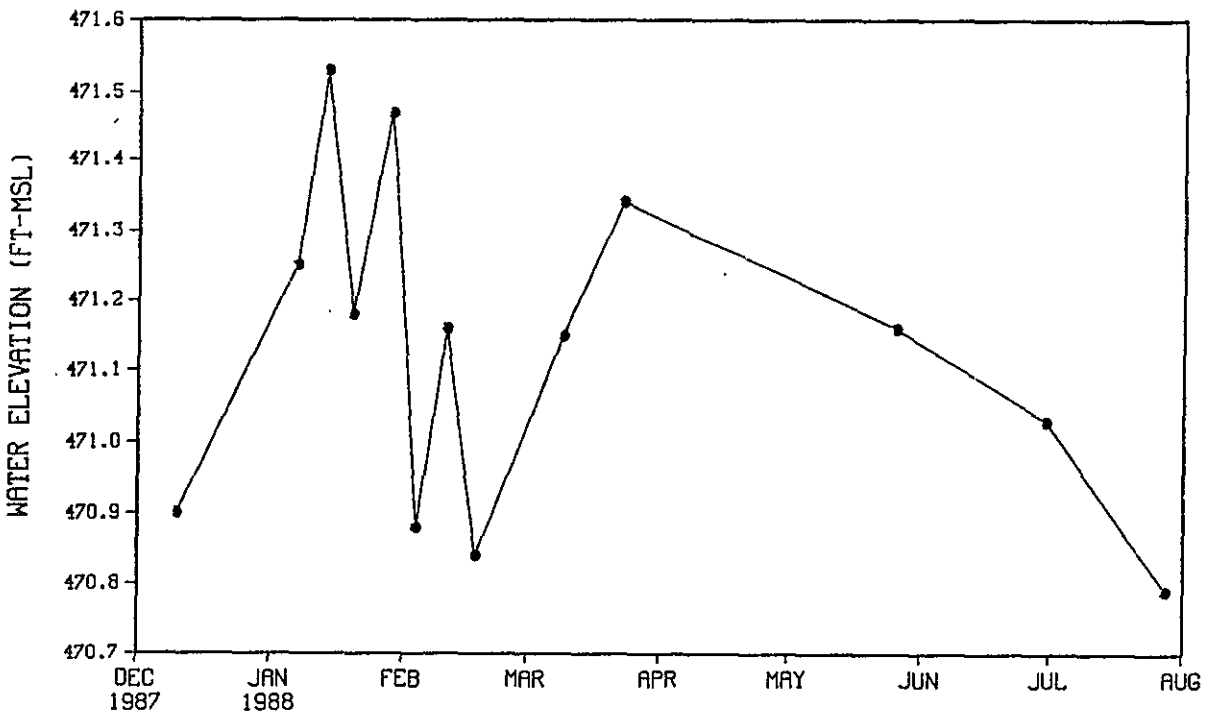
WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W15-17	12/10/87	684.64	214.71	469.93
2-W15-17	1/07/88	684.64	214.40	470.24
2-W15-17	1/14/88	684.64	214.11	470.53
2-W15-17	1/20/88	684.64	215.00	469.64
2-W15-17	1/29/88	684.64	214.68	469.96
2-W15-17	2/04/88	684.64	214.78	469.86
2-W15-17	2/11/88	684.64	214.73	469.91
2-W15-17	2/18/88	684.64	214.70	469.94
2-W15-17	3/09/88	684.64	214.58	470.06
2-W15-17	3/23/88	684.64	214.52	470.12
2-W15-17	5/26/88	684.64	214.39	470.25
2-W15-17	6/30/88	684.64	214.42	470.22
2-W15-17	7/28/88	684.64	214.47	470.17

HYDROGRAPH FOR WELLS 2-W15-16 AND 2-W15-17



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W15-18

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W15-18	12/10/87	685.71	214.81	470.90
2-W15-18	1/07/88	685.71	214.46	471.25
2-W15-18	1/14/88	685.71	214.18	471.53
2-W15-18	1/20/88	685.71	214.53	471.18
2-W15-18	1/29/88	685.71	214.24	471.47
2-W15-18	2/04/88	685.71	214.83	470.88
2-W15-18	2/11/88	685.71	214.55	471.16
2-W15-18	2/18/88	685.71	214.87	470.84
2-W15-18	3/09/88	685.71	214.56	471.15
2-W15-18	3/23/88	685.71	214.37	471.34
2-W15-18	5/26/88	685.71	214.55	471.16
2-W15-18	6/30/88	685.71	214.68	471.03
2-W15-18	7/28/88	685.71	214.92	470.79



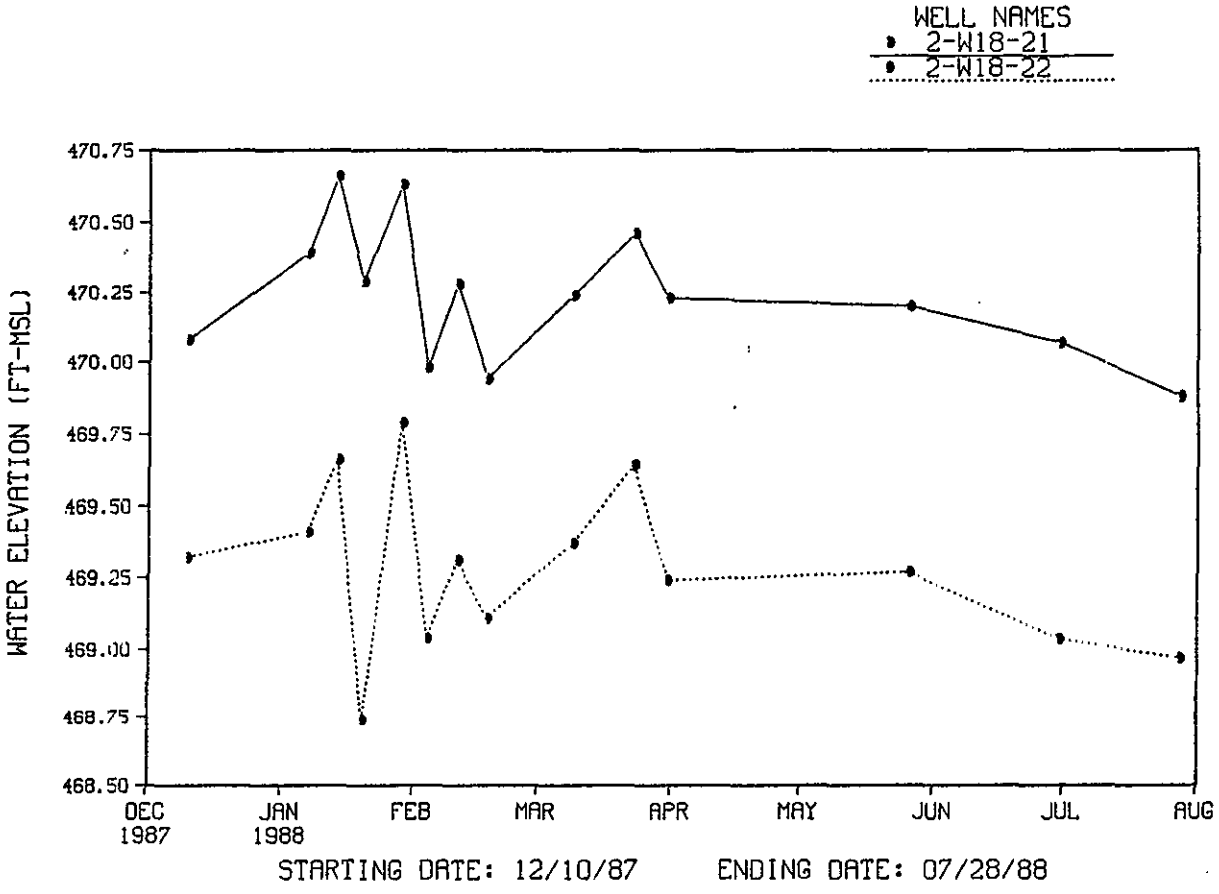
STARTING DATE: 12/10/87 ENDING DATE: 07/28/88

WATER-LEVEL DATA FOR WELLS 2-W18-21 AND 2-W18-22

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W18-21	12/10/87	668.62	198.54	470.08
2-W18-21	1/07/88	668.62	198.23	470.39
2-W18-21	1/14/88	668.62	197.96	470.66
2-W18-21	1/20/88	668.62	198.33	470.29
2-W18-21	1/29/88	668.62	197.99	470.63
2-W18-21	2/04/88	668.62	198.64	469.98
2-W18-21	2/11/88	668.62	198.34	470.28
2-W18-21	2/18/88	668.62	198.68	469.94
2-W18-21	3/09/88	668.62	198.38	470.24
2-W18-21	3/23/88	668.62	198.16	470.46
2-W18-21	3/31/88	668.62	198.39	470.23
2-W18-21	5/26/88	668.62	198.42	470.20
2-W18-21	6/30/88	668.62	198.55	470.07
2-W18-21	7/28/88	668.62	198.74	469.88

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W18-22	12/10/87	668.49	199.17	469.32
2-W18-22	1/07/88	668.49	199.08	469.41
2-W18-22	1/14/88	668.49	198.83	469.66
2-W18-22	1/20/88	668.49	199.75	468.74
2-W18-22	1/29/88	668.49	198.70	469.79
2-W18-22	2/04/88	668.49	199.45	469.04
2-W18-22	2/11/88	668.49	199.18	469.31
2-W18-22	2/18/88	668.49	199.38	469.11
2-W18-22	3/09/88	668.49	199.12	469.37
2-W18-22	3/23/88	668.49	198.85	469.64
2-W18-22	3/31/88	668.49	199.25	469.24
2-W18-22	5/26/88	668.49	199.22	469.27
2-W18-22	6/30/88	668.49	199.45	469.04
2-W18-22	7/28/88	668.49	199.52	468.97

HYDROGRAPH FOR WELLS 2-W18-21 AND 2-W18-22



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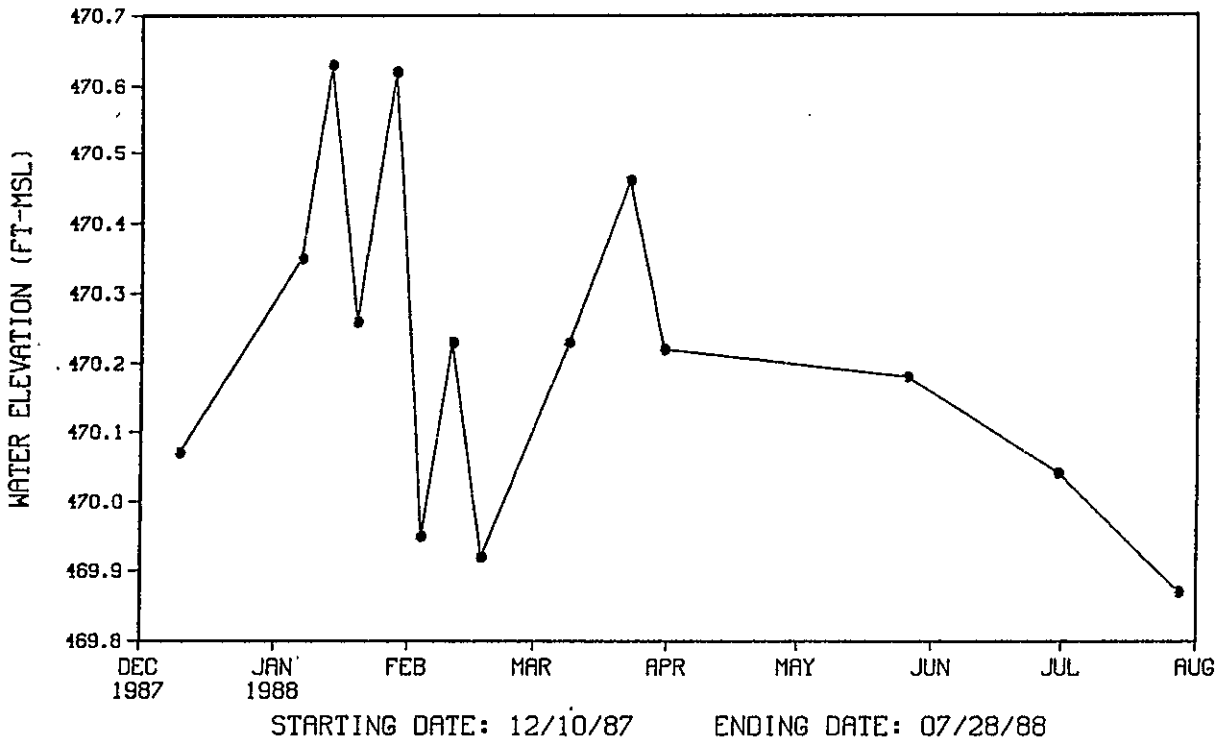
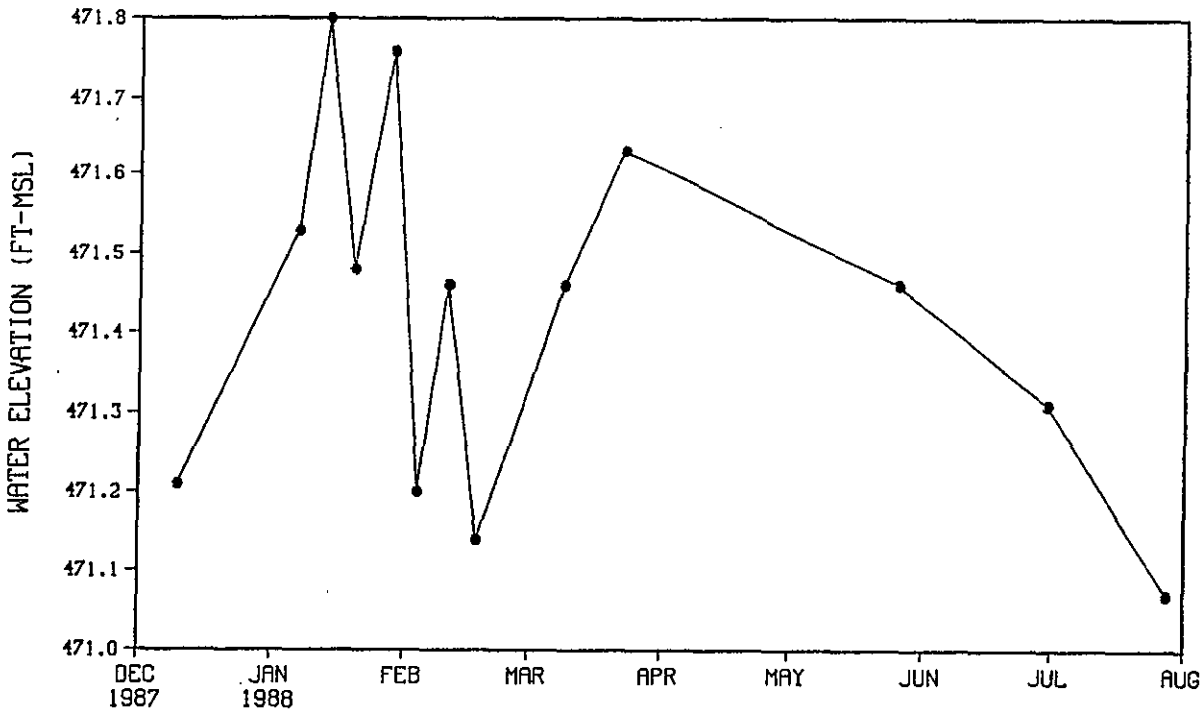
WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W18-23

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W18-23	12/10/87	696.81	226.74	470.07
2-W18-23	1/07/88	696.81	226.46	470.35
2-W18-23	1/14/88	696.81	226.18	470.63
2-W18-23	1/20/88	696.81	226.55	470.26
2-W18-23	1/29/88	696.81	226.19	470.62
2-W18-23	2/04/88	696.81	226.86	469.95
2-W18-23	2/11/88	696.81	226.58	470.23
2-W18-23	2/18/88	696.81	226.89	469.92
2-W18-23	3/09/88	696.81	226.58	470.23
2-W18-23	3/23/88	696.81	226.35	470.46
2-W18-23	3/31/88	696.81	226.59	470.22
2-W18-23	5/26/88	696.81	226.63	470.18
2-W18-23	6/30/88	696.81	226.77	470.04
2-W18-23	7/28/88	696.81	226.94	469.87



WATER-LEVEL DATA AND HYDROGRAPH FOR WELL 2-W18-24

WELL NAME	DATE	CASING ELEVATION	DEPTH TO WATER	COMPUTED HEAD
2-W18-24	12/10/87	684.35	213.14	471.21
2-W18-24	1/07/88	684.35	212.82	471.53
2-W18-24	1/14/88	684.35	212.55	471.80
2-W18-24	1/20/88	684.35	212.87	471.48
2-W18-24	1/29/88	684.35	212.59	471.76
2-W18-24	2/04/88	684.35	213.15	471.20
2-W18-24	2/11/88	684.35	212.89	471.46
2-W18-24	2/18/88	684.35	213.21	471.14
2-W18-24	3/09/88	684.35	212.89	471.46
2-W18-24	3/23/88	684.35	212.72	471.63
2-W18-24	5/26/88	684.35	212.89	471.46
2-W18-24	6/30/88	684.35	213.04	471.31
2-W18-24	7/28/88	684.35	213.28	471.07



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APPENDIX I

FIELD MOISTURE CONTENT OF CORE-BARREL SAMPLES
FROM WELLS IN THE 200-EAST
AND 200-WEST AREAS

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APPENDIX I

FIELD MOISTURE CONTENT OF CORE-BARREL SAMPLES FROM WELLS IN THE 200-EAST AND 200-WEST AREAS

This appendix presents field moisture content of core-barrel samples collected during the drilling of 24 monitoring wells in the 200-East Area and 200-West Areas.

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TABLE I.1. Field Moisture Content of Core-Barrel Samples from Wells in the 200-East Area

Sample Interval, ft	Moisture Content, wt%
Well 299-E27-8	
109-110	7.01
114-115	6.10
119-120	5.51
124-125	5.84
129-130	6.13
136-137	6.01
139-140	6.59
144-145	13.43
149-150	11.90
154-155	9.20
159-160A	6.87
159-160B	6.37
164-165	7.37
169-170	7.57
174-175	6.58
179-180	6.81
184-185	7.55
189-190	6.13
194-195	8.60
Well 299-E28-26	
84-85	1.47
89-90	1.46
100	1.80
105	1.63
109-110	1.51
114-115	2.03
119-120	1.70
129-130	3.35
134-135	2.35
139-140	2.19
144-145	1.84
149-150	1.98
154-155	1.98
159-160	1.94
164-165	2.14
169-170	2.94
174-175	3.65
179-180	2.09
184-185	1.88
189-190	2.92
194-195	2.21
209-210	1.99
Well 299-E28-26 (contd)	
214-215	2.16
225	2.31
230	1.06
Well 299-E28-27	
4-5	1.16
64-65	1.89
69-70	2.45
74-75	2.18
99-100	2.40
104-105	2.52
109-110	2.12
114-115	4.23
119-120	2.55
124-125	2.86
129-130	2.65
134-135	3.54
139-140	2.36
144-145	4.68
149-150	2.01
154-155	2.26
164-165	1.89
169-170	2.09
174-175	2.62
179-180	2.45
185	2.55
190	2.57
194-195	4.18
210	3.09
214-215A	2.29
214-215B	2.53
219-220	2.23
224-225	2.25
239-240	4.05
249-250	2.44
254-255	1.58

TABLE I.1. (contd)

Sample Interval, ft	Moisture Content, wt%
Well 299-E32-2	
59-60	1.98
64-65	2.86
69-70	3.17
74-75	1.70
79-80	2.89
84-85	1.94
89-90	1.88
94-95	1.77
99-100	1.63
104-105	1.60
109-110	2.00
114-115	2.03
120	2.09
125	2.19
129-130	2.24
134-135	2.56
139-140	2.36
144-145	2.47
149-150	2.61
154-155	1.92
159-160	2.03
169-170	2.08
164-165	2.06
174-175	2.20
179-180	2.83
184-185	2.47
194-195	2.59
199-200	2.37
204-205	2.64
209-210	2.53
214-215	2.47
220	2.54
225	2.18
230	2.15
234-235	1.97
239-240	1.97
Well 299-E32-3	
74-75	17.99
79-80	3.13
84-85	2.47
89-90	2.23

Sample Interval, ft	Moisture Content, wt%
Well-299-E32-3 (contd)	
94-95	2.12
99-100	2.45
104-105	2.51
109-110	2.29
115	3.93
120	2.44
125	2.45
129-130	2.54
134-135	1.85
139-140	1.98
150	2.09
155	1.93
160	1.89
164-165	1.78
169-170	2.44
174-175	2.15
179-180	2.00
180	2.70
185	2.49
189-190	3.21
194-195	2.70
200	2.46
204-205	2.36
210	3.33
215	2.84
219-220	2.44
224-225	2.59
229-230	2.43
234-235	2.09
239-240	2.26
244-245	2.88
249.250	2.20
254-255	1.83
Well 299-E32-4	
64-65	3.61
69-70	3.02
80	9.06
90	3.06
95	3.96
100	3.62
104-105	3.41

TABLE I.1. (contd)

Sample Interval, ft	Moisture Content, wt%
Well 299-E32-4 (contd)	
109-110	4.72
114-115	5.03
119-120	5.25
124-125	5.85
130	3.42
135	4.14
140	3.40
145	2.84
149-150	2.77
154-155	2.78
159-160	6.30
164-165	4.87
169-170	2.77
174-175	2.33
180	2.69
185	7.12
190	3.23
195	2.59
209-210	3.14
214-215	2.54
219-220	2.68
224-225	2.22
229-230	2.01
Well 299-E33-29	
69-70	2.42
84-85	2.66
89-90	2.05
96-97	2.12
99-100	2.52
114-115	3.54
119-120	1.95
124-125	1.94
129-130	1.95
144-145	2.44
150	1.83
154-155	2.06
159-160	2.04
164-165	1.90
169-170	2.76
174-175	2.37
179-180	2.25
184-185	2.25
189-190	2.37

Sample Interval, ft	Moisture Content, wt%
Well 299-E33-29 (contd)	
194-195	2.44
199-200	3.27
202-203	16.06
209-210	5.30
210	2.86
214-215	2.78
219-220	2.68
234-235	2.19
239-240	2.81
Well 299-E33-30	
59-60	3.48
69-70	1.97
64-65	2.27
74-75	2.39
79-80	2.16
84-85	2.28
89-90	2.39
95	3.60
100	1.55
104-105	1.55
109-110	1.72
115	2.35
120	3.66
124-125	2.00
129-130	1.91
134-135	1.85
139-140	2.04
144-145	2.08
149-150	1.78
154-155	1.94
159-160 A	1.89
159-160 B	2.03
174-175	2.10
179-180	2.42
184-185	2.43
169-170	1.95
189-190	2.96
194-195	2.49
203	16.20
204-205	3.86
Unmarked depth	3.78
209-210	2.15

TABLE I.1. (contd)

Sample Interval, ft	Moisture Content, wt%
Well 299-E33-30 (contd)	
214-215	2.79
219-220	2.53
224-250	2.77
234-235	2.28
239-240	2.21
244-245	2.03
249-250	2.33
Well 299-E34-6	
4-5	4.40

A,B = Duplicate samples.

TABLE I.2. Field Moisture Content of Core-Barrel Sample from Wells in the 200-West Area

Sample Interval, ft	Moisture Content, wt%
Well 299-W6-2	
5	2.28
10	1.87
Well 299-W7-1	
5-6	2.53
10-11	1.98
130	1.85
135	11.39
140	1.96
142-143	1.31
Well 299-W7-2	
4-5	7.90
Well 299-W7-3	
5	1.94
Well 299-W7-5	
5	6.57
10	2.95
65	2.15
69-70	2.35
75	1.76
80	2.60
84-85	1.80
89-90	1.94
94-95	2.13
99-100	2.03
104-105	1.80
109-110	3.09
114-115	2.79
119-120	1.62
124-125	2.03
129-130	1.87
144-145	2.07
149-150	2.10
154-155	2.00
Well 299-W7-5 (contd)	
174-175	2.34
179-180	2.15
189-190	2.12
194-195	2.45
199-200	3.38
209-210	2.47
214-215	2.22
219-220	2.32
Well 299-W7-6	
5	2.92
10	5.25
Well 299-W9-1	
5	3.51
10	4.13
15	7.22
20	2.20
25	2.39
30	2.38
35	3.02
40	2.56
45	4.64
50	2.65
55 A	1.79
55 B	2.30
Well 299-W10-13	
5	5.98
10	9.91
15	5.89
20	3.92
25	4.17
30	4.97
36	7.33
40	3.94
45	3.78
50	6.20
55	4.46

TABLE I.2. (contd)

Sample Interval, ft	Moisture Content, wt%
Well 299-W10-13 (contd)	
60	3.60
65	3.84
70	3.21
75	3.64
80	5.46
Well 299-W10-14	
4-5	5.92
9-10	6.94
Well 299-W15-15	
10	3.66
15	4.27
20-21	3.38
25	5.94
30	3.12
35	5.39
40	4.71
45	9.84
50	5.73
55	4.30
Well 299-W15-16	
4-5	13.87
9-10	3.39
15	2.85
20	5.62
25	4.55
30	2.92
35	6.19
40	5.47
45	14.88
50	4.04
55	4.59
60	4.45
65	10.86
70	6.08
75	3.33
80	3.67
Well 299-W15-16 (contd)	
85	3.85
89-90	3.80
95	3.51
100	1.88
105	2.26
110	2.06
Well 299-W15-18	
4-5	8.11
10-11	7.04
15-16	4.40
20	8.14
25	4.12
30	4.19
35	4.28
40	11.00
45.5	8.34
50-51	11.47
54-55	4.38
60	4.67
65	10.57
70	5.80
75	9.28
79-80	4.23
84-85	18.69
89-90	10.97
91-92	10.15
94-95	6.55
99-100	7.10
104-105	3.34
109-110	2.82
124-126	2.75
Well 299-W18-21	
4-5	4.72
9	14.92
10	4.01
15	3.94
20	3.32
25	6.63
30	6.47

TABLE I.2. (contd)

Sample Interval, ft	Moisture Content, wt%
Well 299-W18-21 (contd)	
35	4.46
40	11.13
42	5.38
Well 299-W18-23	
4-5	8.72
9-10	4.23
14-15	3.42
19-20	4.99
24-25	10.32
29-30	9.17
34-35	4.38
39-40	17.29
44-45	3.79
49-50	7.96
54-55	2.87
59-60	2.83

Sample Interval, ft	Moisture Content, wt%
Well 299-W18-24	
5	5.27
9-10	6.99
14-15	7.93
17	3.46
20	3.13
21-22	5.81
24-25	3.07
30	3.17
34-35	6.81
38	2.79
40-41	2.15
75	8.15
80	6.87
85	4.34
90	2.90
95	5.37
99-100	2.48
104-105	3.53
109-111	2.49
112-113	2.54
114-115	2.97
119-121	2.77

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APPENDIX J

PARTICLE-SIZE AND CALCIUM CARBONATE DATA FOR 200-EAST AREA WELLS

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APPENDIX J

PARTICLE-SIZE AND CALCIUM CARBONATE DATA FOR 200-EAST AREA WELLS

This appendix presents particle-size and calcium carbonate data for borehole samples collected during the drilling of 16 monitoring wells in the 200-East Area.

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-008 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	H	8.6	43.3	48.1	msG	WT	N/A	176.1	30.3	35.1	36.0	27.5	29.8	N/A	31.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.1	8.3	9.6	9.8	7.5	8.1	N/A	8.6
SPLIT WT= 372.4							CUM WT %	N/A	48.1	56.4	65.9	75.8	83.3	91.4	N/A	100.0
10	N/A	H	10.7	40.4	48.8	msG	WT	N/A	448.3	74.0	84.3	74.0	70.3	68.5	N/A	98.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.9	8.1	9.2	8.1	7.7	7.5	N/A	10.7
SPLIT WT= 919.8							CUM WT %	N/A	48.9	56.9	66.1	74.2	81.8	89.3	N/A	100.0
15	N/A	H	8.7	43.8	47.4	msG	WT	N/A	408.7	67.7	94.2	99.8	71.2	44.8	N/A	75.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.4	7.9	10.9	11.6	8.3	5.2	N/A	8.8
SPLIT WT= 865.9							CUM WT %	N/A	47.4	55.3	66.2	77.8	86.1	91.3	N/A	100.0
20	N/A	H	8.6	39.6	51.8	msG	WT	N/A	490.9	63.7	106.2	89.1	62.7	53.5	N/A	81.3
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.8	6.7	11.2	9.4	6.6	5.7	N/A	8.6
SPLIT WT= 949.2							CUM WT %	N/A	51.8	58.5	69.8	79.2	85.8	91.4	N/A	100.0
25	N/A	H	8.8	78.4	12.8	(m)gS	WT	N/A	93.4	39.8	209.8	176.4	92.1	53.3	N/A	63.9
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.8	5.5	28.8	24.2	12.6	7.3	N/A	8.8
SPLIT WT= 725.2							CUM WT %	N/A	12.8	18.3	47.1	71.3	83.9	91.2	N/A	100.0
30	N/A	H	5.6	59.1	35.3	sG	WT	N/A	322.5	208.3	150.8	94.5	53.0	33.7	N/A	50.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.3	22.8	16.5	10.3	5.8	3.7	N/A	5.6
SPLIT WT= 908.6							CUM WT %	N/A	35.3	58.1	74.6	85.0	90.8	94.4	N/A	100.0
35	N/A	H	6.2	67.8	26.0	gS	WT	N/A	214.3	236.4	139.4	101.1	56.5	26.9	N/A	51.2
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	26.0	28.6	16.9	12.2	6.8	3.3	N/A	6.2
SPLIT WT= 825.4							CUM WT %	N/A	26.0	54.6	71.5	83.7	90.5	93.8	N/A	100.0
40	N/A	H	7.1	60.1	32.8	msG	WT	N/A	297.5	235.2	141.5	81.0	54.8	32.4	N/A	64.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.8	25.9	15.6	8.9	6.0	3.6	N/A	7.1
SPLIT WT= 904.8							CUM WT %	N/A	32.8	58.7	74.3	83.3	89.3	92.9	N/A	100.0
45	N/A	H	7.0	64.5	28.6	gS	WT	N/A	239.5	276.8	131.9	60.3	41.8	29.4	N/A	58.4
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	28.6	33.0	15.7	7.2	5.0	3.5	N/A	7.0
SPLIT WT= 839.2							CUM WT %	N/A	28.6	61.6	77.4	84.5	89.5	93.0	N/A	100.0
50	N/A	H	7.2	69.4	23.4	gS	WT	N/A	205.3	267.5	145.9	101.4	61.4	32.4	N/A	63.2
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	23.4	30.5	16.6	11.6	7.0	3.7	N/A	7.2
SPLIT WT= 873.0							CUM WT %	N/A	23.4	53.9	70.5	82.1	89.1	92.8	N/A	100.0
55	N/A	H	6.7	74.6	18.7	gS	WT	N/A	136.9	135.6	147.0	156.8	73.2	33.6	N/A	48.8
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	18.7	18.5	20.1	21.4	10.0	4.6	N/A	6.7
SPLIT WT= 727.7							CUM WT %	N/A	18.7	37.2	57.3	78.7	88.7	93.3	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	N/A	H	5.4	65.5	29.1	gS	WT	N/A	144.4	109.8	97.4	66.5	34.3	17.2	N/A	26.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.1	22.1	19.6	13.4	6.9	3.5	N/A	5.4
SPLIT WT= 496.5							CUM WT %	N/A	29.1	51.2	70.8	84.2	91.1	94.6	N/A	100.0
65	N/A	H	7.1	60.6	32.3	msG	WT	N/A	272.5	155.7	171.8	84.2	58.5	40.2	N/A	59.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.3	18.5	20.4	10.0	6.9	4.8	N/A	7.1
SPLIT WT= 846.7							CUM WT %	N/A	32.3	50.8	71.2	81.2	88.1	92.9	N/A	100.0
70	N/A	H	5.7	74.5	19.8	gS	WT	N/A	152.5	168.9	208.6	112.1	53.6	31.9	N/A	44.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	19.8	21.9	27.0	14.5	7.0	4.1	N/A	5.7
SPLIT WT= 777.6							CUM WT %	N/A	19.8	41.7	68.7	83.2	90.2	94.3	N/A	100.0
75	N/A	H	7.1	78.2	14.7	gS	WT	N/A	122.7	197.4	216.8	131.3	69.1	35.6	N/A	59.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	14.8	23.7	26.1	15.8	8.3	4.3	N/A	7.1
SPLIT WT= 836.5							CUM WT %	N/A	14.8	38.5	64.5	80.3	88.6	92.9	N/A	100.0
80	N/A	H	5.6	77.1	17.3	gS	WT	N/A	146.8	253.0	210.6	93.1	66.7	31.3	N/A	47.8
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	17.3	29.8	24.8	11.0	7.9	3.7	N/A	5.6
SPLIT WT= 854.7							CUM WT %	N/A	17.3	47.1	71.9	82.8	90.7	94.4	N/A	100.0
85	N/A	H	6.0	70.5	23.5	gS	WT	N/A	205.2	247.9	183.0	98.7	61.9	23.2	N/A	52.0
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	23.5	28.4	21.0	11.3	7.1	2.7	N/A	6.0
SPLIT WT= 874.7							CUM WT %	N/A	23.5	52.0	73.0	84.3	91.4	94.0	N/A	100.0
90	N/A	H	5.7	85.8	8.5	(g)S	WT	N/A	70.4	145.3	279.8	184.6	70.3	29.8	N/A	47.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.5	17.6	33.8	22.3	8.5	3.6	N/A	5.7
SPLIT WT= 828.9							CUM WT %	N/A	8.5	26.1	59.9	82.2	90.7	94.3	N/A	100.0
95	N/A	H	4.9	76.3	18.8	gS	WT	N/A	155.6	161.4	246.1	121.1	71.2	32.5	N/A	40.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	18.8	19.5	29.7	14.6	8.6	3.9	N/A	4.9
SPLIT WT= 825.2							CUM WT %	N/A	18.8	38.2	67.9	82.5	91.1	95.1	N/A	100.0
100	N/A	H	6.4	69.9	23.7	gS	WT	N/A	194.6	165.2	213.2	98.3	62.4	34.5	N/A	52.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	23.7	20.1	26.0	12.0	7.6	4.2	N/A	6.4
SPLIT WT= 816.6							CUM WT %	N/A	23.7	43.9	69.9	81.8	89.4	93.7	N/A	100.0
105	N/A	C	5.9	64.3	29.8	gS	WT	N/A	245.8	178.2	174.6	83.4	61.3	33.1	N/A	48.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.8	21.6	21.2	10.1	7.4	4.0	N/A	5.9
SPLIT WT= 824.8							CUM WT %	N/A	29.8	51.4	72.5	82.7	90.1	94.1	N/A	100.0
110	N/A	C	4.9	74.6	20.5	gS	WT	N/A	137.2	202.6	178.1	63.1	34.2	20.1	N/A	32.4
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	20.6	30.3	26.7	9.5	5.1	3.0	N/A	4.9
SPLIT WT= 669.2							CUM WT %	N/A	20.6	50.9	77.6	87.0	92.1	95.1	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	N/A	C	1.7	88.1	10.2	gS	WT	N/A	62.8	208.8	218.6	66.4	33.3	12.7	N/A	10.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.3	34.1	35.7	10.8	5.4	2.1	N/A	1.7
SPLIT WT= 613.5							CUM WT %	N/A	10.3	44.3	80.0	90.8	96.3	98.3	N/A	100.0
120	N/A	C	4.7	80.2	15.1	gS	WT	N/A	108.2	228.7	212.8	69.2	39.3	22.8	N/A	33.5
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	15.1	32.0	29.8	9.7	5.5	3.2	N/A	4.7
SPLIT WT= 716.2							CUM WT %	N/A	15.1	47.2	76.9	86.6	92.1	95.3	N/A	100.0
125	N/A	C	5.1	80.6	14.3	gS	WT	N/A	92.8	160.2	210.3	85.1	43.6	23.9	N/A	33.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	14.3	24.7	32.4	13.1	6.7	3.7	N/A	5.1
SPLIT WT= 650.8							CUM WT %	N/A	14.3	39.0	71.4	84.5	91.2	94.9	N/A	100.0
130	N/A	C	5.4	80.7	13.8	gS	WT	N/A	95.6	181.7	220.0	86.9	44.4	24.6	N/A	37.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.8	26.3	31.9	12.6	6.4	3.6	N/A	5.4
SPLIT WT= 690.8							CUM WT %	N/A	13.8	40.2	72.0	84.6	91.0	94.6	N/A	100.0
135	N/A	C	0.7	95.5	3.8	S	WT	N/A	22.1	104.7	304.1	121.3	21.9	5.3	N/A	4.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.8	17.9	52.1	20.8	3.8	0.9	N/A	0.7
SPLIT WT= 585.5							CUM WT %	N/A	3.8	21.7	73.9	94.6	98.4	99.3	N/A	100.0
140	N/A	C	4.9	91.2	3.9	S	WT	N/A	24.9	128.1	279.2	106.9	41.6	21.6	N/A	30.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.9	20.2	44.1	16.9	6.6	3.4	N/A	4.9
SPLIT WT= 635.2							CUM WT %	N/A	3.9	24.2	68.3	85.1	91.7	95.1	N/A	100.0
145	N/A	C	1.8	85.2	13.0	gS	WT	N/A	87.2	182.0	270.3	83.5	24.2	10.3	N/A	12.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.0	27.2	40.4	12.5	3.6	1.5	N/A	1.8
SPLIT WT= 671.5							CUM WT %	N/A	13.0	40.2	80.6	93.0	96.7	98.2	N/A	100.0
150	N/A	C	1.9	81.4	16.7	gS	WT	N/A	93.2	143.7	176.6	101.2	24.2	8.2	N/A	10.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	16.7	25.8	31.7	18.1	4.3	1.5	N/A	1.9
SPLIT WT= 560.2							CUM WT %	N/A	16.7	42.5	74.1	92.3	96.6	98.1	N/A	100.0
155	N/A	C	1.4	86.6	11.9	gS	WT	N/A	68.8	113.3	212.6	137.5	28.1	7.6	N/A	8.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	11.9	19.7	36.9	23.9	4.9	1.3	N/A	1.4
SPLIT WT= 578.1							CUM WT %	N/A	11.9	31.6	68.5	92.4	97.2	98.6	N/A	100.0
160	N/A	C	1.9	77.3	20.8	gS	WT	N/A	122.7	159.0	173.4	92.2	23.2	8.7	N/A	11.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	20.8	26.9	29.4	15.6	3.9	1.5	N/A	1.9
SPLIT WT= 592.5							CUM WT %	N/A	20.8	47.7	77.1	92.7	96.6	98.1	N/A	100.0
165	N/A	C	1.9	71.5	26.6	gS	WT	N/A	184.3	177.8	179.9	100.6	27.8	10.0	N/A	13.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.6	25.7	26.0	14.5	4.0	1.4	N/A	1.9
SPLIT WT= 695.6							CUM WT %	N/A	26.6	52.2	78.2	92.7	96.7	98.1	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	N/A	C	5.0	65.2	29.8	gS	WT	N/A	211.0	171.2	146.7	85.0	37.7	21.9	N/A	35.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.8	24.1	20.7	12.0	5.3	3.1	N/A	5.0
SPLIT WT= 709.6							CUM WT %	N/A	29.8	53.9	74.6	86.6	91.9	95.0	N/A	100.0
175	N/A	C	6.7	59.6	33.7	msG	WT	N/A	258.0	159.8	130.9	86.5	48.4	30.6	N/A	51.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.7	20.9	17.1	11.3	6.3	4.0	N/A	6.7
SPLIT WT= 767.2							CUM WT %	N/A	33.7	54.6	71.7	83.0	89.3	93.3	N/A	100.0
180	N/A	C	3.6	71.5	24.9	gS	WT	N/A	185.1	282.7	143.8	55.9	30.6	17.3	N/A	26.6
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	25.0	38.1	19.4	7.5	4.1	2.3	N/A	3.6
SPLIT WT= 742.0							CUM WT %	N/A	25.0	63.1	82.4	90.0	94.1	96.4	N/A	100.0
185	N/A	C	4.4	70.1	25.5	gS	WT	N/A	166.0	222.1	124.1	56.1	31.2	21.9	N/A	28.7
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	25.5	34.2	19.1	8.6	4.8	3.4	N/A	4.4
SPLIT WT= 657.3							CUM WT %	N/A	25.5	59.7	78.8	87.4	92.2	95.6	N/A	100.0
190	N/A	C	7.4	81.9	10.7	gS	WT	N/A	72.2	113.1	154.5	168.9	74.0	42.8	N/A	50.3
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	10.7	16.7	22.9	25.0	11.0	6.3	N/A	7.4
SPLIT WT= 675.0							CUM WT %	N/A	10.7	27.4	50.3	75.3	86.2	92.6	N/A	100.0
195	N/A	C	9.4	87.4	3.1	S	WT	N/A	15.7	41.7	130.2	165.0	70.1	32.2	N/A	47.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.1	8.3	25.9	32.9	14.0	6.4	N/A	9.4
SPLIT WT= 504.4							CUM WT %	N/A	3.1	11.4	37.4	70.2	84.2	90.6	N/A	100.0
200	N/A	H	12.9	48.4	38.7	msG	WT	N/A	290.9	96.0	78.1	76.6	74.5	38.8	N/A	96.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.7	12.8	10.4	10.2	9.9	5.2	N/A	12.9
SPLIT WT= 757.4							CUM WT %	N/A	38.7	51.5	61.9	72.0	82.0	87.1	N/A	100.0
205	N/A	H	12.6	52.6	34.8	msG	WT	N/A	268.1	84.0	96.2	90.3	71.8	62.7	N/A	96.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.8	10.9	12.5	11.7	9.3	8.1	N/A	12.6
SPLIT WT= 777.9							CUM WT %	N/A	34.8	45.7	58.2	70.0	79.3	87.4	N/A	100.0
210	N/A	H	8.6	63.4	28.0	(m)gS	WT	N/A	244.9	136.7	134.2	144.1	88.7	51.8	N/A	75.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.0	15.6	15.3	16.5	10.1	5.9	N/A	8.6
SPLIT WT= 883.4							CUM WT %	N/A	28.0	43.6	58.9	75.3	85.5	91.4	N/A	100.0
215	N/A	H	6.5	53.8	39.7	msG	WT	N/A	358.3	163.1	149.4	83.4	53.5	35.6	N/A	58.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.7	18.1	16.6	9.3	5.9	4.0	N/A	6.5
SPLIT WT= 910.6							CUM WT %	N/A	39.7	57.8	74.4	83.6	89.6	93.5	N/A	100.0
220	N/A	H	6.2	37.2	56.6	msG	WT	N/A	497.5	87.9	92.0	66.0	50.0	31.3	N/A	54.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	56.6	10.0	10.5	7.5	5.7	3.6	N/A	6.2
SPLIT WT= 878.9							CUM WT %	N/A	56.6	66.6	77.1	84.6	90.3	93.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-008 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS			FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	N/A	H	11.3	41.5	47.2	msG		WT	N/A	382.0	96.3	70.3	63.2	65.2	41.5	N/A	91.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	47.2	11.9	8.7	7.8	8.1	5.1	N/A	11.3
SPLIT WT= 819.6								CUM WT %	N/A	47.2	59.0	67.7	75.5	83.6	88.7	N/A	100.0
230	N/A	H	6.1	38.2	55.7	msG		WT	N/A	461.0	102.8	80.7	50.5	47.6	34.7	N/A	50.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	55.7	12.4	9.8	6.1	5.8	4.2	N/A	6.1
SPLIT WT= 834.1								CUM WT %	N/A	55.7	68.1	77.9	84.0	89.7	93.9	N/A	100.0
235	N/A	H	4.5	18.9	76.5	msG		WT	N/A	617.6	55.3	32.7	24.2	21.3	19.3	N/A	36.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	76.5	6.9	4.1	3.0	2.6	2.4	N/A	4.6
SPLIT WT= 809.1								CUM WT %	N/A	76.5	83.4	87.4	90.4	93.1	95.5	N/A	100.0
240	N/A	H	4.8	80.1	15.1	gS		WT	N/A	102.8	164.6	190.2	117.3	45.5	28.1	N/A	32.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	15.1	24.2	27.9	17.2	6.7	4.1	N/A	4.8
SPLIT WT= 671.9								CUM WT %	N/A	15.1	39.3	67.2	84.4	91.1	95.2	N/A	100.0
245	N/A	H	4.1	75.5	20.4	gS		WT	N/A	149.9	118.1	158.5	150.5	86.5	40.8	N/A	29.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	20.4	16.1	21.6	20.5	11.8	5.6	N/A	4.1
SPLIT WT= 736.1								CUM WT %	N/A	20.4	36.5	58.1	78.6	90.4	95.9	N/A	100.0
250	N/A	H	4.3	49.3	46.4	sG		WT	N/A	414.7	157.7	93.4	85.9	63.5	40.0	N/A	38.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	46.4	17.7	10.5	9.6	7.1	4.5	N/A	4.3
SPLIT WT= 893.3								CUM WT %	N/A	46.4	64.1	74.6	84.2	91.3	95.8	N/A	100.0
255	N/A	H	4.4	85.2	10.3	gS		WT	N/A	76.5	55.6	96.9	142.5	223.1	112.4	N/A	32.9
SORT=	N/A	MEDIAN=	2.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	10.3	7.5	13.1	19.3	30.2	15.2	N/A	4.5
SPLIT WT= 741.9								CUM WT %	N/A	10.3	17.9	31.0	50.2	80.4	95.6	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-009 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	H	10.3	33.0	56.8	msG	WT	N/A	549.6	86.1	69.6	55.9	57.5	50.3	N/A	99.3
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	56.8	8.9	7.2	5.8	5.9	5.2	N/A	10.3
SPLIT WT= 971.0							CUM WT %	N/A	56.8	65.7	72.8	78.6	84.6	89.7	N/A	100.0
10	N/A	H	10.8	32.9	56.2	msG	WT	N/A	541.7	75.6	69.4	51.3	60.7	60.5	N/A	104.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	56.2	7.9	7.2	5.3	6.3	6.3	N/A	10.8
SPLIT WT= 972.5							CUM WT %	N/A	56.2	64.1	71.3	76.6	82.9	89.2	N/A	100.0
15	N/A	H	12.8	28.2	59.0	msG	WT	N/A	539.7	70.6	48.7	38.4	47.3	52.4	N/A	117.2
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	59.0	7.7	5.3	4.2	5.2	5.7	N/A	12.8
SPLIT WT= 914.9							CUM WT %	N/A	59.0	66.8	72.1	76.3	81.5	87.2	N/A	100.0
20	N/A	H	13.5	57.0	29.5	(m)gS	WT	N/A	89.6	38.0	38.2	28.7	42.6	26.0	N/A	41.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.5	12.5	12.6	9.4	14.0	8.6	N/A	13.5
SPLIT WT= 308.1							CUM WT %	N/A	29.5	41.9	54.5	63.9	77.9	86.5	N/A	100.0
30	N/A	H	5.0	19.3	75.7	msG	WT	N/A	685.1	60.0	39.8	25.4	27.1	22.2	N/A	44.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	75.7	6.6	4.4	2.8	3.0	2.5	N/A	5.0
SPLIT WT= 905.2							CUM WT %	N/A	75.7	82.4	86.8	89.6	92.6	95.0	N/A	100.0
35	N/A	H	6.7	22.8	70.5	msG	WT	N/A	733.6	69.3	52.7	35.2	41.6	38.8	N/A	70.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	70.5	6.7	5.1	3.4	4.0	3.7	N/A	6.7
SPLIT WT=1039.3							CUM WT %	N/A	70.5	77.1	82.2	85.6	89.6	93.3	N/A	100.0
40	N/A	H	8.5	24.6	66.8	msG	WT	N/A	642.5	57.9	53.4	40.9	42.9	41.9	N/A	82.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	66.8	6.0	5.6	4.3	4.5	4.4	N/A	8.5
SPLIT WT= 964.7							CUM WT %	N/A	66.8	72.8	78.4	82.6	87.1	91.5	N/A	100.0
45	N/A	H	8.9	45.5	45.6	msG	WT	N/A	384.4	124.8	62.7	68.7	60.5	66.5	N/A	75.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.6	14.8	7.4	8.2	7.2	7.9	N/A	8.9
SPLIT WT= 841.9							CUM WT %	N/A	45.6	60.4	67.9	76.0	83.2	91.1	N/A	100.0
50	N/A	H	7.8	51.5	40.7	msG	WT	N/A	355.2	200.0	87.1	78.5	51.3	32.6	N/A	67.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.7	22.9	10.0	9.0	5.9	3.7	N/A	7.8
SPLIT WT= 871.9							CUM WT %	N/A	40.7	63.7	73.6	82.6	88.5	92.3	N/A	100.0
55	N/A	H	5.8	54.6	39.6	sG	WT	N/A	337.5	213.4	121.1	56.1	43.9	29.9	N/A	49.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.7	25.1	14.2	6.6	5.2	3.5	N/A	5.8
SPLIT WT= 851.8							CUM WT %	N/A	39.7	64.7	79.0	85.5	90.7	94.2	N/A	100.0
60	N/A	H	5.8	44.3	50.0	msG	WT	N/A	375.4	135.1	85.4	48.5	36.8	26.6	N/A	43.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.0	18.0	11.4	6.5	4.9	3.5	N/A	5.8
SPLIT WT= 755.1							CUM WT %	N/A	50.0	68.0	79.3	85.8	90.7	94.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-009 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
65	N/A	H	5.8	39.0	55.2	msG	WT	N/A	469.7	165.7	67.6	36.4	34.6	27.6	N/A	49.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	55.2	19.5	8.0	4.3	4.1	3.2	N/A	5.8
SPLIT WT= 850.7							CUM WT %	N/A	55.2	74.7	82.6	86.9	91.0	94.2	N/A	100.0
70	N/A	H	7.4	52.8	39.8	msG	WT	N/A	337.8	190.6	117.4	61.4	44.4	33.7	N/A	62.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.8	22.5	13.8	7.2	5.2	4.0	N/A	7.4
SPLIT WT= 843.3							CUM WT %	N/A	39.8	62.3	76.1	83.4	88.6	92.6	N/A	100.0
75	N/A	H	6.8	58.8	34.4	msG	WT	N/A	299.3	198.3	153.1	75.8	51.7	33.5	N/A	59.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.4	22.8	17.6	8.7	5.9	3.9	N/A	6.8
SPLIT WT= 874.1							CUM WT %	N/A	34.4	57.1	74.7	83.4	89.4	93.2	N/A	100.0
80	N/A	H	8.9	77.7	13.3	(m)gS	WT	N/A	118.7	240.0	222.6	103.8	78.0	46.7	N/A	79.4
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	13.4	27.0	25.0	11.7	8.8	5.3	N/A	8.9
SPLIT WT= 886.5							CUM WT %	N/A	13.4	40.3	65.4	77.0	85.8	91.1	N/A	100.0
86	N/A	H	5.6	70.8	23.6	gS	WT	N/A	211.9	268.7	195.6	78.6	60.0	32.2	N/A	49.8
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	23.6	30.0	21.8	8.8	6.7	3.6	N/A	5.6
SPLIT WT= 897.6							CUM WT %	N/A	23.6	53.6	75.4	84.2	90.9	94.4	N/A	100.0
91	N/A	H	6.4	56.0	37.6	msG	WT	N/A	329.9	192.8	129.9	81.6	56.5	31.3	N/A	56.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	37.6	22.0	14.8	9.3	6.4	3.6	N/A	6.4
SPLIT WT= 877.6							CUM WT %	N/A	37.6	59.5	74.3	83.6	90.1	93.6	N/A	100.0
96	N/A	H	7.1	47.7	45.1	msG	WT	N/A	398.2	123.5	117.3	88.1	58.0	34.4	N/A	63.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.1	14.0	13.3	10.0	6.6	3.9	N/A	7.1
SPLIT WT= 881.6							CUM WT %	N/A	45.1	59.1	72.4	82.4	89.0	92.9	N/A	100.0
100	N/A	H	9.0	68.7	22.3	(m)gS	WT	N/A	193.2	76.4	150.1	189.6	127.3	51.8	N/A	77.6
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	22.3	8.8	17.3	21.9	14.7	6.0	N/A	9.0
SPLIT WT= 867.6							CUM WT %	N/A	22.3	31.1	48.5	70.4	85.1	91.0	N/A	100.0
105	N/A	H	7.5	81.6	10.9	gS	WT	N/A	83.8	41.1	157.2	244.4	129.9	52.8	N/A	57.1
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	10.9	5.4	20.5	31.9	17.0	6.9	N/A	7.5
SPLIT WT= 768.5							CUM WT %	N/A	10.9	16.3	36.8	68.7	85.7	92.5	N/A	100.0
110	N/A	H	3.1	95.0	1.9	S	WT	N/A	14.9	55.7	270.1	283.4	103.4	29.3	N/A	24.0
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	1.9	7.1	34.6	36.3	13.2	3.8	N/A	3.1
SPLIT WT= 782.1							CUM WT %	N/A	1.9	9.0	43.6	79.9	93.2	96.9	N/A	100.0
115	N/A	H	5.2	93.8	0.9	S	WT	N/A	6.9	25.0	186.2	297.7	141.1	40.6	N/A	38.6
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.9	3.4	25.3	40.4	19.2	5.5	N/A	5.2
SPLIT WT= 739.1							CUM WT %	N/A	0.9	4.3	29.6	70.1	89.3	94.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-009 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	N/A	H	4.6	85.5	9.9	(g)S	WT	N/A	80.2	194.6	214.5	157.0	88.1	36.2	N/A	37.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	9.9	24.1	26.6	19.4	10.9	4.5	N/A	4.6
SPLIT WT= 808.2							CUM WT %	N/A	9.9	34.0	60.6	80.0	90.9	95.4	N/A	100.0
125	N/A	H	3.0	81.4	15.6	gS	WT	N/A	114.8	277.7	193.2	74.0	37.3	16.4	N/A	21.7
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	15.6	37.8	26.3	10.1	5.1	2.2	N/A	3.0
SPLIT WT= 732.4							CUM WT %	N/A	15.6	53.4	79.7	89.8	94.8	97.1	N/A	100.0
130	N/A	H	4.3	77.9	17.8	gS	WT	N/A	147.9	274.9	247.8	70.4	34.0	20.1	N/A	35.4
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	17.8	33.1	29.8	8.5	4.1	2.4	N/A	4.3
SPLIT WT= 829.8							CUM WT %	N/A	17.8	50.9	80.8	89.2	93.3	95.7	N/A	100.0
135	N/A	H	8.2	86.2	5.6	(g)S	WT	N/A	40.3	143.9	242.8	129.6	67.0	37.1	N/A	58.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.6	20.0	33.8	18.0	9.3	5.2	N/A	8.2
SPLIT WT= 718.3							CUM WT %	N/A	5.6	25.6	59.4	77.4	86.7	91.8	N/A	100.0
140	N/A	H	5.9	90.4	3.6	S	WT	N/A	26.2	98.8	274.8	169.9	73.3	36.1	N/A	42.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.6	13.7	38.1	23.5	10.2	5.0	N/A	5.9
SPLIT WT= 726.7							CUM WT %	N/A	3.6	17.3	55.4	78.9	89.1	94.1	N/A	100.0
145	N/A	H	7.3	89.3	3.4	S	WT	N/A	21.8	98.1	206.5	168.6	66.2	35.9	N/A	47.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.4	15.2	32.1	26.2	10.3	5.6	N/A	7.3
SPLIT WT= 644.8							CUM WT %	N/A	3.4	18.6	50.7	76.8	87.1	92.7	N/A	100.0
150	N/A	H	4.2	89.0	6.9	(g)S	WT	N/A	54.0	147.8	278.3	180.1	64.4	29.2	N/A	32.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.9	18.8	35.4	22.9	8.2	3.7	N/A	4.2
SPLIT WT= 790.7							CUM WT %	N/A	6.9	25.7	61.0	83.9	92.1	95.8	N/A	100.0
155	N/A	H	6.4	91.8	1.8	S	WT	N/A	12.7	64.1	231.5	234.0	85.0	37.1	N/A	45.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.8	9.0	32.6	33.0	12.0	5.2	N/A	6.4
SPLIT WT= 714.3							CUM WT %	N/A	1.8	10.8	43.4	76.4	88.3	93.6	N/A	100.0
160	N/A	H	5.8	75.2	19.0	gS	WT	N/A	148.6	170.6	197.9	126.3	62.9	31.0	N/A	45.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	19.0	21.8	25.3	16.1	8.0	4.0	N/A	5.8
SPLIT WT= 778.5							CUM WT %	N/A	19.0	40.8	66.1	82.2	90.2	94.2	N/A	100.0
165	N/A	H	5.6	51.6	42.8	sG	WT	N/A	390.8	219.2	136.1	56.8	33.8	24.6	N/A	51.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.8	24.0	14.9	6.2	3.7	2.7	N/A	5.6
SPLIT WT= 907.6							CUM WT %	N/A	42.8	66.9	81.8	88.0	91.7	94.4	N/A	100.0
170	N/A	H	6.1	63.4	30.5	sG	WT	N/A	257.8	219.3	157.3	79.8	55.4	24.5	N/A	52.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.5	25.9	18.6	9.4	6.6	2.9	N/A	6.2
SPLIT WT= 842.8							CUM WT %	N/A	30.5	56.4	75.0	84.4	91.0	93.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-009 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	N/A	H	8.1	79.8	12.0	gS	WT	N/A	101.1	229.6	242.3	118.9	59.9	19.7	N/A	68.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.0	27.3	28.9	14.2	7.1	2.4	N/A	8.1
SPLIT WT= 837.3							CUM WT %	N/A	12.0	39.4	68.2	82.4	89.5	91.9	N/A	100.0
180	N/A	H	5.1	84.8	10.0	gS	WT	N/A	78.3	223.5	245.9	111.7	51.5	30.6	N/A	40.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.0	28.6	31.5	14.3	6.6	3.9	N/A	5.1
SPLIT WT= 779.2							CUM WT %	N/A	10.0	38.6	70.1	84.4	91.0	94.9	N/A	100.0
185	N/A	H	7.1	65.2	27.7	gS	WT	N/A	240.9	246.4	166.8	78.4	50.3	26.4	N/A	61.8
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	27.7	28.3	19.2	9.0	5.8	3.0	N/A	7.1
SPLIT WT= 868.5							CUM WT %	N/A	27.7	56.0	75.1	84.1	89.9	92.9	N/A	100.0
190	N/A	H	8.2	80.0	11.8	gS	WT	N/A	94.1	160.4	216.1	134.6	81.1	44.5	N/A	65.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	11.8	20.2	27.1	16.9	10.2	5.6	N/A	8.2
SPLIT WT= 795.1							CUM WT %	N/A	11.8	32.0	59.1	76.0	86.2	91.8	N/A	100.0
195	N/A	H	11.6	67.2	21.2	(m)gS	WT	N/A	186.1	194.0	171.5	115.5	87.1	20.4	N/A	101.5
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	21.2	22.1	19.6	13.2	9.9	2.3	N/A	11.6
SPLIT WT= 878.1							CUM WT %	N/A	21.2	43.4	63.0	76.1	86.1	88.4	N/A	100.0
200	N/A	H	9.3	73.4	17.3	(m)gS	WT	N/A	129.0	172.2	175.6	97.8	62.5	40.0	N/A	69.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	17.3	23.1	23.5	13.1	8.4	5.4	N/A	9.4
SPLIT WT= 745.8							CUM WT %	N/A	17.3	40.3	63.8	76.9	85.3	90.7	N/A	100.0
205	N/A	H	7.5	64.1	28.5	(m)gS	WT	N/A	250.7	271.3	150.3	66.5	50.0	25.9	N/A	65.8
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	28.5	30.8	17.1	7.6	5.7	2.9	N/A	7.5
SPLIT WT= 880.8							CUM WT %	N/A	28.5	59.3	76.4	83.9	89.6	92.5	N/A	100.0
210	N/A	H	8.8	78.5	12.7	(m)gS	WT	N/A	103.8	186.7	213.9	120.9	77.6	40.5	N/A	71.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.7	22.9	26.3	14.8	9.5	5.0	N/A	8.8
SPLIT WT= 812.3							CUM WT %	N/A	12.7	35.7	61.9	76.7	86.3	91.2	N/A	100.0
215	N/A	H	8.2	76.4	15.4	gS	WT	N/A	122.7	195.6	190.6	115.1	68.6	37.7	N/A	65.4
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	15.4	24.6	24.0	14.5	8.6	4.7	N/A	8.2
SPLIT WT= 789.7							CUM WT %	N/A	15.4	40.0	64.0	78.4	87.0	91.8	N/A	100.0
220	N/A	H	9.0	73.1	17.9	(m)gS	WT	N/A	136.3	194.4	180.6	85.1	57.3	38.7	N/A	68.4
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	17.9	25.6	23.7	11.2	7.5	5.1	N/A	9.0
SPLIT WT= 756.6							CUM WT %	N/A	17.9	43.5	67.2	78.4	85.9	91.0	N/A	100.0
225	N/A	H	6.0	64.4	29.5	gS	WT	N/A	249.1	206.9	170.3	81.8	48.9	35.6	N/A	50.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.5	24.5	20.2	9.7	5.8	4.2	N/A	6.0
SPLIT WT= 835.6							CUM WT %	N/A	29.5	54.1	74.3	84.0	89.8	94.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-E27-009 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
230	N/A	H	16.3	61.2	22.6	gmS	WT	N/A	180.2	122.7	135.8	112.6	99.0	18.8	N/A	129.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	22.6	15.4	17.0	14.1	12.4	2.4	N/A	16.3
SPLIT WT= 799.1							CUM WT %	N/A	22.6	37.9	54.9	69.0	81.4	83.7	N/A	100.0
235	N/A	H	7.9	64.5	27.6	(m)gS	WT	N/A	244.1	127.7	190.2	116.5	81.6	55.8	N/A	70.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.6	14.4	21.5	13.2	9.2	6.3	N/A	7.9
SPLIT WT= 880.0							CUM WT %	N/A	27.6	42.0	63.4	76.6	85.8	92.1	N/A	100.0
240	N/A	H	6.2	49.7	44.1	msG	WT	N/A	369.3	127.3	142.3	81.1	43.3	21.9	N/A	52.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.1	15.2	17.0	9.7	5.2	2.6	N/A	6.2
SPLIT WT= 833.7							CUM WT %	N/A	44.1	59.3	76.3	86.0	91.1	93.8	N/A	100.0
245	N/A	H	6.3	50.8	42.9	msG	WT	N/A	333.5	203.2	127.2	43.7	21.2	0.0	N/A	48.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.9	26.1	16.4	5.6	2.7	0.0	N/A	6.3
SPLIT WT= 781.6							CUM WT %	N/A	42.9	69.0	85.4	91.0	93.8	93.8	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-010 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	H	7.4	30.6	62.0	msG	WT	N/A	506.9	30.9	61.5	21.5	31.7	104.4	N/A	60.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	62.0	3.8	7.5	2.6	3.9	12.8	N/A	7.5
SPLIT WT= 813.6							CUM WT %	N/A	62.0	65.8	73.3	75.9	79.8	92.6	N/A	100.0
15	N/A	H	10.3	44.6	45.0	msG	WT	N/A	437.8	84.2	73.2	98.2	113.4	64.8	N/A	100.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.0	8.7	7.5	10.1	11.7	6.7	N/A	10.3
SPLIT WT= 971.2							CUM WT %	N/A	45.0	53.7	61.2	71.3	83.0	89.7	N/A	100.0
20	N/A	H	10.5	36.4	53.1	msG	WT	N/A	528.9	90.2	66.4	72.8	74.4	58.4	N/A	105.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	53.1	9.1	6.7	7.3	7.5	5.9	N/A	10.5
SPLIT WT= 993.9							CUM WT %	N/A	53.1	62.2	68.8	76.1	83.6	89.5	N/A	100.0
25	N/A	H	6.4	21.1	72.5	msG	WT	N/A	742.8	57.2	43.9	33.8	43.3	38.1	N/A	65.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	72.5	5.6	4.3	3.3	4.2	3.7	N/A	6.4
SPLIT WT=1030.6							CUM WT %	N/A	72.5	78.1	82.4	85.7	89.9	93.6	N/A	100.0
30	N/A	H	12.9	40.4	46.7	msG	WT	N/A	433.3	85.5	72.6	76.1	79.4	61.5	N/A	119.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	46.7	9.2	7.8	8.2	8.6	6.6	N/A	12.9
SPLIT WT= 927.5							CUM WT %	N/A	46.7	55.9	63.7	71.9	80.5	87.1	N/A	100.0
35	N/A	H	12.8	36.7	50.5	msG	WT	N/A	428.5	71.6	58.4	60.4	61.7	59.2	N/A	108.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.5	8.4	6.9	7.1	7.3	7.0	N/A	12.8
SPLIT WT= 844.9							CUM WT %	N/A	50.5	58.9	65.8	72.9	80.2	87.2	N/A	100.0
40	N/A	H	9.6	23.9	66.6	msG	WT	N/A	684.8	53.0	50.5	42.0	52.1	47.8	N/A	98.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	66.6	5.2	4.9	4.1	5.1	4.7	N/A	9.6
SPLIT WT=1027.2							CUM WT %	N/A	66.6	71.7	76.6	80.7	85.8	90.4	N/A	100.0
45	N/A	H	9.9	42.0	48.1	msG	WT	N/A	464.3	92.5	107.7	87.7	58.8	59.0	N/A	95.8
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.1	9.6	11.2	9.1	6.1	6.1	N/A	9.9
SPLIT WT= 972.2							CUM WT %	N/A	48.1	57.7	68.8	77.9	84.0	90.1	N/A	100.0
50	N/A	H	5.0	75.1	19.8	gS	WT	N/A	164.4	127.9	279.4	128.4	52.0	35.2	N/A	41.7
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	19.8	15.4	33.7	15.5	6.3	4.3	N/A	5.0
SPLIT WT= 828.1							CUM WT %	N/A	19.8	35.3	69.0	84.5	90.7	95.0	N/A	100.0
55	N/A	H	6.7	49.8	43.5	msG	WT	N/A	382.3	172.4	107.1	74.3	47.3	36.2	N/A	59.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.5	19.6	12.2	8.5	5.4	4.1	N/A	6.7
SPLIT WT= 876.3							CUM WT %	N/A	43.5	63.1	75.3	83.8	89.2	93.3	N/A	100.0
60	N/A	H	5.2	34.3	60.4	msG	WT	N/A	603.0	125.0	85.3	58.4	46.0	27.6	N/A	52.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	60.5	12.5	8.6	5.9	4.6	2.8	N/A	5.2
SPLIT WT=1003.9							CUM WT %	N/A	60.5	73.0	81.5	87.4	92.0	94.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-010 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
65	N/A	H	8.0	35.1	56.9	msG	WT	N/A	520.0	111.4	75.6	54.8	44.7	33.8	N/A	72.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	57.0	12.2	8.3	6.0	4.9	3.7	N/A	8.0
SPLIT WT= 911.7							CUM WT %	N/A	57.0	69.2	77.4	83.4	88.3	92.0	N/A	100.0
70	N/A	H	8.7	37.9	53.4	msG	WT	N/A	503.2	99.2	90.6	68.0	53.0	45.9	N/A	81.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	53.4	10.5	9.6	7.2	5.6	4.9	N/A	8.7
SPLIT WT= 947.3							CUM WT %	N/A	53.4	64.0	73.6	80.8	86.5	91.3	N/A	100.0
75	N/A	H	10.0	38.8	51.2	msG	WT	N/A	410.4	107.7	69.3	48.8	46.9	38.3	N/A	80.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.2	13.4	8.6	6.1	5.9	4.8	N/A	10.0
SPLIT WT= 799.2							CUM WT %	N/A	51.2	64.6	73.3	79.3	85.2	90.0	N/A	100.0
80	N/A	H	11.1	42.8	46.0	msG	WT	N/A	452.3	122.7	103.1	78.3	72.4	44.7	N/A	109.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	46.0	12.5	10.5	8.0	7.4	4.6	N/A	11.2
SPLIT WT= 988.6							CUM WT %	N/A	46.0	58.5	69.0	76.9	84.3	88.9	N/A	100.0
85	N/A	H	11.6	33.4	55.0	msG	WT	N/A	514.3	98.2	67.2	47.9	60.8	37.6	N/A	108.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	55.0	10.5	7.2	5.1	6.5	4.0	N/A	11.6
SPLIT WT= 933.9							CUM WT %	N/A	55.0	65.6	72.7	77.9	84.4	88.4	N/A	100.0
90	N/A	H	9.7	42.8	47.5	msG	WT	N/A	456.8	112.5	80.8	85.6	83.1	49.3	N/A	93.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.5	11.7	8.4	8.9	8.6	5.1	N/A	9.7
SPLIT WT= 961.5							CUM WT %	N/A	47.5	59.2	67.6	76.5	85.2	90.3	N/A	100.0
95	N/A	H	12.2	40.4	47.4	msG	WT	N/A	452.1	110.4	79.6	71.6	65.0	59.5	N/A	116.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.4	11.6	8.3	7.5	6.8	6.2	N/A	12.2
SPLIT WT= 953.5							CUM WT %	N/A	47.4	58.9	67.3	74.8	81.6	87.8	N/A	100.0
100	N/A	H	12.8	42.1	45.1	msG	WT	N/A	358.9	90.9	70.7	61.5	56.8	55.0	N/A	101.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.1	11.4	8.9	7.7	7.1	6.9	N/A	12.8
SPLIT WT= 800.0							CUM WT %	N/A	45.1	56.6	65.4	73.2	80.3	87.2	N/A	100.0
105	N/A	H	7.8	24.3	68.0	msG	WT	N/A	679.5	69.3	55.6	38.7	40.8	38.5	N/A	77.5
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	68.0	6.9	5.6	3.9	4.1	3.9	N/A	7.8
SPLIT WT=1004.0							CUM WT %	N/A	68.0	74.9	80.5	84.3	88.4	92.3	N/A	100.0
110	N/A	H	5.3	24.3	70.4	msG	WT	N/A	700.5	87.2	55.7	37.9	33.7	27.1	N/A	52.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	70.4	8.8	5.6	3.8	3.4	2.7	N/A	5.3
SPLIT WT=1000.1							CUM WT %	N/A	70.4	79.2	84.8	88.6	92.0	94.7	N/A	100.0
115	N/A	H	11.2	50.2	38.6	msG	WT	N/A	336.3	111.9	122.9	84.1	62.0	55.7	N/A	97.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.6	12.9	14.1	9.7	7.1	6.4	N/A	11.2
SPLIT WT= 866.5							CUM WT %	N/A	38.6	51.5	65.6	75.3	82.4	88.8	N/A	100.0

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02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	N/A	H	6.6	29.8	63.6	msG	WT	N/A	556.6	91.3	62.6	39.8	39.0	28.5	N/A	57.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	63.6	10.4	7.2	4.5	4.5	3.3	N/A	6.6
SPLIT WT= 873.5							CUM WT %	N/A	63.6	74.0	81.1	85.7	90.1	93.4	N/A	100.0
125	N/A	H	6.2	81.3	12.6	gS	WT	N/A	90.8	114.2	210.5	152.3	72.3	37.6	N/A	44.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.6	15.8	29.1	21.1	10.0	5.2	N/A	6.2
SPLIT WT= 726.1							CUM WT %	N/A	12.6	28.4	57.5	78.6	88.6	93.8	N/A	100.0
130	N/A	H	5.7	83.6	10.7	gS	WT	N/A	87.8	153.2	286.1	131.3	79.7	38.4	N/A	46.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.7	18.6	34.8	16.0	9.7	4.7	N/A	5.7
SPLIT WT= 820.6							CUM WT %	N/A	10.7	29.3	64.0	80.0	89.7	94.3	N/A	100.0
135	N/A	H	5.2	70.6	24.3	gS	WT	N/A	198.6	150.9	251.8	99.8	48.3	27.0	N/A	42.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	24.3	18.4	30.8	12.2	5.9	3.3	N/A	5.2
SPLIT WT= 815.9							CUM WT %	N/A	24.3	42.7	73.5	85.6	91.5	94.8	N/A	100.0
140	N/A	H	4.6	79.6	15.8	gS	WT	N/A	109.8	125.5	254.0	105.9	43.1	24.8	N/A	32.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	15.8	18.1	36.5	15.2	6.2	3.6	N/A	4.6
SPLIT WT= 689.7							CUM WT %	N/A	15.8	33.8	70.4	85.6	91.8	95.4	N/A	100.0
145	N/A	H	6.5	25.3	68.2	msG	WT	N/A	664.3	68.9	60.2	47.6	38.3	31.8	N/A	63.5
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	68.2	7.1	6.2	4.9	3.9	3.3	N/A	6.5
SPLIT WT= 970.9							CUM WT %	N/A	68.2	75.2	81.4	86.3	90.2	93.5	N/A	100.0
150	N/A	H	8.3	42.1	49.5	msG	WT	N/A	418.9	95.2	95.8	69.3	60.7	35.2	N/A	70.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.5	11.3	11.3	8.2	7.2	4.2	N/A	8.4
SPLIT WT= 842.1							CUM WT %	N/A	49.5	60.8	72.1	80.3	87.5	91.7	N/A	100.0
155	N/A	H	10.3	52.5	37.2	msG	WT	N/A	311.7	107.8	123.3	86.8	69.4	52.0	N/A	86.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.2	12.9	14.7	10.4	8.3	6.2	N/A	10.3
SPLIT WT= 844.9							CUM WT %	N/A	37.2	50.1	64.9	75.2	83.5	89.7	N/A	100.0
160	N/A	H	6.7	71.4	21.9	gS	WT	N/A	169.6	185.2	211.8	78.5	50.9	26.3	N/A	51.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	21.9	23.9	27.4	10.1	6.6	3.4	N/A	6.7
SPLIT WT= 770.6							CUM WT %	N/A	21.9	45.8	73.2	83.3	89.9	93.3	N/A	100.0
165	N/A	H	6.6	73.8	19.6	gS	WT	N/A	154.7	147.3	222.8	113.7	65.7	31.9	N/A	51.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	19.6	18.7	28.3	14.4	8.3	4.1	N/A	6.6
SPLIT WT= 784.0							CUM WT %	N/A	19.6	38.3	66.6	81.1	89.4	93.4	N/A	100.0
170	N/A	H	6.8	79.8	13.4	gS	WT	N/A	98.0	77.8	183.5	187.3	93.3	42.1	N/A	49.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	13.4	10.6	25.1	25.6	12.8	5.8	N/A	6.8
SPLIT WT= 736.9							CUM WT %	N/A	13.4	24.0	49.1	74.7	87.5	93.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-010 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	N/A	H	9.6	58.1	32.3	msG	WT	N/A	219.5	107.3	104.2	85.8	58.2	38.7	N/A	64.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.4	15.8	15.4	12.6	8.6	5.7	N/A	9.6
SPLIT WT= 683.0							CUM WT %	N/A	32.4	48.2	63.5	76.2	84.7	90.4	N/A	100.0
180	N/A	H	11.4	56.2	32.4	msG	WT	N/A	219.6	105.8	96.2	76.8	54.6	47.3	N/A	76.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.4	15.6	14.2	11.3	8.1	7.0	N/A	11.4
SPLIT WT= 673.9							CUM WT %	N/A	32.4	48.1	62.3	73.6	81.7	88.6	N/A	100.0
185	N/A	H	7.3	68.1	24.6	gS	WT	N/A	193.8	103.1	171.4	125.0	83.4	53.3	N/A	57.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.6	13.1	21.8	15.9	10.6	6.8	N/A	7.3
SPLIT WT= 792.5							CUM WT %	N/A	24.6	37.7	59.5	75.3	85.9	92.7	N/A	100.0
190	N/A	H	11.6	46.0	42.5	msG	WT	N/A	328.4	90.2	81.0	75.1	58.5	50.6	N/A	89.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.5	11.7	10.5	9.7	7.6	6.5	N/A	11.6
SPLIT WT= 769.6							CUM WT %	N/A	42.5	54.1	64.6	74.3	81.9	88.4	N/A	100.0
195	N/A	H	9.1	64.8	26.1	(m)gS	WT	N/A	234.8	134.8	179.6	141.0	84.1	43.1	N/A	82.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.1	15.0	20.0	15.7	9.4	4.8	N/A	9.1
SPLIT WT= 895.8							CUM WT %	N/A	26.1	41.1	61.1	76.8	86.1	90.9	N/A	100.0
200	N/A	H	5.0	65.3	29.7	gS	WT	N/A	255.0	183.2	184.1	114.1	52.3	27.9	N/A	43.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.7	21.3	21.4	13.3	6.1	3.3	N/A	5.0
SPLIT WT= 854.6							CUM WT %	N/A	29.7	51.0	72.4	85.7	91.7	95.0	N/A	100.0
205	N/A	H	6.9	90.1	3.0	S	WT	N/A	21.7	35.8	133.0	318.1	125.2	37.9	N/A	49.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.0	5.0	18.4	44.1	17.4	5.3	N/A	6.9
SPLIT WT= 716.4							CUM WT %	N/A	3.0	8.0	26.4	70.5	87.9	93.1	N/A	100.0
210	N/A	H	7.3	91.0	1.7	S	WT	N/A	12.0	26.3	126.1	300.2	152.0	49.0	N/A	52.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.7	3.7	17.6	41.8	21.2	6.8	N/A	7.3
SPLIT WT= 714.7							CUM WT %	N/A	1.7	5.3	22.9	64.7	85.9	92.7	N/A	100.0
215	N/A	H	6.0	52.5	41.6	msG	WT	N/A	373.6	53.3	66.5	175.4	128.9	47.6	N/A	53.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.6	5.9	7.4	19.5	14.3	5.3	N/A	6.0
SPLIT WT= 896.5							CUM WT %	N/A	41.6	47.5	54.9	74.4	88.8	94.1	N/A	100.0
220	N/A	H	6.6	35.1	58.2	msG	WT	N/A	489.5	123.8	48.2	44.2	43.6	35.6	N/A	55.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	58.2	14.7	5.7	5.3	5.2	4.2	N/A	6.6
SPLIT WT= 837.5							CUM WT %	N/A	58.2	73.0	78.7	84.0	89.1	93.4	N/A	100.0
225	N/A	H	8.2	36.0	55.8	msG	WT	N/A	495.8	125.9	67.0	46.8	47.5	32.5	N/A	72.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	55.8	14.2	7.5	5.3	5.4	3.7	N/A	8.2
SPLIT WT= 888.2							CUM WT %	N/A	55.8	70.0	77.5	82.8	88.1	91.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E27-010 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
230	N/A	H	5.9	93.3	0.8	S	WT	N/A	5.7	108.1	358.2	142.0	43.0	22.6	N/A	42.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.8	15.0	49.6	19.7	6.0	3.1	N/A	5.9
SPLIT WT= 719.0							CUM WT %	N/A	0.8	15.8	65.3	85.0	90.9	94.1	N/A	100.0
235	N/A	H	0.0	31.9	68.1	sG	WT	N/A	552.5	146.0	85.6	21.1	4.7	1.2	N/A	0.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	68.1	18.0	10.6	2.6	0.6	0.2	N/A	0.0
SPLIT WT= 810.8							CUM WT %	N/A	68.1	86.1	96.7	99.3	99.9	100.0	N/A	100.0
240	N/A	H	0.0	7.8	92.2	G	WT	N/A	770.5	30.0	22.3	9.5	2.9	0.8	N/A	0.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	92.2	3.6	2.7	1.1	0.4	0.1	N/A	0.0
SPLIT WT= 834.1							CUM WT %	N/A	92.2	95.8	98.4	99.6	99.9	100.0	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E28-026 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	10.7	37.2	52.1	msG	WT	N/A	390.4	62.4	62.4	56.2	46.9	50.9	N/A	80.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.1	8.3	8.3	7.5	6.3	6.8	N/A	10.7
SPLIT WT= 756.3							CUM WT %	N/A	52.1	60.4	68.8	76.3	82.5	89.3	N/A	100.0
10	N/A	H	5.6	60.5	33.9	sG	WT	N/A	266.7	149.5	158.5	90.4	48.0	29.0	N/A	43.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.9	19.0	20.2	11.5	6.1	3.7	N/A	5.6
SPLIT WT= 785.7							CUM WT %	N/A	33.9	53.0	73.1	84.6	90.8	94.4	N/A	100.0
15	N/A	H	5.9	45.4	48.7	msG	WT	N/A	389.2	89.9	100.6	73.8	55.0	43.1	N/A	47.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.7	11.3	12.6	9.2	6.9	5.4	N/A	5.9
SPLIT WT= 797.1							CUM WT %	N/A	48.7	60.0	72.5	81.8	88.7	94.1	N/A	100.0
20	N/A	H	4.2	16.7	79.1	msG	WT	N/A	694.7	35.2	22.8	22.7	33.8	31.8	N/A	37.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	79.1	4.0	2.6	2.6	3.9	3.6	N/A	4.3
SPLIT WT= 877.8							CUM WT %	N/A	79.1	83.1	85.7	88.3	92.1	95.8	N/A	100.0
30	N/A	H	7.7	79.6	12.7	gS	WT	N/A	93.3	41.4	158.6	219.5	113.8	50.6	N/A	56.8
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	12.7	5.6	21.6	29.9	15.5	6.9	N/A	7.7
SPLIT WT= 730.1							CUM WT %	N/A	12.7	18.4	40.0	69.9	85.4	92.3	N/A	100.0
35	N/A	H	5.8	25.6	68.7	msG	WT	N/A	501.9	40.7	43.1	39.1	32.8	31.1	N/A	42.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	68.7	5.6	5.9	5.4	4.5	4.3	N/A	5.8
SPLIT WT= 738.0							CUM WT %	N/A	68.7	74.2	80.1	85.5	90.0	94.2	N/A	100.0
45	N/A	H	11.0	31.0	58.1	msG	WT	N/A	218.8	30.0	25.3	24.0	20.6	16.8	N/A	41.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.1	8.0	6.7	6.4	5.5	4.5	N/A	11.0
SPLIT WT= 377.0							CUM WT %	N/A	58.1	66.0	72.7	79.1	84.6	89.0	N/A	100.0
49	N/A	H	10.7	37.2	52.1	msG	WT	N/A	390.4	62.4	62.4	56.2	46.9	50.9	N/A	80.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.1	8.3	8.3	7.5	6.3	6.8	N/A	10.7
SPLIT WT= 756.3							CUM WT %	N/A	52.1	60.4	68.8	76.3	82.5	89.3	N/A	100.0
50	N/A	H	5.3	25.8	68.9	msG	WT	N/A	303.8	31.9	31.4	18.9	17.7	13.9	N/A	23.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	68.9	7.2	7.1	4.3	4.0	3.2	N/A	5.3
SPLIT WT= 448.1							CUM WT %	N/A	68.9	76.2	83.3	87.6	91.6	94.7	N/A	100.0
55	N/A	H	6.4	33.9	59.7	msG	WT	N/A	293.3	53.4	44.6	31.5	22.3	14.9	N/A	31.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.7	10.9	9.1	6.4	4.5	3.0	N/A	6.4
SPLIT WT= 487.1							CUM WT %	N/A	59.7	70.6	79.7	86.1	90.6	93.6	N/A	100.0
60	N/A	H	5.6	59.5	34.9	sG	WT	N/A	261.8	88.8	202.6	84.1	41.4	29.2	N/A	42.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.9	11.8	27.0	11.2	5.5	3.9	N/A	5.6
SPLIT WT= 756.7							CUM WT %	N/A	34.9	46.8	73.8	85.0	90.5	94.4	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E28-026 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
95	N/A	C	2.4	97.1	0.5	S	WT	N/A	2.9	76.5	327.7	85.1	22.1	11.2	N/A	12.9
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.5	14.2	60.9	15.8	4.1	2.1	N/A	2.4
SPLIT WT= 540.2							CUM WT %	N/A	0.5	14.8	75.6	91.4	95.5	97.6	N/A	100.0
101	N/A	C	3.8	92.4	3.9	S	WT	N/A	22.0	64.3	162.2	127.6	124.8	48.6	N/A	21.5
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.9	11.3	28.4	22.4	21.9	8.5	N/A	3.8
SPLIT WT= 570.4							CUM WT %	N/A	3.9	15.1	43.5	65.9	87.7	96.2	N/A	100.0
105	N/A	C	3.0	92.8	4.2	S	WT	N/A	26.1	76.3	238.1	172.1	63.1	23.8	N/A	18.3
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.2	12.4	38.5	27.9	10.2	3.9	N/A	3.0
SPLIT WT= 619.2							CUM WT %	N/A	4.2	16.6	55.1	83.0	93.2	97.0	N/A	100.0
110	N/A	C	4.1	95.8	0.1	S	WT	N/A	0.6	10.2	386.9	148.7	35.1	15.4	N/A	25.6
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.1	1.6	62.2	23.9	5.6	2.5	N/A	4.1
SPLIT WT= 627.1							CUM WT %	N/A	0.1	1.7	63.9	87.8	93.4	95.9	N/A	100.0
115	N/A	C	4.6	94.5	0.9	S	WT	N/A	5.7	42.0	356.1	129.0	51.3	41.6	N/A	30.2
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.9	6.4	54.3	19.7	7.8	6.3	N/A	4.6
SPLIT WT= 657.2							CUM WT %	N/A	0.9	7.3	61.6	81.2	89.1	95.4	N/A	100.0
120	N/A	C	5.6	93.7	0.7	S	WT	N/A	4.8	41.9	341.9	139.4	49.6	29.5	N/A	36.0
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.8	6.5	53.2	21.7	7.7	4.6	N/A	5.6
SPLIT WT= 643.3							CUM WT %	N/A	0.8	7.3	60.4	82.1	89.8	94.4	N/A	100.0
130	N/A	C	2.5	91.1	6.4	(g)S	WT	N/A	40.8	198.5	171.3	151.2	43.9	17.2	N/A	16.2
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	6.4	31.1	26.8	23.7	6.9	2.7	N/A	2.5
SPLIT WT= 643.4							CUM WT %	N/A	6.4	37.4	64.2	87.9	94.8	97.5	N/A	100.0
135	N/A	C	2.6	92.8	4.6	S	WT	N/A	30.2	221.3	222.5	109.1	37.4	15.0	N/A	17.1
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.6	33.9	34.1	16.7	5.7	2.3	N/A	2.6
SPLIT WT= 653.7							CUM WT %	N/A	4.6	38.5	72.6	89.4	95.1	97.4	N/A	100.0
140	N/A	C	1.2	94.9	3.9	S	WT	N/A	25.1	73.3	264.4	214.0	43.1	12.9	N/A	7.8
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.9	11.4	41.3	33.4	6.7	2.0	N/A	1.2
SPLIT WT= 645.0							CUM WT %	N/A	3.9	15.4	56.6	90.0	96.8	98.8	N/A	100.0
145	N/A	C	2.0	95.8	2.2	S	WT	N/A	13.8	25.6	146.6	334.0	77.0	19.8	N/A	12.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.2	4.1	23.3	53.1	12.2	3.2	N/A	2.0
SPLIT WT= 631.2							CUM WT %	N/A	2.2	6.3	29.6	82.6	94.8	98.0	N/A	100.0
150	N/A	C	2.8	96.5	0.7	S	WT	N/A	4.0	23.8	96.1	272.8	130.1	25.1	N/A	15.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	4.2	16.9	48.1	22.9	4.4	N/A	2.8
SPLIT WT= 567.6							CUM WT %	N/A	0.7	4.9	21.8	69.9	92.8	97.2	N/A	100.0

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**** REPORT ON WELL 0299-E28-026 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
155	N/A	C	1.5	95.5	3.0	S	WT	N/A	19.0	116.3	261.4	157.8	48.2	14.8	N/A	9.3
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.0	18.6	41.7	25.2	7.7	2.4	N/A	1.5
SPLIT WT= 626.8							CUM WT %	N/A	3.0	21.6	63.3	88.5	96.2	98.5	N/A	100.0
160	N/A	C	6.3	91.9	1.8	S	WT	N/A	10.9	93.4	229.1	126.9	62.1	37.1	N/A	37.5
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.8	15.6	38.4	21.3	10.4	6.2	N/A	6.3
SPLIT WT= 604.2							CUM WT %	N/A	1.8	17.5	55.9	77.1	87.5	93.7	N/A	100.0
165	N/A	C	2.1	95.7	2.2	S	WT	N/A	13.0	102.4	269.4	134.9	45.3	15.1	N/A	12.7
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.2	17.3	45.5	22.8	7.6	2.6	N/A	2.1
SPLIT WT= 595.0							CUM WT %	N/A	2.2	19.5	64.9	87.7	95.3	97.9	N/A	100.0
170	N/A	C	6.7	82.6	10.7	gS	WT	N/A	37.6	75.7	62.9	47.2	69.1	35.3	N/A	23.5
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	10.7	21.6	17.9	13.4	19.7	10.1	N/A	6.7
SPLIT WT= 350.4							CUM WT %	N/A	10.7	32.3	50.2	63.6	83.3	93.3	N/A	100.0
175	N/A	C	1.4	52.5	46.0	sG	WT	N/A	338.7	209.4	100.7	46.5	20.4	9.6	N/A	10.5
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	46.0	28.5	13.7	6.3	2.8	1.3	N/A	1.4
SPLIT WT= 737.0							CUM WT %	N/A	46.0	74.5	88.2	94.5	97.3	98.6	N/A	100.0
180	N/A	C	1.2	97.7	1.1	S	WT	N/A	4.4	58.7	210.5	82.3	23.1	9.7	N/A	4.7
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.1	14.9	53.5	20.9	5.9	2.5	N/A	1.2
SPLIT WT= 399.1							CUM WT %	N/A	1.1	16.0	69.6	90.5	96.3	98.8	N/A	100.0
185	N/A	C	2.4	97.2	0.5	S	WT	N/A	1.7	60.9	192.5	55.2	21.7	11.2	N/A	8.3
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.5	17.3	54.8	15.7	6.2	3.2	N/A	2.4
SPLIT WT= 357.1							CUM WT %	N/A	0.5	17.8	72.6	88.3	94.5	97.6	N/A	100.0
190	N/A	C	5.0	81.3	13.7	gS	WT	N/A	84.2	101.5	215.1	108.4	48.6	24.4	N/A	30.7
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.7	16.6	35.1	17.7	7.9	4.0	N/A	5.0
SPLIT WT= 620.2							CUM WT %	N/A	13.7	30.3	65.4	83.1	91.0	95.0	N/A	100.0
195	N/A	H	3.2	58.3	38.5	sG	WT	N/A	147.8	102.9	62.1	30.6	18.5	9.8	N/A	12.2
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.5	26.8	16.2	8.0	4.8	2.6	N/A	3.2
SPLIT WT= 383.2							CUM WT %	N/A	38.5	65.3	81.5	89.5	94.3	96.8	N/A	100.0
200	N/A	C	0.1	72.1	27.8	gS	WT	N/A	187.5	166.8	209.1	81.8	21.1	6.9	N/A	0.4
SORT= N/A	MEDIAN=		0.00	MODE=	1.00	MEAN= N/A	WT %	N/A	27.8	24.8	31.0	12.1	3.1	1.0	N/A	0.1
SPLIT WT= 677.4							CUM WT %	N/A	27.8	52.6	83.6	95.8	98.9	99.9	N/A	100.0
205	N/A	C	2.9	94.6	2.5	S	WT	N/A	11.4	57.7	180.7	146.4	40.0	12.9	N/A	13.4
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.5	12.5	39.1	31.7	8.7	2.8	N/A	2.9
SPLIT WT= 461.3							CUM WT %	N/A	2.5	14.9	54.0	85.7	94.3	97.1	N/A	100.0

