WELL DEVELOPMENT LOG

WELL NAME AND ZONE: ST-7

DTW PRE-DEVELOPMENT (FT.): 365 (Geophysical Log) DTW POST-DEVELOPMENT SS (FT.): 416.98

DATE	TIME	METHOD	PURGE RATE (GPM)	DELTA VOLUME (GALLONS)	TOTAL VOLUME (GALLONS)	Ph	TEMP (° C)	COND (μMHOS/CM)	TURBIDITY (NTU)	INITIALS	COMMENTS
5/18/99	1130	bail	6 gal/run	0	0					GCG	Drillers directed to move pulling unit to ST-7
"	1230	"	"	36	36					"	to commence bailing. Water black. H_2S odor
"	1505	"	"	138	174					MGC	Water black. H_2S odor
"	1720	"	"	180	354					MGC	Bailing slightly deeper. Water still black.
"	1830	"	"	168	522					MGC	"
5/19/99	0740	bail	"	12	534					MGC	Dark gray and "soapy".
"	1115	"	"	192	726					MGC	"
"	1350	"	"	156	882					MGC	"
"	1625	"	"	90	972					MGC	Improving slightly. Still dark gray.
5/20/99	1310	bail	"	180	1,152					JWP	Cloudy gray.
"	1640	"	5 gal/run	180	1,332					JWP	Bail capacity reduced to 5 gal. Cloudy gray.
5/21/99	1145	"	6 gal/run	96	1,428					GCG	82 bails yesterday. None today. Prep for swab.
"	1800	swab		115	1,543					LHM	Screen 1 (top).
5/22/99	1800	"		115	1,658					LHM	Screen 2.
"	1800	"		2,600	4,258					LHM	Screen 3.
5/23/99	0935	swab		75	4,333					LHM	Screen 3. Water greenish, yellowish, gray.
"	1045	"		825	5,158	7.24	24.8	1,157	46.20	LHM	Screen 3. Water much clearer.
"	1330	"		1,875	7,033				36.80	LHM	Screen 3. Turb. Meter needs calibration.
"	1530	"		750	7,783					LHM	"
5/24/99	1300	swab		1,760	9,543					GCG	Screen 4. Water initially brown but clearing.
5/26/99	1145	"		25	9,568					MGC	Screen 2. Water nasty greenish-brownish black.
"	1300	"		0	9,568					MGC	For 3 more swabs no water. Will jet.

WELL DEVELOPMENT LOG

WELL NAME AND ZONE: ST-7

DTW PRE-DEVELOPMENT (FT.): 365 (Geophysical Log) DTW POST-DEVELOPMENT SS (FT.): 416.98

DATE	TIME	METHOD	PURGE RATE (GPM)	DELTA VOLUME (GALLONS)	TOTAL VOLUME (GALLONS)	Ph	TEMP (° C)	COND (μMHOS/CM)	TURBIDITY (NTU)	INITIALS	COMMENTS
5/26/99	1700	jet		3,200						GCG	Screen 1. Jetted one load well J water.
5/27/99	0745	"		3,200						GCG	"
"	1040	"		6,400						GCG	Screen 2. Jetted two loads water. Clearing.
"	1310	"		3,200						GCG	Screen 3. Jetted one load water.
6/1/99	1100	jet		3,200						GCG	Screen 3. Jetted second load water.
"	1300	"		6,400						GCG	Screen 4. Jetted two loads well J water.
6/2/99	1700	pump	10	0	9,568					GCG	Initial flowmeter read. = 75753. Pump in sump.
"	1830	end	"	632	10,200					GCG	Flowmeter reading = 76385
6/3/99	0800	pump	"	0	10,200	7.41	24.6	1,061	4.70	MR	Screen 4. Water slightly cloudy.
"	1125	"	"	2,445	12,645	7.70	26.5	1,067	1.22	MEM	Flowmeter reading = 78830.
"	1351	"	"	1,423	14,068	7.56	27.4	1,068	1.10	MGC	Flowmeter reading = 80253
"	1620	"	"	336	14,404					MGC	Flowmeter reading = 80589. Pump stopped.
"	1620	restarted	10	0	14,404					MGC	Flowmeter reading = 80589
"	1626	"	"	86	14,490	7.60	25.8	1,015	5.67	MGC	Flowmeter reading = 80675.Water is yellowish
"	1830	"	"	880	15,370					JWP	Need meter reading from A. Gurule.
6/4/99	1200	pump	"	3,005	18,375	7.60	27.7	1,026	1.42	JWP	81555 start meter. 84560 at 1200.
"		"	"	740	19,115					MEM	Volume per Alfred Gurule.Flowmeter not used
"		"	"	2,100	21,215					MEM	Flowmeter not used. Start meter at 85398
6/5/99	0825	pump		462	21,677	7.60	25.0	1,012	3.52	MEM	Screen 3. Flowmeter reading = 85860.
"	1200	"		2,470	24,147	7.50	25.9	1,029	0.88	MEM	Flowmeter reading =88330.
"	1525	"		2,408	26,555	7.40	25.5	1,057	0.88	MEM	Flowmeter reading =90738.
6/6/99		pump		1,773	28,328					MR	Flowmeter reading =92511.

WELL DEVELOPMENT LOG

WELL NAME AND ZONE: ST-7

DTW PRE-DEVELOPMENT (FT.): 365 (Geophysical Log) DTW POST-DEVELOPMENT SS (FT.): 416.98

DATE	TIME	METHOD	PURGE RATE (GPM)	DELTA VOLUME (GALLONS)	TOTAL VOLUME (GALLONS)	Ph	TEMP (° C)	COND (μMHOS/CM)	TURBIDITY (NTU)	INITIALS	COMMENTS
6/6/99	0930	"		1,476	29,804	7.10	24.4	1,033	1.75	MR	Water slightly red. Moving to Screen 2.
"	1130	"		623	30,427	7.13	26.3	1,016	6.63	MR	Screen 2. Water cloudy green. FM = 94610.
"	1624	"		520	30,947	7.40	25.8	953	2.35	MR	Water slightly gray. Flowmeter = 95130
6/7/99	1300	pump		2,470	33,417	7.10	26.4	1,036	1.05	JWP	Flowmeter reading =97600
"	1830	"		671	34,088					MR	Flowmeter reading =98271. Stop pumping.
6/8/99	1055	pump	4.5	1,669	35,757	7.30	26.0	1,016	0.87	MGC	Flowmeter reading = 99940
"	1520	"	"	1,183	36,940					MGC	Flowmeter reading = 101123
"	1526	"	"		36,940	7.20	26.4	1,025	0.98	MGC	Water is clear.
"	1800	end	"	711	37,651					MGC	Flowmeter =101834. Pump had stopped.
6/9/99	0800	pump	4	0	37,651					MGC	Screen 1. Flowmeter =101834. Start pump.
"	0840	"	"	143	37,794				1.59	MGC	Flowmeter reading = 101977.
"	0905	"	"	103	37,897				1.22	MGC	Flowmeter =102080. Water is very clear.
"	1147	"	"	634	38,531				1.22	MGC	Flowmeter reading = 102714
"	1431	"	"	651	39,182				1.26	MGC	Flowmeter reading = 103365
"	1653	"	"	559	39,741				1.20	MGC	Flowmeter reading = 103924
"	1800	end	"	234	39,975					MGC	Flowmeter reading = 104158. Pull pump.