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**** REPORT ON WELL 0299-E28-026 ****

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
210	N/A	C	2.7	95.5	1.8	S	WT	N/A	10.7	85.1	233.4	205.1	50.4	16.2	N/A	16.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.8	10.9	39.1	34.4	8.4	2.7	N/A	2.7
SPLIT WT= 592.0							CUM WT %	N/A	1.8	12.7	51.8	86.1	94.6	97.3	N/A	100.0
215	N/A	C	3.6	95.8	0.6	S	WT	N/A	3.7	19.0	172.7	276.2	121.7	32.3	N/A	23.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.6	2.9	26.6	42.6	18.8	5.0	N/A	3.6
SPLIT WT= 645.3							CUM WT %	N/A	0.6	3.5	30.1	72.7	91.4	96.4	N/A	100.0
220	N/A	C	47.6	51.8	0.6	mS	WT	N/A	3.4	1.7	0.9	9.1	42.9	222.8	N/A	254.8
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.6	0.3	0.2	1.7	8.0	41.6	N/A	47.6
SPLIT WT= 529.2							CUM WT %	N/A	0.6	1.0	1.1	2.8	10.8	52.4	N/A	100.0
225	N/A	C	1.6	55.1	43.2	sG	WT	N/A	357.4	196.3	166.8	57.3	21.9	13.1	N/A	13.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.3	23.8	20.2	6.9	2.7	1.6	N/A	1.7
SPLIT WT= 824.9							CUM WT %	N/A	43.3	67.0	87.2	94.1	96.8	98.4	N/A	100.0
230	N/A	C	2.8	33.9	63.2	sG	WT	N/A	547.6	97.9	98.9	52.5	26.2	18.6	N/A	24.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	63.2	11.3	11.4	6.1	3.0	2.2	N/A	2.8
SPLIT WT= 862.0							CUM WT %	N/A	63.2	74.5	85.9	92.0	95.0	97.2	N/A	100.0
235	N/A	C	3.4	36.3	60.4	sG	WT	N/A	446.4	85.8	92.9	46.6	24.3	18.6	N/A	24.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	60.4	11.6	12.6	6.3	3.3	2.5	N/A	3.4
SPLIT WT= 740.0							CUM WT %	N/A	60.4	72.0	84.5	90.8	94.1	96.6	N/A	100.0
240	N/A	H	8.0	91.3	0.7	S	WT	N/A	5.0	33.5	172.0	279.0	120.1	46.4	N/A	57.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	4.7	24.1	39.1	16.8	6.5	N/A	8.0
SPLIT WT= 712.3							CUM WT %	N/A	0.7	5.4	29.5	68.6	85.5	92.0	N/A	100.0
247	N/A	H	13.8	43.2	43.0	msG	WT	N/A	335.0	81.8	64.0	64.3	63.5	63.4	N/A	107.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.0	10.5	8.2	8.2	8.1	8.1	N/A	13.8
SPLIT WT= 777.1							CUM WT %	N/A	43.0	53.4	61.7	69.9	78.0	86.2	N/A	100.0
255	N/A	H	15.2	72.0	12.8	(m)gS	WT	N/A	91.7	146.7	115.7	86.3	98.7	67.8	N/A	108.4
SORT=	N/A	MEDIAN=	2.00	MODE=	0.00	MEAN= N/A	WT %	N/A	12.8	20.5	16.2	12.1	13.8	9.5	N/A	15.2
SPLIT WT= 709.8							CUM WT %	N/A	12.8	33.3	49.5	61.6	75.4	84.9	N/A	100.0
260	N/A	H	2.0	39.0	59.0	sG	WT	N/A	477.5	134.4	94.4	53.3	23.5	9.7	N/A	16.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	59.0	16.6	11.7	6.6	2.9	1.2	N/A	2.0
SPLIT WT= 809.3							CUM WT %	N/A	59.0	75.6	87.3	93.9	96.8	98.0	N/A	100.0
265	N/A	H	7.0	62.6	30.5	msG	WT	N/A	212.8	65.1	96.7	97.9	105.1	72.1	N/A	48.7
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.5	9.3	13.9	14.0	15.1	10.3	N/A	7.0
SPLIT WT= 700.2							CUM WT %	N/A	30.5	39.8	53.6	67.7	82.7	93.0	N/A	100.0

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**** REPORT ON WELL 0299-E28-026 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
270	N/A	H	12.1	44.6	43.2	msG	WT	N/A	316.1	70.3	60.3	67.6	76.5	51.6	N/A	88.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.2	9.6	8.3	9.3	10.5	7.1	N/A	12.1
SPLIT WT= 728.2							CUM WT %	N/A	43.2	52.9	61.1	70.4	80.8	87.9	N/A	100.0
275	N/A	H	9.8	37.4	52.8	msG	WT	N/A	431.5	59.5	63.6	66.7	68.8	47.1	N/A	80.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.8	7.3	7.8	8.2	8.4	5.8	N/A	9.8
SPLIT WT= 817.1							CUM WT %	N/A	52.8	60.1	67.9	76.0	84.4	90.2	N/A	100.0
280	N/A	H	4.9	40.6	54.5	msG	WT	N/A	450.1	136.9	93.2	43.6	40.0	21.6	N/A	40.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	54.5	16.6	11.3	5.3	4.8	2.6	N/A	4.9
SPLIT WT= 822.2							CUM WT %	N/A	54.5	71.1	82.3	87.6	92.5	95.1	N/A	100.0
285	N/A	H	6.8	34.9	58.3	msG	WT	N/A	241.0	56.5	35.2	20.7	18.0	13.7	N/A	28.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.3	13.7	8.5	5.0	4.4	3.3	N/A	6.9
SPLIT WT= 413.8							CUM WT %	N/A	58.3	72.0	80.5	85.5	89.8	93.2	N/A	100.0
295	N/A	H	3.6	22.7	73.7	msG	WT	N/A	266.8	24.3	17.1	14.7	15.1	11.0	N/A	13.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	73.7	6.7	4.7	4.1	4.2	3.0	N/A	3.6
SPLIT WT= 362.5							CUM WT %	N/A	73.7	80.4	85.1	89.2	93.3	96.4	N/A	100.0
300	N/A	H	3.1	44.4	52.5	sG	WT	N/A	427.7	99.7	116.7	91.6	36.3	17.9	N/A	25.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.5	12.2	14.3	11.2	4.5	2.2	N/A	3.1
SPLIT WT= 807.4							CUM WT %	N/A	52.5	64.7	79.0	90.3	94.7	96.9	N/A	100.0
305	N/A	H	4.1	25.6	70.3	msG	WT	N/A	295.3	43.1	26.1	15.2	13.1	9.9	N/A	17.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	70.3	10.3	6.2	3.6	3.1	2.4	N/A	4.1
SPLIT WT= 420.5							CUM WT %	N/A	70.3	80.6	86.8	90.5	93.6	95.9	N/A	100.0
310	N/A	H	2.4	36.5	61.1	sG	WT	N/A	464.8	139.6	82.8	28.1	19.3	8.1	N/A	18.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	61.1	18.4	10.9	3.7	2.5	1.1	N/A	2.4
SPLIT WT= 758.4							CUM WT %	N/A	61.1	79.5	90.3	94.0	96.6	97.6	N/A	100.0
315	N/A	H	2.9	68.4	28.6	gS	WT	N/A	213.0	73.8	160.5	163.6	82.1	29.5	N/A	21.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.6	9.9	21.6	22.0	11.0	4.0	N/A	2.9
SPLIT WT= 741.4							CUM WT %	N/A	28.6	38.5	60.1	82.1	93.1	97.1	N/A	100.0
320	N/A	H	3.4	65.5	31.1	sG	WT	N/A	245.6	92.0	211.5	137.2	54.3	21.6	N/A	26.6
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.1	11.7	26.8	17.4	6.9	2.7	N/A	3.4
SPLIT WT= 788.9							CUM WT %	N/A	31.1	42.8	69.6	87.0	93.9	96.6	N/A	100.0
325	N/A	H	5.7	52.7	41.6	sG	WT	N/A	311.0	137.2	127.8	76.3	34.0	18.1	N/A	42.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.6	18.4	17.1	10.2	4.6	2.4	N/A	5.7
SPLIT WT= 747.9							CUM WT %	N/A	41.6	60.0	77.1	87.3	91.9	94.3	N/A	100.0

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**** REPORT ON WELL 0299-E28-027 ****

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
35	N/A	H	10.1	54.8	35.0	msG	WT	N/A	298.6	154.2	113.2	84.0	65.8	50.0	N/A	86.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.1	18.1	13.3	9.9	7.7	5.9	N/A	10.1
SPLIT WT= 850.3							CUM WT %	N/A	35.1	53.2	66.4	76.3	84.0	89.9	N/A	100.0
40	N/A	H	8.3	60.7	31.0	msG	WT	N/A	271.6	170.3	165.2	89.5	58.8	48.6	N/A	72.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.0	19.4	18.8	10.2	6.7	5.5	N/A	8.3
SPLIT WT= 884.9							CUM WT %	N/A	31.0	50.4	69.3	79.5	86.2	91.7	N/A	100.0
45	N/A	H	7.6	67.0	25.4	(m)gS	WT	N/A	199.8	210.1	154.6	75.0	51.7	35.1	N/A	59.8
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	25.4	26.7	19.7	9.5	6.6	4.5	N/A	7.6
SPLIT WT= 786.4							CUM WT %	N/A	25.4	52.2	71.8	81.4	87.9	92.4	N/A	100.0
50	N/A	H	12.0	82.1	5.9	(gm)S	WT	N/A	35.6	125.7	162.7	95.3	62.3	50.1	N/A	72.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.9	20.8	26.9	15.8	10.3	8.3	N/A	12.0
SPLIT WT= 602.8							CUM WT %	N/A	5.9	26.7	53.6	69.4	79.7	88.0	N/A	100.0
55	N/A	H	0.2	75.4	24.4	gS	WT	N/A	160.1	197.2	211.5	62.9	14.9	7.4	N/A	1.2
SORT=	N/A	MEDIAN=	0.00	MODE=	1.00	MEAN= N/A	WT %	N/A	24.4	30.1	32.3	9.6	2.3	1.1	N/A	0.2
SPLIT WT= 661.8							CUM WT %	N/A	24.4	54.5	86.8	96.4	98.7	99.8	N/A	100.0
60	N/A	H	2.8	96.2	0.9	S	WT	N/A	6.4	51.3	287.6	246.3	56.7	18.7	N/A	19.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.9	7.5	41.9	35.9	8.3	2.7	N/A	2.8
SPLIT WT= 693.7							CUM WT %	N/A	0.9	8.4	50.3	86.2	94.4	97.2	N/A	100.0
65	N/A	C	2.2	96.5	1.4	S	WT	N/A	8.7	139.5	380.8	67.3	20.0	11.3	N/A	13.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.4	21.8	59.4	10.5	3.1	1.8	N/A	2.2
SPLIT WT= 639.2							CUM WT %	N/A	1.4	23.1	82.5	93.0	96.1	97.9	N/A	100.0
70	N/A	C	N/A	95.5	4.5	N/A	WT	N/A	14.1	44.4	155.7	82.6	12.9	4.1	N/A	N/A
SORT=	N/A	MEDIAN=	1.00	MODE=	N/A	MEAN= N/A	WT %	N/A	4.5	14.2	49.6	26.3	4.1	1.3	N/A	N/A
SPLIT WT= 313.7							CUM WT %	N/A	4.5	18.6	68.3	94.6	98.7	100.0	N/A	N/A
75	N/A	C	0.2	97.4	2.4	S	WT	N/A	12.7	82.7	292.4	128.2	19.8	7.0	N/A	1.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.4	12.0	55.8	24.5	3.8	1.3	N/A	0.2
SPLIT WT= 530.1							CUM WT %	N/A	2.4	14.4	70.2	94.7	98.5	99.8	N/A	100.0
80	N/A	C	2.9	94.9	2.2	S	WT	N/A	15.1	114.4	326.7	163.0	38.1	17.3	N/A	20.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.2	16.5	47.0	23.5	5.5	2.5	N/A	2.9
SPLIT WT= 701.0							CUM WT %	N/A	2.2	18.8	65.7	89.1	94.6	97.1	N/A	100.0
85	N/A	C	2.8	96.2	1.0	S	WT	N/A	5.3	11.8	33.8	168.5	238.2	59.0	N/A	15.1
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	1.0	2.2	6.4	31.7	44.8	11.1	N/A	2.8
SPLIT WT= 530.4							CUM WT %	N/A	1.0	3.2	9.6	41.3	86.1	97.2	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
90	N/A	C	9.7	42.8	47.5	msG	WT	N/A	456.7	112.5	80.8	85.6	83.1	49.3	N/A	93.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	47.5	11.7	8.4	8.9	8.7	5.1	N/A	9.7
SPLIT WT= 961.5							CUM WT %	N/A	47.5	59.2	67.6	76.5	85.2	90.3	N/A	100.0
95	N/A	C	1.2	97.7	1.2	S	WT	N/A	6.9	111.7	363.0	75.6	17.2	4.8	N/A	6.8
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.2	19.1	62.0	12.9	2.9	0.8	N/A	1.2
SPLIT WT= 586.2							CUM WT %	N/A	1.2	20.2	82.2	95.1	98.0	98.9	N/A	100.0
100	N/A	C	1.5	92.1	6.4	(g)S	WT	N/A	22.8	61.3	149.2	94.0	17.6	6.6	N/A	5.5
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	6.4	17.2	41.8	26.3	4.9	1.9	N/A	1.5
SPLIT WT= 353.1							CUM WT %	N/A	6.4	23.6	65.4	91.7	96.6	98.5	N/A	100.0
105	N/A	C	3.4	66.8	29.8	gS	WT	N/A	103.1	39.1	45.9	73.4	56.5	16.0	N/A	11.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	29.8	11.3	13.3	21.2	16.3	4.6	N/A	3.4
SPLIT WT= 342.1							CUM WT %	N/A	29.8	41.1	54.4	75.6	91.9	96.6	N/A	100.0
110	N/A	C	2.3	97.6	0.1	S	WT	N/A	0.4	7.0	70.6	171.3	60.0	11.2	N/A	7.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.1	2.1	21.5	52.2	18.3	3.4	N/A	2.3
SPLIT WT= 325.4							CUM WT %	N/A	0.1	2.3	23.8	76.0	94.3	97.7	N/A	100.0
115	N/A	C	4.8	94.6	0.6	S	WT	N/A	1.8	16.4	64.0	63.1	101.4	28.1	N/A	13.9
SORT= N/A MEDIAN= 2.00 MODE= 3.00 MEAN= N/A							WT %	N/A	0.6	5.7	22.2	21.9	35.1	9.7	N/A	4.8
SPLIT WT= 285.2							CUM WT %	N/A	0.6	6.3	28.5	50.3	85.5	95.2	N/A	100.0
120	N/A	C	1.4	98.4	0.3	S	WT	N/A	0.8	18.9	205.8	70.3	12.3	4.6	N/A	4.3
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	0.3	6.0	64.9	22.2	3.9	1.5	N/A	1.4
SPLIT WT= 314.4							CUM WT %	N/A	0.3	6.2	71.1	93.3	97.2	98.6	N/A	100.0
125	N/A	C	1.8	97.1	1.1	S	WT	N/A	3.6	79.2	173.7	54.2	15.2	6.8	N/A	6.1
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.1	23.4	51.3	16.0	4.5	2.0	N/A	1.8
SPLIT WT= 335.7							CUM WT %	N/A	1.1	24.4	75.7	91.7	96.2	98.2	N/A	100.0
130	N/A	C	6.2	91.0	2.8	S	WT	N/A	17.7	105.3	217.9	133.5	77.2	39.2	N/A	38.9
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	2.8	16.7	34.6	21.2	12.3	6.2	N/A	6.2
SPLIT WT= 634.7							CUM WT %	N/A	2.8	19.5	54.1	75.3	87.6	93.8	N/A	100.0
135	N/A	C	4.1	92.9	3.0	S	WT	N/A	18.3	86.9	221.3	183.4	54.5	23.6	N/A	25.1
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	3.0	14.2	36.1	29.9	8.9	3.9	N/A	4.1
SPLIT WT= 609.4							CUM WT %	N/A	3.0	17.2	53.3	83.2	92.1	95.9	N/A	100.0
140	N/A	C	10.1	88.7	1.3	(m)S	WT	N/A	9.3	167.5	392.9	61.7	30.5	2.8	N/A	74.5
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.3	22.7	53.2	8.4	4.1	0.4	N/A	10.1
SPLIT WT= 746.4							CUM WT %	N/A	1.3	23.9	77.1	85.4	89.6	89.9	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
145	N/A	C	4.8	91.4	3.9	S	WT	N/A	21.5	90.3	223.1	135.4	40.4	19.9	N/A	26.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.9	16.2	40.0	24.3	7.3	3.6	N/A	4.8
SPLIT WT= 555.5							CUM WT %	N/A	3.9	20.1	60.1	84.4	91.6	95.2	N/A	100.0
150	N/A	C	2.6	94.7	2.8	S	WT	N/A	13.8	64.0	201.9	158.5	36.3	12.6	N/A	12.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.8	12.8	40.4	31.7	7.3	2.5	N/A	2.6
SPLIT WT= 498.4							CUM WT %	N/A	2.8	15.6	55.9	87.6	94.9	97.4	N/A	100.0
155	N/A	C	5.0	91.0	4.0	S	WT	N/A	24.2	102.6	222.7	149.7	52.8	28.4	N/A	30.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.0	16.8	36.5	24.5	8.6	4.7	N/A	5.0
SPLIT WT= 608.5							CUM WT %	N/A	4.0	20.8	57.2	81.7	90.3	95.0	N/A	100.0
160	N/A	C	5.6	93.9	0.5	S	WT	N/A	2.8	27.6	172.0	232.3	66.3	29.9	N/A	31.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.5	4.9	30.6	41.3	11.8	5.3	N/A	5.6
SPLIT WT= 567.3							CUM WT %	N/A	0.5	5.4	36.0	77.3	89.1	94.4	N/A	100.0
165	N/A	C	3.4	96.2	0.4	S	WT	N/A	1.4	24.7	128.6	123.3	36.2	9.4	N/A	11.5
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.4	7.4	38.4	36.8	10.8	2.8	N/A	3.4
SPLIT WT= 333.6							CUM WT %	N/A	0.4	7.8	46.2	83.0	93.8	96.6	N/A	100.0
170	N/A	C	6.2	93.8	0.0	S	WT	N/A	0.0	20.3	132.9	114.7	43.2	17.8	N/A	21.9
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.0	5.8	37.9	32.7	12.3	5.1	N/A	6.2
SPLIT WT= 353.7							CUM WT %	N/A	0.0	5.8	43.7	76.4	88.7	93.8	N/A	100.0
175	N/A	C	3.6	96.0	0.4	S	WT	N/A	2.2	10.5	134.2	296.3	93.5	23.0	N/A	21.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	1.8	23.1	51.0	16.1	4.0	N/A	3.6
SPLIT WT= 578.8							CUM WT %	N/A	0.4	2.2	25.3	76.3	92.4	96.4	N/A	100.0
180	N/A	C	3.0	96.6	0.4	S	WT	N/A	2.2	11.0	108.0	296.2	113.4	24.5	N/A	17.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	1.9	18.9	51.8	19.8	4.3	N/A	3.0
SPLIT WT= 570.8							CUM WT %	N/A	0.4	2.3	21.2	72.9	92.7	97.0	N/A	100.0
185	N/A	C	6.1	93.2	0.7	S	WT	N/A	4.1	32.7	139.0	224.5	69.9	34.2	N/A	34.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	5.9	24.9	40.2	16.1	6.1	N/A	6.1
SPLIT WT= 556.4							CUM WT %	N/A	0.7	6.6	31.5	71.7	87.8	93.9	N/A	100.0
190	N/A	C	3.1	48.6	48.3	sG	WT	N/A	370.1	145.2	126.0	57.0	26.9	17.1	N/A	23.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.3	19.0	16.5	7.4	3.5	2.2	N/A	3.1
SPLIT WT= 764.2							CUM WT %	N/A	48.3	67.3	83.7	91.2	94.7	96.9	N/A	100.0
195	N/A	C	2.6	75.4	22.0	gS	WT	N/A	134.1	192.7	184.4	51.7	21.1	10.7	N/A	15.8
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	22.0	31.6	30.2	8.5	3.5	1.8	N/A	2.6
SPLIT WT= 610.6							CUM WT %	N/A	22.0	53.5	83.7	92.2	95.7	97.4	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
200	N/A	C	4.4	84.5	11.0	gS	WT	N/A	68.6	193.3	224.2	63.1	28.1	16.9	N/A	27.6
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	11.0	31.1	36.1	10.2	4.5	2.7	N/A	4.4
SPLIT WT= 622.0							CUM WT %	N/A	11.0	42.1	78.2	88.3	92.9	95.6	N/A	100.0
205	N/A	C	1.0	77.1	21.8	gS	WT	N/A	142.7	173.9	193.6	89.2	33.9	13.6	N/A	6.8
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	21.8	26.6	29.6	13.7	5.2	2.1	N/A	1.0
SPLIT WT= 653.6							CUM WT %	N/A	21.8	48.4	78.1	91.7	96.9	99.0	N/A	100.0
210	N/A	C	3.0	70.2	26.8	gS	WT	N/A	187.8	104.0	197.5	123.8	44.1	23.5	N/A	21.1
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	26.8	14.8	28.1	17.6	6.3	3.4	N/A	3.0
SPLIT WT= 708.7							CUM WT %	N/A	26.8	41.6	69.7	87.4	93.6	97.0	N/A	100.0
215	N/A	C	3.1	74.8	22.1	gS	WT	N/A	155.5	146.0	221.1	107.9	34.9	17.0	N/A	21.8
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	22.1	20.7	31.4	15.3	5.0	2.4	N/A	3.1
SPLIT WT= 704.9							CUM WT %	N/A	22.1	42.8	74.2	89.5	94.5	96.9	N/A	100.0
220	N/A	C	3.9	93.0	3.0	S	WT	N/A	19.0	109.8	240.6	151.7	53.7	24.1	N/A	24.6
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.1	17.6	38.6	24.3	8.6	3.9	N/A	4.0
SPLIT WT= 631.4							CUM WT %	N/A	3.1	20.7	59.3	83.6	92.2	96.1	N/A	100.0
225	N/A	C	9.6	89.6	0.8	S	WT	N/A	5.4	67.0	221.3	178.5	84.1	49.6	N/A	64.1
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.8	10.0	33.0	26.6	12.6	7.4	N/A	9.6
SPLIT WT= 668.3							CUM WT %	N/A	0.8	10.8	43.8	70.5	83.0	90.4	N/A	100.0
230	N/A	C	7.8	90.0	2.2	S	WT	N/A	14.4	75.0	170.2	179.7	118.1	51.4	N/A	51.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.2	11.4	25.8	27.2	17.9	7.8	N/A	7.8
SPLIT WT= 660.9							CUM WT %	N/A	2.2	13.5	39.3	66.5	84.4	92.2	N/A	100.0
235	N/A	C	7.8	89.8	2.4	S	WT	N/A	15.2	71.2	155.1	174.7	98.3	77.0	N/A	50.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.4	11.1	24.2	27.2	15.3	12.0	N/A	7.8
SPLIT WT= 640.0							CUM WT %	N/A	2.4	13.5	37.6	64.9	80.2	92.2	N/A	100.0
240	N/A	C	6.1	53.6	40.3	msG	WT	N/A	258.5	72.9	116.8	66.2	42.6	45.9	N/A	39.3
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.3	11.4	18.2	10.3	6.6	7.2	N/A	6.1
SPLIT WT= 647.9							CUM WT %	N/A	40.3	51.6	69.8	80.1	86.7	93.9	N/A	100.0
245	N/A	C	5.0	34.8	60.2	msG	WT	N/A	509.9	63.3	124.6	62.8	31.1	12.4	N/A	42.4
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	60.2	7.5	14.7	7.4	3.7	1.5	N/A	5.0
SPLIT WT= 853.9							CUM WT %	N/A	60.2	67.7	82.4	89.9	93.5	95.0	N/A	100.0
250	N/A	C	3.2	53.5	43.3	sG	WT	N/A	319.6	89.8	168.8	80.2	35.6	20.6	N/A	23.3
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.3	12.2	22.9	10.9	4.8	2.8	N/A	3.2
SPLIT WT= 737.3							CUM WT %	N/A	43.3	55.5	78.4	89.2	94.1	96.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E28-027 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
255	N/A	C	6.2	34.1	59.7	msG	WT	N/A	469.2	66.4	71.2	53.9	43.2	33.1	N/A	48.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.7	8.5	9.1	6.9	5.5	4.2	N/A	6.2
SPLIT WT= 791.4							CUM WT %	N/A	59.7	68.2	77.2	84.1	89.6	93.8	N/A	100.0
260	N/A	H	10.5	52.3	37.2	msG	WT	N/A	309.4	100.0	78.3	101.4	101.5	54.2	N/A	87.2
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	37.2	12.0	9.4	12.2	12.2	6.5	N/A	10.5
SPLIT WT= 832.1							CUM WT %	N/A	37.2	49.2	58.6	70.8	83.0	89.5	N/A	100.0
265	N/A	H	12.2	55.4	32.4	msG	WT	N/A	284.6	108.5	90.5	114.8	109.5	62.8	N/A	107.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	32.4	12.4	10.3	13.1	12.5	7.2	N/A	12.2
SPLIT WT= 876.4							CUM WT %	N/A	32.4	44.8	55.1	68.2	80.6	87.8	N/A	100.0
270	N/A	H	13.9	51.8	34.3	msG	WT	N/A	279.6	96.4	80.2	68.1	126.9	50.7	N/A	112.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.3	11.8	9.8	8.4	15.6	6.2	N/A	13.9
SPLIT WT= 817.5							CUM WT %	N/A	34.3	46.2	56.0	64.4	79.9	86.1	N/A	100.0
275	N/A	H	11.1	50.7	38.2	msG	WT	N/A	301.0	122.3	95.9	73.9	64.8	43.1	N/A	87.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.2	15.5	12.2	9.4	8.2	5.5	N/A	11.1
SPLIT WT= 789.4							CUM WT %	N/A	38.2	53.7	65.9	75.3	83.5	89.0	N/A	100.0
280	N/A	H	11.0	84.9	4.1	(m)S	WT	N/A	29.0	160.0	226.8	105.9	69.1	37.0	N/A	77.8
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	4.1	22.7	32.1	15.0	9.8	5.2	N/A	11.0
SPLIT WT= 708.1							CUM WT %	N/A	4.1	26.8	58.9	73.9	83.7	89.0	N/A	100.0
285	N/A	H	8.0	78.2	13.7	gS	WT	N/A	113.2	266.0	202.1	84.0	56.8	35.0	N/A	66.2
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	13.8	32.3	24.6	10.2	6.9	4.3	N/A	8.0
SPLIT WT= 821.7							CUM WT %	N/A	13.8	46.1	70.6	80.8	87.7	92.0	N/A	100.0
290	N/A	H	6.6	93.4	0.0	S	WT	N/A	0.0	4.8	37.9	154.6	308.4	142.9	N/A	45.7
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	0.0	0.7	5.5	22.3	44.4	20.6	N/A	6.6
SPLIT WT= 694.7							CUM WT %	N/A	0.0	0.7	6.2	28.4	72.8	93.4	N/A	100.0
295	N/A	H	1.4	40.8	57.8	sG	WT	N/A	473.2	125.0	111.8	67.7	22.2	7.2	N/A	11.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	57.8	15.3	13.7	8.3	2.7	0.9	N/A	1.4
SPLIT WT= 819.0							CUM WT %	N/A	57.8	73.0	86.7	95.0	97.7	98.6	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-002 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	H	13.1	45.2	41.8	msG	WT	N/A	348.8	55.4	58.0	57.3	64.3	142.4	N/A	109.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.8	6.6	6.9	6.9	7.7	17.1	N/A	13.1
SPLIT WT= 833.5							CUM WT %	N/A	41.8	48.4	55.3	62.2	69.9	86.9	N/A	100.0
10	N/A	H	15.1	76.9	8.0	(gm)S	WT	N/A	51.4	45.8	90.4	112.7	144.6	101.5	N/A	97.0
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	8.0	7.1	14.1	17.5	22.5	15.8	N/A	15.1
SPLIT WT= 643.3							CUM WT %	N/A	8.0	15.1	29.2	46.7	69.2	84.9	N/A	100.0
15	N/A	H	12.7	45.2	42.1	msG	WT	N/A	392.1	133.6	92.5	72.4	70.7	52.4	N/A	118.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.1	14.3	9.9	7.8	7.6	5.6	N/A	12.7
SPLIT WT= 930.8							CUM WT %	N/A	42.1	56.4	66.3	74.1	81.7	87.3	N/A	100.0
23	N/A	H	11.7	59.8	28.5	(m)gS	WT	N/A	223.8	154.0	139.8	78.1	57.4	40.0	N/A	91.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.5	19.6	17.8	10.0	7.3	5.1	N/A	11.7
SPLIT WT= 781.6							CUM WT %	N/A	28.5	48.1	65.9	75.9	83.2	88.3	N/A	100.0
40	N/A	H	6.6	23.7	69.6	msG	WT	N/A	529.7	49.7	37.9	34.5	30.6	28.0	N/A	50.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	69.6	6.5	5.0	4.5	4.0	3.7	N/A	6.7
SPLIT WT= 758.4							CUM WT %	N/A	69.6	76.1	81.1	85.7	89.7	93.4	N/A	100.0
45	N/A	H	7.9	49.9	42.1	msG	WT	N/A	351.4	158.8	121.9	61.7	44.4	29.4	N/A	66.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.1	19.1	14.6	7.4	5.3	3.5	N/A	7.9
SPLIT WT= 832.5							CUM WT %	N/A	42.1	61.2	75.8	83.2	88.5	92.1	N/A	100.0
50	N/A	H	8.9	49.7	41.4	msG	WT	N/A	342.2	158.1	89.0	85.3	46.9	31.6	N/A	73.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.4	19.1	10.8	10.3	5.7	3.8	N/A	8.9
SPLIT WT= 818.9							CUM WT %	N/A	41.4	60.5	71.3	81.6	87.3	91.1	N/A	100.0
55	N/A	H	5.6	73.0	21.3	gS	WT	N/A	169.1	178.5	231.7	90.8	50.8	26.8	N/A	44.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	21.3	22.5	29.2	11.5	6.4	3.4	N/A	5.6
SPLIT WT= 790.7							CUM WT %	N/A	21.3	43.9	73.1	84.6	91.0	94.4	N/A	100.0
60	N/A	C	3.3	78.3	18.4	gS	WT	N/A	144.3	221.1	244.4	89.6	38.6	20.6	N/A	25.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	18.4	28.2	31.2	11.4	4.9	2.6	N/A	3.3
SPLIT WT= 784.6							CUM WT %	N/A	18.4	46.6	77.7	89.1	94.1	96.7	N/A	100.0
65	N/A	C	6.0	75.6	18.3	gS	WT	N/A	127.2	192.7	180.4	74.2	44.9	32.1	N/A	41.7
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	18.4	27.8	26.0	10.7	6.5	4.6	N/A	6.0
SPLIT WT= 694.8							CUM WT %	N/A	18.4	46.2	72.2	82.9	89.4	94.0	N/A	100.0
70	N/A	C	8.7	70.5	20.8	(m)gS	WT	N/A	144.9	218.8	115.3	40.0	47.6	69.7	N/A	60.5
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	20.8	31.4	16.6	5.7	6.8	10.0	N/A	8.7
SPLIT WT= 698.4							CUM WT %	N/A	20.8	52.2	68.8	74.5	81.3	91.3	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-002 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
75	N/A	C	3.7	93.7	2.6	S	WT	N/A	20.4	195.4	383.6	89.4	36.2	19.9	N/A	28.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.6	25.3	49.6	11.6	4.7	2.6	N/A	3.7
SPLIT WT= 773.5							CUM WT %	N/A	2.6	27.9	77.5	89.1	93.8	96.3	N/A	100.0
80	N/A	C	4.3	75.4	20.3	gS	WT	N/A	151.5	211.9	219.5	74.2	33.8	23.7	N/A	31.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	20.3	28.4	29.4	9.9	4.5	3.2	N/A	4.3
SPLIT WT= 748.1							CUM WT %	N/A	20.3	48.7	78.1	88.0	92.6	95.7	N/A	100.0
85	N/A	C	1.0	98.0	3.0	S	WT	N/A	16.3	171.1	303.0	38.9	10.4	4.1	N/A	5.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.0	31.2	55.2	7.1	1.9	0.8	N/A	1.0
SPLIT WT= 548.6							CUM WT %	N/A	3.0	34.1	89.3	96.4	98.3	99.0	N/A	100.0
90	N/A	C	5.1	91.8	3.1	S	WT	N/A	21.5	164.9	306.3	97.2	46.2	28.6	N/A	35.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.1	23.5	43.7	13.9	6.6	4.1	N/A	5.1
SPLIT WT= 693.4							CUM WT %	N/A	3.1	26.6	70.3	84.2	90.8	94.9	N/A	100.0
95	N/A	C	1.2	93.9	4.8	S	WT	N/A	34.3	266.9	321.3	54.5	16.3	7.0	N/A	8.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.8	37.6	45.3	7.7	2.3	1.0	N/A	1.2
SPLIT WT= 710.3							CUM WT %	N/A	4.8	42.5	87.8	95.5	97.8	98.8	N/A	100.0
100	N/A	C	2.9	95.3	1.8	S	WT	N/A	13.4	143.8	408.5	116.0	39.2	17.1	N/A	22.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.8	19.0	53.6	15.3	5.2	2.3	N/A	2.9
SPLIT WT= 758.1							CUM WT %	N/A	1.8	20.7	74.4	89.7	94.8	97.1	N/A	100.0
105	N/A	C	4.9	92.7	2.4	S	WT	N/A	16.8	115.0	358.5	113.8	42.8	24.0	N/A	34.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.4	16.3	50.8	16.1	6.1	3.4	N/A	4.9
SPLIT WT= 706.9							CUM WT %	N/A	2.4	18.7	69.5	85.7	91.7	95.1	N/A	100.0
110	N/A	C	1.8	93.0	5.2	(g)S	WT	N/A	37.9	133.6	358.5	141.4	33.8	13.1	N/A	13.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.2	18.3	49.0	19.3	4.6	1.8	N/A	1.8
SPLIT WT= 733.1							CUM WT %	N/A	5.2	23.4	72.4	91.8	96.4	98.2	N/A	100.0
115	N/A	C	10.3	86.7	3.0	(m)S	WT	N/A	22.1	90.4	279.9	152.6	69.8	44.9	N/A	75.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.0	12.3	38.1	20.8	9.5	6.1	N/A	10.3
SPLIT WT= 737.5							CUM WT %	N/A	3.0	15.3	53.4	74.1	83.6	89.7	N/A	100.0
120	N/A	C	2.1	97.9	0.1	S	WT	N/A	0.4	6.4	161.5	354.1	91.1	17.1	N/A	13.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.1	1.0	25.1	55.0	14.2	2.7	N/A	2.1
SPLIT WT= 645.0							CUM WT %	N/A	0.1	1.1	26.1	81.1	95.3	97.9	N/A	100.0
125	N/A	C	6.4	93.5	0.1	S	WT	N/A	0.6	3.1	45.1	327.9	163.6	38.9	N/A	39.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.1	0.5	7.3	53.0	26.4	6.3	N/A	6.4
SPLIT WT= 621.0							CUM WT %	N/A	0.1	0.6	7.9	60.8	87.3	93.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-002 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
130	N/A	C	3.7	96.3	0.0	S	WT	N/A	0.0	0.0	20.4	336.0	245.1	39.6	N/A	24.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	0.0	3.1	50.5	36.8	6.0	N/A	3.7
SPLIT WT= 667.2							CUM WT %	N/A	0.0	0.0	3.1	53.5	90.4	96.3	N/A	100.0
135	N/A	C	5.0	95.0	0.0	S	WT	N/A	0.1	0.0	13.5	253.4	288.6	57.2	N/A	32.3
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.0	2.1	39.3	44.7	8.9	N/A	5.0
SPLIT WT= 646.9							CUM WT %	N/A	0.0	0.0	2.1	41.4	86.1	95.0	N/A	100.0
140	N/A	C	7.6	92.4	0.0	S	WT	N/A	0.0	0.5	5.5	157.8	320.4	72.7	N/A	45.5
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.1	0.9	26.2	53.2	12.1	N/A	7.6
SPLIT WT= 603.1							CUM WT %	N/A	0.0	0.1	1.0	27.2	80.4	92.5	N/A	100.0
145	N/A	C	5.8	94.2	0.0	S	WT	N/A	0.1	0.5	3.0	196.1	313.9	62.3	N/A	35.6
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.1	0.5	32.1	51.3	10.2	N/A	5.8
SPLIT WT= 612.2							CUM WT %	N/A	0.0	0.1	0.6	32.7	84.0	94.2	N/A	100.0
150	N/A	C	5.6	94.3	0.0	S	WT	N/A	0.1	0.4	0.5	80.7	393.1	76.8	N/A	33.0
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.1	0.1	13.8	67.2	13.1	N/A	5.6
SPLIT WT= 585.4							CUM WT %	N/A	0.0	0.1	0.2	14.0	81.2	94.4	N/A	100.0
155	N/A	C	8.9	90.4	2.7	S	WT	N/A	16.3	40.9	154.7	162.1	138.8	55.2	N/A	42.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.7	6.7	25.4	26.6	22.7	9.0	N/A	6.9
SPLIT WT= 616.6							CUM WT %	N/A	2.7	9.4	34.7	61.3	84.0	93.1	N/A	100.0
160	N/A	C	12.0	87.9	0.1	(m)S	WT	N/A	0.7	2.4	8.2	137.3	331.1	88.1	N/A	77.5
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.1	0.4	1.3	21.3	51.3	13.7	N/A	12.0
SPLIT WT= 646.4							CUM WT %	N/A	0.1	0.5	1.8	23.0	74.3	88.0	N/A	100.0
165	N/A	C	2.6	97.3	0.1	S	WT	N/A	0.5	2.0	13.5	219.3	266.0	41.8	N/A	14.7
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.1	0.4	2.4	39.3	47.7	7.5	N/A	2.6
SPLIT WT= 564.4							CUM WT %	N/A	0.1	0.5	2.9	42.2	89.9	97.4	N/A	100.0
170	N/A	C	5.9	93.9	0.3	S	WT	N/A	1.5	1.5	2.5	124.7	334.4	62.5	N/A	32.8
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.3	0.3	0.5	22.3	59.7	11.2	N/A	5.9
SPLIT WT= 557.5							CUM WT %	N/A	0.3	0.5	1.0	23.3	83.0	94.1	N/A	100.0
175	N/A	C	6.1	93.5	0.4	S	WT	N/A	2.2	1.1	0.5	72.5	381.4	68.6	N/A	34.0
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.4	0.2	0.1	12.9	68.1	12.2	N/A	6.1
SPLIT WT= 559.3							CUM WT %	N/A	0.4	0.6	0.7	13.6	81.7	93.9	N/A	100.0
180	N/A	C	12.1	87.6	0.3	(m)S	WT	N/A	1.3	1.9	0.1	17.5	292.2	141.8	N/A	62.7
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.3	0.4	0.0	3.4	56.5	27.4	N/A	12.1
SPLIT WT= 522.1							CUM WT %	N/A	0.3	0.6	0.6	4.0	60.5	87.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-002 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
185	N/A	C	11.6	85.4	2.9	(m)S	WT	N/A	15.7	8.2	7.0	19.6	264.5	156.2	N/A	62.1
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	2.9	1.5	1.3	3.7	49.6	29.3	N/A	11.6
SPLIT WT= 532.2							CUM WT %	N/A	2.9	4.5	5.8	9.5	59.1	88.4	N/A	100.0
190	N/A	H	9.8	61.9	28.2	(m)gS	WT	N/A	229.7	163.3	119.3	104.9	71.9	44.4	N/A	79.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.2	20.1	14.7	12.9	8.8	5.5	N/A	9.8
SPLIT WT= 813.1							CUM WT %	N/A	28.2	48.3	63.0	75.9	84.7	90.2	N/A	100.0
195	N/A	C	4.7	72.9	22.5	gS	WT	N/A	146.4	131.1	181.8	87.9	45.8	27.7	N/A	30.3
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	22.5	20.1	27.9	13.5	7.0	4.3	N/A	4.7
SPLIT WT= 655.3							CUM WT %	N/A	22.5	42.6	70.6	84.1	91.1	95.4	N/A	100.0
200	N/A	C	4.1	95.3	0.6	S	WT	N/A	3.8	57.4	231.9	175.6	76.5	29.2	N/A	24.4
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	0.6	9.6	38.7	29.3	12.8	4.9	N/A	4.1
SPLIT WT= 598.3							CUM WT %	N/A	0.6	10.2	49.0	78.3	91.1	95.9	N/A	100.0
205	N/A	C	6.3	92.8	0.9	S	WT	N/A	5.4	26.0	97.1	207.2	147.2	57.9	N/A	36.2
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.9	4.5	16.8	35.9	25.5	10.0	N/A	6.3
SPLIT WT= 573.5							CUM WT %	N/A	0.9	5.5	22.3	58.2	83.7	93.7	N/A	100.0
210	N/A	C	6.4	56.9	36.7	msG	WT	N/A	270.5	105.3	122.1	81.2	61.9	49.2	N/A	47.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.7	14.3	16.6	11.0	8.4	6.7	N/A	6.4
SPLIT WT= 741.9							CUM WT %	N/A	36.7	51.0	67.5	78.5	86.9	93.6	N/A	100.0
215	N/A	C	5.9	42.4	51.7	msG	WT	N/A	398.7	109.2	100.5	52.5	37.2	27.9	N/A	45.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.7	14.2	13.0	6.8	4.8	3.6	N/A	5.9
SPLIT WT= 770.2							CUM WT %	N/A	51.7	65.9	78.9	85.7	90.5	94.1	N/A	100.0
220	N/A	C	4.0	45.5	50.5	sG	WT	N/A	350.8	82.5	117.7	63.8	32.1	20.2	N/A	28.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.5	11.9	16.9	9.2	4.6	2.9	N/A	4.0
SPLIT WT= 692.2							CUM WT %	N/A	50.5	62.3	79.3	88.5	93.1	96.0	N/A	100.0
235	N/A	C	2.6	24.7	72.7	sG	WT	N/A	596.1	62.9	60.3	40.1	23.5	15.6	N/A	21.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	72.7	7.7	7.4	4.9	2.9	1.9	N/A	2.6
SPLIT WT= 825.7							CUM WT %	N/A	72.7	80.4	87.7	92.6	95.5	97.4	N/A	100.0
240	N/A	C	7.6	48.7	43.7	msG	WT	N/A	399.9	133.2	135.2	81.5	58.4	37.1	N/A	69.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.7	14.6	14.8	8.9	6.4	4.1	N/A	7.6
SPLIT WT= 921.0							CUM WT %	N/A	43.7	58.3	73.1	82.0	88.3	92.4	N/A	100.0
250	N/A	H	11.7	48.7	39.6	msG	WT	N/A	329.7	106.5	82.9	72.2	79.4	64.7	N/A	97.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.6	12.8	10.0	8.7	9.5	7.8	N/A	11.7
SPLIT WT= 829.9							CUM WT %	N/A	39.6	52.4	62.3	71.0	80.6	88.3	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-002 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
255	N/A	H	10.4	45.1	44.6	msG	WT	N/A	398.2	115.3	85.0	72.6	73.0	56.7	N/A	92.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.6	12.9	9.5	8.1	8.2	6.4	N/A	10.4
SPLIT WT= 891.3							CUM WT %	N/A	44.6	57.5	67.0	75.1	83.3	89.6	N/A	100.0
260	N/A	H	19.7	70.4	9.8	(g)mS	WT	N/A	60.5	73.6	87.0	93.5	97.3	81.5	N/A	121.1
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.9	12.0	14.2	15.2	15.8	13.3	N/A	19.7
SPLIT WT= 614.4							CUM WT %	N/A	9.9	21.8	36.0	51.2	67.0	80.3	N/A	100.0
265	N/A	H	7.8	48.3	43.9	msG	WT	N/A	382.4	181.0	98.7	54.7	46.3	40.6	N/A	68.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.9	20.8	11.3	6.3	5.3	4.7	N/A	7.8
SPLIT WT= 870.7							CUM WT %	N/A	43.9	64.6	76.0	82.2	87.5	92.2	N/A	100.0
270	N/A	H	7.1	34.8	58.2	msG	WT	N/A	497.0	86.3	72.0	50.7	46.5	41.5	N/A	60.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	58.2	10.1	8.4	5.9	5.4	4.9	N/A	7.1
SPLIT WT= 860.9							CUM WT %	N/A	58.2	68.3	76.7	82.6	88.1	92.9	N/A	100.0
275	N/A	H	3.0	78.3	18.7	gS	WT	N/A	143.3	131.6	177.2	149.4	101.5	39.7	N/A	23.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	18.7	17.2	23.1	19.5	13.3	5.2	N/A	3.0
SPLIT WT= 765.7							CUM WT %	N/A	18.7	35.9	59.0	78.5	91.8	97.0	N/A	100.0
280	N/A	H	18.5	79.9	1.5	(m)S	WT	N/A	9.3	20.5	39.4	89.0	180.7	164.0	N/A	114.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	1.5	3.3	6.4	14.4	29.3	26.6	N/A	18.6
SPLIT WT= 618.2							CUM WT %	N/A	1.5	4.8	11.2	25.6	54.9	81.5	N/A	100.0
285	N/A	H	11.7	71.9	16.4	(m)gS	WT	N/A	137.1	68.9	132.6	181.6	210.5	7.6	N/A	98.0
SORT=	N/A	MEDIAN=	2.00	MODE=	3.00	MEAN= N/A	WT %	N/A	16.4	8.2	15.9	21.7	25.2	0.9	N/A	11.7
SPLIT WT= 844.3							CUM WT %	N/A	16.4	24.6	40.5	62.2	87.4	88.3	N/A	100.0
290	N/A	H	10.3	68.7	21.0	(m)gS	WT	N/A	147.6	125.2	145.5	103.8	68.8	39.6	N/A	72.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	21.0	17.8	20.7	14.8	9.8	5.6	N/A	10.3
SPLIT WT= 703.3							CUM WT %	N/A	21.0	38.8	59.5	74.3	84.1	89.7	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-003 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	9.0	40.0	51.0	msG	WT	N/A	295.2	32.5	65.5	54.0	39.6	40.0	N/A	52.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.0	5.6	11.3	9.3	6.8	6.9	N/A	9.0
SPLIT WT= 587.6							CUM WT %	N/A	51.0	56.6	67.9	77.2	84.1	91.0	N/A	100.0
10	N/A	H	12.3	46.2	41.5	msG	WT	N/A	366.7	86.3	85.1	94.9	74.2	67.1	N/A	108.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.6	9.8	9.6	10.8	8.4	7.6	N/A	12.3
SPLIT WT= 879.8							CUM WT %	N/A	41.6	51.3	61.0	71.7	80.1	87.7	N/A	100.0
15	N/A	H	6.5	35.4	58.1	msG	WT	N/A	533.5	82.5	78.4	75.9	50.9	37.1	N/A	59.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.1	9.0	8.5	8.3	5.5	4.0	N/A	6.5
SPLIT WT= 916.9							CUM WT %	N/A	58.1	67.1	75.7	83.9	89.5	93.5	N/A	100.0
20	N/A	H	9.4	56.4	34.2	msG	WT	N/A	287.1	116.7	107.9	119.4	89.5	40.6	N/A	79.1
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.2	13.9	12.8	14.2	10.7	4.8	N/A	9.4
SPLIT WT= 855.4							CUM WT %	N/A	34.2	48.1	60.9	75.1	85.8	90.6	N/A	100.0
25	N/A	H	11.4	44.9	43.7	msG	WT	N/A	384.1	93.5	74.7	97.2	77.5	51.8	N/A	100.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.7	10.6	8.5	11.1	8.8	5.9	N/A	11.4
SPLIT WT= 883.3							CUM WT %	N/A	43.7	54.4	62.9	73.9	82.7	88.6	N/A	100.0
30	N/A	H	7.5	41.6	50.8	msG	WT	N/A	486.0	90.2	90.5	107.8	71.9	37.3	N/A	72.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.9	9.4	9.5	11.3	7.5	3.9	N/A	7.5
SPLIT WT= 952.8							CUM WT %	N/A	50.9	60.3	69.8	81.0	88.6	92.5	N/A	100.0
35	N/A	H	6.1	60.9	33.0	sG	WT	N/A	265.6	191.8	130.5	90.3	49.5	27.4	N/A	48.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.0	23.9	16.2	11.2	6.2	3.4	N/A	6.1
SPLIT WT= 800.3							CUM WT %	N/A	33.0	56.9	73.1	84.4	90.5	93.9	N/A	100.0
40	N/A	H	4.4	55.1	40.5	sG	WT	N/A	323.1	186.6	125.3	66.5	38.3	23.5	N/A	35.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.5	23.4	15.7	8.3	4.8	2.9	N/A	4.4
SPLIT WT= 796.7							CUM WT %	N/A	40.5	63.8	79.5	87.9	92.7	95.6	N/A	100.0
45	N/A	H	8.1	48.2	43.7	msG	WT	N/A	384.2	126.8	93.2	91.4	76.2	36.3	N/A	71.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.7	14.4	10.6	10.4	8.7	4.1	N/A	8.1
SPLIT WT= 880.4							CUM WT %	N/A	43.7	58.1	68.7	79.1	87.7	91.9	N/A	100.0
50	N/A	H	8.1	40.6	51.3	msG	WT	N/A	457.7	136.5	74.3	58.5	56.6	36.1	N/A	72.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.3	15.3	8.3	6.6	6.3	4.1	N/A	8.1
SPLIT WT= 892.2							CUM WT %	N/A	51.3	66.6	74.9	81.5	87.8	91.9	N/A	100.0
55	N/A	H	8.8	44.1	47.0	msG	WT	N/A	404.3	169.0	87.7	68.1	44.0	10.6	N/A	75.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	47.0	19.7	10.2	7.9	5.1	1.2	N/A	8.8
SPLIT WT= 865.3							CUM WT %	N/A	47.0	66.7	76.9	84.8	89.9	91.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-003 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	N/A	H	4.7	68.7	26.6	gS	WT	N/A	220.9	269.1	167.9	67.6	47.4	19.1	N/A	39.1
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	26.6	32.4	20.2	8.1	5.7	2.3	N/A	4.7
SPLIT WT= 830.8							CUM WT %	N/A	26.6	59.0	79.2	87.3	93.0	95.3	N/A	100.0
65	N/A	H	6.0	75.9	18.1	gS	WT	N/A	157.8	280.6	201.2	89.8	67.0	22.3	N/A	52.1
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	18.1	32.2	23.1	10.3	7.7	2.6	N/A	6.0
SPLIT WT= 868.4							CUM WT %	N/A	18.1	50.3	73.5	83.8	91.5	94.0	N/A	100.0
70	N/A	H	4.4	78.7	16.8	gS	WT	N/A	135.3	179.1	242.3	128.5	54.4	28.4	N/A	35.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	16.8	22.3	30.2	16.0	6.8	3.5	N/A	4.4
SPLIT WT= 800.8							CUM WT %	N/A	16.8	39.1	69.3	85.3	92.1	95.6	N/A	100.0
75	N/A	C	7.7	83.4	8.9	(g)S	WT	N/A	79.4	207.1	285.4	104.2	68.4	80.0	N/A	68.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.9	23.2	32.0	11.7	7.7	9.0	N/A	7.7
SPLIT WT= 894.7							CUM WT %	N/A	8.9	32.1	64.0	75.7	83.4	92.3	N/A	100.0
80	N/A	C	3.4	83.9	12.7	gS	WT	N/A	80.9	195.6	192.8	60.4	57.6	26.6	N/A	21.7
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	12.7	30.8	30.3	9.5	9.1	4.2	N/A	3.4
SPLIT WT= 631.3							CUM WT %	N/A	12.7	43.5	73.8	83.3	92.4	96.6	N/A	100.0
85	N/A	C	1.4	83.4	15.2	gS	WT	N/A	106.7	241.8	260.6	55.9	17.5	8.5	N/A	10.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	15.2	34.5	37.2	8.0	2.5	1.2	N/A	1.4
SPLIT WT= 700.9							CUM WT %	N/A	15.2	49.7	86.9	94.9	97.4	98.6	N/A	100.0
90	N/A	C	2.2	94.3	3.5	S	WT	N/A	25.7	243.6	306.6	94.4	29.6	13.5	N/A	15.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.5	33.4	42.1	13.0	4.1	1.9	N/A	2.2
SPLIT WT= 730.3							CUM WT %	N/A	3.5	36.9	79.0	91.9	96.0	97.8	N/A	100.0
95	N/A	C	2.1	93.5	4.4	S	WT	N/A	32.0	194.2	351.7	90.4	28.4	13.2	N/A	15.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.4	26.8	48.5	12.5	3.9	1.8	N/A	2.1
SPLIT WT= 726.1							CUM WT %	N/A	4.4	31.2	79.7	92.1	96.1	97.9	N/A	100.0
100	N/A	C	1.3	90.6	8.1	(g)S	WT	N/A	56.1	168.4	310.4	113.4	25.6	9.2	N/A	9.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.1	24.3	44.8	16.4	3.7	1.3	N/A	1.3
SPLIT WT= 693.6							CUM WT %	N/A	8.1	32.4	77.3	93.6	97.3	98.7	N/A	100.0
105	N/A	C	3.5	92.8	3.7	S	WT	N/A	24.1	64.5	233.9	216.2	70.1	23.6	N/A	22.9
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.7	9.8	35.7	33.0	10.7	3.6	N/A	3.5
SPLIT WT= 657.0							CUM WT %	N/A	3.7	13.5	49.2	82.2	92.9	96.5	N/A	100.0
110	N/A	C	3.3	94.9	1.8	S	WT	N/A	12.5	53.1	191.2	278.8	104.9	25.9	N/A	22.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.8	7.7	27.8	40.5	15.2	3.8	N/A	3.3
SPLIT WT= 690.8							CUM WT %	N/A	1.8	9.5	37.3	77.7	93.0	96.7	N/A	100.0

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**** REPORT ON WELL 0299-E32-003 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	N/A	C	10.8	88.9	0.3	(m)S	WT	N/A	1.9	7.2	40.4	151.1	238.8	114.9	N/A	66.9
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	0.3	1.2	6.5	24.3	38.4	18.5	N/A	10.8
SPLIT WT= 621.2							CUM WT %	N/A	0.3	1.5	8.0	32.3	70.7	89.2	N/A	100.0
120	N/A	C	12.0	87.9	0.0	(m)S	WT	N/A	0.2	2.1	73.7	190.8	213.7	96.2	N/A	79.0
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	0.0	0.3	11.2	29.1	32.6	14.7	N/A	12.1
SPLIT WT= 657.7							CUM WT %	N/A	0.0	0.4	11.6	40.7	73.3	88.0	N/A	100.0
125	N/A	C	5.1	73.2	21.7	gS	WT	N/A	167.6	229.8	194.1	89.4	32.9	18.8	N/A	39.7
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	21.7	29.8	25.1	11.6	4.3	2.4	N/A	5.1
SPLIT WT= 772.3							CUM WT %	N/A	21.7	51.5	76.6	88.2	92.4	94.9	N/A	100.0
130	N/A	C	10.5	83.7	5.7	(gm)S	WT	N/A	44.2	137.6	280.5	96.6	66.3	62.8	N/A	81.1
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	5.8	17.9	36.5	12.6	8.6	8.2	N/A	10.5
SPLIT WT= 777.9							CUM WT %	N/A	5.8	23.6	60.1	72.7	81.3	89.5	N/A	100.0
135	N/A	C	3.3	90.3	6.4	(g)S	WT	N/A	36.0	103.7	202.4	125.4	57.9	19.6	N/A	18.4
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	6.4	18.4	35.9	22.3	10.3	3.5	N/A	3.3
SPLIT WT= 558.6							CUM WT %	N/A	6.4	24.8	60.7	83.0	93.3	96.7	N/A	100.0
140	N/A	C	6.7	92.5	0.8	S	WT	N/A	5.8	91.8	302.1	160.7	78.5	39.9	N/A	49.1
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	0.8	12.6	41.5	22.1	10.8	5.5	N/A	6.8
SPLIT WT= 728.0							CUM WT %	N/A	0.8	13.4	54.9	77.0	87.8	93.3	N/A	100.0
145	N/A	C	8.8	88.6	2.6	S	WT	N/A	18.5	92.5	269.8	151.6	75.2	48.3	N/A	63.6
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	2.6	12.9	37.5	21.1	10.5	6.7	N/A	8.8
SPLIT WT= 716.9							CUM WT %	N/A	2.6	15.4	52.9	74.0	84.5	91.2	N/A	100.0
147	N/A	C	7.4	89.3	3.2	S	WT	N/A	20.2	101.5	234.2	127.5	59.3	35.4	N/A	46.5
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	3.2	16.3	37.5	20.4	9.5	5.7	N/A	7.4
SPLIT WT= 621.9							CUM WT %	N/A	3.2	19.5	57.0	77.4	86.9	92.6	N/A	100.0
150	N/A	C	11.1	87.3	1.5	(m)S	WT	N/A	9.9	54.9	200.9	163.2	89.3	49.9	N/A	71.0
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.6	8.6	31.4	25.5	14.0	7.8	N/A	11.1
SPLIT WT= 639.2							CUM WT %	N/A	1.6	10.1	41.6	67.1	81.1	88.9	N/A	100.0
155	N/A	C	5.5	93.7	0.8	S	WT	N/A	4.8	16.4	95.3	290.7	124.5	28.1	N/A	32.7
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.8	2.8	16.1	49.1	21.0	4.7	N/A	5.5
SPLIT WT= 599.5							CUM WT %	N/A	0.8	3.6	19.7	68.7	89.7	94.5	N/A	100.0
160	N/A	C	4.1	95.8	0.2	S	WT	N/A	0.5	4.4	29.1	150.9	94.8	16.4	N/A	12.6
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.2	1.4	9.4	48.9	30.7	5.3	N/A	4.1
SPLIT WT= 307.5							CUM WT %	N/A	0.2	1.6	11.0	59.9	90.6	95.9	N/A	100.0

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**** REPORT ON WELL 0299-E32-003 ****

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
165	N/A	C	8.0	91.6	0.3	S	WT	N/A	2.2	5.3	48.6	288.7	188.1	49.2	N/A	50.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	0.8	7.7	45.6	29.7	7.8	N/A	8.0
SPLIT WT= 631.5							CUM WT %	N/A	0.4	1.2	8.9	54.5	84.2	92.0	N/A	100.0
170	N/A	C	7.7	92.0	0.2	S	WT	N/A	1.4	1.3	13.0	171.4	273.0	92.3	N/A	46.3
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.2	0.2	2.2	28.6	45.6	15.4	N/A	7.7
SPLIT WT= 597.1							CUM WT %	N/A	0.2	0.5	2.6	31.3	76.9	92.3	N/A	100.0
175	N/A	C	8.2	91.7	0.0	S	WT	N/A	0.2	3.2	16.5	188.1	264.7	22.2	N/A	44.3
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.6	3.1	34.9	49.1	4.1	N/A	8.2
SPLIT WT= 546.9							CUM WT %	N/A	0.0	0.6	3.7	38.6	87.7	91.8	N/A	100.0
180	N/A	C	4.8	94.8	0.4	S	WT	N/A	2.3	1.4	2.3	90.8	365.6	72.7	N/A	26.9
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.4	0.3	0.4	16.2	65.1	12.9	N/A	4.8
SPLIT WT= 558.8							CUM WT %	N/A	0.4	0.7	1.1	17.2	82.3	95.2	N/A	100.0
185	N/A	C	18.3	81.6	0.2	(m)S	WT	N/A	0.9	1.3	0.0	50.5	389.5	19.1	N/A	103.0
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.2	0.2	0.0	9.0	69.0	3.4	N/A	18.3
SPLIT WT= 571.4							CUM WT %	N/A	0.2	0.4	0.4	9.3	78.4	81.7	N/A	100.0
190	N/A	C	10.4	89.6	0.0	(m)S	WT	N/A	0.0	0.2	0.0	10.1	144.8	89.4	N/A	28.3
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.1	0.0	3.7	53.1	32.8	N/A	10.4
SPLIT WT= 273.9							CUM WT %	N/A	0.0	0.1	0.1	3.8	56.9	89.6	N/A	100.0
195	N/A	C	3.5	63.1	33.4	sG	WT	N/A	271.8	144.8	144.7	52.0	115.1	57.2	N/A	28.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.4	17.8	17.8	6.4	14.1	7.0	N/A	3.5
SPLIT WT= 813.7							CUM WT %	N/A	33.4	51.2	68.9	75.3	89.5	96.5	N/A	100.0
200	N/A	C	8.9	70.5	20.6	(m)gS	WT	N/A	142.7	145.7	162.5	78.8	59.6	41.4	N/A	61.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	20.6	21.1	23.5	11.4	8.6	6.0	N/A	8.9
SPLIT WT= 692.6							CUM WT %	N/A	20.6	41.7	65.2	76.5	85.2	91.1	N/A	100.0
205	N/A	C	7.8	70.7	21.5	gS	WT	N/A	153.9	152.4	166.1	85.9	60.5	41.7	N/A	56.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	21.5	21.3	23.2	12.0	8.4	5.8	N/A	7.8
SPLIT WT= 715.8							CUM WT %	N/A	21.5	42.8	65.9	77.9	86.4	92.2	N/A	100.0
210	N/A	C	2.9	45.4	51.7	sG	WT	N/A	360.0	124.9	104.0	46.8	24.5	15.9	N/A	20.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.7	17.9	14.9	6.7	3.5	2.3	N/A	2.9
SPLIT WT= 693.7							CUM WT %	N/A	51.7	69.6	84.6	91.3	94.8	97.1	N/A	100.0
215	N/A	C	4.5	47.8	47.7	sG	WT	N/A	364.4	103.4	104.3	44.2	32.1	80.8	N/A	34.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.7	13.5	13.7	5.8	4.2	10.6	N/A	4.5
SPLIT WT= 763.1							CUM WT %	N/A	47.7	61.3	74.9	80.7	84.9	95.5	N/A	100.0

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**** REPORT ON WELL 0299-E32-003 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
220	N/A	C	3.0	38.9	58.1	sG	WT	N/A	447.1	103.4	93.7	52.2	30.4	19.5	N/A	22.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.1	13.4	12.2	6.8	4.0	2.5	N/A	3.0
SPLIT WT= 776.7							CUM WT %	N/A	58.1	71.6	83.8	90.5	94.5	97.0	N/A	100.0
225	N/A	C	6.5	42.4	51.1	msG	WT	N/A	410.5	117.6	88.8	56.5	45.4	31.7	N/A	52.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.1	14.7	11.1	7.0	5.7	4.0	N/A	6.5
SPLIT WT= 801.4							CUM WT %	N/A	51.1	65.8	76.9	83.9	89.6	93.5	N/A	100.0
230	N/A	C	8.7	39.0	52.3	msG	WT	N/A	428.6	110.2	76.9	50.7	47.4	34.6	N/A	71.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.3	13.4	9.4	6.2	5.8	4.2	N/A	8.7
SPLIT WT= 817.4							CUM WT %	N/A	52.3	65.7	75.1	81.3	87.0	91.3	N/A	100.0
235	N/A	C	4.8	25.1	70.1	msG	WT	N/A	555.2	69.9	56.6	30.8	21.5	20.0	N/A	37.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	70.1	8.8	7.2	3.9	2.7	2.5	N/A	4.8
SPLIT WT= 792.6							CUM WT %	N/A	70.1	79.0	86.1	90.0	92.7	95.2	N/A	100.0
240	N/A	C	15.0	54.1	31.0	msG	WT	N/A	218.4	93.3	83.1	74.0	67.5	63.6	N/A	105.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.0	13.2	11.8	10.5	9.6	9.0	N/A	15.0
SPLIT WT= 703.5							CUM WT %	N/A	31.0	44.2	56.0	66.4	76.0	85.0	N/A	100.0
245	N/A	C	9.5	80.4	10.0	(m)gS	WT	N/A	75.6	86.6	143.0	124.3	150.6	100.7	N/A	71.5
SORT= N/A MEDIAN= 2.00 MODE= 3.00 MEAN= N/A							WT %	N/A	10.1	11.5	19.0	16.5	20.0	13.4	N/A	9.5
SPLIT WT= 758.9							CUM WT %	N/A	10.1	21.6	40.6	57.1	77.1	90.5	N/A	100.0
250	N/A	C	7.9	35.2	56.9	msG	WT	N/A	421.1	68.8	54.0	51.9	46.9	39.4	N/A	58.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	56.9	9.3	7.3	7.0	6.3	5.3	N/A	7.9
SPLIT WT= 734.0							CUM WT %	N/A	56.9	66.2	73.5	80.5	86.8	92.1	N/A	100.0
255	N/A	C	12.5	37.9	49.7	msG	WT	N/A	371.7	65.2	59.5	53.8	56.7	48.3	N/A	93.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	49.7	8.7	8.0	7.2	7.6	6.5	N/A	12.5
SPLIT WT= 748.4							CUM WT %	N/A	49.7	58.4	66.3	73.5	81.1	87.5	N/A	100.0
260	N/A	H	10.9	40.5	48.7	msG	WT	N/A	341.6	66.7	53.4	62.5	59.3	42.1	N/A	76.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.7	9.5	7.6	8.9	8.5	6.0	N/A	10.9
SPLIT WT= 700.5							CUM WT %	N/A	48.7	58.2	65.8	74.7	83.1	89.1	N/A	100.0
265	N/A	H	16.6	44.5	38.9	msG	WT	N/A	287.8	81.3	66.3	83.4	83.0	15.0	N/A	122.4
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.9	11.0	9.0	11.3	11.2	2.0	N/A	16.6
SPLIT WT= 748.8							CUM WT %	N/A	38.9	49.9	58.9	70.2	81.4	83.4	N/A	100.0
270	N/A	H	11.8	47.2	41.0	msG	WT	N/A	327.7	72.8	66.9	73.4	109.2	55.7	N/A	94.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.0	9.1	8.4	9.2	13.7	7.0	N/A	11.8
SPLIT WT= 799.4							CUM WT %	N/A	41.0	50.1	58.4	67.6	81.2	88.2	N/A	100.0

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02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
275	N/A	H	9.0	86.9	5.2	(g)S	WT	N/A	40.6	186.3	217.7	136.0	80.1	54.9	N/A	70.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.2	23.6	27.8	17.2	10.2	7.0	N/A	9.0
SPLIT WT= 780.8							CUM WT %	N/A	5.2	28.8	56.6	73.8	84.0	91.0	N/A	100.0
280	N/A	H	9.1	35.0	55.9	msG	WT	N/A	475.9	127.1	60.1	41.8	46.6	22.2	N/A	77.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	55.9	14.9	7.1	4.9	5.5	2.6	N/A	9.1
SPLIT WT= 857.0							CUM WT %	N/A	55.9	70.8	77.9	82.8	88.3	90.9	N/A	100.0
285	N/A	H	3.7	92.4	3.9	S	WT	N/A	14.5	31.1	88.0	135.5	72.1	19.3	N/A	13.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.9	8.3	23.5	36.2	19.3	5.2	N/A	3.7
SPLIT WT= 381.2							CUM WT %	N/A	3.9	12.2	35.7	71.9	91.2	96.3	N/A	100.0
290	N/A	H	13.0	83.9	3.1	(m)S	WT	N/A	9.2	15.3	29.3	52.8	84.9	67.4	N/A	38.8
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	3.1	5.1	9.8	17.7	28.5	22.6	N/A	13.0
SPLIT WT= 302.6							CUM WT %	N/A	3.1	8.2	18.1	35.8	64.3	87.0	N/A	100.0
294	N/A	H	3.3	29.4	67.3	msG	WT	N/A	306.0	30.7	41.7	28.7	18.5	14.1	N/A	15.2
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	67.3	6.8	9.2	6.3	4.1	3.1	N/A	3.3
SPLIT WT= 463.9							CUM WT %	N/A	67.3	74.0	83.2	89.5	93.6	96.7	N/A	100.0
300	N/A	H	5.7	82.5	11.8	gS	WT	N/A	44.7	41.3	64.4	127.0	58.2	21.1	N/A	21.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.8	10.9	17.0	33.6	15.4	5.6	N/A	5.7
SPLIT WT= 384.3							CUM WT %	N/A	11.8	22.7	39.8	73.4	88.7	94.3	N/A	100.0

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**** REPORT ON WELL 0299-E32-004 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	16.0	68.5	25.5	gmS	WT	N/A	159.0	27.9	68.1	34.5	60.8	174.4	N/A	99.9
SORT= N/A MEDIAN= 3.00 MODE= 4.00 MEAN= N/A							WT %	N/A	25.5	4.5	10.9	5.5	9.7	27.9	N/A	16.0
SPLIT WT= 627.8							CUM WT %	N/A	25.5	29.9	40.8	46.4	56.1	84.0	N/A	100.0
10	N/A	H	9.5	34.2	56.2	msG	WT	N/A	439.1	59.3	45.6	46.8	45.0	70.7	N/A	74.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	56.2	7.6	5.8	6.0	5.8	9.1	N/A	9.5
SPLIT WT= 777.8							CUM WT %	N/A	56.2	63.8	69.7	75.7	81.4	90.5	N/A	100.0
15	N/A	H	16.4	48.3	35.3	msG	WT	N/A	284.2	99.6	89.3	62.3	76.0	61.4	N/A	132.1
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	35.3	12.4	11.1	7.7	9.4	7.6	N/A	16.4
SPLIT WT= 803.5							CUM WT %	N/A	35.3	47.7	58.8	66.5	76.0	83.6	N/A	100.0
20	N/A	H	11.9	46.8	41.3	msG	WT	N/A	345.5	89.1	83.8	99.6	58.8	60.0	N/A	99.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.3	10.7	10.0	11.9	7.0	7.2	N/A	11.9
SPLIT WT= 841.2							CUM WT %	N/A	41.3	52.0	62.0	73.9	81.0	88.2	N/A	100.0
25	N/A	H	12.1	46.6	41.3	msG	WT	N/A	357.9	100.3	75.7	95.8	67.2	65.1	N/A	105.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.3	11.6	8.7	11.1	7.8	7.5	N/A	12.1
SPLIT WT= 864.0							CUM WT %	N/A	41.3	52.9	61.6	72.6	80.4	87.9	N/A	100.0
30	N/A	H	7.5	41.6	50.8	msG	WT	N/A	486.0	90.2	90.5	107.8	71.9	37.3	N/A	72.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.9	9.4	9.5	11.3	7.5	3.9	N/A	7.5
SPLIT WT= 952.8							CUM WT %	N/A	50.9	60.3	69.8	81.0	88.6	92.5	N/A	100.0
35	N/A	H	6.5	45.2	48.3	msG	WT	N/A	434.9	97.5	127.9	87.6	55.7	38.6	N/A	58.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.3	10.8	14.2	9.7	6.2	4.3	N/A	6.5
SPLIT WT= 895.3							CUM WT %	N/A	48.3	59.1	73.3	83.0	89.2	93.5	N/A	100.0
40	N/A	H	7.8	49.0	43.2	msG	WT	N/A	363.7	141.3	93.8	83.0	55.6	38.6	N/A	65.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.2	16.8	11.2	9.9	6.6	4.6	N/A	7.8
SPLIT WT= 838.6							CUM WT %	N/A	43.2	60.0	71.2	81.0	87.6	92.2	N/A	100.0
45	N/A	H	5.4	43.7	50.9	msG	WT	N/A	427.6	149.4	83.3	66.8	41.0	26.9	N/A	45.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.9	17.8	9.9	8.0	4.9	3.2	N/A	5.4
SPLIT WT= 844.0							CUM WT %	N/A	50.9	68.7	78.6	86.5	91.4	94.6	N/A	100.0
50	N/A	H	6.5	64.3	29.2	gS	WT	N/A	241.5	215.1	135.3	99.1	51.3	30.2	N/A	53.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	29.2	26.0	16.4	12.0	6.2	3.7	N/A	6.5
SPLIT WT= 820.0							CUM WT %	N/A	29.2	55.3	71.6	83.6	89.8	93.5	N/A	100.0
55	N/A	H	5.9	72.9	21.2	gS	WT	N/A	181.1	247.3	203.6	90.2	49.3	33.1	N/A	50.9
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	21.2	28.9	23.8	10.5	5.8	3.9	N/A	6.0
SPLIT WT= 859.2							CUM WT %	N/A	21.2	50.1	73.9	84.4	90.2	94.1	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	N/A	H	5.2	78.1	16.7	gS	WT	N/A	140.9	242.1	220.6	100.3	65.7	30.9	N/A	44.3
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	16.7	28.7	26.1	11.9	7.8	3.7	N/A	5.2
SPLIT WT= 846.1							CUM WT %	N/A	16.7	45.3	71.5	83.3	91.1	94.8	N/A	100.0
65	N/A	C	0.7	69.0	30.4	sG	WT	N/A	187.4	283.3	109.0	18.5	8.7	6.2	N/A	4.1
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	30.4	45.9	17.7	3.0	1.4	1.0	N/A	0.7
SPLIT WT= 620.1							CUM WT %	N/A	30.4	76.3	93.9	96.9	98.3	99.3	N/A	100.0
70	N/A	C	1.9	79.7	18.4	gS	WT	N/A	117.8	241.1	196.5	41.0	20.8	10.7	N/A	11.9
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	18.4	37.7	30.7	6.4	3.3	1.7	N/A	1.9
SPLIT WT= 644.6							CUM WT %	N/A	18.4	56.1	86.8	93.2	96.5	98.1	N/A	100.0
75	N/A	C	1.4	93.1	5.4	(g)S	WT	N/A	32.2	207.1	270.2	48.6	16.9	7.8	N/A	8.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.5	35.0	45.7	8.2	2.9	1.3	N/A	1.4
SPLIT WT= 588.3							CUM WT %	N/A	5.5	40.5	86.2	94.4	97.3	98.6	N/A	100.0
80	N/A	C	3.6	95.5	0.9	S	WT	N/A	2.4	11.0	31.4	81.8	111.7	18.3	N/A	9.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.9	4.1	11.8	30.7	42.0	6.9	N/A	3.6
SPLIT WT= 263.5							CUM WT %	N/A	0.9	5.0	16.8	47.6	89.6	96.4	N/A	100.0
85	N/A	C	1.0	96.0	3.0	S	WT	N/A	16.3	171.1	303.0	38.9	10.4	4.1	N/A	5.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.0	31.2	55.2	7.1	1.9	0.8	N/A	1.0
SPLIT WT= 548.6							CUM WT %	N/A	3.0	34.1	89.3	96.4	98.3	99.0	N/A	100.0
90	N/A	C	2.3	90.3	7.5	(g)S	WT	N/A	23.1	103.1	136.7	25.3	8.8	5.4	N/A	7.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.5	33.3	44.2	8.2	2.8	1.8	N/A	2.3
SPLIT WT= 306.5							CUM WT %	N/A	7.5	40.8	85.0	93.2	96.0	97.7	N/A	100.0
95	N/A	C	2.5	93.7	3.8	S	WT	N/A	21.6	138.7	270.0	84.6	26.5	13.2	N/A	14.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.8	24.4	47.5	14.9	4.7	2.3	N/A	2.5
SPLIT WT= 565.5							CUM WT %	N/A	3.8	28.2	75.7	90.6	95.2	97.5	N/A	100.0
100	N/A	C	1.9	90.6	7.5	(g)S	WT	N/A	42.7	170.1	245.6	57.6	28.6	17.2	N/A	11.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.5	29.7	42.9	10.1	5.0	3.0	N/A	1.9
SPLIT WT= 579.4							CUM WT %	N/A	7.5	37.2	80.0	90.1	95.1	98.1	N/A	100.0
105	N/A	C	1.0	91.6	7.4	(g)S	WT	N/A	43.4	194.7	217.3	84.1	29.1	11.0	N/A	5.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.4	33.3	37.1	14.4	5.0	1.9	N/A	1.0
SPLIT WT= 589.7							CUM WT %	N/A	7.4	40.7	77.8	92.2	97.2	99.0	N/A	100.0
110	N/A	C	1.8	97.3	0.8	S	WT	N/A	5.0	107.6	313.8	120.6	23.0	9.1	N/A	10.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.9	18.2	53.2	20.4	3.9	1.5	N/A	1.9
SPLIT WT= 587.0							CUM WT %	N/A	0.9	19.1	72.3	92.7	96.6	98.2	N/A	100.0

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**** REPORT ON WELL 0299-E32-004 ****

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	N/A	C	0.6	96.3	3.1	S	WT	N/A	16.9	160.5	251.2	81.8	20.1	7.9	N/A	3.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.1	29.6	46.4	15.1	3.7	1.5	N/A	0.6
SPLIT WT= 548.1							CUM WT %	N/A	3.1	32.8	79.1	94.2	97.9	99.4	N/A	100.0
120	N/A	C	2.1	96.5	1.4	S	WT	N/A	7.3	73.4	251.6	142.0	28.8	10.0	N/A	10.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.4	14.0	48.0	27.1	5.5	1.9	N/A	2.1
SPLIT WT= 520.5							CUM WT %	N/A	1.4	15.4	63.4	90.5	96.0	97.9	N/A	100.0
125	N/A	C	3.4	95.8	0.8	S	WT	N/A	4.0	1.4	1.4	135.7	279.2	42.0	N/A	16.1
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.8	0.3	0.3	28.3	58.2	8.8	N/A	3.4
SPLIT WT= 473.6							CUM WT %	N/A	0.8	1.1	1.4	29.7	87.9	96.6	N/A	100.0
130	N/A	C	3.3	85.8	10.9	gS	WT	N/A	22.6	63.7	77.6	24.1	7.8	4.6	N/A	6.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.9	30.7	37.5	11.6	3.8	2.2	N/A	3.3
SPLIT WT= 206.2							CUM WT %	N/A	10.9	41.7	79.1	90.7	94.5	96.7	N/A	100.0
135	N/A	C	3.7	90.4	6.0	(g)S	WT	N/A	11.4	35.2	65.3	40.7	24.2	7.0	N/A	7.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.0	18.5	34.2	21.3	12.7	3.7	N/A	3.7
SPLIT WT= 189.6							CUM WT %	N/A	6.0	24.4	58.6	80.0	92.7	96.3	N/A	100.0
140	N/A	C	1.8	90.4	7.8	(g)S	WT	N/A	47.7	156.1	225.8	125.6	32.0	11.9	N/A	10.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.8	25.6	37.0	20.6	5.3	2.0	N/A	1.8
SPLIT WT= 606.2							CUM WT %	N/A	7.8	33.4	70.4	91.0	96.3	98.2	N/A	100.0
145	N/A	C	2.9	90.8	6.3	(g)S	WT	N/A	38.3	99.7	229.0	163.6	42.1	16.8	N/A	17.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.3	16.4	37.7	27.0	6.9	2.8	N/A	2.9
SPLIT WT= 607.1							CUM WT %	N/A	6.3	22.7	60.5	87.4	94.4	97.1	N/A	100.0
150	N/A	C	1.8	93.0	5.1	(g)S	WT	N/A	31.2	89.0	248.0	168.2	46.9	13.9	N/A	11.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.1	14.6	40.8	27.7	7.7	2.3	N/A	1.8
SPLIT WT= 602.7							CUM WT %	N/A	5.1	19.8	60.5	88.2	95.9	98.2	N/A	100.0
155	N/A	C	2.1	91.9	5.9	(g)S	WT	N/A	37.2	76.5	262.9	170.3	45.3	20.3	N/A	13.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.9	12.2	42.0	27.2	7.2	3.2	N/A	2.1
SPLIT WT= 632.1							CUM WT %	N/A	5.9	18.2	60.2	87.4	94.6	97.9	N/A	100.0
160	N/A	C	7.5	91.0	1.4	S	WT	N/A	3.9	5.6	16.7	82.1	105.8	37.5	N/A	20.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	1.4	2.1	6.1	30.2	38.9	13.8	N/A	7.5
SPLIT WT= 271.6							CUM WT %	N/A	1.4	3.5	9.6	39.8	78.7	92.5	N/A	100.0
165	N/A	C	8.2	91.3	0.5	S	WT	N/A	1.8	10.8	38.4	106.6	107.9	37.1	N/A	26.9
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.6	3.3	11.7	32.4	32.8	11.3	N/A	8.2
SPLIT WT= 334.4							CUM WT %	N/A	0.6	3.8	15.5	47.8	80.6	91.8	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS			FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	N/A	C	3.1	96.3	0.6	S		WT	N/A	1.8	10.9	48.5	126.9	99.0	17.6	N/A	9.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	0.6	3.5	15.4	40.3	31.5	5.6	N/A	3.2
SPLIT WT= 313.7								CUM WT %	N/A	0.6	4.0	19.5	59.8	91.3	96.9	N/A	100.0
175	N/A	C	3.9	84.0	12.0	gS		WT	N/A	75.9	95.0	155.6	153.0	93.7	32.5	N/A	24.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	12.0	15.1	24.7	24.3	14.9	5.2	N/A	4.0
SPLIT WT= 626.7								CUM WT %	N/A	12.0	27.1	51.8	76.0	90.9	96.1	N/A	100.0
180	N/A	C	2.7	85.5	11.8	gS		WT	N/A	76.9	131.1	201.1	125.7	76.4	24.5	N/A	17.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	11.8	20.1	30.8	19.2	11.7	3.8	N/A	2.7
SPLIT WT= 650.3								CUM WT %	N/A	11.8	31.8	62.6	81.9	93.6	97.3	N/A	100.0
185	N/A	C	15.9	79.4	4.6	(m)S		WT	N/A	27.0	128.0	193.6	57.4	36.5	46.7	N/A	92.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	4.6	22.0	33.3	9.9	6.3	8.0	N/A	16.0
SPLIT WT= 580.5								CUM WT %	N/A	4.6	26.6	59.9	69.8	76.0	84.0	N/A	100.0
190	N/A	C	3.6	82.9	13.5	gS		WT	N/A	89.1	153.1	198.4	93.6	67.7	34.6	N/A	23.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	13.5	23.2	30.1	14.2	10.3	5.2	N/A	3.6
SPLIT WT= 658.2								CUM WT %	N/A	13.5	36.7	66.7	80.9	91.2	96.4	N/A	100.0
195	N/A	C	3.5	84.0	12.5	gS		WT	N/A	88.6	215.8	245.6	75.1	37.8	22.3	N/A	25.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	12.5	30.4	34.6	10.6	5.3	3.1	N/A	3.6
SPLIT WT= 708.9								CUM WT %	N/A	12.5	42.9	77.4	88.0	93.3	96.5	N/A	100.0
200	N/A	C	3.3	50.1	46.7	sG		WT	N/A	345.3	156.4	127.7	44.1	26.7	15.6	N/A	24.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	46.7	21.1	17.3	6.0	3.6	2.1	N/A	3.3
SPLIT WT= 737.4								CUM WT %	N/A	46.7	67.8	85.0	91.0	94.6	96.7	N/A	100.0
210	N/A	C	4.1	70.6	25.3	gS		WT	N/A	165.1	116.0	178.8	88.2	46.9	31.1	N/A	26.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	25.3	17.8	27.4	13.5	7.2	4.8	N/A	4.1
SPLIT WT= 661.4								CUM WT %	N/A	25.3	43.1	70.5	84.0	91.1	95.9	N/A	100.0
215	N/A	C	5.6	63.1	31.3	sG		WT	N/A	114.2	94.6	73.0	32.6	17.8	11.9	N/A	20.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	31.3	26.0	20.0	8.9	4.9	3.3	N/A	5.6
SPLIT WT= 362.2								CUM WT %	N/A	31.3	57.3	77.3	86.3	91.1	94.4	N/A	100.0
220	N/A	C	3.8	52.4	43.8	sG		WT	N/A	165.5	79.7	70.6	26.3	13.4	8.1	N/A	14.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	43.8	21.1	18.7	7.0	3.6	2.1	N/A	3.8
SPLIT WT= 376.3								CUM WT %	N/A	43.8	64.9	83.6	90.5	94.1	96.2	N/A	100.0
225	N/A	C	21.8	78.0	0.3	mS		WT	N/A	1.4	1.2	0.4	1.8	99.4	298.5	N/A	112.0
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN=	N/A	WT %	N/A	0.3	0.2	0.1	0.4	19.3	58.0	N/A	21.8
SPLIT WT= 514.7								CUM WT %	N/A	0.3	0.5	0.6	0.9	20.2	78.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-004 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
230	N/A	C	14.5	79.4	6.1	(gm)S	WT	N/A	20.8	14.4	14.4	5.7	127.0	107.2	N/A	48.9
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	6.2	4.3	4.3	1.7	37.5	31.7	N/A	14.5
SPLIT WT= 337.0							CUM WT %	N/A	6.2	10.4	14.7	16.4	53.9	85.6	N/A	100.0
235	N/A	H	9.4	50.2	40.4	msG	WT	N/A	371.8	113.9	97.9	89.1	81.0	79.8	N/A	86.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.4	12.4	10.6	9.7	8.8	8.7	N/A	9.4
SPLIT WT= 926.6							CUM WT %	N/A	40.4	52.8	63.4	73.1	81.9	90.6	N/A	100.0
240	N/A	H	2.4	43.2	54.4	sG	WT	N/A	468.3	90.5	152.1	79.5	32.3	18.1	N/A	20.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	54.4	10.5	17.7	9.2	3.8	2.1	N/A	2.4
SPLIT WT= 862.6							CUM WT %	N/A	54.4	64.9	82.5	91.7	95.5	97.6	N/A	100.0
245	N/A	H	10.2	49.5	40.2	msG	WT	N/A	345.1	100.7	133.8	76.4	62.7	51.3	N/A	87.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.2	11.7	15.6	8.9	7.3	6.0	N/A	10.2
SPLIT WT= 855.7							CUM WT %	N/A	40.2	52.0	67.6	76.5	83.8	89.8	N/A	100.0
250	N/A	H	9.6	47.5	43.0	msG	WT	N/A	385.5	93.8	89.6	86.1	86.6	69.7	N/A	86.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.0	10.5	10.0	9.6	9.7	7.8	N/A	9.6
SPLIT WT= 903.2							CUM WT %	N/A	43.0	53.4	63.4	73.0	82.7	90.4	N/A	100.0
255	N/A	H	10.3	53.4	36.2	msG	WT	N/A	306.6	107.4	116.7	89.4	77.3	61.0	N/A	87.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.3	12.7	13.8	10.6	9.1	7.2	N/A	10.3
SPLIT WT= 851.3							CUM WT %	N/A	36.3	49.0	62.8	73.3	82.5	89.7	N/A	100.0
260	N/A	H	8.2	36.0	55.8	msG	WT	N/A	437.5	79.8	55.6	58.2	46.2	42.4	N/A	64.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	55.8	10.2	7.1	7.4	5.9	5.4	N/A	8.2
SPLIT WT= 780.4							CUM WT %	N/A	55.8	66.0	73.0	80.5	86.4	91.8	N/A	100.0
265	N/A	H	6.4	74.1	19.5	gS	WT	N/A	135.8	106.1	112.8	123.3	115.8	58.9	N/A	44.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	19.5	15.2	16.2	17.7	16.6	8.5	N/A	6.4
SPLIT WT= 692.4							CUM WT %	N/A	19.5	34.7	50.9	68.6	85.2	93.6	N/A	100.0
270	N/A	H	11.4	49.0	39.6	msG	WT	N/A	342.1	100.6	81.7	92.3	83.9	65.5	N/A	98.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.6	11.6	9.5	10.7	9.7	7.6	N/A	11.4
SPLIT WT= 858.4							CUM WT %	N/A	39.6	51.2	60.6	71.3	81.0	88.6	N/A	100.0
275	N/A	H	12.7	45.4	42.0	msG	WT	N/A	285.7	65.3	58.9	75.6	54.9	54.2	N/A	86.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.0	9.6	8.7	11.1	8.1	8.0	N/A	12.7
SPLIT WT= 682.2							CUM WT %	N/A	42.0	51.6	60.2	71.3	79.4	87.3	N/A	100.0
280	N/A	H	9.8	46.6	43.6	msG	WT	N/A	312.9	89.8	65.8	76.4	59.4	43.1	N/A	70.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.6	12.5	9.2	10.6	8.3	6.0	N/A	9.8
SPLIT WT= 713.8							CUM WT %	N/A	43.6	56.1	65.3	75.9	84.2	90.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E32-004 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
285	N/A	H	7.6	79.7	12.7	gS	WT	N/A	85.6	84.1	104.4	124.5	143.3	82.3	N/A	51.6
SORT=	N/A	MEDIAN=	2.00	MODE=	3.00	MEAN= N/A	WT %	N/A	12.7	12.4	15.5	18.4	21.2	12.2	N/A	7.6
SPLIT WT= 672.3							CUM WT %	N/A	12.7	25.1	40.6	59.0	80.2	92.4	N/A	100.0
290	N/A	H	5.8	45.9	48.3	msG	WT	N/A	393.9	158.4	57.4	63.1	62.9	32.3	N/A	47.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.3	19.4	7.0	7.7	7.7	4.0	N/A	5.8
SPLIT WT= 813.6							CUM WT %	N/A	48.3	67.7	74.8	82.5	90.2	94.2	N/A	100.0
295	N/A	H	8.2	53.7	38.0	msG	WT	N/A	361.7	107.5	77.6	116.5	120.8	88.1	N/A	78.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.1	11.3	8.2	12.3	12.7	9.3	N/A	8.3
SPLIT WT= 950.6							CUM WT %	N/A	38.1	49.4	57.5	69.8	82.5	91.8	N/A	100.0
296	N/A	H	5.7	93.6	0.7	S	WT	N/A	3.8	7.7	46.8	189.0	204.8	47.3	N/A	30.0
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.7	1.5	8.8	35.7	38.7	8.9	N/A	5.7
SPLIT WT= 525.7							CUM WT %	N/A	0.7	2.2	11.0	46.7	85.4	94.3	N/A	100.0
300	N/A	H	8.4	56.6	35.0	msG	WT	N/A	269.0	95.3	95.9	90.5	93.7	60.2	N/A	64.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.0	12.4	12.5	11.8	12.2	7.8	N/A	8.4
SPLIT WT= 774.8							CUM WT %	N/A	35.0	47.4	59.8	71.6	83.8	91.6	N/A	100.0
305	N/A	H	8.4	70.8	20.7	(m)gS	WT	N/A	148.5	57.7	60.7	173.7	139.3	75.8	N/A	60.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	20.7	8.1	8.5	24.3	19.5	10.6	N/A	8.5
SPLIT WT= 717.8							CUM WT %	N/A	20.7	28.8	37.3	61.5	81.0	91.6	N/A	100.0
310	N/A	H	5.0	73.6	21.3	gS	WT	N/A	165.1	61.6	47.1	273.4	140.8	47.1	N/A	39.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	21.3	8.0	6.1	35.3	18.2	6.1	N/A	5.0
SPLIT WT= 770.8							CUM WT %	N/A	21.3	29.3	35.4	70.7	88.9	95.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-028 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	5.0	54.2	40.8	sG	WT	N/A	351.4	154.5	139.0	66.9	44.3	62.9	N/A	43.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.8	17.9	16.1	7.8	5.1	7.3	N/A	5.0
SPLIT WT= 862.3							CUM WT %	N/A	40.8	58.7	74.8	82.6	87.7	95.0	N/A	100.0
10	N/A	H	10.7	62.0	27.3	(m)gS	WT	N/A	252.4	118.4	177.6	122.3	85.2	69.4	N/A	98.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	27.3	12.8	19.2	13.2	9.2	7.5	N/A	10.7
SPLIT WT= 924.5							CUM WT %	N/A	27.3	40.1	59.3	72.6	81.8	89.3	N/A	100.0
15	N/A	H	5.5	83.5	11.1	gS	WT	N/A	91.6	182.5	282.2	135.2	58.9	32.3	N/A	45.2
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	11.1	22.0	34.1	16.3	7.1	3.9	N/A	5.5
SPLIT WT= 836.1							CUM WT %	N/A	11.1	33.1	67.2	83.5	90.6	94.5	N/A	100.0
20	N/A	H	7.0	23.4	69.6	msG	WT	N/A	587.9	56.6	43.3	41.5	30.4	26.0	N/A	59.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	69.6	6.7	5.1	4.9	3.6	3.1	N/A	7.0
SPLIT WT= 852.3							CUM WT %	N/A	69.6	76.3	81.4	86.3	89.9	93.0	N/A	100.0
25	N/A	H	12.4	59.2	28.4	(m)gS	WT	N/A	245.2	106.5	95.8	123.3	122.1	64.5	N/A	107.5
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.4	12.3	11.1	14.3	14.1	7.5	N/A	12.4
SPLIT WT= 865.0							CUM WT %	N/A	28.4	40.7	51.7	66.0	80.1	87.6	N/A	100.0
30	N/A	H	5.0	67.2	27.8	gS	WT	N/A	214.3	212.1	150.6	83.3	44.1	27.3	N/A	38.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	27.8	27.6	19.6	10.8	5.7	3.6	N/A	5.0
SPLIT WT= 773.0							CUM WT %	N/A	27.8	55.4	74.9	85.8	91.5	95.0	N/A	100.0
35	N/A	H	6.7	77.5	15.7	gS	WT	N/A	125.8	221.4	229.2	90.2	49.2	29.3	N/A	53.8
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	15.8	27.7	28.7	11.3	6.2	3.7	N/A	6.7
SPLIT WT= 785.2							CUM WT %	N/A	15.8	43.5	72.2	83.4	89.6	93.3	N/A	100.0
40	N/A	H	5.5	87.7	6.7	(g)S	WT	N/A	53.4	203.4	305.1	91.1	70.5	25.6	N/A	44.0
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	6.7	25.7	38.5	11.5	8.9	3.2	N/A	5.6
SPLIT WT= 793.2							CUM WT %	N/A	6.7	32.4	70.9	82.3	91.2	94.5	N/A	100.0
45	N/A	H	5.1	87.0	7.9	(g)S	WT	N/A	68.3	241.9	287.6	109.7	81.3	36.5	N/A	44.6
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	7.9	27.8	33.1	12.6	9.4	4.2	N/A	5.1
SPLIT WT= 865.2							CUM WT %	N/A	7.9	35.7	68.7	81.3	90.7	94.9	N/A	100.0
50	N/A	H	5.0	89.6	5.3	(g)S	WT	N/A	42.5	167.0	286.4	156.8	68.7	34.9	N/A	40.2
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	5.3	21.0	36.0	19.7	8.6	4.4	N/A	5.1
SPLIT WT= 790.9							CUM WT %	N/A	5.3	26.3	62.3	82.0	90.6	95.0	N/A	100.0
55	N/A	H	4.5	90.4	5.1	(g)S	WT	N/A	37.0	90.3	245.9	214.1	73.8	29.9	N/A	32.5
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	5.1	12.5	34.0	29.6	10.2	4.1	N/A	4.5
SPLIT WT= 720.0							CUM WT %	N/A	5.1	17.6	51.6	81.2	91.4	95.5	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-028 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	N/A	H	3.6	80.9	15.5	gS	WT	N/A	118.7	154.9	233.5	142.1	59.9	30.3	N/A	27.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	15.5	20.2	30.4	18.5	7.8	4.0	N/A	3.6
SPLIT WT= 770.9							CUM WT %	N/A	15.5	35.7	66.1	84.7	92.5	96.4	N/A	100.0
65	N/A	C	0.7	86.8	12.5	gS	WT	N/A	85.1	208.4	284.0	72.0	19.1	9.5	N/A	5.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.5	30.5	41.6	10.5	2.8	1.4	N/A	0.7
SPLIT WT= 688.2							CUM WT %	N/A	12.5	43.0	84.6	95.1	97.9	99.3	N/A	100.0
70	N/A	C	1.4	95.2	3.4	S	WT	N/A	20.1	98.9	151.3	195.7	88.8	30.0	N/A	8.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.4	16.7	25.5	33.0	15.0	5.1	N/A	1.4
SPLIT WT= 591.0							CUM WT %	N/A	3.4	20.1	45.6	78.5	93.5	98.6	N/A	100.0
75	N/A	C	0.7	96.7	2.6	S	WT	N/A	16.3	84.6	375.1	124.0	18.3	5.0	N/A	4.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.6	13.5	59.8	19.8	2.9	0.8	N/A	0.7
SPLIT WT= 625.9							CUM WT %	N/A	2.6	16.1	75.9	95.6	98.5	99.3	N/A	100.0
80	N/A	C	1.2	94.4	4.4	S	WT	N/A	27.4	188.0	283.8	88.4	22.6	8.5	N/A	7.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.4	30.0	45.3	14.1	3.6	1.4	N/A	1.2
SPLIT WT= 624.1							CUM WT %	N/A	4.4	34.4	79.7	93.8	97.5	98.8	N/A	100.0
85	N/A	C	2.3	97.3	0.4	S	WT	N/A	2.6	80.8	392.6	118.1	26.4	12.9	N/A	14.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.4	12.5	60.6	18.2	4.1	2.0	N/A	2.3
SPLIT WT= 645.7							CUM WT %	N/A	0.4	12.9	73.4	91.7	95.7	97.7	N/A	100.0
90	N/A	C	0.2	94.7	5.1	(g)S	WT	N/A	31.5	194.8	319.4	38.3	22.4	13.4	N/A	1.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.1	31.4	51.4	6.2	3.6	2.2	N/A	0.2
SPLIT WT= 627.2							CUM WT %	N/A	5.1	36.4	87.9	94.0	97.6	99.8	N/A	100.0
95	N/A	C	1.1	95.3	3.6	S	WT	N/A	23.2	157.8	341.3	86.7	20.2	7.5	N/A	7.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.6	24.5	53.0	13.5	3.1	1.2	N/A	1.1
SPLIT WT= 642.5							CUM WT %	N/A	3.6	28.1	81.1	94.6	97.7	98.9	N/A	100.0
100	N/A	C	2.5	95.2	2.3	S	WT	N/A	13.3	67.7	279.5	158.8	31.8	13.4	N/A	14.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.3	11.7	48.3	27.4	5.5	2.3	N/A	2.5
SPLIT WT= 573.2							CUM WT %	N/A	2.3	14.0	62.3	89.7	95.2	97.5	N/A	100.0
105	N/A	C	1.5	97.5	1.0	S	WT	N/A	6.0	66.0	371.0	135.6	20.3	8.2	N/A	9.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.0	10.7	60.2	22.0	3.3	1.3	N/A	1.5
SPLIT WT= 613.3							CUM WT %	N/A	1.0	11.7	71.9	93.9	97.2	98.5	N/A	100.0
110	N/A	C	5.0	93.2	1.8	S	WT	N/A	9.6	62.1	120.5	29.3	197.5	87.4	N/A	26.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	1.8	11.7	22.6	5.5	37.1	16.4	N/A	5.0
SPLIT WT= 529.4							CUM WT %	N/A	1.8	13.5	36.1	41.6	78.6	95.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-E33-028 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	N/A	C	3.9	86.1	9.9	(g)S	WT	N/A	64.0	181.5	238.4	77.9	35.7	21.3	N/A	25.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	9.9	28.2	37.0	12.1	5.5	3.3	N/A	3.9
SPLIT WT= 641.5							CUM WT %	N/A	9.9	38.1	75.1	87.2	92.8	96.1	N/A	100.0
120	N/A	C	2.5	96.1	1.4	S	WT	N/A	5.0	49.2	199.4	68.6	20.2	10.6	N/A	9.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.4	13.6	55.1	19.0	5.6	2.9	N/A	2.5
SPLIT WT= 368.8							CUM WT %	N/A	1.4	15.0	70.0	89.0	94.6	97.5	N/A	100.0
125	N/A	C	1.4	95.4	3.1	S	WT	N/A	19.8	83.1	308.1	156.9	38.0	15.4	N/A	9.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.1	13.2	48.9	24.9	6.0	2.4	N/A	1.4
SPLIT WT= 633.1							CUM WT %	N/A	3.1	16.3	65.2	90.1	96.1	98.6	N/A	100.0
130	N/A	C	0.2	94.9	4.9	S	WT	N/A	33.3	81.3	260.3	234.0	54.7	10.7	N/A	1.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.9	12.0	38.5	34.6	8.1	1.6	N/A	0.2
SPLIT WT= 679.8							CUM WT %	N/A	4.9	17.0	55.5	90.1	98.2	99.8	N/A	100.0
135	N/A	C	3.6	93.8	2.6	S	WT	N/A	18.4	55.9	249.4	264.6	73.4	24.6	N/A	25.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.6	7.9	35.0	37.2	10.3	3.5	N/A	3.6
SPLIT WT= 709.1							CUM WT %	N/A	2.6	10.4	45.5	82.6	92.9	96.4	N/A	100.0
140	N/A	C	2.3	97.2	0.4	S	WT	N/A	2.4	15.1	162.7	274.8	73.5	18.1	N/A	13.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	2.7	29.1	49.1	13.1	3.2	N/A	2.3
SPLIT WT= 557.0							CUM WT %	N/A	0.4	3.1	32.2	81.3	94.4	97.7	N/A	100.0
145	N/A	C	3.0	94.8	2.2	S	WT	N/A	13.2	87.6	262.0	157.9	46.4	23.8	N/A	18.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.2	14.4	43.0	25.9	7.6	3.9	N/A	3.0
SPLIT WT= 614.9							CUM WT %	N/A	2.2	16.5	59.5	85.4	93.1	97.0	N/A	100.0
150	N/A	C	5.6	93.0	1.4	S	WT	N/A	9.0	48.6	206.4	231.3	75.4	34.7	N/A	35.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.4	7.6	32.2	36.1	11.8	5.4	N/A	5.6
SPLIT WT= 638.4							CUM WT %	N/A	1.4	9.0	41.2	77.3	89.0	94.4	N/A	100.0
155	N/A	C	2.5	90.5	7.0	(g)S	WT	N/A	45.6	51.1	233.7	224.3	56.6	22.4	N/A	16.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.0	7.9	36.0	34.5	8.7	3.5	N/A	2.5
SPLIT WT= 654.4							CUM WT %	N/A	7.0	14.9	50.9	85.4	94.1	97.5	N/A	100.0
160	N/A	C	2.5	82.7	14.8	gS	WT	N/A	112.3	144.4	247.7	156.9	55.7	24.2	N/A	18.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	14.8	19.0	32.6	20.6	7.3	3.2	N/A	2.5
SPLIT WT= 766.2							CUM WT %	N/A	14.8	33.8	66.4	87.0	94.3	97.5	N/A	100.0
165	N/A	C	3.2	85.5	11.3	gS	WT	N/A	78.3	82.3	201.7	214.1	65.6	27.5	N/A	22.0
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.3	11.9	29.2	31.0	9.5	4.0	N/A	3.2
SPLIT WT= 697.2							CUM WT %	N/A	11.3	23.2	52.4	83.4	92.8	96.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-E33-028 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	N/A	C	3.8	84.6	11.6	gS	WT	N/A	75.4	142.9	191.6	131.3	56.7	25.7	N/A	24.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	11.6	22.0	29.6	20.3	8.8	4.0	N/A	3.8
SPLIT WT= 654.1							CUM WT %	N/A	11.6	33.7	63.2	83.5	92.2	98.2	N/A	100.0
175	N/A	C	2.3	83.9	13.8	gS	WT	N/A	88.3	220.4	189.0	82.3	32.8	13.6	N/A	14.6
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	13.8	34.4	29.5	12.8	5.1	2.1	N/A	2.3
SPLIT WT= 638.7							CUM WT %	N/A	13.8	48.2	77.7	90.5	95.6	97.7	N/A	100.0
180	N/A	C	3.4	74.4	22.1	gS	WT	N/A	156.8	116.1	154.7	162.6	69.6	24.3	N/A	24.4
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	22.1	16.4	21.8	23.0	9.8	3.4	N/A	3.4
SPLIT WT= 706.5							CUM WT %	N/A	22.1	38.5	60.4	83.3	93.1	96.6	N/A	100.0
185	N/A	C	2.4	97.3	0.3	S	WT	N/A	2.0	10.7	65.0	313.1	154.4	33.4	N/A	14.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.3	1.8	11.0	52.8	26.1	5.6	N/A	2.4
SPLIT WT= 596.9							CUM WT %	N/A	0.3	2.2	13.1	66.0	92.0	97.6	N/A	100.0
190	N/A	C	2.6	96.8	0.6	S	WT	N/A	3.9	38.9	154.7	273.8	103.0	28.2	N/A	15.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.6	6.3	25.0	44.3	16.7	4.6	N/A	2.6
SPLIT WT= 621.6							CUM WT %	N/A	0.6	6.9	31.9	76.2	92.9	97.4	N/A	100.0
195	N/A	C	3.3	96.2	0.5	S	WT	N/A	2.8	19.6	122.2	263.7	101.9	26.1	N/A	18.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.5	3.5	22.0	47.5	18.4	4.7	N/A	3.3
SPLIT WT= 551.8							CUM WT %	N/A	0.5	4.0	26.1	73.6	92.0	96.7	N/A	100.0
200	N/A	C	13.0	86.6	0.4	(m)S	WT	N/A	1.9	0.9	0.6	2.6	137.3	289.3	N/A	64.9
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.4	0.2	0.1	0.5	27.6	58.2	N/A	13.1
SPLIT WT= 494.9							CUM WT %	N/A	0.4	0.6	0.7	1.2	28.8	87.0	N/A	100.0
210	N/A	C	2.6	67.4	30.0	sG	WT	N/A	221.9	175.0	210.1	68.8	29.5	14.9	N/A	19.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.0	23.7	28.4	9.3	4.0	2.0	N/A	2.6
SPLIT WT= 744.9							CUM WT %	N/A	30.0	53.7	82.1	91.4	95.4	97.4	N/A	100.0
215	N/A	C	1.7	36.2	62.1	sG	WT	N/A	508.2	128.6	108.9	32.8	16.5	9.3	N/A	13.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	62.1	15.7	13.3	4.0	2.0	1.1	N/A	1.7
SPLIT WT= 816.4							CUM WT %	N/A	62.1	77.8	91.1	95.2	97.2	98.3	N/A	100.0
220	N/A	C	2.6	33.8	63.6	sG	WT	N/A	508.4	90.0	99.2	42.7	23.7	14.7	N/A	20.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	63.6	11.3	12.4	5.3	3.0	1.8	N/A	2.6
SPLIT WT= 797.3							CUM WT %	N/A	63.6	74.9	87.3	92.6	95.6	97.4	N/A	100.0
225	N/A	C	1.8	41.6	56.5	sG	WT	N/A	456.4	149.8	110.2	44.0	20.3	11.8	N/A	14.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	56.5	18.6	13.7	5.5	2.5	1.5	N/A	1.9
SPLIT WT= 804.9							CUM WT %	N/A	56.5	75.1	88.7	94.2	96.7	98.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-028 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
230	N/A	H	9.0	52.7	38.3	msG	WT	N/A	296.8	98.7	136.4	79.5	55.8	38.5	N/A	69.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.3	12.7	17.6	10.3	7.2	5.0	N/A	9.0
SPLIT WT= 773.1							CUM WT %	N/A	38.3	51.0	68.6	78.8	86.0	91.0	N/A	100.0
235	N/A	H	8.1	48.4	43.5	msG	WT	N/A	339.0	148.2	103.7	53.8	40.1	31.9	N/A	63.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.5	19.0	13.3	6.9	5.1	4.1	N/A	8.1
SPLIT WT= 776.3							CUM WT %	N/A	43.5	62.5	75.8	82.7	87.8	91.9	N/A	100.0
240	N/A	H	8.8	33.0	58.2	msG	WT	N/A	497.0	86.2	63.7	51.4	46.8	33.7	N/A	75.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.2	10.1	7.5	6.0	5.5	3.9	N/A	8.8
SPLIT WT= 853.1							CUM WT %	N/A	58.2	68.3	75.7	81.8	87.2	91.2	N/A	100.0
245	N/A	H	12.6	84.4	3.0	(m)S	WT	N/A	18.8	121.1	177.1	104.0	81.7	45.6	N/A	78.8
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	3.0	19.3	28.2	16.6	13.0	7.3	N/A	12.6
SPLIT WT= 618.9							CUM WT %	N/A	3.0	22.3	50.6	67.1	80.2	87.4	N/A	100.0
250	N/A	H	7.3	33.8	58.9	msG	WT	N/A	464.9	123.1	65.5	39.0	32.7	5.9	N/A	57.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.0	15.6	8.3	4.9	4.2	0.8	N/A	7.3
SPLIT WT= 795.6							CUM WT %	N/A	59.0	74.6	82.9	87.8	92.0	92.7	N/A	100.0
255	N/A	H	7.7	29.1	63.2	msG	WT	N/A	526.4	63.9	45.9	39.6	49.1	43.8	N/A	64.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.2	7.7	5.5	4.8	5.9	5.3	N/A	7.7
SPLIT WT= 829.2							CUM WT %	N/A	63.2	70.9	76.4	81.2	87.1	92.3	N/A	100.0
260	N/A	H	7.3	50.1	42.6	msG	WT	N/A	347.9	197.1	90.9	49.1	42.7	29.6	N/A	59.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	42.6	24.1	11.1	6.0	5.2	3.6	N/A	7.3
SPLIT WT= 811.7							CUM WT %	N/A	42.6	66.7	77.9	83.9	89.1	92.7	N/A	100.0
265	N/A	H	6.4	93.5	0.1	S	WT	N/A	0.5	47.5	304.8	186.4	75.5	40.7	N/A	44.7
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	0.1	6.8	43.5	26.6	10.8	5.8	N/A	6.4
SPLIT WT= 708.3							CUM WT %	N/A	0.1	6.9	50.4	77.0	87.8	93.6	N/A	100.0
270	N/A	H	2.1	64.5	33.5	sG	WT	N/A	242.8	210.3	163.3	62.1	20.9	10.9	N/A	15.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.5	29.0	22.5	8.6	2.9	1.5	N/A	2.1
SPLIT WT= 729.4							CUM WT %	N/A	33.5	62.5	85.0	93.5	96.4	97.9	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-029 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	0.4	6.8	92.8	G	WT	N/A	656.8	20.3	12.6	5.7	3.0	6.2	N/A	2.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	92.9	2.9	1.8	0.8	0.4	0.9	N/A	0.4
SPLIT WT= 711.4							CUM WT %	N/A	92.9	95.7	97.5	98.3	98.7	99.6	N/A	100.0
15	N/A	H	9.5	45.5	45.1	msG	WT	N/A	385.2	97.2	80.5	76.8	56.4	77.7	N/A	81.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.1	11.4	9.4	9.0	6.6	9.1	N/A	9.5
SPLIT WT= 861.3							CUM WT %	N/A	45.1	56.4	65.8	74.8	81.4	90.5	N/A	100.0
20	N/A	H	16.3	30.8	52.9	msG	WT	N/A	481.8	72.9	58.7	50.4	61.9	36.7	N/A	148.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.9	8.0	6.4	5.5	6.8	4.0	N/A	16.3
SPLIT WT= 919.9							CUM WT %	N/A	52.9	60.9	67.3	72.9	79.7	83.7	N/A	100.0
25	N/A	H	2.2	52.8	45.0	sG	WT	N/A	419.2	109.9	109.4	74.4	60.2	138.8	N/A	20.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.0	11.8	11.7	8.0	6.5	14.9	N/A	2.2
SPLIT WT= 937.8							CUM WT %	N/A	45.0	56.8	68.5	76.5	82.9	97.8	N/A	100.0
30	N/A	H	1.8	43.1	55.1	sG	WT	N/A	527.4	87.6	67.8	66.0	51.0	140.1	N/A	16.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	55.1	9.2	7.1	6.9	5.3	14.6	N/A	1.8
SPLIT WT= 960.1							CUM WT %	N/A	55.1	64.3	71.4	78.3	83.6	98.2	N/A	100.0
35	N/A	H	12.2	34.4	53.5	msG	WT	N/A	504.2	79.9	58.3	54.0	74.4	57.7	N/A	114.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	53.5	8.5	6.2	5.7	7.9	6.1	N/A	12.2
SPLIT WT= 942.1							CUM WT %	N/A	53.5	61.9	68.1	73.8	81.7	87.9	N/A	100.0
40	N/A	H	7.1	32.1	60.7	msG	WT	N/A	593.6	87.9	59.9	46.3	68.4	51.3	N/A	69.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	60.7	9.0	6.1	4.7	7.0	5.3	N/A	7.1
SPLIT WT= 984.0							CUM WT %	N/A	60.7	69.7	75.9	80.6	87.6	92.9	N/A	100.0
45	N/A	H	7.6	36.9	55.4	msG	WT	N/A	521.8	116.3	80.1	61.8	51.3	38.4	N/A	71.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	55.4	12.4	8.5	6.6	5.5	4.1	N/A	7.6
SPLIT WT= 938.4							CUM WT %	N/A	55.4	67.8	76.3	82.8	88.3	92.4	N/A	100.0
50	N/A	H	7.3	44.1	48.6	msG	WT	N/A	381.9	116.7	79.6	69.8	45.0	35.2	N/A	57.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.6	14.9	10.1	8.9	5.7	4.5	N/A	7.3
SPLIT WT= 782.1							CUM WT %	N/A	48.6	63.5	73.6	82.5	88.2	92.7	N/A	100.0
55	N/A	H	5.9	72.7	21.4	gS	WT	N/A	176.0	220.4	187.5	100.9	58.6	30.1	N/A	48.6
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	21.4	26.8	22.8	12.3	7.1	3.7	N/A	5.9
SPLIT WT= 819.9							CUM WT %	N/A	21.4	48.2	71.0	83.3	90.4	94.1	N/A	100.0
60	N/A	C	3.2	95.0	1.8	S	WT	N/A	10.3	126.6	290.3	69.7	34.0	18.7	N/A	18.3
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.8	22.3	51.1	12.3	6.0	3.3	N/A	3.2
SPLIT WT= 567.0							CUM WT %	N/A	1.8	24.1	75.2	87.5	93.5	96.8	N/A	100.0

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**** REPORT ON WELL 0299-E33-029 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS			FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
65	N/A	C	3.3	92.1	4.6	S		WT	N/A	28.1	202.3	241.3	68.5	33.4	20.7	N/A	20.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	4.6	32.9	39.3	11.1	5.4	3.4	N/A	3.3
SPLIT WT= 611.6								CUM WT %	N/A	4.6	37.5	76.7	87.9	93.3	96.7	N/A	100.0
70	N/A	C	3.7	94.4	1.9	S		WT	N/A	12.3	165.3	331.9	60.4	29.6	12.8	N/A	23.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	1.9	26.0	52.2	9.5	4.7	2.0	N/A	3.7
SPLIT WT= 632.8								CUM WT %	N/A	1.9	27.9	80.1	89.6	94.3	96.3	N/A	100.0
75	N/A	C	22.1	75.3	2.6	mS		WT	N/A	17.4	127.2	240.9	51.6	41.8	44.8	N/A	149.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	2.6	18.9	35.8	7.7	6.2	6.7	N/A	22.2
SPLIT WT= 673.1								CUM WT %	N/A	2.6	21.5	57.3	65.0	71.2	77.9	N/A	100.0
80	N/A	C	10.2	79.4	10.5	(m)gS		WT	N/A	67.2	136.0	177.0	99.9	58.7	38.1	N/A	65.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	10.5	21.2	27.6	15.6	9.1	5.9	N/A	10.2
SPLIT WT= 643.1								CUM WT %	N/A	10.5	31.6	59.2	74.7	83.9	89.8	N/A	100.0
85	N/A	C	6.0	90.1	3.8	S		WT	N/A	25.9	131.0	285.1	108.9	52.1	35.5	N/A	41.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	3.8	19.3	42.0	16.0	7.7	5.2	N/A	6.1
SPLIT WT= 678.6								CUM WT %	N/A	3.8	23.1	65.0	81.1	88.7	94.0	N/A	100.0
90	N/A	C	1.5	97.9	0.6	S		WT	N/A	3.9	92.3	409.7	105.7	20.2	9.2	N/A	9.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	0.6	14.2	63.0	16.2	3.1	1.4	N/A	1.5
SPLIT WT= 657.2								CUM WT %	N/A	0.6	14.8	77.7	94.0	97.1	98.5	N/A	100.0
97	N/A	C	0.6	96.9	2.5	S		WT	N/A	8.5	67.3	200.8	48.7	8.4	2.3	N/A	2.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	2.5	19.9	59.4	14.4	2.5	0.7	N/A	0.6
SPLIT WT= 338.2								CUM WT %	N/A	2.5	22.4	81.8	96.2	98.7	99.4	N/A	100.0
100	N/A	C	5.6	92.1	2.3	S		WT	N/A	7.4	54.4	146.3	59.2	22.4	14.3	N/A	18.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	2.3	16.9	45.4	18.4	7.0	4.4	N/A	5.7
SPLIT WT= 321.9								CUM WT %	N/A	2.3	19.2	64.6	83.0	89.9	94.4	N/A	100.0
105	N/A	C	4.0	95.5	0.5	S		WT	N/A	1.5	2.7	25.1	138.8	113.8	26.0	N/A	12.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	0.5	0.8	7.8	43.3	35.5	8.1	N/A	4.0
SPLIT WT= 326.8								CUM WT %	N/A	0.5	1.3	9.1	52.4	87.9	96.0	N/A	100.0
110	N/A	C	4.2	95.8	0.0	S		WT	N/A	0.0	0.4	10.3	115.7	135.3	22.2	N/A	12.6
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	0.0	0.1	3.5	39.0	45.6	7.5	N/A	4.3
SPLIT WT= 296.6								CUM WT %	N/A	0.0	0.1	3.6	42.6	88.3	95.7	N/A	100.0
115	N/A	C	5.8	93.8	0.4	S		WT	N/A	1.9	1.2	0.7	32.7	350.1	98.6	N/A	30.0
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	0.4	0.2	0.1	6.4	68.0	19.1	N/A	5.8
SPLIT WT= 515.1								CUM WT %	N/A	0.4	0.6	0.7	7.1	75.0	94.2	N/A	100.0

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**** REPORT ON WELL 0299-E33-029 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	N/A	C	18.1	75.5	6.4	(gm)S	WT	N/A	14.8	25.8	74.8	28.4	18.2	26.2	N/A	41.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.4	11.2	32.6	12.4	7.9	11.4	N/A	18.1
SPLIT WT= 230.1							CUM WT %	N/A	6.4	17.7	50.2	62.6	70.5	81.9	N/A	100.0
125	N/A	C	1.4	96.7	1.9	S	WT	N/A	6.6	46.8	172.6	81.2	21.4	8.3	N/A	4.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.9	13.7	50.5	23.8	6.3	2.4	N/A	1.4
SPLIT WT= 347.8							CUM WT %	N/A	1.9	15.6	66.1	89.9	96.2	98.6	N/A	100.0
130	N/A	C	7.9	91.7	0.3	S	WT	N/A	1.1	5.9	35.1	142.9	88.0	22.9	N/A	25.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.3	1.8	10.9	44.5	27.4	7.1	N/A	7.9
SPLIT WT= 321.4							CUM WT %	N/A	0.3	2.2	13.1	57.6	84.9	92.1	N/A	100.0
135	N/A	C	1.3	98.5	0.2	S	WT	N/A	0.9	3.7	72.2	349.6	137.5	20.3	N/A	7.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	0.6	12.2	59.1	23.2	3.4	N/A	1.3
SPLIT WT= 597.4							CUM WT %	N/A	0.2	0.8	13.0	72.0	95.3	98.7	N/A	100.0
139	N/A	C	5.0	94.8	0.2	S	WT	N/A	1.1	10.1	181.1	335.5	97.8	30.3	N/A	34.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	1.5	26.2	48.6	14.2	4.4	N/A	5.0
SPLIT WT= 690.5							CUM WT %	N/A	0.2	1.6	27.9	76.5	90.6	95.0	N/A	100.0
150	N/A	C	5.8	92.8	1.5	S	WT	N/A	9.7	70.2	271.7	172.6	59.7	30.0	N/A	37.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.5	10.8	41.7	26.5	9.2	4.6	N/A	5.8
SPLIT WT= 651.0							CUM WT %	N/A	1.5	12.3	54.0	80.5	89.6	94.3	N/A	100.0
155	N/A	C	6.0	92.1	1.9	S	WT	N/A	11.6	39.7	201.9	216.0	67.0	32.4	N/A	36.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.9	6.6	33.4	35.7	11.1	5.4	N/A	6.0
SPLIT WT= 611.0							CUM WT %	N/A	1.9	8.5	41.9	77.6	88.7	94.1	N/A	100.0
160	N/A	C	6.2	83.1	10.6	gS	WT	N/A	69.4	102.2	244.5	114.4	50.1	31.4	N/A	40.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.6	15.7	37.5	17.5	7.7	4.8	N/A	6.2
SPLIT WT= 659.4							CUM WT %	N/A	10.6	26.3	63.8	81.3	89.0	93.8	N/A	100.0
165	N/A	C	3.5	90.8	5.7	(g)S	WT	N/A	39.1	92.8	288.8	178.2	47.3	21.4	N/A	24.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.7	13.4	41.8	25.8	6.8	3.1	N/A	3.5
SPLIT WT= 698.6							CUM WT %	N/A	5.7	19.1	60.8	86.6	93.4	96.5	N/A	100.0
170	N/A	C	3.8	89.9	6.3	(g)S	WT	N/A	38.7	145.9	246.9	107.7	33.4	17.3	N/A	23.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.3	23.8	40.3	17.6	5.5	2.8	N/A	3.8
SPLIT WT= 613.1							CUM WT %	N/A	6.3	30.1	70.4	87.9	93.4	96.2	N/A	100.0
175	N/A	C	6.0	84.9	9.1	(g)S	WT	N/A	57.0	140.5	199.4	108.0	54.7	31.3	N/A	37.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	9.1	22.3	31.7	17.2	8.7	5.0	N/A	6.0
SPLIT WT= 628.5							CUM WT %	N/A	9.1	31.4	63.1	80.3	89.0	94.0	N/A	100.0

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**** REPORT ON WELL 0299-E33-029 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
180	N/A	C	4.0	85.5	10.5	gS	WT	N/A	71.2	182.7	223.7	105.6	44.8	22.8	N/A	27.4
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.5	26.9	33.0	15.6	6.6	3.4	N/A	4.0
SPLIT WT= 678.4							CUM WT %	N/A	10.5	37.4	70.4	86.0	92.6	96.0	N/A	100.0
185	N/A	C	5.7	93.5	0.8	S	WT	N/A	4.8	17.5	127.9	294.7	94.5	35.4	N/A	34.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.8	2.9	21.0	48.4	15.5	5.8	N/A	5.7
SPLIT WT= 615.5							CUM WT %	N/A	0.8	3.7	24.6	73.0	88.5	94.3	N/A	100.0
190	N/A	C	5.3	94.5	0.2	S	WT	N/A	1.3	18.4	176.0	268.3	88.4	29.7	N/A	32.5
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	3.0	28.6	43.7	14.4	4.8	N/A	5.3
SPLIT WT= 614.2							CUM WT %	N/A	0.2	3.2	31.8	75.5	89.9	94.7	N/A	100.0
195	N/A	C	9.7	90.1	0.2	S	WT	N/A	0.7	20.3	105.2	112.2	46.6	22.9	N/A	33.2
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	6.0	30.8	32.9	13.7	6.7	N/A	9.7
SPLIT WT= 341.1							CUM WT %	N/A	0.2	6.2	37.0	69.9	83.6	90.3	N/A	100.0
200	N/A	C	8.3	91.5	0.2	S	WT	N/A	1.2	32.3	194.8	225.0	88.7	45.4	N/A	53.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	5.0	30.4	35.1	13.8	7.1	N/A	8.3
SPLIT WT= 647.5							CUM WT %	N/A	0.2	5.2	35.6	70.8	84.6	91.7	N/A	100.0
205	N/A	C	18.2	81.8	0.0	(m)S	WT	N/A	0.0	1.5	37.1	39.7	75.7	271.4	N/A	94.9
SORT= N/A	MEDIAN=		4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	0.3	7.1	7.6	14.6	52.2	N/A	18.2
SPLIT WT= 526.8							CUM WT %	N/A	0.0	0.3	7.4	15.1	29.6	81.8	N/A	100.0
210	N/A	C	24.2	75.8	0.0	mS	WT	N/A	0.0	0.6	5.5	10.4	66.6	286.6	N/A	118.0
SORT= N/A	MEDIAN=		4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	0.1	1.1	2.1	13.7	58.8	N/A	24.2
SPLIT WT= 493.7							CUM WT %	N/A	0.0	0.1	1.3	3.4	17.0	75.8	N/A	100.0
215	N/A	C	4.6	60.8	34.6	sG	WT	N/A	134.2	77.3	89.1	37.4	20.0	12.1	N/A	17.7
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.6	19.9	23.0	9.6	5.2	3.1	N/A	4.6
SPLIT WT= 388.0							CUM WT %	N/A	34.6	54.5	77.5	87.2	92.3	95.4	N/A	100.0
220	N/A	C	0.9	57.1	42.0	sG	WT	N/A	155.3	93.1	80.0	21.9	10.2	5.9	N/A	3.2
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.0	25.2	21.7	5.9	2.8	1.6	N/A	0.9
SPLIT WT= 375.8							CUM WT %	N/A	42.0	67.2	88.9	94.8	97.6	99.2	N/A	100.0
227	N/A	C	8.8	29.1	62.1	msG	WT	N/A	518.7	65.1	73.2	60.4	39.1	5.6	N/A	73.6
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	62.1	7.8	8.8	7.2	4.7	0.7	N/A	8.8
SPLIT WT= 842.1							CUM WT %	N/A	62.1	69.9	78.6	85.9	90.5	91.2	N/A	100.0
230	N/A	C	4.7	44.6	50.7	sG	WT	N/A	348.4	75.0	104.3	65.8	37.0	24.2	N/A	32.5
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.7	10.9	15.2	9.6	5.4	3.5	N/A	4.7
SPLIT WT= 693.6							CUM WT %	N/A	50.7	61.6	76.8	86.4	91.8	95.3	N/A	100.0

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**** REPORT ON WELL 0299-E33-029 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
235	N/A	C	6.0	58.2	35.9	sG	WT	N/A	291.0	195.5	142.5	58.0	40.0	36.3	N/A	48.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	35.9	24.1	17.6	7.2	4.9	4.5	N/A	6.0
SPLIT WT= 811.8							CUM WT %	N/A	35.9	59.9	77.5	84.7	89.6	94.1	N/A	100.0
240	N/A	C	12.1	47.1	40.8	msG	WT	N/A	315.6	91.1	63.0	99.0	67.2	43.7	N/A	93.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.8	11.8	8.2	12.8	8.7	5.7	N/A	12.1
SPLIT WT= 770.7							CUM WT %	N/A	40.8	52.6	60.8	73.6	82.3	87.9	N/A	100.0
245	N/A	C	6.9	34.9	58.2	msG	WT	N/A	446.1	64.9	59.1	65.8	46.4	31.5	N/A	53.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.2	8.5	7.7	8.6	6.1	4.1	N/A	6.9
SPLIT WT= 766.6							CUM WT %	N/A	58.2	66.6	74.3	82.9	89.0	93.1	N/A	100.0
250	N/A	H	12.0	28.5	59.5	msG	WT	N/A	532.9	68.5	57.4	52.8	61.0	16.1	N/A	107.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.5	7.6	6.4	5.9	6.8	1.8	N/A	12.0
SPLIT WT= 904.4							CUM WT %	N/A	59.5	67.1	73.5	79.4	86.2	88.0	N/A	100.0
255	N/A	H	9.2	36.8	54.0	msG	WT	N/A	506.5	87.5	64.6	67.0	79.0	47.5	N/A	86.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	54.0	9.3	6.9	7.1	8.4	5.1	N/A	9.2
SPLIT WT= 936.2							CUM WT %	N/A	54.0	63.3	70.2	77.3	85.7	90.8	N/A	100.0
260	N/A	H	11.3	25.3	63.4	msG	WT	N/A	572.1	70.5	53.4	44.2	46.6	13.6	N/A	101.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.4	7.8	5.9	4.9	5.2	1.5	N/A	11.3
SPLIT WT= 909.5							CUM WT %	N/A	63.4	71.3	77.2	82.1	87.2	88.8	N/A	100.0
265	N/A	H	10.9	44.7	44.4	msG	WT	N/A	391.7	87.8	69.7	88.1	94.6	54.6	N/A	96.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	44.4	9.9	7.9	10.0	10.7	6.2	N/A	10.9
SPLIT WT= 880.6							CUM WT %	N/A	44.4	54.3	62.2	72.2	82.9	89.1	N/A	100.0
270	N/A	H	10.0	72.7	17.3	(m)gS	WT	N/A	142.4	206.1	218.2	97.4	54.6	22.7	N/A	82.7
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	17.3	25.0	26.5	11.8	6.6	2.8	N/A	10.0
SPLIT WT= 833.6							CUM WT %	N/A	17.3	42.3	68.8	80.6	87.2	90.0	N/A	100.0
275	N/A	H	8.7	64.5	26.8	(m)gS	WT	N/A	230.8	254.9	138.4	62.0	53.3	46.0	N/A	75.0
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	26.8	29.6	16.1	7.2	6.2	5.4	N/A	8.7
SPLIT WT= 861.0							CUM WT %	N/A	26.8	56.5	72.5	79.8	85.9	91.3	N/A	100.0
280	N/A	H	5.0	87.1	7.8	(g)S	WT	N/A	57.1	45.3	109.4	214.7	198.1	67.3	N/A	36.6
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	7.8	6.2	15.0	29.5	27.2	9.2	N/A	5.0
SPLIT WT= 727.6							CUM WT %	N/A	7.8	14.1	29.1	58.6	85.7	95.0	N/A	100.0
285	N/A	H	0.6	11.1	88.3	G	WT	N/A	668.3	19.8	26.1	24.5	13.5	0.1	N/A	4.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	88.3	2.6	3.5	3.2	1.8	0.0	N/A	0.6
SPLIT WT= 766.4							CUM WT %	N/A	88.3	90.9	94.4	97.6	99.4	99.4	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-029 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
290	N/A	H	1.6	46.5	51.9	sG	WT	N/A	382.6	90.6	92.0	88.6	53.0	18.8	N/A	11.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.9	12.3	12.5	12.0	7.2	2.6	N/A	1.6
SPLIT WT= 735.9							CUM WT %	N/A	51.9	64.2	76.6	88.6	95.8	98.4	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-030 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS			FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	7.5	19.4	73.1	msG		WT	N/A	529.7	35.1	37.3	16.0	20.0	32.2	N/A	54.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	73.1	4.9	5.2	2.2	2.8	4.5	N/A	7.5
SPLIT WT= 724.6								CUM WT %	N/A	73.1	78.0	83.1	85.3	88.1	92.6	N/A	100.0
15	N/A	H	13.0	37.5	49.5	msG		WT	N/A	418.8	72.4	53.6	59.6	82.0	50.2	N/A	110.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	49.5	8.6	6.3	7.0	9.7	5.9	N/A	13.0
SPLIT WT= 840.5								CUM WT %	N/A	49.5	58.0	64.3	71.4	81.1	87.0	N/A	100.0
20	N/A	H	12.8	45.2	41.9	msG		WT	N/A	350.6	90.6	71.4	79.3	76.4	60.4	N/A	107.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	41.9	10.8	8.5	9.5	9.1	7.2	N/A	12.9
SPLIT WT= 832.6								CUM WT %	N/A	41.9	52.8	61.3	70.8	79.9	87.2	N/A	100.0
25	N/A	H	8.8	49.1	42.1	msG		WT	N/A	365.1	159.3	92.2	87.1	54.5	32.4	N/A	76.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	42.1	18.4	10.6	10.0	6.3	3.7	N/A	8.8
SPLIT WT= 864.3								CUM WT %	N/A	42.1	60.5	71.1	81.1	87.4	91.2	N/A	100.0
30	N/A	H	10.5	41.0	48.6	msG		WT	N/A	413.7	95.9	83.0	93.0	59.5	17.4	N/A	89.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	48.6	11.3	9.8	10.9	7.0	2.0	N/A	10.5
SPLIT WT= 852.4								CUM WT %	N/A	48.6	59.8	69.6	80.5	87.5	89.5	N/A	100.0
35	N/A	H	9.5	42.8	47.7	msG		WT	N/A	394.4	114.7	75.5	69.0	53.0	41.2	N/A	78.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	47.7	13.9	9.1	8.4	6.4	5.0	N/A	9.5
SPLIT WT= 822.8								CUM WT %	N/A	47.7	61.6	70.8	79.1	85.5	90.5	N/A	100.0
40	N/A	H	10.2	48.4	41.5	msG		WT	N/A	379.9	125.2	90.3	82.0	75.1	70.4	N/A	93.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	41.5	13.7	9.9	9.0	8.2	7.7	N/A	10.2
SPLIT WT= 918.9								CUM WT %	N/A	41.5	55.1	65.0	74.0	82.2	89.8	N/A	100.0
45	N/A	H	6.4	70.3	23.3	gS		WT	N/A	194.3	237.6	158.0	94.4	62.2	35.2	N/A	53.7
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN=	N/A	WT %	N/A	23.3	28.4	18.9	11.3	7.5	4.2	N/A	6.4
SPLIT WT= 828.1								CUM WT %	N/A	23.3	51.7	70.6	81.9	89.4	93.6	N/A	100.0
50	N/A	H	5.5	74.1	20.3	gS		WT	N/A	163.8	239.1	185.6	89.1	53.4	29.5	N/A	44.6
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN=	N/A	WT %	N/A	20.4	29.7	23.1	11.1	6.6	3.7	N/A	5.5
SPLIT WT= 800.1								CUM WT %	N/A	20.4	50.1	73.1	84.2	90.8	94.5	N/A	100.0
55	N/A	H	6.1	73.9	20.1	gS		WT	N/A	177.4	250.0	200.0	107.8	62.7	32.4	N/A	53.6
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN=	N/A	WT %	N/A	20.1	28.3	22.6	12.2	7.1	3.7	N/A	6.1
SPLIT WT= 883.8								CUM WT %	N/A	20.1	48.4	71.0	83.2	90.3	93.9	N/A	100.0
60	N/A	C	0.8	87.0	12.1	gS		WT	N/A	82.2	189.0	290.6	84.4	19.3	6.4	N/A	5.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	12.1	27.9	42.9	12.5	2.9	0.9	N/A	0.8
SPLIT WT= 676.0								CUM WT %	N/A	12.1	40.0	82.9	95.4	98.2	99.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-030 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
65	N/A	C	2.5	90.1	7.5	(g)S	WT	N/A	51.9	192.3	314.4	75.7	26.4	15.0	N/A	17.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.5	27.8	45.4	10.9	3.8	2.2	N/A	2.5
SPLIT WT= 694.1							CUM WT %	N/A	7.5	35.3	80.6	91.6	95.4	97.6	N/A	100.0
70	N/A	C	1.9	91.6	6.5	(g)S	WT	N/A	45.3	256.1	289.9	59.3	24.0	11.8	N/A	13.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.5	36.6	41.4	8.5	3.4	1.7	N/A	1.9
SPLIT WT= 699.0							CUM WT %	N/A	6.5	43.1	84.5	93.0	96.4	98.1	N/A	100.0
75	N/A	C	3.4	91.3	5.3	(g)S	WT	N/A	36.0	170.2	303.1	92.8	35.4	18.1	N/A	23.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.3	25.1	44.7	13.7	5.2	2.7	N/A	3.4
SPLIT WT= 676.5							CUM WT %	N/A	5.3	30.4	75.0	88.7	93.9	96.6	N/A	100.0
80	N/A	C	4.5	95.1	0.4	S	WT	N/A	2.1	2.1	12.3	217.6	221.1	34.5	N/A	23.2
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.4	0.4	2.4	42.4	43.1	6.7	N/A	4.5
SPLIT WT= 513.5							CUM WT %	N/A	0.4	0.8	3.2	45.7	88.8	95.5	N/A	100.0
85	N/A	C	4.0	95.8	0.2	S	WT	N/A	1.2	2.6	17.1	285.4	210.3	29.7	N/A	22.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	0.5	3.0	50.2	37.0	5.2	N/A	4.0
SPLIT WT= 567.4							CUM WT %	N/A	0.2	0.7	3.7	53.9	90.8	96.1	N/A	100.0
90	N/A	C	4.9	94.8	0.3	S	WT	N/A	1.6	0.6	6.4	144.3	286.4	44.6	N/A	25.0
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.3	0.1	1.3	28.4	56.3	8.8	N/A	4.9
SPLIT WT= 508.2							CUM WT %	N/A	0.3	0.4	1.7	30.1	86.3	95.1	N/A	100.0
95	N/A	C	8.8	90.3	0.9	S	WT	N/A	5.6	3.9	7.0	48.6	253.9	235.4	N/A	53.3
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.9	0.6	1.2	8.0	41.8	38.7	N/A	8.8
SPLIT WT= 600.0							CUM WT %	N/A	0.9	1.6	2.7	10.7	52.5	91.2	N/A	100.0
100	N/A	C	6.7	90.6	2.7	S	WT	N/A	18.1	105.5	302.3	101.8	59.5	36.6	N/A	44.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.7	15.8	45.2	15.2	8.9	5.5	N/A	6.7
SPLIT WT= 665.1							CUM WT %	N/A	2.7	18.5	63.7	79.0	87.9	93.3	N/A	100.0
105	N/A	C	1.7	97.6	0.7	S	WT	N/A	4.4	32.9	375.8	173.4	29.8	11.5	N/A	10.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.7	5.2	58.8	27.2	4.7	1.8	N/A	1.7
SPLIT WT= 634.9							CUM WT %	N/A	0.7	5.8	64.7	91.8	96.5	98.3	N/A	100.0
110	N/A	C	3.3	95.9	0.8	S	WT	N/A	5.1	48.9	310.1	204.0	53.3	22.0	N/A	22.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.8	7.4	46.6	30.6	8.0	3.3	N/A	3.4
SPLIT WT= 658.5							CUM WT %	N/A	0.8	8.1	54.7	85.3	93.4	96.7	N/A	100.0
115	N/A	C	1.8	85.0	13.2	gS	WT	N/A	92.4	217.7	233.3	102.2	28.5	12.4	N/A	12.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.2	31.1	33.4	14.6	4.1	1.8	N/A	1.8
SPLIT WT= 692.7							CUM WT %	N/A	13.2	44.3	77.7	92.3	96.4	98.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-030 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	N/A	C	4.3	93.1	2.6	S	WT	N/A	15.8	45.5	220.3	191.8	65.8	40.9	N/A	25.9
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.6	7.5	36.4	31.7	10.9	6.8	N/A	4.3
SPLIT WT= 599.1							CUM WT %	N/A	2.6	10.1	46.5	78.1	89.0	95.7	N/A	100.0
125	N/A	C	3.3	95.6	1.1	S	WT	N/A	6.9	67.1	331.1	159.6	47.3	21.6	N/A	21.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.1	10.2	50.5	24.4	7.2	3.3	N/A	3.3
SPLIT WT= 652.8							CUM WT %	N/A	1.1	11.3	61.8	86.2	93.4	96.7	N/A	100.0
130	N/A	C	6.2	93.1	0.7	S	WT	N/A	4.6	36.8	248.2	226.6	67.3	33.1	N/A	40.5
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.7	5.6	37.8	34.5	10.2	5.0	N/A	6.2
SPLIT WT= 656.4							CUM WT %	N/A	0.7	6.3	44.1	78.6	88.8	93.8	N/A	100.0
135	N/A	C	18.4	80.2	1.4	(m)S	WT	N/A	8.9	32.4	172.3	188.9	79.0	50.0	N/A	120.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.4	5.0	26.4	29.0	12.1	7.7	N/A	18.4
SPLIT WT= 654.3							CUM WT %	N/A	1.4	6.3	32.8	61.8	73.9	81.6	N/A	100.0
140	N/A	C	8.5	87.2	4.3	S	WT	N/A	26.5	62.9	183.7	169.2	76.4	41.7	N/A	52.1
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.3	10.3	30.0	27.6	12.5	6.8	N/A	8.5
SPLIT WT= 615.6							CUM WT %	N/A	4.3	14.6	44.6	72.2	84.7	91.5	N/A	100.0
145	N/A	C	12.8	82.7	4.5	(m)S	WT	N/A	29.6	107.7	163.1	130.3	84.2	53.3	N/A	83.2
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.5	16.5	25.0	20.0	12.9	8.2	N/A	12.8
SPLIT WT= 652.1							CUM WT %	N/A	4.5	21.1	46.1	66.1	79.0	87.2	N/A	100.0
150	N/A	C	2.8	96.6	0.6	S	WT	N/A	3.1	26.6	166.4	249.4	79.6	18.2	N/A	15.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.6	4.8	29.8	44.6	14.2	3.3	N/A	2.8
SPLIT WT= 559.7							CUM WT %	N/A	0.6	5.3	35.1	79.7	93.9	97.2	N/A	100.0
155	N/A	C	4.6	92.4	3.1	S	WT	N/A	20.2	79.9	258.0	176.2	62.9	27.9	N/A	29.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.1	12.2	39.4	26.9	9.6	4.3	N/A	4.6
SPLIT WT= 655.2							CUM WT %	N/A	3.1	15.3	54.7	81.6	91.2	95.4	N/A	100.0
160	N/A	C	2.6	96.6	0.7	S	WT	N/A	4.7	37.9	221.0	273.8	76.5	22.1	N/A	17.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	5.8	33.8	41.9	11.7	3.4	N/A	2.6
SPLIT WT= 652.0							CUM WT %	N/A	0.7	6.5	40.4	82.3	94.0	97.4	N/A	100.0
165	N/A	C	3.3	95.1	1.6	S	WT	N/A	9.4	37.7	176.8	242.8	78.5	22.5	N/A	19.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.6	6.4	30.1	41.4	13.4	3.8	N/A	3.3
SPLIT WT= 587.1							CUM WT %	N/A	1.6	8.0	38.1	79.5	92.9	96.7	N/A	100.0
170	N/A	C	4.4	94.9	0.6	S	WT	N/A	3.6	19.6	104.9	252.0	139.1	31.3	N/A	25.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.6	3.4	18.2	43.7	24.2	5.4	N/A	4.4
SPLIT WT= 574.9							CUM WT %	N/A	0.6	4.0	22.2	66.0	90.1	95.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-030 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	N/A	C	3.4	95.9	0.7	S	WT	N/A	3.9	8.6	60.6	268.3	181.3	31.8	N/A	19.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	1.5	10.6	46.7	31.6	5.5	N/A	3.4
SPLIT WT= 571.1							CUM WT %	N/A	0.7	2.2	12.7	59.5	91.1	96.6	N/A	100.0
180	N/A	C	3.7	95.9	0.4	S	WT	N/A	1.9	0.5	0.0	38.5	383.4	58.5	N/A	18.7
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.4	0.1	0.0	7.7	76.5	11.7	N/A	3.7
SPLIT WT= 500.8							CUM WT %	N/A	0.4	0.5	0.5	8.2	84.6	96.3	N/A	100.0
185	N/A	C	8.1	91.5	0.4	S	WT	N/A	2.2	1.3	0.6	21.9	373.7	72.5	N/A	41.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.4	0.3	0.1	4.3	72.8	14.1	N/A	8.1
SPLIT WT= 513.6							CUM WT %	N/A	0.4	0.7	0.8	5.1	77.8	91.9	N/A	100.0
190	N/A	C	29.9	69.5	0.5	mS	WT	N/A	2.6	1.9	0.3	11.8	250.2	71.5	N/A	144.6
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.5	0.4	0.1	2.4	51.8	14.8	N/A	29.9
SPLIT WT= 480.9							CUM WT %	N/A	0.5	0.9	1.0	3.4	55.2	70.1	N/A	100.0
195	N/A	C	7.3	92.1	0.6	S	WT	N/A	3.0	1.8	1.4	1.4	133.8	336.4	N/A	37.6
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.6	0.4	0.3	0.3	26.0	65.3	N/A	7.3
SPLIT WT= 511.6							CUM WT %	N/A	0.6	0.9	1.2	1.5	27.4	92.7	N/A	100.0
200	N/A	C	65.8	33.6	0.6	sM	WT	N/A	2.3	1.3	0.0	2.8	82.7	51.7	N/A	271.0
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.6	0.3	0.0	0.7	20.1	12.6	N/A	65.8
SPLIT WT= 411.2							CUM WT %	N/A	0.6	0.9	0.9	1.6	21.6	34.2	N/A	100.0
205	N/A	C	48.3	44.8	6.9	(g)sM	WT	N/A	37.8	63.4	77.2	24.8	32.1	46.5	N/A	263.1
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	6.9	11.6	14.2	4.6	5.9	8.5	N/A	48.3
SPLIT WT= 545.3							CUM WT %	N/A	6.9	18.6	32.8	37.3	43.2	51.7	N/A	100.0
210	N/A	C	3.7	89.8	6.6	(g)S	WT	N/A	45.4	258.2	235.0	72.0	34.0	21.7	N/A	25.3
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	6.6	37.3	34.0	10.4	4.9	3.1	N/A	3.7
SPLIT WT= 692.2							CUM WT %	N/A	6.6	43.9	77.9	88.3	93.2	96.3	N/A	100.0
215	N/A	C	2.8	80.5	16.7	gS	WT	N/A	106.9	268.7	130.4	64.8	34.1	18.5	N/A	18.2
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	16.7	41.9	20.3	10.1	5.3	2.9	N/A	2.8
SPLIT WT= 644.1							CUM WT %	N/A	16.7	58.5	78.9	89.0	94.3	97.2	N/A	100.0
220	N/A	C	4.7	84.9	10.4	gS	WT	N/A	71.5	182.4	257.7	72.9	40.5	27.9	N/A	32.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.4	26.6	37.6	10.6	5.9	4.1	N/A	4.7
SPLIT WT= 685.6							CUM WT %	N/A	10.4	37.1	74.7	85.3	91.2	95.3	N/A	100.0
225	N/A	C	9.2	76.8	14.0	(m)gS	WT	N/A	80.3	3.8	4.0	22.5	131.4	277.5	N/A	52.7
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	14.0	0.7	0.7	3.9	23.0	48.5	N/A	9.2
SPLIT WT= 576.4							CUM WT %	N/A	14.0	14.7	15.4	19.3	42.3	90.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E33-030 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
230	N/A	C	2.6	32.7	64.7	sG	WT	N/A	568.3	88.7	93.4	53.6	31.7	19.0	N/A	23.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	64.7	10.1	10.7	6.1	3.6	2.2	N/A	2.6
SPLIT WT= 877.7							CUM WT %	N/A	64.7	74.8	85.5	91.6	95.2	97.4	N/A	100.0
235	N/A	C	2.5	32.6	64.8	sG	WT	N/A	421.8	69.6	68.9	38.2	21.5	14.2	N/A	16.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	64.8	10.7	10.6	5.9	3.3	2.2	N/A	2.5
SPLIT WT= 651.0							CUM WT %	N/A	64.8	75.5	86.1	92.0	95.3	97.5	N/A	100.0
240	N/A	C	6.1	34.9	59.0	msG	WT	N/A	476.9	63.2	89.7	58.9	42.5	27.6	N/A	48.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.0	7.8	11.1	7.3	5.3	3.4	N/A	6.1
SPLIT WT= 809.2							CUM WT %	N/A	59.0	66.9	78.0	85.3	90.5	93.9	N/A	100.0
245	N/A	C	5.1	58.9	35.9	sG	WT	N/A	278.7	100.4	178.9	91.1	52.3	34.3	N/A	39.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	35.9	13.0	23.1	11.8	6.7	4.4	N/A	5.1
SPLIT WT= 772.3							CUM WT %	N/A	35.9	48.9	72.0	83.7	90.5	94.9	N/A	100.0
250	N/A	C	3.1	53.2	43.7	sG	WT	N/A	327.5	101.0	170.6	71.4	35.8	20.1	N/A	23.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.7	13.5	22.8	9.5	4.8	2.7	N/A	3.1
SPLIT WT= 747.5							CUM WT %	N/A	43.7	57.1	79.9	89.4	94.2	96.9	N/A	100.0
255	N/A	C	2.9	24.7	72.4	msG	WT	N/A	575.4	72.9	51.5	34.9	22.3	14.8	N/A	23.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	72.4	9.2	6.5	4.4	2.8	1.9	N/A	2.9
SPLIT WT= 793.4							CUM WT %	N/A	72.4	81.5	88.0	92.4	95.2	97.1	N/A	100.0
260	N/A	C	10.1	37.4	52.5	msG	WT	N/A	422.8	77.8	65.0	64.4	58.2	36.0	N/A	81.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.5	9.7	8.1	8.0	7.2	4.5	N/A	10.1
SPLIT WT= 805.2							CUM WT %	N/A	52.5	62.1	70.2	78.2	85.4	89.9	N/A	100.0
265	N/A	H	9.0	61.0	30.0	msG	WT	N/A	239.0	229.6	114.4	63.1	48.1	30.8	N/A	71.8
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	30.0	28.8	14.4	7.9	6.0	3.9	N/A	9.0
SPLIT WT= 793.2							CUM WT %	N/A	30.0	58.8	73.2	81.1	87.1	91.0	N/A	100.0
270	N/A	H	10.3	89.5	0.2	(m)S	WT	N/A	1.2	2.6	43.1	277.9	229.2	61.7	N/A	70.9
SORT= N/A MEDIAN= 3.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.2	0.4	6.3	40.5	33.4	9.0	N/A	10.3
SPLIT WT= 687.9							CUM WT %	N/A	0.2	0.6	6.8	47.3	80.7	89.7	N/A	100.0
275	N/A	H	6.3	45.3	48.4	msG	WT	N/A	410.4	176.5	87.5	51.8	38.6	30.2	N/A	53.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.4	20.8	10.3	6.1	4.6	3.6	N/A	6.3
SPLIT WT= 847.5							CUM WT %	N/A	48.4	69.2	79.5	85.6	90.1	93.7	N/A	100.0
280	N/A	H	7.3	82.7	10.0	gS	WT	N/A	74.0	104.3	163.7	195.2	110.3	41.4	N/A	54.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	10.0	14.0	22.0	26.3	14.8	5.6	N/A	7.3
SPLIT WT= 741.8							CUM WT %	N/A	10.0	24.0	46.0	72.3	87.1	92.7	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-002 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	C	3.1	31.3	65.6	sG	WT	N/A	422.5	18.4	115.1	31.4	21.5	15.1	N/A	20.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	65.6	2.9	17.9	4.9	3.3	2.3	N/A	3.1
SPLIT WT= 648.5							CUM WT %	N/A	65.6	68.5	86.3	91.2	94.6	96.9	N/A	100.0
12	N/A	H	7.8	32.5	59.6	msG	WT	N/A	559.4	69.4	53.9	69.5	62.7	49.8	N/A	73.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.6	7.4	5.8	7.4	6.7	5.3	N/A	7.8
SPLIT WT= 938.1							CUM WT %	N/A	59.6	67.0	72.8	80.2	86.9	92.2	N/A	100.0
15	N/A	H	9.3	42.4	48.3	msG	WT	N/A	434.9	73.7	84.9	95.4	73.7	54.6	N/A	83.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.3	8.2	9.4	10.6	8.2	6.1	N/A	9.3
SPLIT WT= 895.4							CUM WT %	N/A	48.3	56.5	65.9	76.5	84.7	90.7	N/A	100.0
20	N/A	H	10.0	38.3	51.7	msG	WT	N/A	482.6	78.1	67.9	87.6	72.0	51.2	N/A	93.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.7	8.4	7.3	9.4	7.7	5.5	N/A	10.0
SPLIT WT= 924.4							CUM WT %	N/A	51.7	60.1	67.4	76.8	84.5	90.0	N/A	100.0
25	N/A	H	7.8	31.2	61.1	msG	WT	N/A	539.3	71.0	57.9	60.5	52.2	33.8	N/A	68.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	61.1	8.0	6.6	6.9	5.9	3.8	N/A	7.8
SPLIT WT= 875.4							CUM WT %	N/A	61.1	69.1	75.7	82.5	88.4	92.3	N/A	100.0
35	N/A	H	2.5	34.3	63.2	sG	WT	N/A	592.2	104.6	108.9	62.3	30.5	15.4	N/A	23.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.2	11.2	11.6	6.7	3.3	1.6	N/A	2.5
SPLIT WT= 934.2							CUM WT %	N/A	63.2	74.3	86.0	92.6	95.9	97.5	N/A	100.0
50	N/A	H	3.7	49.8	46.5	sG	WT	N/A	417.4	138.3	92.0	93.5	54.8	68.2	N/A	32.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	46.5	15.4	10.3	10.4	6.1	7.6	N/A	3.7
SPLIT WT= 897.1							CUM WT %	N/A	46.5	62.0	72.2	82.6	88.7	96.3	N/A	100.0
55	N/A	H	7.0	54.4	38.6	msG	WT	N/A	307.7	177.8	121.8	61.8	41.7	31.0	N/A	55.8
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.6	22.3	15.3	7.8	5.2	3.9	N/A	7.0
SPLIT WT= 792.6							CUM WT %	N/A	38.6	60.9	76.1	83.9	89.1	93.0	N/A	100.0
60	N/A	H	3.4	56.6	40.0	sG	WT	N/A	300.9	189.9	135.3	51.5	28.2	21.5	N/A	25.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.0	25.2	18.0	6.8	3.8	2.9	N/A	3.4
SPLIT WT= 748.0							CUM WT %	N/A	40.0	65.2	83.2	90.0	93.7	96.6	N/A	100.0
67	N/A	H	6.0	66.4	27.6	gS	WT	N/A	244.3	234.7	181.6	91.3	53.3	26.7	N/A	53.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	27.6	26.5	20.5	10.3	6.0	3.0	N/A	6.0
SPLIT WT= 879.0							CUM WT %	N/A	27.6	54.1	74.7	85.0	91.0	94.0	N/A	100.0
70	N/A	H	6.1	68.4	25.5	gS	WT	N/A	220.0	214.6	201.2	95.7	50.6	27.9	N/A	52.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.5	24.9	23.3	11.1	5.9	3.2	N/A	6.1
SPLIT WT= 860.3							CUM WT %	N/A	25.5	50.4	73.8	84.9	90.7	94.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-002 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
75	N/A	H	4.6	73.6	21.8	gS	WT	N/A	191.4	273.7	213.5	81.3	49.4	27.6	N/A	40.3
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	21.8	31.2	24.3	9.3	5.6	3.2	N/A	4.6
SPLIT WT= 874.1							CUM WT %	N/A	21.8	53.0	77.4	86.6	92.3	95.4	N/A	100.0
80	N/A	H	4.6	73.3	22.2	gS	WT	N/A	186.1	259.8	214.4	74.5	43.4	23.3	N/A	38.3
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	22.2	30.9	25.5	8.9	5.2	2.8	N/A	4.6
SPLIT WT= 836.3							CUM WT %	N/A	22.2	53.1	78.6	87.5	92.7	95.4	N/A	100.0
85	N/A	H	4.4	75.5	20.1	gS	WT	N/A	169.9	189.2	260.4	114.6	46.8	26.6	N/A	37.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	20.1	22.4	30.8	13.6	5.5	3.2	N/A	4.4
SPLIT WT= 838.9							CUM WT %	N/A	20.1	42.5	73.3	86.9	92.5	95.6	N/A	100.0
90	N/A	H	5.0	74.7	20.4	gS	WT	N/A	169.7	140.5	263.0	130.0	59.6	29.6	N/A	41.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	20.4	16.9	31.6	15.6	7.2	3.6	N/A	5.0
SPLIT WT= 831.8							CUM WT %	N/A	20.4	37.2	68.8	84.4	91.5	95.1	N/A	100.0
95	N/A	H	7.3	84.7	7.9	(g)S	WT	N/A	58.9	119.8	257.4	182.9	65.3	3.6	N/A	54.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.9	16.1	34.7	24.6	8.8	0.5	N/A	7.3
SPLIT WT= 737.7							CUM WT %	N/A	7.9	24.1	58.7	83.4	92.2	92.7	N/A	100.0
105	N/A	H	3.3	76.8	19.9	gS	WT	N/A	151.9	200.7	246.6	89.6	32.5	17.4	N/A	25.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	19.9	26.3	32.3	11.7	4.3	2.3	N/A	3.3
SPLIT WT= 756.0							CUM WT %	N/A	19.9	46.1	78.4	90.1	94.4	96.7	N/A	100.0
110	N/A	H	3.2	84.1	12.7	gS	WT	N/A	103.1	224.3	279.8	101.5	43.4	34.0	N/A	25.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.7	27.6	34.5	12.5	5.4	4.2	N/A	3.2
SPLIT WT= 804.7							CUM WT %	N/A	12.7	40.3	74.8	87.3	92.7	96.8	N/A	100.0
115	N/A	H	5.9	80.3	13.8	gS	WT	N/A	115.2	188.2	232.3	132.1	74.1	42.6	N/A	49.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.8	22.6	27.9	15.9	8.9	5.1	N/A	5.9
SPLIT WT= 828.5							CUM WT %	N/A	13.8	36.4	64.3	80.1	89.0	94.1	N/A	100.0
120	N/A	H	7.3	64.4	28.3	(m)gS	WT	N/A	227.8	188.9	191.2	84.0	46.0	7.4	N/A	58.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.3	23.5	23.8	10.5	5.7	0.9	N/A	7.3
SPLIT WT= 798.8							CUM WT %	N/A	28.3	51.8	75.6	86.1	91.8	92.7	N/A	100.0
125	N/A	H	6.4	80.7	12.9	gS	WT	N/A	107.7	204.9	270.1	123.3	62.6	14.3	N/A	53.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.9	24.5	32.3	14.7	7.5	1.7	N/A	6.4
SPLIT WT= 833.0							CUM WT %	N/A	12.9	37.4	69.6	84.4	91.9	93.6	N/A	100.0
145	N/A	H	8.2	83.7	8.1	(g)S	WT	N/A	62.5	125.7	280.9	161.7	59.8	16.6	N/A	63.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.1	16.3	36.5	21.0	7.8	2.2	N/A	8.2
SPLIT WT= 768.5							CUM WT %	N/A	8.1	24.4	60.9	81.9	89.7	91.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-002 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
155	N/A	H	5.0	85.7	9.3	(g)S	WT	N/A	75.2	253.9	261.7	123.7	42.2	11.8	N/A	40.6
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	9.3	31.4	32.3	15.3	5.2	1.5	N/A	5.0
SPLIT WT= 805.0							CUM WT %	N/A	9.3	40.7	73.0	88.3	93.5	95.0	N/A	100.0
161	N/A	H	4.7	81.0	14.3	gS	WT	N/A	117.8	288.1	213.8	96.2	45.7	24.3	N/A	38.9
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	14.3	34.9	25.9	11.7	5.5	3.0	N/A	4.7
SPLIT WT= 818.6							CUM WT %	N/A	14.3	49.2	75.1	86.8	92.3	95.3	N/A	100.0
165	N/A	H	3.8	80.0	16.2	gS	WT	N/A	131.5	248.6	226.1	107.6	44.8	23.9	N/A	31.1
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	16.2	30.6	27.8	13.2	5.5	2.9	N/A	3.8
SPLIT WT= 810.9							CUM WT %	N/A	16.2	46.7	74.5	87.7	93.3	96.2	N/A	100.0
170	N/A	H	5.8	81.6	12.6	gS	WT	N/A	89.0	202.8	185.7	102.4	54.2	31.3	N/A	41.0
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	12.6	28.7	26.3	14.5	7.7	4.4	N/A	5.8
SPLIT WT= 703.0							CUM WT %	N/A	12.6	41.3	67.6	82.1	89.8	94.2	N/A	100.0
175	N/A	H	5.0	77.6	17.4	gS	WT	N/A	153.1	260.6	222.6	113.3	57.0	29.7	N/A	43.9
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	17.4	29.6	25.3	12.9	6.5	3.4	N/A	5.0
SPLIT WT= 875.2							CUM WT %	N/A	17.4	47.0	72.3	85.2	91.6	95.0	N/A	100.0
180	N/A	H	5.5	75.0	19.5	gS	WT	N/A	165.8	247.2	210.5	103.7	55.8	21.1	N/A	46.5
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	19.5	29.1	24.8	12.2	6.6	2.5	N/A	5.5
SPLIT WT= 846.4							CUM WT %	N/A	19.5	48.6	73.3	85.5	92.1	94.5	N/A	100.0
185	N/A	H	4.5	93.8	1.8	S	WT	N/A	12.7	38.6	154.2	314.0	124.4	32.0	N/A	31.5
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.8	5.5	21.8	44.4	17.6	4.5	N/A	4.5
SPLIT WT= 706.9							CUM WT %	N/A	1.8	7.3	29.1	73.5	91.0	95.6	N/A	100.0
190	N/A	H	8.0	77.8	14.2	gS	WT	N/A	99.0	186.8	166.4	98.8	61.0	30.7	N/A	55.9
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	14.2	26.7	23.8	14.1	8.7	4.4	N/A	8.0
SPLIT WT= 696.5							CUM WT %	N/A	14.2	40.9	64.7	78.9	87.6	92.0	N/A	100.0
195	N/A	H	6.7	83.2	10.2	gS	WT	N/A	75.9	185.9	189.8	135.0	70.4	38.8	N/A	49.6
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.2	24.9	25.5	18.1	9.4	5.2	N/A	6.7
SPLIT WT= 740.6							CUM WT %	N/A	10.2	35.1	60.6	78.7	88.1	93.3	N/A	100.0
200	N/A	H	7.9	83.7	8.4	(g)S	WT	N/A	54.0	158.1	179.8	105.5	61.1	36.2	N/A	51.1
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.4	24.5	27.8	16.3	9.5	5.6	N/A	7.9
SPLIT WT= 642.4							CUM WT %	N/A	8.4	32.8	60.7	77.0	86.5	92.1	N/A	100.0
205	N/A	H	9.3	78.4	12.4	(m)gS	WT	N/A	91.3	183.2	178.1	128.0	75.3	13.2	N/A	68.3
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	12.4	24.8	24.2	17.4	10.2	1.8	N/A	9.3
SPLIT WT= 735.8							CUM WT %	N/A	12.4	37.2	61.4	78.7	88.9	90.7	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-002 ****

02/02/89

DEPTH	%CACØ3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (Ø)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
21Ø	N/A	H	6.2	51.1	42.7	msG	WT	N/A	38Ø.5	184.6	138.4	74.7	42.6	14.2	N/A	55.2
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	42.7	2Ø.7	15.6	8.4	4.8	1.6	N/A	6.2
SPLIT WT= 889.3							CUM WT %	N/A	42.7	63.5	79.Ø	87.4	92.2	93.8	N/A	1ØØ.Ø
215	N/A	H	8.9	66.Ø	25.2	(m)gS	WT	N/A	2ØØ.7	98.Ø	87.1	8Ø.1	198.7	61.5	N/A	7Ø.5
SORT=	N/A	MEDIAN=	2.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	25.2	12.3	1Ø.9	1Ø.1	24.9	7.7	N/A	8.9
SPLIT WT= 799.4							CUM WT %	N/A	25.2	37.5	48.4	58.5	83.4	91.1	N/A	1ØØ.Ø
22Ø	N/A	H	6.Ø	31.4	62.6	msG	WT	N/A	517.6	84.4	53.2	53.Ø	52.9	36.2	N/A	49.9
SORT=	N/A	MEDIAN=	-1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	62.6	7.8	6.4	6.4	6.4	4.4	N/A	6.Ø
SPLIT WT= 823.6							CUM WT %	N/A	62.6	7Ø.4	76.8	83.2	89.6	94.Ø	N/A	1ØØ.Ø
225	N/A	H	9.7	54.5	35.8	msG	WT	N/A	283.7	117.6	1Ø9.1	8Ø.Ø	75.6	5Ø.3	N/A	77.Ø
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	35.8	14.8	13.8	1Ø.1	9.5	6.3	N/A	9.7
SPLIT WT= 791.3							CUM WT %	N/A	35.8	5Ø.6	64.3	74.4	83.9	9Ø.3	N/A	1ØØ.Ø
23Ø	N/A	H	11.6	53.4	35.Ø	msG	WT	N/A	27Ø.7	95.6	83.4	9Ø.3	88.8	54.9	N/A	89.7
SORT=	N/A	MEDIAN=	1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	35.Ø	12.4	1Ø.8	11.7	11.5	7.1	N/A	11.6
SPLIT WT= 77Ø.3							CUM WT %	N/A	35.Ø	47.4	58.1	69.8	81.3	88.4	N/A	1ØØ.Ø
235	N/A	H	6.9	53.6	39.4	msG	WT	N/A	332.1	238.1	98.8	43.Ø	4Ø.4	31.4	N/A	58.4
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	39.4	28.3	11.7	5.1	4.8	3.7	N/A	6.9
SPLIT WT= 838.6							CUM WT %	N/A	39.4	67.7	79.4	84.5	89.3	93.1	N/A	1ØØ.Ø

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-003 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	10.4	36.0	53.6	msG	WT	N/A	478.3	41.3	47.8	35.6	54.7	142.0	N/A	93.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	53.6	4.6	5.4	4.0	6.1	15.9	N/A	10.4
SPLIT WT= 895.2							CUM WT %	N/A	53.6	58.2	63.6	67.5	73.7	89.6	N/A	100.0
10	N/A	H	9.5	40.4	50.0	msG	WT	N/A	472.5	83.0	60.4	87.2	97.1	54.1	N/A	90.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.0	8.8	6.4	9.2	10.3	5.7	N/A	9.5
SPLIT WT= 943.2							CUM WT %	N/A	50.0	58.8	65.2	74.5	84.7	90.5	N/A	100.0
15	N/A	H	11.5	41.2	47.3	msG	WT	N/A	443.3	77.4	63.3	75.4	105.5	64.3	N/A	108.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	47.3	8.3	6.8	8.0	11.3	6.9	N/A	11.5
SPLIT WT= 938.3							CUM WT %	N/A	47.3	55.6	62.3	70.3	81.6	88.5	N/A	100.0
20	N/A	H	7.3	25.0	67.7	msG	WT	N/A	617.9	47.7	53.3	38.6	52.7	36.0	N/A	67.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	67.7	5.2	5.8	4.2	5.8	3.9	N/A	7.4
SPLIT WT= 917.9							CUM WT %	N/A	67.7	72.9	78.7	83.0	88.7	92.7	N/A	100.0
25	N/A	H	10.9	34.2	54.9	msG	WT	N/A	517.5	63.0	65.1	55.3	80.5	58.1	N/A	102.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	54.9	6.7	6.9	5.9	8.5	6.2	N/A	10.9
SPLIT WT= 944.1							CUM WT %	N/A	54.9	61.6	68.5	74.4	82.9	89.1	N/A	100.0
32	N/A	H	6.3	44.6	49.1	msG	WT	N/A	448.1	171.7	111.8	52.2	40.6	30.2	N/A	57.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	49.1	18.8	12.3	5.7	4.5	3.3	N/A	6.3
SPLIT WT= 911.4							CUM WT %	N/A	49.1	67.9	80.2	85.9	90.4	93.7	N/A	100.0
35	N/A	H	8.1	28.3	63.6	msG	WT	N/A	639.2	71.2	59.3	60.1	59.5	33.9	N/A	81.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.6	7.1	5.9	6.0	5.9	3.4	N/A	8.1
SPLIT WT=1006.0							CUM WT %	N/A	63.6	70.7	76.6	82.6	88.5	91.9	N/A	100.0
40	N/A	H	8.4	31.2	60.4	msG	WT	N/A	604.3	65.6	57.4	70.0	70.4	49.1	N/A	84.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	60.4	6.6	5.7	7.0	7.0	4.9	N/A	8.4
SPLIT WT= 998.2							CUM WT %	N/A	60.4	66.9	72.7	79.7	86.7	91.6	N/A	100.0
45	N/A	H	6.8	56.7	36.4	msG	WT	N/A	324.7	147.4	105.3	88.8	98.6	65.8	N/A	60.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.4	16.5	11.8	10.0	11.1	7.4	N/A	6.8
SPLIT WT= 890.5							CUM WT %	N/A	36.4	53.0	64.8	74.7	85.8	93.2	N/A	100.0
50	N/A	H	7.2	49.9	42.9	msG	WT	N/A	380.0	172.3	103.5	77.7	55.3	33.2	N/A	63.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	42.9	19.5	11.7	8.8	6.2	3.8	N/A	7.2
SPLIT WT= 885.0							CUM WT %	N/A	42.9	62.3	74.0	82.8	89.0	92.8	N/A	100.0
55	N/A	H	5.8	28.0	66.1	msG	WT	N/A	645.4	115.2	60.4	37.1	34.2	26.8	N/A	57.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	66.1	11.8	6.2	3.8	3.5	2.8	N/A	5.9
SPLIT WT= 974.6							CUM WT %	N/A	66.1	77.9	84.1	87.9	91.4	94.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-003 ****

02/02/89

DEPTH	%CACO3	DW	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	N/A	H	4.8	27.2	68.0	N/A	WT	N/A	616.9	92.1	53.4	52.0	42.4	7.3	43.4	N/A
SORT= N/A MEDIAN= -1.00 MODE= N/A MEAN= N/A							WT %	N/A	68.0	10.2	5.9	5.7	4.7	0.8	4.8	N/A
SPLIT WT= 925.7							CUM WT %	N/A	68.0	78.1	84.0	89.7	94.4	95.2	100.0	N/A
65	N/A	H	7.9	28.4	63.7	msG	WT	N/A	622.3	87.2	61.0	64.4	49.5	15.7	N/A	77.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.7	8.9	6.2	6.6	5.1	1.6	N/A	7.9
SPLIT WT= 976.3							CUM WT %	N/A	63.7	72.6	78.8	85.4	90.5	92.1	N/A	100.0
70	N/A	H	9.7	35.0	55.2	msG	WT	N/A	543.8	104.8	77.4	77.3	57.3	28.1	N/A	95.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	55.2	10.6	7.9	7.9	5.8	2.9	N/A	9.7
SPLIT WT= 984.7							CUM WT %	N/A	55.2	65.9	73.7	81.6	87.4	90.3	N/A	100.0
75	N/A	H	7.2	24.8	67.9	msG	WT	N/A	702.9	76.0	52.5	39.0	47.6	41.8	N/A	75.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	67.9	7.3	5.1	3.8	4.6	4.0	N/A	7.3
SPLIT WT=1027.4							CUM WT %	N/A	67.9	75.3	80.3	84.1	88.7	92.8	N/A	100.0
85	N/A	H	7.6	64.1	28.4	(m)gS	WT	N/A	256.5	238.6	161.5	89.4	57.3	32.3	N/A	68.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.4	26.4	17.9	9.9	6.3	3.6	N/A	7.6
SPLIT WT= 897.7							CUM WT %	N/A	28.4	54.8	72.6	82.5	88.9	92.4	N/A	100.0
90	N/A	H	6.7	42.0	51.4	msG	WT	N/A	484.4	147.2	112.9	60.2	43.7	31.6	N/A	63.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.4	15.6	12.0	6.4	4.6	3.4	N/A	6.7
SPLIT WT= 940.9							CUM WT %	N/A	51.4	67.0	79.0	85.3	90.0	93.3	N/A	100.0
95	N/A	H	7.5	68.2	24.3	gS	WT	N/A	216.3	184.1	238.2	95.1	58.4	32.5	N/A	67.0
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	24.3	20.7	26.7	10.7	6.6	3.7	N/A	7.5
SPLIT WT= 890.6							CUM WT %	N/A	24.3	44.9	71.6	82.3	88.9	92.5	N/A	100.0
100	N/A	H	5.1	90.3	4.6	S	WT	N/A	33.2	195.6	260.9	88.5	55.6	25.9	N/A	36.4
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	4.6	27.3	39.2	12.4	7.8	3.6	N/A	5.1
SPLIT WT= 713.9							CUM WT %	N/A	4.6	32.0	71.2	83.5	91.3	94.9	N/A	100.0
105	N/A	H	4.9	84.9	10.2	gS	WT	N/A	78.9	264.6	280.7	81.7	30.5	0.0	N/A	37.6
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	10.2	34.2	36.3	10.6	3.9	0.0	N/A	4.9
SPLIT WT= 772.6							CUM WT %	N/A	10.2	44.4	80.7	91.2	95.2	95.2	N/A	100.0
110	N/A	H	4.3	88.4	7.3	(g)S	WT	N/A	52.6	201.7	281.5	95.0	36.7	19.4	N/A	30.7
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	7.3	28.1	39.2	13.2	5.1	2.7	N/A	4.3
SPLIT WT= 713.5							CUM WT %	N/A	7.3	35.4	74.7	87.9	93.0	95.7	N/A	100.0
115	N/A	H	3.2	91.2	5.6	(g)S	WT	N/A	44.3	192.4	353.9	117.7	40.9	18.1	N/A	25.3
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	5.6	24.3	44.7	14.9	5.2	2.3	N/A	3.2
SPLIT WT= 790.6							CUM WT %	N/A	5.6	29.9	74.5	89.4	94.5	96.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-003 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	N/A	H	2.6	87.2	10.2	gS	WT	N/A	78.2	141.8	260.1	193.4	61.5	14.2	N/A	20.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.2	18.4	33.8	25.1	8.0	1.9	N/A	2.6
SPLIT WT= 769.0							CUM WT %	N/A	10.2	28.6	62.4	87.5	95.5	97.4	N/A	100.0
125	N/A	H	3.5	91.8	4.7	S	WT	N/A	35.8	88.8	231.4	241.7	103.8	27.4	N/A	26.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.7	11.8	30.7	32.0	13.8	3.6	N/A	3.5
SPLIT WT= 754.9							CUM WT %	N/A	4.7	16.5	47.2	79.2	92.9	96.5	N/A	100.0
130	N/A	H	1.6	84.9	13.5	gS	WT	N/A	109.4	252.4	272.2	109.7	38.1	16.2	N/A	13.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.5	31.1	33.6	13.5	4.7	2.0	N/A	1.6
SPLIT WT= 817.0							CUM WT %	N/A	13.5	44.6	78.2	91.7	96.4	98.4	N/A	100.0
135	N/A	H	5.1	85.9	9.0	(g)S	WT	N/A	73.1	113.7	205.9	227.8	109.2	40.5	N/A	41.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.0	14.0	25.4	28.1	13.5	5.0	N/A	5.1
SPLIT WT= 812.8							CUM WT %	N/A	9.0	23.0	48.4	76.5	89.9	94.9	N/A	100.0
141	N/A	H	8.3	23.6	68.1	msG	WT	N/A	651.0	85.1	41.5	32.7	31.9	34.5	N/A	79.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	68.1	8.9	4.3	3.4	3.3	3.6	N/A	8.3
SPLIT WT= 956.3							CUM WT %	N/A	68.1	77.0	81.3	84.7	88.1	91.7	N/A	100.0
145	N/A	H	10.2	23.1	66.7	msG	WT	N/A	609.9	62.4	45.1	38.6	33.5	31.8	N/A	92.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	66.7	6.8	4.9	4.2	3.7	3.5	N/A	10.2
SPLIT WT= 920.8							CUM WT %	N/A	66.7	73.5	78.5	82.7	86.4	89.8	N/A	100.0
150	N/A	H	8.2	22.9	68.9	msG	WT	N/A	665.3	75.5	44.1	33.0	36.2	32.3	N/A	79.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	68.9	7.8	4.6	3.4	3.8	3.3	N/A	8.2
SPLIT WT= 967.8							CUM WT %	N/A	68.9	76.7	81.3	84.7	88.4	91.8	N/A	100.0
155	N/A	H	10.6	24.7	64.7	msG	WT	N/A	592.3	61.9	46.7	39.9	43.8	33.5	N/A	97.2
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	64.7	6.8	5.1	4.4	4.8	3.7	N/A	10.6
SPLIT WT= 914.7							CUM WT %	N/A	64.7	71.5	76.6	80.9	85.7	89.4	N/A	100.0
160	N/A	H	13.5	32.6	53.9	msG	WT	N/A	479.1	77.0	57.9	55.8	57.8	40.9	N/A	120.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	53.9	8.7	6.5	6.3	6.5	4.6	N/A	13.5
SPLIT WT= 886.1							CUM WT %	N/A	53.9	62.6	69.1	75.4	81.9	86.5	N/A	100.0
165	N/A	H	6.8	33.5	59.7	msG	WT	N/A	545.3	92.4	68.5	68.8	47.4	28.8	N/A	62.3
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	59.7	10.1	7.5	7.5	5.2	3.2	N/A	6.8
SPLIT WT= 906.3							CUM WT %	N/A	59.7	69.8	77.3	84.8	90.0	93.2	N/A	100.0
170	N/A	H	8.1	31.5	60.4	msG	WT	N/A	551.9	137.9	59.5	33.7	32.8	24.3	N/A	74.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	60.4	15.1	6.5	3.7	3.6	2.7	N/A	8.1
SPLIT WT= 913.1							CUM WT %	N/A	60.4	75.5	82.0	85.7	89.3	91.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-003 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	N/A	H	11.6	33.8	54.6	msG	WT	N/A	491.8	119.8	61.1	44.4	49.4	30.0	N/A	104.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	54.6	13.3	6.8	4.9	5.5	3.3	N/A	11.6
SPLIT WT= 900.1							CUM WT %	N/A	54.6	67.9	74.7	79.6	85.1	88.4	N/A	100.0
180	N/A	H	7.7	28.5	63.8	msG	WT	N/A	596.3	105.3	60.5	40.6	32.5	28.0	N/A	72.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	63.8	11.3	6.5	4.3	3.5	3.0	N/A	7.7
SPLIT WT= 935.9							CUM WT %	N/A	63.8	75.0	81.5	85.8	89.3	92.3	N/A	100.0
185	N/A	H	6.2	53.2	40.6	msG	WT	N/A	366.0	236.6	118.6	56.5	38.9	29.1	N/A	55.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.6	26.3	13.2	6.3	4.3	3.2	N/A	6.2
SPLIT WT= 903.3							CUM WT %	N/A	40.6	66.9	80.0	86.3	90.6	93.8	N/A	100.0
190	N/A	H	6.7	62.6	30.7	sG	WT	N/A	278.0	280.4	152.2	64.5	38.0	30.7	N/A	60.7
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	30.7	31.0	16.8	7.1	4.2	3.4	N/A	6.7
SPLIT WT= 910.6							CUM WT %	N/A	30.7	61.7	78.6	85.7	89.9	93.3	N/A	100.0
195	N/A	H	10.8	60.5	28.6	(m)gS	WT	N/A	220.8	149.8	94.6	100.8	74.0	47.5	N/A	83.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.6	19.4	12.3	13.1	9.6	6.2	N/A	10.8
SPLIT WT= 770.4							CUM WT %	N/A	28.6	48.1	60.3	73.4	83.0	89.2	N/A	100.0
200	N/A	H	4.2	50.7	45.1	sG	WT	N/A	437.8	158.2	173.3	94.0	42.6	24.7	N/A	41.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.1	16.3	17.8	9.7	4.4	2.5	N/A	4.2
SPLIT WT= 969.6							CUM WT %	N/A	45.1	61.3	79.2	88.8	93.2	95.8	N/A	100.0
205	N/A	H	13.5	56.5	30.0	msG	WT	N/A	275.8	132.9	125.5	96.9	76.8	88.2	N/A	124.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.0	14.4	13.6	10.5	8.3	9.6	N/A	13.5
SPLIT WT= 926.3							CUM WT %	N/A	30.0	44.4	58.1	68.6	76.9	86.5	N/A	100.0
210	N/A	H	9.2	43.2	47.6	msG	WT	N/A	377.8	105.0	82.7	61.7	54.0	39.6	N/A	73.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.6	13.2	10.4	7.8	6.8	5.0	N/A	9.2
SPLIT WT= 795.4							CUM WT %	N/A	47.6	60.8	71.2	79.0	85.8	90.8	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-004 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
4	N/A	N/	3.2	22.2	74.6	msG	WT	N/A	610.0	33.3	57.8	42.7	21.8	26.2	N/A	25.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	74.6	4.1	7.1	5.2	2.7	3.2	N/A	3.2
SPLIT WT= 814.5							CUM WT %	N/A	74.6	78.7	85.8	91.0	93.6	96.8	N/A	100.0
10	N/A	H	13.1	39.1	47.9	msG	WT	N/A	399.7	65.5	51.3	56.9	64.5	88.1	N/A	109.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	47.9	7.8	6.1	6.8	7.7	10.6	N/A	13.1
SPLIT WT= 832.5							CUM WT %	N/A	47.9	55.7	61.8	68.7	76.4	86.9	N/A	100.0
15	N/A	H	10.4	63.4	26.1	(m)gS	WT	N/A	214.0	97.1	105.2	158.8	106.2	51.7	N/A	85.5
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	26.2	11.9	12.9	19.4	13.0	6.3	N/A	10.5
SPLIT WT= 816.5							CUM WT %	N/A	26.2	38.0	50.9	70.3	83.2	89.6	N/A	100.0
20	N/A	H	7.6	81.3	11.1	gS	WT	N/A	77.6	47.7	181.6	212.1	85.0	43.9	N/A	53.5
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	11.1	6.8	25.9	30.2	12.1	6.3	N/A	7.6
SPLIT WT= 701.8							CUM WT %	N/A	11.1	17.9	43.8	74.0	86.1	92.4	N/A	100.0
25	N/A	H	6.2	83.5	10.3	gS	WT	N/A	67.2	51.7	110.3	207.3	123.7	51.5	N/A	40.3
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	10.3	7.9	16.9	31.8	19.0	7.9	N/A	6.2
SPLIT WT= 648.4							CUM WT %	N/A	10.3	18.2	35.2	67.0	85.9	93.8	N/A	100.0
30	N/A	H	4.6	69.6	25.8	gS	WT	N/A	204.6	199.1	149.6	102.2	67.5	34.4	N/A	36.8
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.8	25.1	18.8	12.9	8.5	4.3	N/A	4.6
SPLIT WT= 792.0							CUM WT %	N/A	25.8	50.8	69.7	82.5	91.0	95.4	N/A	100.0
35	N/A	H	7.7	55.0	37.3	msG	WT	N/A	294.2	131.8	92.6	75.6	76.7	57.7	N/A	61.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	37.3	16.7	11.7	9.6	9.7	7.3	N/A	7.7
SPLIT WT= 794.7							CUM WT %	N/A	37.3	54.0	65.7	75.3	85.0	92.3	N/A	100.0
40	N/A	H	9.0	38.2	52.8	msG	WT	N/A	387.2	99.9	56.9	46.7	43.1	33.0	N/A	66.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.8	13.6	7.8	6.4	5.9	4.5	N/A	9.0
SPLIT WT= 729.8							CUM WT %	N/A	52.8	66.5	74.2	80.6	86.5	91.0	N/A	100.0
45	N/A	H	11.1	37.1	51.7	msG	WT	N/A	478.6	92.9	65.7	75.3	70.2	39.3	N/A	103.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.7	10.0	7.1	8.1	7.6	4.3	N/A	11.1
SPLIT WT= 926.1							CUM WT %	N/A	51.7	61.8	68.9	77.0	84.6	88.9	N/A	100.0
50	N/A	H	9.8	40.6	49.6	msG	WT	N/A	495.0	101.4	68.0	66.3	109.7	59.7	N/A	97.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	49.6	10.2	6.8	6.6	11.0	6.0	N/A	9.8
SPLIT WT= 995.8							CUM WT %	N/A	49.6	59.8	66.6	73.2	84.2	90.2	N/A	100.0
55	N/A	H	11.7	29.8	58.5	msG	WT	N/A	450.3	54.8	46.2	41.1	48.7	39.0	N/A	90.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.5	7.1	6.0	5.3	6.3	5.1	N/A	11.7
SPLIT WT= 774.0							CUM WT %	N/A	58.5	65.6	71.6	76.9	83.2	88.3	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-004 ****

02/02/89

DEPTH	%CACØ3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (Ø)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
6Ø	N/A	H	16.7	4Ø.3	43.Ø	msG	WT	N/A	361.2	77.5	58.1	82.5	69.2	51.8	N/A	14Ø.5
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	43.Ø	9.2	6.9	9.8	8.2	6.2	N/A	16.7
SPLIT WT= 839.5							CUM WT %	N/A	43.Ø	52.2	59.1	68.9	77.1	83.3	N/A	1ØØ.Ø
65	N/A	H	7.6	23.3	69.1	msG	WT	N/A	616.3	62.Ø	41.6	38.4	38.3	27.7	N/A	67.6
SORT=	N/A	MEDIAN=	-1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	69.1	7.Ø	4.7	4.3	4.3	3.1	N/A	7.6
SPLIT WT= 896.9							CUM WT %	N/A	69.1	76.1	8Ø.7	85.Ø	89.3	92.4	N/A	1ØØ.Ø
7Ø	N/A	H	16.1	47.2	36.7	msG	WT	N/A	3ØØ.7	91.Ø	69.4	86.8	83.4	56.2	N/A	132.1
SORT=	N/A	MEDIAN=	1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	36.7	11.1	8.5	1Ø.6	1Ø.2	6.9	N/A	16.1
SPLIT WT= 816.4							CUM WT %	N/A	36.7	47.8	56.3	66.9	77.Ø	83.9	N/A	1ØØ.Ø
75	N/A	H	13.Ø	41.7	45.4	msG	WT	N/A	341.Ø	79.4	59.8	63.5	62.9	47.5	N/A	97.4
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	45.4	1Ø.6	8.Ø	8.5	8.4	6.3	N/A	13.Ø
SPLIT WT= 748.5							CUM WT %	N/A	45.4	56.Ø	63.9	72.4	8Ø.7	87.1	N/A	1ØØ.Ø
8Ø	N/A	H	8.8	45.4	45.7	msG	WT	N/A	412.Ø	141.2	114.2	66.7	64.2	23.Ø	N/A	79.4
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	45.7	15.7	12.7	7.4	7.1	2.6	N/A	8.8
SPLIT WT= 9Ø8.4							CUM WT %	N/A	45.7	61.4	74.1	81.5	88.6	91.2	N/A	1ØØ.Ø
85	N/A	H	8.2	28.7	63.Ø	msG	WT	N/A	575.5	67.6	47.4	56.Ø	48.8	42.5	N/A	75.3
SORT=	N/A	MEDIAN=	-1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	63.Ø	7.4	5.2	6.1	5.3	4.7	N/A	8.3
SPLIT WT= 913.6							CUM WT %	N/A	63.Ø	7Ø.4	75.6	81.8	87.1	91.7	N/A	1ØØ.Ø
9Ø	N/A	H	8.8	66.5	24.7	(m)gS	WT	N/A	174.8	124.1	149.9	95.4	6Ø.9	41.2	N/A	62.3
SORT=	N/A	MEDIAN=	1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	24.7	17.5	21.2	13.5	8.6	5.8	N/A	8.8
SPLIT WT= 713.1							CUM WT %	N/A	24.7	42.2	63.3	76.8	85.4	91.2	N/A	1ØØ.Ø
95	N/A	H	1Ø.9	61.6	27.5	(m)gS	WT	N/A	2Ø9.6	13Ø.1	128.3	1Ø1.1	71.5	37.9	N/A	82.8
SORT=	N/A	MEDIAN=	1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	27.5	17.1	16.9	13.3	9.4	5.Ø	N/A	1Ø.9
SPLIT WT= 757.4							CUM WT %	N/A	27.5	44.6	61.5	74.8	84.1	89.1	N/A	1ØØ.Ø
1ØØ	N/A	H	11.4	44.9	43.7	msG	WT	N/A	384.7	113.8	79.2	82.Ø	7Ø.9	49.Ø	N/A	1ØØ.5
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	43.7	12.9	9.Ø	9.3	8.1	5.6	N/A	11.4
SPLIT WT= 874.7							CUM WT %	N/A	43.7	56.6	65.6	75.Ø	83.Ø	88.6	N/A	1ØØ.Ø
1Ø5	N/A	H	13.3	6Ø.8	35.9	msG	WT	N/A	312.1	1Ø6.9	82.8	111.9	92.5	48.4	N/A	115.7
SORT=	N/A	MEDIAN=	1.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	35.9	12.3	9.5	12.9	1Ø.6	5.6	N/A	13.3
SPLIT WT= 874.3							CUM WT %	N/A	35.9	48.1	57.7	7Ø.5	81.1	86.7	N/A	1ØØ.Ø
11Ø	N/A	H	11.6	44.9	43.5	msG	WT	N/A	388.Ø	115.1	84.5	69.8	84.8	45.8	N/A	1Ø3.7
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	43.5	12.9	9.5	7.8	9.5	5.1	N/A	11.6
SPLIT WT= 889.1							CUM WT %	N/A	43.5	56.4	65.9	73.7	83.2	88.4	N/A	1ØØ.Ø

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-004 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	N/A	H	14.1	47.4	38.5	msG	WT	N/A	331.5	116.1	82.4	75.5	80.1	53.7	N/A	121.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.5	13.5	9.6	8.8	9.3	6.2	N/A	14.1
SPLIT WT= 856.2							CUM WT %	N/A	38.5	52.0	61.6	70.3	79.6	85.9	N/A	100.0
120	N/A	H	12.9	37.7	49.4	msG	WT	N/A	400.3	82.6	59.6	54.3	69.9	39.3	N/A	104.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.4	10.2	7.4	6.7	8.6	4.9	N/A	12.9
SPLIT WT= 806.8							CUM WT %	N/A	49.4	59.6	66.9	73.6	82.2	87.1	N/A	100.0
125	N/A	H	17.0	44.4	38.6	msG	WT	N/A	317.9	88.8	65.0	78.0	77.2	56.8	N/A	140.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.6	10.8	7.9	9.5	9.4	6.9	N/A	17.0
SPLIT WT= 817.6							CUM WT %	N/A	38.6	49.4	57.3	66.7	76.1	83.0	N/A	100.0
130	N/A	H	11.2	37.4	51.4	msG	WT	N/A	370.8	76.5	50.5	58.4	49.4	35.3	N/A	80.5
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.4	10.6	7.0	8.1	6.9	4.9	N/A	11.2
SPLIT WT= 725.2							CUM WT %	N/A	51.4	62.0	69.0	77.1	84.0	88.8	N/A	100.0
135	N/A	H	15.3	50.1	34.6	msG	WT	N/A	305.1	106.2	81.0	111.0	94.5	49.7	N/A	135.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.6	12.0	9.2	12.6	10.7	5.6	N/A	15.4
SPLIT WT= 879.9							CUM WT %	N/A	34.6	46.6	55.8	68.3	79.0	84.7	N/A	100.0
140	N/A	H	13.7	54.4	31.9	msG	WT	N/A	233.5	141.7	85.1	57.7	55.1	58.3	N/A	100.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.9	19.4	11.6	7.9	7.5	8.0	N/A	13.7
SPLIT WT= 736.6							CUM WT %	N/A	31.9	51.3	62.9	70.8	78.3	86.3	N/A	100.0
145	N/A	H	8.7	40.7	50.6	msG	WT	N/A	402.7	113.2	74.6	55.6	45.7	35.3	N/A	69.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.6	14.2	9.4	7.0	5.7	4.4	N/A	8.7
SPLIT WT= 800.8							CUM WT %	N/A	50.6	64.8	74.2	81.2	86.9	91.3	N/A	100.0
150	N/A	H	13.3	48.3	38.4	msG	WT	N/A	333.9	118.6	87.0	85.0	82.4	46.7	N/A	115.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.4	13.7	10.0	9.8	9.5	5.4	N/A	13.3
SPLIT WT= 864.7							CUM WT %	N/A	38.4	52.1	62.1	71.9	81.4	86.7	N/A	100.0
155	N/A	H	7.9	38.2	53.9	msG	WT	N/A	469.7	102.3	69.5	64.5	61.7	34.4	N/A	68.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	54.0	11.8	8.0	7.4	7.1	4.0	N/A	7.9
SPLIT WT= 867.2							CUM WT %	N/A	54.0	65.7	73.7	81.1	88.2	92.1	N/A	100.0
160	N/A	H	12.4	45.5	42.0	msG	WT	N/A	340.1	86.2	79.7	80.4	74.9	47.2	N/A	100.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.1	10.7	9.9	9.9	9.3	5.8	N/A	12.4
SPLIT WT= 813.6							CUM WT %	N/A	42.1	52.7	62.6	72.5	81.8	87.6	N/A	100.0
165	N/A	H	11.1	54.0	34.9	msG	WT	N/A	290.3	128.1	95.0	103.5	82.5	40.6	N/A	92.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.9	15.4	11.4	12.4	9.9	4.9	N/A	11.1
SPLIT WT= 828.7							CUM WT %	N/A	34.9	50.2	61.7	74.1	84.0	88.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-004 ****

02/02/89

DEPTH	%CACØ3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (Ø)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
17Ø	N/A	H	4.7	68.6	26.7	gS	WT	N/A	22Ø.5	256.8	172.5	71.1	41.7	23.4	N/A	38.9
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	Ø.ØØ	MEAN= N/A	WT %	N/A	26.7	31.1	2Ø.9	8.6	5.1	2.8	N/A	4.7
SPLIT WT= 821.6							CUM WT %	N/A	26.7	57.9	78.8	87.4	92.5	95.3	N/A	1ØØ.Ø
175	N/A	H	7.5	71.5	21.1	gS	WT	N/A	152.1	194.7	147.3	91.Ø	54.Ø	29.1	N/A	53.9
SORT=	N/A	MEDIAN=	1.ØØ	MODE=	Ø.ØØ	MEAN= N/A	WT %	N/A	21.1	27.Ø	2Ø.4	12.6	7.5	4.Ø	N/A	7.5
SPLIT WT= 726.7							CUM WT %	N/A	21.1	48.Ø	68.4	81.Ø	88.5	92.5	N/A	1ØØ.Ø

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-005 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	2.3	21.8	75.9	sG	WT	N/A	631.8	26.1	48.8	39.2	35.8	31.8	N/A	19.3
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	75.9	3.1	5.9	4.7	4.3	3.8	N/A	2.3
SPLIT WT= 829.6							CUM WT %	N/A	75.9	79.0	84.9	89.6	93.9	97.7	N/A	100.0
10	N/A	H	9.9	53.3	36.7	msG	WT	N/A	316.4	103.9	118.9	114.9	73.3	48.3	N/A	85.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.7	12.1	13.8	13.3	8.5	5.6	N/A	9.9
SPLIT WT= 861.9							CUM WT %	N/A	36.7	48.8	62.6	75.9	84.5	90.1	N/A	100.0
15	N/A	H	10.2	49.6	40.2	msG	WT	N/A	337.8	92.1	89.5	102.6	77.8	54.3	N/A	85.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.2	11.0	10.7	12.2	9.3	6.5	N/A	10.2
SPLIT WT= 837.3							CUM WT %	N/A	40.2	51.2	61.9	74.1	83.3	89.8	N/A	100.0
20	N/A	H	9.6	43.2	47.2	msG	WT	N/A	463.3	104.0	85.0	104.2	76.7	53.5	N/A	94.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.2	10.6	8.7	10.6	7.8	5.5	N/A	9.6
SPLIT WT= 976.3							CUM WT %	N/A	47.2	57.8	66.5	77.1	85.0	90.4	N/A	100.0
25	N/A	H	10.5	70.6	18.9	(m)gS	WT	N/A	152.4	53.7	61.0	200.3	167.5	85.9	N/A	84.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	18.9	6.7	7.6	24.9	20.8	10.7	N/A	10.5
SPLIT WT= 805.1							CUM WT %	N/A	18.9	25.6	33.2	58.0	78.8	89.5	N/A	100.0
30	N/A	H	7.7	88.6	3.7	S	WT	N/A	26.8	25.6	143.7	294.0	120.8	56.7	N/A	55.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.7	3.5	19.9	40.7	16.7	7.8	N/A	7.7
SPLIT WT= 722.0							CUM WT %	N/A	3.7	7.3	27.1	67.8	84.5	92.3	N/A	100.0
35	N/A	H	7.0	89.8	3.2	S	WT	N/A	22.9	12.8	89.8	332.2	155.7	58.5	N/A	50.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.2	1.8	12.4	46.0	21.6	8.1	N/A	7.0
SPLIT WT= 721.2							CUM WT %	N/A	3.2	4.9	17.4	63.4	84.9	93.0	N/A	100.0
40	N/A	H	6.1	75.1	18.8	gS	WT	N/A	146.5	126.2	121.0	172.9	110.3	54.9	N/A	47.7
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	18.8	16.2	15.5	22.2	14.2	7.0	N/A	6.1
SPLIT WT= 778.1							CUM WT %	N/A	18.8	35.0	50.5	72.7	86.8	93.9	N/A	100.0
45	N/A	H	8.0	44.4	47.6	msG	WT	N/A	417.0	87.1	80.5	94.3	68.1	58.5	N/A	69.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.7	10.0	9.2	10.8	7.8	6.7	N/A	8.0
SPLIT WT= 874.1							CUM WT %	N/A	47.7	57.6	66.8	77.6	85.4	92.0	N/A	100.0
50	N/A	H	7.7	20.4	71.9	msG	WT	N/A	714.6	53.7	35.9	32.4	44.0	37.1	N/A	76.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	71.9	5.4	3.6	3.3	4.4	3.7	N/A	7.7
SPLIT WT= 992.2							CUM WT %	N/A	71.9	77.3	80.9	84.2	88.6	92.3	N/A	100.0
55	N/A	H	8.1	23.5	68.4	msG	WT	N/A	646.6	55.1	39.3	42.7	41.5	44.1	N/A	76.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	68.4	5.8	4.2	4.5	4.4	4.7	N/A	8.1
SPLIT WT= 942.9							CUM WT %	N/A	68.4	74.2	78.3	82.9	87.2	91.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-005 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	N/A	H	8.6	27.5	63.9	msG	WT	N/A	626.3	65.6	46.8	60.5	49.2	47.4	N/A	84.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	63.9	6.7	4.8	6.2	5.0	4.8	N/A	8.6
SPLIT WT= 977.2							CUM WT %	N/A	63.9	70.6	75.3	81.5	86.5	91.4	N/A	100.0
70	N/A	H	7.4	29.7	62.9	msG	WT	N/A	479.1	76.3	45.3	38.6	34.7	31.1	N/A	56.3
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	62.9	10.0	6.0	5.1	4.6	4.1	N/A	7.4
SPLIT WT= 762.9							CUM WT %	N/A	62.9	72.9	78.9	84.0	88.5	92.6	N/A	100.0
75	N/A	H	12.0	29.7	58.2	msG	WT	N/A	431.5	65.9	38.4	39.3	45.3	31.5	N/A	89.2
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	58.2	8.9	5.2	5.3	6.1	4.3	N/A	12.0
SPLIT WT= 746.7							CUM WT %	N/A	58.2	67.1	72.3	77.6	83.7	88.0	N/A	100.0
80	N/A	H	14.2	36.1	49.7	msG	WT	N/A	381.3	75.9	49.7	51.1	53.6	46.7	N/A	108.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.7	9.9	6.5	6.7	7.0	6.1	N/A	14.2
SPLIT WT= 764.3							CUM WT %	N/A	49.7	59.6	66.1	72.7	79.7	85.8	N/A	100.0
85	N/A	H	7.7	24.6	67.7	msG	WT	N/A	609.2	70.1	41.1	33.9	45.8	30.3	N/A	69.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	67.7	7.8	4.6	3.8	5.1	3.4	N/A	7.7
SPLIT WT= 902.8							CUM WT %	N/A	67.7	75.5	80.1	83.8	88.9	92.3	N/A	100.0
90	N/A	H	8.5	24.2	67.2	msG	WT	N/A	646.9	75.9	43.9	32.7	38.5	41.9	N/A	82.2
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	67.3	7.9	4.6	3.4	4.0	4.4	N/A	8.5
SPLIT WT= 956.6							CUM WT %	N/A	67.3	75.1	79.7	83.1	87.1	91.5	N/A	100.0
95	N/A	H	8.4	23.1	68.5	msG	WT	N/A	677.0	69.0	40.7	30.1	47.3	41.4	N/A	82.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	68.5	7.0	4.1	3.1	4.8	4.2	N/A	8.4
SPLIT WT= 986.9							CUM WT %	N/A	68.5	75.5	79.6	82.7	87.5	91.6	N/A	100.0
105	N/A	H	6.6	39.1	54.3	msG	WT	N/A	522.5	206.1	77.7	33.1	30.5	28.6	N/A	64.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	54.3	21.4	8.1	3.4	3.2	3.0	N/A	6.7
SPLIT WT= 956.3							CUM WT %	N/A	54.3	75.7	83.8	87.2	90.4	93.4	N/A	100.0
110	N/A	H	8.5	22.0	69.5	msG	WT	N/A	640.4	51.9	32.6	39.2	39.8	39.7	N/A	78.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	69.5	5.6	3.5	4.3	4.3	4.3	N/A	8.5
SPLIT WT= 919.9							CUM WT %	N/A	69.5	75.1	78.7	82.9	87.2	91.5	N/A	100.0
115	N/A	H	12.7	28.1	59.2	msG	WT	N/A	556.5	61.7	40.8	51.0	52.8	57.8	N/A	119.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	59.2	6.6	4.3	5.4	5.6	6.2	N/A	12.7
SPLIT WT= 937.3							CUM WT %	N/A	59.2	65.7	70.1	75.5	81.1	87.3	N/A	100.0
120	N/A	H	8.9	21.9	69.2	msG	WT	N/A	668.0	46.3	34.7	32.7	49.5	47.7	N/A	86.3
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	69.2	4.8	3.6	3.4	5.1	4.9	N/A	8.9
SPLIT WT= 964.9							CUM WT %	N/A	69.2	74.0	77.6	81.0	86.1	91.1	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
125	N/A	H	8.3	32.7	59.0	msG	WT	N/A	582.4	75.7	54.9	84.1	67.3	40.8	N/A	81.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.0	7.7	5.6	8.5	6.8	4.1	N/A	8.3
SPLIT WT= 983.0							CUM WT %	N/A	59.0	66.7	72.2	80.8	87.6	91.7	N/A	100.0
130	N/A	H	6.2	31.7	62.2	msG	WT	N/A	571.4	106.0	59.6	56.8	39.8	28.8	N/A	56.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	62.2	11.5	6.5	6.2	4.3	3.1	N/A	6.2
SPLIT WT= 918.9							CUM WT %	N/A	62.2	73.7	80.2	86.4	90.7	93.8	N/A	100.0
135	N/A	H	6.1	34.3	59.6	msG	WT	N/A	536.4	143.8	64.0	41.2	33.7	26.0	N/A	54.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.6	16.0	7.1	4.6	3.8	2.9	N/A	6.1
SPLIT WT= 903.1							CUM WT %	N/A	59.6	75.6	82.7	87.3	91.1	93.9	N/A	100.0
140	N/A	H	6.0	32.3	61.7	msG	WT	N/A	525.7	129.8	59.9	32.6	29.5	23.4	N/A	51.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	61.7	15.2	7.0	3.8	3.5	2.8	N/A	6.0
SPLIT WT= 856.1							CUM WT %	N/A	61.7	76.9	84.0	87.8	91.2	94.0	N/A	100.0
145	N/A	H	7.1	48.3	44.6	msG	WT	N/A	404.1	187.1	121.5	62.6	38.3	28.0	N/A	64.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	44.6	20.7	13.4	6.9	4.2	3.1	N/A	7.1
SPLIT WT= 909.7							CUM WT %	N/A	44.6	65.3	78.7	85.6	89.8	92.9	N/A	100.0
150	N/A	H	10.3	70.4	19.3	(m)gS	WT	N/A	167.5	224.4	144.3	126.0	83.5	33.4	N/A	89.3
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	19.3	25.8	16.6	14.5	9.6	3.9	N/A	10.3
SPLIT WT= 876.1							CUM WT %	N/A	19.3	45.1	61.8	76.3	85.9	89.7	N/A	100.0
155	N/A	H	4.3	54.6	41.1	sG	WT	N/A	383.2	220.8	120.3	63.8	42.5	61.3	N/A	39.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.1	23.7	12.9	6.9	4.6	6.6	N/A	4.3
SPLIT WT= 925.6							CUM WT %	N/A	41.1	64.8	77.7	84.6	89.1	95.7	N/A	100.0
160	N/A	H	4.0	76.6	19.4	gS	WT	N/A	167.4	341.5	181.5	70.9	44.4	22.4	N/A	34.6
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	19.4	39.6	21.0	8.2	5.2	2.6	N/A	4.0
SPLIT WT= 858.5							CUM WT %	N/A	19.4	59.0	80.0	88.3	93.4	96.0	N/A	100.0
165	N/A	H	6.2	72.3	21.5	gS	WT	N/A	187.4	358.4	135.1	68.6	44.4	22.8	N/A	54.1
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	21.5	41.2	15.5	7.9	5.1	2.6	N/A	6.2
SPLIT WT= 867.1							CUM WT %	N/A	21.5	62.7	78.2	86.1	91.2	93.8	N/A	100.0
170	N/A	H	10.3	72.0	17.7	(m)gS	WT	N/A	144.9	242.4	156.5	93.0	64.9	34.5	N/A	84.7
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	17.7	29.5	19.1	11.3	7.9	4.2	N/A	10.3
SPLIT WT= 817.1							CUM WT %	N/A	17.7	47.2	66.2	77.6	85.5	89.7	N/A	100.0
175	N/A	H	8.8	70.5	20.7	(m)gS	WT	N/A	174.4	233.2	163.3	97.4	68.6	32.5	N/A	74.6
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	20.7	27.6	19.4	11.5	8.1	3.9	N/A	8.8
SPLIT WT= 841.5							CUM WT %	N/A	20.7	48.3	67.6	79.2	87.3	91.2	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
180	N/A	H	5.6	62.0	32.4	sG	WT	N/A	288.3	269.6	147.5	63.6	46.6	23.8	N/A	50.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.4	30.3	16.6	7.2	5.2	2.7	N/A	5.6
SPLIT WT= 888.2							CUM WT %	N/A	32.4	62.7	79.3	86.5	91.7	94.4	N/A	100.0
185	N/A	H	10.4	40.9	48.7	msG	WT	N/A	438.2	142.3	69.6	64.5	46.2	46.1	N/A	93.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.7	15.8	7.7	7.2	5.1	5.1	N/A	10.4
SPLIT WT= 903.3							CUM WT %	N/A	48.7	64.5	72.2	79.4	84.5	89.6	N/A	100.0
190	N/A	H	10.8	47.2	42.0	msG	WT	N/A	323.7	119.7	79.8	68.3	59.0	37.4	N/A	83.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.0	15.5	10.3	8.9	7.7	4.9	N/A	10.8
SPLIT WT= 777.7							CUM WT %	N/A	42.0	57.5	67.8	76.7	84.3	89.2	N/A	100.0
192	N/A	H	0.7	95.5	3.8	S	WT	N/A	27.8	240.8	321.6	105.8	21.9	3.0	N/A	5.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.8	33.2	44.3	14.6	3.0	0.4	N/A	0.7
SPLIT WT= 727.7							CUM WT %	N/A	3.8	37.0	81.3	95.9	98.9	99.3	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	6.9	48.4	44.7	msG	WT	N/A	265.0	29.0	56.3	75.4	42.7	83.3	N/A	41.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	44.7	4.9	9.5	12.7	7.2	14.1	N/A	6.9
SPLIT WT= 595.0							CUM WT %	N/A	44.7	49.6	59.1	71.8	79.0	93.1	N/A	100.0
10	N/A	H	5.7	20.3	74.0	msG	WT	N/A	709.0	52.1	34.6	38.6	38.7	30.4	N/A	54.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	74.0	5.4	3.6	4.0	4.0	3.2	N/A	5.7
SPLIT WT= 957.9							CUM WT %	N/A	74.0	79.5	83.1	87.1	91.1	94.3	N/A	100.0
15	N/A	H	8.5	32.6	58.9	msG	WT	N/A	577.9	65.8	58.5	68.2	79.1	48.4	N/A	83.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.9	6.7	6.0	7.0	8.1	4.9	N/A	8.5
SPLIT WT= 981.1							CUM WT %	N/A	58.9	65.6	71.6	78.5	86.6	91.5	N/A	100.0
20	N/A	H	9.5	61.5	29.0	(m)gS	WT	N/A	238.2	32.2	41.3	84.1	241.9	105.0	N/A	77.8
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	29.0	3.9	5.0	10.3	29.5	12.8	N/A	9.5
SPLIT WT= 825.1							CUM WT %	N/A	29.0	33.0	38.0	48.2	77.7	90.5	N/A	100.0
25	N/A	H	10.8	77.1	12.1	(m)gS	WT	N/A	86.1	12.0	21.6	88.4	306.1	120.8	N/A	76.8
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	12.1	1.7	3.0	12.4	43.0	17.0	N/A	10.8
SPLIT WT= 716.4							CUM WT %	N/A	12.1	13.8	16.8	29.2	72.2	89.2	N/A	100.0
30	N/A	H	9.1	88.7	2.2	S	WT	N/A	16.0	22.3	134.4	220.9	188.6	87.8	N/A	67.2
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	2.2	3.0	18.2	30.0	25.6	11.9	N/A	9.1
SPLIT WT= 737.3							CUM WT %	N/A	2.2	5.2	23.4	53.4	79.0	90.9	N/A	100.0
35	N/A	H	8.5	86.0	5.4	(g)S	WT	N/A	35.8	82.0	96.4	160.2	158.0	71.4	N/A	56.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	5.4	12.4	14.6	24.3	23.9	10.8	N/A	8.5
SPLIT WT= 659.4							CUM WT %	N/A	5.4	17.8	32.4	56.7	80.6	91.5	N/A	100.0
40	N/A	H	4.7	77.6	17.6	gS	WT	N/A	144.1	167.7	169.5	131.0	115.6	51.2	N/A	38.7
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	17.6	20.5	20.7	16.0	14.1	6.3	N/A	4.7
SPLIT WT= 819.5							CUM WT %	N/A	17.6	38.1	58.9	74.9	89.0	95.3	N/A	100.0
45	N/A	H	6.0	75.1	18.9	gS	WT	N/A	161.4	119.5	228.0	152.4	87.3	53.9	N/A	51.5
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	18.9	14.0	26.7	17.9	10.2	6.3	N/A	6.0
SPLIT WT= 852.6							CUM WT %	N/A	18.9	32.9	59.6	77.4	87.7	94.0	N/A	100.0
50	N/A	H	5.3	31.7	63.0	msG	WT	N/A	584.0	70.9	73.0	68.0	49.7	32.1	N/A	48.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.0	7.7	7.9	7.3	5.4	3.5	N/A	5.3
SPLIT WT= 929.2							CUM WT %	N/A	63.0	70.7	78.6	85.9	91.3	94.7	N/A	100.0
55	N/A	H	6.4	27.9	65.7	msG	WT	N/A	687.9	79.4	56.6	65.4	55.4	34.8	N/A	66.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	65.7	7.6	5.4	6.3	5.3	3.3	N/A	6.4
SPLIT WT=1050.4							CUM WT %	N/A	65.7	73.3	78.7	85.0	90.3	93.6	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	N/A	H	5.8	21.4	72.8	msG	WT	N/A	720.2	83.7	42.4	29.9	31.3	24.5	N/A	57.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	72.8	8.5	4.3	3.0	3.2	2.5	N/A	5.9
SPLIT WT= 987.8							CUM WT %	N/A	72.8	81.2	85.5	88.5	91.7	94.1	N/A	100.0
65	N/A	H	6.4	35.6	58.0	msG	WT	N/A	578.2	124.4	87.4	73.4	43.1	27.2	N/A	63.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.0	12.5	8.8	7.4	4.3	2.7	N/A	6.4
SPLIT WT= 993.2							CUM WT %	N/A	58.0	70.5	79.2	86.6	90.9	93.6	N/A	100.0
70	N/A	H	8.1	40.5	51.4	msG	WT	N/A	480.3	133.6	73.6	87.5	50.1	33.7	N/A	76.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.4	14.3	7.9	9.4	5.4	3.6	N/A	8.1
SPLIT WT= 926.4							CUM WT %	N/A	51.4	65.7	73.5	82.9	88.3	91.9	N/A	100.0
75	N/A	H	6.2	47.5	46.3	msG	WT	N/A	372.1	149.8	86.1	77.0	44.5	24.4	N/A	49.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	46.3	18.6	10.7	9.6	5.5	3.0	N/A	6.2
SPLIT WT= 800.4							CUM WT %	N/A	46.3	64.9	75.6	85.2	90.8	93.8	N/A	100.0
80	N/A	H	9.2	41.1	49.7	msG	WT	N/A	450.7	105.1	73.1	86.6	69.4	38.2	N/A	82.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	49.8	11.6	8.1	9.6	7.7	4.2	N/A	9.2
SPLIT WT= 902.1							CUM WT %	N/A	49.8	61.4	69.4	79.0	86.6	90.9	N/A	100.0
85	N/A	H	14.9	39.3	45.9	msG	WT	N/A	343.6	86.0	68.6	73.0	58.2	8.1	N/A	111.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.9	11.5	9.2	9.8	7.8	1.1	N/A	14.9
SPLIT WT= 748.6							CUM WT %	N/A	45.9	57.4	66.5	76.3	84.1	85.1	N/A	100.0
90	N/A	H	4.5	70.3	25.2	gS	WT	N/A	210.8	139.9	235.4	127.5	56.3	28.9	N/A	37.4
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	25.2	16.7	28.2	15.3	6.7	3.5	N/A	4.5
SPLIT WT= 844.9							CUM WT %	N/A	25.2	41.9	70.1	85.3	92.1	95.5	N/A	100.0
95	N/A	H	4.5	79.0	16.5	gS	WT	N/A	139.6	181.1	239.4	140.9	71.5	33.8	N/A	38.0
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	16.5	21.5	28.4	16.7	8.5	4.0	N/A	4.5
SPLIT WT= 842.6							CUM WT %	N/A	16.5	38.0	66.3	83.0	91.5	95.5	N/A	100.0
100	N/A	H	8.8	29.1	62.1	msG	WT	N/A	614.1	80.3	59.3	57.6	50.6	40.1	N/A	87.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	62.1	8.1	6.0	5.8	5.1	4.1	N/A	8.8
SPLIT WT= 989.2							CUM WT %	N/A	62.1	70.2	76.2	82.0	87.2	91.2	N/A	100.0
105	N/A	H	8.1	28.0	63.9	msG	WT	N/A	628.7	70.7	51.8	69.8	48.9	34.4	N/A	80.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.9	7.2	5.3	7.1	5.0	3.5	N/A	8.1
SPLIT WT= 984.9							CUM WT %	N/A	63.9	71.1	76.3	83.4	88.4	91.9	N/A	100.0
110	N/A	H	10.5	26.3	63.2	msG	WT	N/A	622.8	75.6	49.1	44.5	49.0	41.4	N/A	103.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.2	7.7	5.0	4.5	5.0	4.2	N/A	10.5
SPLIT WT= 985.0							CUM WT %	N/A	63.2	70.9	75.9	80.4	85.3	89.5	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	N/A	H	10.5	32.0	57.5	msG	WT	N/A	587.1	72.7	68.2	68.2	67.3	49.8	N/A	108.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	57.6	7.1	6.7	6.7	6.6	4.9	N/A	10.5
SPLIT WT=1022.3							CUM WT %	N/A	57.6	64.7	71.4	78.0	84.6	89.5	N/A	100.0
120	N/A	H	11.4	30.5	58.0	msG	WT	N/A	557.5	72.9	51.7	59.6	61.8	47.2	N/A	109.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.1	7.6	5.4	6.2	6.4	4.9	N/A	11.4
SPLIT WT= 958.1							CUM WT %	N/A	58.1	65.6	71.0	77.2	83.7	88.6	N/A	100.0
130	N/A	H	8.0	46.3	45.7	msG	WT	N/A	416.7	120.8	77.4	115.4	67.2	41.3	N/A	73.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.7	13.2	8.5	12.7	7.4	4.5	N/A	8.1
SPLIT WT= 907.2							CUM WT %	N/A	45.7	58.9	67.4	80.1	87.4	92.0	N/A	100.0
135	N/A	H	8.5	60.9	30.7	msG	WT	N/A	280.4	188.7	116.3	143.0	68.7	39.7	N/A	77.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	30.7	20.6	12.7	15.6	7.5	4.3	N/A	8.5
SPLIT WT= 906.9							CUM WT %	N/A	30.7	51.3	64.0	79.7	87.2	91.5	N/A	100.0
140	N/A	H	9.9	64.7	25.4	(m)gS	WT	N/A	229.8	193.3	155.1	142.0	77.6	17.1	N/A	89.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.4	21.4	17.2	15.7	8.6	1.9	N/A	9.9
SPLIT WT= 905.3							CUM WT %	N/A	25.4	46.8	63.9	79.6	88.2	90.1	N/A	100.0
145	N/A	H	8.1	72.0	19.9	(m)gS	WT	N/A	173.5	211.2	171.5	127.3	77.3	40.5	N/A	70.3
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	19.9	24.2	19.7	14.6	8.9	4.7	N/A	8.1
SPLIT WT= 869.8							CUM WT %	N/A	19.9	44.1	63.8	78.4	87.3	92.0	N/A	100.0
150	N/A	H	5.8	77.5	16.8	gS	WT	N/A	138.6	245.1	210.0	103.7	54.6	27.0	N/A	47.6
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	16.8	29.7	25.4	12.6	6.6	3.3	N/A	5.8
SPLIT WT= 824.6							CUM WT %	N/A	16.8	46.4	71.8	84.4	91.0	94.3	N/A	100.0
155	N/A	H	4.6	92.9	2.5	S	WT	N/A	18.7	164.8	281.0	152.2	61.1	31.1	N/A	33.8
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	2.5	22.2	37.8	20.5	8.2	4.2	N/A	4.6
SPLIT WT= 739.0							CUM WT %	N/A	2.5	24.7	62.5	83.0	91.3	95.5	N/A	100.0
160	N/A	H	6.3	85.9	7.8	(g)S	WT	N/A	66.2	196.7	254.3	153.1	77.8	46.4	N/A	53.1
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	7.8	23.2	30.0	18.1	9.2	5.5	N/A	6.3
SPLIT WT= 844.1							CUM WT %	N/A	7.8	31.0	61.0	79.1	88.3	93.7	N/A	100.0
170	N/A	H	6.4	83.1	10.5	gS	WT	N/A	86.5	205.0	209.5	146.4	87.0	38.7	N/A	52.7
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	10.5	24.8	25.4	17.7	10.5	4.7	N/A	6.4
SPLIT WT= 825.2							CUM WT %	N/A	10.5	35.3	60.7	78.4	88.9	93.6	N/A	100.0
175	N/A	H	5.8	93.3	1.0	S	WT	N/A	7.1	73.8	254.9	233.1	94.4	36.2	N/A	42.7
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.0	9.9	34.3	31.4	12.7	4.9	N/A	5.8
SPLIT WT= 736.6							CUM WT %	N/A	1.0	10.9	45.2	76.7	89.4	94.3	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-E34-006 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
180	N/A	H	4.4	94.9	0.7	S	WT	N/A	4.8	43.7	197.4	277.5	126.8	31.0	N/A	31.4
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	6.1	27.7	38.9	17.8	4.4	N/A	4.4
SPLIT WT= 707.0							CUM WT %	N/A	0.7	6.8	34.5	73.4	91.2	95.6	N/A	100.0
185	N/A	H	10.3	73.6	16.1	(m)gS	WT	N/A	141.4	208.7	189.9	146.6	86.5	13.8	N/A	90.3
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	16.1	23.8	21.7	16.7	9.9	1.6	N/A	10.3
SPLIT WT= 877.6							CUM WT %	N/A	16.1	39.9	61.6	78.3	88.1	89.7	N/A	100.0
190	N/A	H	7.8	45.8	46.4	msG	WT	N/A	424.2	145.2	87.8	75.5	72.3	38.2	N/A	71.8
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	46.4	15.9	9.6	8.3	7.9	4.2	N/A	7.9
SPLIT WT= 910.3							CUM WT %	N/A	46.4	62.2	71.8	80.1	88.0	92.2	N/A	100.0
195	N/A	H	7.3	42.6	50.1	msG	WT	N/A	460.1	148.4	104.7	60.7	43.1	33.9	N/A	67.5
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.1	16.2	11.4	6.6	4.7	3.7	N/A	7.4
SPLIT WT= 918.4							CUM WT %	N/A	50.1	66.3	77.7	84.3	89.0	92.7	N/A	100.0

APPENDIX K

PARTICLE-SIZE AND CALCIUM CARBONATE DATA FOR 200-WEST AREA WELLS

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APPENDIX K

PARTICLE-SIZE AND CALCIUM CARBONATE DATA FOR 200-WEST AREA WELLS

This appendix presents particle-size and calcium carbonate data for borehole samples collected during the drilling of 19 monitoring wells in the 200-West Area.

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W06-002 ****

02/02/89

DEPTH	%CAC03	DW	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	2.4	N/	1.5	9.7	88.9	G	WT	N/A	642.1	17.9	16.4	8.2	9.3	18.0	N/A	10.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	88.9	2.5	2.3	1.1	1.3	2.5	N/A	1.5
SPLIT WT= 725.9							CUM WT %	N/A	88.9	91.3	93.6	94.7	96.0	98.5	N/A	100.0
10	1.9	N/	4.4	24.0	71.7	msG	WT	N/A	492.4	23.1	30.0	23.9	32.7	55.0	N/A	30.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	71.7	3.4	4.4	3.5	4.8	8.0	N/A	4.4
SPLIT WT= 686.9							CUM WT %	N/A	71.7	75.0	79.4	82.9	87.6	95.6	N/A	100.0
15	0.8	H	10.8	36.1	53.1	msG	WT	N/A	460.3	79.5	58.1	64.3	63.9	47.0	N/A	94.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	53.1	9.2	6.7	7.4	7.4	5.4	N/A	10.8
SPLIT WT= 866.2							CUM WT %	N/A	53.1	62.3	69.0	76.4	83.7	89.2	N/A	100.0
20	1.1	H	10.7	48.6	40.6	msG	WT	N/A	328.2	101.4	73.7	99.7	71.4	46.4	N/A	86.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.6	12.6	9.1	12.4	8.8	5.8	N/A	10.8
SPLIT WT= 808.2							CUM WT %	N/A	40.6	53.2	62.3	74.7	83.5	89.3	N/A	100.0
25	0.9	H	11.4	37.6	51.0	msG	WT	N/A	462.1	89.3	69.3	62.6	73.6	46.1	N/A	103.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.0	9.9	7.6	6.9	8.1	5.1	N/A	11.5
SPLIT WT= 907.7							CUM WT %	N/A	51.0	60.8	68.5	75.4	83.5	88.6	N/A	100.0
35	1.5	H	1.2	63.2	35.6	sG	WT	N/A	301.5	97.9	88.0	111.4	109.9	129.2	N/A	10.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.6	11.5	10.4	13.1	13.0	15.2	N/A	1.2
SPLIT WT= 849.9							CUM WT %	N/A	35.6	47.1	57.5	70.6	83.6	98.8	N/A	100.0
40	1.5	H	4.3	54.5	41.3	sG	WT	N/A	358.4	105.5	88.4	81.6	70.5	126.7	N/A	36.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.3	12.2	10.2	9.4	8.1	14.6	N/A	4.3
SPLIT WT= 869.1							CUM WT %	N/A	41.3	53.4	63.6	73.0	81.1	95.7	N/A	100.0
45	0.9	H	11.6	43.2	45.3	msG	WT	N/A	433.1	128.1	103.7	76.5	59.9	44.8	N/A	110.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.3	13.4	10.8	8.0	6.3	4.7	N/A	11.6
SPLIT WT= 958.6							CUM WT %	N/A	45.3	58.7	69.5	77.5	83.7	88.4	N/A	100.0
55	5.1	H	0.7	49.3	50.0	sG	WT	N/A	392.5	117.4	67.3	70.9	40.2	91.1	N/A	5.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.0	15.0	8.6	9.0	5.1	11.6	N/A	0.7
SPLIT WT= 784.0							CUM WT %	N/A	50.0	65.0	73.6	82.6	87.7	99.3	N/A	100.0
60	5.7	H	0.3	74.4	25.3	gS	WT	N/A	185.0	137.0	113.0	69.8	151.3	73.0	N/A	2.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.3	18.7	15.5	9.5	20.7	10.0	N/A	0.3
SPLIT WT= 732.6							CUM WT %	N/A	25.3	44.0	59.5	69.0	89.7	99.7	N/A	100.0
65	5.8	H	37.3	54.6	8.1	(g)mS	WT	N/A	53.4	29.3	39.0	42.0	53.4	197.7	N/A	246.9
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	8.1	4.4	5.9	6.4	8.1	29.9	N/A	37.3
SPLIT WT= 667.7							CUM WT %	N/A	8.1	12.5	18.4	24.7	32.8	62.7	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W06-002 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
70	10.3	H	13.8	80.2	6.0	(gm)S	WT	N/A	41.6	52.0	105.6	214.4	85.6	95.8	N/A	95.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	6.0	7.5	15.3	31.1	12.4	13.9	N/A	13.8
SPLIT WT= 690.8							CUM WT %	N/A	6.0	13.6	28.9	59.9	72.3	86.2	N/A	100.0
75	3.7	H	9.4	87.4	3.2	S	WT	N/A	21.7	32.4	86.0	283.7	140.8	53.6	N/A	64.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.2	4.8	12.6	41.6	20.6	7.9	N/A	9.4
SPLIT WT= 684.7							CUM WT %	N/A	3.2	7.9	20.5	62.1	82.7	90.6	N/A	100.0
85	4.8	H	9.8	86.8	3.5	(m)S	WT	N/A	25.8	59.5	194.1	193.5	135.0	63.5	N/A	72.8
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.5	8.0	26.1	26.0	18.1	8.5	N/A	9.8
SPLIT WT= 747.0							CUM WT %	N/A	3.5	11.5	37.6	63.6	81.7	90.2	N/A	100.0
90	5.7	H	8.4	87.4	4.2	S	WT	N/A	31.7	51.3	230.0	186.9	96.4	102.8	N/A	64.4
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.2	6.7	30.1	24.5	12.6	13.5	N/A	8.4
SPLIT WT= 764.5							CUM WT %	N/A	4.2	10.9	41.0	65.5	78.1	91.6	N/A	100.0
95	4.3	H	6.7	75.3	18.0	gS	WT	N/A	146.2	63.0	270.3	157.8	66.5	54.9	N/A	54.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	18.0	7.7	33.2	19.4	8.2	6.8	N/A	6.8
SPLIT WT= 816.4							CUM WT %	N/A	18.0	25.7	58.9	78.3	86.5	93.3	N/A	100.0
100	0.8	H	7.5	50.5	42.0	msG	WT	N/A	353.3	64.5	144.3	99.5	66.6	50.4	N/A	63.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.0	7.7	17.1	11.8	7.9	6.0	N/A	7.5
SPLIT WT= 845.4							CUM WT %	N/A	42.0	49.6	66.8	78.6	86.5	92.5	N/A	100.0
105	0.6	H	10.2	61.8	27.9	(m)gS	WT	N/A	242.1	67.3	151.6	149.3	106.0	61.9	N/A	88.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.9	7.8	17.5	17.2	12.2	7.1	N/A	10.2
SPLIT WT= 869.2							CUM WT %	N/A	27.9	35.7	53.2	70.4	82.6	89.8	N/A	100.0
110	0.6	H	9.7	58.4	31.9	msG	WT	N/A	282.0	61.1	133.1	144.7	115.1	62.9	N/A	86.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.9	6.9	15.0	16.4	13.0	7.1	N/A	9.7
SPLIT WT= 889.6							CUM WT %	N/A	31.9	38.8	53.8	70.2	83.2	90.3	N/A	100.0
115	0.2	H	7.8	82.1	10.1	gS	WT	N/A	79.6	37.4	176.5	282.3	98.7	50.4	N/A	61.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	10.1	4.8	22.4	35.9	12.6	6.4	N/A	7.8
SPLIT WT= 787.0							CUM WT %	N/A	10.1	14.9	37.3	73.2	85.8	92.2	N/A	100.0
120	0.2	H	9.0	40.0	51.0	msG	WT	N/A	461.9	84.5	78.1	76.6	71.3	52.1	N/A	81.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.0	9.3	8.6	8.5	7.9	5.8	N/A	9.0
SPLIT WT= 905.8							CUM WT %	N/A	51.0	60.3	68.9	77.4	85.3	91.0	N/A	100.0
125	0.5	H	11.4	49.1	39.5	msG	WT	N/A	337.1	78.1	77.8	101.2	93.9	67.8	N/A	97.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.5	9.2	9.1	11.9	11.0	7.9	N/A	11.4
SPLIT WT= 854.7							CUM WT %	N/A	39.5	48.7	57.8	69.6	80.6	88.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W06-002 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
130	0.3	H	9.3	55.4	35.3	msG	WT	N/A	281.6	176.7	102.3	61.7	55.3	46.4	N/A	74.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.3	22.1	12.8	7.7	6.9	5.8	N/A	9.3
SPLIT WT= 798.2							CUM WT %	N/A	35.3	57.4	70.2	78.0	84.9	90.7	N/A	100.0
135	0.6	H	12.9	60.1	27.0	(m)gS	WT	N/A	219.4	70.0	87.1	115.1	151.7	63.8	N/A	104.9
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.0	8.6	10.7	14.2	18.7	7.9	N/A	12.9
SPLIT WT= 817.6							CUM WT %	N/A	27.0	35.6	46.4	60.5	79.2	87.1	N/A	100.0
140	0.4	H	8.1	58.0	34.0	msG	WT	N/A	308.0	61.3	86.7	213.6	114.1	50.2	N/A	73.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.0	6.8	9.6	23.5	12.6	5.5	N/A	8.1
SPLIT WT= 908.4							CUM WT %	N/A	34.0	40.7	50.3	73.8	86.4	91.9	N/A	100.0
145	0.5	H	11.8	62.7	25.5	(m)gS	WT	N/A	217.0	76.7	74.6	163.8	158.3	60.5	N/A	100.2
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.5	9.0	8.8	19.3	18.6	7.1	N/A	11.8
SPLIT WT= 856.4							CUM WT %	N/A	25.5	34.5	43.3	62.5	81.1	88.2	N/A	100.0
150	0.8	H	9.5	54.6	35.9	msG	WT	N/A	331.9	86.2	65.9	175.4	125.5	52.1	N/A	87.7
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.9	9.3	7.1	19.0	13.6	5.6	N/A	9.5
SPLIT WT= 925.5							CUM WT %	N/A	35.9	45.2	52.3	71.3	84.9	90.5	N/A	100.0
155	0.6	H	12.6	62.9	24.5	(m)gS	WT	N/A	214.4	98.9	74.8	136.1	157.2	84.0	N/A	110.3
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.5	11.3	8.5	15.5	18.0	9.6	N/A	12.6
SPLIT WT= 878.6							CUM WT %	N/A	24.5	35.8	44.3	59.9	77.8	87.4	N/A	100.0
160	0.0	H	9.1	67.2	23.7	(m)gS	WT	N/A	177.8	41.0	32.8	237.1	142.4	51.1	N/A	68.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	23.7	5.5	4.4	31.6	19.0	6.8	N/A	9.1
SPLIT WT= 752.6							CUM WT %	N/A	23.7	29.1	33.5	65.1	84.1	90.9	N/A	100.0
165	0.0	H	11.2	58.5	30.2	msG	WT	N/A	265.0	86.6	64.1	147.1	139.1	75.9	N/A	98.3
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.3	9.9	7.3	16.8	15.9	8.7	N/A	11.2
SPLIT WT= 876.1							CUM WT %	N/A	30.3	40.1	47.5	64.2	80.1	88.8	N/A	100.0
170	0.0	H	12.3	61.8	25.9	(m)gS	WT	N/A	227.9	66.7	68.4	176.3	151.1	81.1	N/A	107.8
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.9	7.6	7.8	20.1	17.2	9.2	N/A	12.3
SPLIT WT= 880.9							CUM WT %	N/A	25.9	33.5	41.3	61.3	78.5	87.7	N/A	100.0
175	0.0	H	11.6	47.9	40.5	msG	WT	N/A	375.7	75.8	67.7	122.6	112.4	65.7	N/A	107.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.5	8.2	7.3	13.2	12.1	7.1	N/A	11.6
SPLIT WT= 932.0							CUM WT %	N/A	40.5	48.7	56.0	69.2	81.3	88.4	N/A	100.0
180	0.0	H	10.9	46.2	42.9	msG	WT	N/A	364.7	62.6	51.9	65.1	146.9	66.6	N/A	92.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.9	7.4	6.1	7.7	17.3	7.8	N/A	10.9
SPLIT WT= 850.5							CUM WT %	N/A	42.9	50.3	56.4	64.0	81.3	89.1	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W06-002 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
185	0.0	H	8.3	48.1	43.6	msG	WT	N/A	375.9	115.1	62.7	78.8	103.2	54.1	N/A	71.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.7	13.4	7.3	9.2	12.0	6.3	N/A	8.3
SPLIT WT= 858.6							CUM WT %	N/A	43.7	57.0	64.3	73.5	85.4	91.7	N/A	100.0
190	0.0	H	9.6	68.3	22.1	(m)gS	WT	N/A	169.9	72.4	71.7	188.0	123.2	69.9	N/A	74.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	22.1	9.4	9.3	24.4	16.0	9.1	N/A	9.7
SPLIT WT= 766.9							CUM WT %	N/A	22.1	31.5	40.8	65.3	81.3	90.4	N/A	100.0
195	0.0	H	9.5	71.6	18.8	(m)gS	WT	N/A	143.5	90.0	79.3	189.2	113.8	73.5	N/A	72.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	18.8	11.8	10.4	24.8	14.9	9.7	N/A	9.5
SPLIT WT= 761.6							CUM WT %	N/A	18.8	30.6	41.1	65.9	80.8	90.5	N/A	100.0
200	0.1	H	9.3	67.1	23.6	(m)gS	WT	N/A	186.5	90.2	86.5	182.5	110.7	61.4	N/A	73.8
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	23.6	11.4	10.9	23.1	14.0	7.8	N/A	9.3
SPLIT WT= 795.8							CUM WT %	N/A	23.6	35.0	45.9	68.9	82.9	90.7	N/A	100.0
205	0.2	H	10.2	67.1	22.7	(m)gS	WT	N/A	178.7	94.6	83.7	179.6	106.9	64.3	N/A	80.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	22.7	12.0	10.6	22.8	13.6	8.2	N/A	10.2
SPLIT WT= 787.4							CUM WT %	N/A	22.7	34.7	45.3	68.1	81.6	89.8	N/A	100.0
210	1.0	H	10.2	66.4	23.4	(m)gS	WT	N/A	180.3	80.3	85.6	184.3	101.0	60.7	N/A	79.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	23.4	10.4	11.1	23.9	13.1	7.9	N/A	10.2
SPLIT WT= 773.5							CUM WT %	N/A	23.4	33.8	44.9	68.8	81.9	89.8	N/A	100.0
215	1.3	H	10.4	64.5	25.0	(m)gS	WT	N/A	190.3	83.9	74.3	177.2	94.4	61.1	N/A	79.4
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.0	11.0	9.8	23.3	12.4	8.0	N/A	10.4
SPLIT WT= 762.8							CUM WT %	N/A	25.0	36.1	45.8	69.1	81.5	89.6	N/A	100.0
220	0.9	H	9.9	54.9	35.2	msG	WT	N/A	267.3	85.2	62.6	125.8	91.8	51.2	N/A	75.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.2	11.2	8.3	16.6	12.1	6.8	N/A	9.9
SPLIT WT= 756.3							CUM WT %	N/A	35.2	46.5	54.7	71.3	83.4	90.1	N/A	100.0
225	2.3	H	14.2	61.2	24.6	(m)gS	WT	N/A	176.1	84.4	64.5	118.5	108.8	62.0	N/A	101.3
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.6	11.8	9.0	16.6	15.2	8.7	N/A	14.2
SPLIT WT= 717.4							CUM WT %	N/A	24.6	36.4	45.4	62.0	77.2	85.8	N/A	100.0
231	1.1	H	11.0	68.3	20.7	(m)gS	WT	N/A	154.0	73.0	75.1	185.4	114.5	60.1	N/A	82.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	20.7	9.8	10.1	24.9	15.4	8.1	N/A	11.0
SPLIT WT= 749.2							CUM WT %	N/A	20.7	30.5	40.6	65.5	80.9	89.0	N/A	100.0
235	1.0	H	11.4	61.0	27.6	(m)gS	WT	N/A	220.4	88.1	78.6	158.3	107.4	54.9	N/A	91.2
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.6	11.0	9.8	19.8	13.4	6.9	N/A	11.4
SPLIT WT= 803.8							CUM WT %	N/A	27.6	38.6	48.5	68.3	81.7	88.6	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W07-001 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.1	C	6.7	29.0	64.3	msG	WT	N/A	519.3	68.5	40.5	24.3	41.9	69.3	N/A	53.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	64.3	8.5	5.0	3.0	5.2	7.3	N/A	6.7
SPLIT WT= 807.7							CUM WT %	N/A	64.3	72.8	77.8	80.8	86.0	93.3	N/A	100.0
10	1.3	C	2.1	18.7	79.2	msG	WT	N/A	689.7	68.9	52.0	16.0	10.7	14.9	N/A	18.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	79.3	7.9	6.0	1.8	1.2	1.7	N/A	2.1
SPLIT WT= 870.2							CUM WT %	N/A	79.3	87.2	93.1	95.0	96.2	97.9	N/A	100.0
15	0.6	H	25.2	42.4	32.4	msG	WT	N/A	148.0	53.8	47.3	35.8	32.9	23.5	N/A	114.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	32.4	11.8	10.4	7.9	7.2	5.2	N/A	25.2
SPLIT WT= 456.2							CUM WT %	N/A	32.4	44.2	54.6	62.5	69.7	74.8	N/A	100.0
20	0.9	H	22.3	52.6	25.1	gmS	WT	N/A	109.4	92.8	60.4	34.0	25.9	16.1	N/A	97.4
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.1	21.3	13.9	7.8	5.9	3.7	N/A	22.3
SPLIT WT= 436.1							CUM WT %	N/A	25.1	46.4	60.2	68.0	74.0	77.7	N/A	100.0
25	0.8	H	13.6	38.0	48.4	msG	WT	N/A	146.5	36.9	27.2	21.5	18.2	11.1	N/A	41.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	48.4	12.2	9.0	7.1	6.0	3.7	N/A	13.6
SPLIT WT= 302.6							CUM WT %	N/A	48.4	60.6	69.6	76.7	82.7	86.4	N/A	100.0
30	0.9	H	17.7	44.0	38.3	msG	WT	N/A	148.7	57.4	40.9	28.0	25.8	18.9	N/A	68.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.3	14.8	10.5	7.2	6.6	4.9	N/A	17.7
SPLIT WT= 388.5							CUM WT %	N/A	38.3	53.0	63.6	70.8	77.4	82.3	N/A	100.0
35	1.1	H	24.6	38.6	36.8	msG	WT	N/A	149.8	50.5	36.3	27.2	25.3	17.8	N/A	99.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.8	12.4	8.9	6.7	6.2	4.4	N/A	24.6
SPLIT WT= 406.8							CUM WT %	N/A	36.8	49.2	58.2	64.8	71.1	75.4	N/A	100.0
40	1.3	H	19.6	39.2	41.1	msG	WT	N/A	150.5	48.7	33.7	25.6	21.3	14.3	N/A	71.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.1	13.3	9.2	7.0	5.8	3.9	N/A	19.6
SPLIT WT= 366.0							CUM WT %	N/A	41.1	54.4	63.6	70.6	76.5	80.4	N/A	100.0
45	1.3	H	19.5	39.7	40.8	msG	WT	N/A	150.9	47.5	32.0	26.9	24.4	16.0	N/A	71.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.8	12.9	8.7	7.3	6.6	4.3	N/A	19.5
SPLIT WT= 369.7							CUM WT %	N/A	40.8	53.7	62.3	69.6	76.2	80.6	N/A	100.0
50	2.7	H	13.4	53.5	33.1	msG	WT	N/A	106.4	50.8	49.4	32.8	24.2	14.9	N/A	43.1
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.1	15.8	15.4	10.2	7.5	4.6	N/A	13.4
SPLIT WT= 321.7							CUM WT %	N/A	33.1	48.9	64.2	74.4	82.0	86.6	N/A	100.0
55	2.9	H	12.2	52.3	35.5	msG	WT	N/A	141.8	69.3	56.5	39.2	27.8	16.1	N/A	48.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	35.5	17.3	14.1	9.8	7.0	4.0	N/A	12.2
SPLIT WT= 399.6							CUM WT %	N/A	35.5	52.8	67.0	76.8	83.7	87.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-001 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	2.9	H	10.5	54.6	34.9	msG	WT	N/A	130.8	48.9	64.3	48.6	28.6	14.2	N/A	39.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.9	13.1	17.2	13.0	7.6	3.8	N/A	10.5
SPLIT WT= 374.8							CUM WT %	N/A	34.9	48.0	65.1	78.1	85.7	89.5	N/A	100.0
65	4.4	H	23.3	43.1	33.6	msG	WT	N/A	135.6	53.6	41.2	39.1	24.5	15.3	N/A	93.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.7	13.3	10.2	9.7	6.1	3.8	N/A	23.3
SPLIT WT= 403.0							CUM WT %	N/A	33.7	47.0	57.2	66.9	73.0	76.8	N/A	100.0
70	3.7	H	63.2	26.3	10.6	gsM	WT	N/A	35.1	19.6	12.1	9.3	17.5	28.8	N/A	210.1
SORT= N/A MEDIAN= 5.00 MODE= 5.00 MEAN= N/A							WT %	N/A	10.6	5.9	3.6	2.8	5.3	8.7	N/A	63.2
SPLIT WT= 332.6							CUM WT %	N/A	10.6	16.5	20.1	22.9	28.2	36.8	N/A	100.0
75	20.8	H	33.9	52.0	14.1	gmS	WT	N/A	45.2	22.7	22.3	24.8	43.3	53.3	N/A	108.6
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	14.1	7.1	7.0	7.8	13.5	16.7	N/A	33.9
SPLIT WT= 320.3							CUM WT %	N/A	14.1	21.2	28.2	35.9	49.4	66.1	N/A	100.0
80	13.7	H	25.6	59.4	15.0	gmS	WT	N/A	58.4	43.5	59.3	36.1	51.7	41.2	N/A	100.1
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	15.0	11.2	15.2	9.3	13.3	10.6	N/A	25.7
SPLIT WT= 390.3							CUM WT %	N/A	15.0	26.1	41.3	50.6	63.8	74.4	N/A	100.0
85	7.7	H	17.3	61.7	21.0	gmS	WT	N/A	80.2	46.6	52.4	47.8	49.4	40.0	N/A	66.3
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	21.0	12.2	13.7	12.5	12.9	10.5	N/A	17.3
SPLIT WT= 382.7							CUM WT %	N/A	21.0	33.1	46.8	59.3	72.2	82.7	N/A	100.0
90	5.2	H	16.6	77.4	6.0	(gm)S	WT	N/A	21.4	22.8	65.6	79.5	57.7	51.3	N/A	59.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	6.0	6.4	18.3	22.2	16.1	14.3	N/A	16.6
SPLIT WT= 357.8							CUM WT %	N/A	6.0	12.4	30.7	52.9	69.1	83.4	N/A	100.0
95	5.0	H	15.2	75.8	9.0	(gm)S	WT	N/A	33.2	36.5	75.9	77.5	53.7	37.0	N/A	56.3
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	9.0	9.9	20.5	20.9	14.5	10.0	N/A	15.2
SPLIT WT= 370.2							CUM WT %	N/A	9.0	18.8	39.3	60.3	74.8	84.8	N/A	100.0
100	6.5	H	12.0	78.8	9.2	(gm)S	WT	N/A	32.6	45.2	105.3	68.2	37.1	23.6	N/A	42.6
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	9.2	12.8	29.7	19.2	10.5	6.7	N/A	12.0
SPLIT WT= 354.5							CUM WT %	N/A	9.2	21.9	51.6	70.9	81.3	88.0	N/A	100.0
105	3.1	H	13.2	76.1	10.7	(m)gS	WT	N/A	37.0	51.2	107.1	62.1	27.2	15.4	N/A	45.8
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	10.7	14.8	31.0	18.0	7.9	4.5	N/A	13.2
SPLIT WT= 345.7							CUM WT %	N/A	10.7	25.5	56.5	74.4	82.3	86.8	N/A	100.0
110	2.3	H	12.1	83.6	4.3	(m)S	WT	N/A	14.1	23.8	92.1	104.1	38.5	14.8	N/A	39.5
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	4.3	7.3	28.2	31.8	11.8	4.5	N/A	12.1
SPLIT WT= 326.9							CUM WT %	N/A	4.3	11.6	39.8	71.6	83.4	87.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-001 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	1.2	H	9.9	88.5	1.6	(m)S	WT	N/A	5.2	9.5	74.0	129.7	51.2	15.8	N/A	31.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.6	3.0	23.4	41.0	16.2	5.0	N/A	9.9
SPLIT WT= 316.6							CUM WT %	N/A	1.6	4.6	28.0	69.0	85.1	90.1	N/A	100.0
120	0.8	H	9.4	89.4	1.1	S	WT	N/A	3.8	3.0	56.5	172.6	45.1	19.0	N/A	31.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.2	0.9	17.1	52.1	13.6	5.7	N/A	9.4
SPLIT WT= 331.2							CUM WT %	N/A	1.2	2.1	19.1	71.2	84.9	90.6	N/A	100.0
125	0.8	H	4.9	93.4	1.7	S	WT	N/A	4.2	13.0	70.0	111.1	28.9	7.3	N/A	12.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.7	5.3	28.4	45.1	11.7	3.0	N/A	4.9
SPLIT WT= 246.3							CUM WT %	N/A	1.7	7.0	35.4	80.4	92.2	95.1	N/A	100.0
130	0.6	C	7.7	80.8	11.5	gS	WT	N/A	92.9	177.9	243.9	121.8	71.1	36.7	N/A	62.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	11.5	22.1	30.3	15.1	8.8	4.6	N/A	7.7
SPLIT WT= 806.3							CUM WT %	N/A	11.5	33.6	63.8	78.9	87.8	92.3	N/A	100.0
135	5.5	C	17.7	73.9	8.4	(gm)S	WT	N/A	28.7	31.4	128.6	49.1	28.6	13.8	N/A	60.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.4	9.2	37.8	14.4	8.4	4.1	N/A	17.7
SPLIT WT= 340.3							CUM WT %	N/A	8.4	17.7	55.5	69.9	78.3	82.3	N/A	100.0
140	1.1	C	5.3	91.9	2.8	S	WT	N/A	20.1	72.3	329.1	187.6	56.9	23.8	N/A	38.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.8	9.9	45.2	25.8	7.8	3.3	N/A	5.3
SPLIT WT= 728.7							CUM WT %	N/A	2.8	12.7	57.9	83.6	91.4	94.7	N/A	100.0
145	0.5	H	12.4	39.9	47.7	msG	WT	N/A	221.4	43.9	47.5	44.0	31.7	17.9	N/A	57.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.8	9.5	10.2	9.5	6.8	3.9	N/A	12.4
SPLIT WT= 463.8							CUM WT %	N/A	47.8	57.2	67.5	77.0	83.8	87.7	N/A	100.0
150	0.8	H	19.0	41.0	40.0	msG	WT	N/A	185.9	46.1	46.3	43.0	33.8	21.2	N/A	88.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.0	9.9	10.0	9.3	7.3	4.6	N/A	19.0
SPLIT WT= 464.6							CUM WT %	N/A	40.0	49.9	59.9	69.1	76.4	81.0	N/A	100.0
155	0.4	H	15.1	39.8	45.1	msG	WT	N/A	189.3	39.3	41.9	42.4	27.4	16.1	N/A	63.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.1	9.4	10.0	10.1	6.5	3.8	N/A	15.1
SPLIT WT= 419.6							CUM WT %	N/A	45.1	54.5	64.4	74.5	81.1	84.9	N/A	100.0
160	0.2	H	21.4	48.0	30.6	msG	WT	N/A	133.1	45.8	47.3	56.8	36.1	23.0	N/A	93.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.6	10.5	10.9	13.1	8.3	5.3	N/A	21.4
SPLIT WT= 435.1							CUM WT %	N/A	30.6	41.1	52.0	65.0	73.3	78.6	N/A	100.0
165	0.2	H	11.8	35.2	53.0	msG	WT	N/A	197.1	35.6	27.4	30.5	23.8	13.4	N/A	43.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	53.0	9.6	7.4	8.2	6.4	3.6	N/A	11.8
SPLIT WT= 371.5							CUM WT %	N/A	53.0	62.6	70.0	78.2	84.6	88.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-001 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	0.2	H	20.7	46.1	33.2	msG	WT	N/A	123.8	40.9	44.0	35.6	31.4	20.3	N/A	77.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.2	11.0	11.8	9.5	8.4	5.4	N/A	20.7
SPLIT WT= 373.2							CUM WT %	N/A	33.2	44.1	55.9	65.5	73.9	79.3	N/A	100.0
175	0.2	H	15.2	39.2	45.6	msG	WT	N/A	181.1	46.8	34.3	31.0	26.3	17.0	N/A	60.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.6	11.8	8.6	7.8	6.6	4.3	N/A	15.2
SPLIT WT= 396.9							CUM WT %	N/A	45.6	57.4	66.1	73.9	80.5	84.8	N/A	100.0
180	0.4	H	17.8	37.5	44.7	msG	WT	N/A	224.7	45.6	36.0	39.3	43.4	24.3	N/A	89.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.7	9.1	7.2	7.8	8.6	4.8	N/A	17.9
SPLIT WT= 503.2							CUM WT %	N/A	44.7	53.7	60.9	68.7	77.3	82.2	N/A	100.0
185	0.3	H	20.3	47.4	32.3	msG	WT	N/A	129.5	41.9	33.4	42.7	48.3	23.7	N/A	81.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.3	10.5	8.3	10.7	12.0	5.9	N/A	20.3
SPLIT WT= 401.0							CUM WT %	N/A	32.3	42.7	51.1	61.7	73.8	79.7	N/A	100.0
190	0.3	H	22.7	48.4	28.9	gmS	WT	N/A	126.9	44.7	34.6	46.0	52.3	34.9	N/A	99.7
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.9	10.2	7.9	10.5	11.9	8.0	N/A	22.7
SPLIT WT= 439.1							CUM WT %	N/A	28.9	39.1	47.0	57.4	69.4	77.3	N/A	100.0
195	0.2	H	20.6	46.5	32.9	msG	WT	N/A	131.2	44.3	29.7	45.2	43.3	22.8	N/A	82.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.9	11.1	7.5	11.3	10.9	5.7	N/A	20.6
SPLIT WT= 398.7							CUM WT %	N/A	32.9	44.0	51.5	62.8	73.7	79.4	N/A	100.0
200	0.3	H	21.0	53.5	25.5	gmS	WT	N/A	89.2	46.1	31.4	44.4	44.3	21.1	N/A	73.3
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.5	13.2	9.0	12.7	12.7	6.0	N/A	21.0
SPLIT WT= 349.7							CUM WT %	N/A	25.5	38.7	47.7	60.4	73.0	79.0	N/A	100.0
205	0.3	H	23.1	50.0	26.9	gmS	WT	N/A	92.0	41.5	28.9	42.9	39.3	18.7	N/A	79.2
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.9	12.1	8.4	12.5	11.5	5.5	N/A	23.1
SPLIT WT= 342.4							CUM WT %	N/A	26.9	39.0	47.4	60.0	71.4	76.9	N/A	100.0
210	2.6	H	19.9	45.3	34.8	msG	WT	N/A	131.9	45.1	29.7	39.8	38.0	18.9	N/A	75.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.8	11.9	7.8	10.5	10.0	5.0	N/A	19.9
SPLIT WT= 378.7							CUM WT %	N/A	34.8	46.7	54.6	65.1	75.1	80.1	N/A	100.0
215	2.4	H	26.6	51.9	21.5	gmS	WT	N/A	89.3	50.8	37.6	47.6	52.7	27.4	N/A	110.9
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	21.5	12.2	9.0	11.4	12.7	6.6	N/A	26.6
SPLIT WT= 416.5							CUM WT %	N/A	21.5	33.7	42.7	54.1	66.8	73.4	N/A	100.0
220	1.3	H	23.6	51.1	25.4	gmS	WT	N/A	90.4	49.6	33.1	42.3	36.0	20.9	N/A	84.0
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.4	13.9	9.3	11.9	10.1	5.9	N/A	23.6
SPLIT WT= 356.3							CUM WT %	N/A	25.4	39.3	48.6	60.5	70.6	76.4	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-001 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	3.9	H	24.0	46.9	29.1	gmS	WT	N/A	101.5	41.4	29.5	40.3	35.3	17.3	N/A	84.0
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.1	11.9	8.5	11.5	10.1	5.0	N/A	24.1
SPLIT WT= 349.4							CUM WT %	N/A	29.1	40.9	49.4	60.9	71.0	76.0	N/A	100.0
230	2.3	H	19.0	44.4	36.6	msG	WT	N/A	129.6	42.9	29.4	39.2	30.8	14.7	N/A	67.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.6	12.1	8.3	11.1	8.7	4.2	N/A	19.0
SPLIT WT= 353.6							CUM WT %	N/A	36.6	48.8	57.1	68.2	76.9	81.0	N/A	100.0
235	0.8	H	18.6	45.8	35.6	msG	WT	N/A	116.2	43.2	25.6	30.9	32.6	17.2	N/A	60.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.6	13.2	7.8	9.5	10.0	5.3	N/A	18.7
SPLIT WT= 326.6							CUM WT %	N/A	35.6	48.8	56.7	66.1	76.1	81.4	N/A	100.0
240	N/A	H	21.0	46.8	32.2	msG	WT	N/A	120.9	36.6	31.1	45.9	38.9	23.3	N/A	78.7
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.2	9.8	8.3	12.2	10.4	6.2	N/A	21.0
SPLIT WT= 375.6							CUM WT %	N/A	32.2	42.0	50.2	62.5	72.8	79.0	N/A	100.0
245	N/A	H	20.2	60.3	19.4	gmS	WT	N/A	68.8	38.4	29.2	68.4	52.5	25.5	N/A	71.8
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	19.4	10.8	8.2	19.3	14.8	7.2	N/A	20.3
SPLIT WT= 354.6							CUM WT %	N/A	19.4	30.2	38.5	57.8	72.6	79.8	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-002 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	N/A	N/	8.4	36.5	55.1	msG	WT	N/A	346.5	59.2	51.9	34.9	44.4	39.1	N/A	53.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	55.1	9.4	8.3	5.6	7.1	6.2	N/A	8.4
SPLIT WT= 629.0							CUM WT %	N/A	55.1	64.5	72.8	78.3	85.4	91.6	N/A	100.0
10	0.6	N/	15.3	34.2	50.5	msG	WT	N/A	237.3	40.7	45.5	34.0	23.4	17.3	N/A	72.1
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.5	8.7	9.7	7.2	5.0	3.7	N/A	15.3
SPLIT WT= 470.4							CUM WT %	N/A	50.5	59.1	68.8	76.0	81.0	84.7	N/A	100.0
15	0.3	H	21.3	44.6	34.0	msG	WT	N/A	148.1	57.4	45.4	35.1	30.2	26.2	N/A	92.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.0	13.2	10.4	8.1	6.9	6.0	N/A	21.3
SPLIT WT= 435.2							CUM WT %	N/A	34.0	47.2	57.7	65.7	72.7	78.7	N/A	100.0
25	1.2	H	23.3	36.9	39.8	msG	WT	N/A	187.6	52.4	39.4	31.5	27.0	23.7	N/A	109.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.8	11.1	8.4	6.7	5.7	5.0	N/A	23.3
SPLIT WT= 471.2							CUM WT %	N/A	39.8	50.9	59.3	66.0	71.7	76.7	N/A	100.0
30	2.8	H	36.7	53.0	10.3	gmS	WT	N/A	35.2	50.8	45.2	36.0	27.5	21.0	N/A	124.9
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	10.3	14.9	13.3	10.6	8.1	6.2	N/A	36.7
SPLIT WT= 340.6							CUM WT %	N/A	10.3	25.2	38.5	49.1	57.2	63.3	N/A	100.0
35	1.9	H	38.4	34.7	26.9	gsM	WT	N/A	102.6	42.4	30.4	25.1	18.4	15.9	N/A	146.6
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	26.9	11.1	8.0	6.6	4.8	4.2	N/A	38.4
SPLIT WT= 381.4							CUM WT %	N/A	26.9	38.0	46.0	52.6	57.4	61.6	N/A	100.0
40	2.8	H	70.7	23.3	6.0	(g)sM	WT	N/A	16.1	8.0	6.5	5.1	5.1	37.8	N/A	189.4
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	6.0	3.0	2.4	1.9	1.9	14.1	N/A	70.7
SPLIT WT= 267.7							CUM WT %	N/A	6.0	9.0	11.4	13.3	15.2	29.3	N/A	100.0
45	0.5	H	8.4	18.4	73.2	msG	WT	N/A	413.3	29.7	22.2	20.6	17.5	13.6	N/A	47.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	73.2	5.3	3.9	3.7	3.1	2.4	N/A	8.4
SPLIT WT= 564.3							CUM WT %	N/A	73.2	78.5	82.4	86.1	89.2	91.6	N/A	100.0
50	16.0	H	28.1	43.2	28.7	gmS	WT	N/A	100.4	38.6	38.4	24.8	23.4	26.1	N/A	98.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.7	11.0	11.0	7.1	6.7	7.5	N/A	28.1
SPLIT WT= 350.2							CUM WT %	N/A	28.7	39.7	50.7	57.7	64.4	71.9	N/A	100.0
55	5.8	H	15.3	37.1	47.7	msG	WT	N/A	194.6	51.2	36.2	28.8	19.0	16.1	N/A	82.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.7	12.5	8.9	7.1	4.7	3.9	N/A	15.3
SPLIT WT= 408.3							CUM WT %	N/A	47.7	60.2	69.1	76.1	80.8	84.7	N/A	100.0
60	3.1	H	15.5	58.3	26.2	gmS	WT	N/A	109.7	53.6	78.7	63.5	30.0	18.4	N/A	65.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.2	12.8	18.8	15.2	7.2	4.4	N/A	15.5
SPLIT WT= 415.9							CUM WT %	N/A	26.2	39.0	57.8	72.9	80.1	84.5	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-002 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
65	4.1	H	15.9	49.4	34.7	msG	WT	N/A	140.3	49.5	53.9	50.7	26.7	18.9	N/A	64.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.7	12.3	13.3	12.5	6.6	4.7	N/A	15.9
SPLIT WT= 404.2							CUM WT %	N/A	34.7	47.0	60.3	72.8	79.4	84.1	N/A	100.0
70	5.1	H	14.0	69.5	16.5	(m)gS	WT	N/A	61.9	38.4	91.8	71.2	38.2	21.0	N/A	52.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	16.5	10.2	24.5	19.0	10.2	5.6	N/A	14.0
SPLIT WT= 375.1							CUM WT %	N/A	16.5	26.7	51.2	70.2	80.4	86.0	N/A	100.0
75	4.0	H	9.8	81.9	8.3	(gm)S	WT	N/A	31.4	43.3	142.9	67.7	36.9	19.7	N/A	37.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.3	11.4	37.7	17.9	9.7	5.2	N/A	9.8
SPLIT WT= 379.2							CUM WT %	N/A	8.3	19.7	57.4	75.2	85.0	90.2	N/A	100.0
80	1.9	H	16.6	77.5	5.9	(gm)S	WT	N/A	21.2	26.9	137.6	74.9	24.1	15.3	N/A	59.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.9	7.5	38.3	20.8	6.7	4.3	N/A	16.6
SPLIT WT= 359.7							CUM WT %	N/A	5.9	13.4	51.6	72.4	79.1	83.4	N/A	100.0
85	0.9	H	13.3	83.8	2.9	(m)S	WT	N/A	10.7	19.4	139.8	109.6	26.3	15.0	N/A	49.3
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.9	5.2	37.8	29.6	7.1	4.1	N/A	13.3
SPLIT WT= 370.2							CUM WT %	N/A	2.9	8.1	45.9	75.5	82.6	86.7	N/A	100.0
95	0.8	H	5.8	46.2	47.9	msG	WT	N/A	190.9	13.4	61.6	80.7	18.9	9.5	N/A	23.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.9	3.4	15.5	20.3	4.8	2.4	N/A	5.9
SPLIT WT= 398.2							CUM WT %	N/A	47.9	51.3	66.8	87.0	91.8	94.2	N/A	100.0
100	0.8	H	9.9	73.5	16.6	(m)gS	WT	N/A	57.6	7.8	32.0	154.9	46.5	13.8	N/A	34.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	16.6	2.3	9.2	44.6	13.4	4.0	N/A	9.9
SPLIT WT= 347.0							CUM WT %	N/A	16.6	18.8	28.1	72.7	86.1	90.1	N/A	100.0
105	0.5	H	13.5	38.4	48.0	msG	WT	N/A	226.4	49.8	43.8	43.8	26.0	17.8	N/A	63.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.0	10.6	9.3	9.3	5.5	3.8	N/A	13.5
SPLIT WT= 471.4							CUM WT %	N/A	48.0	58.6	67.9	77.2	82.7	86.5	N/A	100.0
113	0.2	H	13.6	86.2	0.2	(m)S	WT	N/A	0.6	9.0	57.8	147.0	61.5	18.7	N/A	46.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	2.6	17.0	43.1	18.0	5.5	N/A	13.6
SPLIT WT= 341.0							CUM WT %	N/A	0.2	2.8	19.8	62.9	80.9	86.4	N/A	100.0
115	0.5	H	9.5	47.6	42.9	msG	WT	N/A	191.3	46.3	59.2	68.1	24.2	14.6	N/A	42.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.9	10.4	13.3	15.3	5.4	3.3	N/A	9.5
SPLIT WT= 446.3							CUM WT %	N/A	42.9	53.3	66.5	81.8	87.2	90.5	N/A	100.0
120	0.6	H	18.5	51.0	30.5	msG	WT	N/A	132.7	34.8	58.4	71.7	35.9	21.4	N/A	80.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.5	8.0	13.4	16.5	8.2	4.9	N/A	18.5
SPLIT WT= 435.6							CUM WT %	N/A	30.5	38.5	51.9	68.3	76.6	81.5	N/A	100.0

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**** REPORT ON WELL 0299-W07-002 ****

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
125	0.6	H	10.5	42.7	46.8	msG	WT	N/A	189.3	37.5	34.9	54.0	31.1	14.9	N/A	42.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	46.8	9.3	8.6	13.4	7.7	3.7	N/A	10.5
SPLIT WT= 404.2							CUM WT %	N/A	46.8	56.1	64.7	78.1	85.8	89.5	N/A	100.0
130	0.6	H	14.9	53.0	32.1	msG	WT	N/A	137.5	34.4	45.3	77.2	46.5	23.5	N/A	63.6
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	32.1	8.0	10.6	18.0	10.9	5.5	N/A	14.9
SPLIT WT= 428.1							CUM WT %	N/A	32.1	40.2	50.8	68.8	79.7	85.1	N/A	100.0
135	0.5	H	15.7	41.1	43.3	msG	WT	N/A	157.4	32.2	33.2	41.6	25.6	16.8	N/A	57.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.3	8.9	9.1	11.4	7.0	4.6	N/A	15.7
SPLIT WT= 363.9							CUM WT %	N/A	43.3	52.1	61.2	72.7	79.7	84.3	N/A	100.0
140	0.2	H	19.2	40.2	40.6	msG	WT	N/A	173.4	40.0	38.6	37.4	30.9	24.7	N/A	81.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.6	9.4	9.0	8.8	7.2	5.8	N/A	19.2
SPLIT WT= 426.7							CUM WT %	N/A	40.6	50.0	59.0	67.8	75.0	80.8	N/A	100.0
145	0.2	H	10.3	70.2	19.5	(m)gS	WT	N/A	83.1	74.7	101.1	82.5	26.0	14.7	N/A	44.1
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	19.5	17.5	23.7	19.4	6.1	3.5	N/A	10.4
SPLIT WT= 426.3							CUM WT %	N/A	19.5	37.0	60.8	80.1	86.2	89.7	N/A	100.0
150	0.2	H	20.3	49.6	30.1	msG	WT	N/A	107.2	28.9	44.9	46.1	32.0	24.7	N/A	72.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	30.1	8.1	12.6	13.0	9.0	6.9	N/A	20.3
SPLIT WT= 356.0							CUM WT %	N/A	30.1	38.2	50.8	63.8	72.8	79.7	N/A	100.0
155	0.1	H	17.0	51.1	31.8	msG	WT	N/A	153.3	55.8	68.2	51.8	40.8	29.7	N/A	82.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.8	11.6	14.2	10.8	8.5	6.2	N/A	17.0
SPLIT WT= 481.6							CUM WT %	N/A	31.8	43.4	57.6	68.3	76.8	83.0	N/A	100.0
160	0.1	H	16.6	44.2	39.2	msG	WT	N/A	174.4	42.0	36.9	45.2	39.6	33.3	N/A	73.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.2	9.4	8.3	10.2	8.9	7.5	N/A	16.6
SPLIT WT= 445.2							CUM WT %	N/A	39.2	48.6	56.9	67.0	75.9	83.4	N/A	100.0
165	0.1	H	10.0	35.4	54.6	msG	WT	N/A	221.9	37.0	26.3	39.6	25.9	15.1	N/A	40.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	54.6	9.1	6.5	9.7	6.4	3.7	N/A	10.0
SPLIT WT= 406.4							CUM WT %	N/A	54.6	63.7	70.2	79.9	86.3	90.0	N/A	100.0
170	0.1	H	20.5	51.9	27.5	gmS	WT	N/A	108.2	40.1	39.4	62.6	37.6	24.4	N/A	80.6
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	27.5	10.2	10.0	15.9	9.6	6.2	N/A	20.5
SPLIT WT= 392.9							CUM WT %	N/A	27.5	37.8	47.8	63.7	73.3	79.5	N/A	100.0
175	0.1	H	29.2	46.2	24.5	gmS	WT	N/A	108.2	40.1	39.4	62.6	37.6	24.4	N/A	129.1
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	24.5	9.1	8.9	14.2	8.5	5.5	N/A	29.3
SPLIT WT= 441.4							CUM WT %	N/A	24.5	33.6	42.5	56.7	65.2	70.8	N/A	100.0

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**** REPORT ON WELL 0299-W07-002 ****

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
185	0.9	H	25.5	52.2	22.3	gmS	WT	N/A	66.9	32.9	31.3	44.0	29.3	19.1	N/A	76.5
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	22.3	11.0	10.4	14.7	9.8	6.4	N/A	25.5
SPLIT WT= 300.0							CUM WT %	N/A	22.3	33.3	43.7	58.4	68.1	74.5	N/A	100.0
190	0.2	H	22.1	58.3	19.6	gmS	WT	N/A	73.7	59.6	46.7	48.5	39.1	25.6	N/A	83.0
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	19.6	15.8	12.4	12.9	10.4	6.8	N/A	22.1
SPLIT WT= 376.2							CUM WT %	N/A	19.6	35.4	47.8	60.7	71.1	77.9	N/A	100.0
195	0.4	H	10.7	64.9	24.3	(m)gS	WT	N/A	80.5	40.9	42.0	67.2	38.4	28.2	N/A	35.5
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.3	12.4	12.7	20.3	11.6	7.9	N/A	10.7
SPLIT WT= 334.4							CUM WT %	N/A	24.3	36.7	49.4	69.7	81.3	89.3	N/A	100.0
210	2.0	H	11.6	63.5	24.9	(m)gS	WT	N/A	77.4	42.5	30.6	57.2	41.0	25.6	N/A	36.0
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.9	13.7	9.9	18.4	13.2	8.3	N/A	11.6
SPLIT WT= 311.6							CUM WT %	N/A	24.9	38.6	48.5	66.9	80.1	88.4	N/A	100.0
215	2.0	H	9.2	80.2	10.6	(m)gS	WT	N/A	67.8	135.2	111.9	113.4	93.0	61.1	N/A	59.0
SORT=	N/A	MEDIAN=	2.00	MODE=	0.00	MEAN= N/A	WT %	N/A	10.6	21.1	17.5	17.7	14.5	9.5	N/A	9.2
SPLIT WT= 646.8							CUM WT %	N/A	10.6	31.7	49.1	66.8	81.3	90.8	N/A	100.0
220	2.2	H	7.5	53.3	39.2	msG	WT	N/A	319.2	95.7	76.0	115.8	98.6	47.4	N/A	61.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.2	11.8	9.3	14.2	12.1	5.8	N/A	7.5
SPLIT WT= 814.6							CUM WT %	N/A	39.2	51.0	60.3	74.6	86.7	92.5	N/A	100.0
225	0.9	H	5.4	64.4	30.2	sG	WT	N/A	212.1	38.7	38.1	260.2	81.7	34.3	N/A	38.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	30.2	5.5	5.4	37.0	11.6	4.9	N/A	5.4
SPLIT WT= 704.7							CUM WT %	N/A	30.2	35.7	41.1	78.1	89.7	94.6	N/A	100.0
230	0.1	H	2.1	56.9	41.0	sG	WT	N/A	329.4	49.2	57.7	262.2	70.1	17.6	N/A	16.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.0	6.1	7.2	32.7	8.7	2.2	N/A	2.1
SPLIT WT= 804.7							CUM WT %	N/A	41.0	47.2	54.3	87.0	95.7	97.9	N/A	100.0
235	0.2	H	7.3	73.3	19.4	gS	WT	N/A	105.0	39.8	40.5	190.3	87.5	39.3	N/A	39.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	19.4	7.3	7.5	35.1	16.1	7.3	N/A	7.3
SPLIT WT= 547.1							CUM WT %	N/A	19.4	26.7	34.2	69.3	85.4	92.7	N/A	100.0

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**** REPORT ON WELL 0299-W07-003 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	0.8	N/	N/A	12.9	87.1	N/A	WT	N/A	719.9	51.0	39.1	10.3	3.9	2.1	N/A	N/A
SORT= N/A MEDIAN= -1.00 MODE= N/A MEAN= N/A							WT %	N/A	87.1	6.2	4.7	1.3	0.5	0.3	N/A	N/A
SPLIT WT= 832.3							CUM WT %	N/A	87.1	93.3	98.0	99.3	99.7	100.0	N/A	N/A
10	0.4	H	14.4	28.1	57.5	msG	WT	N/A	285.2	42.8	30.0	24.9	22.0	19.7	N/A	71.3
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	57.5	8.6	6.1	5.0	4.4	4.0	N/A	14.4
SPLIT WT= 495.8							CUM WT %	N/A	57.5	66.1	72.2	77.2	81.7	85.6	N/A	100.0
15	0.5	H	16.2	31.5	52.3	msG	WT	N/A	263.2	41.1	37.6	30.2	26.8	22.6	N/A	81.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.3	8.2	7.5	6.0	5.3	4.5	N/A	16.2
SPLIT WT= 502.8							CUM WT %	N/A	52.3	60.5	68.0	74.0	79.3	83.8	N/A	100.0
20	1.7	H	18.4	35.0	46.6	msG	WT	N/A	196.3	40.6	36.0	28.8	23.0	19.0	N/A	77.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	46.6	9.6	8.5	6.8	5.5	4.5	N/A	18.4
SPLIT WT= 421.4							CUM WT %	N/A	46.6	56.2	64.8	71.6	77.0	81.6	N/A	100.0
25	1.5	H	24.7	39.2	36.1	msG	WT	N/A	145.5	44.7	37.3	30.2	23.9	21.6	N/A	99.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.2	11.1	9.3	7.5	5.9	5.4	N/A	24.7
SPLIT WT= 402.5							CUM WT %	N/A	36.2	47.3	56.5	64.0	70.0	75.3	N/A	100.0
30	2.7	H	13.0	22.3	64.7	msG	WT	N/A	291.4	34.0	21.8	18.1	14.4	12.0	N/A	58.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	64.7	7.6	4.8	4.0	3.2	2.7	N/A	13.0
SPLIT WT= 450.2							CUM WT %	N/A	64.7	72.3	77.1	81.2	84.4	87.0	N/A	100.0
35	1.8	H	58.0	20.4	21.6	gsM	WT	N/A	82.5	18.0	17.2	13.9	11.6	17.3	N/A	221.8
SORT= N/A MEDIAN= 5.00 MODE= 5.00 MEAN= N/A							WT %	N/A	21.6	4.7	4.5	3.6	3.0	4.5	N/A	58.0
SPLIT WT= 382.3							CUM WT %	N/A	21.6	26.3	30.8	34.4	37.5	42.0	N/A	100.0
40	3.2	H	74.3	22.3	3.4	sM	WT	N/A	10.6	3.9	4.0	3.2	5.5	52.4	N/A	229.6
SORT= N/A MEDIAN= 5.00 MODE= 5.00 MEAN= N/A							WT %	N/A	3.4	1.3	1.3	1.0	1.8	17.0	N/A	74.3
SPLIT WT= 309.2							CUM WT %	N/A	3.4	4.7	6.0	7.0	8.8	25.7	N/A	100.0
45	26.1	H	41.8	35.3	23.0	gsM	WT	N/A	61.3	18.7	13.6	12.9	17.0	31.9	N/A	111.4
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	23.0	7.0	5.1	4.8	6.4	12.0	N/A	41.8
SPLIT WT= 267.0							CUM WT %	N/A	23.0	30.0	35.1	39.9	46.3	58.3	N/A	100.0
50	13.1	H	20.3	44.7	35.0	msG	WT	N/A	127.5	51.8	44.2	23.4	21.3	21.8	N/A	73.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	35.0	14.2	12.2	6.4	5.9	6.0	N/A	20.3
SPLIT WT= 363.8							CUM WT %	N/A	35.0	49.3	61.4	67.9	73.7	79.7	N/A	100.0
55	8.7	H	21.2	38.1	40.7	msG	WT	N/A	160.3	56.0	42.4	20.8	16.3	14.8	N/A	83.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.7	14.2	10.8	5.3	4.1	3.8	N/A	21.2
SPLIT WT= 394.1							CUM WT %	N/A	40.7	54.9	65.6	70.9	75.0	78.8	N/A	100.0

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**** REPORT ON WELL 0299-W07-003 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	4.7	H	21.5	51.0	27.5	gmS	WT	N/A	121.4	61.3	57.7	45.2	28.1	32.5	N/A	95.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.5	13.9	13.1	10.2	6.4	7.4	N/A	21.5
SPLIT WT= 441.2							CUM WT %	N/A	27.5	41.4	54.5	64.7	71.1	78.5	N/A	100.0
65	5.2	H	21.9	70.4	7.7	(g)mS	WT	N/A	8.7	10.7	21.8	25.5	10.0	11.7	N/A	24.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	7.7	9.5	19.3	22.5	8.8	10.3	N/A	21.9
SPLIT WT= 113.4							CUM WT %	N/A	7.7	17.1	36.4	58.9	67.8	78.1	N/A	100.0
70	2.4	H	15.1	80.0	4.8	(m)S	WT	N/A	17.8	39.7	117.4	81.6	32.4	23.5	N/A	55.7
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.8	10.8	31.9	22.2	8.8	6.4	N/A	15.1
SPLIT WT= 368.0							CUM WT %	N/A	4.8	15.6	47.5	69.7	78.5	84.9	N/A	100.0
75	11.1	H	14.8	77.5	7.7	(gm)S	WT	N/A	27.1	38.1	115.2	60.4	31.6	26.3	N/A	51.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.7	10.9	32.9	17.2	9.0	7.5	N/A	14.8
SPLIT WT= 350.6							CUM WT %	N/A	7.7	18.6	51.5	68.7	77.7	85.2	N/A	100.0
85	0.5	H	4.4	77.7	17.9	gS	WT	N/A	68.4	33.5	140.6	93.7	18.7	9.8	N/A	16.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	17.9	8.8	36.9	24.6	4.9	2.6	N/A	4.4
SPLIT WT= 381.1							CUM WT %	N/A	17.9	26.7	63.6	88.2	93.1	95.6	N/A	100.0
87	N/A	H	8.5	89.3	2.2	S	WT	N/A	7.3	28.9	172.4	66.6	18.9	11.8	N/A	28.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.2	8.7	51.6	19.9	5.7	3.5	N/A	8.5
SPLIT WT= 334.1							CUM WT %	N/A	2.2	10.8	62.4	82.4	88.0	91.5	N/A	100.0
90	0.5	H	4.5	91.7	3.8	S	WT	N/A	12.3	22.1	129.7	106.2	23.5	13.6	N/A	14.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.8	6.9	40.3	33.0	7.3	4.2	N/A	4.5
SPLIT WT= 321.9							CUM WT %	N/A	3.8	10.7	51.0	84.0	91.3	95.5	N/A	100.0
95	0.8	H	7.4	92.0	0.6	S	WT	N/A	2.1	4.3	128.3	150.7	24.0	15.0	N/A	25.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.6	1.2	36.6	43.0	6.9	4.3	N/A	7.4
SPLIT WT= 350.3							CUM WT %	N/A	0.6	1.8	38.5	81.5	88.3	92.6	N/A	100.0
105	0.8	H	11.4	49.0	39.6	msG	WT	N/A	146.6	20.6	28.2	85.1	32.3	15.1	N/A	42.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.6	5.6	7.6	23.0	8.7	4.1	N/A	11.4
SPLIT WT= 371.8							CUM WT %	N/A	39.6	45.2	52.8	75.8	84.6	88.6	N/A	100.0
110	24.1	H	38.4	43.9	17.6	gmS	WT	N/A	61.6	26.6	24.0	23.3	31.3	48.4	N/A	134.3
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	17.6	7.6	6.9	6.7	9.0	13.9	N/A	38.4
SPLIT WT= 349.3							CUM WT %	N/A	17.6	25.2	32.1	38.8	47.7	61.6	N/A	100.0
115	0.4	H	17.2	49.2	33.6	msG	WT	N/A	157.6	78.7	81.7	33.0	21.4	16.1	N/A	80.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.6	16.8	17.4	7.0	4.6	3.4	N/A	17.2
SPLIT WT= 469.1							CUM WT %	N/A	33.6	50.4	67.8	74.8	79.4	82.8	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	0.9	H	15.0	57.8	27.2	gmS	WT	N/A	103.5	20.9	39.8	112.0	31.9	15.2	N/A	56.9
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	27.2	5.5	10.5	29.5	8.4	4.0	N/A	15.0
SPLIT WT= 380.1							CUM WT %	N/A	27.2	32.7	43.2	72.7	81.0	85.0	N/A	100.0
125	0.8	H	12.9	40.3	46.8	msG	WT	N/A	190.1	27.4	31.2	52.9	34.3	17.9	N/A	52.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	46.8	6.8	7.7	13.0	8.4	4.4	N/A	12.9
SPLIT WT= 406.2							CUM WT %	N/A	46.8	53.6	61.2	74.3	82.7	87.1	N/A	100.0
130	0.7	H	12.6	48.9	38.5	msG	WT	N/A	171.3	30.7	36.5	86.4	44.5	19.4	N/A	56.2
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.5	6.9	8.2	19.4	10.0	4.4	N/A	12.6
SPLIT WT= 444.9							CUM WT %	N/A	38.5	45.4	53.6	73.0	83.0	87.4	N/A	100.0
135	0.5	H	16.0	43.8	40.3	msG	WT	N/A	180.4	39.1	48.5	49.8	35.8	22.8	N/A	71.5
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.3	8.7	10.8	11.1	8.0	5.1	N/A	16.0
SPLIT WT= 447.9							CUM WT %	N/A	40.3	49.0	59.8	71.0	79.0	84.0	N/A	100.0
140	0.5	H	16.1	34.8	49.1	msG	WT	N/A	220.0	42.4	31.6	32.8	27.4	21.5	N/A	72.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	49.1	9.5	7.1	7.3	6.1	4.8	N/A	16.1
SPLIT WT= 447.9							CUM WT %	N/A	49.1	58.6	65.7	73.0	79.1	83.9	N/A	100.0
145	0.1	H	18.1	42.6	39.3	msG	WT	N/A	163.8	40.9	45.9	42.6	26.8	21.2	N/A	75.6
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.3	9.8	11.0	10.2	6.4	5.1	N/A	18.1
SPLIT WT= 416.8							CUM WT %	N/A	39.3	49.1	60.1	70.3	76.8	81.9	N/A	100.0
150	0.2	H	18.0	43.8	38.2	msG	WT	N/A	162.6	35.2	45.5	49.7	33.1	23.3	N/A	76.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.2	8.3	10.7	11.7	7.8	5.5	N/A	18.0
SPLIT WT= 425.9							CUM WT %	N/A	38.2	46.4	57.1	68.8	76.5	82.0	N/A	100.0
155	0.1	H	13.2	41.0	45.8	msG	WT	N/A	203.7	36.2	42.7	40.0	36.9	26.5	N/A	58.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.8	8.1	9.6	9.0	8.3	6.0	N/A	13.2
SPLIT WT= 444.3							CUM WT %	N/A	45.8	54.0	63.6	72.6	80.9	86.8	N/A	100.0
160	0.1	H	16.6	44.4	39.0	msG	WT	N/A	168.3	33.3	34.6	37.6	41.4	44.7	N/A	71.5
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.0	7.7	8.0	8.7	9.6	10.4	N/A	16.6
SPLIT WT= 431.3							CUM WT %	N/A	39.0	46.7	54.8	63.5	73.1	83.4	N/A	100.0
165	0.1	H	19.8	43.9	36.3	msG	WT	N/A	157.8	43.4	34.7	45.9	37.5	29.4	N/A	86.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.3	10.0	8.0	10.6	8.6	6.8	N/A	19.8
SPLIT WT= 434.7							CUM WT %	N/A	36.3	46.3	54.3	64.8	73.5	80.2	N/A	100.0
170	0.1	H	12.0	27.4	60.7	msG	WT	N/A	299.6	29.1	28.1	36.6	24.6	16.7	N/A	59.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	60.7	5.9	5.7	7.4	5.0	3.4	N/A	12.0
SPLIT WT= 493.7							CUM WT %	N/A	60.7	66.6	72.3	79.7	84.7	88.0	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	0.1	H	19.2	43.0	37.8	msG	WT	N/A	165.9	38.6	38.5	55.2	33.3	22.9	N/A	84.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	37.8	8.8	8.8	12.6	7.6	5.2	N/A	19.2
SPLIT WT= 438.4							CUM WT %	N/A	37.8	46.6	55.4	68.0	75.6	80.8	N/A	100.0
180	0.1	H	11.0	30.8	58.1	msG	WT	N/A	255.8	24.6	23.8	48.4	23.1	15.7	N/A	48.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.1	5.6	5.4	11.0	5.3	3.6	N/A	11.1
SPLIT WT= 440.0							CUM WT %	N/A	58.1	63.7	69.1	80.1	85.4	89.0	N/A	100.0
215	0.1	H	11.1	59.0	29.9	(m)gS	WT	N/A	200.8	91.5	61.6	89.5	97.5	55.5	N/A	74.4
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	29.9	13.6	9.2	13.3	14.5	8.3	N/A	11.1
SPLIT WT= 673.2							CUM WT %	N/A	29.9	43.6	52.8	66.1	80.6	88.9	N/A	100.0
220	0.4	H	5.1	32.8	62.1	msG	WT	N/A	489.6	42.9	33.1	65.6	82.8	34.6	N/A	39.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	62.1	5.4	4.2	8.3	10.5	4.4	N/A	5.1
SPLIT WT= 793.2							CUM WT %	N/A	62.1	67.5	71.7	80.1	90.6	94.9	N/A	100.0
225	0.2	H	10.3	58.7	31.0	msG	WT	N/A	217.6	68.9	50.2	99.6	131.6	62.2	N/A	72.1
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.0	9.8	7.2	14.2	18.7	8.9	N/A	10.3
SPLIT WT= 706.3							CUM WT %	N/A	31.0	40.8	48.0	62.1	80.9	89.7	N/A	100.0
230	0.1	H	1.8	58.8	39.4	sG	WT	N/A	315.9	96.3	63.6	214.1	79.7	17.0	N/A	14.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.5	12.0	7.9	26.7	10.0	2.1	N/A	1.8
SPLIT WT= 802.9							CUM WT %	N/A	39.5	51.5	59.4	86.2	96.1	98.2	N/A	100.0
235	0.1	H	3.8	92.9	3.2	S	WT	N/A	21.3	34.1	85.8	228.2	208.6	57.3	N/A	25.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	3.2	5.2	13.0	34.5	31.6	8.7	N/A	3.8
SPLIT WT= 661.4							CUM WT %	N/A	3.2	8.4	21.4	55.9	87.5	96.2	N/A	100.0
240	0.1	H	5.3	66.7	28.0	gS	WT	N/A	155.9	75.9	50.5	142.0	73.5	29.8	N/A	29.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.0	13.6	9.1	25.5	13.2	5.4	N/A	5.3
SPLIT WT= 560.7							CUM WT %	N/A	28.0	41.6	50.7	76.1	89.3	94.7	N/A	100.0
245	0.1	H	4.9	61.9	33.1	sG	WT	N/A	174.3	31.4	24.7	134.7	106.4	28.7	N/A	26.0
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.1	6.0	4.7	25.6	20.2	5.5	N/A	4.9
SPLIT WT= 533.3							CUM WT %	N/A	33.1	39.1	43.8	69.4	89.6	95.1	N/A	100.0
250	0.1	H	4.1	79.0	16.9	gS	WT	N/A	101.0	44.3	31.9	239.1	126.3	30.6	N/A	24.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	16.9	7.4	5.3	40.0	21.1	5.1	N/A	4.1
SPLIT WT= 600.5							CUM WT %	N/A	16.9	24.3	29.7	69.7	90.8	95.9	N/A	100.0
255	0.1	H	6.2	85.3	8.5	(g)S	WT	N/A	37.4	33.9	32.7	164.2	104.2	38.8	N/A	27.2
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	8.5	7.7	7.5	37.5	23.8	8.9	N/A	6.2
SPLIT WT= 443.3							CUM WT %	N/A	8.5	16.3	23.7	61.2	84.9	93.8	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
260	0.1	H	4.1	95.7	0.2	S	WT	N/A	1.1	4.4	26.8	334.6	189.8	39.4	N/A	25.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	0.7	4.3	53.8	30.5	6.3	N/A	4.1
SPLIT WT= 623.1							CUM WT %	N/A	0.2	0.9	5.2	59.0	89.6	95.9	N/A	100.0
265	0.6	H	1.7	25.8	72.5	sG	WT	N/A	556.8	64.2	30.7	55.7	33.6	14.0	N/A	13.4
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	72.5	8.4	4.0	7.3	4.4	1.8	N/A	1.7
SPLIT WT= 770.1							CUM WT %	N/A	72.5	80.8	84.8	92.1	96.4	98.3	N/A	100.0
270	0.4	H	2.5	38.2	59.3	sG	WT	N/A	496.5	119.8	59.2	78.0	43.8	19.6	N/A	21.0
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	59.3	14.3	7.1	9.3	5.2	2.3	N/A	2.5
SPLIT WT= 840.2							CUM WT %	N/A	59.3	73.6	80.6	89.9	95.2	97.5	N/A	100.0
275	1.0	H	2.3	29.8	67.9	sG	WT	N/A	524.9	75.6	34.3	67.9	36.7	15.9	N/A	17.5
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	67.9	9.8	4.4	8.8	4.8	2.1	N/A	2.3
SPLIT WT= 774.2							CUM WT %	N/A	67.9	77.7	82.1	90.9	95.7	97.7	N/A	100.0
280	1.1	H	11.5	74.2	14.3	(m)gS	WT	N/A	82.2	31.4	49.2	158.4	114.6	71.9	N/A	66.0
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	14.3	5.5	8.6	27.6	20.0	12.5	N/A	11.5
SPLIT WT= 578.6							CUM WT %	N/A	14.3	19.8	28.4	56.0	76.0	88.5	N/A	100.0
285	0.6	H	3.1	30.5	66.4	sG	WT	N/A	553.3	92.0	41.9	59.9	38.6	22.0	N/A	26.1
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	66.4	11.0	5.0	7.2	4.6	2.6	N/A	3.1
SPLIT WT= 837.9							CUM WT %	N/A	66.4	77.4	82.4	89.6	94.2	96.9	N/A	100.0
290	0.5	H	7.8	55.3	36.9	msG	WT	N/A	186.3	45.2	35.2	94.8	66.0	37.8	N/A	39.2
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.9	9.0	7.0	18.8	13.1	7.5	N/A	7.8
SPLIT WT= 508.0							CUM WT %	N/A	36.9	45.9	52.9	71.7	84.7	92.2	N/A	100.0
295	0.4	H	5.0	67.1	27.9	gS	WT	N/A	223.8	118.3	89.2	201.8	85.8	42.4	N/A	40.1
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.9	14.8	11.1	25.2	10.7	5.3	N/A	5.0
SPLIT WT= 808.2							CUM WT %	N/A	27.9	42.7	53.8	79.0	89.7	95.0	N/A	100.0
300	0.4	H	6.2	38.8	55.0	msG	WT	N/A	345.8	59.3	40.1	70.0	44.8	29.7	N/A	38.7
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	55.0	9.4	6.4	11.1	7.1	4.7	N/A	6.2
SPLIT WT= 634.4							CUM WT %	N/A	55.0	64.5	70.9	82.0	89.1	93.9	N/A	100.0
305	0.3	H	6.6	71.4	22.0	gS	WT	N/A	120.8	121.7	69.2	117.1	56.7	28.0	N/A	36.4
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	22.0	22.1	12.6	21.3	10.3	5.1	N/A	6.6
SPLIT WT= 550.4							CUM WT %	N/A	22.0	44.1	56.7	78.0	88.3	93.4	N/A	100.0
310	0.2	H	1.8	31.2	66.9	sG	WT	N/A	497.1	74.1	41.1	77.0	26.7	12.9	N/A	13.7
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	66.9	10.0	5.5	10.4	3.6	1.7	N/A	1.8
SPLIT WT= 750.2							CUM WT %	N/A	66.9	76.9	82.5	92.8	96.4	98.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-003 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
315	0.2	H	14.5	80.7	4.8	(m)S	WT	N/A	17.3	8.2	7.4	108.0	112.8	55.2	N/A	52.4
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	4.8	2.3	2.1	29.9	31.2	15.3	N/A	14.5
SPLIT WT= 365.9							CUM WT %	N/A	4.8	7.1	9.1	39.0	70.2	85.5	N/A	100.0
320	0.4	H	1.3	35.9	62.8	sG	WT	N/A	423.3	78.4	22.9	83.7	45.6	11.4	N/A	9.0
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	62.8	11.6	3.4	12.4	6.8	1.7	N/A	1.3
SPLIT WT= 679.2							CUM WT %	N/A	62.8	74.4	77.8	90.2	97.0	98.7	N/A	100.0
325	0.3	H	2.0	39.7	58.3	sG	WT	N/A	416.3	58.8	22.7	120.1	67.2	14.6	N/A	14.3
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	58.3	8.2	3.2	16.8	9.4	2.0	N/A	2.0
SPLIT WT= 717.3							CUM WT %	N/A	58.3	66.6	69.7	86.6	96.0	98.0	N/A	100.0
330	0.9	H	5.3	67.6	27.1	gS	WT	N/A	114.1	49.2	32.0	119.2	62.8	21.5	N/A	22.4
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	27.1	11.7	7.6	28.3	14.9	5.1	N/A	5.3
SPLIT WT= 421.8							CUM WT %	N/A	27.1	38.8	46.4	74.7	89.6	94.7	N/A	100.0
335	0.8	H	9.2	72.7	18.1	(m)gS	WT	N/A	73.2	39.4	65.6	97.3	60.2	32.3	N/A	37.4
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	18.1	9.7	16.2	24.0	14.9	8.0	N/A	9.2
SPLIT WT= 408.6							CUM WT %	N/A	18.1	27.8	44.0	68.0	82.8	90.8	N/A	100.0
340	0.4	H	4.6	58.7	36.7	sG	WT	N/A	238.1	94.9	60.4	126.1	70.5	28.7	N/A	29.6
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.7	14.6	9.3	19.5	10.9	4.4	N/A	4.6
SPLIT WT= 647.2							CUM WT %	N/A	36.7	51.4	60.7	80.1	91.0	95.4	N/A	100.0
345	0.5	H	4.1	83.6	12.4	gS	WT	N/A	80.3	51.7	62.5	248.0	144.1	35.2	N/A	26.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	12.4	8.0	9.6	38.3	22.2	5.4	N/A	4.1
SPLIT WT= 651.9							CUM WT %	N/A	12.4	20.4	30.0	68.3	90.5	95.9	N/A	100.0
350	0.5	H	6.4	68.7	24.8	gS	WT	N/A	131.9	55.1	37.9	152.3	85.6	34.7	N/A	34.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	24.8	10.4	7.1	28.6	16.1	6.5	N/A	6.5
SPLIT WT= 529.5							CUM WT %	N/A	24.8	35.2	42.3	70.9	87.0	93.6	N/A	100.0
355	0.6	H	7.5	77.3	15.3	gS	WT	N/A	85.3	74.7	52.1	163.3	100.8	41.2	N/A	41.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	15.3	13.4	9.3	29.2	18.0	7.4	N/A	7.5
SPLIT WT= 557.5							CUM WT %	N/A	15.3	28.6	37.9	67.1	85.2	92.5	N/A	100.0
360	0.3	H	7.9	82.9	9.2	(g)S	WT	N/A	39.3	32.5	42.5	152.6	92.0	35.7	N/A	34.0
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.2	7.6	9.9	35.6	21.5	8.3	N/A	7.9
SPLIT WT= 429.0							CUM WT %	N/A	9.2	16.8	26.7	62.3	83.7	92.1	N/A	100.0
365	0.2	H	7.2	84.8	8.0	(g)S	WT	N/A	38.7	34.0	52.5	205.2	80.4	35.7	N/A	34.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.0	7.1	10.9	42.7	16.7	7.4	N/A	7.2
SPLIT WT= 484.0							CUM WT %	N/A	8.0	15.1	26.0	68.7	85.4	92.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-003 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
375	0.2	H	11.9	84.6	3.5	(m)S	WT	N/A	16.5	20.0	37.9	151.2	123.2	62.0	N/A	55.4
SORT= N/A	MEDIAN=		3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.5	4.3	8.1	32.4	26.4	13.3	N/A	11.9
SPLIT WT= 469.2							CUM WT %	N/A	3.5	7.8	16.0	48.4	74.8	88.1	N/A	100.0
380	0.2	H	4.5	71.2	24.3	gS	WT	N/A	158.3	65.6	45.2	217.2	106.7	28.1	N/A	29.1
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	24.4	10.1	7.0	33.4	16.4	4.3	N/A	4.5
SPLIT WT= 652.1							CUM WT %	N/A	24.4	34.4	41.4	74.8	91.2	95.5	N/A	100.0
385	0.2	H	3.4	49.4	47.2	sG	WT	N/A	316.1	68.0	42.2	133.4	66.7	20.2	N/A	22.9
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.2	10.2	6.3	19.9	10.0	3.0	N/A	3.4
SPLIT WT= 670.3							CUM WT %	N/A	47.2	57.4	63.7	83.6	93.6	96.6	N/A	100.0
390	0.1	H	8.3	83.7	8.0	(g)S	WT	N/A	41.0	41.0	46.5	182.9	111.9	47.8	N/A	42.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.0	8.0	9.1	35.6	21.8	9.3	N/A	8.3
SPLIT WT= 520.2							CUM WT %	N/A	8.0	16.0	25.0	60.6	82.4	91.7	N/A	100.0
395	0.2	H	4.7	85.2	10.2	gS	WT	N/A	51.2	35.0	38.8	231.6	95.8	27.3	N/A	23.5
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	10.2	7.0	7.7	46.0	19.0	5.4	N/A	4.7
SPLIT WT= 507.5							CUM WT %	N/A	10.2	17.1	24.8	70.9	89.9	95.3	N/A	100.0
405	0.1	H	9.8	84.2	6.0	(gm)S	WT	N/A	24.3	30.1	36.2	120.7	97.3	56.0	N/A	39.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	6.0	7.4	9.0	29.9	24.1	13.9	N/A	9.8
SPLIT WT= 409.6							CUM WT %	N/A	6.0	13.5	22.4	52.3	76.3	90.2	N/A	100.0
415	0.1	H	8.7	88.9	2.4	S	WT	N/A	12.8	47.9	57.8	185.2	122.7	62.9	N/A	46.9
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.4	8.9	10.8	34.5	22.9	11.7	N/A	8.8
SPLIT WT= 542.4							CUM WT %	N/A	2.4	11.3	22.1	56.6	79.5	91.3	N/A	100.0
420	0.1	H	7.5	76.5	16.0	gS	WT	N/A	63.6	40.3	52.6	107.3	67.7	36.1	N/A	29.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	16.0	10.1	13.2	27.0	17.0	9.1	N/A	7.5
SPLIT WT= 405.3							CUM WT %	N/A	16.0	26.1	39.4	66.4	83.4	92.5	N/A	100.0
425	0.1	H	7.1	80.8	12.2	gS	WT	N/A	58.0	52.5	80.6	137.3	75.7	39.0	N/A	33.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	12.2	11.0	16.9	28.8	15.9	8.2	N/A	7.1
SPLIT WT= 484.4							CUM WT %	N/A	12.2	23.2	40.1	68.9	84.7	92.9	N/A	100.0
435	0.4	H	7.5	84.1	8.5	(g)S	WT	N/A	43.7	46.4	60.2	173.3	109.8	44.5	N/A	38.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.5	9.0	11.7	33.6	21.3	8.6	N/A	7.5
SPLIT WT= 520.9							CUM WT %	N/A	8.5	17.4	29.1	62.7	83.9	92.5	N/A	100.0
450	0.2	H	5.3	72.7	22.0	gS	WT	N/A	145.1	132.5	109.8	134.0	68.7	35.1	N/A	35.0
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	22.0	20.1	16.6	20.3	10.4	5.3	N/A	5.3
SPLIT WT= 664.4							CUM WT %	N/A	22.0	42.1	58.7	79.0	89.4	94.7	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-003 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
455	0.3	H	5.7	68.1	26.2	gS	WT	N/A	168.6	162.2	85.0	95.8	63.6	30.9	N/A	36.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.2	25.3	13.2	14.9	9.9	4.8	N/A	5.7
SPLIT WT= 649.0							CUM WT %	N/A	26.2	51.5	64.7	79.6	89.5	94.3	N/A	100.0
460	0.1	H	5.2	85.3	9.6	(g)S	WT	N/A	65.0	97.2	124.7	197.9	118.9	41.5	N/A	35.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.6	14.3	18.3	29.1	17.5	6.1	N/A	5.2
SPLIT WT= 684.6							CUM WT %	N/A	9.6	23.8	42.2	71.3	88.7	94.8	N/A	100.0
465	0.1	H	8.3	90.2	1.5	S	WT	N/A	10.6	57.0	162.5	241.2	136.1	61.1	N/A	60.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.5	7.8	22.3	33.1	18.7	8.4	N/A	8.3
SPLIT WT= 732.8							CUM WT %	N/A	1.5	9.3	31.6	64.6	83.3	91.7	N/A	100.0
470	0.2	H	5.5	60.8	33.7	sG	WT	N/A	195.2	104.2	82.4	91.2	46.7	28.3	N/A	31.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.7	18.0	14.2	15.7	8.1	4.9	N/A	5.5
SPLIT WT= 587.6							CUM WT %	N/A	33.7	51.6	65.9	81.6	89.6	94.5	N/A	100.0
475	0.2	H	6.1	84.3	9.6	(g)S	WT	N/A	46.8	80.7	136.9	120.4	51.6	23.6	N/A	30.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	9.6	16.5	27.9	24.6	10.5	4.8	N/A	6.1
SPLIT WT= 497.7							CUM WT %	N/A	9.6	26.0	54.0	78.5	89.1	93.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-004 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	0.3	N/	12.3	48.4	39.3	msG	WT	N/A	275.7	28.3	38.3	38.7	77.1	157.5	N/A	86.4
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.3	4.0	5.5	5.5	11.0	22.4	N/A	12.3
SPLIT WT= 701.6							CUM WT %	N/A	39.3	43.3	48.8	54.3	65.3	87.7	N/A	100.0
10	0.4	H	1.3	49.3	49.4	sG	WT	N/A	466.2	92.2	75.1	93.9	62.0	141.6	N/A	12.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	49.4	9.8	8.0	10.0	6.6	15.0	N/A	1.3
SPLIT WT= 944.8							CUM WT %	N/A	49.4	59.2	67.2	77.1	83.7	98.7	N/A	100.0
15	1.1	H	2.2	45.1	52.7	sG	WT	N/A	456.1	87.8	61.7	74.1	59.1	108.0	N/A	19.4
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	52.7	10.1	7.1	8.6	6.8	12.5	N/A	2.2
SPLIT WT= 868.0							CUM WT %	N/A	52.7	62.8	69.9	78.5	85.3	97.8	N/A	100.0
20	1.6	H	8.2	28.1	63.7	msG	WT	N/A	583.0	74.0	51.6	49.1	45.9	36.6	N/A	74.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.7	8.1	5.6	5.4	5.0	4.0	N/A	8.2
SPLIT WT= 917.1							CUM WT %	N/A	63.7	71.8	77.5	82.8	87.8	91.8	N/A	100.0
25	1.8	H	8.2	29.8	62.0	msG	WT	N/A	522.9	75.6	48.3	48.4	47.5	31.2	N/A	69.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	62.0	9.0	5.7	5.7	5.6	3.7	N/A	8.2
SPLIT WT= 845.2							CUM WT %	N/A	62.0	71.0	76.7	82.5	88.1	91.8	N/A	100.0
30	1.6	H	8.2	32.6	59.2	msG	WT	N/A	474.8	78.8	52.7	51.6	46.2	32.5	N/A	66.1
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	59.2	9.8	6.6	6.4	5.8	4.1	N/A	8.2
SPLIT WT= 806.1							CUM WT %	N/A	59.2	69.0	75.5	82.0	87.7	91.8	N/A	100.0
35	1.6	H	5.2	35.9	58.9	msG	WT	N/A	489.8	75.9	71.7	75.2	47.7	28.2	N/A	43.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	58.9	9.1	8.6	9.0	5.7	3.4	N/A	5.2
SPLIT WT= 838.3							CUM WT %	N/A	58.9	68.0	76.7	85.7	91.4	94.8	N/A	100.0
39	1.6	H	6.3	42.3	51.4	msG	WT	N/A	424.3	112.3	78.5	75.8	49.2	33.5	N/A	51.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	51.4	13.6	9.5	9.2	6.0	4.1	N/A	6.3
SPLIT WT= 830.5							CUM WT %	N/A	51.4	65.0	74.5	83.7	89.7	93.7	N/A	100.0
45	1.5	H	0.9	51.6	47.5	sG	WT	N/A	371.1	138.5	70.1	77.8	46.9	69.9	N/A	7.1
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	47.5	17.7	9.0	10.0	6.0	9.0	N/A	0.9
SPLIT WT= 784.7							CUM WT %	N/A	47.5	65.2	74.2	84.1	90.1	99.1	N/A	100.0
50	2.1	H	1.2	60.0	38.8	sG	WT	N/A	309.0	171.1	102.4	83.3	59.4	61.6	N/A	9.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.8	21.5	12.9	10.5	7.5	7.7	N/A	1.2
SPLIT WT= 799.5							CUM WT %	N/A	38.8	60.3	73.1	83.6	91.1	98.8	N/A	100.0
55	7.1	H	1.6	65.0	33.4	sG	WT	N/A	272.5	145.0	132.4	116.6	66.4	69.4	N/A	12.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.4	17.8	16.2	14.3	8.2	8.5	N/A	1.6
SPLIT WT= 816.8							CUM WT %	N/A	33.4	51.2	67.5	81.8	89.9	98.4	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-004 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	3.1	H	28.0	65.4	6.6	(g)mS	WT	N/A	32.7	21.3	20.5	58.1	32.6	189.4	N/A	137.9
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	6.6	4.3	4.2	11.8	6.6	38.5	N/A	28.0
SPLIT WT= 496.6							CUM WT %	N/A	6.6	11.0	15.1	26.9	33.5	72.0	N/A	100.0
65	9.6	H	29.4	55.9	14.6	gmS	WT	N/A	86.2	39.1	36.5	59.2	77.7	117.0	N/A	173.5
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	14.6	6.6	6.2	10.1	13.2	19.9	N/A	29.5
SPLIT WT= 595.5							CUM WT %	N/A	14.6	21.3	27.5	37.5	50.7	70.6	N/A	100.0
70	8.4	H	17.8	75.1	7.0	(gm)S	WT	N/A	44.2	29.3	34.2	97.5	183.9	128.1	N/A	112.3
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	7.0	4.7	5.4	15.5	29.2	20.4	N/A	17.8
SPLIT WT= 633.2							CUM WT %	N/A	7.0	11.7	17.1	32.6	61.8	82.2	N/A	100.0
75	11.8	H	10.0	79.7	10.3	(m)gS	WT	N/A	65.7	31.0	69.3	83.7	195.6	128.7	N/A	64.0
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	10.3	4.9	10.9	13.1	30.7	20.2	N/A	10.0
SPLIT WT= 639.7							CUM WT %	N/A	10.3	15.2	26.0	39.1	69.8	90.0	N/A	100.0
80	1.1	H	5.8	79.3	14.9	gS	WT	N/A	111.7	100.2	262.6	130.8	61.9	38.5	N/A	43.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	14.9	13.4	35.1	17.5	8.3	5.1	N/A	5.8
SPLIT WT= 750.0							CUM WT %	N/A	14.9	28.3	63.4	80.8	89.1	94.3	N/A	100.0
85	0.9	H	3.2	90.5	6.3	(g)S	WT	N/A	36.7	39.6	244.8	174.2	44.9	26.0	N/A	18.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.3	6.8	41.9	29.8	7.7	4.5	N/A	3.2
SPLIT WT= 591.2							CUM WT %	N/A	6.3	13.0	54.9	84.7	92.4	96.8	N/A	100.0
90	0.9	H	5.1	93.8	1.2	S	WT	N/A	7.4	8.6	233.7	256.1	60.2	37.4	N/A	32.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.2	1.4	36.8	40.3	9.5	5.9	N/A	5.1
SPLIT WT= 640.9							CUM WT %	N/A	1.2	2.5	39.3	79.6	89.0	94.9	N/A	100.0
95	0.9	H	5.2	94.7	0.2	S	WT	N/A	1.3	6.6	216.4	315.6	53.2	31.0	N/A	33.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	1.0	32.9	48.0	8.1	4.7	N/A	5.2
SPLIT WT= 660.3							CUM WT %	N/A	0.2	1.2	34.1	82.1	90.1	94.9	N/A	100.0
100	1.1	H	4.9	90.5	4.6	S	WT	N/A	32.4	13.3	164.4	341.7	79.0	41.2	N/A	34.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.6	1.9	23.3	48.4	11.2	5.8	N/A	4.9
SPLIT WT= 711.7							CUM WT %	N/A	4.6	6.5	29.7	78.1	89.3	95.1	N/A	100.0
105	1.5	H	5.7	72.8	21.5	gS	WT	N/A	166.3	54.4	164.1	238.7	69.2	37.4	N/A	44.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	21.5	7.0	21.2	30.8	8.9	4.8	N/A	5.7
SPLIT WT= 778.7							CUM WT %	N/A	21.5	28.5	49.7	80.5	89.5	94.3	N/A	100.0
110	0.6	H	9.5	62.2	28.3	(m)gS	WT	N/A	222.6	78.7	105.9	169.3	89.8	44.9	N/A	74.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.3	10.0	13.5	21.5	11.4	5.7	N/A	9.5
SPLIT WT= 791.7							CUM WT %	N/A	28.3	38.3	51.8	73.3	84.8	90.5	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-004 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	0.6	H	7.6	42.9	49.5	msG	WT	N/A	393.3	65.7	63.7	103.0	71.5	36.8	N/A	60.2
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.5	8.3	8.0	13.0	9.0	4.6	N/A	7.6
SPLIT WT= 795.9							CUM WT %	N/A	49.5	57.8	65.8	78.8	87.8	92.4	N/A	100.0
120	0.5	H	8.7	49.8	41.5	msG	WT	N/A	345.7	79.8	65.4	132.4	82.1	54.8	N/A	72.4
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.5	9.6	7.9	15.9	9.9	6.6	N/A	8.7
SPLIT WT= 834.2							CUM WT %	N/A	41.5	51.1	59.0	74.9	84.7	91.3	N/A	100.0
125	0.6	H	9.6	49.0	41.4	msG	WT	N/A	354.2	84.1	93.5	103.6	79.4	59.2	N/A	81.9
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.4	9.8	10.9	12.1	9.3	6.9	N/A	9.6
SPLIT WT= 856.9							CUM WT %	N/A	41.4	51.2	62.1	74.2	83.5	90.4	N/A	100.0
130	0.4	H	9.4	58.6	31.9	msG	WT	N/A	276.2	83.0	114.8	145.3	98.5	65.4	N/A	81.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.9	9.6	13.3	16.8	11.4	7.6	N/A	9.4
SPLIT WT= 865.8							CUM WT %	N/A	31.9	41.5	54.8	71.6	83.0	90.6	N/A	100.0
135	0.5	H	8.4	47.4	44.2	msG	WT	N/A	376.9	73.7	70.1	115.7	105.4	39.0	N/A	71.9
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.2	8.6	8.2	13.6	12.4	4.6	N/A	8.4
SPLIT WT= 852.1							CUM WT %	N/A	44.2	52.8	61.1	74.6	87.0	91.6	N/A	100.0
140	0.6	H	8.6	48.3	43.0	msG	WT	N/A	379.6	80.1	81.8	103.9	109.7	51.2	N/A	76.3
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.0	9.1	9.3	11.8	12.4	5.8	N/A	8.6
SPLIT WT= 886.6							CUM WT %	N/A	43.0	52.1	61.4	73.1	85.6	91.4	N/A	100.0
145	0.7	H	9.3	46.1	44.6	msG	WT	N/A	423.0	75.4	91.4	103.4	108.2	59.0	N/A	88.3
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.6	8.0	9.6	10.9	11.4	6.2	N/A	9.3
SPLIT WT= 955.1							CUM WT %	N/A	44.6	52.5	62.2	73.1	84.5	90.7	N/A	100.0
150	0.1	H	10.5	42.5	47.0	msG	WT	N/A	398.9	71.2	51.9	111.1	91.9	32.8	N/A	88.4
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.0	8.4	6.2	13.2	10.9	3.9	N/A	10.5
SPLIT WT= 846.8							CUM WT %	N/A	47.0	55.4	61.6	74.8	85.8	89.5	N/A	100.0
155	0.2	H	10.7	53.1	36.2	msG	WT	N/A	319.0	98.2	70.9	132.2	114.0	52.1	N/A	93.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.2	11.2	8.1	15.0	13.0	5.9	N/A	10.7
SPLIT WT= 885.4							CUM WT %	N/A	36.2	47.4	55.5	70.5	83.4	89.3	N/A	100.0
160	0.1	H	9.6	51.1	39.3	msG	WT	N/A	324.5	69.4	60.6	137.9	97.9	56.6	N/A	79.2
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.3	8.4	7.3	16.7	11.9	6.9	N/A	9.6
SPLIT WT= 833.5							CUM WT %	N/A	39.3	47.7	55.0	71.7	83.6	90.4	N/A	100.0
165	0.2	H	9.5	63.1	27.4	(m)gS	WT	N/A	214.8	99.8	76.8	154.6	113.5	50.1	N/A	74.1
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.4	12.7	9.8	19.7	14.5	6.4	N/A	9.5
SPLIT WT= 789.1							CUM WT %	N/A	27.4	40.1	49.9	69.7	84.2	90.5	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-004 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	0.1	H	9.4	58.3	32.3	msG	WT	N/A	245.6	83.4	77.0	136.9	92.6	53.1	N/A	71.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.3	11.0	10.1	18.0	12.2	7.0	N/A	9.4
SPLIT WT= 767.9							CUM WT %	N/A	32.3	43.3	53.4	71.4	83.6	90.6	N/A	100.0
175	0.1	H	10.6	64.9	24.5	(m)gS	WT	N/A	171.9	84.4	64.3	133.6	108.9	65.0	N/A	74.8
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.5	12.0	9.2	19.0	15.5	9.3	N/A	10.6
SPLIT WT= 708.5							CUM WT %	N/A	24.5	36.5	45.6	64.6	80.1	89.4	N/A	100.0
180	0.1	H	7.6	47.9	44.5	msG	WT	N/A	339.7	67.7	46.0	122.2	81.0	48.4	N/A	57.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.5	8.9	6.0	16.0	10.6	6.4	N/A	7.6
SPLIT WT= 766.7							CUM WT %	N/A	44.5	53.4	59.4	75.5	86.1	92.4	N/A	100.0
185	0.1	H	8.9	62.6	28.5	(m)gS	WT	N/A	183.1	63.8	59.2	140.2	88.5	50.6	N/A	57.0
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.5	9.9	9.2	21.8	13.8	7.9	N/A	8.9
SPLIT WT= 647.0							CUM WT %	N/A	28.5	38.4	47.7	69.5	83.3	91.1	N/A	100.0
190	0.1	H	9.7	55.6	34.8	msG	WT	N/A	247.5	80.1	52.8	117.4	93.9	51.3	N/A	68.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.8	11.3	7.4	16.5	13.2	7.2	N/A	9.7
SPLIT WT= 714.1							CUM WT %	N/A	34.8	46.0	53.4	69.9	83.1	90.3	N/A	100.0
195	0.1	H	8.1	56.4	35.4	msG	WT	N/A	247.4	79.8	57.0	122.7	81.3	53.3	N/A	56.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.4	11.4	8.2	17.6	11.6	7.6	N/A	8.2
SPLIT WT= 699.2							CUM WT %	N/A	35.4	46.9	55.0	72.6	84.2	91.9	N/A	100.0
200	0.1	H	7.1	42.9	50.0	msG	WT	N/A	374.2	66.0	59.6	84.7	67.4	43.1	N/A	53.3
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.0	8.8	8.0	11.3	9.0	5.8	N/A	7.1
SPLIT WT= 750.1							CUM WT %	N/A	50.0	58.8	66.8	78.1	87.1	92.9	N/A	100.0
205	0.0	H	5.0	66.7	28.3	gS	WT	N/A	190.6	32.4	39.5	220.6	112.3	44.6	N/A	34.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	28.3	4.8	5.9	32.7	16.7	6.6	N/A	5.0
SPLIT WT= 675.8							CUM WT %	N/A	28.3	33.1	39.0	71.7	88.3	95.0	N/A	100.0
210	0.1	H	7.2	75.0	17.8	gS	WT	N/A	94.1	29.4	29.4	148.5	130.6	57.8	N/A	37.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	17.8	5.6	5.6	28.2	24.8	11.0	N/A	7.2
SPLIT WT= 528.2							CUM WT %	N/A	17.8	23.4	29.0	57.1	81.9	92.8	N/A	100.0
215	0.1	H	8.3	87.7	4.0	S	WT	N/A	27.1	18.1	66.5	376.1	85.2	51.1	N/A	56.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.0	2.7	9.8	55.3	12.5	7.5	N/A	8.3
SPLIT WT= 681.7							CUM WT %	N/A	4.0	6.6	16.4	71.7	84.2	91.7	N/A	100.0
220	0.2	H	6.9	68.5	24.6	gS	WT	N/A	173.0	30.8	61.5	237.3	102.8	48.7	N/A	48.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	24.6	4.4	8.8	33.8	14.6	6.9	N/A	6.9
SPLIT WT= 702.4							CUM WT %	N/A	24.6	29.0	37.8	71.5	86.1	93.1	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-004 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	0.2	H	7.6	62.1	30.3	msG	WT	N/A	194.3	50.7	65.1	164.6	76.5	41.9	N/A	48.7
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.3	7.9	10.1	25.7	11.9	6.5	N/A	7.6
SPLIT WT= 646.4							CUM WT %	N/A	30.3	38.2	48.3	74.0	85.9	92.4	N/A	100.0
230	0.2	H	3.9	43.4	52.7	sG	WT	N/A	404.5	140.2	57.9	71.2	42.7	21.3	N/A	29.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	52.7	18.3	7.5	9.3	5.6	2.8	N/A	3.9
SPLIT WT= 769.5							CUM WT %	N/A	52.7	71.0	78.5	87.8	93.3	96.1	N/A	100.0
235	2.2	H	4.0	26.6	69.4	msG	WT	N/A	580.8	71.6	36.3	51.9	40.1	22.9	N/A	33.2
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	69.4	8.6	4.3	6.2	4.8	2.7	N/A	4.0
SPLIT WT= 836.6							CUM WT %	N/A	69.4	78.0	82.3	88.5	93.3	96.0	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-005 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.4	N/	0.5	16.9	82.6	G	WT	N/A	588.4	9.9	31.2	48.6	22.8	8.0	N/A	3.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	82.6	1.4	4.4	6.8	3.2	1.1	N/A	0.5
SPLIT WT= 711.3							CUM WT %	N/A	82.6	84.0	88.3	95.2	98.4	99.5	N/A	100.0
10	2.4	N/	1.2	11.7	87.1	G	WT	N/A	618.3	16.0	21.0	18.0	13.4	14.8	N/A	8.2
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	87.1	2.3	3.0	2.5	1.9	2.1	N/A	1.2
SPLIT WT= 710.6							CUM WT %	N/A	87.1	89.4	92.3	94.9	96.8	98.9	N/A	100.0
20	3.9	H	9.6	42.7	47.7	msG	WT	N/A	405.1	78.9	68.3	100.0	75.0	40.8	N/A	81.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	47.7	9.3	8.0	11.8	8.8	4.8	N/A	9.6
SPLIT WT= 855.3							CUM WT %	N/A	47.7	57.0	65.0	76.8	85.6	90.4	N/A	100.0
30	2.9	H	28.3	52.3	19.4	gmS	WT	N/A	141.3	61.4	31.3	66.2	58.1	164.2	N/A	206.7
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	19.4	8.4	4.3	9.1	8.0	22.5	N/A	28.4
SPLIT WT= 732.3							CUM WT %	N/A	19.4	27.8	32.1	41.2	49.1	71.7	N/A	100.0
40	19.7	H	10.7	71.4	17.9	(m)gS	WT	N/A	130.8	68.8	75.3	113.2	142.5	123.9	N/A	77.8
SORT= N/A MEDIAN= 2.00 MODE= 3.00 MEAN= N/A							WT %	N/A	17.9	9.2	10.3	15.5	19.5	17.0	N/A	10.7
SPLIT WT= 730.3							CUM WT %	N/A	17.9	27.1	37.4	52.9	72.4	89.4	N/A	100.0
45	7.9	H	5.2	50.2	44.7	sG	WT	N/A	382.0	117.6	79.0	102.7	67.2	62.6	N/A	44.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	44.7	13.8	9.2	12.0	7.9	7.3	N/A	5.2
SPLIT WT= 852.1							CUM WT %	N/A	44.7	58.4	67.7	79.7	87.5	94.8	N/A	100.0
50	4.3	H	9.3	73.7	17.0	(m)gS	WT	N/A	134.5	75.2	171.3	154.8	105.0	75.4	N/A	73.5
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	17.0	9.5	21.7	19.6	13.3	9.6	N/A	9.3
SPLIT WT= 783.0							CUM WT %	N/A	17.0	26.6	48.2	67.8	81.1	90.7	N/A	100.0
55	3.7	H	7.9	81.7	10.4	gS	WT	N/A	82.6	93.7	173.2	162.8	121.3	98.3	N/A	62.5
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	10.4	11.8	21.9	20.6	15.3	12.2	N/A	7.9
SPLIT WT= 791.2							CUM WT %	N/A	10.4	22.2	44.1	64.7	80.0	92.1	N/A	100.0
60	6.2	H	8.8	85.4	5.8	(g)S	WT	N/A	41.0	69.0	148.4	251.6	80.5	54.3	N/A	62.1
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	5.8	9.8	21.0	35.6	11.4	7.7	N/A	8.8
SPLIT WT= 703.0							CUM WT %	N/A	5.8	15.6	36.6	72.1	83.5	91.2	N/A	100.0
65	6.9	H	13.2	77.4	9.4	(gm)S	WT	N/A	66.4	59.6	119.8	159.0	101.6	107.1	N/A	92.9
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	9.4	8.4	17.0	22.5	14.4	15.2	N/A	13.2
SPLIT WT= 710.9							CUM WT %	N/A	9.4	17.8	34.8	57.3	71.7	86.9	N/A	100.0
70	13.4	H	9.6	82.0	8.4	(gm)S	WT	N/A	54.2	59.4	176.5	135.7	79.9	77.0	N/A	62.2
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	8.4	9.2	27.4	21.0	12.4	11.9	N/A	9.6
SPLIT WT= 645.6							CUM WT %	N/A	8.4	17.6	45.0	66.0	78.4	90.4	N/A	100.0

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**** REPORT ON WELL 0299-W07-005 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
75	3.0	H	7.2	80.2	12.5	gS	WT	N/A	100.4	71.0	241.5	187.4	81.1	62.8	N/A	58.1
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.5	8.9	30.1	23.4	10.1	7.8	N/A	7.2
SPLIT WT= 801.6							CUM WT %	N/A	12.5	21.4	51.5	74.8	84.9	92.8	N/A	100.0
80	0.7	H	9.2	55.7	35.0	msG	WT	N/A	264.3	84.6	114.8	108.3	78.9	34.0	N/A	69.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.0	11.2	15.2	14.4	10.5	4.5	N/A	9.3
SPLIT WT= 754.7							CUM WT %	N/A	35.0	46.2	61.4	75.8	86.2	90.8	N/A	100.0
85	0.4	H	9.1	53.2	37.7	msG	WT	N/A	329.2	93.2	105.9	126.6	101.9	37.5	N/A	79.9
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.7	10.7	12.1	14.5	11.7	4.3	N/A	9.1
SPLIT WT= 878.8							CUM WT %	N/A	37.7	48.3	60.4	74.9	86.6	90.9	N/A	100.0
90	0.3	H	7.5	52.3	40.2	msG	WT	N/A	360.6	74.3	131.9	152.1	67.1	43.8	N/A	67.3
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.2	8.3	14.7	17.0	7.5	4.9	N/A	7.5
SPLIT WT= 906.8							CUM WT %	N/A	40.2	48.5	63.2	80.1	87.6	92.5	N/A	100.0
95	1.1	H	2.9	57.9	39.2	sG	WT	N/A	327.1	84.1	99.2	137.7	61.6	99.7	N/A	24.1
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.2	10.1	11.9	16.5	7.4	12.0	N/A	2.9
SPLIT WT= 835.6							CUM WT %	N/A	39.2	49.3	61.2	77.8	85.1	97.1	N/A	100.0
105	0.5	H	6.5	64.0	29.5	gS	WT	N/A	227.3	60.4	153.0	196.7	54.7	29.1	N/A	50.2
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.5	7.8	19.8	25.5	7.1	3.8	N/A	6.5
SPLIT WT= 784.9							CUM WT %	N/A	29.5	37.3	57.1	82.6	89.7	93.5	N/A	100.0
110	0.7	H	9.1	58.0	33.0	msG	WT	N/A	275.8	95.3	174.7	117.4	62.5	35.4	N/A	75.9
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.0	11.4	20.9	14.0	7.5	4.2	N/A	9.1
SPLIT WT= 837.8							CUM WT %	N/A	33.0	44.3	65.2	79.2	86.7	90.9	N/A	100.0
115	0.2	H	3.5	62.9	33.6	sG	WT	N/A	270.7	69.9	109.0	155.2	81.4	90.2	N/A	28.2
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.6	8.7	13.6	19.3	10.1	11.2	N/A	3.5
SPLIT WT= 808.1							CUM WT %	N/A	33.6	42.3	55.9	75.2	85.3	96.5	N/A	100.0
125	0.4	H	11.1	60.7	28.3	(m)gS	WT	N/A	255.3	103.1	97.3	167.4	116.5	63.6	N/A	99.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.3	11.4	10.8	18.5	12.9	7.0	N/A	11.1
SPLIT WT= 902.5							CUM WT %	N/A	28.3	39.7	50.5	69.0	81.9	89.0	N/A	100.0
130	0.3	H	9.0	33.8	57.2	msG	WT	N/A	526.8	76.6	63.9	58.7	61.5	50.9	N/A	82.9
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	57.2	8.3	6.9	6.4	6.7	5.5	N/A	9.0
SPLIT WT= 925.9							CUM WT %	N/A	57.2	65.5	72.4	78.8	85.5	91.0	N/A	100.0
135	0.4	H	7.5	58.5	34.0	msG	WT	N/A	291.8	133.3	114.9	126.8	82.2	45.7	N/A	64.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.0	15.5	13.4	14.8	9.6	5.3	N/A	7.5
SPLIT WT= 860.6							CUM WT %	N/A	34.0	49.5	62.8	77.6	87.2	92.5	N/A	100.0

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**** REPORT ON WELL 0299-W07-005 ****

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
140	0.9	H	9.4	62.6	28.0	(m)gS	WT	N/A	247.5	93.8	125.1	145.3	129.9	80.5	N/A	83.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.0	10.6	14.1	16.4	14.7	6.8	N/A	9.4
SPLIT WT= 888.8							CUM WT %	N/A	28.0	38.5	52.7	69.1	83.8	90.6	N/A	100.0
145	0.2	H	6.6	52.5	40.9	msG	WT	N/A	346.0	75.4	94.3	117.8	108.5	48.1	N/A	56.2
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.9	8.9	11.1	13.9	12.8	5.7	N/A	6.6
SPLIT WT= 848.0							CUM WT %	N/A	40.9	49.8	60.9	74.9	87.7	93.4	N/A	100.0
150	0.1	H	9.3	52.2	38.4	msG	WT	N/A	341.3	87.4	74.3	128.2	119.1	54.7	N/A	82.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	38.5	9.9	8.4	14.4	13.4	6.2	N/A	9.3
SPLIT WT= 890.4							CUM WT %	N/A	38.5	48.3	56.7	71.1	84.5	90.7	N/A	100.0
155	0.2	H	9.0	50.6	40.4	msG	WT	N/A	336.2	91.2	72.1	121.2	83.0	54.3	N/A	75.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.4	11.0	8.7	14.6	10.0	6.5	N/A	9.0
SPLIT WT= 833.1							CUM WT %	N/A	40.4	51.3	60.0	74.5	84.5	91.0	N/A	100.0
160	0.0	H	12.5	57.4	30.1	msG	WT	N/A	259.8	104.4	77.5	123.3	132.4	57.7	N/A	108.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	30.1	12.1	9.0	14.3	15.3	6.7	N/A	12.5
SPLIT WT= 865.7							CUM WT %	N/A	30.1	42.2	51.2	65.4	80.8	87.5	N/A	100.0
170	0.0	H	9.7	50.7	39.6	msG	WT	N/A	364.7	142.3	85.8	97.0	86.5	55.1	N/A	88.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.6	15.5	9.3	10.5	9.4	6.0	N/A	9.7
SPLIT WT= 921.1							CUM WT %	N/A	39.6	55.1	64.4	75.0	84.4	90.3	N/A	100.0
180	0.0	H	11.6	68.1	20.3	(m)gS	WT	N/A	179.9	109.7	85.5	177.8	153.7	76.3	N/A	102.6
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	20.3	12.4	9.7	20.1	17.4	8.6	N/A	11.6
SPLIT WT= 888.7							CUM WT %	N/A	20.3	32.7	42.4	62.5	79.8	88.4	N/A	100.0
190	0.0	H	10.2	66.7	23.1	(m)gS	WT	N/A	181.7	111.2	84.6	151.7	111.9	65.5	N/A	80.5
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	23.1	14.1	10.8	19.3	14.2	8.3	N/A	10.2
SPLIT WT= 787.0							CUM WT %	N/A	23.1	37.2	48.0	67.2	81.5	89.8	N/A	100.0
195	0.1	H	12.9	62.3	24.8	(m)gS	WT	N/A	197.8	102.1	80.1	157.5	106.0	52.3	N/A	103.3
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	24.8	12.8	10.0	19.7	13.3	6.5	N/A	12.9
SPLIT WT= 804.2							CUM WT %	N/A	24.8	37.5	47.6	67.3	80.5	87.1	N/A	100.0
200	0.1	H	12.6	67.8	19.6	(m)gS	WT	N/A	162.6	124.8	88.4	173.4	106.1	68.3	N/A	104.2
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	19.6	15.1	10.7	21.0	12.8	8.3	N/A	12.6
SPLIT WT= 830.6							CUM WT %	N/A	19.6	34.7	45.4	66.4	79.2	87.4	N/A	100.0
215	0.1	H	11.1	66.4	22.5	(m)gS	WT	N/A	151.7	78.3	68.3	157.8	87.0	58.3	N/A	74.5
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	22.5	11.6	10.1	23.4	12.9	8.4	N/A	11.1
SPLIT WT= 676.9							CUM WT %	N/A	22.5	34.1	44.3	67.7	80.6	89.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-005 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
220	0.1	H	4.4	35.5	60.1	msG	WT	N/A	451.6	95.5	49.0	59.1	38.2	24.7	N/A	32.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	60.1	12.7	6.5	7.9	5.1	3.3	N/A	4.4
SPLIT WT= 754.1							CUM WT %	N/A	60.1	72.9	79.4	87.2	92.3	95.6	N/A	100.0
225	0.2	H	11.6	80.2	8.2	(gm)S	WT	N/A	52.6	88.0	99.3	160.9	95.7	69.5	N/A	74.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.2	13.7	15.5	25.1	14.9	10.9	N/A	11.6
SPLIT WT= 646.9							CUM WT %	N/A	8.2	22.0	37.5	62.6	77.5	88.4	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W07-006 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	2.6	N/	1.3	12.5	86.2	G	WT	N/A	635.2	20.7	28.1	11.8	13.3	18.3	N/A	9.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	86.2	2.8	3.8	1.6	1.8	2.5	N/A	1.3
SPLIT WT= 734.2							CUM WT %	N/A	86.2	89.0	92.8	94.4	96.2	98.7	N/A	100.0
10	1.0	N/	2.2	34.6	63.2	sG	WT	N/A	400.7	30.7	46.9	65.2	49.8	26.9	N/A	13.8
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	63.2	4.8	7.4	10.3	7.9	4.2	N/A	2.2
SPLIT WT= 632.7							CUM WT %	N/A	63.2	68.0	75.4	85.7	93.6	97.8	N/A	100.0
15	0.8	H	13.0	43.4	43.6	msG	WT	N/A	345.7	89.4	65.7	50.3	87.6	51.5	N/A	102.7
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.6	11.3	8.3	6.3	11.1	6.5	N/A	13.0
SPLIT WT= 794.9							CUM WT %	N/A	43.6	54.9	63.2	69.5	80.6	87.1	N/A	100.0
20	5.7	H	9.4	46.1	44.5	msG	WT	N/A	377.9	118.0	80.2	64.1	82.2	47.7	N/A	79.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	44.5	13.9	9.4	7.5	9.7	5.6	N/A	9.4
SPLIT WT= 847.9							CUM WT %	N/A	44.5	58.3	67.8	75.3	85.0	90.6	N/A	100.0
25	9.9	H	6.2	52.6	41.2	msG	WT	N/A	341.7	119.2	97.5	82.2	96.6	41.0	N/A	51.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.2	14.4	11.8	9.9	11.7	4.9	N/A	6.2
SPLIT WT= 827.4							CUM WT %	N/A	41.2	55.6	67.3	77.2	88.9	93.8	N/A	100.0
30	8.2	H	9.5	61.2	29.4	(m)gS	WT	N/A	229.5	100.2	99.8	99.8	123.9	54.4	N/A	74.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	29.4	12.8	12.8	12.8	15.9	7.0	N/A	9.5
SPLIT WT= 782.8							CUM WT %	N/A	29.4	42.2	55.0	67.7	83.6	90.5	N/A	100.0
35	22.9	H	8.4	68.9	22.7	(m)gS	WT	N/A	169.8	87.5	96.6	90.7	152.4	88.7	N/A	63.2
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	22.7	11.7	12.9	12.1	20.4	11.8	N/A	8.4
SPLIT WT= 748.0							CUM WT %	N/A	22.7	34.4	47.3	59.4	79.7	91.6	N/A	100.0
40	16.4	H	7.8	55.6	36.6	msG	WT	N/A	260.9	92.4	81.5	77.5	86.0	59.4	N/A	55.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.6	13.0	11.4	10.9	12.1	8.3	N/A	7.8
SPLIT WT= 713.4							CUM WT %	N/A	36.6	49.5	60.9	71.8	83.8	92.2	N/A	100.0
45	7.9	H	6.0	69.2	24.8	gS	WT	N/A	212.8	138.1	116.3	123.9	139.4	77.1	N/A	51.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	24.8	16.1	13.5	14.4	16.2	9.0	N/A	6.0
SPLIT WT= 858.4							CUM WT %	N/A	24.8	40.8	54.4	68.8	85.0	94.0	N/A	100.0
50	5.0	H	13.7	74.9	11.4	(m)gS	WT	N/A	87.7	71.5	156.8	107.9	124.4	117.3	N/A	106.0
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	11.4	9.3	20.3	14.0	16.1	15.2	N/A	13.7
SPLIT WT= 773.5							CUM WT %	N/A	11.4	20.6	41.0	54.9	71.1	86.3	N/A	100.0
55	3.8	H	10.0	83.7	6.3	(gm)S	WT	N/A	45.4	48.5	203.9	179.1	92.1	80.5	N/A	71.9
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	6.3	6.7	28.3	24.8	12.8	11.2	N/A	10.0
SPLIT WT= 723.3							CUM WT %	N/A	6.3	13.0	41.3	66.1	78.9	90.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-008 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	3.3	H	8.3	86.9	4.8	S	WT	N/A	33.5	54.0	178.7	227.1	95.6	56.1	N/A	58.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.8	7.7	25.4	32.3	13.6	8.0	N/A	8.3
SPLIT WT= 701.4							CUM WT %	N/A	4.8	12.4	37.8	70.1	83.7	91.7	N/A	100.0
65	2.6	H	8.1	87.9	3.9	S	WT	N/A	28.2	56.7	235.6	200.3	75.2	63.8	N/A	58.5
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.9	7.9	32.8	27.9	10.5	8.9	N/A	8.1
SPLIT WT= 720.0							CUM WT %	N/A	3.9	11.8	44.6	72.5	83.0	91.9	N/A	100.0
70	5.6	H	8.9	84.5	6.7	(g)S	WT	N/A	50.7	72.8	251.3	175.1	86.9	57.7	N/A	67.7
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.7	9.6	33.0	23.0	11.4	7.6	N/A	8.9
SPLIT WT= 760.8							CUM WT %	N/A	6.7	16.2	49.2	72.1	83.5	91.1	N/A	100.0
75	3.8	H	5.7	77.8	16.5	gS	WT	N/A	123.7	120.6	233.0	136.3	55.7	36.5	N/A	42.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	16.5	16.1	31.1	18.2	7.4	4.9	N/A	5.7
SPLIT WT= 745.1							CUM WT %	N/A	16.5	32.7	63.8	82.0	89.4	94.3	N/A	100.0
80	0.8	H	7.4	68.1	24.5	gS	WT	N/A	225.7	162.6	192.7	135.6	92.0	44.0	N/A	68.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.5	17.7	20.9	14.7	10.0	4.8	N/A	7.4
SPLIT WT= 923.3							CUM WT %	N/A	24.5	42.2	63.1	77.8	87.8	92.6	N/A	100.0
85	0.3	H	10.0	67.9	22.1	(m)gS	WT	N/A	210.1	131.0	164.4	213.9	89.5	48.3	N/A	95.6
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	22.1	13.8	17.3	22.5	9.4	5.1	N/A	10.0
SPLIT WT= 951.6							CUM WT %	N/A	22.1	35.8	53.1	75.5	84.9	90.0	N/A	100.0
90	0.2	H	8.3	70.0	21.6	(m)gS	WT	N/A	198.7	110.0	152.3	206.1	112.8	62.7	N/A	76.7
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	21.6	12.0	16.6	22.4	12.3	6.8	N/A	8.3
SPLIT WT= 915.8							CUM WT %	N/A	21.6	33.6	50.2	72.6	84.8	91.7	N/A	100.0
95	0.5	H	8.7	71.1	20.2	(m)gS	WT	N/A	152.8	92.0	167.2	138.5	81.2	59.5	N/A	66.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	20.2	12.2	22.1	18.3	10.7	7.9	N/A	8.7
SPLIT WT= 759.2							CUM WT %	N/A	20.2	32.3	54.4	72.7	83.4	91.3	N/A	100.0
100	0.5	H	9.0	57.4	33.6	msG	WT	N/A	270.7	110.6	135.6	95.1	72.9	48.3	N/A	72.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.6	13.7	16.8	11.8	9.1	6.0	N/A	9.0
SPLIT WT= 804.4							CUM WT %	N/A	33.6	47.3	64.2	76.0	85.0	91.0	N/A	100.0
105	0.5	H	8.1	59.3	32.7	msG	WT	N/A	268.2	96.9	155.9	109.1	75.3	49.4	N/A	66.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.7	11.8	19.0	13.3	9.2	6.0	N/A	8.1
SPLIT WT= 813.8							CUM WT %	N/A	32.7	44.5	63.4	76.7	85.9	91.9	N/A	100.0
110	0.5	H	7.4	68.8	23.8	gS	WT	N/A	183.2	78.7	192.1	125.3	77.9	56.6	N/A	57.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	23.8	10.2	24.9	16.3	10.1	7.3	N/A	7.4
SPLIT WT= 771.1							CUM WT %	N/A	23.8	34.0	58.9	75.1	85.2	92.6	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-006 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	0.8	H	7.6	59.2	33.2	msG	WT	N/A	268.6	75.4	110.9	149.6	92.3	51.3	N/A	61.6
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.2	9.3	13.7	18.5	11.4	6.3	N/A	7.6
SPLIT WT= 802.5							CUM WT %	N/A	33.2	42.5	56.2	74.7	86.1	92.4	N/A	100.0
120	0.8	H	7.2	48.8	44.0	msG	WT	N/A	383.0	79.6	94.4	119.1	83.2	49.0	N/A	62.8
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.0	9.1	10.8	13.7	9.6	5.6	N/A	7.2
SPLIT WT= 871.2							CUM WT %	N/A	44.0	53.1	64.0	77.6	87.2	92.8	N/A	100.0
125	0.5	H	8.4	54.2	37.4	msG	WT	N/A	328.9	80.9	100.0	137.9	100.4	57.3	N/A	73.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.4	9.2	11.4	15.7	11.4	6.5	N/A	8.4
SPLIT WT= 883.0							CUM WT %	N/A	37.4	46.6	58.0	73.7	85.1	91.6	N/A	100.0
130	0.2	H	8.1	48.4	43.4	msG	WT	N/A	375.0	112.5	84.4	96.0	74.8	50.5	N/A	70.3
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.4	13.0	9.8	11.1	8.7	5.9	N/A	8.1
SPLIT WT= 864.0							CUM WT %	N/A	43.4	56.5	66.2	77.4	86.0	91.9	N/A	100.0
135	0.3	H	9.6	53.1	37.4	msG	WT	N/A	337.3	95.1	91.4	122.0	118.3	52.2	N/A	86.6
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.4	10.5	10.1	13.5	13.1	5.8	N/A	9.6
SPLIT WT= 904.2							CUM WT %	N/A	37.4	47.9	58.0	71.5	84.6	90.4	N/A	100.0
140	0.4	H	10.0	53.3	36.7	msG	WT	N/A	325.1	75.5	84.6	140.8	109.9	60.7	N/A	88.6
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.7	8.5	9.6	15.9	12.4	6.9	N/A	10.0
SPLIT WT= 889.9							CUM WT %	N/A	36.7	45.3	54.8	70.7	83.2	90.0	N/A	100.0
150	0.1	H	7.4	38.1	54.4	msG	WT	N/A	513.8	100.9	71.3	77.6	64.0	46.0	N/A	70.1
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	54.5	10.7	7.6	8.2	6.8	4.9	N/A	7.4
SPLIT WT= 948.1							CUM WT %	N/A	54.5	65.1	72.7	80.9	87.7	92.6	N/A	100.0
155	0.4	H	11.0	61.5	27.4	(m)gS	WT	N/A	266.7	106.0	81.7	124.4	190.9	73.2	N/A	103.3
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.4	11.3	8.7	13.3	20.4	7.8	N/A	11.0
SPLIT WT= 936.7							CUM WT %	N/A	27.4	38.7	47.5	60.8	81.2	89.0	N/A	100.0
160	0.2	H	9.0	53.3	37.7	msG	WT	N/A	358.1	97.7	69.6	114.1	141.5	83.5	N/A	85.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.7	10.3	7.3	12.0	14.9	8.8	N/A	9.0
SPLIT WT= 950.9							CUM WT %	N/A	37.7	48.0	55.3	67.3	82.2	91.0	N/A	100.0
165	0.2	H	8.3	42.4	49.3	msG	WT	N/A	469.3	97.4	63.3	82.6	108.5	52.2	N/A	79.4
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.3	10.2	6.6	8.7	11.4	5.5	N/A	8.3
SPLIT WT= 953.6							CUM WT %	N/A	49.3	59.5	66.1	74.8	86.2	91.7	N/A	100.0
170	0.1	H	10.3	55.4	34.3	msG	WT	N/A	314.4	141.7	87.8	101.3	120.7	57.1	N/A	94.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.3	15.4	9.6	11.0	13.2	6.2	N/A	10.3
SPLIT WT= 917.3							CUM WT %	N/A	34.3	49.7	59.3	70.3	83.5	89.7	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-006 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	0.2	H	10.1	57.3	32.6	msG	WT	N/A	287.0	86.1	72.6	115.5	161.5	68.0	N/A	88.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	32.6	9.8	8.3	13.1	18.4	7.7	N/A	10.1
SPLIT WT= 880.3							CUM WT %	N/A	32.6	42.4	50.7	63.8	82.2	89.9	N/A	100.0
180	0.2	H	12.2	54.7	33.1	msG	WT	N/A	251.3	68.8	54.3	115.2	119.6	57.7	N/A	92.5
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	33.1	9.1	7.2	15.2	15.8	7.6	N/A	12.2
SPLIT WT= 757.4							CUM WT %	N/A	33.1	42.2	49.3	64.5	80.2	87.8	N/A	100.0
185	0.3	H	10.8	55.1	34.1	msG	WT	N/A	270.6	90.3	66.2	115.6	101.5	64.0	N/A	85.6
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.1	11.4	8.3	14.6	12.8	8.1	N/A	10.8
SPLIT WT= 793.1							CUM WT %	N/A	34.1	45.5	53.8	68.4	81.2	89.2	N/A	100.0
190	0.2	H	10.4	64.9	24.6	(m)gS	WT	N/A	185.1	87.5	72.0	102.4	168.6	57.8	N/A	78.5
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	24.6	11.6	9.6	13.6	22.4	7.7	N/A	10.4
SPLIT WT= 754.1							CUM WT %	N/A	24.6	36.3	45.8	59.5	81.9	89.6	N/A	100.0
195	0.2	H	8.3	47.8	43.9	msG	WT	N/A	392.6	82.3	64.7	127.3	86.7	66.9	N/A	74.4
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.9	9.2	7.2	14.2	9.7	7.5	N/A	8.3
SPLIT WT= 893.2							CUM WT %	N/A	43.9	53.1	60.3	74.5	84.2	91.7	N/A	100.0
200	0.2	H	10.7	62.8	26.5	(m)gS	WT	N/A	204.8	124.1	104.9	102.5	100.1	53.7	N/A	82.6
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	26.5	16.1	13.6	13.3	13.0	7.0	N/A	10.7
SPLIT WT= 772.0							CUM WT %	N/A	26.5	42.6	56.1	69.4	82.4	89.3	N/A	100.0
205	0.2	H	8.2	45.5	46.3	msG	WT	N/A	371.8	80.6	64.1	81.5	93.1	45.4	N/A	65.8
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	46.3	10.1	8.0	10.2	11.6	5.7	N/A	8.2
SPLIT WT= 803.0							CUM WT %	N/A	46.3	56.4	64.4	74.5	86.1	91.8	N/A	100.0
210	0.2	H	10.0	59.6	30.4	msG	WT	N/A	220.2	102.3	97.4	103.1	76.9	51.8	N/A	72.4
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	30.4	14.1	13.5	14.2	10.6	7.2	N/A	10.0
SPLIT WT= 723.7							CUM WT %	N/A	30.4	44.5	58.0	72.2	82.9	90.0	N/A	100.0
215	0.0	H	9.5	59.1	31.5	msG	WT	N/A	250.9	103.8	119.9	109.7	85.2	52.5	N/A	75.4
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.5	13.0	15.0	13.8	10.7	6.6	N/A	9.5
SPLIT WT= 797.5							CUM WT %	N/A	31.5	44.5	59.5	73.3	84.0	90.5	N/A	100.0
220	0.0	H	9.3	63.8	26.9	(m)gS	WT	N/A	210.5	80.9	72.9	186.6	102.4	56.0	N/A	72.9
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	26.9	10.3	9.3	23.9	13.1	7.2	N/A	9.3
SPLIT WT= 784.0							CUM WT %	N/A	26.9	37.3	46.6	70.4	83.5	90.7	N/A	100.0
225	0.0	H	8.6	66.0	25.5	(m)gS	WT	N/A	195.9	107.3	127.8	136.3	88.2	47.9	N/A	66.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.5	14.0	16.6	17.7	11.5	6.2	N/A	8.6
SPLIT WT= 770.5							CUM WT %	N/A	25.5	39.4	56.0	73.7	85.2	91.4	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W07-006 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
235	1.5	H	7.8	64.9	27.3	(m)gS	WT	N/A	179.1	71.9	62.8	142.4	102.9	45.1	N/A	51.1
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.3	11.0	9.6	21.7	15.7	6.9	N/A	7.8
SPLIT WT= 654.9							CUM WT %	N/A	27.3	38.3	47.9	69.6	85.3	92.2	N/A	100.0
240	1.1	H	6.4	50.0	43.6	msG	WT	N/A	329.7	84.0	63.6	118.2	74.5	37.7	N/A	48.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.6	11.1	8.4	15.6	9.9	5.0	N/A	6.4
SPLIT WT= 752.7							CUM WT %	N/A	43.6	54.7	63.1	78 7	88.6	93.6	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W08-001 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.3	H	18.8	43.0	38.2	msG	WT	N/A	156.7	37.9	34.1	24.4	47.3	32.4	N/A	77.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.2	9.3	8.3	6.0	11.5	7.9	N/A	18.8
SPLIT WT= 409.8							CUM WT %	N/A	38.2	47.5	55.8	61.8	73.3	81.2	N/A	100.0
10	0.8	H	17.9	41.4	40.8	msG	WT	N/A	167.2	46.8	44.1	24.0	31.5	23.2	N/A	73.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.8	11.4	10.8	5.9	7.7	5.7	N/A	17.9
SPLIT WT= 410.0							CUM WT %	N/A	40.8	52.2	63.0	68.8	76.5	82.1	N/A	100.0
15	0.5	H	21.7	41.3	37.0	msG	WT	N/A	149.6	56.1	41.8	25.5	24.6	18.9	N/A	87.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.0	13.9	10.3	6.3	6.1	4.7	N/A	21.7
SPLIT WT= 404.2							CUM WT %	N/A	37.0	50.9	61.2	67.5	73.6	78.3	N/A	100.0
20	0.6	H	21.6	37.4	41.0	msG	WT	N/A	219.9	64.2	48.0	33.4	31.3	23.3	N/A	115.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.1	12.0	9.0	6.2	5.8	4.4	N/A	21.6
SPLIT WT= 535.7							CUM WT %	N/A	41.1	53.0	62.0	68.2	74.1	78.4	N/A	100.0
25	1.2	H	18.6	40.6	40.9	msG	WT	N/A	108.9	35.5	28.9	17.5	15.4	10.8	N/A	49.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.9	13.3	10.8	6.6	5.8	4.1	N/A	18.6
SPLIT WT= 266.4							CUM WT %	N/A	40.9	54.2	65.0	71.6	77.4	81.4	N/A	100.0
30	1.1	H	30.1	28.9	40.9	mG	WT	N/A	143.7	40.4	N/A	22.7	21.8	16.7	N/A	105.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.9	11.5	N/A	6.5	6.2	4.8	N/A	30.1
SPLIT WT= 351.1							CUM WT %	N/A	40.9	52.4	N/A	58.9	65.1	69.9	N/A	100.0
35	0.6	H	17.3	37.0	45.7	msG	WT	N/A	142.6	34.7	27.3	19.7	19.5	14.4	N/A	53.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.7	11.1	8.8	6.3	6.3	4.6	N/A	17.3
SPLIT WT= 312.1							CUM WT %	N/A	45.7	56.8	65.6	71.9	78.1	82.7	N/A	100.0
40	0.6	H	20.5	37.3	42.1	msG	WT	N/A	208.3	55.7	42.9	31.7	30.7	23.5	N/A	101.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.2	11.3	8.7	6.4	6.2	4.8	N/A	20.5
SPLIT WT= 494.1							CUM WT %	N/A	42.2	53.4	62.1	68.5	74.7	79.5	N/A	100.0
45	0.8	H	20.8	37.2	42.1	msG	WT	N/A	186.2	50.0	38.1	27.9	27.4	21.2	N/A	92.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.1	11.3	8.6	6.3	6.2	4.8	N/A	20.8
SPLIT WT= 442.8							CUM WT %	N/A	42.1	53.3	61.9	68.2	74.4	79.2	N/A	100.0
50	0.9	H	24.8	40.5	34.7	msG	WT	N/A	157.2	52.8	42.3	32.4	31.6	23.9	N/A	112.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.8	11.7	9.4	7.2	7.0	5.3	N/A	24.8
SPLIT WT= 452.5							CUM WT %	N/A	34.8	46.4	55.8	62.9	69.9	75.2	N/A	100.0
55	1.1	H	19.8	33.2	47.1	msG	WT	N/A	215.1	51.1	35.1	24.8	23.1	17.4	N/A	90.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.1	11.2	7.7	5.4	5.1	3.8	N/A	19.8
SPLIT WT= 457.0							CUM WT %	N/A	47.1	58.3	65.9	71.4	76.4	80.2	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	1.3	H	25.3	39.0	35.7	msG	WT	N/A	158.1	59.3	40.6	28.5	25.2	19.2	N/A	111.9
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	35.7	13.4	9.2	6.4	5.7	4.3	N/A	25.3
SPLIT WT= 442.8							CUM WT %	N/A	35.7	49.1	58.3	64.7	70.4	74.7	N/A	100.0
65	1.4	H	24.8	39.8	35.4	msG	WT	N/A	157.6	55.8	41.2	30.9	28.0	21.0	N/A	110.1
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	35.5	12.6	9.3	7.0	6.3	4.7	N/A	24.8
SPLIT WT= 444.5							CUM WT %	N/A	35.5	48.0	57.3	64.2	70.5	75.2	N/A	100.0
70	1.5	H	19.7	38.7	41.6	msG	WT	N/A	187.0	60.6	40.4	29.7	25.4	18.1	N/A	88.4
SORT= N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	41.6	13.5	9.0	6.6	5.7	4.0	N/A	19.7
SPLIT WT= 449.7							CUM WT %	N/A	41.6	55.1	64.1	70.7	76.3	80.4	N/A	100.0
75	2.6	H	25.0	33.2	41.9	msG	WT	N/A	185.5	58.2	16.2	31.6	24.9	15.9	N/A	110.5
SORT= N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	41.9	13.1	3.7	7.1	5.6	3.6	N/A	25.0
SPLIT WT= 442.9							CUM WT %	N/A	41.9	55.0	58.7	65.8	71.5	75.0	N/A	100.0
80	5.0	H	52.8	26.4	20.8	gsM	WT	N/A	75.0	28.7	16.8	12.5	17.5	20.0	N/A	190.8
SORT= N/A	MEDIAN=	5.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	20.8	7.9	4.7	3.5	4.8	5.5	N/A	52.8
SPLIT WT= 361.4							CUM WT %	N/A	20.8	28.7	33.4	36.8	41.7	47.2	N/A	100.0
86	3.8	H	76.9	15.5	7.6	(g)M	WT	N/A	23.8	8.8	5.1	4.6	11.4	18.8	N/A	241.1
SORT= N/A	MEDIAN=	5.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	7.6	2.8	1.6	1.5	3.6	6.0	N/A	76.9
SPLIT WT= 313.5							CUM WT %	N/A	7.6	10.4	12.0	13.5	17.1	23.1	N/A	100.0
91	20.8	H	39.6	26.4	34.1	mG	WT	N/A	124.2	15.8	10.6	10.9	23.4	35.4	N/A	144.4
SORT= N/A	MEDIAN=	3.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	34.1	4.3	2.9	3.0	6.4	9.7	N/A	39.6
SPLIT WT= 364.7							CUM WT %	N/A	34.1	38.4	41.3	44.3	50.7	60.4	N/A	100.0
95	21.1	H	28.0	41.9	30.2	msG	WT	N/A	126.7	41.8	29.6	32.7	40.0	31.8	N/A	117.6
SORT= N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	30.2	10.0	7.0	7.8	9.5	7.6	N/A	28.0
SPLIT WT= 420.3							CUM WT %	N/A	30.2	40.1	47.1	54.9	64.4	72.0	N/A	100.0
100	12.9	H	21.6	36.4	42.0	msG	WT	N/A	179.1	57.5	32.8	20.4	26.1	18.4	N/A	92.0
SORT= N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	42.0	13.5	7.7	4.8	6.1	4.3	N/A	21.6
SPLIT WT= 426.2							CUM WT %	N/A	42.0	55.5	63.2	68.0	74.1	78.4	N/A	100.0
105	8.4	H	29.5	51.2	19.4	gmS	WT	N/A	79.9	37.8	46.0	49.5	38.8	39.1	N/A	121.6
SORT= N/A	MEDIAN=	2.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	19.4	9.2	11.2	12.0	9.4	9.5	N/A	29.5
SPLIT WT= 412.8							CUM WT %	N/A	19.4	28.5	39.7	51.7	61.1	70.5	N/A	100.0
110	9.1	H	38.0	56.1	5.9	(g)mS	WT	N/A	21.9	21.8	42.3	51.3	48.1	44.1	N/A	140.8
SORT= N/A	MEDIAN=	3.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	5.9	5.9	11.4	13.9	13.0	11.9	N/A	38.0
SPLIT WT= 370.2							CUM WT %	N/A	5.9	11.8	23.2	37.1	50.1	62.0	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	13.2	H	30.0	60.0	10.0	gmS	WT	N/A	33.9	22.6	41.7	55.3	44.1	40.0	N/A	102.0
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	10.0	6.7	12.3	16.3	13.0	11.8	N/A	30.0
SPLIT WT= 339.6							CUM WT %	N/A	10.0	16.6	28.9	45.2	58.2	70.0	N/A	100.0
120	5.1	H	18.8	76.8	4.4	(m)S	WT	N/A	15.0	13.4	58.7	115.2	48.4	25.9	N/A	64.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.4	3.9	17.2	33.8	14.2	7.6	N/A	18.8
SPLIT WT= 340.8							CUM WT %	N/A	4.4	8.3	25.6	59.4	73.6	81.2	N/A	100.0
125	2.9	H	12.8	86.2	1.0	(m)S	WT	N/A	3.7	14.5	112.0	130.4	45.0	19.7	N/A	47.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.0	3.9	30.0	35.0	12.1	5.3	N/A	12.8
SPLIT WT= 373.1							CUM WT %	N/A	1.0	4.9	34.9	69.9	81.9	87.2	N/A	100.0
130	2.7	H	16.2	82.9	0.9	(m)S	WT	N/A	3.2	8.1	67.5	160.3	49.2	20.7	N/A	59.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.9	2.2	18.3	43.5	13.3	5.6	N/A	16.2
SPLIT WT= 369.0							CUM WT %	N/A	0.9	3.1	21.4	64.8	78.2	83.8	N/A	100.0
135	1.7	H	9.3	89.8	0.8	S	WT	N/A	3.4	1.8	36.5	208.6	95.7	18.5	N/A	37.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.9	0.5	9.1	51.9	23.8	4.6	N/A	9.3
SPLIT WT= 401.9							CUM WT %	N/A	0.9	1.3	10.4	62.3	86.1	90.7	N/A	100.0
140	1.6	H	15.9	84.1	0.0	(m)S	WT	N/A	0.0	2.0	54.2	179.6	63.2	17.2	N/A	59.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	0.5	14.4	47.8	16.8	4.6	N/A	15.9
SPLIT WT= 375.7							CUM WT %	N/A	0.0	0.5	15.0	62.7	79.6	84.1	N/A	100.0
145	1.3	H	14.4	83.4	2.2	(m)S	WT	N/A	9.5	17.2	85.4	172.4	59.4	18.5	N/A	60.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.2	4.1	20.2	40.7	14.0	4.4	N/A	14.4
SPLIT WT= 423.2							CUM WT %	N/A	2.2	6.3	26.5	67.2	81.3	85.6	N/A	100.0
150	1.7	H	19.7	79.1	1.2	(m)S	WT	N/A	4.7	6.4	37.3	155.5	79.3	19.8	N/A	74.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.3	1.7	9.9	41.2	21.0	5.3	N/A	19.7
SPLIT WT= 377.3							CUM WT %	N/A	1.3	3.0	12.8	54.1	75.1	80.3	N/A	100.0
155	1.1	H	16.1	50.7	33.2	msG	WT	N/A	157.0	37.3	68.1	74.5	41.0	19.0	N/A	76.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.2	7.9	14.4	15.7	8.7	4.0	N/A	16.1
SPLIT WT= 473.4							CUM WT %	N/A	33.2	41.1	55.4	71.2	79.8	83.9	N/A	100.0
160	0.8	H	18.2	47.2	34.6	msG	WT	N/A	160.8	47.7	61.7	52.2	36.6	21.0	N/A	84.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.6	10.3	13.3	11.2	7.9	4.5	N/A	18.2
SPLIT WT= 464.3							CUM WT %	N/A	34.6	44.9	58.2	69.4	77.3	81.8	N/A	100.0
165	0.7	H	16.0	47.5	36.5	msG	WT	N/A	177.3	44.3	66.6	65.2	35.1	19.7	N/A	77.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.5	9.1	13.7	13.4	7.2	4.1	N/A	16.0
SPLIT WT= 485.8							CUM WT %	N/A	36.5	45.6	59.3	72.8	80.0	84.0	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	0.4	H	16.1	40.2	43.7	msG	WT	N/A	198.5	42.5	51.1	42.1	29.5	17.3	N/A	73.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.7	9.4	11.3	9.3	6.5	3.8	N/A	16.1
SPLIT WT= 454.0							CUM WT %	N/A	43.7	53.1	64.3	73.6	80.1	83.9	N/A	100.0
175	0.2	H	16.5	35.5	48.0	msG	WT	N/A	225.2	45.6	37.6	37.1	28.5	18.0	N/A	77.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.0	9.7	8.0	7.9	6.1	3.8	N/A	16.5
SPLIT WT= 469.2							CUM WT %	N/A	48.0	57.7	65.7	73.6	79.7	83.6	N/A	100.0
180	0.2	H	22.8	46.6	30.9	msG	WT	N/A	154.1	63.1	53.5	50.9	38.9	25.9	N/A	112.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.9	12.7	10.7	10.2	7.8	5.2	N/A	22.6
SPLIT WT= 499.0							CUM WT %	N/A	30.9	43.5	54.3	64.5	72.3	77.4	N/A	100.0
185	0.2	H	24.5	44.7	30.8	msG	WT	N/A	147.8	54.1	49.1	49.3	38.5	23.1	N/A	117.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.8	11.3	10.2	10.3	8.0	4.8	N/A	24.5
SPLIT WT= 479.4							CUM WT %	N/A	30.8	42.1	52.3	62.6	70.7	75.5	N/A	100.0
190	0.2	H	22.1	41.5	36.5	msG	WT	N/A	161.0	46.9	36.5	38.5	37.6	23.5	N/A	97.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.5	10.6	8.3	8.7	8.5	5.3	N/A	22.1
SPLIT WT= 441.4							CUM WT %	N/A	36.5	47.1	55.4	64.1	72.6	77.9	N/A	100.0
195	0.2	H	27.3	49.8	22.9	gmS	WT	N/A	91.8	58.6	40.3	40.4	37.5	23.0	N/A	109.6
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	22.9	14.6	10.0	10.1	9.4	5.7	N/A	27.3
SPLIT WT= 401.2							CUM WT %	N/A	22.9	37.5	47.5	57.6	67.0	72.7	N/A	100.0
200	0.2	H	14.9	53.5	31.6	msG	WT	N/A	122.7	13.8	11.6	114.5	53.9	14.4	N/A	57.9
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.6	3.6	3.0	29.5	13.9	3.7	N/A	14.9
SPLIT WT= 388.8							CUM WT %	N/A	31.6	35.1	38.1	67.5	81.4	85.1	N/A	100.0
205	0.3	H	19.1	55.9	25.0	gmS	WT	N/A	103.2	39.5	27.0	90.3	54.2	19.5	N/A	78.9
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.0	9.6	6.5	21.9	13.1	4.7	N/A	19.1
SPLIT WT= 412.5							CUM WT %	N/A	25.0	34.6	41.1	63.0	76.2	80.9	N/A	100.0
210	0.2	H	22.6	54.4	23.0	gmS	WT	N/A	88.9	43.5	29.5	66.6	49.5	21.3	N/A	87.6
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	23.0	11.2	7.6	17.2	12.8	5.5	N/A	22.6
SPLIT WT= 386.7							CUM WT %	N/A	23.0	34.2	41.8	59.1	71.8	77.4	N/A	100.0
215	0.1	H	20.0	44.4	35.5	msG	WT	N/A	147.3	38.5	29.2	57.8	38.8	19.8	N/A	83.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.6	9.3	7.1	14.0	9.4	4.8	N/A	20.0
SPLIT WT= 414.4							CUM WT %	N/A	35.6	44.8	51.9	65.8	75.2	80.0	N/A	100.0
220	0.8	H	11.3	46.5	42.2	msG	WT	N/A	154.2	45.1	29.9	40.1	35.1	19.5	N/A	41.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.2	12.4	8.2	11.0	9.6	5.3	N/A	11.3
SPLIT WT= 365.3							CUM WT %	N/A	42.2	54.6	62.8	73.7	83.4	88.7	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W08-001 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	2.4	H	22.7	41.2	36.1	msG	WT	N/A	135.3	37.3	27.8	36.9	33.5	18.7	N/A	85.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.1	10.0	7.4	9.9	9.0	5.0	N/A	22.7
SPLIT WT= 374.6							CUM WT %	N/A	36.1	46.1	53.5	63.4	72.3	77.3	N/A	100.0
230	1.8	H	23.4	43.1	33.5	msG	WT	N/A	130.1	41.4	30.4	38.8	37.4	19.3	N/A	90.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.5	10.7	7.8	10.0	9.6	5.0	N/A	23.4
SPLIT WT= 388.2							CUM WT %	N/A	33.5	44.2	52.0	62.0	71.6	76.6	N/A	100.0
235	0.9	H	21.6	39.3	39.2	msG	WT	N/A	162.3	42.6	30.9	36.7	32.7	19.8	N/A	89.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.2	10.3	7.5	8.9	7.9	4.8	N/A	21.6
SPLIT WT= 414.3							CUM WT %	N/A	39.2	49.5	56.9	65.8	73.7	78.4	N/A	100.0
240	1.4	H	37.4	50.6	12.0	gmS	WT	N/A	43.3	45.4	35.2	37.8	38.0	26.2	N/A	134.9
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	12.0	12.6	9.8	10.5	10.5	7.3	N/A	37.4
SPLIT WT= 360.8							CUM WT %	N/A	12.0	24.6	34.3	44.8	55.4	62.6	N/A	100.0
248	1.0	H	30.8	32.0	37.2	msG	WT	N/A	139.5	37.8	22.9	20.8	24.0	14.5	N/A	115.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.2	10.1	6.1	5.6	6.4	3.9	N/A	30.8
SPLIT WT= 375.0							CUM WT %	N/A	37.2	47.3	53.4	58.9	65.3	69.2	N/A	100.0
250	0.8	H	29.6	46.3	24.1	gmS	WT	N/A	74.2	37.6	26.8	28.5	30.9	18.7	N/A	91.2
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	24.1	12.2	8.7	9.3	10.0	6.1	N/A	29.6
SPLIT WT= 307.9							CUM WT %	N/A	24.1	36.3	45.0	54.3	64.3	70.4	N/A	100.0
255	0.9	H	21.2	46.8	32.1	msG	WT	N/A	128.3	30.0	26.4	63.0	46.5	21.4	N/A	84.7
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.1	7.5	6.6	15.7	11.6	5.4	N/A	21.2
SPLIT WT= 400.1							CUM WT %	N/A	32.1	39.5	46.1	61.9	73.5	78.9	N/A	100.0
260	1.2	H	25.1	47.8	27.0	gmS	WT	N/A	100.4	39.7	31.6	45.9	38.0	22.5	N/A	93.4
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.0	10.7	8.5	12.4	10.2	6.1	N/A	25.1
SPLIT WT= 371.5							CUM WT %	N/A	27.0	37.7	46.2	58.6	68.8	74.9	N/A	100.0
265	0.7	H	20.7	47.1	32.1	msG	WT	N/A	122.0	41.0	30.5	49.1	38.9	19.4	N/A	78.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.2	10.8	8.0	12.9	10.3	5.1	N/A	20.7
SPLIT WT= 379.9							CUM WT %	N/A	32.2	43.0	51.0	63.9	74.2	79.3	N/A	100.0
270	0.7	H	26.7	39.8	33.6	msG	WT	N/A	121.8	2.3	27.4	57.1	39.2	18.2	N/A	96.7
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.6	0.6	7.6	15.7	10.8	5.0	N/A	26.7
SPLIT WT= 362.7							CUM WT %	N/A	33.6	34.2	41.8	57.5	68.3	73.3	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W09-001 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	0.2	C	8.1	91.5	0.4	S	WT	N/A	1.5	3.3	27.8	54.3	84.4	141.7	N/A	27.6
SORT=	N/A	MEDIAN=	3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.4	1.0	8.2	15.9	24.8	41.6	N/A	8.1
SPLIT WT= 346.5							CUM WT %	N/A	0.4	1.4	9.6	25.5	50.3	91.9	N/A	100.0
10	1.4	C	3.0	97.0	0.0	S	WT	N/A	0.1	1.0	18.8	76.6	94.8	88.8	N/A	8.6
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.4	6.5	26.5	32.8	30.8	N/A	3.0
SPLIT WT= 294.4							CUM WT %	N/A	0.0	0.4	6.9	33.4	66.3	97.0	N/A	100.0
15	2.7	C	47.9	52.0	0.1	mS	WT	N/A	0.3	0.8	1.6	6.5	63.2	71.7	N/A	132.6
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.1	0.3	0.6	2.4	22.8	25.9	N/A	47.9
SPLIT WT= 275.9							CUM WT %	N/A	0.1	0.4	1.0	3.3	26.2	52.1	N/A	100.0
20	1.1	C	1.8	55.6	42.6	sG	WT	N/A	305.7	149.9	152.5	58.7	24.5	13.9	N/A	13.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.6	20.9	21.2	8.2	3.4	1.9	N/A	1.8
SPLIT WT= 720.0							CUM WT %	N/A	42.6	63.4	84.7	92.8	96.2	98.2	N/A	100.0
25	0.6	C	0.6	96.0	3.3	S	WT	N/A	21.7	126.2	331.8	127.6	28.7	10.0	N/A	4.2
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.3	19.4	51.0	19.6	4.4	1.5	N/A	0.7
SPLIT WT= 656.2							CUM WT %	N/A	3.3	22.8	73.8	93.4	97.8	99.4	N/A	100.0
30	0.6	C	2.6	92.1	5.2	(g)S	WT	N/A	36.2	150.0	379.2	67.0	25.4	14.1	N/A	18.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.3	21.7	55.0	9.7	3.7	2.0	N/A	2.6
SPLIT WT= 689.8							CUM WT %	N/A	5.3	27.0	82.0	91.7	95.3	97.4	N/A	100.0
35	0.6	C	0.5	99.3	0.2	S	WT	N/A	1.1	7.1	246.0	328.6	40.1	10.1	N/A	3.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	1.1	38.7	51.7	6.3	1.6	N/A	0.5
SPLIT WT= 641.6							CUM WT %	N/A	0.2	1.3	40.0	91.6	97.9	99.5	N/A	100.0
40	1.6	C	10.1	89.4	0.4	(m)S	WT	N/A	2.4	15.3	53.8	115.5	147.5	168.7	N/A	56.8
SORT=	N/A	MEDIAN=	3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.4	2.7	9.6	20.6	26.3	30.1	N/A	10.1
SPLIT WT= 558.9							CUM WT %	N/A	0.4	3.2	12.8	33.4	59.7	89.9	N/A	100.0
45	0.9	C	13.2	86.3	0.5	(m)S	WT	N/A	1.5	7.3	35.1	61.2	80.4	80.7	N/A	40.4
SORT=	N/A	MEDIAN=	3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.5	2.4	11.5	20.0	26.2	26.3	N/A	13.2
SPLIT WT= 312.7							CUM WT %	N/A	0.5	2.9	14.3	34.3	60.5	86.8	N/A	100.0
50	1.8	C	7.9	91.9	0.2	S	WT	N/A	0.9	3.3	4.7	30.5	296.3	197.1	N/A	45.8
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.2	0.6	0.8	5.3	51.2	34.1	N/A	7.9
SPLIT WT= 581.1							CUM WT %	N/A	0.2	0.7	1.5	6.8	58.0	92.1	N/A	100.0
55	1.4	C	6.1	60.6	33.3	sG	WT	N/A	290.1	172.6	181.8	84.6	51.6	37.5	N/A	53.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.3	19.8	20.9	9.7	5.9	4.3	N/A	6.1
SPLIT WT= 877.2							CUM WT %	N/A	33.3	53.1	74.0	83.7	89.6	93.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W09-001 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	1.0	H	8.0	60.3	31.7	msG	WT	N/A	238.3	169.2	138.9	66.3	45.5	33.3	N/A	60.0
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.7	22.5	18.5	8.8	6.1	4.4	N/A	8.0
SPLIT WT= 757.2							CUM WT %	N/A	31.7	54.2	72.7	81.5	87.6	92.0	N/A	100.0
65	1.1	H	9.5	64.7	25.8	(m)gS	WT	N/A	182.6	158.1	144.2	72.3	51.0	32.8	N/A	67.4
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.8	22.3	20.4	10.2	7.2	4.6	N/A	9.5
SPLIT WT= 708.9							CUM WT %	N/A	25.8	48.1	68.5	78.7	85.9	90.5	N/A	100.0
70	1.0	H	11.2	54.0	34.8	msG	WT	N/A	280.9	136.6	114.5	80.2	58.9	45.8	N/A	90.0
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.8	16.9	14.2	9.9	7.3	5.7	N/A	11.2
SPLIT WT= 810.4							CUM WT %	N/A	34.8	51.7	65.9	75.9	83.2	88.9	N/A	100.0
80	1.3	H	6.0	68.9	25.2	gS	WT	N/A	212.8	124.1	192.1	150.7	81.6	33.6	N/A	50.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.2	14.7	22.7	17.8	9.7	4.0	N/A	6.0
SPLIT WT= 846.7							CUM WT %	N/A	25.2	39.9	62.6	80.4	90.1	94.0	N/A	100.0
85	N/A	H	4.6	83.5	11.9	gS	WT	N/A	93.2	92.9	273.3	175.2	88.5	25.8	N/A	35.9
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	11.9	11.8	34.8	22.3	11.3	3.3	N/A	4.6
SPLIT WT= 786.9							CUM WT %	N/A	11.9	23.7	58.5	80.9	92.1	95.4	N/A	100.0
90	1.8	H	6.3	83.7	10.0	gS	WT	N/A	80.7	118.9	254.9	182.6	79.7	36.2	N/A	50.6
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.0	14.8	31.7	22.7	9.9	4.5	N/A	6.3
SPLIT WT= 803.1							CUM WT %	N/A	10.0	24.8	56.6	79.3	89.2	93.7	N/A	100.0
95	1.2	H	5.3	79.9	14.8	gS	WT	N/A	120.3	102.9	253.5	175.0	81.8	36.9	N/A	43.5
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	14.8	12.6	31.2	21.5	10.1	4.5	N/A	5.3
SPLIT WT= 815.4							CUM WT %	N/A	14.8	27.4	58.6	80.1	90.1	94.7	N/A	100.0
100	3.3	H	7.3	72.1	20.6	gS	WT	N/A	156.7	120.9	172.3	144.2	69.2	41.7	N/A	55.3
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	20.6	15.9	22.7	19.0	9.1	5.5	N/A	7.3
SPLIT WT= 762.8							CUM WT %	N/A	20.6	36.5	59.2	78.1	87.2	92.7	N/A	100.0
105	1.3	H	1.9	87.2	10.9	gS	WT	N/A	87.8	153.2	287.0	136.9	68.8	56.9	N/A	15.0
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.9	19.0	35.6	17.0	8.5	7.1	N/A	1.9
SPLIT WT= 804.6							CUM WT %	N/A	10.9	29.9	65.6	82.5	91.1	98.1	N/A	100.0
110	1.5	H	5.2	81.4	13.3	gS	WT	N/A	112.0	125.3	223.6	197.1	98.0	40.0	N/A	43.8
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.3	14.9	26.6	23.5	11.7	4.8	N/A	5.2
SPLIT WT= 840.5							CUM WT %	N/A	13.3	28.3	54.9	78.4	90.0	94.8	N/A	100.0
115	1.6	H	6.4	86.6	7.0	(g)S	WT	N/A	57.2	107.6	231.6	221.8	107.4	38.7	N/A	52.0
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.0	13.2	28.4	27.2	13.2	4.7	N/A	6.4
SPLIT WT= 820.1							CUM WT %	N/A	7.0	20.2	48.6	75.7	88.9	93.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W09-001 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	1.2	H	5.1	84.2	10.7	gS	WT	N/A	85.8	82.6	227.2	221.7	98.5	43.0	N/A	40.4
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	10.7	10.3	28.4	27.7	12.3	5.4	N/A	5.1
SPLIT WT= 795.3							CUM WT %	N/A	10.7	21.1	49.5	77.3	89.6	95.0	N/A	100.0
125	1.3	H	6.5	88.3	5.2	(g)S	WT	N/A	37.0	71.8	174.3	223.4	105.8	50.8	N/A	46.2
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	5.2	10.1	24.6	31.5	14.9	7.2	N/A	6.5
SPLIT WT= 711.8							CUM WT %	N/A	5.2	15.3	39.9	71.4	86.3	93.5	N/A	100.0
130	1.3	H	5.9	89.8	4.3	S	WT	N/A	33.6	96.3	223.6	222.7	104.0	47.4	N/A	45.6
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.4	12.5	28.9	28.8	13.5	6.1	N/A	5.9
SPLIT WT= 776.4							CUM WT %	N/A	4.4	16.8	45.7	74.5	88.0	94.1	N/A	100.0
135	1.6	H	5.3	68.5	26.2	gS	WT	N/A	218.5	114.6	161.0	169.7	90.7	34.9	N/A	44.1
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.2	13.8	19.3	20.4	10.9	4.2	N/A	5.3
SPLIT WT= 837.0							CUM WT %	N/A	26.2	40.0	59.3	79.6	90.5	94.7	N/A	100.0
140	1.8	H	5.8	64.5	29.7	gS	WT	N/A	246.7	134.8	147.1	142.2	75.6	36.2	N/A	47.9
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.7	16.2	17.7	17.1	9.1	4.4	N/A	5.8
SPLIT WT= 831.5							CUM WT %	N/A	29.7	45.9	63.6	80.8	89.9	94.2	N/A	100.0
145	3.0	H	6.8	70.1	23.1	gS	WT	N/A	186.7	110.4	178.3	159.0	72.9	46.3	N/A	55.3
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	23.1	13.7	22.0	19.7	9.0	5.7	N/A	6.8
SPLIT WT= 814.8							CUM WT %	N/A	23.1	36.7	58.8	78.4	87.4	93.2	N/A	100.0
150	1.2	H	4.9	89.3	5.8	(g)S	WT	N/A	45.8	109.0	247.6	226.4	78.9	37.1	N/A	38.3
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	5.9	13.9	31.6	28.9	10.1	4.7	N/A	4.9
SPLIT WT= 772.4							CUM WT %	N/A	5.9	19.8	51.4	80.3	90.4	95.1	N/A	100.0
155	3.6	H	9.7	73.1	17.1	(m)gS	WT	N/A	131.4	108.5	179.4	144.3	73.9	55.9	N/A	74.9
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	17.1	14.1	23.4	18.8	9.6	7.3	N/A	9.8
SPLIT WT= 774.1							CUM WT %	N/A	17.1	31.2	54.6	73.4	83.0	90.3	N/A	100.0
160	4.1	H	21.9	67.6	10.5	gmS	WT	N/A	76.2	66.4	91.5	119.7	83.2	131.2	N/A	159.2
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	10.5	9.1	12.6	16.5	11.4	18.0	N/A	21.9
SPLIT WT= 729.7							CUM WT %	N/A	10.5	19.6	32.2	48.7	60.1	78.1	N/A	100.0
165	17.9	H	9.3	79.9	10.8	(m)gS	WT	N/A	79.1	82.9	109.2	142.9	154.4	94.1	N/A	67.8
SORT= N/A	MEDIAN=		2.00	MODE=	3.00	MEAN= N/A	WT %	N/A	10.8	11.4	15.0	19.6	21.1	12.9	N/A	9.3
SPLIT WT= 732.3							CUM WT %	N/A	10.8	22.2	37.1	56.7	77.8	90.7	N/A	100.0
170	12.7	H	10.1	82.9	7.0	(gm)S	WT	N/A	52.6	66.9	208.4	162.0	121.1	63.0	N/A	75.4
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.0	8.9	27.8	21.6	16.2	8.4	N/A	10.1
SPLIT WT= 754.1							CUM WT %	N/A	7.0	16.0	43.8	65.4	81.5	90.0	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	N/A	H	8.6	86.8	4.6	S	WT	N/A	34.3	38.1	166.6	239.0	136.1	67.7	N/A	63.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.6	5.1	22.3	32.1	18.3	9.1	N/A	8.6
SPLIT WT= 746.9							CUM WT %	N/A	4.6	9.7	32.1	64.1	82.4	91.4	N/A	100.0
180	5.9	H	7.8	90.6	1.6	S	WT	N/A	10.0	12.6	41.6	328.8	129.0	38.1	N/A	47.1
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.7	2.1	6.9	54.2	21.3	6.3	N/A	7.8
SPLIT WT= 610.4							CUM WT %	N/A	1.7	3.7	10.6	64.7	86.0	92.3	N/A	100.0
185	1.7	H	6.4	93.4	0.2	S	WT	N/A	1.1	1.4	27.0	430.1	170.6	45.8	N/A	46.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	0.2	3.7	59.6	23.6	6.3	N/A	6.4
SPLIT WT= 723.9							CUM WT %	N/A	0.2	0.3	4.1	63.6	87.3	93.6	N/A	100.0
190	1.7	H	7.0	92.9	0.1	S	WT	N/A	0.7	0.8	42.9	400.0	175.0	45.9	N/A	50.4
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.1	0.1	6.0	55.9	24.5	6.4	N/A	7.0
SPLIT WT= 719.0							CUM WT %	N/A	0.1	0.2	6.2	62.1	86.5	93.0	N/A	100.0
195	1.4	H	5.7	74.3	20.0	gS	WT	N/A	171.5	43.8	76.8	324.4	130.1	61.6	N/A	49.0
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	20.0	5.1	9.0	37.8	15.2	7.2	N/A	5.7
SPLIT WT= 863.4							CUM WT %	N/A	20.0	25.1	34.1	71.9	87.1	94.3	N/A	100.0
200	0.5	H	7.6	65.1	27.3	(m)gS	WT	N/A	232.7	83.6	103.7	217.3	102.3	48.3	N/A	65.1
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.3	9.8	12.2	25.5	12.0	5.7	N/A	7.6
SPLIT WT= 857.9							CUM WT %	N/A	27.3	37.1	49.2	74.7	86.7	92.4	N/A	100.0
205	0.6	H	9.8	74.9	15.3	(m)gS	WT	N/A	129.5	104.5	119.0	236.6	112.0	59.7	N/A	82.4
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	15.4	12.4	14.1	28.0	13.3	7.1	N/A	9.8
SPLIT WT= 845.5							CUM WT %	N/A	15.4	27.7	41.8	69.9	83.2	90.2	N/A	100.0
210	0.4	H	11.4	60.5	28.1	(m)gS	WT	N/A	258.0	99.2	161.1	157.8	93.1	43.7	N/A	104.4
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.1	10.8	17.6	17.2	10.2	4.8	N/A	11.4
SPLIT WT= 919.2							CUM WT %	N/A	28.1	38.9	56.5	73.7	83.9	88.6	N/A	100.0
215	0.2	H	11.9	65.8	22.3	(m)gS	WT	N/A	180.8	88.4	137.1	142.2	122.9	42.0	N/A	96.6
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	22.3	10.9	16.9	17.6	15.2	5.2	N/A	11.9
SPLIT WT= 814.8							CUM WT %	N/A	22.3	33.2	50.2	67.7	82.9	88.1	N/A	100.0
220	0.1	H	12.6	58.1	29.3	(m)gS	WT	N/A	170.9	54.5	64.6	94.1	68.8	57.1	N/A	73.7
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.3	9.3	11.1	16.1	11.8	9.8	N/A	12.6
SPLIT WT= 590.0							CUM WT %	N/A	29.3	38.6	49.7	65.8	77.6	87.4	N/A	100.0
225	0.0	H	9.8	59.9	30.3	msG	WT	N/A	263.2	94.7	100.4	153.5	124.2	47.2	N/A	85.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.3	10.9	11.6	17.7	14.3	5.4	N/A	9.8
SPLIT WT= 871.6							CUM WT %	N/A	30.3	41.2	52.8	70.4	84.7	90.2	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
230	0.1	H	8.1	31.0	60.9	msG	WT	N/A	456.3	74.5	44.1	38.9	41.3	33.7	N/A	60.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	60.9	9.9	5.9	5.2	5.5	4.5	N/A	8.1
SPLIT WT= 753.0							CUM WT %	N/A	60.9	70.8	76.7	81.9	87.4	91.9	N/A	100.0
235	0.0	H	6.7	40.1	53.2	msG	WT	N/A	493.1	135.0	77.1	63.6	57.5	38.9	N/A	62.5
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	53.2	14.6	8.3	6.9	6.2	4.2	N/A	6.7
SPLIT WT= 927.3							CUM WT %	N/A	53.2	67.7	76.0	82.9	89.1	93.3	N/A	100.0
240	0.1	H	10.2	64.2	25.6	(m)gS	WT	N/A	207.4	95.1	111.1	137.8	105.0	71.8	N/A	83.1
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.6	11.7	13.7	17.0	12.9	8.9	N/A	10.2
SPLIT WT= 811.8							CUM WT %	N/A	25.6	37.3	51.0	68.0	80.9	89.8	N/A	100.0
245	0.1	H	8.0	64.5	27.6	(m)gS	WT	N/A	211.0	107.3	81.2	144.8	97.7	61.9	N/A	60.8
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	27.6	14.0	10.6	18.9	12.8	8.1	N/A	8.0
SPLIT WT= 766.8							CUM WT %	N/A	27.6	41.6	52.2	71.2	84.0	92.1	N/A	100.0
250	0.1	H	9.3	66.0	24.7	(m)gS	WT	N/A	193.7	138.0	115.9	104.5	93.2	66.3	N/A	72.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	24.7	17.6	14.8	13.3	11.9	8.5	N/A	9.3
SPLIT WT= 783.6							CUM WT %	N/A	24.7	42.3	57.1	70.4	82.3	90.7	N/A	100.0
255	0.1	H	12.2	73.9	13.9	(m)gS	WT	N/A	95.5	111.3	124.9	108.7	104.6	58.1	N/A	83.9
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	13.9	16.2	18.2	15.8	15.2	8.5	N/A	12.2
SPLIT WT= 691.1							CUM WT %	N/A	13.9	30.1	48.3	64.1	79.3	87.8	N/A	100.0
260	0.3	H	9.8	67.6	22.6	(m)gS	WT	N/A	173.5	124.7	120.8	105.0	103.2	65.5	N/A	75.1
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	22.6	16.2	15.7	13.7	13.4	8.5	N/A	9.8
SPLIT WT= 773.5							CUM WT %	N/A	22.6	38.8	54.6	68.3	81.7	90.2	N/A	100.0
265	1.2	H	10.2	64.9	24.9	(m)gS	WT	N/A	189.5	87.3	84.2	130.8	112.3	78.5	N/A	77.6
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	24.9	11.5	11.1	17.2	14.8	10.3	N/A	10.2
SPLIT WT= 766.2							CUM WT %	N/A	24.9	36.4	47.5	64.7	79.5	89.8	N/A	100.0
270	1.4	H	10.8	65.3	23.9	(m)gS	WT	N/A	166.7	90.8	74.5	119.1	101.8	69.5	N/A	75.2
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	23.9	13.0	10.7	17.1	14.6	10.0	N/A	10.8
SPLIT WT= 699.5							CUM WT %	N/A	23.9	36.9	47.6	64.7	79.3	89.2	N/A	100.0
275	0.9	H	10.8	75.2	14.0	(m)gS	WT	N/A	87.1	74.9	85.7	134.2	103.8	70.3	N/A	67.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	14.0	12.0	13.8	21.5	16.7	11.3	N/A	10.8
SPLIT WT= 629.8							CUM WT %	N/A	14.0	26.0	39.7	61.3	77.9	89.2	N/A	100.0
280	0.5	H	8.1	42.0	50.0	msG	WT	N/A	360.9	66.3	53.5	75.6	65.2	42.6	N/A	58.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.0	9.2	7.4	10.5	9.0	5.9	N/A	8.1
SPLIT WT= 727.5							CUM WT %	N/A	50.0	59.1	66.6	77.0	86.1	92.0	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
285	0.8	H	7.9	51.7	40.4	msG	WT	N/A	263.9	50.2	59.5	109.4	75.5	43.5	N/A	51.4
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	40.4	7.7	9.1	16.7	11.6	6.7	N/A	7.9
SPLIT WT= 658.0							CUM WT %	N/A	40.4	48.1	57.2	73.9	85.5	92.1	N/A	100.0
295	1.6	H	7.8	48.2	44.0	msG	WT	N/A	310.8	74.8	62.0	88.2	73.7	42.1	N/A	55.2
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	44.0	10.6	8.8	12.5	10.4	6.0	N/A	7.8
SPLIT WT= 710.8							CUM WT %	N/A	44.0	54.6	63.3	75.8	86.2	92.2	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	0.9	N/	8.9	91.1	0.0	S	WT	N/A	0.2	4.3	41.8	86.5	114.7	229.3	N/A	46.5
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	0.8	8.0	16.5	21.9	43.8	N/A	8.9
SPLIT WT= 523.4							CUM WT %	N/A	0.0	0.9	8.9	25.4	47.3	91.1	N/A	100.0
10	1.6	N/	10.3	88.9	0.8	(m)S	WT	N/A	3.8	2.5	17.9	61.3	170.7	179.7	N/A	50.1
SORT=	N/A	MEDIAN=	3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.8	0.5	3.7	12.6	35.1	37.0	N/A	10.3
SPLIT WT= 486.0							CUM WT %	N/A	0.8	1.3	5.0	17.6	52.7	89.7	N/A	100.0
15	1.6	C	10.9	81.5	7.6	(gm)S	WT	N/A	42.3	7.5	24.1	63.0	183.3	176.2	N/A	60.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	7.6	1.4	4.3	11.3	32.9	31.6	N/A	10.9
SPLIT WT= 557.2							CUM WT %	N/A	7.6	9.0	13.3	24.6	57.5	89.1	N/A	100.0
20	0.4	C	2.8	67.7	29.5	gS	WT	N/A	200.4	152.7	100.3	105.6	74.3	26.3	N/A	18.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.5	22.5	14.8	15.6	11.0	3.9	N/A	2.8
SPLIT WT= 678.6							CUM WT %	N/A	29.5	52.1	66.8	82.4	93.4	97.2	N/A	100.0
25	0.9	C	3.1	74.7	22.2	gS	WT	N/A	165.3	129.0	215.3	135.8	54.9	20.9	N/A	22.7
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	22.2	17.3	28.9	18.3	7.4	2.8	N/A	3.1
SPLIT WT= 744.7							CUM WT %	N/A	22.2	39.6	68.5	86.8	94.1	97.0	N/A	100.0
30	0.8	C	13.4	46.3	40.3	msG	WT	N/A	354.6	102.2	78.8	84.2	104.0	38.0	N/A	117.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.3	11.6	9.0	9.6	11.8	4.3	N/A	13.4
SPLIT WT= 880.6							CUM WT %	N/A	40.3	51.9	60.9	70.5	82.3	86.6	N/A	100.0
35	1.1	C	6.9	91.3	1.8	S	WT	N/A	10.3	35.4	124.7	179.7	117.4	65.2	N/A	39.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.8	6.2	21.8	31.4	20.5	11.4	N/A	6.9
SPLIT WT= 572.7							CUM WT %	N/A	1.8	8.0	29.8	61.2	81.7	93.1	N/A	100.0
40	1.5	C	4.5	95.0	0.4	S	WT	N/A	3.1	73.3	337.0	120.6	60.1	66.5	N/A	31.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.5	10.6	48.7	17.4	8.7	9.6	N/A	4.5
SPLIT WT= 691.9							CUM WT %	N/A	0.5	11.0	59.7	77.2	85.9	95.5	N/A	100.0
45	1.7	C	5.3	94.7	N/A	G	WT	N/A	N/A	2.4	86.6	270.7	129.5	64.1	N/A	31.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	N/A	0.4	14.8	46.3	22.2	11.0	N/A	5.3
SPLIT WT= 584.0							CUM WT %	N/A	N/A	0.4	15.2	61.5	83.7	94.7	N/A	100.0
50	1.2	C	9.0	90.4	0.7	S	WT	N/A	4.0	11.1	28.0	70.4	313.0	124.7	N/A	54.2
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.7	1.8	4.6	11.6	51.7	20.6	N/A	9.0
SPLIT WT= 604.9							CUM WT %	N/A	0.7	2.5	7.1	18.8	70.5	91.1	N/A	100.0
55	1.3	C	4.7	94.4	0.9	S	WT	N/A	4.4	27.9	95.4	160.7	149.5	48.8	N/A	24.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.9	5.5	18.7	31.5	29.3	9.6	N/A	4.7
SPLIT WT= 510.2							CUM WT %	N/A	0.9	6.3	25.0	56.4	85.7	95.3	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	2.0	C	4.9	94.8	0.3	S	WT	N/A	1.8	55.2	202.0	115.6	68.1	56.2	N/A	25.6
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	0.3	10.5	38.5	22.0	13.0	10.7	N/A	4.9
SPLIT WT= 526.3							CUM WT %	N/A	0.3	10.9	49.4	71.4	84.4	95.1	N/A	100.0
65	1.9	C	5.4	94.2	0.4	S	WT	N/A	2.2	9.1	122.7	226.1	105.2	58.9	N/A	29.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	1.6	22.2	40.8	19.0	10.6	N/A	5.4
SPLIT WT= 552.8							CUM WT %	N/A	0.4	2.0	24.2	65.0	84.0	94.6	N/A	100.0
70	0.8	C	1.7	57.6	40.6	sG	WT	N/A	280.9	93.2	194.4	75.3	23.0	12.6	N/A	12.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.6	13.5	28.1	10.9	3.3	1.8	N/A	1.8
SPLIT WT= 695.7							CUM WT %	N/A	40.6	54.1	82.2	93.1	96.4	98.3	N/A	100.0
75	0.9	C	2.5	79.3	18.1	gS	WT	N/A	124.2	134.0	285.7	83.3	26.4	14.3	N/A	17.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	18.1	19.6	41.7	12.2	3.9	2.1	N/A	2.5
SPLIT WT= 686.0							CUM WT %	N/A	18.1	37.7	79.4	91.6	95.4	97.5	N/A	100.0
80	1.5	C	4.8	31.6	63.5	msG	WT	N/A	481.2	69.4	89.2	38.9	24.7	17.2	N/A	36.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	63.5	9.2	11.8	5.1	3.3	2.3	N/A	4.9
SPLIT WT= 759.4							CUM WT %	N/A	63.5	72.7	84.5	89.6	92.9	95.2	N/A	100.0
85	1.1	H	18.8	43.6	37.7	msG	WT	N/A	148.3	50.4	50.2	32.8	22.0	16.1	N/A	73.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.7	12.8	12.8	8.3	5.6	4.1	N/A	18.8
SPLIT WT= 395.9							CUM WT %	N/A	37.7	50.5	63.2	71.6	77.1	81.2	N/A	100.0
90	1.0	H	23.4	46.9	29.7	gmS	WT	N/A	112.7	51.8	43.2	35.1	26.2	21.9	N/A	89.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.7	13.6	11.4	9.2	6.9	5.8	N/A	23.4
SPLIT WT= 379.9							CUM WT %	N/A	29.7	43.3	54.7	63.9	70.8	76.6	N/A	100.0
95	0.9	H	24.3	49.3	26.4	gmS	WT	N/A	99.0	48.5	49.2	37.4	27.7	21.8	N/A	90.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.4	13.0	13.1	10.0	7.4	5.8	N/A	24.3
SPLIT WT= 374.3							CUM WT %	N/A	26.4	39.4	52.5	62.5	69.9	75.7	N/A	100.0
100	0.8	H	17.1	35.2	47.7	msG	WT	N/A	204.9	51.2	36.9	25.7	20.0	17.2	N/A	73.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	47.7	11.9	8.6	6.0	4.7	4.0	N/A	17.1
SPLIT WT= 429.0							CUM WT %	N/A	47.7	59.7	68.3	74.3	78.9	82.9	N/A	100.0
105	0.6	H	13.7	40.7	45.6	msG	WT	N/A	196.7	68.2	49.9	25.8	17.6	14.0	N/A	59.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.6	15.8	11.6	6.0	4.1	3.3	N/A	13.7
SPLIT WT= 431.4							CUM WT %	N/A	45.6	61.4	73.0	79.0	83.0	86.3	N/A	100.0
110	1.9	H	14.9	70.0	15.2	(m)gS	WT	N/A	60.0	46.7	85.7	98.3	30.0	16.3	N/A	58.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	15.2	11.8	21.7	24.8	7.6	4.1	N/A	14.9
SPLIT WT= 396.0							CUM WT %	N/A	15.2	27.0	48.6	73.4	81.0	85.1	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	1.9	H	17.0	75.8	7.2	(gm)S	WT	N/A	26.4	20.0	64.0	123.0	48.1	21.9	N/A	62.1
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	7.2	5.5	17.5	33.7	13.2	6.0	N/A	17.0
SPLIT WT= 365.4							CUM WT %	N/A	7.2	12.7	30.2	63.9	77.0	83.0	N/A	100.0
120	3.0	H	27.0	70.8	2.2	mS	WT	N/A	7.9	10.4	34.6	93.1	68.3	49.4	N/A	97.4
SORT= N/A MEDIAN= 3.00 MODE= 5.00 MEAN= N/A							WT %	N/A	2.2	2.9	9.6	25.8	18.9	13.7	N/A	27.0
SPLIT WT= 361.1							CUM WT %	N/A	2.2	5.1	14.7	40.4	59.3	73.0	N/A	100.0
125	3.0	H	55.9	43.5	0.7	sM	WT	N/A	2.1	4.3	16.6	42.3	34.8	39.4	N/A	176.5
SORT= N/A MEDIAN= 5.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.7	1.4	5.3	13.4	11.0	12.5	N/A	55.9
SPLIT WT= 316.2							CUM WT %	N/A	0.7	2.0	7.3	20.7	31.7	44.1	N/A	100.0
130	8.1	H	59.1	38.6	2.3	sM	WT	N/A	6.6	6.2	12.9	27.2	28.0	34.4	N/A	166.5
SORT= N/A MEDIAN= 5.00 MODE= 5.00 MEAN= N/A							WT %	N/A	2.3	2.2	4.6	9.7	9.9	12.2	N/A	59.1
SPLIT WT= 281.5							CUM WT %	N/A	2.3	4.5	9.1	18.8	28.7	40.9	N/A	100.0
135	16.4	H	45.1	48.7	6.2	(g)mS	WT	N/A	18.2	13.3	26.5	39.4	32.5	31.8	N/A	132.8
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	6.2	4.5	9.0	13.4	11.0	10.8	N/A	45.1
SPLIT WT= 294.6							CUM WT %	N/A	6.2	10.7	19.7	33.1	44.1	54.9	N/A	100.0
140	6.4	H	21.5	52.9	25.5	gmS	WT	N/A	91.0	32.6	39.5	62.7	31.9	21.8	N/A	76.7
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.6	9.2	11.1	17.6	9.0	6.1	N/A	21.5
SPLIT WT= 356.2							CUM WT %	N/A	25.6	34.7	45.8	63.4	72.4	78.5	N/A	100.0
145	2.4	H	15.2	55.7	29.1	gmS	WT	N/A	123.5	30.9	52.5	95.5	37.8	19.7	N/A	64.4
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	29.1	7.3	12.4	22.5	8.9	4.6	N/A	15.2
SPLIT WT= 424.3							CUM WT %	N/A	29.1	36.4	48.8	71.3	80.2	84.8	N/A	100.0
150	0.9	H	9.8	51.2	39.0	msG	WT	N/A	176.2	70.6	54.9	63.8	28.5	13.6	N/A	44.3
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	39.0	15.6	12.2	14.1	6.3	3.0	N/A	9.8
SPLIT WT= 451.8							CUM WT %	N/A	39.0	54.6	66.8	80.9	87.2	90.2	N/A	100.0
155	0.3	H	7.0	61.7	31.2	msG	WT	N/A	265.5	105.3	120.6	171.1	92.6	35.0	N/A	59.9
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.2	12.4	14.2	20.1	10.9	4.1	N/A	7.1
SPLIT WT= 849.3							CUM WT %	N/A	31.2	43.6	57.8	78.0	88.8	93.0	N/A	100.0
160	0.2	H	7.3	47.6	45.1	msG	WT	N/A	403.1	104.6	109.5	110.5	70.4	29.9	N/A	65.0
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	45.1	11.7	12.3	12.4	7.9	3.4	N/A	7.3
SPLIT WT= 896.5							CUM WT %	N/A	45.1	56.9	69.1	81.5	89.4	92.7	N/A	100.0
165	0.2	H	8.4	55.5	36.2	msG	WT	N/A	327.0	132.9	130.2	132.2	67.5	38.7	N/A	75.5
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.2	14.7	14.4	14.6	7.5	4.3	N/A	8.4
SPLIT WT= 905.2							CUM WT %	N/A	36.2	50.9	65.3	79.9	87.4	91.6	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	0.4	H	10.9	59.7	29.4	(m)gS	WT	N/A	216.8	84.4	67.8	132.8	97.8	57.2	N/A	80.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.4	11.5	9.2	18.0	13.3	7.8	N/A	10.9
SPLIT WT= 737.3							CUM WT %	N/A	29.4	40.9	50.1	68.1	81.4	89.1	N/A	100.0
175	0.2	H	9.1	53.0	37.9	msG	WT	N/A	333.9	92.5	122.3	128.6	77.2	45.9	N/A	80.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.9	10.5	13.9	14.6	8.8	5.2	N/A	9.1
SPLIT WT= 879.5							CUM WT %	N/A	37.9	48.4	62.3	76.9	85.7	90.9	N/A	100.0
180	0.2	H	10.3	65.2	24.5	(m)gS	WT	N/A	209.4	92.0	159.9	122.7	124.3	58.2	N/A	87.6
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.5	10.8	18.7	14.4	14.6	6.8	N/A	10.3
SPLIT WT= 855.6							CUM WT %	N/A	24.5	35.3	54.0	68.4	82.9	89.7	N/A	100.0
185	0.3	H	10.2	61.6	28.2	(m)gS	WT	N/A	121.8	53.5	76.2	58.3	43.1	35.0	N/A	44.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.2	12.4	17.6	13.5	10.0	8.1	N/A	10.2
SPLIT WT= 431.9							CUM WT %	N/A	28.2	40.6	58.2	71.7	81.7	89.8	N/A	100.0
190	0.2	H	10.8	55.1	34.1	msG	WT	N/A	134.2	41.3	40.1	57.7	47.8	29.7	N/A	42.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.1	10.5	10.2	14.7	12.2	7.6	N/A	10.8
SPLIT WT= 394.3							CUM WT %	N/A	34.1	44.6	54.8	69.5	81.7	89.2	N/A	100.0
195	0.2	H	7.8	42.9	49.3	msG	WT	N/A	153.3	32.2	35.3	26.0	22.1	17.9	N/A	24.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.3	10.4	11.4	8.4	7.1	5.8	N/A	7.8
SPLIT WT= 314.8							CUM WT %	N/A	49.3	59.6	71.0	79.4	86.5	92.2	N/A	100.0
200	0.2	H	10.1	38.5	51.5	msG	WT	N/A	79.8	19.5	12.5	10.1	9.5	8.1	N/A	15.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.5	12.6	8.1	6.5	6.1	5.2	N/A	10.1
SPLIT WT= 154.9							CUM WT %	N/A	51.5	64.0	72.1	78.6	84.7	89.9	N/A	100.0
205	0.2	H	10.5	44.9	44.6	msG	WT	N/A	121.3	25.2	18.3	32.4	28.9	17.5	N/A	28.6
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.6	9.3	6.7	11.9	10.6	6.4	N/A	10.5
SPLIT WT= 271.5							CUM WT %	N/A	44.6	53.8	60.5	72.4	83.1	89.5	N/A	100.0
210	0.2	H	9.0	50.4	40.6	msG	WT	N/A	139.2	28.3	21.7	52.4	47.3	22.8	N/A	30.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.6	8.3	6.3	15.3	13.8	6.7	N/A	9.0
SPLIT WT= 343.3							CUM WT %	N/A	40.6	48.9	55.2	70.5	84.4	91.0	N/A	100.0
215	0.2	H	7.2	43.9	48.9	msG	WT	N/A	170.5	29.5	23.0	42.5	38.8	19.4	N/A	25.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.9	8.5	6.6	12.2	11.1	5.6	N/A	7.2
SPLIT WT= 352.3							CUM WT %	N/A	48.9	57.3	63.9	76.1	87.2	92.8	N/A	100.0
220	0.2	H	8.5	48.8	42.7	msG	WT	N/A	154.7	34.6	23.9	52.8	42.9	22.5	N/A	30.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.7	9.6	6.6	14.6	11.9	6.2	N/A	8.5
SPLIT WT= 361.4							CUM WT %	N/A	42.7	52.3	58.9	73.5	85.3	91.5	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	0.2	H	20.7	50.2	29.2	gmS	WT	N/A	54.6	22.5	15.8	19.6	22.8	13.3	N/A	38.7
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.2	12.0	8.4	10.5	12.2	7.1	N/A	20.7
SPLIT WT= 187.3							CUM WT %	N/A	29.2	41.2	49.6	60.1	72.2	79.3	N/A	100.0
230	0.2	H	8.9	63.6	27.5	(m)gS	WT	N/A	67.4	36.7	30.1	38.9	30.9	19.2	N/A	21.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.5	15.0	12.3	15.9	12.6	7.8	N/A	8.9
SPLIT WT= 247.8							CUM WT %	N/A	27.5	42.5	54.8	70.7	83.3	91.1	N/A	100.0
235	0.2	H	22.6	48.2	29.2	gmS	WT	N/A	43.4	15.0	12.6	15.3	16.8	11.9	N/A	33.6
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.2	10.1	8.5	10.3	11.3	8.0	N/A	22.6
SPLIT WT= 148.6							CUM WT %	N/A	29.2	39.3	47.8	58.1	69.4	77.4	N/A	100.0
240	0.2	H	7.3	53.2	39.5	msG	WT	N/A	245.6	41.9	43.6	134.6	72.7	37.6	N/A	45.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.5	6.7	7.0	21.7	11.7	6.1	N/A	7.3
SPLIT WT= 622.5							CUM WT %	N/A	39.5	46.3	53.3	74.9	86.6	92.7	N/A	100.0
245	0.2	H	2.2	96.4	1.4	S	WT	N/A	3.3	1.5	3.7	122.4	91.6	9.3	N/A	5.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.4	0.6	1.6	51.6	38.6	3.9	N/A	2.2
SPLIT WT= 241.4							CUM WT %	N/A	1.4	2.0	3.6	55.2	93.8	97.8	N/A	100.0
250	0.2	H	2.1	97.9	0.0	S	WT	N/A	0.0	1.0	2.0	171.6	88.8	7.3	N/A	5.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	0.4	0.7	62.1	32.1	2.6	N/A	2.1
SPLIT WT= 275.8							CUM WT %	N/A	0.0	0.4	1.1	63.2	95.3	97.9	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.1	N/	4.2	93.7	2.1	S	WT	N/A	9.9	7.3	29.4	70.0	156.1	174.9	N/A	19.6
SORT=	N/A	MEDIAN=	3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	2.1	1.6	6.3	15.0	33.4	37.4	N/A	4.2
SPLIT WT= 471.0							CUM WT %	N/A	2.1	3.7	10.0	25.0	58.4	95.8	N/A	100.0
10	1.5	N/	9.1	90.9	0.0	S	WT	N/A	0.0	1.0	6.6	35.9	157.2	172.7	N/A	37.3
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	0.2	1.6	8.7	38.3	42.1	N/A	9.1
SPLIT WT= 418.1							CUM WT %	N/A	0.0	0.2	1.9	10.6	48.9	90.9	N/A	100.0
15	1.5	C	11.6	67.6	20.7	(m)gS	WT	N/A	42.2	32.4	17.3	23.0	46.3	18.8	N/A	23.7
SORT=	N/A	MEDIAN=	2.00	MODE=	3.00	MEAN= N/A	WT %	N/A	20.7	15.9	8.5	11.3	22.7	9.2	N/A	11.6
SPLIT WT= 203.7							CUM WT %	N/A	20.7	36.6	45.1	56.4	79.1	88.4	N/A	100.0
20	0.9	C	8.9	70.1	21.0	(m)gS	WT	N/A	56.1	76.9	48.0	22.5	26.0	14.2	N/A	23.9
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	21.0	28.7	17.9	8.4	9.7	5.3	N/A	8.9
SPLIT WT= 267.4							CUM WT %	N/A	21.0	49.7	67.6	76.1	85.8	91.1	N/A	100.0
25	1.2	H	17.0	72.5	10.4	(m)gS	WT	N/A	26.3	31.5	47.1	55.8	32.4	15.8	N/A	42.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	10.4	12.5	18.7	22.2	12.9	6.3	N/A	17.0
SPLIT WT= 251.8							CUM WT %	N/A	10.4	23.0	41.7	63.8	76.7	83.0	N/A	100.0
30	1.3	H	20.4	73.4	6.1	(g)mS	WT	N/A	24.2	34.3	79.3	84.4	52.8	40.2	N/A	81.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	6.1	8.7	20.0	21.3	13.3	10.2	N/A	20.4
SPLIT WT= 396.2							CUM WT %	N/A	6.1	14.8	34.8	56.1	69.4	79.6	N/A	100.0
35	1.3	H	17.9	80.1	2.0	(m)S	WT	N/A	7.5	18.0	83.3	101.6	61.8	39.3	N/A	67.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	2.0	4.7	22.0	26.8	16.3	10.4	N/A	17.9
SPLIT WT= 379.5							CUM WT %	N/A	2.0	6.7	28.7	55.5	71.8	82.1	N/A	100.0
40	1.6	H	18.1	80.8	1.1	(m)S	WT	N/A	4.2	17.4	88.3	90.0	66.7	50.4	N/A	69.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.1	4.5	22.8	23.3	17.2	13.0	N/A	18.1
SPLIT WT= 387.0							CUM WT %	N/A	1.1	5.6	28.4	51.7	68.9	81.9	N/A	100.0
45	1.6	H	15.8	83.5	0.7	(m)S	WT	N/A	2.8	10.1	80.8	119.5	64.4	43.1	N/A	60.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	2.7	21.2	31.4	16.9	11.3	N/A	15.8
SPLIT WT= 380.8							CUM WT %	N/A	0.7	3.4	24.6	56.0	72.9	84.2	N/A	100.0
53	N/A	H	16.0	83.1	0.9	(m)S	WT	N/A	3.4	13.4	62.6	95.1	87.2	53.1	N/A	60.1
SORT=	N/A	MEDIAN=	3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.9	3.6	16.7	25.4	23.3	14.2	N/A	16.0
SPLIT WT= 374.9							CUM WT %	N/A	0.9	4.5	21.2	46.6	69.8	84.0	N/A	100.0
56	1.3	H	12.5	86.8	0.7	(m)S	WT	N/A	2.4	10.4	57.4	120.7	71.1	33.4	N/A	42.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	3.1	17.0	35.7	21.1	9.9	N/A	12.5
SPLIT WT= 337.7							CUM WT %	N/A	0.7	3.8	20.8	56.5	77.6	87.5	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	1.5	H	11.8	88.1	0.2	(m)S	WT	N/A	0.6	6.0	55.4	124.1	78.8	30.7	N/A	39.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.2	1.8	16.5	37.0	23.5	9.2	N/A	11.8
SPLIT WT= 335.0							CUM WT %	N/A	0.2	2.0	18.5	55.6	79.1	88.2	N/A	100.0
65	1.9	H	13.9	85.3	0.8	(m)S	WT	N/A	2.7	6.0	79.8	117.8	52.2	33.3	N/A	47.2
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.8	1.8	23.5	34.8	15.4	9.8	N/A	13.9
SPLIT WT= 339.0							CUM WT %	N/A	0.8	2.6	26.1	60.9	76.3	86.1	N/A	100.0
70	1.5	H	14.4	80.2	5.4	(gm)S	WT	N/A	21.3	24.0	102.3	97.8	54.3	35.6	N/A	56.3
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	5.4	6.1	26.1	25.0	13.9	9.1	N/A	14.4
SPLIT WT= 391.6							CUM WT %	N/A	5.4	11.6	37.7	62.7	76.5	85.6	N/A	100.0
75	1.1	H	18.2	72.3	9.6	(g)mS	WT	N/A	17.9	18.6	65.3	28.3	13.8	9.3	N/A	34.0
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	9.6	9.9	34.9	15.1	7.4	5.0	N/A	18.2
SPLIT WT= 187.0							CUM WT %	N/A	9.6	19.5	54.4	69.5	76.9	81.8	N/A	100.0
80	1.3	H	18.9	63.5	17.6	gmS	WT	N/A	63.0	40.4	95.3	48.3	25.3	18.1	N/A	67.6
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	17.6	11.3	26.6	13.5	7.1	5.1	N/A	18.9
SPLIT WT= 357.9							CUM WT %	N/A	17.6	28.9	55.5	69.0	76.1	81.1	N/A	100.0
85	1.1	H	10.5	39.0	50.6	msG	WT	N/A	224.8	45.0	59.1	33.0	21.9	14.2	N/A	46.6
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	50.6	10.1	13.3	7.4	4.9	3.2	N/A	10.5
SPLIT WT= 444.6							CUM WT %	N/A	50.6	60.7	74.0	81.4	86.3	89.5	N/A	100.0
90	1.2	H	19.7	38.5	41.8	msG	WT	N/A	166.6	46.4	47.2	25.8	19.4	14.4	N/A	78.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.8	11.7	11.9	6.5	4.9	3.6	N/A	19.7
SPLIT WT= 398.4							CUM WT %	N/A	41.8	53.5	65.3	71.8	76.7	80.3	N/A	100.0
95	1.1	H	22.0	34.5	43.5	msG	WT	N/A	203.4	49.1	45.7	25.7	22.0	18.6	N/A	102.9
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	43.5	10.5	9.8	5.5	4.7	4.0	N/A	22.0
SPLIT WT= 467.4							CUM WT %	N/A	43.5	54.0	63.8	69.3	74.0	78.0	N/A	100.0
100	0.8	H	20.5	36.7	42.8	msG	WT	N/A	208.3	57.7	51.0	28.8	23.1	17.8	N/A	99.8
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	42.8	11.9	10.5	5.9	4.8	3.7	N/A	20.5
SPLIT WT= 486.6							CUM WT %	N/A	42.8	54.7	65.2	71.1	75.8	79.5	N/A	100.0
105	1.1	H	23.1	45.0	31.8	msG	WT	N/A	153.0	54.3	61.6	47.8	30.1	22.7	N/A	111.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.8	11.3	12.8	9.9	6.3	4.7	N/A	23.2
SPLIT WT= 480.8							CUM WT %	N/A	31.8	43.1	55.9	65.9	72.1	76.8	N/A	100.0
110	1.3	H	17.2	58.1	24.7	gmS	WT	N/A	85.6	34.7	62.3	64.1	25.4	15.2	N/A	59.6
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	24.7	10.0	18.0	18.5	7.3	4.4	N/A	17.2
SPLIT WT= 346.8							CUM WT %	N/A	24.7	34.7	52.6	71.1	78.4	82.8	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	2.3	H	15.8	74.8	9.4	(gm)S	WT	N/A	19.6	14.1	42.6	68.0	21.2	9.6	N/A	32.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.4	6.8	20.5	32.7	10.2	4.6	N/A	15.8
SPLIT WT= 208.0							CUM WT %	N/A	9.4	16.2	36.7	69.4	79.6	84.2	N/A	100.0
120	2.6	H	26.6	66.6	6.9	(g)mS	WT	N/A	20.4	11.8	34.4	75.0	46.5	30.1	N/A	79.0
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	6.9	4.0	11.6	25.2	15.7	10.1	N/A	26.6
SPLIT WT= 297.1							CUM WT %	N/A	6.9	10.8	22.4	47.6	63.3	73.4	N/A	100.0
125	3.0	H	59.5	37.6	2.9	sM	WT	N/A	8.5	5.5	13.2	31.1	26.6	35.2	N/A	176.4
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	2.9	1.9	4.5	10.5	9.0	11.9	N/A	59.5
SPLIT WT= 296.6							CUM WT %	N/A	2.9	4.7	9.2	19.7	28.6	40.5	N/A	100.0
130	4.0	H	63.5	36.4	0.2	sM	WT	N/A	0.3	1.3	4.3	11.0	17.3	23.4	N/A	100.0
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.2	0.8	2.7	7.0	11.0	14.9	N/A	63.5
SPLIT WT= 157.6							CUM WT %	N/A	0.2	1.0	3.7	10.7	21.7	36.6	N/A	100.0
135	10.7	H	36.8	58.0	5.3	(g)mS	WT	N/A	11.2	9.6	22.3	27.6	31.6	32.0	N/A	78.1
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	5.3	4.5	10.5	13.0	14.9	15.1	N/A	36.8
SPLIT WT= 212.4							CUM WT %	N/A	5.3	9.8	20.3	33.3	48.2	63.2	N/A	100.0
140	6.9	H	19.7	63.5	16.8	gmS	WT	N/A	58.6	25.7	53.5	80.3	38.2	23.0	N/A	68.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	16.9	7.4	15.4	23.1	11.0	6.6	N/A	19.7
SPLIT WT= 347.6							CUM WT %	N/A	16.9	24.2	39.6	62.7	73.7	80.3	N/A	100.0
145	5.3	H	16.5	49.8	33.7	msG	WT	N/A	107.1	29.1	34.3	51.5	26.8	16.5	N/A	52.3
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.7	9.2	10.8	16.2	8.4	5.2	N/A	16.5
SPLIT WT= 317.6							CUM WT %	N/A	33.7	42.9	53.7	69.9	78.3	83.5	N/A	100.0
150	2.4	H	7.9	72.4	19.7	gS	WT	N/A	64.5	39.1	70.6	96.6	22.3	7.7	N/A	25.8
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	19.8	12.0	21.6	29.6	6.8	2.4	N/A	7.9
SPLIT WT= 326.5							CUM WT %	N/A	19.8	31.7	53.3	82.9	89.8	92.1	N/A	100.0
155	1.9	H	15.7	55.0	29.3	gmS	WT	N/A	119.6	39.2	43.1	82.7	38.7	20.7	N/A	64.3
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.3	9.6	10.6	20.3	9.5	5.1	N/A	15.8
SPLIT WT= 408.3							CUM WT %	N/A	29.3	38.9	49.5	69.7	79.2	84.3	N/A	100.0
160	0.9	H	15.9	42.1	42.0	msG	WT	N/A	192.0	41.7	43.6	55.5	31.1	20.4	N/A	72.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.0	9.1	9.5	12.1	6.8	4.5	N/A	15.9
SPLIT WT= 457.0							CUM WT %	N/A	42.0	51.1	60.7	72.8	79.6	84.1	N/A	100.0
165	0.8	H	26.9	54.1	19.0	gmS	WT	N/A	76.7	45.3	44.0	58.9	39.4	30.5	N/A	108.3
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	19.0	11.2	10.9	14.6	9.8	7.6	N/A	26.9
SPLIT WT= 403.0							CUM WT %	N/A	19.0	30.3	41.2	55.8	65.6	73.1	N/A	100.0

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02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	1.0	H	37.1	57.3	5.6	(g)mS	WT	N/A	16.1	26.5	40.7	42.7	30.2	24.7	N/A	106.7
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	5.6	9.2	14.2	14.9	10.5	8.6	N/A	37.1
SPLIT WT= 287.5							CUM WT %	N/A	5.6	14.8	29.0	43.8	54.3	62.9	N/A	100.0
175	0.6	H	17.3	38.8	43.9	msG	WT	N/A	181.1	42.8	37.6	37.3	24.0	18.5	N/A	71.4
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.9	10.4	9.1	9.0	5.8	4.5	N/A	17.3
SPLIT WT= 412.7							CUM WT %	N/A	43.9	54.3	63.4	72.4	78.2	82.7	N/A	100.0
180	0.5	H	16.7	46.4	36.8	msG	WT	N/A	160.0	56.0	54.2	45.9	26.6	19.0	N/A	72.6
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.8	12.9	12.5	10.6	6.1	4.4	N/A	16.7
SPLIT WT= 434.2							CUM WT %	N/A	36.8	49.7	62.2	72.8	78.9	83.3	N/A	100.0
185	0.4	H	23.6	46.3	30.1	msG	WT	N/A	115.5	42.9	43.8	39.9	28.5	22.6	N/A	90.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.1	11.2	11.4	10.4	7.4	5.9	N/A	23.7
SPLIT WT= 384.0							CUM WT %	N/A	30.1	41.3	52.7	63.1	70.5	76.4	N/A	100.0
190	0.1	H	18.9	44.4	36.7	msG	WT	N/A	170.4	44.5	55.8	49.6	32.2	24.5	N/A	87.9
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.7	9.6	12.0	10.7	6.9	5.3	N/A	18.9
SPLIT WT= 464.9							CUM WT %	N/A	36.7	46.2	58.2	68.9	75.8	81.1	N/A	100.0
195	0.1	H	20.9	43.0	36.1	msG	WT	N/A	160.9	43.2	43.4	42.3	34.9	28.1	N/A	93.1
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.1	9.7	9.7	9.5	7.8	6.3	N/A	20.9
SPLIT WT= 445.8							CUM WT %	N/A	36.1	45.8	55.5	65.0	72.8	79.1	N/A	100.0
200	0.1	H	27.7	47.9	24.4	gmS	WT	N/A	84.8	39.9	34.3	33.9	32.2	26.5	N/A	96.6
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	24.4	11.5	9.9	9.7	9.3	7.6	N/A	27.7
SPLIT WT= 348.3							CUM WT %	N/A	24.4	35.8	45.7	55.4	64.7	72.3	N/A	100.0
205	0.1	H	18.8	44.9	36.3	msG	WT	N/A	162.7	45.9	39.0	50.9	41.4	23.9	N/A	84.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.3	10.2	8.7	11.4	9.2	5.3	N/A	18.9
SPLIT WT= 448.2							CUM WT %	N/A	36.3	46.5	55.2	66.6	75.8	81.1	N/A	100.0
210	0.1	H	15.8	34.7	49.5	msG	WT	N/A	226.6	32.3	29.8	41.9	35.1	20.1	N/A	72.4
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.5	7.1	6.5	9.1	7.7	4.4	N/A	15.8
SPLIT WT= 458.3							CUM WT %	N/A	49.5	56.5	63.0	72.1	79.8	84.2	N/A	100.0
215	0.1	H	12.2	32.0	55.8	msG	WT	N/A	245.1	33.5	19.6	33.8	37.0	16.7	N/A	53.8
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	55.8	7.6	4.5	7.7	8.4	3.8	N/A	12.2
SPLIT WT= 439.5							CUM WT %	N/A	55.8	63.4	67.9	75.5	84.0	87.8	N/A	100.0
220	0.1	H	11.6	67.2	21.2	(m)gS	WT	N/A	92.6	81.8	86.8	69.8	40.1	14.8	N/A	50.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	21.2	18.7	19.9	16.0	9.2	3.4	N/A	11.6
SPLIT WT= 436.3							CUM WT %	N/A	21.2	40.0	59.9	75.8	85.0	88.4	N/A	100.0

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02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	0.2	H	19.7	41.2	39.0	msG	WT	N/A	174.5	36.9	31.7	42.4	47.0	26.3	N/A	88.2
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.0	8.3	7.1	9.5	10.5	5.9	N/A	19.7
SPLIT WT= 447.0							CUM WT %	N/A	39.0	47.3	54.4	63.9	74.4	80.3	N/A	100.0
230	0.2	H	24.2	49.5	26.3	gmS	WT	N/A	102.1	47.3	32.5	37.3	46.6	28.4	N/A	93.9
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.3	12.2	8.4	9.6	12.0	7.3	N/A	24.2
SPLIT WT= 388.1							CUM WT %	N/A	26.3	38.5	46.9	56.5	68.5	75.8	N/A	100.0
235	0.1	H	26.4	50.3	23.3	gmS	WT	N/A	66.2	32.7	26.8	28.3	32.6	22.9	N/A	75.2
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	23.3	11.5	9.4	9.9	11.5	8.0	N/A	26.4
SPLIT WT= 284.7							CUM WT %	N/A	23.3	34.7	44.2	54.1	65.5	73.6	N/A	100.0
240	0.1	H	35.6	55.7	8.8	(g)mS	WT	N/A	25.1	31.5	28.7	34.5	38.0	26.8	N/A	101.9
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	8.8	11.0	10.0	12.0	13.3	9.4	N/A	35.6
SPLIT WT= 286.5							CUM WT %	N/A	8.8	19.8	29.8	41.8	55.1	64.4	N/A	100.0
245	0.1	H	9.1	28.8	62.1	msG	WT	N/A	271.2	23.0	15.8	26.1	46.3	14.7	N/A	39.7
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	62.1	5.3	3.6	6.0	10.6	3.4	N/A	9.1
SPLIT WT= 436.8							CUM WT %	N/A	62.1	67.4	71.0	77.0	87.6	90.9	N/A	100.0
250	0.3	H	6.7	62.0	31.3	sG	WT	N/A	119.2	33.6	34.4	51.9	90.3	26.0	N/A	25.4
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.3	8.8	9.0	13.6	23.7	6.8	N/A	6.7
SPLIT WT= 375.5							CUM WT %	N/A	31.3	40.1	49.2	62.8	86.5	93.3	N/A	100.0
255	0.1	H	5.3	83.8	10.9	gS	WT	N/A	72.6	21.9	15.3	286.4	194.4	41.9	N/A	35.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	10.9	3.3	2.3	42.9	29.1	6.3	N/A	5.3
SPLIT WT= 664.2							CUM WT %	N/A	10.9	14.2	16.4	59.3	88.4	94.7	N/A	100.0
260	0.2	H	5.1	67.8	27.1	gS	WT	N/A	190.8	61.8	46.6	211.3	118.4	38.6	N/A	35.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	27.1	8.8	6.6	30.0	16.8	5.5	N/A	5.1
SPLIT WT= 700.5							CUM WT %	N/A	27.1	35.9	42.6	72.6	89.4	94.9	N/A	100.0
265	0.2	H	4.8	71.8	23.6	gS	WT	N/A	168.4	69.1	55.4	226.2	117.4	43.5	N/A	34.2
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	23.6	9.7	7.8	31.7	16.4	6.1	N/A	4.8
SPLIT WT= 717.1							CUM WT %	N/A	23.6	33.3	41.0	72.7	89.1	95.2	N/A	100.0
270	0.2	H	6.3	72.3	21.4	gS	WT	N/A	132.2	56.9	46.4	194.3	104.2	44.1	N/A	38.9
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	21.4	9.2	7.5	31.5	16.9	7.2	N/A	6.3
SPLIT WT= 612.6							CUM WT %	N/A	21.4	30.7	38.2	69.7	86.6	93.7	N/A	100.0
275	0.1	H	5.8	82.4	11.7	gS	WT	N/A	77.0	38.6	27.5	149.3	279.2	46.5	N/A	38.3
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	11.7	5.9	4.2	22.8	42.5	7.1	N/A	5.8
SPLIT WT= 653.5							CUM WT %	N/A	11.7	17.6	21.8	44.6	87.1	94.2	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
280	0.1	H	4.4	93.3	2.3	S	WT	N/A	14.1	10.4	53.8	145.9	299.9	58.7	N/A	26.9
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	2.3	1.7	8.8	23.9	49.2	9.6	N/A	4.4
SPLIT WT= 607.3							CUM WT %	N/A	2.3	4.0	12.8	36.8	86.0	95.6	N/A	100.0
285	0.1	H	11.7	86.5	1.8	(m)S	WT	N/A	5.9	7.2	5.7	153.9	91.3	25.2	N/A	38.5
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.8	2.2	1.7	47.0	27.9	7.7	N/A	11.8
SPLIT WT= 327.6							CUM WT %	N/A	1.8	4.0	5.7	52.7	80.6	88.3	N/A	100.0
290	0.1	H	4.0	95.4	0.6	S	WT	N/A	2.6	1.8	16.5	108.5	252.5	36.5	N/A	17.5
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.6	0.4	3.8	24.9	57.9	8.4	N/A	4.0
SPLIT WT= 430.5							CUM WT %	N/A	0.6	1.0	4.8	29.7	87.6	96.0	N/A	100.0
295	0.1	H	3.3	96.0	0.6	S	WT	N/A	4.2	3.0	26.7	183.0	358.8	50.1	N/A	21.5
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.7	0.5	4.1	28.3	55.4	7.7	N/A	3.3
SPLIT WT= 647.1							CUM WT %	N/A	0.7	1.1	5.2	33.5	88.9	96.7	N/A	100.0
300	0.1	H	3.8	82.6	13.6	gS	WT	N/A	95.8	32.0	54.4	289.9	168.1	36.4	N/A	26.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	13.6	4.6	7.7	41.2	23.9	5.2	N/A	3.8
SPLIT WT= 698.0							CUM WT %	N/A	13.6	18.2	25.9	67.1	91.0	96.2	N/A	100.0
305	0.5	H	5.4	65.4	29.2	gS	WT	N/A	169.5	73.6	68.0	120.9	84.1	33.4	N/A	31.4
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.2	12.7	11.7	20.8	14.5	5.8	N/A	5.4
SPLIT WT= 574.3							CUM WT %	N/A	29.2	41.9	53.6	74.4	88.9	94.6	N/A	100.0
310	0.9	H	5.7	75.1	19.2	gS	WT	N/A	121.0	67.1	51.0	213.1	106.5	36.5	N/A	36.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	19.2	10.6	8.1	33.8	16.9	5.8	N/A	5.8
SPLIT WT= 629.1							CUM WT %	N/A	19.2	29.8	37.9	71.6	88.5	94.3	N/A	100.0
315	1.1	H	6.0	64.1	29.9	gS	WT	N/A	209.3	89.5	68.5	167.9	81.9	40.4	N/A	42.0
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.9	12.8	9.8	24.0	11.7	5.8	N/A	6.0
SPLIT WT= 704.5							CUM WT %	N/A	29.9	42.7	52.5	76.5	88.2	94.0	N/A	100.0
320	0.3	H	3.7	63.0	33.3	sG	WT	N/A	195.6	53.4	32.7	169.3	90.4	23.6	N/A	21.8
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.3	9.1	5.6	28.9	15.4	4.0	N/A	3.7
SPLIT WT= 581.4							CUM WT %	N/A	33.3	42.4	48.0	76.9	92.3	96.3	N/A	100.0
325	0.2	H	2.3	97.3	0.4	S	WT	N/A	2.3	12.5	80.6	283.1	192.3	37.0	N/A	14.2
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	2.0	13.0	45.5	30.9	6.0	N/A	2.3
SPLIT WT= 619.1							CUM WT %	N/A	0.4	2.4	15.3	60.9	91.8	97.7	N/A	100.0
330	0.2	H	12.2	69.9	17.9	(m)gS	WT	N/A	98.1	65.8	62.7	112.6	86.3	56.8	N/A	67.2
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	17.9	12.0	11.4	20.5	15.7	10.3	N/A	12.2
SPLIT WT= 553.6							CUM WT %	N/A	17.9	29.8	41.2	61.7	77.4	87.8	N/A	100.0

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02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
335	0.4	H	8.7	66.5	24.9	(m)gS	WT	N/A	170.1	84.8	51.2	132.1	127.4	59.3	N/A	59.4
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.9	12.4	7.5	19.3	18.6	8.7	N/A	8.7
SPLIT WT= 680.4							CUM WT %	N/A	24.9	37.3	44.7	64.0	82.7	91.3	N/A	100.0
340	0.8	H	7.1	70.1	22.9	gS	WT	N/A	167.5	133.8	107.5	115.2	111.2	45.7	N/A	51.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	22.9	18.3	14.7	15.7	15.2	6.2	N/A	7.1
SPLIT WT= 729.9							CUM WT %	N/A	22.9	41.1	55.8	71.5	86.7	92.9	N/A	100.0
345	0.6	H	7.0	64.4	28.5	gS	WT	N/A	190.6	102.4	128.0	95.7	65.1	39.2	N/A	46.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.5	15.3	19.2	14.3	9.8	5.9	N/A	7.0
SPLIT WT= 661.5							CUM WT %	N/A	28.5	43.9	63.0	77.4	87.1	93.0	N/A	100.0
350	0.8	H	9.4	72.2	18.4	(m)gS	WT	N/A	132.0	123.1	84.9	154.6	94.2	61.2	N/A	67.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	18.4	17.2	11.8	21.5	13.1	8.5	N/A	9.4
SPLIT WT= 717.6							CUM WT %	N/A	18.4	35.5	47.4	68.9	82.0	90.6	N/A	100.0
355	1.2	H	9.8	75.8	14.4	(m)gS	WT	N/A	65.7	68.9	67.4	111.2	63.7	35.7	N/A	44.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	14.4	15.1	14.7	24.3	13.9	7.8	N/A	9.8
SPLIT WT= 454.0							CUM WT %	N/A	14.4	29.4	44.2	68.5	82.4	90.2	N/A	100.0
360	1.3	H	5.9	68.8	25.4	gS	WT	N/A	171.4	97.9	74.5	155.7	97.5	39.1	N/A	39.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.4	14.5	11.0	23.0	14.4	5.8	N/A	5.9
SPLIT WT= 673.6							CUM WT %	N/A	25.4	39.8	50.9	73.9	88.3	94.1	N/A	100.0
365	0.6	H	8.0	80.6	11.4	gS	WT	N/A	57.7	95.4	90.1	119.9	69.8	33.8	N/A	40.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.4	18.8	17.8	23.6	13.8	6.7	N/A	8.0
SPLIT WT= 504.6							CUM WT %	N/A	11.4	30.2	47.9	71.6	85.3	92.0	N/A	100.0
370	0.5	H	13.1	81.8	5.1	(gm)S	WT	N/A	24.1	49.0	73.9	133.7	79.2	48.8	N/A	61.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	5.1	10.4	15.7	28.4	16.8	10.4	N/A	13.1
SPLIT WT= 473.8							CUM WT %	N/A	5.1	15.5	31.3	59.7	76.5	86.9	N/A	100.0
375	0.4	H	16.2	70.7	13.1	(m)gS	WT	N/A	63.8	42.0	55.0	122.4	75.1	48.8	N/A	78.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	13.1	8.7	11.3	25.2	15.5	10.1	N/A	16.2
SPLIT WT= 483.1							CUM WT %	N/A	13.1	21.8	33.1	58.3	73.8	83.8	N/A	100.0
380	0.4	H	12.1	83.9	4.0	(m)S	WT	N/A	14.6	26.4	39.1	147.9	59.5	30.5	N/A	43.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.0	7.3	10.8	40.9	16.5	8.4	N/A	12.1
SPLIT WT= 355.5							CUM WT %	N/A	4.0	11.3	22.2	63.1	79.5	87.9	N/A	100.0
385	0.2	H	6.6	82.4	11.0	gS	WT	N/A	52.2	52.4	76.7	179.6	59.0	24.5	N/A	31.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.0	11.0	16.1	37.7	12.4	5.2	N/A	6.6
SPLIT WT= 473.0							CUM WT %	N/A	11.0	22.0	38.1	75.8	88.2	93.4	N/A	100.0

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02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
390	0.2	H	6.4	85.9	7.7	(g)S	WT	N/A	33.7	46.4	69.1	172.9	59.6	27.9	N/A	27.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	7.7	10.6	15.8	39.5	13.6	6.4	N/A	6.4
SPLIT WT= 441.9							CUM WT %	N/A	7.7	18.3	34.1	73.6	87.2	93.6	N/A	100.0
395	0.8	H	7.6	84.2	8.2	(g)S	WT	N/A	32.7	57.6	52.2	141.2	57.2	28.2	N/A	30.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.2	14.4	13.1	35.3	14.3	7.1	N/A	7.6
SPLIT WT= 394.3							CUM WT %	N/A	8.2	22.6	35.7	71.0	85.3	92.4	N/A	100.0
400	0.5	H	3.9	78.8	17.2	gS	WT	N/A	63.7	80.5	77.4	78.2	36.6	18.5	N/A	14.5
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	17.2	21.8	21.0	21.2	9.9	5.0	N/A	3.9
SPLIT WT= 372.4							CUM WT %	N/A	17.2	39.0	60.0	81.2	91.1	96.1	N/A	100.0
405	0.8	H	6.9	74.0	19.1	gS	WT	N/A	110.1	90.7	135.0	111.7	59.0	31.3	N/A	40.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	19.1	15.7	23.4	19.3	10.2	5.4	N/A	6.9
SPLIT WT= 574.7							CUM WT %	N/A	19.1	34.8	58.1	77.5	87.7	93.1	N/A	100.0
410	0.7	H	22.9	65.2	11.9	gmS	WT	N/A	37.9	42.2	29.2	65.6	48.8	21.1	N/A	72.7
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	11.9	13.3	9.2	20.7	15.4	6.7	N/A	22.9
SPLIT WT= 317.5							CUM WT %	N/A	11.9	25.2	34.4	55.1	70.5	77.1	N/A	100.0
415	0.7	H	5.5	78.0	16.5	gS	WT	N/A	77.0	39.9	106.1	138.7	53.7	25.6	N/A	25.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	16.5	8.6	22.7	29.7	11.5	5.5	N/A	5.5
SPLIT WT= 468.8							CUM WT %	N/A	16.5	25.1	47.8	77.5	89.0	94.5	N/A	100.0
420	0.4	H	5.3	79.7	15.0	gS	WT	N/A	62.1	56.4	85.8	118.9	47.6	22.5	N/A	22.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	15.0	13.6	20.7	28.6	11.5	5.4	N/A	5.3
SPLIT WT= 413.4							CUM WT %	N/A	15.0	28.5	49.2	77.8	89.3	94.7	N/A	100.0
425	0.4	H	15.9	72.4	11.7	(m)gS	WT	N/A	40.0	29.8	27.6	118.4	56.3	15.4	N/A	54.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.7	8.7	8.1	34.6	16.5	4.5	N/A	15.9
SPLIT WT= 341.8							CUM WT %	N/A	11.7	20.4	28.5	63.1	79.6	84.1	N/A	100.0
430	0.5	H	26.7	63.6	9.7	(g)mS	WT	N/A	24.9	21.2	31.5	63.1	32.9	14.5	N/A	68.6
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.7	8.3	12.3	24.6	12.8	5.7	N/A	26.7
SPLIT WT= 256.6							CUM WT %	N/A	9.7	18.0	30.2	54.8	67.6	73.3	N/A	100.0
435	0.5	H	12.6	70.9	16.6	(m)gS	WT	N/A	50.7	48.8	40.0	79.1	36.7	12.2	N/A	38.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	16.6	16.0	13.1	25.9	12.0	4.0	N/A	12.6
SPLIT WT= 305.9							CUM WT %	N/A	16.6	32.5	45.6	71.5	83.5	87.5	N/A	100.0
440	0.5	H	21.1	70.2	8.7	(g)mS	WT	N/A	21.3	28.1	26.7	61.7	38.9	16.9	N/A	51.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.7	11.5	10.9	25.1	15.9	6.9	N/A	21.1
SPLIT WT= 245.6							CUM WT %	N/A	8.7	20.1	31.0	56.2	72.0	78.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W10-014 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
445	0.5	H	24.8	55.6	19.6	gmS	WT	N/A	51.2	36.6	22.1	35.3	31.3	19.8	N/A	64.9
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	19.6	14.0	8.5	13.5	12.0	7.6	N/A	24.9
SPLIT WT= 261.3							CUM WT %	N/A	19.6	33.6	42.1	55.6	67.6	75.1	N/A	100.0
450	0.4	H	36.0	49.6	14.4	gmS	WT	N/A	37.2	30.2	22.1	38.2	25.1	12.8	N/A	93.3
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	14.4	11.7	8.5	14.8	9.7	4.9	N/A	36.0
SPLIT WT= 258.8							CUM WT %	N/A	14.4	26.0	34.6	49.3	59.0	64.0	N/A	100.0
455	0.8	H	66.9	31.9	1.1	sM	WT	N/A	2.6	5.8	7.8	23.7	22.7	14.6	N/A	156.3
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.1	2.5	3.3	10.2	9.7	6.3	N/A	66.9
SPLIT WT= 233.5							CUM WT %	N/A	1.1	3.6	6.9	17.1	26.8	33.1	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-015 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.6	C	29.3	69.1	1.6	mS	WT	N/A	7.9	18.1	37.2	50.2	106.6	138.9	N/A	148.8
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.6	3.6	7.3	9.9	21.0	27.4	N/A	29.3
SPLIT WT= 507.6							CUM WT %	N/A	1.6	5.1	12.5	22.4	43.4	70.7	N/A	100.0
10	0.2	C	0.7	98.8	2.5	S	WT	N/A	16.0	134.3	329.3	133.0	23.4	4.6	N/A	4.5
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.5	20.8	51.1	20.6	3.6	0.7	N/A	0.7
SPLIT WT= 645.4							CUM WT %	N/A	2.5	23.3	74.4	95.0	98.6	99.3	N/A	100.0
15	0.4	C	4.8	69.3	26.0	gS	WT	N/A	195.8	196.2	210.3	53.1	36.6	25.7	N/A	35.9
SORT= N/A	MEDIAN=		0.00	MODE=	1.00	MEAN= N/A	WT %	N/A	26.0	26.0	27.9	7.1	4.9	3.4	N/A	4.8
SPLIT WT= 754.3							CUM WT %	N/A	26.0	52.0	79.9	87.0	91.8	95.3	N/A	100.0
20	0.4	C	2.7	65.6	31.7	sG	WT	N/A	243.8	98.2	229.8	110.3	47.9	18.8	N/A	20.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.7	12.8	29.9	14.3	6.2	2.4	N/A	2.7
SPLIT WT= 769.9							CUM WT %	N/A	31.7	44.5	74.3	88.7	94.9	97.3	N/A	100.0
25	0.5	C	5.8	92.3	1.9	S	WT	N/A	10.5	88.2	204.3	139.3	50.6	37.5	N/A	32.9
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.9	15.7	36.3	24.7	9.0	6.7	N/A	5.8
SPLIT WT= 563.3							CUM WT %	N/A	1.9	17.5	53.8	78.5	87.5	94.2	N/A	100.0
30	0.4	C	1.6	93.6	4.9	S	WT	N/A	30.8	218.3	263.3	80.9	18.6	9.6	N/A	9.9
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.9	34.6	41.7	12.8	3.0	1.5	N/A	1.6
SPLIT WT= 631.4							CUM WT %	N/A	4.9	39.5	81.2	94.0	96.9	98.4	N/A	100.0
35	0.9	C	5.0	92.9	2.1	S	WT	N/A	12.4	89.1	275.4	141.9	30.2	27.4	N/A	29.0
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.1	11.8	47.0	24.2	5.2	4.7	N/A	5.0
SPLIT WT= 586.1							CUM WT %	N/A	2.1	13.9	61.0	85.2	90.4	95.0	N/A	100.0
40	1.1	C	2.7	57.1	40.2	sG	WT	N/A	295.0	91.3	178.7	99.6	31.9	17.3	N/A	20.0
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.2	12.4	24.4	13.6	4.4	2.4	N/A	2.7
SPLIT WT= 734.3							CUM WT %	N/A	40.2	52.6	77.0	90.6	94.9	97.3	N/A	100.0
45	1.6	C	9.6	88.9	1.5	S	WT	N/A	6.9	22.7	99.1	64.1	64.7	151.6	N/A	43.5
SORT= N/A	MEDIAN=		3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	1.5	5.0	21.9	14.2	14.3	33.5	N/A	9.6
SPLIT WT= 453.2							CUM WT %	N/A	1.5	6.5	28.4	42.6	56.9	90.4	N/A	100.0
50	1.2	C	4.4	94.9	0.7	S	WT	N/A	3.4	19.4	50.4	140.1	190.1	50.0	N/A	20.9
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.7	4.1	10.6	29.5	40.1	10.5	N/A	4.4
SPLIT WT= 474.8							CUM WT %	N/A	0.7	4.8	15.4	45.0	85.1	95.6	N/A	100.0
55	1.2	C	3.1	70.2	26.7	gS	WT	N/A	158.5	137.7	151.3	57.5	40.0	30.1	N/A	18.4
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.7	23.2	25.5	9.7	6.7	5.1	N/A	3.1
SPLIT WT= 594.2							CUM WT %	N/A	26.7	49.9	75.4	85.1	91.8	96.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-015 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	0.8	H	23.0	37.4	39.6	msG	WT	N/A	190.4	56.1	44.5	32.5	25.9	20.6	N/A	110.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.6	11.7	9.3	6.8	5.4	4.3	N/A	23.0
SPLIT WT= 480.9							CUM WT %	N/A	39.6	51.3	60.5	67.3	72.7	77.0	N/A	100.0
65	1.0	H	23.3	43.0	33.6	msG	WT	N/A	142.9	57.3	48.8	33.0	24.5	19.2	N/A	99.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.6	13.5	11.5	7.8	5.8	4.5	N/A	23.4
SPLIT WT= 424.9							CUM WT %	N/A	33.6	47.1	58.6	66.4	72.2	76.7	N/A	100.0
70	0.1	H	17.5	62.0	20.5	gmS	WT	N/A	68.0	83.0	57.9	30.3	19.9	14.4	N/A	58.1
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	20.5	25.0	17.5	9.1	6.0	4.3	N/A	17.5
SPLIT WT= 331.6							CUM WT %	N/A	20.5	45.5	63.0	72.1	78.1	82.5	N/A	100.0
75	0.4	H	28.7	39.3	32.0	msG	WT	N/A	105.5	37.3	29.7	23.7	20.7	18.1	N/A	94.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.0	11.3	9.0	7.2	6.3	5.5	N/A	28.7
SPLIT WT= 329.9							CUM WT %	N/A	32.0	43.3	52.3	59.5	65.8	71.3	N/A	100.0
80	0.6	H	18.4	29.7	51.9	msG	WT	N/A	212.5	40.6	30.2	21.2	16.4	13.3	N/A	75.4
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.9	9.9	7.4	5.2	4.0	3.3	N/A	18.4
SPLIT WT= 409.6							CUM WT %	N/A	51.9	61.8	69.2	74.3	78.3	81.6	N/A	100.0
85	1.1	H	23.3	51.2	25.5	gmS	WT	N/A	117.5	41.7	66.0	74.4	34.3	20.1	N/A	107.6
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.5	9.0	14.3	16.1	7.4	4.4	N/A	23.3
SPLIT WT= 461.6							CUM WT %	N/A	25.5	34.5	48.8	64.9	72.3	76.7	N/A	100.0
90	1.3	H	15.6	67.9	16.5	(m)gS	WT	N/A	72.1	55.5	88.0	90.3	39.4	24.4	N/A	68.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	16.5	12.7	20.1	20.6	9.0	5.6	N/A	15.6
SPLIT WT= 438.0							CUM WT %	N/A	16.5	29.1	49.2	69.8	78.8	84.4	N/A	100.0
95	1.2	H	20.7	75.4	3.9	mS	WT	N/A	14.3	29.1	72.0	102.2	47.7	24.6	N/A	75.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.9	8.0	19.7	28.0	13.1	6.7	N/A	20.7
SPLIT WT= 365.4							CUM WT %	N/A	3.9	11.9	31.6	59.5	72.6	79.3	N/A	100.0
100	1.6	H	24.1	73.1	2.8	mS	WT	N/A	9.0	13.9	32.4	63.7	71.4	56.8	N/A	78.6
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	2.8	4.3	9.9	19.6	21.9	17.4	N/A	24.1
SPLIT WT= 325.7							CUM WT %	N/A	2.8	7.0	17.0	36.5	58.4	75.9	N/A	100.0
105	1.4	H	18.5	79.6	1.9	(m)S	WT	N/A	6.9	17.0	56.7	87.3	67.0	66.5	N/A	68.5
SORT=	N/A	MEDIAN=	3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.9	4.6	15.3	23.6	18.1	18.0	N/A	18.5
SPLIT WT= 369.8							CUM WT %	N/A	1.9	6.5	21.8	45.4	63.5	81.5	N/A	100.0
110	1.5	H	17.9	80.9	1.2	(m)S	WT	N/A	3.9	19.0	65.5	102.4	52.5	28.4	N/A	59.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.2	5.7	19.8	31.0	15.9	8.6	N/A	17.9
SPLIT WT= 330.9							CUM WT %	N/A	1.2	6.9	26.7	57.7	73.5	82.1	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-015 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	1.8	H	24.9	74.6	0.6	mS	WT	N/A	1.7	15.2	56.9	58.9	39.4	60.0	N/A	76.9
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.6	4.9	18.4	19.1	12.8	19.4	N/A	24.9
SPLIT WT= 309.0							CUM WT %	N/A	0.6	5.5	23.9	42.9	55.7	75.1	N/A	100.0
120	1.6	H	23.7	75.8	0.5	mS	WT	N/A	1.7	12.0	43.5	63.2	61.6	60.9	N/A	75.4
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.5	3.8	13.7	19.9	19.4	19.1	N/A	23.7
SPLIT WT= 318.3							CUM WT %	N/A	0.5	4.3	18.0	37.8	57.2	76.3	N/A	100.0
125	1.5	H	26.8	72.9	0.3	mS	WT	N/A	0.9	8.4	30.1	46.6	71.5	77.6	N/A	86.2
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.3	2.6	9.4	14.5	22.3	24.2	N/A	26.8
SPLIT WT= 321.3							CUM WT %	N/A	0.3	2.9	12.3	26.8	49.0	73.2	N/A	100.0
130	1.3	H	21.5	78.5	0.0	mS	WT	N/A	0.1	13.8	31.6	45.2	76.6	77.1	N/A	67.0
SORT=	N/A	MEDIAN=	3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	4.4	10.2	14.5	24.6	24.8	N/A	21.5
SPLIT WT= 311.5							CUM WT %	N/A	0.0	4.5	14.6	29.1	53.7	78.5	N/A	100.0
135	1.4	H	22.5	77.0	0.5	mS	WT	N/A	1.6	7.9	29.8	72.3	87.9	61.4	N/A	75.7
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.5	2.4	8.9	21.5	26.1	18.2	N/A	22.5
SPLIT WT= 336.6							CUM WT %	N/A	0.5	2.8	11.7	33.2	59.3	77.5	N/A	100.0
140	2.0	H	36.3	63.3	0.4	mS	WT	N/A	1.1	5.4	17.2	38.0	55.7	59.3	N/A	100.7
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.4	2.0	6.2	13.7	20.1	21.4	N/A	36.3
SPLIT WT= 277.4							CUM WT %	N/A	0.4	2.4	8.6	22.3	42.3	63.7	N/A	100.0
145	2.4	H	61.4	38.5	0.0	sM	WT	N/A	0.1	2.2	8.9	21.0	31.6	49.0	N/A	179.8
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.0	0.8	3.0	7.2	10.8	16.8	N/A	61.5
SPLIT WT= 292.6							CUM WT %	N/A	0.0	0.8	3.8	11.0	21.8	38.6	N/A	100.0
150	2.6	H	79.3	20.7	0.0	sM	WT	N/A	0.0	0.9	3.9	8.6	13.5	31.5	N/A	224.4
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.0	0.3	1.4	3.0	4.8	11.1	N/A	79.4
SPLIT WT= 282.7							CUM WT %	N/A	0.0	0.3	1.7	4.7	9.5	20.7	N/A	100.0
155	17.1	H	59.7	28.5	11.8	gsM	WT	N/A	30.3	12.9	10.1	9.9	14.5	25.5	N/A	152.7
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	11.8	5.0	4.0	3.9	5.7	10.0	N/A	59.7
SPLIT WT= 255.9							CUM WT %	N/A	11.8	16.9	20.8	24.7	30.4	40.3	N/A	100.0
160	27.4	H	39.5	48.8	11.7	gmS	WT	N/A	31.9	22.4	18.6	23.2	33.6	34.9	N/A	107.3
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	11.7	8.2	6.8	8.5	12.4	12.8	N/A	39.5
SPLIT WT= 271.9							CUM WT %	N/A	11.7	20.0	26.8	35.3	47.7	60.5	N/A	100.0
165	27.1	H	27.4	54.7	18.0	gmS	WT	N/A	59.2	39.0	28.3	31.9	43.3	37.5	N/A	90.1
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	18.0	11.8	8.6	9.7	13.2	11.4	N/A	27.4
SPLIT WT= 329.4							CUM WT %	N/A	18.0	29.8	38.4	48.1	61.3	72.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-016 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	20.3	H	26.0	66.1	8.0	(g)mS	WT	N/A	30.2	23.1	44.4	103.8	44.8	34.3	N/A	98.4
SORT= N/A	MEDIAN=	2.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	8.0	6.1	11.7	27.4	11.8	9.1	N/A	26.0
SPLIT WT= 379.1							CUM WT %	N/A	8.0	14.1	25.8	53.2	65.0	74.0	N/A	100.0
175	4.6	H	33.8	62.2	4.0	mS	WT	N/A	11.7	7.5	18.1	61.9	53.9	42.5	N/A	99.9
SORT= N/A	MEDIAN=	3.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	4.0	2.5	6.1	21.0	18.2	14.4	N/A	33.8
SPLIT WT= 295.4							CUM WT %	N/A	4.0	6.5	12.6	33.6	51.8	66.2	N/A	100.0
180	1.0	H	16.6	43.7	39.6	msG	WT	N/A	139.3	25.2	36.1	39.4	32.8	20.2	N/A	58.4
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	39.6	7.2	10.3	11.2	9.3	5.8	N/A	16.6
SPLIT WT= 351.5							CUM WT %	N/A	39.6	46.8	57.1	68.3	77.6	83.4	N/A	100.0
185	0.4	H	17.6	42.1	40.3	msG	WT	N/A	161.5	47.2	43.0	33.6	26.8	18.0	N/A	70.4
SORT= N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	40.3	11.8	10.7	8.4	6.7	4.5	N/A	17.6
SPLIT WT= 400.4							CUM WT %	N/A	40.3	52.1	62.9	71.2	77.9	82.4	N/A	100.0
190	0.1	H	20.2	41.2	38.6	msG	WT	N/A	129.3	39.6	37.8	24.9	20.1	15.4	N/A	67.6
SORT= N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	38.6	11.8	11.3	7.4	6.0	4.6	N/A	20.2
SPLIT WT= 334.8							CUM WT %	N/A	38.6	50.5	61.8	69.2	75.2	79.8	N/A	100.0
195	0.0	H	11.7	48.1	40.1	msG	WT	N/A	95.7	25.1	27.6	27.0	20.0	15.1	N/A	28.0
SORT= N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	40.1	10.5	11.6	11.3	8.4	6.3	N/A	11.7
SPLIT WT= 235.3							CUM WT %	N/A	40.1	50.7	62.2	73.5	81.9	88.3	N/A	100.0
200	0.1	H	19.8	41.8	38.4	msG	WT	N/A	180.8	43.7	36.5	49.9	42.0	25.1	N/A	93.4
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	38.4	9.3	7.7	10.6	8.9	5.3	N/A	19.8
SPLIT WT= 471.4							CUM WT %	N/A	38.4	47.6	55.4	66.0	74.9	80.2	N/A	100.0
205	0.1	H	21.6	43.7	34.8	msG	WT	N/A	146.1	39.5	32.0	43.6	41.5	27.0	N/A	90.7
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	34.8	9.4	7.6	10.4	9.9	6.4	N/A	21.6
SPLIT WT= 420.3							CUM WT %	N/A	34.8	44.2	51.8	62.1	72.0	78.4	N/A	100.0
210	0.1	H	22.6	41.2	36.2	msG	WT	N/A	148.6	37.9	31.3	33.6	40.8	25.2	N/A	92.7
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	36.2	9.2	7.6	8.2	10.0	6.1	N/A	22.6
SPLIT WT= 410.1							CUM WT %	N/A	36.2	45.5	53.1	61.3	71.3	77.4	N/A	100.0
215	0.1	H	18.9	46.8	34.3	msG	WT	N/A	134.5	30.6	22.2	52.1	56.8	21.6	N/A	74.0
SORT= N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	34.3	7.8	5.7	13.3	14.5	5.5	N/A	18.9
SPLIT WT= 391.4							CUM WT %	N/A	34.3	42.1	47.8	61.1	75.6	81.1	N/A	100.0
220	0.1	H	19.9	45.4	34.7	msG	WT	N/A	160.7	44.1	30.2	50.9	59.7	25.6	N/A	92.1
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	34.7	9.5	6.5	11.0	12.9	5.5	N/A	19.9
SPLIT WT= 463.2							CUM WT %	N/A	34.7	44.2	50.7	61.7	74.6	80.1	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-015 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	0.1	H	20.2	43.7	36.1	msG	WT	N/A	143.7	32.0	25.4	46.9	47.0	22.4	N/A	80.2
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	36.1	8.1	6.4	11.8	11.8	5.6	N/A	20.2
SPLIT WT= 397.5							CUM WT %	N/A	36.1	44.2	50.6	62.4	74.2	79.8	N/A	100.0
230	0.1	H	17.4	51.8	30.8	msG	WT	N/A	136.6	65.9	45.7	52.8	45.3	20.3	N/A	77.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	30.8	14.9	10.3	11.9	10.2	4.6	N/A	17.4
SPLIT WT= 443.9							CUM WT %	N/A	30.8	45.6	55.9	67.8	78.0	82.6	N/A	100.0
235	0.0	H	24.2	48.4	27.4	gmS	WT	N/A	111.2	46.8	31.4	48.3	47.7	22.1	N/A	98.1
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	27.4	11.5	7.7	11.9	11.8	5.5	N/A	24.2
SPLIT WT= 405.6							CUM WT %	N/A	27.4	39.0	46.7	58.6	70.4	75.8	N/A	100.0
240	0.0	H	23.5	47.9	28.6	gmS	WT	N/A	85.9	40.5	25.3	31.9	28.7	17.2	N/A	70.4
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.6	13.5	8.4	10.6	9.6	5.7	N/A	23.5
SPLIT WT= 299.8							CUM WT %	N/A	28.6	42.1	50.6	61.2	70.8	76.5	N/A	100.0
245	0.0	H	26.0	42.5	31.5	msG	WT	N/A	105.0	29.1	16.8	31.7	37.5	26.3	N/A	86.6
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.5	8.7	5.1	9.5	11.3	7.9	N/A	26.0
SPLIT WT= 332.8							CUM WT %	N/A	31.5	40.3	45.3	54.8	66.1	74.0	N/A	100.0
250	0.0	H	7.2	82.7	10.1	gS	WT	N/A	37.9	34.1	27.9	67.2	135.6	45.3	N/A	27.0
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	10.1	9.1	7.4	17.9	36.2	12.1	N/A	7.2
SPLIT WT= 374.9							CUM WT %	N/A	10.1	19.2	26.6	44.6	80.7	92.8	N/A	100.0
255	0.0	H	13.2	57.5	29.3	(m)gS	WT	N/A	108.8	54.5	40.0	41.2	53.9	24.0	N/A	49.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	29.3	14.7	10.8	11.1	14.5	6.5	N/A	13.2
SPLIT WT= 371.4							CUM WT %	N/A	29.3	44.0	54.7	65.8	80.3	86.8	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-016 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	0.1	N/	35.9	63.3	0.9	mS	WT	N/A	4.6	11.7	27.0	51.4	96.6	144.5	N/A	187.7
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.9	2.2	5.2	9.8	18.5	27.6	N/A	35.9
SPLIT WT= 525.0							CUM WT %	N/A	0.9	3.1	8.3	18.1	36.5	64.1	N/A	100.0
10	0.2	N/	0.5	84.5	15.0	gS	WT	N/A	97.9	274.9	189.7	62.9	18.6	3.6	N/A	3.0
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	15.1	42.3	29.2	9.7	2.9	0.6	N/A	0.5
SPLIT WT= 651.8							CUM WT %	N/A	15.1	57.3	86.5	96.1	99.0	99.5	N/A	100.0
15	0.6	C	10.9	47.6	41.5	msG	WT	N/A	373.8	113.3	76.1	107.0	69.9	63.3	N/A	98.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.5	12.6	8.4	11.9	7.8	7.0	N/A	10.9
SPLIT WT= 903.8							CUM WT %	N/A	41.5	54.0	62.5	74.3	82.1	89.1	N/A	100.0
20	0.4	C	1.6	89.5	8.9	(g)S	WT	N/A	58.1	147.3	297.2	96.3	35.7	11.2	N/A	10.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.9	22.4	45.3	14.7	5.4	1.7	N/A	1.6
SPLIT WT= 657.5							CUM WT %	N/A	8.9	31.3	76.6	91.2	96.7	98.4	N/A	100.0
25	0.4	C	10.8	49.0	40.2	msG	WT	N/A	348.3	109.2	76.7	122.1	71.5	44.5	N/A	93.7
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.2	12.6	8.9	14.1	8.3	5.1	N/A	10.8
SPLIT WT= 869.1							CUM WT %	N/A	40.2	52.8	61.7	75.8	84.1	89.2	N/A	100.0
30	0.5	C	1.0	46.0	52.9	sG	WT	N/A	396.4	161.0	135.4	33.7	9.6	5.0	N/A	7.8
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	52.9	21.5	18.1	4.5	1.3	0.7	N/A	1.0
SPLIT WT= 750.5							CUM WT %	N/A	52.9	74.4	92.5	97.0	98.3	99.0	N/A	100.0
35	1.0	C	2.5	97.4	0.1	S	WT	N/A	0.3	22.3	220.7	231.2	63.2	17.7	N/A	14.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.1	3.9	38.7	40.6	11.1	3.1	N/A	2.5
SPLIT WT= 571.2							CUM WT %	N/A	0.1	4.0	42.7	83.3	94.4	97.5	N/A	100.0
40	1.2	C	4.0	95.3	0.7	S	WT	N/A	3.9	36.7	176.1	204.8	80.6	52.6	N/A	23.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	6.4	30.5	35.4	14.0	9.1	N/A	4.0
SPLIT WT= 578.4							CUM WT %	N/A	0.7	7.0	37.5	72.9	86.9	96.0	N/A	100.0
45	1.8	C	18.9	80.7	0.4	(m)S	WT	N/A	2.0	3.1	7.6	13.5	132.7	243.3	N/A	93.6
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.4	0.6	1.5	2.7	26.8	49.1	N/A	18.9
SPLIT WT= 494.3							CUM WT %	N/A	0.4	1.0	2.6	5.3	32.0	81.1	N/A	100.0
50	1.3	C	2.8	97.2	0.0	S	WT	N/A	0.0	1.3	116.2	317.1	91.6	61.2	N/A	17.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	0.2	19.2	52.5	15.2	10.1	N/A	2.8
SPLIT WT= 605.4							CUM WT %	N/A	0.0	0.2	19.5	71.9	87.1	97.2	N/A	100.0
55	1.3	C	2.8	96.8	0.4	S	WT	N/A	2.3	35.5	126.6	181.9	140.6	31.4	N/A	14.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	6.7	23.8	34.1	26.4	5.9	N/A	2.8
SPLIT WT= 534.3							CUM WT %	N/A	0.4	7.1	30.8	65.0	91.3	97.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-016 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS			FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	1.2	C	5.9	94.1	N/A	G		WT	N/A	N/A	N/A	33.8	252.2	170.0	71.7	N/A	32.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	N/A	N/A	6.0	45.0	30.3	12.8	N/A	5.9
SPLIT WT= 561.8								CUM WT %	N/A	N/A	N/A	6.0	51.0	81.4	94.2	N/A	100.0
65	1.1	C	14.6	85.2	0.2	(m)S		WT	N/A	0.9	5.9	29.9	85.3	162.8	152.1	N/A	74.6
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	0.2	1.2	5.9	16.7	31.8	29.7	N/A	14.6
SPLIT WT= 512.8								CUM WT %	N/A	0.2	1.3	7.2	23.9	55.7	85.4	N/A	100.0
70	1.8	C	2.6	97.3	0.1	S		WT	N/A	0.6	5.5	74.0	233.8	147.6	27.8	N/A	12.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	0.1	1.1	14.7	46.6	29.4	5.5	N/A	2.6
SPLIT WT= 503.1								CUM WT %	N/A	0.1	1.2	16.0	62.5	91.9	97.5	N/A	100.0
75	1.1	C	0.5	70.9	28.6	gS		WT	N/A	186.6	147.9	223.1	75.8	12.7	3.3	N/A	3.2
SORT=	N/A	MEDIAN=	0.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	28.6	22.7	34.2	11.6	2.0	0.5	N/A	0.5
SPLIT WT= 653.6								CUM WT %	N/A	28.6	51.3	85.4	97.1	99.0	99.5	N/A	100.0
80	0.8	C	0.4	79.6	20.0	gS		WT	N/A	133.0	213.2	225.0	71.1	14.6	5.4	N/A	2.4
SORT=	N/A	MEDIAN=	0.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	20.0	32.1	33.9	10.7	2.2	0.8	N/A	0.4
SPLIT WT= 668.5								CUM WT %	N/A	20.0	52.1	85.9	96.6	98.8	99.6	N/A	100.0
85	0.9	C	0.8	76.3	22.8	gS		WT	N/A	154.3	214.0	223.0	59.3	14.3	5.5	N/A	5.7
SORT=	N/A	MEDIAN=	0.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	22.8	31.7	33.0	8.8	2.1	0.8	N/A	0.8
SPLIT WT= 676.9								CUM WT %	N/A	22.8	54.5	87.5	96.2	98.3	99.2	N/A	100.0
90	0.6	C	0.4	56.0	43.6	sG		WT	N/A	266.7	172.8	130.6	30.6	6.9	2.2	N/A	2.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	43.6	28.2	21.3	5.0	1.1	0.4	N/A	0.4
SPLIT WT= 613.1								CUM WT %	N/A	43.6	71.8	93.1	98.1	99.2	99.6	N/A	100.0
95	2.0	C	2.2	32.1	65.7	sG		WT	N/A	488.5	90.4	80.3	36.9	20.0	10.9	N/A	16.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	65.7	12.2	10.8	5.0	2.7	1.5	N/A	2.2
SPLIT WT= 745.0								CUM WT %	N/A	65.7	77.9	88.7	93.6	96.3	97.8	N/A	100.0
100	0.8	C	3.2	40.8	55.9	sG		WT	N/A	464.6	131.6	114.4	46.8	28.2	18.2	N/A	26.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	56.0	15.9	13.8	5.6	3.4	2.2	N/A	3.2
SPLIT WT= 831.7								CUM WT %	N/A	56.0	71.8	85.6	91.2	94.6	96.8	N/A	100.0
105	1.8	C	3.8	20.9	75.2	msG		WT	N/A	639.2	55.2	42.1	30.9	27.8	21.9	N/A	32.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	75.2	6.5	5.0	3.6	3.3	2.6	N/A	3.9
SPLIT WT= 851.5								CUM WT %	N/A	75.2	81.7	86.7	90.3	93.6	96.2	N/A	100.0
110	2.0	C	4.5	21.6	73.9	msG		WT	N/A	590.5	56.1	40.9	29.4	25.5	20.2	N/A	36.0
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	73.9	7.0	5.1	3.7	3.2	2.5	N/A	4.5
SPLIT WT= 800.1								CUM WT %	N/A	73.9	81.0	86.1	89.8	93.0	95.5	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-016 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	0.5	H	17.2	82.8	0.0	(m)S	WT	N/A	0.0	9.8	124.6	249.8	159.2	82.1	N/A	129.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	1.3	16.5	33.1	21.1	10.9	N/A	17.2
SPLIT WT= 755.2							CUM WT %	N/A	0.0	1.3	17.8	50.9	72.0	82.8	N/A	100.0
123	0.4	H	4.3	64.3	31.4	sG	WT	N/A	251.4	72.3	97.4	130.8	140.3	74.7	N/A	34.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.4	9.0	12.2	16.3	17.5	9.3	N/A	4.3
SPLIT WT= 801.5							CUM WT %	N/A	31.4	40.4	52.5	68.9	86.4	95.7	N/A	100.0
125	0.5	H	4.4	51.0	44.7	sG	WT	N/A	359.5	141.6	149.6	60.1	36.8	22.0	N/A	35.3
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.7	17.6	18.6	7.5	4.6	2.7	N/A	4.4
SPLIT WT= 805.8							CUM WT %	N/A	44.7	62.3	80.8	88.3	92.9	95.6	N/A	100.0
130	0.9	H	8.2	50.7	41.1	msG	WT	N/A	368.9	130.9	131.1	77.9	65.3	50.7	N/A	73.6
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.1	14.6	14.6	8.7	7.3	5.6	N/A	8.2
SPLIT WT= 899.9							CUM WT %	N/A	41.1	55.6	70.2	78.9	86.2	91.8	N/A	100.0
135	0.7	H	33.5	24.5	42.1	mG	WT	N/A	123.0	21.4	11.6	5.7	30.3	2.5	N/A	97.8
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	42.1	7.3	4.0	2.0	10.4	0.9	N/A	33.5
SPLIT WT= 292.3							CUM WT %	N/A	42.1	49.4	53.4	55.3	65.7	66.6	N/A	100.0
140	4.9	H	69.8	26.6	3.6	sM	WT	N/A	11.9	7.0	6.5	9.2	23.8	41.4	N/A	230.5
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	3.6	2.1	2.0	2.8	7.2	12.5	N/A	69.8
SPLIT WT= 330.1							CUM WT %	N/A	3.6	5.7	7.7	10.5	17.7	30.2	N/A	100.0
145	16.1	H	39.9	44.4	15.7	gmS	WT	N/A	47.8	27.1	17.5	19.2	33.7	37.2	N/A	121.1
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	15.7	8.9	5.8	6.3	11.1	12.3	N/A	39.9
SPLIT WT= 303.7							CUM WT %	N/A	15.7	24.7	30.4	36.8	47.9	60.1	N/A	100.0
150	21.1	H	40.4	49.7	9.9	(g)mS	WT	N/A	32.8	28.5	25.4	28.6	41.4	41.3	N/A	134.4
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.9	8.6	7.6	8.6	12.5	12.4	N/A	40.4
SPLIT WT= 332.3							CUM WT %	N/A	9.9	18.4	26.1	34.7	47.1	59.6	N/A	100.0
155	13.4	H	31.0	63.7	5.3	(g)mS	WT	N/A	14.5	12.5	23.7	63.8	49.9	23.2	N/A	84.2
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	5.3	4.6	8.7	23.5	18.4	8.5	N/A	31.0
SPLIT WT= 271.9							CUM WT %	N/A	5.3	9.9	18.7	42.1	60.5	69.0	N/A	100.0
160	4.3	H	51.5	45.1	3.4	sM	WT	N/A	11.2	8.7	22.9	17.4	83.3	18.4	N/A	172.0
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	3.4	2.6	6.9	5.2	25.0	5.5	N/A	51.5
SPLIT WT= 334.0							CUM WT %	N/A	3.4	6.0	12.8	18.0	43.0	48.5	N/A	100.0
165	2.4	H	49.9	48.4	1.6	sM	WT	N/A	5.6	4.0	11.3	93.7	33.9	22.3	N/A	170.2
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.6	1.2	3.3	27.5	9.9	6.5	N/A	49.9
SPLIT WT= 340.9							CUM WT %	N/A	1.6	2.8	6.1	33.6	43.5	50.1	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W15-016 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	1.9	H	25.1	70.0	4.9	mS	WT	N/A	15.0	6.2	13.6	63.0	103.7	29.5	N/A	77.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	4.9	2.0	4.4	20.4	33.6	9.6	N/A	25.1
SPLIT WT= 308.5							CUM WT %	N/A	4.9	6.9	11.3	31.7	65.3	74.9	N/A	100.0
175	1.1	H	22.7	51.7	25.7	gmS	WT	N/A	107.1	40.7	38.4	48.6	64.0	24.1	N/A	94.6
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.7	9.8	9.2	11.6	15.3	5.8	N/A	22.7
SPLIT WT= 417.4							CUM WT %	N/A	25.7	35.4	44.6	56.2	71.6	77.3	N/A	100.0
180	0.8	H	21.1	76.3	2.6	mS	WT	N/A	9.0	13.6	21.3	89.7	115.7	23.6	N/A	72.9
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	2.6	3.9	6.2	25.9	33.5	6.8	N/A	21.1
SPLIT WT= 345.8							CUM WT %	N/A	2.6	6.5	12.7	38.6	72.1	78.9	N/A	100.0
185	0.6	H	11.4	54.0	34.5	msG	WT	N/A	286.6	83.5	64.5	139.3	103.2	57.8	N/A	94.7
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.6	10.1	7.8	16.8	12.4	7.0	N/A	11.4
SPLIT WT= 833.0							CUM WT %	N/A	34.6	44.6	52.4	69.2	81.6	88.6	N/A	100.0
195	0.2	H	10.6	56.6	32.8	msG	WT	N/A	240.9	80.2	64.2	110.9	103.6	56.9	N/A	77.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.6	10.9	8.7	15.1	14.1	7.8	N/A	10.6
SPLIT WT= 739.3							CUM WT %	N/A	32.8	43.7	52.5	67.6	81.7	89.4	N/A	100.0
210	0.1	H	12.1	64.2	23.7	(m)gS	WT	N/A	170.8	97.8	75.6	137.6	92.7	60.0	N/A	87.3
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	23.7	13.6	10.5	19.1	12.8	8.3	N/A	12.1
SPLIT WT= 728.1							CUM WT %	N/A	23.7	37.2	47.7	66.7	79.6	87.9	N/A	100.0
215	0.2	H	22.6	50.0	27.5	gmS	WT	N/A	120.8	45.7	38.4	55.6	48.8	31.2	N/A	99.2
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.5	10.4	8.7	12.6	11.1	7.1	N/A	22.6
SPLIT WT= 439.6							CUM WT %	N/A	27.5	37.9	46.6	59.2	70.3	77.4	N/A	100.0
220	0.2	H	25.8	52.1	22.1	gmS	WT	N/A	88.5	48.9	37.4	46.2	47.0	29.5	N/A	103.3
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	22.1	12.2	9.3	11.5	11.7	7.4	N/A	25.8
SPLIT WT= 400.8							CUM WT %	N/A	22.1	34.3	43.6	55.1	66.9	74.2	N/A	100.0
230	0.2	H	11.9	55.9	32.2	msG	WT	N/A	109.7	60.1	45.1	44.0	28.1	12.9	N/A	40.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.2	17.7	13.3	12.9	8.3	3.8	N/A	11.9
SPLIT WT= 340.3							CUM WT %	N/A	32.2	49.9	63.2	76.1	84.3	88.1	N/A	100.0
235	0.2	H	4.2	22.2	73.6	msG	WT	N/A	339.4	15.7	12.3	34.8	29.7	9.9	N/A	19.6
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	73.6	3.4	2.7	7.5	6.4	2.2	N/A	4.3
SPLIT WT= 461.4							CUM WT %	N/A	73.6	77.0	79.6	87.2	93.6	95.8	N/A	100.0
240	0.2	H	6.9	35.4	57.7	msG	WT	N/A	217.0	61.6	23.8	20.6	18.6	8.4	N/A	25.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	57.7	16.4	6.3	5.5	5.0	2.2	N/A	6.9
SPLIT WT= 375.8							CUM WT %	N/A	57.7	74.1	80.5	85.9	90.9	93.1	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W15-016 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
255	N/A	H	20.2	65.8	14.0	gmS	WT	N/A	46.2	41.0	35.5	70.9	48.2	21.7	N/A	66.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	14.0	12.4	10.8	21.5	14.6	6.6	N/A	20.2
SPLIT WT= 330.2							CUM WT %	N/A	14.0	26.4	37.2	58.8	73.2	79.8	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W15-017 ****

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.2	H	27.1	59.8	13.1	gmS	WT	N/A	47.5	42.3	32.8	29.4	45.3	66.1	N/A	97.9
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	13.2	11.7	9.1	8.1	12.5	18.3	N/A	27.1
SPLIT WT= 361.3							CUM WT %	N/A	13.2	24.9	33.9	42.1	54.6	72.9	N/A	100.0
10	0.6	H	11.3	81.8	6.9	(gm)S	WT	N/A	25.7	68.0	77.5	49.7	60.1	49.9	N/A	42.0
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.9	18.2	20.8	13.3	16.1	13.4	N/A	11.3
SPLIT WT= 372.8							CUM WT %	N/A	6.9	25.1	45.9	59.2	75.4	88.7	N/A	100.0
15	0.5	H	7.3	85.6	7.1	(g)S	WT	N/A	26.0	73.1	99.5	63.9	50.9	25.9	N/A	26.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.1	20.0	27.2	17.5	13.9	7.1	N/A	7.3
SPLIT WT= 365.8							CUM WT %	N/A	7.1	27.1	54.3	71.7	85.7	92.7	N/A	100.0
20	0.5	H	5.6	89.6	4.8	N/A	WT	N/A	18.3	63.7	130.9	80.7	50.2	17.8	21.6	N/A
SORT=	N/A	MEDIAN=	1.00	MODE=	N/A	MEAN= N/A	WT %	N/A	4.8	16.6	34.2	21.1	13.1	4.7	5.6	N/A
SPLIT WT= 383.2							CUM WT %	N/A	4.8	21.4	55.6	76.6	89.7	94.4	100.0	N/A
25	0.5	H	7.8	82.4	9.7	(g)S	WT	N/A	38.5	67.2	101.6	97.4	45.6	14.5	N/A	31.0
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	9.7	17.0	25.7	24.6	11.5	3.7	N/A	7.8
SPLIT WT= 395.8							CUM WT %	N/A	9.7	26.7	52.4	77.0	88.5	92.2	N/A	100.0
30	0.5	H	11.5	61.6	26.8	(m)gS	WT	N/A	112.0	101.8	81.2	37.8	22.2	14.3	N/A	48.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.8	24.4	19.5	9.1	5.3	3.4	N/A	11.5
SPLIT WT= 417.6							CUM WT %	N/A	26.8	51.2	70.7	79.7	85.0	88.5	N/A	100.0
35	0.9	H	30.5	67.9	1.7	mS	WT	N/A	5.8	12.1	55.5	81.4	50.5	36.1	N/A	105.7
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.7	3.5	16.0	23.5	14.6	10.4	N/A	30.5
SPLIT WT= 347.0							CUM WT %	N/A	1.7	5.2	21.2	44.6	59.2	69.6	N/A	100.0
40	1.1	H	25.7	72.6	1.7	mS	WT	N/A	6.4	11.6	83.9	105.1	49.2	30.9	N/A	99.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.7	3.0	21.7	27.2	12.7	8.0	N/A	25.7
SPLIT WT= 386.4							CUM WT %	N/A	1.7	4.7	26.4	53.6	66.3	74.3	N/A	100.0
45	1.2	H	30.0	68.7	1.3	mS	WT	N/A	5.2	13.0	70.6	88.1	51.0	43.1	N/A	116.1
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.3	3.4	18.2	22.8	13.2	11.1	N/A	30.0
SPLIT WT= 386.9							CUM WT %	N/A	1.3	4.7	22.9	45.7	58.9	70.0	N/A	100.0
50	1.3	H	31.0	68.4	0.6	mS	WT	N/A	2.1	8.4	54.7	82.7	52.9	58.3	N/A	116.5
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.6	2.2	14.6	22.0	14.1	15.5	N/A	31.0
SPLIT WT= 375.7							CUM WT %	N/A	0.6	2.8	17.4	39.4	53.5	69.0	N/A	100.0
55	1.3	H	26.8	72.4	0.8	mS	WT	N/A	3.0	9.8	54.1	90.3	64.5	58.0	N/A	102.4
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.8	2.6	14.2	23.6	16.9	15.2	N/A	26.8
SPLIT WT= 382.1							CUM WT %	N/A	0.8	3.4	17.5	41.1	58.0	73.2	N/A	100.0

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02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	1.4	H	24.7	74.9	0.4	mS	WT	N/A	1.3	4.6	29.7	90.5	81.4	58.4	N/A	87.4
SORT=	N/A	MEDIAN=	3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.4	1.3	8.4	25.6	23.0	16.5	N/A	24.7
SPLIT WT= 353.7							CUM WT %	N/A	0.4	1.7	10.1	35.7	58.7	75.3	N/A	100.0
65	1.5	H	31.0	69.0	0.0	mS	WT	N/A	0.0	1.7	16.8	58.2	60.4	43.6	N/A	81.0
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.0	0.7	6.4	22.2	23.1	16.7	N/A	31.0
SPLIT WT= 261.8							CUM WT %	N/A	0.0	0.7	7.1	29.3	52.4	69.1	N/A	100.0
70	1.9	H	31.2	68.8	0.0	mS	WT	N/A	0.0	0.7	12.7	52.0	58.2	35.9	N/A	72.2
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.0	0.3	5.5	22.4	25.1	15.5	N/A	31.2
SPLIT WT= 231.7							CUM WT %	N/A	0.0	0.3	5.8	28.2	53.3	68.8	N/A	100.0
75	1.7	H	25.7	70.9	3.3	mS	WT	N/A	12.5	12.9	34.9	86.3	86.4	46.3	N/A	96.8
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	3.3	3.4	9.3	23.0	23.0	12.3	N/A	25.7
SPLIT WT= 375.9							CUM WT %	N/A	3.3	6.8	16.0	39.0	62.0	74.3	N/A	100.0
80	1.1	H	12.8	73.8	13.4	(m)gS	WT	N/A	53.0	67.7	94.6	67.5	39.3	21.8	N/A	50.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.4	17.2	24.0	17.1	10.0	5.5	N/A	12.8
SPLIT WT= 394.4							CUM WT %	N/A	13.4	30.6	54.6	71.7	81.7	87.2	N/A	100.0
85	1.0	H	9.1	72.4	18.5	(m)gS	WT	N/A	78.7	119.7	108.9	47.0	20.9	11.4	N/A	38.8
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	18.5	28.1	25.6	11.1	4.9	2.7	N/A	9.1
SPLIT WT= 424.5							CUM WT %	N/A	18.5	46.6	72.2	83.3	88.2	90.9	N/A	100.0
90	1.1	H	20.0	66.5	13.6	gmS	WT	N/A	46.5	68.2	73.8	41.2	27.0	17.8	N/A	68.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.6	19.9	21.5	12.0	7.9	5.2	N/A	20.0
SPLIT WT= 343.1							CUM WT %	N/A	13.6	33.4	55.0	67.0	74.8	80.0	N/A	100.0
95	1.0	H	17.8	64.6	17.6	gmS	WT	N/A	68.6	81.0	77.9	43.6	29.3	19.6	N/A	69.2
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	17.6	20.8	20.0	11.2	7.6	5.0	N/A	17.8
SPLIT WT= 389.1							CUM WT %	N/A	17.6	38.4	58.5	69.7	77.2	82.2	N/A	100.0
100	0.9	H	23.1	50.8	26.1	gmS	WT	N/A	99.1	60.1	53.4	35.7	25.4	17.9	N/A	87.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	26.1	15.9	14.1	9.4	6.7	4.7	N/A	23.1
SPLIT WT= 379.2							CUM WT %	N/A	26.1	42.0	56.1	65.5	72.2	76.9	N/A	100.0
105	0.8	H	18.5	44.7	36.8	msG	WT	N/A	141.7	54.6	44.2	31.1	24.3	17.7	N/A	71.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	36.8	14.2	11.5	8.1	6.3	4.6	N/A	18.5
SPLIT WT= 384.7							CUM WT %	N/A	36.8	51.0	62.5	70.6	76.9	81.5	N/A	100.0
110	0.8	H	20.4	46.5	33.0	msG	WT	N/A	123.5	55.4	44.9	31.6	24.1	18.0	N/A	76.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.0	14.8	12.0	8.5	6.5	4.8	N/A	20.4
SPLIT WT= 373.8							CUM WT %	N/A	33.0	47.9	59.9	68.3	74.8	79.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W15-017 ****

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	0.5	H	10.1	85.2	4.7	(m)S	WT	N/A	15.9	54.5	84.7	83.8	47.4	18.8	N/A	34.4
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.7	16.1	25.0	24.7	14.0	5.5	N/A	10.1
SPLIT WT= 339.4							CUM WT %	N/A	4.7	20.7	45.7	70.4	84.3	89.9	N/A	100.0
120	0.6	H	10.2	59.2	30.6	msG	WT	N/A	143.7	124.0	84.9	34.6	19.8	14.2	N/A	47.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.6	26.4	18.1	7.4	4.2	3.0	N/A	10.2
SPLIT WT= 469.1							CUM WT %	N/A	30.6	57.1	75.2	82.5	86.8	89.8	N/A	100.0
125	0.6	H	9.0	60.2	30.8	msG	WT	N/A	271.1	227.0	117.8	61.2	69.6	53.2	N/A	79.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.8	25.8	13.4	7.0	7.9	6.1	N/A	9.0
SPLIT WT= 875.8							CUM WT %	N/A	30.8	56.7	70.1	77.0	84.9	91.0	N/A	100.0
130	0.6	H	9.5	51.2	39.3	msG	WT	N/A	377.3	171.6	104.5	75.0	71.7	68.8	N/A	91.3
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.3	17.9	10.9	7.8	7.5	7.2	N/A	9.5
SPLIT WT= 960.3							CUM WT %	N/A	39.3	57.2	68.0	75.9	83.3	90.5	N/A	100.0
135	0.6	H	11.1	42.4	46.5	msG	WT	N/A	406.2	147.2	68.5	44.4	60.7	49.1	N/A	97.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	46.6	16.9	7.8	5.1	7.0	5.6	N/A	11.1
SPLIT WT= 871.3							CUM WT %	N/A	46.5	63.4	71.2	76.3	83.2	88.9	N/A	100.0
140	3.1	H	20.7	73.2	6.2	(g)mS	WT	N/A	46.7	81.5	88.3	130.3	127.4	127.6	N/A	157.0
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	6.2	10.7	11.6	17.2	16.8	16.8	N/A	20.7
SPLIT WT= 757.6							CUM WT %	N/A	6.2	16.9	28.5	45.7	62.5	79.3	N/A	100.0
145	10.4	H	17.3	78.6	4.1	(m)S	WT	N/A	29.1	53.7	64.2	148.2	152.3	144.2	N/A	123.7
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	4.1	7.5	9.0	20.7	21.3	20.2	N/A	17.3
SPLIT WT= 711.8							CUM WT %	N/A	4.1	11.6	20.6	41.3	62.6	82.7	N/A	100.0
150	18.6	H	11.1	84.9	4.0	(m)S	WT	N/A	27.2	59.2	91.7	163.7	168.9	92.0	N/A	75.0
SORT=	N/A	MEDIAN=	2.00	MODE=	3.00	MEAN= N/A	WT %	N/A	4.0	8.7	13.5	24.2	24.9	13.6	N/A	11.1
SPLIT WT= 679.9							CUM WT %	N/A	4.0	12.8	26.3	50.4	75.4	88.9	N/A	100.0
155	8.3	H	39.2	59.6	1.2	mS	WT	N/A	3.3	10.7	21.5	49.1	55.3	30.4	N/A	109.8
SORT=	N/A	MEDIAN=	4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.2	3.8	7.7	17.5	19.7	10.9	N/A	39.2
SPLIT WT= 279.8							CUM WT %	N/A	1.2	5.0	12.7	30.2	50.0	60.8	N/A	100.0
160	7.3	H	37.6	61.6	0.8	mS	WT	N/A	1.9	6.2	16.1	42.3	56.0	26.4	N/A	89.8
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.8	2.6	6.7	17.7	23.5	11.1	N/A	37.6
SPLIT WT= 238.7							CUM WT %	N/A	0.8	3.4	10.1	27.9	51.3	62.4	N/A	100.0
165	4.0	H	37.8	61.6	0.6	mS	WT	N/A	1.4	1.8	6.0	32.2	83.8	27.7	N/A	93.0
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.6	0.7	2.4	13.1	34.1	11.3	N/A	37.8
SPLIT WT= 246.8							CUM WT %	N/A	0.6	1.3	3.7	16.8	50.9	62.2	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	4.3	H	31.8	59.8	8.5	(g)mS	WT	N/A	25.9	22.4	25.5	40.1	66.2	28.1	N/A	96.9
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	8.5	7.3	8.4	13.1	21.7	9.2	N/A	31.8
SPLIT WT= 305.1							CUM WT %	N/A	8.5	15.8	24.2	37.3	59.0	68.2	N/A	100.0
175	3.1	H	23.6	55.8	20.6	gmS	WT	N/A	79.3	53.4	46.0	40.4	50.0	24.4	N/A	90.7
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	20.6	13.9	12.0	10.5	13.0	6.4	N/A	23.6
SPLIT WT= 384.1							CUM WT %	N/A	20.6	34.5	46.5	57.0	70.0	76.4	N/A	100.0
180	2.0	H	17.6	43.3	39.1	msG	WT	N/A	151.1	57.3	34.1	25.9	30.1	20.2	N/A	68.0
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.1	14.8	8.8	6.7	7.8	5.2	N/A	17.6
SPLIT WT= 386.6							CUM WT %	N/A	39.1	53.9	62.7	69.4	77.2	82.4	N/A	100.0
185	1.1	H	22.3	46.7	31.0	msG	WT	N/A	104.5	43.7	33.4	27.9	30.4	22.3	N/A	75.4
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.0	12.9	9.9	8.3	9.0	6.6	N/A	22.3
SPLIT WT= 337.6							CUM WT %	N/A	31.0	43.9	53.8	62.0	71.0	77.7	N/A	100.0
190	0.8	H	22.9	53.5	23.6	gmS	WT	N/A	95.5	53.3	49.4	47.7	41.3	25.0	N/A	92.7
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	23.6	13.2	12.2	11.8	10.2	6.2	N/A	22.9
SPLIT WT= 404.9							CUM WT %	N/A	23.6	36.8	49.0	60.7	70.9	77.1	N/A	100.0
195	0.2	H	31.7	48.9	19.3	gmS	WT	N/A	84.6	50.4	42.4	41.7	45.0	34.7	N/A	139.0
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	19.3	11.5	9.7	9.5	10.3	7.9	N/A	31.8
SPLIT WT= 437.8							CUM WT %	N/A	19.3	30.8	40.5	50.0	60.3	68.2	N/A	100.0
200	0.1	H	12.4	38.9	48.7	msG	WT	N/A	186.0	52.2	29.5	26.9	25.1	14.8	N/A	47.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.7	13.7	7.7	7.1	6.6	3.9	N/A	12.4
SPLIT WT= 381.6							CUM WT %	N/A	48.7	62.4	70.1	77.2	83.8	87.7	N/A	100.0
205	0.2	H	27.3	59.3	13.4	gmS	WT	N/A	38.0	29.7	24.4	30.9	58.4	24.6	N/A	77.2
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	13.4	10.5	8.6	10.9	20.6	8.7	N/A	27.3
SPLIT WT= 283.1							CUM WT %	N/A	13.4	23.9	32.5	43.4	64.1	72.8	N/A	100.0
210	0.2	H	17.0	43.4	39.6	msG	WT	N/A	164.8	57.5	30.6	29.3	42.4	21.1	N/A	70.9
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	39.6	13.8	7.4	7.0	10.2	5.1	N/A	17.0
SPLIT WT= 416.7							CUM WT %	N/A	39.6	53.4	60.7	67.7	77.9	83.0	N/A	100.0
215	0.1	H	22.5	64.2	13.3	gmS	WT	N/A	62.7	77.5	68.0	60.4	60.7	35.9	N/A	105.8
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	13.3	16.5	14.4	12.8	12.9	7.6	N/A	22.5
SPLIT WT= 471.0							CUM WT %	N/A	13.3	29.8	44.2	57.0	69.9	77.5	N/A	100.0
220	0.1	H	26.1	46.3	27.6	gmS	WT	N/A	90.7	38.3	28.8	30.5	31.9	22.5	N/A	85.8
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.6	11.7	8.8	9.3	9.7	6.9	N/A	26.1
SPLIT WT= 328.7							CUM WT %	N/A	27.6	39.3	48.0	57.3	67.0	73.9	N/A	100.0

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02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	0.1	H	22.4	53.2	24.4	gmS	WT	N/A	96.1	40.9	37.4	55.7	49.8	26.1	N/A	88.3
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	24.4	10.4	9.5	14.1	12.6	6.6	N/A	22.4
SPLIT WT= 394.4							CUM WT %	N/A	24.4	34.7	44.2	58.4	71.0	77.6	N/A	100.0
230	0.1	H	21.7	55.6	22.7	gmS	WT	N/A	84.8	42.2	30.0	61.4	49.2	24.7	N/A	81.2
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	22.7	11.3	8.0	16.4	13.2	6.6	N/A	21.7
SPLIT WT= 373.4							CUM WT %	N/A	22.7	34.0	42.0	58.5	71.6	78.3	N/A	100.0
235	0.1	H	25.6	60.9	13.5	gmS	WT	N/A	47.0	56.1	38.7	49.6	42.5	24.7	N/A	89.0
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	13.5	16.1	11.1	14.3	12.2	7.1	N/A	25.6
SPLIT WT= 347.5							CUM WT %	N/A	13.5	29.7	40.8	55.1	67.3	74.4	N/A	100.0
240	0.1	H	20.8	53.3	25.9	gmS	WT	N/A	88.3	41.7	32.4	53.8	37.8	18.0	N/A	71.0
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	25.9	12.2	9.5	15.8	11.1	4.7	N/A	20.8
SPLIT WT= 341.0							CUM WT %	N/A	25.9	38.1	47.6	63.4	74.5	79.2	N/A	100.0
245	0.1	H	21.4	55.3	23.2	gmS	WT	N/A	91.0	45.5	39.5	64.4	45.5	22.1	N/A	84.1
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	23.2	11.6	10.1	16.4	11.6	5.6	N/A	21.5
SPLIT WT= 392.0							CUM WT %	N/A	23.2	34.8	44.9	61.3	72.9	78.5	N/A	100.0
250	0.1	H	19.8	59.7	20.5	gmS	WT	N/A	80.7	46.2	35.5	76.7	51.9	25.1	N/A	78.1
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	20.5	11.7	9.0	19.5	13.2	6.4	N/A	19.8
SPLIT WT= 394.3							CUM WT %	N/A	20.5	32.2	41.2	60.7	73.8	80.2	N/A	100.0
255	0.1	H	21.5	63.0	15.5	gmS	WT	N/A	60.4	49.1	41.0	77.0	52.9	25.2	N/A	83.5
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	15.5	12.6	10.5	19.8	13.6	6.5	N/A	21.5
SPLIT WT= 389.1							CUM WT %	N/A	15.5	28.1	38.7	58.5	72.1	78.6	N/A	100.0
260	0.1	H	20.7	63.0	16.3	gmS	WT	N/A	66.3	45.7	35.7	87.6	61.3	25.4	N/A	83.9
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	16.3	11.3	8.8	21.6	15.1	6.3	N/A	20.7
SPLIT WT= 405.9							CUM WT %	N/A	16.3	27.6	36.4	58.0	73.1	79.3	N/A	100.0
265	0.1	H	18.9	68.6	12.5	gmS	WT	N/A	46.2	30.1	30.1	103.0	63.6	27.3	N/A	70.0
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	12.5	8.1	8.1	27.8	17.2	7.4	N/A	18.9
SPLIT WT= 370.2							CUM WT %	N/A	12.5	20.6	28.7	56.6	73.7	81.1	N/A	100.0
270	0.1	H	20.2	62.4	17.4	gmS	WT	N/A	67.8	40.1	34.7	84.5	57.7	26.7	N/A	78.8
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	17.4	10.3	8.9	21.7	14.8	6.8	N/A	20.2
SPLIT WT= 390.4							CUM WT %	N/A	17.4	27.6	36.5	58.2	73.0	79.8	N/A	100.0
275	0.2	H	22.0	60.0	18.0	gmS	WT	N/A	67.4	42.0	47.6	62.7	44.1	27.6	N/A	82.2
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	18.0	11.2	12.7	16.8	11.8	7.4	N/A	22.0
SPLIT WT= 373.6							CUM WT %	N/A	18.0	29.3	42.0	58.8	70.6	78.0	N/A	100.0

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**** REPORT ON WELL 0299-W15-017 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
280	0.1	H	18.0	60.4	21.6	gmS	WT	N/A	89.9	57.2	50.1	73.5	47.6	22.7	N/A	75.0
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	21.6	13.8	12.0	17.7	11.4	5.5	N/A	18.0
SPLIT WT= 415.9							CUM WT %	N/A	21.6	35.4	47.4	65.1	76.5	82.0	N/A	100.0
285	0.1	H	22.6	60.4	17.0	gmS	WT	N/A	58.1	42.2	38.3	61.5	41.8	22.2	N/A	77.1
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	17.0	12.4	11.2	18.0	12.3	6.5	N/A	22.6
SPLIT WT= 341.2							CUM WT %	N/A	17.0	29.4	40.6	58.7	70.9	77.4	N/A	100.0
290	0.1	H	22.2	62.2	15.5	gmS	WT	N/A	48.8	39.9	33.8	60.7	39.9	21.2	N/A	69.8
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	15.5	12.7	10.8	19.3	12.7	6.8	N/A	22.2
SPLIT WT= 314.1							CUM WT %	N/A	15.5	28.2	39.0	58.3	71.0	77.8	N/A	100.0
295	0.2	H	24.4	65.2	10.4	gmS	WT	N/A	39.6	36.4	38.5	82.5	58.6	32.6	N/A	93.0
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	10.4	9.6	10.1	21.6	15.4	8.6	N/A	24.4
SPLIT WT= 381.2							CUM WT %	N/A	10.4	19.9	30.0	51.7	67.1	75.6	N/A	100.0
300	0.1	H	21.7	62.5	15.8	gmS	WT	N/A	60.9	43.9	38.3	84.3	49.9	24.3	N/A	83.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	15.8	11.4	9.9	21.9	13.0	6.3	N/A	21.7
SPLIT WT= 385.1							CUM WT %	N/A	15.8	27.2	37.2	59.0	72.0	78.3	N/A	100.0
305	0.2	H	28.4	54.1	17.5	gmS	WT	N/A	59.8	32.3	35.6	51.1	39.7	26.4	N/A	97.0
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	17.5	9.5	10.4	15.0	11.6	7.7	N/A	28.4
SPLIT WT= 342.0							CUM WT %	N/A	17.5	26.9	37.4	52.3	63.9	71.6	N/A	100.0
310	0.2	H	23.8	63.7	12.5	gmS	WT	N/A	48.6	50.0	57.5	75.3	41.8	22.7	N/A	92.5
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	12.5	12.9	14.8	19.4	10.8	5.8	N/A	23.8
SPLIT WT= 388.4							CUM WT %	N/A	12.5	25.4	40.2	59.6	70.3	76.2	N/A	100.0
315	0.2	H	25.2	65.2	9.6	(g)mS	WT	N/A	35.7	25.4	30.3	112.4	52.7	20.4	N/A	93.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.6	6.9	8.2	30.4	14.2	5.5	N/A	25.2
SPLIT WT= 370.1							CUM WT %	N/A	9.6	16.5	24.7	55.0	69.3	74.8	N/A	100.0
320	0.2	H	7.6	83.8	8.6	(g)S	WT	N/A	33.0	73.9	136.0	84.2	21.5	5.7	N/A	29.0
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.6	19.3	35.5	22.0	5.6	1.5	N/A	7.6
SPLIT WT= 383.2							CUM WT %	N/A	8.6	27.9	63.4	85.3	91.0	92.4	N/A	100.0
325	0.2	H	11.2	66.3	22.5	(m)gS	WT	N/A	74.8	46.2	44.3	61.5	44.8	23.8	N/A	37.1
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	22.5	13.9	13.3	18.5	13.5	7.2	N/A	11.2
SPLIT WT= 331.4							CUM WT %	N/A	22.5	36.4	49.7	68.2	81.7	88.8	N/A	100.0
335	0.1	H	7.1	83.9	9.0	(g)S	WT	N/A	61.1	103.4	110.1	211.3	93.4	48.3	N/A	47.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.1	15.3	16.3	31.3	13.8	7.2	N/A	7.1
SPLIT WT= 670.1							CUM WT %	N/A	9.1	24.4	40.7	72.0	85.8	92.9	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
340	0.1	H	6.9	81.8	11.3	gS	WT	N/A	74.9	89.1	114.6	198.9	99.7	40.0	N/A	45.5
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.3	13.4	17.3	30.0	15.0	6.0	N/A	6.9
SPLIT WT= 661.7							CUM WT %	N/A	11.3	24.7	42.0	72.0	87.1	93.1	N/A	100.0
345	0.1	H	5.8	91.1	3.1	S	WT	N/A	21.1	37.6	145.2	304.8	84.0	41.1	N/A	38.9
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.1	5.6	21.6	45.3	12.5	6.1	N/A	5.8
SPLIT WT= 674.6							CUM WT %	N/A	3.1	8.7	30.3	75.6	88.1	94.2	N/A	100.0
350	0.1	H	7.3	82.2	10.5	gS	WT	N/A	67.3	33.5	71.2	294.1	82.8	44.4	N/A	46.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	10.5	5.2	11.1	46.0	12.9	6.9	N/A	7.3
SPLIT WT= 633.6							CUM WT %	N/A	10.5	15.8	26.9	72.9	85.8	92.7	N/A	100.0
355	0.1	H	5.2	85.7	9.0	(g)S	WT	N/A	60.0	47.3	66.5	320.2	95.7	39.8	N/A	34.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.0	7.1	10.0	48.2	14.4	6.0	N/A	5.2
SPLIT WT= 666.8							CUM WT %	N/A	9.0	16.2	26.2	74.4	88.8	94.8	N/A	100.0
360	0.1	H	5.3	71.0	23.7	gS	WT	N/A	132.9	78.7	58.8	169.7	60.2	29.9	N/A	29.6
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	23.7	14.1	10.5	30.3	10.8	5.3	N/A	5.3
SPLIT WT= 561.9							CUM WT %	N/A	23.7	37.8	48.3	78.6	89.4	94.7	N/A	100.0
365	0.1	H	4.0	77.7	18.3	gS	WT	N/A	116.9	80.3	73.7	246.6	66.0	30.2	N/A	25.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	18.3	12.6	11.5	38.6	10.3	4.7	N/A	4.0
SPLIT WT= 642.7							CUM WT %	N/A	18.3	30.8	42.4	80.9	91.3	96.0	N/A	100.0
370	0.1	H	5.7	86.3	8.1	(g)S	WT	N/A	47.4	47.5	126.6	212.3	81.3	37.4	N/A	33.1
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.1	8.1	21.6	36.3	13.9	6.4	N/A	5.7
SPLIT WT= 583.0							CUM WT %	N/A	8.1	16.2	37.8	74.1	88.0	94.3	N/A	100.0
375	1.8	H	5.4	87.7	6.8	(g)S	WT	N/A	45.3	64.9	104.1	287.1	85.1	41.7	N/A	36.2
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	6.8	9.8	15.7	43.2	12.8	6.3	N/A	5.5
SPLIT WT= 667.9							CUM WT %	N/A	6.8	16.6	32.3	75.5	88.3	94.6	N/A	100.0
380	0.9	H	5.4	82.9	11.8	gS	WT	N/A	78.0	62.8	86.7	275.6	87.3	36.3	N/A	35.5
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.8	9.5	13.1	41.6	13.2	5.5	N/A	5.4
SPLIT WT= 659.0							CUM WT %	N/A	11.8	21.3	34.4	76.0	89.2	94.6	N/A	100.0
385	0.4	H	6.2	78.2	15.6	gS	WT	N/A	112.2	64.4	79.1	250.5	110.4	59.6	N/A	44.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	15.6	8.9	11.0	34.7	15.3	8.3	N/A	6.2
SPLIT WT= 725.1							CUM WT %	N/A	15.6	24.5	35.5	70.2	85.5	93.8	N/A	100.0
390	0.4	H	5.2	90.9	3.9	S	WT	N/A	22.3	30.2	52.0	275.9	117.2	42.2	N/A	29.8
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.9	5.3	9.1	48.4	20.6	7.4	N/A	5.2
SPLIT WT= 573.1							CUM WT %	N/A	3.9	9.2	18.4	66.8	87.4	94.8	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
395	0.6	H	5.3	74.6	20.1	gS	WT	N/A	95.7	60.6	92.8	105.9	64.8	31.9	N/A	25.4
SORT=	N/A	MEDIAN=	1.00	MODE=	2.00	MEAN= N/A	WT %	N/A	20.1	12.7	19.5	22.2	13.6	6.7	N/A	5.3
SPLIT WT= 477.2							CUM WT %	N/A	20.1	32.8	52.2	74.4	88.0	94.7	N/A	100.0
400	0.4	H	5.1	83.6	11.2	gS	WT	N/A	71.3	53.8	67.4	268.3	101.1	41.3	N/A	32.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.2	8.5	10.6	42.2	15.9	6.5	N/A	5.1
SPLIT WT= 630.0							CUM WT %	N/A	11.2	19.7	30.3	72.5	88.4	94.9	N/A	100.0
405	0.3	H	4.3	79.7	16.0	gS	WT	N/A	98.1	62.8	75.5	241.0	79.3	31.5	N/A	26.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	16.0	10.2	12.3	39.2	12.9	5.1	N/A	4.3
SPLIT WT= 611.3							CUM WT %	N/A	16.0	26.2	38.5	77.7	90.6	95.7	N/A	100.0
410	0.2	H	3.1	85.4	11.5	gS	WT	N/A	68.9	39.8	78.1	279.7	83.5	30.4	N/A	18.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.5	6.6	13.0	46.7	13.9	5.1	N/A	3.1
SPLIT WT= 603.0							CUM WT %	N/A	11.5	18.1	31.2	77.9	91.8	96.9	N/A	100.0
415	0.2	H	4.1	82.9	13.0	gS	WT	N/A	85.4	47.4	78.8	264.6	110.1	43.5	N/A	26.6
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	13.0	7.2	12.0	40.3	16.8	6.6	N/A	4.1
SPLIT WT= 660.2							CUM WT %	N/A	13.0	20.2	32.2	72.5	89.3	95.9	N/A	100.0
420	0.5	H	5.9	79.3	14.8	gS	WT	N/A	97.8	62.8	57.4	250.9	107.0	47.6	N/A	39.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	14.8	9.5	8.7	37.9	16.2	7.2	N/A	5.9
SPLIT WT= 657.0							CUM WT %	N/A	14.8	24.2	32.9	70.8	86.9	94.1	N/A	100.0
425	1.5	H	5.1	79.8	15.0	gS	WT	N/A	91.6	71.2	103.7	185.6	87.5	38.5	N/A	31.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	15.0	11.7	17.0	30.5	14.4	6.3	N/A	5.1
SPLIT WT= 612.6							CUM WT %	N/A	15.0	26.7	43.7	74.2	88.6	94.9	N/A	100.0
430	1.2	H	6.2	80.8	13.0	gS	WT	N/A	91.3	83.5	138.0	192.6	107.9	43.5	N/A	43.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	13.0	11.9	19.7	27.5	15.4	6.2	N/A	6.2
SPLIT WT= 698.0							CUM WT %	N/A	13.0	25.0	44.7	72.2	87.6	93.8	N/A	100.0
435	1.0	H	7.5	78.6	13.9	gS	WT	N/A	90.3	93.9	102.3	175.3	94.1	45.7	N/A	48.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	13.9	14.4	15.7	27.0	14.5	7.0	N/A	7.5
SPLIT WT= 643.9							CUM WT %	N/A	13.9	28.3	44.1	71.0	85.5	92.5	N/A	100.0
440	0.6	H	3.2	91.8	5.0	(g)S	WT	N/A	24.0	31.3	160.8	174.0	55.1	21.6	N/A	15.5
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	5.0	6.5	33.3	36.1	11.4	4.5	N/A	3.2
SPLIT WT= 482.2							CUM WT %	N/A	5.0	11.5	44.8	80.9	92.3	96.8	N/A	100.0
445	0.4	H	55.7	39.7	4.6	sM	WT	N/A	7.7	10.6	13.1	24.4	11.5	7.4	N/A	93.9
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	4.6	6.3	7.8	14.5	6.8	4.4	N/A	55.7
SPLIT WT= 168.7							CUM WT %	N/A	4.6	10.9	18.6	33.1	39.9	44.3	N/A	100.0

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**** REPORT ON WELL 0299-W15-018 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.6	C	17.2	81.4	1.4	(m)S	WT	N/A	9.1	15.0	57.1	98.5	171.8	204.6	N/A	115.9
SORT= N/A MEDIAN= 3.00 MODE= 4.00 MEAN= N/A							WT %	N/A	1.4	2.2	8.5	14.7	25.6	30.5	N/A	17.3
SPLIT WT= 671.8							CUM WT %	N/A	1.4	3.6	12.1	26.7	52.3	82.8	N/A	100.0
10	0.9	C	4.9	83.6	11.5	gS	WT	N/A	70.3	73.2	82.3	136.4	175.4	46.2	N/A	30.1
SORT= N/A MEDIAN= 2.00 MODE= 3.00 MEAN= N/A							WT %	N/A	11.5	11.9	13.4	22.2	28.6	7.5	N/A	4.9
SPLIT WT= 614.0							CUM WT %	N/A	11.5	23.4	36.8	59.0	87.6	95.1	N/A	100.0
15	0.8	C	6.2	86.5	7.3	(g)S	WT	N/A	55.0	156.2	187.9	116.7	108.2	78.5	N/A	46.4
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	7.3	20.9	25.1	15.6	14.5	10.5	N/A	6.2
SPLIT WT= 751.4							CUM WT %	N/A	7.3	28.2	53.3	68.9	83.3	93.8	N/A	100.0
20	1.7	C	14.0	85.9	0.1	(m)S	WT	N/A	0.6	0.1	2.9	52.5	305.5	180.0	N/A	88.2
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	0.1	0.0	0.5	8.3	48.5	28.6	N/A	14.0
SPLIT WT= 629.7							CUM WT %	N/A	0.1	0.1	0.6	8.9	57.4	86.0	N/A	100.0
25	0.8	C	2.5	96.6	0.9	S	WT	N/A	6.7	165.0	370.5	101.3	35.0	19.7	N/A	17.8
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	0.9	23.0	51.8	14.2	4.9	2.8	N/A	2.5
SPLIT WT= 715.9							CUM WT %	N/A	0.9	24.0	75.7	89.9	94.8	97.5	N/A	100.0
30	0.6	C	10.4	85.7	4.0	(m)S	WT	N/A	32.7	324.4	278.7	59.5	14.7	24.2	N/A	84.8
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	4.0	39.6	34.0	7.3	1.8	3.0	N/A	10.4
SPLIT WT= 819.0							CUM WT %	N/A	4.0	43.6	77.6	84.9	86.7	89.6	N/A	100.0
35	0.8	C	1.9	66.3	31.9	sG	WT	N/A	262.7	313.5	160.0	46.5	8.8	17.4	N/A	15.3
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	31.9	38.1	19.4	5.6	1.0	2.1	N/A	1.9
SPLIT WT= 824.0							CUM WT %	N/A	31.9	69.9	89.4	95.0	96.0	98.1	N/A	100.0
40	1.8	C	15.8	84.1	0.1	(m)S	WT	N/A	0.8	1.1	27.8	152.8	172.9	207.6	N/A	105.7
SORT= N/A MEDIAN= 3.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.1	0.2	4.2	22.9	25.9	31.1	N/A	15.8
SPLIT WT= 672.1							CUM WT %	N/A	0.1	0.3	4.4	27.3	53.2	84.2	N/A	100.0
45	2.0	C	20.4	79.6	0.0	mS	WT	N/A	0.0	0.0	12.4	58.4	146.2	287.9	N/A	129.1
SORT= N/A MEDIAN= 4.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.0	0.0	2.0	9.2	23.1	45.4	N/A	20.4
SPLIT WT= 634.0							CUM WT %	N/A	0.0	0.0	2.0	11.2	34.2	79.6	N/A	100.0
50	1.6	C	31.5	68.5	0.0	mS	WT	N/A	0.0	0.0	0.0	4.5	N/A	443.5	N/A	205.7
SORT= N/A MEDIAN= 4.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.0	0.0	0.0	0.7	N/A	67.8	N/A	31.5
SPLIT WT= 653.7							CUM WT %	N/A	0.0	0.0	0.0	0.7	N/A	68.5	N/A	100.0
55	1.6	C	8.3	87.6	4.0	S	WT	N/A	28.7	17.1	141.3	264.1	102.5	96.7	N/A	59.0
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	4.1	2.4	19.9	37.2	14.5	13.6	N/A	8.3
SPLIT WT= 709.5							CUM WT %	N/A	4.1	6.5	26.4	63.6	78.1	91.7	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W15-018 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	1.2	C	6.4	93.4	0.1	S	WT	N/A	0.9	4.3	37.3	206.8	309.8	60.2	N/A	42.5
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.1	0.7	5.6	31.3	46.8	9.1	N/A	6.4
SPLIT WT= 664.6							CUM WT %	N/A	0.1	0.8	6.4	37.7	84.5	93.6	N/A	100.0
65	2.6	C	18.8	80.9	0.4	(m)S	WT	N/A	2.5	22.8	92.7	166.2	191.5	97.4	N/A	132.5
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.4	3.2	13.1	23.6	27.1	13.8	N/A	18.8
SPLIT WT= 705.5							CUM WT %	N/A	0.4	3.6	16.7	40.3	67.4	81.2	N/A	100.0
70	1.7	C	11.7	88.3	0.0	(m)S	WT	N/A	0.0	0.0	9.6	117.1	296.9	140.2	N/A	75.0
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.0	1.5	18.3	46.5	22.0	N/A	11.7
SPLIT WT= 638.7							CUM WT %	N/A	0.0	0.0	1.5	19.8	66.3	88.3	N/A	100.0
75	1.9	C	13.1	86.9	0.0	(m)S	WT	N/A	0.0	1.5	11.6	34.9	228.0	262.1	N/A	80.9
SORT= N/A	MEDIAN=		4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	0.2	1.9	5.6	36.8	42.3	N/A	13.1
SPLIT WT= 619.0							CUM WT %	N/A	0.0	0.2	2.1	7.8	44.6	86.9	N/A	100.0
80	2.0	C	9.9	90.1	0.0	S	WT	N/A	0.0	12.2	147.1	232.4	108.0	83.4	N/A	64.0
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	1.9	22.7	35.9	16.7	12.9	N/A	9.9
SPLIT WT= 647.1							CUM WT %	N/A	0.0	1.9	24.6	60.5	77.2	90.1	N/A	100.0
85	1.9	C	20.3	79.7	0.0	mS	WT	N/A	0.2	9.4	32.8	70.2	179.0	205.4	N/A	126.7
SORT= N/A	MEDIAN=		4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	1.5	5.3	11.3	28.7	32.9	N/A	20.3
SPLIT WT= 623.7							CUM WT %	N/A	0.0	1.5	6.8	18.1	46.8	79.7	N/A	100.0
90	1.9	C	17.4	82.6	0.0	(m)S	WT	N/A	0.0	0.0	8.4	98.6	298.5	157.2	N/A	118.4
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.0	1.2	14.5	43.8	23.1	N/A	17.4
SPLIT WT= 680.7							CUM WT %	N/A	0.0	0.0	1.2	15.7	59.5	82.6	N/A	100.0
92	N/A	C	17.9	77.4	4.7	(m)S	WT	N/A	11.4	52.7	25.4	41.7	40.1	25.9	N/A	42.9
SORT= N/A	MEDIAN=		2.00	MODE=	0.00	MEAN= N/A	WT %	N/A	4.8	22.0	10.6	17.4	16.7	10.8	N/A	17.9
SPLIT WT= 240.1							CUM WT %	N/A	4.8	26.7	37.3	54.7	71.4	82.1	N/A	100.0
95	1.8	C	10.1	89.9	0.0	(m)S	WT	N/A	0.0	0.1	0.7	38.0	368.1	163.0	N/A	64.1
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.0	0.1	6.0	58.1	25.7	N/A	10.1
SPLIT WT= 635.0							CUM WT %	N/A	0.0	0.0	0.1	6.1	64.2	89.9	N/A	100.0
100	1.6	C	9.1	90.7	0.2	S	WT	N/A	1.1	2.6	17.6	79.8	282.7	153.9	N/A	54.0
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.2	0.4	3.0	13.5	47.8	26.0	N/A	9.1
SPLIT WT= 592.0							CUM WT %	N/A	0.2	0.6	3.6	17.1	64.9	90.9	N/A	100.0
105	1.5	C	6.4	81.7	11.9	gS	WT	N/A	95.9	46.5	234.9	250.4	90.1	36.1	N/A	51.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.9	5.8	29.2	31.1	11.2	4.5	N/A	6.4
SPLIT WT= 805.0							CUM WT %	N/A	11.9	17.7	46.8	77.9	89.1	93.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W15-018 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
110	1.2	C	4.4	57.0	38.6	sG	WT	N/A	321.0	43.6	198.2	159.8	47.0	25.8	N/A	36.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	38.6	5.2	23.8	19.2	5.7	3.1	N/A	4.4
SPLIT WT= 832.4							CUM WT %	N/A	38.6	43.8	67.7	86.9	92.5	95.6	N/A	100.0
115	1.6	C	5.5	86.9	7.6	(g)S	WT	N/A	44.0	41.6	202.6	177.2	53.1	26.9	N/A	31.5
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	7.6	7.2	35.1	30.7	9.2	4.7	N/A	5.5
SPLIT WT= 577.5							CUM WT %	N/A	7.6	14.8	50.0	80.7	89.9	94.5	N/A	100.0
120	1.2	C	7.1	84.3	8.6	(g)S	WT	N/A	58.6	64.9	221.6	184.8	65.6	36.7	N/A	48.5
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.6	9.5	32.6	27.2	9.6	5.4	N/A	7.1
SPLIT WT= 681.0							CUM WT %	N/A	8.6	18.1	50.7	77.8	87.5	92.9	N/A	100.0
125	1.3	C	1.8	31.4	66.8	sG	WT	N/A	569.1	135.4	78.6	31.8	15.0	7.1	N/A	15.4
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	66.8	15.9	9.2	3.7	1.8	0.8	N/A	1.8
SPLIT WT= 853.2							CUM WT %	N/A	66.8	82.6	91.9	95.6	97.4	98.2	N/A	100.0
130	1.3	H	22.8	55.5	21.7	gmS	WT	N/A	88.9	45.8	69.7	52.3	33.5	26.0	N/A	93.5
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	21.7	11.2	17.0	12.8	8.2	6.4	N/A	22.8
SPLIT WT= 409.7							CUM WT %	N/A	21.7	32.9	49.9	62.7	70.8	77.2	N/A	100.0
135	1.7	H	41.8	44.3	13.9	gmS	WT	N/A	43.9	28.3	39.9	29.3	20.1	22.8	N/A	132.4
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	13.9	8.9	12.6	9.3	6.4	7.2	N/A	41.8
SPLIT WT= 316.7							CUM WT %	N/A	13.9	22.8	35.4	44.7	51.0	58.2	N/A	100.0
140	7.3	H	43.3	47.5	9.3	(g)mS	WT	N/A	29.4	24.5	36.0	37.5	25.9	26.4	N/A	137.0
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.3	7.7	11.4	11.8	8.2	8.3	N/A	43.3
SPLIT WT= 316.6							CUM WT %	N/A	9.3	17.0	28.4	40.2	48.4	56.8	N/A	100.0
145	9.7	H	22.9	41.3	35.7	msG	WT	N/A	152.1	33.6	45.8	42.3	30.7	23.4	N/A	97.6
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.8	7.9	10.8	9.9	7.2	5.5	N/A	22.9
SPLIT WT= 425.4							CUM WT %	N/A	35.8	43.7	54.4	64.4	71.6	77.1	N/A	100.0
150	4.2	H	19.3	65.2	15.4	gmS	WT	N/A	70.1	34.6	138.3	73.4	30.5	19.3	N/A	87.8
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	15.4	7.6	30.5	16.2	6.7	4.3	N/A	19.3
SPLIT WT= 454.0							CUM WT %	N/A	15.4	23.1	53.5	69.7	76.4	80.7	N/A	100.0
155	2.4	H	16.9	73.7	9.4	(gm)S	WT	N/A	34.2	19.5	102.8	86.7	41.5	17.6	N/A	61.3
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	9.4	5.4	28.3	23.8	11.4	4.8	N/A	16.9
SPLIT WT= 363.6							CUM WT %	N/A	9.4	14.8	43.0	66.9	78.3	83.1	N/A	100.0
160	1.3	H	18.5	75.1	6.5	(gm)S	WT	N/A	24.0	16.7	127.7	84.7	33.9	16.0	N/A	68.6
SORT= N/A	MEDIAN=		2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.5	4.5	34.4	22.8	9.1	4.3	N/A	18.5
SPLIT WT= 371.6							CUM WT %	N/A	6.5	11.0	45.3	68.1	77.2	81.5	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W15-018 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
165	0.4	H	18.5	70.8	10.7	gmS	WT	N/A	39.9	31.6	118.4	64.1	33.2	17.1	N/A	69.0
SORT= N/A	MEDIAN=	1.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	10.7	8.5	31.7	17.2	8.9	4.6	N/A	18.5
SPLIT WT= 373.3							CUM WT %	N/A	10.7	19.2	50.9	68.1	76.9	81.5	N/A	100.0
170	0.2	H	26.0	65.2	8.7	(g)mS	WT	N/A	39.5	39.6	140.7	64.8	33.9	16.8	N/A	118.1
SORT= N/A	MEDIAN=	2.00	MODE=	1.00	MEAN=	N/A	WT %	N/A	8.7	8.7	31.0	14.3	7.5	3.7	N/A	26.1
SPLIT WT= 453.4							CUM WT %	N/A	8.7	17.4	48.5	62.8	70.2	74.0	N/A	100.0
175	0.1	H	15.3	41.3	43.4	msG	WT	N/A	166.9	47.6	53.3	27.2	18.6	12.4	N/A	58.9
SORT= N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	43.4	12.4	13.9	7.1	4.8	3.2	N/A	15.3
SPLIT WT= 384.9							CUM WT %	N/A	43.4	55.7	69.6	76.7	81.5	84.7	N/A	100.0
180	0.2	H	22.9	49.1	28.0	gmS	WT	N/A	101.1	40.7	43.3	44.5	28.2	20.5	N/A	82.8
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	28.0	11.3	12.0	12.3	7.8	5.7	N/A	22.9
SPLIT WT= 361.1							CUM WT %	N/A	28.0	39.3	51.3	63.6	71.4	77.1	N/A	100.0
190	0.2	H	17.1	40.3	42.6	msG	WT	N/A	173.5	25.0	19.5	34.6	60.0	25.1	N/A	69.9
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	42.6	6.1	4.8	8.5	14.7	6.2	N/A	17.2
SPLIT WT= 407.7							CUM WT %	N/A	42.6	48.7	53.5	62.0	76.7	82.9	N/A	100.0
195	0.1	H	32.9	63.3	3.9	mS	WT	N/A	9.2	24.7	30.7	31.2	41.0	23.0	N/A	78.2
SORT= N/A	MEDIAN=	3.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	3.9	10.4	12.9	13.1	17.2	9.7	N/A	32.9
SPLIT WT= 238.0							CUM WT %	N/A	3.9	14.3	27.2	40.3	57.5	67.2	N/A	100.0
200	0.2	H	22.1	41.0	36.9	msG	WT	N/A	111.3	35.5	25.1	22.4	23.8	16.8	N/A	66.6
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	36.9	11.8	8.3	7.4	7.9	5.6	N/A	22.1
SPLIT WT= 300.8							CUM WT %	N/A	36.9	48.7	57.0	64.5	72.3	77.9	N/A	100.0
205	0.1	H	23.9	45.6	30.5	msG	WT	N/A	114.5	44.9	32.7	38.2	32.9	22.6	N/A	89.7
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	30.5	12.0	8.7	10.2	8.8	6.0	N/A	23.9
SPLIT WT= 375.4							CUM WT %	N/A	30.5	42.5	51.2	61.3	70.1	76.1	N/A	100.0
210	0.2	H	26.4	52.2	21.4	gmS	WT	N/A	78.3	38.7	34.7	47.1	43.1	27.6	N/A	96.6
SORT= N/A	MEDIAN=	2.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	21.4	10.6	9.5	12.9	11.8	7.5	N/A	26.4
SPLIT WT= 366.0							CUM WT %	N/A	21.4	32.0	41.4	54.3	66.1	73.6	N/A	100.0
215	0.1	H	21.1	56.1	22.8	gmS	WT	N/A	90.3	49.4	43.6	60.2	46.4	22.2	N/A	83.4
SORT= N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	22.8	12.5	11.0	15.2	11.7	5.6	N/A	21.1
SPLIT WT= 395.5							CUM WT %	N/A	22.8	35.3	46.3	61.6	73.3	78.9	N/A	100.0
220	0.2	H	28.0	51.1	20.9	gmS	WT	N/A	60.7	36.4	27.0	32.8	33.7	18.9	N/A	81.5
SORT= N/A	MEDIAN=	2.00	MODE=	5.00	MEAN=	N/A	WT %	N/A	20.9	12.5	9.3	11.3	11.6	6.5	N/A	28.0
SPLIT WT= 290.8							CUM WT %	N/A	20.9	33.4	42.7	53.9	65.5	72.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W15-018 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	0.1	H	19.6	48.8	31.5	msG	WT	N/A	102.5	26.3	20.8	57.8	37.7	18.2	N/A	63.9
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.5	8.1	6.4	17.8	11.6	5.0	N/A	19.7
SPLIT WT= 325.0							CUM WT %	N/A	31.5	39.6	46.0	63.8	75.4	80.4	N/A	100.0
230	0.1	H	23.9	66.0	10.2	gmS	WT	N/A	27.2	20.9	21.4	55.3	60.1	18.8	N/A	63.8
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	10.2	7.8	8.0	20.7	22.5	7.0	N/A	23.9
SPLIT WT= 267.5							CUM WT %	N/A	10.2	18.0	26.0	46.7	69.1	76.2	N/A	100.0
235	0.1	H	26.5	55.1	18.4	gmS	WT	N/A	49.1	34.2	26.1	31.9	35.8	19.0	N/A	70.8
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	18.4	12.8	9.8	12.0	13.4	7.1	N/A	26.5
SPLIT WT= 266.8							CUM WT %	N/A	18.4	31.2	41.0	52.9	66.4	73.5	N/A	100.0
240	N/A	H	29.3	59.0	11.7	gmS	WT	N/A	27.1	24.7	26.5	31.3	34.9	19.0	N/A	67.8
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	11.7	10.7	11.5	13.5	15.1	8.2	N/A	29.3
SPLIT WT= 231.2							CUM WT %	N/A	11.7	22.4	33.9	47.4	62.5	70.7	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-021 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	0.9	C	4.8	95.0	0.2	S	WT	N/A	1.6	29.6	46.7	148.4	155.7	228.3	N/A	30.6
SORT= N/A MEDIAN= 3.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.3	4.6	7.3	23.2	24.3	35.6	N/A	4.8
SPLIT WT= 640.7							CUM WT %	N/A	0.3	4.9	12.2	35.3	59.6	95.2	N/A	100.0
9	2.4	C	17.0	82.9	0.1	(m)S	WT	N/A	0.5	7.9	39.8	90.5	222.4	185.8	N/A	111.9
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	0.1	1.2	6.0	13.7	33.8	28.2	N/A	17.0
SPLIT WT= 658.8							CUM WT %	N/A	0.1	1.3	7.3	21.1	54.8	83.0	N/A	100.0
10	0.6	C	2.9	95.6	1.5	S	WT	N/A	9.6	121.6	322.8	135.0	35.3	18.2	N/A	19.4
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.5	18.4	48.8	20.4	5.3	2.8	N/A	2.9
SPLIT WT= 661.9							CUM WT %	N/A	1.5	19.8	68.6	89.0	94.3	97.1	N/A	100.0
15	0.5	C	1.5	95.0	3.5	S	WT	N/A	25.0	166.4	360.8	103.9	33.5	18.9	N/A	11.0
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	3.5	23.1	50.2	14.4	4.7	2.6	N/A	1.5
SPLIT WT= 719.5							CUM WT %	N/A	3.5	26.6	76.8	91.2	95.9	98.5	N/A	100.0
20	0.4	C	1.0	76.5	22.5	gS	WT	N/A	163.9	276.5	234.0	33.7	5.4	6.4	N/A	7.2
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	22.5	38.0	32.2	4.6	0.7	0.9	N/A	1.0
SPLIT WT= 727.2							CUM WT %	N/A	22.5	60.6	92.8	97.4	98.1	99.0	N/A	100.0
25	1.6	C	11.4	73.2	15.4	(m)gS	WT	N/A	105.7	261.7	111.5	29.8	43.2	55.0	N/A	77.8
SORT= N/A MEDIAN= 0.00 MODE= 0.00 MEAN= N/A							WT %	N/A	15.4	38.2	16.3	4.4	6.3	8.0	N/A	11.4
SPLIT WT= 684.6							CUM WT %	N/A	15.4	53.7	69.9	74.3	80.6	88.6	N/A	100.0
30	1.6	C	7.5	92.5	0.0	S	WT	N/A	0.0	0.2	38.6	150.9	157.4	270.3	N/A	49.7
SORT= N/A MEDIAN= 3.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.0	0.0	5.8	22.6	23.6	40.5	N/A	7.5
SPLIT WT= 667.2							CUM WT %	N/A	0.0	0.0	5.8	28.4	52.0	92.6	N/A	100.0
35	1.2	C	2.4	91.9	5.7	(g)S	WT	N/A	39.4	73.6	263.9	151.2	89.6	54.2	N/A	16.2
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	5.7	10.7	38.4	22.0	13.0	7.9	N/A	2.4
SPLIT WT= 688.2							CUM WT %	N/A	5.7	16.4	54.8	76.8	89.8	97.7	N/A	100.0
39	N/A	C	9.0	86.0	5.0	(g)S	WT	N/A	14.0	18.5	71.6	61.5	48.1	39.0	N/A	24.9
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	5.0	6.7	25.8	22.2	17.3	14.1	N/A	9.0
SPLIT WT= 277.5							CUM WT %	N/A	5.0	11.7	37.5	59.6	77.0	91.0	N/A	100.0
40	1.4	C	5.8	86.3	7.9	(g)S	WT	N/A	56.4	59.7	131.5	192.3	111.4	121.8	N/A	41.3
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	7.9	8.4	18.4	26.9	15.6	17.1	N/A	5.8
SPLIT WT= 714.5							CUM WT %	N/A	7.9	16.3	34.7	61.6	77.2	94.2	N/A	100.0
42	1.2	H	3.1	40.9	56.0	sG	WT	N/A	455.0	122.5	108.3	53.1	29.1	19.8	N/A	25.0
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	56.0	15.1	13.3	6.5	3.6	2.4	N/A	3.1
SPLIT WT= 812.8							CUM WT %	N/A	56.0	71.1	84.4	90.9	94.5	96.9	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
45	0.7	H	7.5	55.6	37.0	msG	WT	N/A	149.9	89.1	69.0	34.5	19.6	12.9	N/A	30.2
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.0	22.0	17.0	8.5	4.8	3.2	N/A	7.5
SPLIT WT= 405.2							CUM WT %	N/A	37.0	59.0	76.0	84.5	89.4	92.5	N/A	100.0
50	1.1	H	14.6	31.1	54.3	msG	WT	N/A	236.6	42.2	31.1	23.1	20.8	18.2	N/A	63.7
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	54.3	9.7	7.1	5.3	4.8	4.2	N/A	14.6
SPLIT WT= 435.7							CUM WT %	N/A	54.3	64.0	71.1	76.4	81.2	85.4	N/A	100.0
55	0.8	H	13.6	36.5	49.9	msG	WT	N/A	210.7	65.4	34.6	21.5	17.4	15.2	N/A	57.5
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.9	15.5	8.2	5.1	4.1	3.6	N/A	13.6
SPLIT WT= 422.3							CUM WT %	N/A	49.9	65.4	73.6	78.7	82.8	86.4	N/A	100.0
60	1.2	H	11.7	29.6	58.7	msG	WT	N/A	250.2	36.2	32.7	24.8	18.2	14.1	N/A	49.9
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	58.7	8.5	7.7	5.8	4.3	3.3	N/A	11.7
SPLIT WT= 426.2							CUM WT %	N/A	58.7	67.2	74.9	80.7	85.0	88.3	N/A	100.0
65	1.5	H	19.6	62.0	18.5	gmS	WT	N/A	73.3	26.7	34.0	71.5	63.0	50.5	N/A	77.6
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	18.5	6.7	8.6	18.0	15.9	12.7	N/A	19.6
SPLIT WT= 396.4							CUM WT %	N/A	18.5	25.2	33.8	51.8	67.7	80.4	N/A	100.0
68	1.6	H	24.6	64.9	10.5	gmS	WT	N/A	36.8	30.9	49.6	50.8	45.8	50.6	N/A	86.4
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	10.5	8.8	14.1	14.5	13.1	14.4	N/A	24.6
SPLIT WT= 351.0							CUM WT %	N/A	10.5	19.3	33.4	47.9	61.0	75.4	N/A	100.0
70	1.6	H	21.3	66.1	12.6	gmS	WT	N/A	43.7	31.2	55.0	55.0	42.7	45.6	N/A	73.9
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	12.6	9.0	15.9	15.9	12.3	13.1	N/A	21.3
SPLIT WT= 347.1							CUM WT %	N/A	12.6	21.6	37.4	53.3	65.6	78.7	N/A	100.0
75	1.8	H	24.7	65.6	9.7	(g)mS	WT	N/A	38.0	22.7	51.3	72.2	49.3	60.1	N/A	96.2
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.8	5.8	13.2	18.5	12.7	15.4	N/A	24.7
SPLIT WT= 389.7							CUM WT %	N/A	9.8	15.6	28.7	47.3	59.9	75.3	N/A	100.0
80	1.9	H	17.1	81.4	1.5	(m)S	WT	N/A	5.5	10.1	30.7	43.5	106.3	106.8	N/A	62.5
SORT= N/A	MEDIAN=		3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	1.5	2.8	8.4	11.9	29.1	29.2	N/A	17.1
SPLIT WT= 365.3							CUM WT %	N/A	1.5	4.3	12.7	24.6	53.7	82.9	N/A	100.0
85	1.6	H	19.1	79.8	1.2	(m)S	WT	N/A	4.3	13.8	50.8	48.5	79.7	96.4	N/A	69.1
SORT= N/A	MEDIAN=		3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	1.2	3.8	14.0	13.4	22.0	26.6	N/A	19.1
SPLIT WT= 362.5							CUM WT %	N/A	1.2	5.0	19.0	32.4	54.4	81.0	N/A	100.0
90	1.5	H	15.0	84.0	1.0	(m)S	WT	N/A	2.7	7.1	27.5	36.6	67.8	83.4	N/A	39.6
SORT= N/A	MEDIAN=		3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	1.0	2.7	10.4	13.8	25.6	31.5	N/A	15.0
SPLIT WT= 264.7							CUM WT %	N/A	1.0	3.7	14.1	27.9	53.5	85.0	N/A	100.0

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95	1.6	H	16.7	83.1	0.1	(m)S	WT	N/A	0.4	5.4	31.2	73.9	71.0	70.6	N/A	50.7
SORT= N/A MEDIAN= 3.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.1	1.8	10.3	24.4	23.4	23.3	N/A	16.7
SPLIT WT= 303.2							CUM WT %	N/A	0.1	1.9	12.2	36.6	60.0	83.3	N/A	100.0
100	1.5	H	17.0	82.9	0.1	(m)S	WT	N/A	0.4	4.9	27.5	71.5	69.6	62.5	N/A	48.4
SORT= N/A MEDIAN= 3.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.1	1.7	9.7	25.1	24.4	22.0	N/A	17.0
SPLIT WT= 284.7							CUM WT %	N/A	0.1	1.9	11.5	36.6	61.1	83.0	N/A	100.0
105	1.8	H	25.8	73.5	0.7	mS	WT	N/A	1.8	2.1	11.1	33.4	57.0	91.3	N/A	68.5
SORT= N/A MEDIAN= 4.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.7	0.8	4.2	12.6	21.5	34.4	N/A	25.8
SPLIT WT= 265.1							CUM WT %	N/A	0.7	1.5	5.7	18.3	39.7	74.2	N/A	100.0
110	1.6	H	23.5	75.6	0.9	mS	WT	N/A	2.5	3.6	16.8	45.8	64.3	71.6	N/A	62.7
SORT= N/A MEDIAN= 4.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.9	1.4	6.3	17.1	24.1	26.8	N/A	23.5
SPLIT WT= 267.3							CUM WT %	N/A	0.9	2.3	8.6	25.7	49.8	76.6	N/A	100.0
115	1.8	H	26.2	73.1	0.7	mS	WT	N/A	2.1	4.2	21.5	55.0	69.1	80.3	N/A	82.6
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.7	1.3	6.8	17.5	22.0	25.5	N/A	26.2
SPLIT WT= 314.8							CUM WT %	N/A	0.7	2.0	8.8	26.3	48.3	73.8	N/A	100.0
120	1.8	H	26.4	73.0	0.6	mS	WT	N/A	1.7	2.4	13.3	45.3	69.1	78.3	N/A	75.4
SORT= N/A MEDIAN= 4.00 MODE= 4.00 MEAN= N/A							WT %	N/A	0.6	0.8	4.7	15.9	24.2	27.4	N/A	26.4
SPLIT WT= 285.6							CUM WT %	N/A	0.6	1.4	6.1	22.0	46.2	73.6	N/A	100.0
125	2.1	H	36.9	62.6	0.5	mS	WT	N/A	1.8	2.1	10.4	42.7	68.4	84.8	N/A	122.9
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.5	0.6	3.1	12.8	20.5	25.5	N/A	36.9
SPLIT WT= 333.2							CUM WT %	N/A	0.5	1.2	4.3	17.1	37.6	63.1	N/A	100.0
130	2.3	H	45.4	54.1	0.5	mS	WT	N/A	1.6	1.6	7.4	29.6	50.6	86.4	N/A	147.3
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.5	0.5	2.3	9.1	15.6	26.6	N/A	45.4
SPLIT WT= 324.4							CUM WT %	N/A	0.5	1.0	3.3	12.4	28.0	54.6	N/A	100.0
135	2.4	H	51.6	47.8	0.6	sM	WT	N/A	1.8	1.9	6.7	22.2	37.6	71.8	N/A	151.3
SORT= N/A MEDIAN= 5.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.6	0.7	2.3	7.6	12.8	24.5	N/A	51.6
SPLIT WT= 293.3							CUM WT %	N/A	0.6	1.3	3.5	11.1	23.9	48.4	N/A	100.0
140	3.1	H	57.3	41.5	1.1	sM	WT	N/A	2.1	2.5	3.9	10.1	20.9	40.9	N/A	108.1
SORT= N/A MEDIAN= 5.00 MODE= 5.00 MEAN= N/A							WT %	N/A	1.1	1.3	2.1	5.4	11.1	21.7	N/A	57.4
SPLIT WT= 188.6							CUM WT %	N/A	1.1	2.4	4.5	9.9	21.0	42.7	N/A	100.0
145	5.8	H	48.8	39.4	11.8	gsM	WT	N/A	30.0	17.8	16.2	14.8	18.6	32.8	N/A	124.1
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	11.8	7.0	6.4	5.8	7.3	12.9	N/A	48.8
SPLIT WT= 254.4							CUM WT %	N/A	11.8	18.8	25.2	31.0	38.3	51.2	N/A	100.0

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150	2.1	H	26.7	49.4	23.9	gmS	WT	N/A	91.3	53.0	50.4	38.9	22.8	23.2	N/A	101.8
SORT= N/A	MEDIAN=		1.00	MODE=	5.00	MEAN= N/A	WT %	N/A	23.9	13.9	13.2	10.2	6.0	6.1	N/A	26.7
SPLIT WT= 381.4							CUM WT %	N/A	23.9	37.8	51.1	61.3	67.2	73.3	N/A	100.0
155	1.3	H	10.4	56.8	32.9	msG	WT	N/A	139.3	48.2	50.4	92.7	27.1	22.2	N/A	43.9
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.9	11.4	11.9	21.9	6.4	5.2	N/A	10.4
SPLIT WT= 423.8							CUM WT %	N/A	32.9	44.2	56.1	78.0	84.4	89.6	N/A	100.0
160	0.9	H	19.5	55.0	25.6	gmS	WT	N/A	119.5	41.3	61.5	99.6	31.3	23.0	N/A	90.9
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.6	8.8	13.2	21.3	6.7	4.9	N/A	19.5
SPLIT WT= 467.1							CUM WT %	N/A	25.6	34.4	47.6	68.9	75.6	80.5	N/A	100.0
165	0.4	H	27.4	53.6	19.0	gmS	WT	N/A	78.2	55.4	52.3	46.3	37.1	29.6	N/A	112.8
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	19.0	13.5	12.7	11.3	9.0	7.2	N/A	27.4
SPLIT WT= 411.6							CUM WT %	N/A	19.0	32.5	45.2	56.4	65.4	72.6	N/A	100.0
180	0.2	H	20.8	50.6	28.7	gmS	WT	N/A	121.7	64.4	56.5	42.3	29.6	21.8	N/A	88.1
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.7	15.2	13.3	10.0	7.0	5.1	N/A	20.8
SPLIT WT= 424.5							CUM WT %	N/A	28.7	43.9	57.2	67.1	74.1	79.2	N/A	100.0
185	0.1	H	22.1	57.8	20.1	gmS	WT	N/A	90.9	64.7	60.8	60.2	47.1	28.0	N/A	99.5
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	20.2	14.3	13.5	13.3	10.4	6.2	N/A	22.1
SPLIT WT= 451.2							CUM WT %	N/A	20.2	34.5	48.0	61.3	71.8	78.0	N/A	100.0
190	0.2	H	25.7	59.0	15.3	gmS	WT	N/A	61.3	55.8	47.9	53.5	48.6	30.7	N/A	103.1
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	15.3	13.9	12.0	13.3	12.1	7.7	N/A	25.7
SPLIT WT= 400.9							CUM WT %	N/A	15.3	29.2	41.2	54.5	66.6	74.3	N/A	100.0
195	0.2	H	33.1	57.2	9.6	(g)mS	WT	N/A	29.7	30.3	31.1	46.6	41.1	27.8	N/A	102.4
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.6	9.8	10.1	15.1	13.3	9.0	N/A	33.1
SPLIT WT= 308.8							CUM WT %	N/A	9.6	19.4	29.5	44.6	57.9	66.9	N/A	100.0
200	0.2	H	32.7	57.5	9.8	(g)mS	WT	N/A	26.9	24.8	24.2	48.7	36.9	23.5	N/A	90.0
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.8	9.0	8.8	17.7	13.4	8.6	N/A	32.7
SPLIT WT= 274.9							CUM WT %	N/A	9.8	18.8	27.6	45.3	58.7	67.3	N/A	100.0
205	0.2	H	32.2	57.7	10.1	gmS	WT	N/A	28.2	30.9	28.8	42.7	35.2	22.9	N/A	89.7
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	10.1	11.1	10.3	15.3	12.6	8.2	N/A	32.2
SPLIT WT= 278.4							CUM WT %	N/A	10.1	21.2	31.6	46.9	59.6	67.8	N/A	100.0
210	0.1	H	28.1	56.2	15.7	gmS	WT	N/A	47.7	38.4	31.8	42.5	34.9	22.6	N/A	85.2
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	15.7	12.7	10.5	14.0	11.5	7.5	N/A	28.1
SPLIT WT= 303.1							CUM WT %	N/A	15.7	28.4	38.9	52.9	64.4	71.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-021 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
215	0.1	H	24.9	61.0	14.1	gmS	WT	N/A	43.0	45.1	34.5	38.1	44.1	23.9	N/A	75.7
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	14.1	14.8	11.3	12.5	14.5	7.9	N/A	24.9
SPLIT WT= 304.3							CUM WT %	N/A	14.1	29.0	40.3	52.8	67.3	75.1	N/A	100.0
220	0.2	H	31.3	60.3	8.4	(g)mS	WT	N/A	21.1	28.7	26.6	30.8	41.4	23.7	N/A	78.5
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	8.4	11.4	10.6	12.3	16.5	9.5	N/A	31.3
SPLIT WT= 250.7							CUM WT %	N/A	8.4	19.9	30.5	42.7	59.3	68.7	N/A	100.0
225	0.2	H	25.1	65.5	9.4	(g)mS	WT	N/A	21.4	37.0	29.6	32.5	30.5	19.8	N/A	57.3
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.4	16.2	13.0	14.3	13.4	8.7	N/A	25.1
SPLIT WT= 227.9							CUM WT %	N/A	9.4	25.6	38.6	52.8	66.2	74.9	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-022 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.1	N/	13.9	82.1	4.0	(m)S	WT	N/A	9.5	4.6	12.1	26.8	68.3	82.8	N/A	32.9
SORT=	N/A	MEDIAN=	3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	4.0	1.9	5.1	11.3	28.8	34.9	N/A	13.9
SPLIT WT= 237.0							CUM WT %	N/A	4.0	6.0	11.1	22.4	51.2	86.1	N/A	100.0
10	1.1	H	12.3	86.0	1.7	(m)S	WT	N/A	6.8	38.9	108.7	65.4	71.5	59.6	N/A	49.2
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	1.7	9.7	27.2	16.4	17.9	14.9	N/A	12.3
SPLIT WT= 400.1							CUM WT %	N/A	1.7	11.4	38.6	54.9	72.8	87.7	N/A	100.0
15	0.6	H	12.5	73.6	13.9	(m)gS	WT	N/A	58.6	80.0	115.9	55.7	35.7	22.5	N/A	52.4
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	13.9	19.0	27.5	13.2	8.5	5.4	N/A	12.5
SPLIT WT= 420.9							CUM WT %	N/A	13.9	32.9	60.5	73.7	82.2	87.6	N/A	100.0
20	0.5	H	9.0	68.1	22.9	(m)gS	WT	N/A	96.6	112.1	100.2	44.9	18.6	10.9	N/A	37.9
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	22.9	26.6	23.8	10.7	4.4	2.6	N/A	9.0
SPLIT WT= 421.2							CUM WT %	N/A	22.9	49.5	73.3	84.0	88.4	91.0	N/A	100.0
25	0.9	H	17.3	76.6	6.1	(gm)S	WT	N/A	26.6	85.8	106.0	56.3	46.7	38.4	N/A	75.1
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	6.1	19.7	24.4	13.0	10.7	8.8	N/A	17.3
SPLIT WT= 435.0							CUM WT %	N/A	6.1	25.9	50.2	63.2	73.9	82.7	N/A	100.0
30	1.2	H	17.4	81.2	1.4	(m)S	WT	N/A	5.5	26.2	58.2	92.3	80.6	64.6	N/A	69.1
SORT=	N/A	MEDIAN=	3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.4	6.6	14.7	23.3	20.3	16.3	N/A	17.4
SPLIT WT= 396.6							CUM WT %	N/A	1.4	8.0	22.7	46.0	66.3	82.6	N/A	100.0
35	1.1	H	13.4	84.8	1.8	(m)S	WT	N/A	7.0	27.8	96.8	104.7	61.4	41.8	N/A	52.7
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.8	7.1	24.7	26.7	15.7	10.7	N/A	13.4
SPLIT WT= 392.2							CUM WT %	N/A	1.8	8.9	33.6	60.3	75.9	86.6	N/A	100.0
40	1.3	H	16.7	79.3	4.0	(m)S	WT	N/A	16.0	25.1	82.3	96.9	67.8	46.6	N/A	67.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.0	6.3	20.5	24.1	16.9	11.6	N/A	16.7
SPLIT WT= 401.7							CUM WT %	N/A	4.0	10.2	30.7	54.8	71.7	83.3	N/A	100.0
50	1.1	H	6.0	80.8	33.2	sG	WT	N/A	132.7	41.5	42.5	0.1	132.3	26.6	N/A	23.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.2	10.4	10.6	0.0	33.1	6.7	N/A	6.0
SPLIT WT= 399.7							CUM WT %	N/A	33.2	43.6	54.2	54.3	87.4	94.0	N/A	100.0
55	1.1	H	12.2	47.2	40.7	msG	WT	N/A	162.3	62.7	46.0	33.7	26.2	19.5	N/A	48.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.7	15.7	11.5	8.5	6.6	4.9	N/A	12.2
SPLIT WT= 398.9							CUM WT %	N/A	40.7	56.4	67.9	76.4	83.0	87.9	N/A	100.0
60	1.3	H	10.1	16.3	73.6	msG	WT	N/A	364.7	24.6	16.4	14.6	13.6	11.5	N/A	49.9
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	73.6	5.0	3.3	3.0	2.8	2.3	N/A	10.1
SPLIT WT= 495.4							CUM WT %	N/A	73.6	78.6	81.9	84.9	87.6	89.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-022 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
65	1.1	H	18.4	50.3	31.3	msG	WT	N/A	154.5	54.4	55.6	57.4	45.4	35.9	N/A	90.8
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.3	11.0	11.3	11.6	9.2	7.3	N/A	18.4
SPLIT WT= 494.1							CUM WT %	N/A	31.3	42.3	53.6	65.2	74.4	81.6	N/A	100.0
70	1.4	H	23.3	63.5	13.2	gmS	WT	N/A	53.8	36.0	65.8	60.5	44.7	51.9	N/A	95.0
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	13.2	8.8	16.1	14.8	11.0	12.7	N/A	23.3
SPLIT WT= 407.9							CUM WT %	N/A	13.2	22.0	38.2	53.0	64.0	76.7	N/A	100.0
75	1.3	H	21.2	75.9	2.9	mS	WT	N/A	11.3	17.9	57.6	69.2	69.2	80.8	N/A	82.1
SORT= N/A MEDIAN= 3.00 MODE= 5.00 MEAN= N/A							WT %	N/A	2.9	4.6	14.8	17.8	17.8	20.8	N/A	21.2
SPLIT WT= 388.1							CUM WT %	N/A	2.9	7.5	22.4	40.2	58.0	78.8	N/A	100.0
80	1.3	H	15.9	81.6	2.5	(m)S	WT	N/A	9.2	33.3	58.0	39.6	83.0	84.2	N/A	58.1
SORT= N/A MEDIAN= 3.00 MODE= 4.00 MEAN= N/A							WT %	N/A	2.5	9.1	15.9	10.8	22.7	23.0	N/A	15.9
SPLIT WT= 365.3							CUM WT %	N/A	2.5	11.6	27.5	38.3	61.1	84.1	N/A	100.0
85	1.4	H	14.7	83.9	1.4	(m)S	WT	N/A	5.3	15.6	66.5	55.8	76.2	98.0	N/A	54.7
SORT= N/A MEDIAN= 3.00 MODE= 4.00 MEAN= N/A							WT %	N/A	1.4	4.2	17.9	15.0	20.5	26.3	N/A	14.7
SPLIT WT= 372.1							CUM WT %	N/A	1.4	5.6	23.5	38.5	59.0	85.3	N/A	100.0
90	1.4	H	6.4	92.2	1.4	S	WT	N/A	5.4	48.1	159.9	64.2	43.7	43.3	N/A	25.0
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	1.4	12.4	41.0	16.5	11.2	11.1	N/A	6.4
SPLIT WT= 389.7							CUM WT %	N/A	1.4	13.7	54.8	71.3	82.5	93.6	N/A	100.0
95	1.6	H	35.5	64.5	0.0	mS	WT	N/A	0.0	2.0	10.4	24.1	65.4	80.1	N/A	100.3
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.0	0.7	3.7	8.5	23.2	28.4	N/A	35.5
SPLIT WT= 282.2							CUM WT %	N/A	0.0	0.7	4.4	12.9	36.1	64.5	N/A	100.0
100	1.6	H	37.1	62.9	0.0	mS	WT	N/A	0.1	0.5	6.3	28.2	45.3	45.6	N/A	74.2
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.1	0.3	3.2	14.1	22.6	22.8	N/A	37.1
SPLIT WT= 200.1							CUM WT %	N/A	0.1	0.3	3.5	17.5	40.2	63.0	N/A	100.0
105	1.6	H	47.3	52.5	0.2	mS	WT	N/A	0.6	0.2	2.7	15.3	50.8	78.1	N/A	132.7
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.2	0.1	1.0	5.5	18.1	27.9	N/A	47.3
SPLIT WT= 280.3							CUM WT %	N/A	0.2	0.3	1.2	6.7	24.8	52.7	N/A	100.0
110	1.8	H	44.7	55.2	0.1	mS	WT	N/A	0.3	0.6	4.3	17.7	45.0	52.5	N/A	97.3
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.1	0.3	2.0	8.1	20.7	24.1	N/A	44.7
SPLIT WT= 217.7							CUM WT %	N/A	0.1	0.4	2.4	10.5	31.2	55.3	N/A	100.0
115	1.9	H	39.4	60.4	0.2	mS	WT	N/A	0.5	1.5	8.8	33.5	73.7	67.8	N/A	121.0
SORT= N/A MEDIAN= 4.00 MODE= 5.00 MEAN= N/A							WT %	N/A	0.2	0.5	2.9	10.9	24.0	22.1	N/A	39.4
SPLIT WT= 306.7							CUM WT %	N/A	0.2	0.7	3.5	14.4	38.5	60.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-022 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
120	1.9	H	58.2	41.8	0.0	sM	WT	N/A	0.0	0.4	3.6	15.3	19.7	38.6	N/A	108.1
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.0	0.2	1.9	8.2	10.6	20.8	N/A	58.2
SPLIT WT= 185.7							CUM WT %	N/A	0.0	0.2	2.2	10.4	21.0	41.8	N/A	100.0
125	2.9	H	60.5	39.1	0.4	sM	WT	N/A	0.7	1.0	1.1	7.5	23.8	36.2	N/A	107.9
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.4	0.6	0.6	4.2	13.4	20.3	N/A	60.6
SPLIT WT= 178.0							CUM WT %	N/A	0.4	1.0	1.6	5.8	19.1	39.5	N/A	100.0
130	2.5	H	56.0	43.6	0.4	sM	WT	N/A	0.8	1.1	1.2	7.2	29.0	50.6	N/A	114.4
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.4	0.5	0.6	3.5	14.2	24.8	N/A	56.0
SPLIT WT= 204.4							CUM WT %	N/A	0.4	0.9	1.5	5.0	19.2	44.0	N/A	100.0
135	2.7	H	63.2	36.5	0.3	sM	WT	N/A	1.1	1.8	2.7	10.6	30.6	71.9	N/A	203.9
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.3	0.6	0.8	3.3	9.5	22.3	N/A	63.2
SPLIT WT= 322.6							CUM WT %	N/A	0.3	0.9	1.7	5.0	14.5	36.8	N/A	100.0
140	3.1	H	55.5	43.9	0.6	sM	WT	N/A	1.3	2.1	2.2	10.4	33.2	55.8	N/A	131.0
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.6	0.9	0.9	4.4	14.1	23.6	N/A	55.5
SPLIT WT= 236.1							CUM WT %	N/A	0.6	1.4	2.4	6.8	20.9	44.5	N/A	100.0
145	12.2	H	38.8	47.0	14.2	gmS	WT	N/A	38.2	18.9	23.1	23.0	29.5	32.1	N/A	104.3
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	14.2	7.0	8.6	8.6	11.0	11.9	N/A	38.8
SPLIT WT= 269.0							CUM WT %	N/A	14.2	21.2	29.8	38.4	49.3	61.2	N/A	100.0
150	5.1	H	18.2	31.6	50.3	msG	WT	N/A	189.3	30.8	31.1	19.5	18.8	18.6	N/A	68.4
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	50.3	8.2	8.3	5.2	5.0	4.9	N/A	18.2
SPLIT WT= 376.6							CUM WT %	N/A	50.3	58.5	66.7	71.9	76.9	81.8	N/A	100.0
155	1.3	H	9.2	33.2	57.6	msG	WT	N/A	277.5	68.6	35.7	25.4	17.7	12.3	N/A	44.3
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	57.6	14.3	7.4	5.3	3.7	2.6	N/A	9.2
SPLIT WT= 481.4							CUM WT %	N/A	57.6	71.9	79.3	84.6	88.3	90.8	N/A	100.0
160	0.6	H	8.4	45.9	45.7	msG	WT	N/A	213.6	84.1	63.2	41.0	18.4	7.7	N/A	39.5
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	45.7	18.0	13.5	8.8	3.9	1.7	N/A	8.5
SPLIT WT= 467.6							CUM WT %	N/A	45.7	63.7	77.2	86.0	89.9	91.6	N/A	100.0
165	0.6	H	8.9	57.3	33.8	msG	WT	N/A	127.2	82.8	62.9	40.8	18.8	10.3	N/A	33.3
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	33.8	22.0	16.7	10.9	5.0	2.7	N/A	8.9
SPLIT WT= 376.2							CUM WT %	N/A	33.8	55.8	72.6	83.4	88.4	91.2	N/A	100.0
170	0.4	H	36.0	54.7	9.3	(g)mS	WT	N/A	20.7	25.9	27.9	25.2	24.3	18.0	N/A	79.8
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.3	11.7	12.6	11.4	11.0	8.1	N/A	36.0
SPLIT WT= 221.7							CUM WT %	N/A	9.3	21.0	33.6	45.0	55.9	64.0	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-022 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
175	0.1	H	23.7	45.7	30.5	msG	WT	N/A	92.3	43.4	39.4	23.6	16.7	15.1	N/A	71.7
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.5	14.4	13.0	7.8	5.5	5.0	N/A	23.7
SPLIT WT= 302.2							CUM WT %	N/A	30.5	44.9	57.9	65.8	71.3	76.3	N/A	100.0
180	0.2	H	18.0	44.5	37.5	msG	WT	N/A	170.3	47.3	41.1	52.5	39.3	21.9	N/A	82.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.5	10.4	9.0	11.6	8.7	4.8	N/A	18.1
SPLIT WT= 454.4							CUM WT %	N/A	37.5	47.9	56.9	68.5	77.1	82.0	N/A	100.0
185	0.1	H	22.8	47.2	30.0	msG	WT	N/A	115.5	38.2	32.8	43.5	42.5	24.4	N/A	87.7
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.0	9.9	8.5	11.3	11.1	6.3	N/A	22.8
SPLIT WT= 384.6							CUM WT %	N/A	30.0	40.0	48.5	59.8	70.9	77.2	N/A	100.0
190	0.1	H	7.1	80.8	12.1	gS	WT	N/A	39.8	50.8	81.3	74.8	45.2	14.1	N/A	23.3
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.1	15.4	24.7	22.7	13.7	4.3	N/A	7.1
SPLIT WT= 329.3							CUM WT %	N/A	12.1	27.5	52.2	74.9	88.7	92.9	N/A	100.0
195	0.2	H	28.5	55.5	16.0	gmS	WT	N/A	60.3	48.9	40.0	48.3	45.6	26.1	N/A	107.5
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	16.0	13.0	10.6	12.8	12.1	6.9	N/A	28.5
SPLIT WT= 376.6							CUM WT %	N/A	16.0	29.0	39.6	52.4	64.5	71.5	N/A	100.0
200	0.1	H	11.7	40.4	48.0	msG	WT	N/A	133.5	10.5	8.4	49.5	34.6	9.4	N/A	32.5
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	48.0	3.8	3.0	17.8	12.4	3.4	N/A	11.7
SPLIT WT= 278.3							CUM WT %	N/A	48.0	51.7	54.7	72.5	85.0	88.3	N/A	100.0
205	0.1	H	24.5	53.7	21.8	gmS	WT	N/A	72.4	38.6	27.9	43.1	45.8	22.7	N/A	81.3
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	21.8	11.6	8.4	13.0	13.8	6.8	N/A	24.5
SPLIT WT= 331.7							CUM WT %	N/A	21.8	33.5	41.9	54.9	68.7	75.5	N/A	100.0
210	0.1	H	18.4	46.1	35.4	msG	WT	N/A	119.6	42.2	29.7	26.9	38.3	18.7	N/A	62.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	35.4	12.5	8.8	8.0	11.3	5.5	N/A	18.4
SPLIT WT= 337.6							CUM WT %	N/A	35.4	47.9	56.7	64.7	76.0	81.6	N/A	100.0
215	0.1	H	25.4	51.2	23.4	gmS	WT	N/A	79.1	43.9	34.3	32.4	41.5	21.2	N/A	86.1
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	23.4	13.0	10.1	9.6	12.3	6.3	N/A	25.4
SPLIT WT= 338.0							CUM WT %	N/A	23.4	36.3	46.5	56.0	68.3	74.6	N/A	100.0
220	0.1	H	29.1	54.7	16.2	gmS	WT	N/A	48.2	37.0	30.9	32.1	40.1	22.3	N/A	86.4
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	16.2	12.5	10.4	10.8	13.5	7.5	N/A	29.1
SPLIT WT= 296.9							CUM WT %	N/A	16.2	28.7	39.1	49.9	63.4	70.9	N/A	100.0
225	0.1	H	3.9	72.9	23.3	gS	WT	N/A	89.9	94.3	96.6	56.9	27.6	6.2	N/A	14.9
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	23.3	24.4	25.0	14.7	7.1	1.6	N/A	3.9
SPLIT WT= 386.2							CUM WT %	N/A	23.3	47.7	72.7	87.4	94.5	96.1	N/A	100.0

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DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
230	0.1	H	8.6	27.4	64.1	msG	WT	N/A	268.2	26.8	20.3	25.3	28.8	13.4	N/A	35.9
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	64.1	6.4	4.9	6.0	6.9	3.2	N/A	8.6
SPLIT WT= 418.8							CUM WT %	N/A	64.1	70.5	75.3	81.4	88.2	91.4	N/A	100.0
235	0.1	H	11.5	46.8	41.7	msG	WT	N/A	168.8	59.5	44.6	41.1	32.3	12.3	N/A	46.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	41.7	14.7	11.0	10.1	8.0	3.0	N/A	11.5
SPLIT WT= 405.3							CUM WT %	N/A	41.7	56.3	67.4	77.5	85.5	88.5	N/A	100.0
240	0.2	H	7.9	68.4	23.7	(m)gS	WT	N/A	139.1	64.4	101.4	122.0	75.2	38.7	N/A	46.2
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	23.7	11.0	17.3	20.8	12.8	6.6	N/A	7.9
SPLIT WT= 584.9							CUM WT %	N/A	23.7	34.7	51.9	72.7	85.5	92.1	N/A	100.0
245	0.3	H	9.0	73.2	17.9	(m)gS	WT	N/A	84.0	93.2	70.9	91.5	56.9	31.7	N/A	42.2
SORT= N/A MEDIAN= 1.00 MODE= 0.00 MEAN= N/A							WT %	N/A	17.9	19.8	15.1	19.5	12.1	6.7	N/A	9.0
SPLIT WT= 464.5							CUM WT %	N/A	17.9	37.7	52.7	72.2	84.3	91.0	N/A	100.0
250	0.2	H	7.4	77.4	15.2	gS	WT	N/A	98.8	110.9	93.6	146.2	101.1	51.3	N/A	46.2
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	15.2	17.1	14.4	22.5	15.6	7.9	N/A	7.4
SPLIT WT= 655.7							CUM WT %	N/A	15.2	32.3	46.7	69.2	84.7	92.6	N/A	100.0
254	0.3	H	6.9	76.5	16.5	gS	WT	N/A	91.4	93.2	81.9	130.7	76.5	40.6	N/A	38.4
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	16.5	16.9	14.8	23.7	13.8	7.4	N/A	7.0
SPLIT WT= 552.5							CUM WT %	N/A	16.5	33.4	48.2	71.9	85.7	93.1	N/A	100.0
261	0.3	H	7.5	83.9	8.6	(g)S	WT	N/A	49.2	94.2	82.4	154.2	100.8	46.2	N/A	42.8
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	8.6	16.5	14.5	27.1	17.7	8.1	N/A	7.5
SPLIT WT= 564.2							CUM WT %	N/A	8.6	25.2	39.6	66.7	84.4	92.5	N/A	100.0
266	0.2	H	6.0	86.4	7.6	(g)S	WT	N/A	46.2	105.8	106.5	169.5	101.5	44.1	N/A	36.6
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	7.6	17.3	17.5	27.8	16.6	7.2	N/A	6.0
SPLIT WT= 611.9							CUM WT %	N/A	7.6	24.9	42.4	70.1	86.8	94.0	N/A	100.0
270	N/A	H	23.7	67.1	9.2	(g)mS	WT	N/A	28.0	43.4	35.4	54.5	47.1	22.9	N/A	71.9
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	9.2	14.3	11.7	18.0	15.5	7.6	N/A	23.7
SPLIT WT= 303.2							CUM WT %	N/A	9.2	23.5	35.2	53.2	68.7	76.3	N/A	100.0
275	0.1	H	18.1	60.0	23.9	gmS	WT	N/A	87.8	51.9	42.0	57.7	47.0	22.2	N/A	59.1
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	23.9	14.1	11.4	15.7	12.8	6.0	N/A	16.1
SPLIT WT= 367.7							CUM WT %	N/A	23.9	38.0	49.4	65.1	77.9	83.9	N/A	100.0
280	0.1	H	22.0	57.7	20.3	gmS	WT	N/A	53.9	29.5	24.5	44.6	36.5	18.3	N/A	58.4
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	20.3	11.1	9.2	16.8	13.7	6.9	N/A	22.0
SPLIT WT= 265.7							CUM WT %	N/A	20.3	31.4	40.6	57.4	71.1	78.0	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
285	0.1	H	19.9	59.7	20.4	gmS	WT	N/A	67.6	41.2	29.0	61.8	45.0	21.2	N/A	66.0
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	20.4	12.4	8.7	18.6	13.6	6.4	N/A	19.9
SPLIT WT= 331.9							CUM WT %	N/A	20.4	32.8	41.5	60.2	73.7	80.1	N/A	100.0
290	0.4	H	23.6	66.8	9.6	(g)mS	WT	N/A	29.3	41.3	36.8	58.8	45.9	21.5	N/A	72.3
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	9.6	13.5	12.0	19.2	15.0	7.0	N/A	23.6
SPLIT WT= 305.9							CUM WT %	N/A	9.6	23.1	35.1	54.3	69.3	76.4	N/A	100.0
295	0.2	H	17.0	67.4	15.7	gmS	WT	N/A	48.2	29.4	21.3	77.7	60.7	18.3	N/A	52.2
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	15.7	9.6	6.9	25.2	19.7	6.0	N/A	17.0
SPLIT WT= 307.8							CUM WT %	N/A	15.7	25.2	32.1	57.4	77.1	83.0	N/A	100.0
300	0.2	H	19.8	58.7	21.5	gmS	WT	N/A	79.7	46.5	32.6	64.8	53.6	20.7	N/A	73.6
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	21.5	12.5	8.8	17.4	14.4	5.6	N/A	19.8
SPLIT WT= 371.6							CUM WT %	N/A	21.5	34.0	42.8	60.2	74.6	80.2	N/A	100.0
305	0.1	H	20.6	60.1	19.3	gmS	WT	N/A	66.8	48.4	41.7	56.7	42.4	18.4	N/A	71.1
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	19.3	14.0	12.1	16.4	12.3	5.3	N/A	20.6
SPLIT WT= 345.6							CUM WT %	N/A	19.3	33.3	45.4	61.8	74.1	79.4	N/A	100.0
310	0.2	H	22.7	65.5	11.8	gmS	WT	N/A	38.6	37.8	31.8	63.8	55.7	24.9	N/A	74.2
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	11.8	11.6	9.7	19.5	17.0	7.6	N/A	22.7
SPLIT WT= 326.5							CUM WT %	N/A	11.8	23.4	33.1	52.6	69.7	77.3	N/A	100.0
315	0.4	H	25.8	57.9	16.3	gmS	WT	N/A	54.2	55.3	35.1	42.4	38.8	21.2	N/A	85.9
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	16.3	16.6	10.5	12.7	11.7	6.4	N/A	25.8
SPLIT WT= 332.8							CUM WT %	N/A	16.3	32.9	43.4	56.2	67.8	74.2	N/A	100.0
320	0.7	H	24.5	61.3	14.2	gmS	WT	N/A	48.1	40.6	37.2	54.0	48.0	27.9	N/A	83.1
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	14.2	12.0	11.0	15.9	14.2	8.2	N/A	24.5
SPLIT WT= 338.9							CUM WT %	N/A	14.2	26.2	37.2	53.1	67.2	75.5	N/A	100.0
325	0.3	H	22.2	65.9	12.0	gmS	WT	N/A	40.8	48.1	37.6	62.1	51.8	24.8	N/A	75.5
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	12.0	14.1	11.0	18.2	15.2	7.3	N/A	22.2
SPLIT WT= 340.8							CUM WT %	N/A	12.0	26.1	37.1	55.4	70.6	77.9	N/A	100.0
330	0.3	H	25.7	67.6	6.7	(g)mS	WT	N/A	16.3	22.4	20.3	61.3	43.5	16.6	N/A	62.3
SORT= N/A MEDIAN= 3.00 MODE= 5.00 MEAN= N/A							WT %	N/A	6.7	9.2	8.4	25.3	17.9	6.8	N/A	25.7
SPLIT WT= 242.7							CUM WT %	N/A	6.7	16.0	24.3	49.6	67.5	74.3	N/A	100.0
335	0.6	H	24.0	65.4	10.6	gmS	WT	N/A	33.1	25.5	21.7	79.0	58.9	18.8	N/A	75.0
SORT= N/A MEDIAN= 2.00 MODE= 2.00 MEAN= N/A							WT %	N/A	10.6	8.2	7.0	25.3	18.9	6.0	N/A	24.0
SPLIT WT= 312.0							CUM WT %	N/A	10.6	18.8	25.7	51.1	69.9	76.0	N/A	100.0

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**** REPORT ON WELL 0299-W18-022 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
340	0.6	H	22.4	63.7	13.9	gmS	WT	N/A	48.5	32.4	25.0	85.2	59.1	20.7	N/A	78.2
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	13.9	9.3	7.2	24.4	16.9	5.9	N/A	22.4
SPLIT WT= 349.0							CUM WT %	N/A	13.9	23.2	30.3	54.7	71.7	77.6	N/A	100.0
345	0.5	H	22.6	59.9	17.5	gmS	WT	N/A	54.9	33.9	25.8	65.8	44.0	18.8	N/A	71.1
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	17.5	10.8	8.2	20.9	14.0	6.0	N/A	22.8
SPLIT WT= 314.4							CUM WT %	N/A	17.5	28.3	36.5	57.4	71.4	77.4	N/A	100.0
350	0.2	H	21.4	58.2	20.4	gmS	WT	N/A	66.4	38.0	29.1	65.9	38.9	17.9	N/A	69.9
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	20.4	11.7	8.9	20.2	11.9	5.5	N/A	21.4
SPLIT WT= 326.0							CUM WT %	N/A	20.4	32.0	40.9	61.1	73.1	78.6	N/A	100.0
355	0.2	H	18.1	60.4	21.5	gmS	WT	N/A	77.2	52.9	37.9	74.5	36.1	15.5	N/A	64.9
SORT= N/A	MEDIAN=		2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	21.5	14.7	10.6	20.8	10.1	4.3	N/A	18.1
SPLIT WT= 359.0							CUM WT %	N/A	21.5	36.2	46.8	67.6	77.6	81.9	N/A	100.0
360	0.2	H	22.1	69.6	8.3	(g)mS	WT	N/A	24.3	30.0	31.2	80.2	45.2	17.6	N/A	64.9
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	8.3	10.2	10.6	27.3	15.4	6.0	N/A	22.1
SPLIT WT= 293.4							CUM WT %	N/A	8.3	18.5	29.1	56.5	71.9	77.9	N/A	100.0
365	0.2	H	24.5	69.5	6.1	(g)mS	WT	N/A	16.9	37.6	34.4	64.9	38.4	17.9	N/A	68.0
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	6.1	13.5	12.4	23.3	13.8	6.4	N/A	24.5
SPLIT WT= 278.2							CUM WT %	N/A	6.1	19.6	32.0	55.3	69.1	75.6	N/A	100.0
370	0.3	H	24.2	70.6	5.2	(g)mS	WT	N/A	12.9	21.1	26.6	65.3	43.4	19.1	N/A	80.1
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	5.2	8.5	10.7	26.3	17.5	7.7	N/A	24.2
SPLIT WT= 248.5							CUM WT %	N/A	5.2	13.7	24.4	50.7	68.1	75.8	N/A	100.0
375	0.9	H	28.7	63.3	8.0	(g)mS	WT	N/A	19.6	23.0	23.7	54.7	36.1	17.4	N/A	70.4
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	8.0	9.4	9.7	22.3	14.7	7.1	N/A	28.8
SPLIT WT= 245.0							CUM WT %	N/A	8.0	17.4	27.1	49.4	64.2	71.3	N/A	100.0
380	0.6	H	26.0	65.4	8.6	(g)mS	WT	N/A	19.0	28.1	24.9	49.5	28.7	13.0	N/A	57.3
SORT= N/A	MEDIAN=		2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	8.6	12.7	11.3	22.5	13.0	5.9	N/A	26.0
SPLIT WT= 220.5							CUM WT %	N/A	8.6	21.4	32.7	55.1	68.1	74.0	N/A	100.0
385	0.6	H	25.6	67.9	6.5	(g)mS	WT	N/A	15.0	22.7	24.9	62.6	32.9	13.6	N/A	59.0
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	6.5	9.8	10.8	27.1	14.3	5.9	N/A	25.6
SPLIT WT= 230.6							CUM WT %	N/A	6.5	16.3	27.1	54.3	68.5	74.4	N/A	100.0
390	0.5	H	7.4	88.6	4.0	S	WT	N/A	19.2	72.6	101.0	145.3	71.3	32.6	N/A	35.4
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.0	15.2	21.2	30.4	14.9	6.8	N/A	7.4
SPLIT WT= 472.2							CUM WT %	N/A	4.0	19.2	40.4	70.8	85.8	92.6	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W18-022 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
396	0.4	H	9.1	85.7	5.1	(g)S	WT	N/A	21.0	63.9	79.4	106.4	67.8	33.3	N/A	37.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	5.1	15.6	19.4	26.0	16.6	8.1	N/A	9.1
SPLIT WT= 406.4							CUM WT %	N/A	5.1	20.8	40.2	66.2	82.7	90.9	N/A	100.0
401	0.2	H	5.7	89.6	4.7	S	WT	N/A	16.6	61.5	95.6	91.5	45.7	23.3	N/A	20.2
SORT=	N/A	MEDIAN=	2.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.7	17.4	27.0	25.8	12.9	6.6	N/A	5.7
SPLIT WT= 360.0							CUM WT %	N/A	4.7	22.0	49.0	74.8	87.7	94.3	N/A	100.0
406	0.4	H	11.7	84.4	3.9	(m)S	WT	N/A	16.6	54.4	62.2	99.7	88.0	54.1	N/A	49.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.9	12.8	14.6	23.5	20.7	12.7	N/A	11.7
SPLIT WT= 422.9							CUM WT %	N/A	3.9	16.7	31.4	54.8	75.6	88.3	N/A	100.0
411	0.2	H	6.3	89.6	4.1	S	WT	N/A	14.6	41.1	87.4	110.4	53.4	25.2	N/A	22.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	4.1	11.6	24.7	31.2	15.1	7.1	N/A	6.3
SPLIT WT= 351.8							CUM WT %	N/A	4.1	15.7	40.4	71.5	86.6	93.7	N/A	100.0
416	0.4	H	4.7	91.4	3.9	S	WT	N/A	17.4	58.2	115.2	145.9	60.2	28.8	N/A	21.1
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	3.9	13.0	25.8	32.7	13.5	6.5	N/A	4.7
SPLIT WT= 448.7							CUM WT %	N/A	3.9	16.9	42.7	75.4	88.8	95.3	N/A	100.0
420	0.8	H	22.5	65.8	11.8	gmS	WT	N/A	24.6	22.3	21.9	52.7	27.5	13.0	N/A	46.9
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	11.8	10.7	10.5	25.2	13.2	6.2	N/A	22.5
SPLIT WT= 208.8							CUM WT %	N/A	11.8	22.5	32.9	58.2	71.3	77.5	N/A	100.0
425	0.6	H	22.7	67.4	10.0	gmS	WT	N/A	20.8	21.5	26.7	53.6	26.2	12.8	N/A	47.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	10.0	10.3	12.8	25.7	12.5	6.1	N/A	22.7
SPLIT WT= 208.9							CUM WT %	N/A	10.0	20.2	33.0	58.7	71.2	77.3	N/A	100.0
430	0.6	H	24.2	65.9	9.9	(g)mS	WT	N/A	17.3	14.6	21.6	45.3	22.0	11.3	N/A	42.2
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	9.9	8.4	12.4	26.0	12.6	6.5	N/A	24.2
SPLIT WT= 174.2							CUM WT %	N/A	9.9	18.3	30.7	56.7	69.3	75.8	N/A	100.0
435	0.5	H	22.5	61.5	16.0	gmS	WT	N/A	38.3	32.4	30.8	46.5	24.8	13.1	N/A	54.0
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	16.0	13.5	12.8	19.4	10.3	5.5	N/A	22.5
SPLIT WT= 239.9							CUM WT %	N/A	16.0	29.5	42.3	61.7	72.0	77.5	N/A	100.0
440	0.4	H	26.2	68.1	5.7	(g)mS	WT	N/A	11.9	25.4	29.8	50.6	24.6	12.7	N/A	55.0
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	5.7	12.1	14.2	24.1	11.7	6.1	N/A	26.2
SPLIT WT= 210.0							CUM WT %	N/A	5.7	17.8	32.0	56.1	67.8	73.8	N/A	100.0
445	0.2	H	21.8	56.4	21.8	gmS	WT	N/A	58.3	28.4	33.4	49.3	26.3	13.7	N/A	58.5
SORT=	N/A	MEDIAN=	2.00	MODE=	5.00	MEAN= N/A	WT %	N/A	21.8	10.6	12.5	18.4	9.8	5.1	N/A	21.8
SPLIT WT= 267.9							CUM WT %	N/A	21.8	32.4	44.8	63.2	73.1	78.2	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W18-023 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.8	C	10.1	77.5	12.4	(m)gS	WT	N/A	75.1	199.3	82.1	41.1	93.9	54.7	N/A	61.4
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	12.4	32.8	13.5	6.8	15.5	9.0	N/A	10.1
SPLIT WT= 607.6							CUM WT %	N/A	12.4	45.2	58.7	65.4	80.9	89.9	N/A	100.0
10	1.2	C	4.8	85.8	9.4	(g)S	WT	N/A	65.5	265.9	219.6	46.2	25.6	42.0	N/A	33.4
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	9.4	38.1	31.5	6.6	3.7	6.0	N/A	4.8
SPLIT WT= 698.2							CUM WT %	N/A	9.4	47.5	78.9	85.5	89.2	95.2	N/A	100.0
15	0.8	C	3.1	88.1	8.8	(g)S	WT	N/A	63.4	279.7	260.3	48.4	11.2	32.5	N/A	22.0
SORT= N/A	MEDIAN=		1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	8.8	39.0	36.3	6.8	1.6	4.5	N/A	3.1
SPLIT WT= 717.5							CUM WT %	N/A	8.8	47.8	84.1	90.9	92.4	96.9	N/A	100.0
20	1.3	C	9.8	90.1	0.1	S	WT	N/A	0.9	7.5	65.7	241.2	181.2	69.1	N/A	61.3
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.1	1.2	10.5	38.5	28.9	11.0	N/A	9.8
SPLIT WT= 627.0							CUM WT %	N/A	0.1	1.3	11.8	50.3	79.2	90.2	N/A	100.0
25	1.6	C	27.2	72.7	0.1	mS	WT	N/A	0.7	2.8	22.4	117.4	230.5	75.9	N/A	167.8
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.1	0.5	3.6	19.0	37.3	12.3	N/A	27.2
SPLIT WT= 617.4							CUM WT %	N/A	0.1	0.6	4.2	23.2	60.5	72.8	N/A	100.0
30	1.3	C	25.6	74.4	0.0	mS	WT	N/A	0.3	4.1	41.0	175.0	211.8	82.9	N/A	177.1
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.6	5.9	25.3	30.6	12.0	N/A	25.6
SPLIT WT= 692.3							CUM WT %	N/A	0.0	0.6	6.6	31.8	62.4	74.4	N/A	100.0
35	0.7	C	2.6	94.1	3.3	S	WT	N/A	21.7	154.3	288.0	111.4	47.8	15.8	N/A	17.0
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.3	23.5	43.9	17.0	7.3	2.4	N/A	2.6
SPLIT WT= 655.9							CUM WT %	N/A	3.3	26.8	70.7	87.7	95.0	97.4	N/A	100.0
40	1.5	C	11.2	88.4	0.4	(m)S	WT	N/A	2.5	23.9	63.4	29.9	192.1	292.1	N/A	76.5
SORT= N/A	MEDIAN=		4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.4	3.5	9.3	4.4	28.2	42.9	N/A	11.2
SPLIT WT= 680.4							CUM WT %	N/A	0.4	3.9	13.2	17.6	45.8	88.8	N/A	100.0
45	0.8	C	2.5	92.7	4.9	S	WT	N/A	36.3	263.7	332.7	62.7	21.5	11.6	N/A	18.4
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	4.9	35.3	44.5	8.4	2.9	1.6	N/A	2.5
SPLIT WT= 747.0							CUM WT %	N/A	4.9	40.2	84.7	93.1	96.0	97.5	N/A	100.0
50	1.5	C	10.7	89.3	0.0	(m)S	WT	N/A	0.0	0.8	35.9	119.1	180.0	235.1	N/A	68.3
SORT= N/A	MEDIAN=		3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.0	0.1	5.6	18.6	28.2	36.8	N/A	10.7
SPLIT WT= 639.1							CUM WT %	N/A	0.0	0.1	5.8	24.4	52.5	89.3	N/A	100.0
55	1.1	C	2.1	69.8	28.1	gS	WT	N/A	221.2	147.4	216.3	138.3	36.0	12.5	N/A	16.5
SORT= N/A	MEDIAN=		1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.1	18.7	27.4	17.6	4.6	1.6	N/A	2.1
SPLIT WT= 788.3							CUM WT %	N/A	28.1	46.8	74.2	91.8	96.3	97.9	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
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**** REPORT ON WELL 0299-W18-023 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
60	0.6	C	1.8	85.4	12.8	gS	WT	N/A	85.5	221.2	256.3	63.2	19.5	8.4	N/A	11.7
SORT= N/A MEDIAN= 1.00 MODE= 1.00 MEAN= N/A							WT %	N/A	12.8	33.2	38.5	9.5	2.9	1.3	N/A	1.8
SPLIT WT= 665.8							CUM WT %	N/A	12.8	46.1	84.6	94.1	97.0	98.2	N/A	100.0
65	1.2	H	11.3	31.9	56.8	msG	WT	N/A	264.9	44.4	38.4	27.7	22.0	16.4	N/A	52.7
SORT= N/A MEDIAN= -1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	56.8	9.5	8.2	5.9	4.7	3.5	N/A	11.3
SPLIT WT= 466.5							CUM WT %	N/A	56.8	66.3	74.5	80.5	85.2	88.7	N/A	100.0
70	0.9	H	18.4	39.1	42.5	msG	WT	N/A	183.8	51.8	41.3	31.2	24.6	20.2	N/A	79.6
SORT= N/A MEDIAN= 0.00 MODE= -1.00 MEAN= N/A							WT %	N/A	42.5	12.0	9.6	7.2	5.7	4.7	N/A	18.4
SPLIT WT= 432.3							CUM WT %	N/A	42.5	54.5	64.0	71.2	76.9	81.6	N/A	100.0
75	0.9	H	24.0	46.3	29.7	gmS	WT	N/A	126.2	63.7	52.5	35.5	25.2	19.7	N/A	102.0
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	29.7	15.0	12.4	8.4	5.9	4.6	N/A	24.0
SPLIT WT= 424.7							CUM WT %	N/A	29.7	44.7	57.1	65.4	71.4	76.0	N/A	100.0
80	1.1	H	23.1	42.3	34.6	msG	WT	N/A	120.2	48.2	35.9	25.4	20.3	16.8	N/A	80.1
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.7	13.9	10.4	7.3	5.9	4.8	N/A	23.1
SPLIT WT= 346.8							CUM WT %	N/A	34.7	48.5	58.9	66.2	72.1	76.9	N/A	100.0
85	0.8	H	20.0	79.7	0.3	mS	WT	N/A	1.8	5.6	17.7	178.8	132.7	117.3	N/A	113.5
SORT= N/A MEDIAN= 3.00 MODE= 2.00 MEAN= N/A							WT %	N/A	0.3	1.0	3.1	31.5	23.4	20.7	N/A	20.0
SPLIT WT= 567.4							CUM WT %	N/A	0.3	1.3	4.4	35.9	59.3	80.0	N/A	100.0
90	0.9	H	25.0	43.3	31.7	msG	WT	N/A	144.4	65.2	48.5	33.4	26.2	24.0	N/A	114.2
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	31.7	14.3	10.6	7.3	5.8	5.3	N/A	25.1
SPLIT WT= 455.9							CUM WT %	N/A	31.7	46.0	56.6	63.9	69.7	75.0	N/A	100.0
95	1.1	H	19.7	46.0	34.3	msG	WT	N/A	146.0	52.0	51.5	44.2	27.4	20.4	N/A	83.7
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	34.3	12.2	12.1	10.4	6.4	4.8	N/A	19.7
SPLIT WT= 425.3							CUM WT %	N/A	34.3	46.6	58.7	69.1	75.5	80.3	N/A	100.0
100	1.5	H	18.6	53.0	28.4	gmS	WT	N/A	120.3	39.5	48.4	54.7	42.5	39.1	N/A	78.8
SORT= N/A MEDIAN= 2.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.4	9.3	11.4	12.9	10.0	9.2	N/A	18.6
SPLIT WT= 423.2							CUM WT %	N/A	28.4	37.8	49.2	62.1	72.1	81.4	N/A	100.0
105	1.6	H	19.8	60.4	19.8	gmS	WT	N/A	83.1	35.1	52.0	65.3	54.5	47.1	N/A	83.2
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	19.8	8.4	12.4	15.5	13.0	11.2	N/A	19.8
SPLIT WT= 420.2							CUM WT %	N/A	19.8	28.1	40.5	56.0	69.0	80.2	N/A	100.0
110	1.6	H	25.9	65.4	8.6	(g)mS	WT	N/A	33.0	16.3	39.4	63.2	62.4	69.4	N/A	99.4
SORT= N/A MEDIAN= 3.00 MODE= 5.00 MEAN= N/A							WT %	N/A	8.6	4.3	10.3	16.5	16.3	18.1	N/A	26.0
SPLIT WT= 383.0							CUM WT %	N/A	8.6	12.9	23.1	39.6	55.9	74.1	N/A	100.0

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**** REPORT ON WELL 0299-W18-023 ****

02/02/89

DEPTH	%CAC03	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
115	1.6	H	24.0	69.9	6.0	(g)mS	WT	N/A	20.2	16.1	40.7	63.6	53.7	60.5	N/A	80.6
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	6.0	4.8	12.1	19.0	16.0	18.0	N/A	24.0
SPLIT WT= 335.3							CUM WT %	N/A	6.0	10.8	23.0	41.9	57.9	76.0	N/A	100.0
120	1.6	H	25.9	70.8	3.3	mS	WT	N/A	11.4	12.0	34.4	53.8	60.7	83.5	N/A	89.6
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	3.3	3.5	10.0	15.6	17.6	24.2	N/A	25.9
SPLIT WT= 345.3							CUM WT %	N/A	3.3	6.8	16.7	32.3	49.9	74.1	N/A	100.0
125	1.5	H	28.2	70.2	1.7	mS	WT	N/A	5.9	8.7	25.4	45.5	72.8	94.4	N/A	99.1
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.7	2.5	7.2	12.9	20.7	26.8	N/A	28.2
SPLIT WT= 351.7							CUM WT %	N/A	1.7	4.2	11.4	24.3	45.0	71.8	N/A	100.0
130	1.3	H	19.9	78.9	1.3	mS	WT	N/A	3.7	10.0	47.9	43.9	60.2	70.7	N/A	58.7
SORT= N/A	MEDIAN=		3.00	MODE=	4.00	MEAN= N/A	WT %	N/A	1.3	3.4	16.2	14.9	20.4	24.0	N/A	19.9
SPLIT WT= 295.1							CUM WT %	N/A	1.3	4.6	20.9	35.8	56.2	80.1	N/A	100.0
135	1.7	H	24.1	74.9	1.0	mS	WT	N/A	3.7	7.4	35.3	60.3	78.9	85.1	N/A	85.9
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.0	2.1	9.9	16.9	22.1	23.9	N/A	24.1
SPLIT WT= 356.6							CUM WT %	N/A	1.0	3.1	13.0	29.9	52.1	75.9	N/A	100.0
140	1.6	H	24.5	74.6	1.0	mS	WT	N/A	3.5	7.5	36.4	62.0	80.8	88.1	N/A	90.1
SORT= N/A	MEDIAN=		3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.0	2.0	9.9	16.8	21.9	23.9	N/A	24.5
SPLIT WT= 368.8							CUM WT %	N/A	1.0	3.0	12.9	29.7	51.6	75.5	N/A	100.0
145	1.6	H	28.1	71.0	0.9	mS	WT	N/A	2.8	4.8	22.6	46.3	64.4	94.3	N/A	92.0
SORT= N/A	MEDIAN=		4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.9	1.5	6.9	14.2	19.7	28.8	N/A	28.1
SPLIT WT= 327.1							CUM WT %	N/A	0.9	2.3	9.2	23.4	43.1	71.9	N/A	100.0
150	1.8	H	48.3	50.9	0.8	mS	WT	N/A	2.4	2.3	9.8	21.9	37.0	80.7	N/A	144.1
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.8	0.8	3.3	7.3	12.4	27.1	N/A	48.3
SPLIT WT= 298.1							CUM WT %	N/A	0.8	1.6	4.9	12.2	24.6	51.7	N/A	100.0
155	2.4	H	57.5	41.6	0.8	sM	WT	N/A	2.4	1.9	6.8	15.2	27.1	71.8	N/A	169.7
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	0.8	0.6	2.3	5.2	9.2	24.4	N/A	57.5
SPLIT WT= 294.9							CUM WT %	N/A	0.8	1.5	3.8	8.9	18.1	42.5	N/A	100.0
160	2.7	H	74.0	24.8	1.2	sM	WT	N/A	3.6	1.4	3.6	7.7	14.5	46.6	N/A	219.9
SORT= N/A	MEDIAN=		5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	1.2	0.5	1.2	2.6	4.9	15.7	N/A	74.0
SPLIT WT= 297.6							CUM WT %	N/A	1.2	1.7	2.9	5.5	10.4	26.0	N/A	100.0
165	16.1	H	46.6	44.2	9.3	(g)sM	WT	N/A	28.3	13.8	13.1	28.8	35.2	44.0	N/A	142.2
SORT= N/A	MEDIAN=		4.00	MODE=	5.00	MEAN= N/A	WT %	N/A	9.3	4.5	4.3	9.4	11.5	14.4	N/A	46.6
SPLIT WT= 305.3							CUM WT %	N/A	9.3	13.8	18.1	27.5	39.0	53.5	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-023 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
170	8.4	H	27.8	68.7	3.5	mS	WT	N/A	10.0	6.5	8.9	71.1	80.6	30.1	N/A	79.7
SORT= N/A MEDIAN= 3.00 MODE= 3.00 MEAN= N/A							WT %	N/A	3.5	2.3	3.1	24.8	28.1	10.5	N/A	27.8
SPLIT WT= 286.9							CUM WT %	N/A	3.5	5.8	8.9	33.6	61.7	72.2	N/A	100.0
175	7.0	H	31.2	66.7	2.1	mS	WT	N/A	7.6	4.4	7.6	66.3	119.9	42.8	N/A	112.7
SORT= N/A MEDIAN= 3.00 MODE= 3 00 MEAN= N/A							WT %	N/A	2.1	1.2	2.1	18.4	33.2	11.9	N/A	31.2
SPLIT WT= 361.3							CUM WT %	N/A	2.1	3.3	5.4	23.8	57.0	68.8	N/A	100.0
180	3.5	H	17.8	79.1	3.1	(m)S	WT	N/A	12.0	45.3	89.5	66.2	79.0	29.5	N/A	69.7
SORT= N/A MEDIAN= 2.00 MODE= 1.00 MEAN= N/A							WT %	N/A	3.1	11.6	22.9	16.9	20.2	7.5	N/A	17.8
SPLIT WT= 391.1							CUM WT %	N/A	3.1	14.7	37.5	54.5	74.6	82.2	N/A	100.0
185	1.0	H	18.4	55.5	26.0	gmS	WT	N/A	119.0	54.3	79.6	49.6	43.9	26.3	N/A	84.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	26.0	11.9	17.4	10.9	9.6	5.8	N/A	18.5
SPLIT WT= 457.0							CUM WT %	N/A	26.0	37.9	55.3	66.2	75.8	81.6	N/A	100.0
190	0.4	H	21.6	56.8	21.6	gmS	WT	N/A	80.8	49.3	61.4	42.5	34.4	24.7	N/A	80.6
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	21.6	13.2	16.4	11.4	9.2	6.6	N/A	21.6
SPLIT WT= 373.6							CUM WT %	N/A	21.6	34.8	51.2	62.6	71.8	78.4	N/A	100.0
195	0.2	H	24.5	56.7	18.8	gmS	WT	N/A	77.7	64.1	70.0	44.4	32.9	23.7	N/A	101.5
SORT= N/A MEDIAN= 1.00 MODE= 5.00 MEAN= N/A							WT %	N/A	18.8	15.5	16.9	10.7	7.9	5.7	N/A	24.5
SPLIT WT= 414.3							CUM WT %	N/A	18.8	34.2	51.1	61.8	69.8	75.5	N/A	100.0
200	0.1	H	14.8	56.3	28.8	gmS	WT	N/A	111.5	41.7	40.4	61.3	55.3	19.2	N/A	57.3
SORT= N/A MEDIAN= 1.00 MODE= -1.00 MEAN= N/A							WT %	N/A	28.8	10.8	10.5	15.9	14.3	5.0	N/A	14.8
SPLIT WT= 386.7							CUM WT %	N/A	28.8	39.6	50.1	65.9	80.2	85.2	N/A	100.0
205	0.1	H	21.6	58.3	20.1	gmS	WT	N/A	87.3	40.4	38.8	62.8	75.2	35.7	N/A	83.6
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	20.1	9.3	8.9	14.5	17.3	8.2	N/A	21.6
SPLIT WT= 433.9							CUM WT %	N/A	20.1	29.4	38.4	52.9	70.2	78.4	N/A	100.0
210	0.1	H	25.2	57.5	17.3	gmS	WT	N/A	71.0	41.8	41.8	56.4	60.4	35.0	N/A	103.0
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	17.3	10.2	10.2	13.8	14.8	8.6	N/A	25.2
SPLIT WT= 409.4							CUM WT %	N/A	17.3	27.6	37.8	51.5	66.3	74.8	N/A	100.0
215	0.2	H	26.0	56.7	17.3	gmS	WT	N/A	64.5	48.0	40.2	47.4	47.5	28.7	N/A	97.3
SORT= N/A MEDIAN= 2.00 MODE= 5.00 MEAN= N/A							WT %	N/A	17.3	12.9	10.8	12.7	12.7	7.7	N/A	26.0
SPLIT WT= 373.5							CUM WT %	N/A	17.3	30.1	40.9	53.6	66.3	74.0	N/A	100.0
220	0.2	H	30.8	55.7	13.5	gmS	WT	N/A	47.9	47.3	39.7	41.9	40.4	28.1	N/A	109.3
SORT= N/A MEDIAN= 3.00 MODE= 5.00 MEAN= N/A							WT %	N/A	13.5	13.3	11.2	11.8	11.4	7.9	N/A	30.8
SPLIT WT= 354.6							CUM WT %	N/A	13 5	26.9	38.1	49.9	61.3	69.2	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-023 ****

02/02/89

DEPTH	%CAC03	DW	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
225	0.1	H	21.9	43.3	34.7	msG	WT	N/A	130.8	43.3	32.4	33.2	32.0	22.4	N/A	82.7
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	34.7	11.5	8.6	8.8	8.5	5.9	N/A	22.0
SPLIT WT= 376.8							CUM WT %	N/A	34.7	46.2	54.8	63.6	72.1	78.0	N/A	100.0
230	0.1	H	27.3	58.3	14.3	gmS	WT	N/A	41.7	35.4	31.7	35.1	40.8	26.6	N/A	79.4
SORT=	N/A	MEDIAN=	3.00	MODE=	5.00	MEAN= N/A	WT %	N/A	14.3	12.2	10.9	12.1	14.0	9.2	N/A	27.3
SPLIT WT= 290.8							CUM WT %	N/A	14.3	26.5	37.4	49.5	63.5	72.7	N/A	100.0
235	0.1	H	19.2	52.8	28.0	gmS	WT	N/A	81.3	45.2	31.5	29.5	28.4	18.6	N/A	55.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	28.0	15.6	10.9	10.2	9.8	6.4	N/A	19.3
SPLIT WT= 290.2							CUM WT %	N/A	28.0	43.6	54.4	64.6	74.4	80.8	N/A	100.0
240	0.1	H	13.6	54.0	32.5	msG	WT	N/A	106.3	60.7	42.8	30.0	27.3	15.9	N/A	44.4
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	32.5	18.5	13.1	9.2	8.3	4.9	N/A	13.6
SPLIT WT= 327.4							CUM WT %	N/A	32.5	51.0	64.1	73.2	81.6	86.4	N/A	100.0
245	0.0	H	5.6	35.8	58.6	msG	WT	N/A	216.5	68.3	29.6	12.9	12.9	8.8	N/A	20.7
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	58.6	18.5	8.0	3.5	3.5	2.4	N/A	5.6
SPLIT WT= 369.7							CUM WT %	N/A	58.6	77.0	85.0	88.5	92.0	94.4	N/A	100.0
250	0.1	H	18.1	54.7	27.2	gmS	WT	N/A	75.0	35.8	29.1	25.4	38.4	22.3	N/A	50.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	27.2	13.0	10.5	9.2	13.9	8.1	N/A	18.2
SPLIT WT= 276.0							CUM WT %	N/A	27.2	40.1	50.7	59.9	73.8	81.9	N/A	100.0
255	0.5	H	4.9	86.9	8.2	(g)S	WT	N/A	26.1	82.7	88.6	65.3	29.5	9.2	N/A	15.5
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	8.2	26.1	28.0	20.6	9.3	2.9	N/A	4.9
SPLIT WT= 316.8							CUM WT %	N/A	8.2	34.3	62.3	82.9	92.2	95.1	N/A	100.0

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ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-024 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
5	1.6	C	7.8	92.0	0.2	S	WT	N/A	0.8	3.4	11.1	37.2	128.1	282.1	N/A	39.2
SORT=	N/A	MEDIAN=	4.00	MODE=	4.00	MEAN= N/A	WT %	N/A	0.2	0.7	2.2	7.4	25.5	56.2	N/A	7.8
SPLIT WT= 501.9							CUM WT %	N/A	0.2	0.8	3.1	10.5	36.0	92.2	N/A	100.0
10	1.6	C	14.6	84.3	1.0	(m)S	WT	N/A	4.9	6.7	14.5	53.4	175.3	144.8	N/A	68.5
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	1.1	1.4	3.1	11.4	37.5	30.9	N/A	14.6
SPLIT WT= 468.0							CUM WT %	N/A	1.1	2.5	5.6	17.0	54.4	85.4	N/A	100.0
15	2.2	C	11.5	79.1	9.4	(gm)S	WT	N/A	48.7	83.7	49.0	87.5	130.8	59.7	N/A	59.6
SORT=	N/A	MEDIAN=	2.00	MODE=	3.00	MEAN= N/A	WT %	N/A	9.4	16.1	9.4	16.9	25.2	11.5	N/A	11.5
SPLIT WT= 518.9							CUM WT %	N/A	9.4	25.5	35.0	51.8	77.0	88.5	N/A	100.0
17	1.2	C	2.2	75.1	22.8	gS	WT	N/A	155.1	293.2	144.6	39.6	24.5	9.7	N/A	14.7
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	22.8	43.0	21.2	5.8	3.6	1.4	N/A	2.2
SPLIT WT= 681.5							CUM WT %	N/A	22.8	65.8	87.0	92.8	96.4	97.8	N/A	100.0
20	0.4	C	1.7	95.6	2.7	S	WT	N/A	19.1	206.1	322.7	104.7	27.3	8.5	N/A	11.6
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	2.7	29.4	46.1	15.0	3.9	1.2	N/A	1.7
SPLIT WT= 700.0							CUM WT %	N/A	2.7	32.2	78.3	93.2	97.1	98.3	N/A	100.0
22	N/A	C	6.2	92.7	1.1	S	WT	N/A	7.3	156.7	128.5	159.2	128.7	41.8	N/A	41.3
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	1.1	23.6	19.4	24.0	19.4	6.3	N/A	6.2
SPLIT WT= 663.5							CUM WT %	N/A	1.1	24.7	44.1	68.1	87.5	93.8	N/A	100.0
25	0.4	C	0.6	88.8	10.6	gS	WT	N/A	80.5	321.4	284.4	49.6	12.4	4.8	N/A	4.6
SORT=	N/A	MEDIAN=	0.00	MODE=	0.00	MEAN= N/A	WT %	N/A	10.6	42.4	37.5	6.6	1.6	0.6	N/A	0.6
SPLIT WT= 757.8							CUM WT %	N/A	10.6	53.0	90.6	97.1	98.8	99.4	N/A	100.0
30	0.5	C	1.6	82.9	15.5	gS	WT	N/A	114.0	253.2	257.3	69.0	20.8	8.0	N/A	11.9
SORT=	N/A	MEDIAN=	0.00	MODE=	1.00	MEAN= N/A	WT %	N/A	15.5	34.5	35.0	9.4	2.8	1.1	N/A	1.6
SPLIT WT= 734.2							CUM WT %	N/A	15.5	50.0	85.1	94.5	97.3	98.4	N/A	100.0
31	0.4	C	1.7	83.0	15.3	gS	WT	N/A	104.6	221.2	244.2	70.9	21.4	9.0	N/A	11.8
SORT=	N/A	MEDIAN=	1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	15.3	32.4	35.8	10.4	3.1	1.3	N/A	1.7
SPLIT WT= 682.5							CUM WT %	N/A	15.3	47.7	83.4	93.8	97.0	98.3	N/A	100.0
35	0.8	C	6.4	93.6	0.0	S	WT	N/A	0.0	3.7	145.7	205.3	99.5	52.3	N/A	34.8
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	0.7	26.9	37.9	18.4	9.7	N/A	6.4
SPLIT WT= 541.2							CUM WT %	N/A	0.0	0.7	27.6	65.5	83.9	93.6	N/A	100.0
38	0.6	C	1.2	57.0	41.8	sG	WT	N/A	329.9	163.7	200.1	60.6	19.1	6.7	N/A	9.8
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	41.8	20.7	25.3	7.7	2.4	0.9	N/A	1.2
SPLIT WT= 789.9							CUM WT %	N/A	41.8	62.5	87.8	95.5	97.9	98.8	N/A	100.0

ROCKWELL HANFORD OPERATIONS SIEVE ANALYSIS
ROCKSAN REPORT

**** REPORT ON WELL 0299-W18-024 ****

02/02/89

DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
40	0.8	C	2.1	41.3	56.6	sG	WT	N/A	471.8	116.4	144.9	50.9	20.8	10.9	N/A	17.9
SORT= N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	56.6	14.0	17.4	6.1	2.5	1.3	N/A	2.2
SPLIT WT= 833.6							CUM WT %	N/A	56.6	70.6	87.9	94.1	96.6	97.9	N/A	100.0
45	0.9	H	12.3	79.0	8.6	(gm)S	WT	N/A	63.9	47.7	70.2	113.0	241.2	112.5	N/A	91.3
SORT= N/A	MEDIAN=	3.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	8.6	6.5	9.5	15.3	32.6	15.2	N/A	12.3
SPLIT WT= 734.6							CUM WT %	N/A	8.6	15.1	24.6	39.9	72.5	87.7	N/A	100.0
50	1.5	H	8.7	71.1	20.2	(m)gS	WT	N/A	141.8	34.6	74.6	126.9	188.0	74.3	N/A	60.8
SORT= N/A	MEDIAN=	2.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	20.2	4.9	10.6	18.1	26.8	10.6	N/A	8.7
SPLIT WT= 700.7							CUM WT %	N/A	20.2	25.2	35.8	53.9	80.7	91.3	N/A	100.0
55	0.8	H	9.9	57.9	32.2	msG	WT	N/A	232.8	77.6	82.2	87.4	111.3	59.9	N/A	71.9
SORT= N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	32.2	10.7	11.4	12.1	15.4	8.3	N/A	9.9
SPLIT WT= 722.5							CUM WT %	N/A	32.2	42.9	54.3	66.4	81.8	90.1	N/A	100.0
60	1.0	H	4.0	35.2	60.8	msG	WT	N/A	453.1	38.0	29.6	62.3	92.4	40.1	N/A	30.2
SORT= N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN=	N/A	WT %	N/A	60.8	5.1	4.0	8.4	12.4	5.4	N/A	4.1
SPLIT WT= 744.7							CUM WT %	N/A	60.8	65.9	69.8	78.2	90.6	96.0	N/A	100.0
65	1.1	H	5.2	88.3	6.5	(g)S	WT	N/A	48.8	46.0	134.0	201.7	198.6	83.8	N/A	39.2
SORT= N/A	MEDIAN=	2.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	6.5	6.1	17.8	26.8	26.4	11.1	N/A	5.2
SPLIT WT= 751.6							CUM WT %	N/A	6.5	12.6	30.4	57.3	83.7	94.8	N/A	100.0
70	1.5	H	6.6	89.9	3.6	S	WT	N/A	25.0	25.8	97.0	212.4	194.7	95.3	N/A	45.6
SORT= N/A	MEDIAN=	2.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	3.6	3.7	13.9	30.5	28.0	13.7	N/A	6.6
SPLIT WT= 695.6							CUM WT %	N/A	3.6	7.3	21.2	51.8	79.8	93.5	N/A	100.0
75	1.5	H	13.5	85.1	1.5	(m)S	WT	N/A	7.5	6.9	32.4	96.3	163.0	130.0	N/A	67.8
SORT= N/A	MEDIAN=	3.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	1.5	1.4	6.4	19.1	32.4	25.8	N/A	13.5
SPLIT WT= 503.7							CUM WT %	N/A	1.5	2.9	9.3	28.4	60.8	86.6	N/A	100.0
80	2.0	H	20.7	79.2	0.2	mS	WT	N/A	0.8	2.1	7.1	24.4	136.8	244.2	N/A	108.3
SORT= N/A	MEDIAN=	4.00	MODE=	4.00	MEAN=	N/A	WT %	N/A	0.2	0.4	1.4	4.7	26.1	46.6	N/A	20.7
SPLIT WT= 524.3							CUM WT %	N/A	0.2	0.6	1.9	6.6	32.7	79.3	N/A	100.0
85	1.5	H	12.2	87.4	0.3	(m)S	WT	N/A	1.7	6.0	44.7	131.4	124.7	129.7	N/A	61.0
SORT= N/A	MEDIAN=	3.00	MODE=	2.00	MEAN=	N/A	WT %	N/A	0.3	1.2	9.0	26.3	25.0	26.0	N/A	12.2
SPLIT WT= 498.8							CUM WT %	N/A	0.3	1.5	10.5	36.8	61.8	87.8	N/A	100.0
90	1.4	H	9.4	90.4	0.2	S	WT	N/A	0.9	0.5	18.1	116.9	212.2	125.6	N/A	49.3
SORT= N/A	MEDIAN=	3.00	MODE=	3.00	MEAN=	N/A	WT %	N/A	0.2	0.1	3.5	22.3	40.5	24.0	N/A	9.4
SPLIT WT= 523.6							CUM WT %	N/A	0.2	0.3	3.7	26.1	66.6	90.6	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
95	1.7	H	12.2	87.6	0.2	(m)S	WT	N/A	1.3	5.6	56.7	150.3	142.9	137.5	N/A	68.7
SORT= N/A	MEDIAN=		3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.2	1.0	10.1	26.7	25.4	24.4	N/A	12.2
SPLIT WT= 563.0							CUM WT %	N/A	0.2	1.2	11.3	38.0	63.4	87.8	N/A	100.0
100	0.9	H	6.3	93.6	0.0	S	WT	N/A	0.1	2.7	21.0	140.3	299.4	60.2	N/A	35.5
SORT= N/A	MEDIAN=		3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	0.0	0.5	3.8	25.1	53.5	10.8	N/A	6.4
SPLIT WT= 559.2							CUM WT %	N/A	0.0	0.5	4.3	29.4	82.9	93.7	N/A	100.0
105	1.2	H	8.1	91.7	0.1	S	WT	N/A	0.8	1.6	51.9	244.8	172.5	78.4	N/A	48.8
SORT= N/A	MEDIAN=		3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.1	0.3	8.7	40.9	28.8	13.1	N/A	8.2
SPLIT WT= 598.8							CUM WT %	N/A	0.1	0.4	9.1	50.0	78.8	91.9	N/A	100.0
106	N/A	H	7.2	92.8	0.0	S	WT	N/A	0.1	2.3	56.0	245.2	215.6	52.8	N/A	44.4
SORT= N/A	MEDIAN=		3.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.0	0.4	9.1	39.8	35.0	8.6	N/A	7.2
SPLIT WT= 616.4							CUM WT %	N/A	0.0	0.4	9.5	49.3	84.2	92.8	N/A	100.0
110	1.5	H	8.0	91.3	0.7	S	WT	N/A	3.9	15.1	110.5	179.2	120.5	119.3	N/A	47.7
SORT= N/A	MEDIAN=		2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	0.7	2.5	18.5	30.1	20.2	20.0	N/A	8.0
SPLIT WT= 596.3							CUM WT %	N/A	0.7	3.2	21.7	51.8	72.0	92.0	N/A	100.0
112	1.2	H	3.4	52.1	44.5	sG	WT	N/A	315.7	140.8	117.8	55.8	34.8	20.1	N/A	24.4
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	44.5	19.9	16.6	7.9	4.9	2.8	N/A	3.4
SPLIT WT= 709.9							CUM WT %	N/A	44.5	64.4	81.0	88.8	93.7	96.6	N/A	100.0
113	N/A	H	2.9	47.2	49.9	sG	WT	N/A	427.9	182.1	134.2	50.6	24.0	13.4	N/A	24.8
SORT= N/A	MEDIAN=		0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.9	21.3	15.7	5.9	2.8	1.6	N/A	2.9
SPLIT WT= 857.0							CUM WT %	N/A	49.9	71.2	86.8	92.7	95.5	97.1	N/A	100.0
115	1.5	H	4.4	83.3	12.3	gS	WT	N/A	77.6	51.8	229.3	178.3	45.6	20.5	N/A	27.5
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	12.3	8.2	36.4	28.3	7.2	3.3	N/A	4.4
SPLIT WT= 630.6							CUM WT %	N/A	12.3	20.5	56.9	85.2	92.4	95.6	N/A	100.0
116	1.5	H	3.2	38.4	58.5	sG	WT	N/A	467.9	121.2	92.1	42.0	30.6	21.1	N/A	25.6
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	58.5	15.1	11.5	5.3	3.8	2.6	N/A	3.2
SPLIT WT= 800.2							CUM WT %	N/A	58.5	73.6	85.1	90.4	94.2	96.8	N/A	100.0
120	1.1	H	7.4	88.7	3.9	S	WT	N/A	23.3	70.1	219.4	163.6	51.9	26.9	N/A	44.2
SORT= N/A	MEDIAN=		1.00	MODE=	1.00	MEAN= N/A	WT %	N/A	3.9	11.7	36.6	27.3	8.7	4.5	N/A	7.4
SPLIT WT= 599.5							CUM WT %	N/A	3.9	15.6	52.2	79.5	88.1	92.6	N/A	100.0
125	1.3	H	16.2	26.7	57.1	msG	WT	N/A	256.1	41.1	27.7	19.5	16.9	14.8	N/A	72.5
SORT= N/A	MEDIAN=		-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	57.1	9.2	6.2	4.4	3.8	3.3	N/A	16.2
SPLIT WT= 448.5							CUM WT %	N/A	57.1	66.3	72.4	76.8	80.5	83.8	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
130	1.1	H	18.0	33.1	49.0	msG	WT	N/A	226.6	54.3	36.9	25.2	20.2	16.4	N/A	83.1
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	49.0	11.7	8.0	5.5	4.4	3.5	N/A	18.0
SPLIT WT= 462.6							CUM WT %	N/A	49.0	60.7	68.7	74.1	78.5	82.0	N/A	100.0
135	2.4	H	73.0	22.6	4.4	sM	WT	N/A	13.9	10.0	7.0	5.3	10.2	39.2	N/A	231.0
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	4.4	3.2	2.2	1.7	3.2	12.4	N/A	73.0
SPLIT WT= 316.5							CUM WT %	N/A	4.4	7.6	9.8	11.4	14.7	27.0	N/A	100.0
140	2.6	H	83.9	13.8	2.3	M	WT	N/A	6.0	3.0	1.7	1.4	3.8	26.2	N/A	219.6
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	2.3	1.2	0.7	0.5	1.5	10.0	N/A	83.9
SPLIT WT= 261.7							CUM WT %	N/A	2.3	3.4	4.1	4.6	6.1	16.1	N/A	100.0
145	14.6	H	60.5	31.9	7.5	(g)sM	WT	N/A	26.9	13.9	11.4	12.6	25.7	50.7	N/A	216.6
SORT=	N/A	MEDIAN=	5.00	MODE=	5.00	MEAN= N/A	WT %	N/A	7.5	3.9	3.2	3.5	7.2	14.2	N/A	60.5
SPLIT WT= 357.9							CUM WT %	N/A	7.5	11.4	14.6	18.1	25.3	39.5	N/A	100.0
150	13.4	H	21.6	37.8	40.6	msG	WT	N/A	150.4	30.2	31.2	29.9	25.0	24.0	N/A	80.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	40.6	8.2	8.4	8.1	6.7	6.5	N/A	21.6
SPLIT WT= 370.6							CUM WT %	N/A	40.6	48.7	57.1	65.2	72.0	78.4	N/A	100.0
155	2.3	H	14.7	42.0	43.3	msG	WT	N/A	177.7	45.1	46.8	42.9	22.2	15.1	N/A	60.2
SORT=	N/A	MEDIAN=	0.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	43.3	11.0	11.4	10.5	5.4	3.7	N/A	14.7
SPLIT WT= 409.9							CUM WT %	N/A	43.3	54.3	65.8	76.2	81.6	85.3	N/A	100.0
160	0.3	H	20.0	73.2	6.9	(g)mS	WT	N/A	25.3	17.4	46.0	146.6	43.3	15.9	N/A	73.4
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	6.9	4.7	12.5	39.9	11.8	4.3	N/A	20.0
SPLIT WT= 367.8							CUM WT %	N/A	6.9	11.6	24.1	64.0	75.7	80.1	N/A	100.0
165	0.1	H	3.7	90.9	5.4	(g)S	WT	N/A	36.8	13.5	223.7	261.1	83.4	35.7	N/A	25.0
SORT=	N/A	MEDIAN=	2.00	MODE=	2.00	MEAN= N/A	WT %	N/A	5.4	2.0	32.9	38.4	12.3	5.3	N/A	3.7
SPLIT WT= 679.7							CUM WT %	N/A	5.4	7.4	40.4	78.8	91.1	96.3	N/A	100.0
170	0.1	H	1.2	80.9	17.9	gS	WT	N/A	148.6	240.2	200.4	156.9	56.5	16.8	N/A	10.2
SORT=	N/A	MEDIAN=	1.00	MODE=	0.00	MEAN= N/A	WT %	N/A	17.9	29.0	24.2	18.9	6.8	2.0	N/A	1.2
SPLIT WT= 826.9							CUM WT %	N/A	17.9	46.9	71.0	89.9	96.7	98.8	N/A	100.0
175	0.2	H	20.7	48.7	30.6	msG	WT	N/A	128.5	55.8	58.4	42.1	27.3	20.6	N/A	87.0
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.6	13.3	13.9	10.0	6.5	4.9	N/A	20.7
SPLIT WT= 419.7							CUM WT %	N/A	30.6	43.9	57.8	67.9	74.4	79.3	N/A	100.0
180	0.1	H	19.3	48.9	31.8	msG	WT	N/A	147.3	58.2	56.1	34.9	36.4	41.1	N/A	89.5
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.8	12.6	12.1	7.5	7.9	8.9	N/A	19.3
SPLIT WT= 463.5							CUM WT %	N/A	31.8	44.3	56.4	64.0	71.8	80.7	N/A	100.0

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DEPTH	%CACO3	DM	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (0)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
185	N/A	H	21.0	48.0	31.1	msG	WT	N/A	138.0	53.2	65.9	37.5	29.5	26.9	N/A	93.2
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	31.1	12.0	14.8	8.4	6.6	6.1	N/A	21.0
SPLIT WT= 444.2							CUM WT %	N/A	31.1	43.1	57.9	66.3	73.0	79.0	N/A	100.0
190	0.1	H	22.1	48.2	29.7	gmS	WT	N/A	132.4	51.5	57.7	43.7	36.4	26.0	N/A	98.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.7	11.5	12.9	9.8	8.2	5.8	N/A	22.1
SPLIT WT= 446.5							CUM WT %	N/A	29.7	41.2	54.1	63.9	72.0	77.9	N/A	100.0
195	0.0	H	19.5	42.9	37.6	msG	WT	N/A	165.7	40.2	34.3	39.4	46.6	28.3	N/A	85.9
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.6	9.1	7.8	9.0	10.6	6.4	N/A	19.5
SPLIT WT= 440.4							CUM WT %	N/A	37.6	46.8	54.5	63.5	74.1	80.5	N/A	100.0
200	0.0	H	19.8	55.3	25.0	gmS	WT	N/A	95.4	23.9	17.6	61.2	82.6	25.9	N/A	75.5
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.0	6.3	4.6	16.0	21.6	6.8	N/A	19.8
SPLIT WT= 382.1							CUM WT %	N/A	25.0	31.2	35.8	51.9	73.5	80.3	N/A	100.0
205	0.0	H	19.9	50.6	29.4	gmS	WT	N/A	124.8	43.1	31.0	45.2	67.7	27.7	N/A	84.4
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	29.4	10.2	7.3	10.7	16.0	6.5	N/A	19.9
SPLIT WT= 423.9							CUM WT %	N/A	29.4	39.6	46.9	57.6	73.6	80.1	N/A	100.0
210	0.0	H	22.5	66.9	10.6	gmS	WT	N/A	44.5	26.2	24.4	98.8	103.4	31.3	N/A	95.0
SORT=	N/A	MEDIAN=	3.00	MODE=	3.00	MEAN= N/A	WT %	N/A	10.6	6.2	5.8	23.0	24.5	7.4	N/A	22.5
SPLIT WT= 421.6							CUM WT %	N/A	10.6	16.8	22.6	45.5	70.1	77.5	N/A	100.0
215	0.0	H	7.6	67.6	24.9	(m)gS	WT	N/A	94.7	81.7	33.7	57.0	70.2	14.7	N/A	28.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	24.9	21.5	8.9	15.0	18.4	3.9	N/A	7.6
SPLIT WT= 380.7							CUM WT %	N/A	24.9	46.3	55.2	70.1	88.6	92.4	N/A	100.0
220	0.0	H	3.4	59.2	37.3	sG	WT	N/A	149.5	46.8	54.6	75.8	49.2	10.6	N/A	13.8
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	37.4	11.7	13.6	18.9	12.3	2.7	N/A	3.5
SPLIT WT= 400.4							CUM WT %	N/A	37.4	49.0	62.7	81.6	93.9	96.6	N/A	100.0
225	0.0	H	8.6	60.9	30.5	msG	WT	N/A	112.3	32.0	24.6	77.7	73.0	16.8	N/A	31.6
SORT=	N/A	MEDIAN=	2.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	30.5	8.7	6.7	21.1	19.8	4.6	N/A	8.6
SPLIT WT= 367.9							CUM WT %	N/A	30.5	39.2	45.9	67.0	86.9	91.4	N/A	100.0
230	0.0	H	4.1	70.8	25.1	gS	WT	N/A	98.1	68.6	60.6	76.0	57.8	13.7	N/A	16.1
SORT=	N/A	MEDIAN=	1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	25.1	17.6	15.5	19.4	14.8	3.5	N/A	4.1
SPLIT WT= 390.9							CUM WT %	N/A	25.1	42.7	58.2	77.6	92.4	95.9	N/A	100.0
235	0.1	H	6.3	42.6	51.1	msG	WT	N/A	171.3	65.0	34.3	20.3	15.6	7.4	N/A	21.2
SORT=	N/A	MEDIAN=	-1.00	MODE=	-1.00	MEAN= N/A	WT %	N/A	51.1	19.4	10.2	6.1	4.7	2.2	N/A	6.3
SPLIT WT= 335.1							CUM WT %	N/A	51.1	70.5	80.8	86.8	91.5	93.7	N/A	100.0

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02/02/89

DEPTH	%CACØ3	DW	%MUD	%SAND	%GRAVEL	CLASS		FINE PEB (<=-2)	VFINE PEB (-1)	VERY COARS (Ø)	COARS (1)	MED (2)	FINE (3)	VERY FINE (4)	SILT (4.75)	PAN (>4.75)
24Ø	Ø.1	H	6.7	63.7	29.6	gS	WT	N/A	97.2	95.5	59.6	31.2	16.1	7.1	N/A	22.2
SORT=	N/A	MEDIAN=	Ø.ØØ	MODE=	-1.ØØ	MEAN= N/A	WT %	N/A	29.6	29.Ø	18.1	9.5	4.9	2.2	N/A	6.8
SPLIT WT= 328.8							CUM WT %	N/A	29.6	58.6	76.7	86.2	91.1	93.3	N/A	1ØØ.Ø

APPENDIX L

BOREHOLE GEOPHYSICAL LOGGING PROCEDURES

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STANDARD OPERATING PROCEDURE

TITLE: GL-5 NEUTRON PROBE PROCEDURE

1.0 Objective

The objective of this procedure is to establish a standardized format for the operation of the neutron probe.

2.0 Applicability

When this procedure is selected for implementation by a QA plan prepared and approved in accordance with PNL-MA-60, Quality Assurance Manual for License-Related Programs, this procedure is applicable to borehole neutron logging. The neutron logging system provides a means for determining formation hydrogen content, moisture content, and porosity. Maximum logging speed is 25 ft per minute. Procedures for use and handling of the radioactive source for this probe are described in RWP HR-9 and SRSP NO. 0078.

3.0 Definitions

3.1 Definitions of abbreviations used in this procedure

a. NBP is NIMS Bin Panel. NIMS refers to nuclear instrument modules specifications.
b. SRP refers to solid state recorder panel.
c. LPM refers to line power module.
d. RMM refers to rate meter module.

4.0 Responsibilities

It will be the responsibility of each person authorized to operate the equipment to follow the step-by-step operating procedure.

5.0 Procedure

5.1 Equipment

The following equipment is used to run neutron logs:

a. Logging truck with cable and reel
b. AC power source
c. NIMS Bin panel
d. Chart recorder
e. Line power module

QAO Approval		Approved (Line Manager)	
OR Dahl 8-4-86		R Woodruff for P Brauson 8/6/86	
Prepared by VL McGhan V.L. McGhan 8-4-86		Technical Review J.R. Raymond 8/1/86	
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f. Ratemeter module
g. Neutron probe
h. 3 Ci ^{241}Am Be source
i. Well sheave
j. 50 mCi ^{241}Am Be calibration source.

5.2 Equipment Setup

a. Attach a 3 Ci Am Be source to the probe and the probe to the cable head.
b. NBP and SRP power to ON.
c. RMM MODE switch to LINE.
d. RMM SUPPRESSION and RECORDER OUTPUT controls fully clockwise.
e. RMM TC switch to 2.
f. RMM POSITIVE-NEGATIVE polarity switch to POSITIVE.
g. RMM REVERSE-NORMAL switch to NORMAL.
h. LPM CURRENT-VOLTAGE switch to CURRENT.
i. LPM NEG-OFF-POS switch to POSITIVE.
j. LPM CURRENT ADJUST to 70 milliamps.

5.3 Calibration

a. RMM MODE switch to CAL 100.
b. RMM CPS switch to 100.
c. SRP--Switch a recorder amplifier to ON.
d. RMM--Depress ZERO and hold in.
e. Adjust recorder amplifier ZERO to position pen to its preselected zero point on the chart.
f. RMM--Release the ZERO.
g. Adjust the recorder amplifier SPAN control to the desired position on the chart. Record this span on the chart.
h. RMM MODE switch to LINE.
i. RMM CPS switch to 500.
j. With the probe resting on a dry surface at least three feet above the ground, take a one minute background count and record this on the chart. Use the time drive to turn the recorder.
k. Place the 50mCi Am Be neutron calibrator at the proper position on the probe and take a one minute count. Record this on the chart.

5.4 Logging

a. Place the probe in the well and set to proper measuring point. Probe zero is at the detector tube. Change CPS switch to 1000 or 5000.
b. Run the log. Maximum logging speed is 25 ft per minute. Rerun a 50-ft section for system check, or if well has been logged before, overlap a 50-ft section of the previous log.
c. Review the log for reasonableness. Sign and date the log to document review.

5.5 Calibration Check

a. RMM CPS switch to 500.
b. Record a one minute background count with the probe resting on a dry surface and three feet above ground surface.
c. Place the 50 mCi Am Be source on the probe and record a one minute count.
d. Record the span on the chart.
e. If the count rate does not match the calibration background and source count, the probe has malfunctioned and the log should not be used.

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STANDARD OPERATING PROCEDURE

TITLE: GL-6 BULK DENSITY PROBE PROCEDURE

1.0 Objective

The objective of this procedure is to establish a standardized format for the operation of the bulk density probe.

2.0 Applicability

When this procedure is selected for implementation by a QA plan prepared and approved in accordance with PNL-MA-60, Quality Assurance Manual for License-Related Programs, this procedure is applicable to borehole bulk density logging. The bulk density logging system provides continuous recording of bulk density of materials surrounding the borehole. Maximum logging speed is 25 ft per minute. Procedures for use and handling of the probe and radioactive sources are described in RWP HR-9 and SRSP No. 0078.

3.0 Definitions

3.1 Definition of abbreviations used in this procedure

a. NBP is NIMS Bin Panel. NIMS refers to nuclear instrument modules specifications.
b. SRP refers to solid state recorder panel.
c. LPM refers to line power module.
d. RMM refers to rate meter module.

4.0 Responsibilities

It will be the responsibility of each person authorized to operate the equipment to follow the step-by-step operating procedure.

5.0 Procedure

5.1 Equipment

The following equipment is used to run density logs:

a. Logging truck with cable and reel
b. AC power source
c. NIMS Bin panel
d. Chart recorder
e. Line power module

QAO Approval		Approved (Line Manager)	
DR Dall 8-4-86		R Woodruff for P Brewson 8/6/86	
Prepared by VL McGhan V.L. McGhan 8-4-86		Technical Review JR Raymond 8/1/86	
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f. Ratemeter module
g. Density probe
h. 125 mCi ^{137}Cs source
i. Well sheave.

5.2 Equipment Setup

a. Attach probe to cable head.
b. Place probe in well and set to proper measuring point. Probe zero is at the detector, 3.7 ft from top of cable head spring.
c. NBP and SRP power switches to ON.
d. RMM NORMAL-Reverse switch to REVERSE.
e. RMM MODE switch to LINE.
f. RMM SUPPRESSION and RECORDER OUTPUT control fully clockwise.
g. RMM CPS switch to 500.
h. RMM TC switch to 3.
i. RMM POSITIVE-NEGATIVE switch to NEGATIVE.
j. LPM NEG-OFF-POS switch to POSITIVE.
k. LPM CURRENT ADJUST to 70 milliamps.
l. RMM MODE switch to 100 CAL.
m. RMM CPS switch to 100.
n. Switch a recorder amplifier to ON.
o. RMM Depress the zero and hold in.
p. SRP Adjust the recorder amplifier ZERO to position pen to its preselected position on the right side of the chart.
q. RMM Release zero.
r. SRP Adjust recorder SPAN control to desired position on the left side of the chart. Record this span on the chart.
s. RMM MODE switch to LINE.
t. RMM CPS switch to 500. System is ready to operate. Maximum logging speed is 25 ft per minute.
u. Rerun a 50-ft section for system check, or if well has been logged before, overlap a 50-ft section of previous log.
v. Check the span and record it on the chart.
w. Review log for reasonableness. Sign and date log to document review.

STANDARD OPERATING PROCEDURE

TITLE: GL-7 GAMMA RAY PROBE PROCEDURE

1.0 Objective

The objective of this procedure is to establish a standardized format for the operation of the gamma ray probe.

2.0 Applicability

When this procedure is selected for implementation by a QA plan prepared and approved in accordance with PNL-MA-60, Quality Assurance Manual for License-Related Programs, this procedure is applicable to borehole gamma ray logging. Gamma Ray logs are used for the determination of lithology and measurement of natural and induced gamma radiation. Gamma Ray logs may be recorded in cased or uncased wells, fluid-filled or dry. Maximum logging speed is 20 ft per minute. Procedures for handling the source that is used with this probe are described in RWP HR-9 and SRSP No. 0078.

3.0 Definitions

3.1 Definitions of abbreviations used in this procedure

a. NBP is NIMS Bin Panel. NIMS refers to nuclear instrument modules specifications.
b. SRP refers to solid state recorder panel.
c. LPM refers to line power module.
d. RMM refers to rate meter module.

4.0 Responsibilities

It will be the responsibility of each person authorized to operate this equipment to follow the step-by-step operating procedure.

5.0 Procedure

5.1 Equipment

The following equipment is used to run gamma ray logs:

a. Logging truck with cable and reel
b. AC power source
c. NIMS Bin panel
d. Chart recorder

QAO Approval DR Dahl 8-4-86		Approved (Line Manager) R Woodruff for P Brown 8/6/86	
Prepared by VL McGhan VL McGhan 8-4-86		Technical Review JP Raymond 8/4/86	
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e. Line power module
f. Ratemeter module
g. Gamma ray probe
h. Well sheave
i. .02 mCi Ra 226 calibration source.

5.2 Equipment Setup

a. NBP and SRP switches to ON.
b. RMM switch to LINE.
c. RMM SUPPRESSION and RECORDER OUTPUT controls fully clockwise.
d. RMM TC switch to 3.
e. RMM POSITIVE-NEGATIVE polarity switch to NEGATIVE.
f. RMM REVERSE-NORMAL switch to NORMAL.
g. LPM CURRENT-VOLTAGE switch to CURRENT.
h. LPM INSTRUMENT POWER switch to POSITIVE.
i. LPM CURRENT ADJUST to 75 milliamps for probe NO. NG-001. For probe NO. CG-27A97 use 60 milliamps.

5.3 Calibration

a. RMM CPS switch to 100.
b. RMM switch to CAL 100. RMM CPS meter should read 100 cps at this point.
c. SRP--Switch a recorder amplifier to ON.
d. RMM--Depress the zero and hold in.
e. SRP--Adjust recorder ZERO to position pen to its preselected position on the chart.
f. RMM--Release the ZERO.
g. SRP--Adjust the SPAN control to position the pen to a desired position on the chart.
h. Record this span on the chart.
i. RMM MODE switch to LINE.
j. RMM CPS switch to 500.
k. Record zero on the chart.
l. Record gamma ray background in air.
m. Record the probe response to the .02 mCi Ra 226 source placed perpendicular to the probe and 42 in. from the detector. Make sure the source is pointing toward the top of the probe.

5.4 Logging

a. Place probe in the well and set depth to proper measuring point. Probe zero is at the counting tube.
b. Proceed to the bottom of the hole and log up. Log at 15 ft per minute.
c. For system check, rerun a 50-ft section, or if the well has been logged before, overlap a 50-ft section of the previously logged section.

d. Review the log for reasonableness. Sign and date the log to document the review.

5.5 Calibration Check

a. Record zero.
b. Record gamma ray background in air.
c. Record the probe response to the .02 mCI Ra 226 source.
d. Record the span.
e. If the calibration check does not match the calibration count rate, the probe has malfunctioned and the log should not be used.

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