WELL DEVELOPMENT LOG

WELL NAME AND ZONE: PL-8

DTW PRE-DEVELOPMENT (FT.): 390 (Geophysical Log) DTW POST-DEVELOPMENT SS (FT.): 404.51

DATE	TIME	METHOD	PURGE RATE (GPM)	DELTA VOLUME (GALLONS)	TOTAL VOLUME (GALLONS)	Ph	TEMP (° C)	COND (μMHOS/CM)	TURBIDITY (NTU)	INITIALS	COMMENTS
6/3/99	0945	bail	4 gal/bail	0	0					MGC	Bailing begins.
"	1410	"	"	172	172					MGC	Nasty black water. Surfur smell.
"		"	"	244	416					MGC	"
6/4/99	1200	bail	"	64	480					JWP	Will switch to swabbing next.
6/5/99	0845	swab	75 gal/run	450	930					MEM	Screen 4. Began 0715. Black, oily water.
"	1215	"		1,800	2,730					MEM	Volume per Alfred. Water cleaner, still gray.
"	1545	"		1,925	4,655					MEM	Water varying from nearly clear to cloudy.
"	0845	"		300	4,955					MR	Screen 3. Water nearly clear to cloudy.
6/6/99	0845	swab		540	5,495					MR	Water green and cloudy. Cleared to light gray.
"	1515	"		1,340	6,835				39.30	MR	Water cloudy to light gray.
6/7/99	1315	swab		4,150	10,985					JWP	Screen 3. Leaking packer.
6/8/99		"		15	11,000					MGC	Screen 2.
"		"		15	11,015					MGC	"
"	1550	"		20	11,035					MGC	New Swabs. Water is greenish brown to gray.
"	1710	"		270	11,305					MGC	Water clearing. More gray now.
6/9/99	0955	swab		260	11,565				13.90	MGC	"
"	1100	"		120	11,685					MGC	Move to screen 1.
"	1200	"		25	11,710					MGC	124.8 m water. Water brown to rust colored.
"		"		0	11,710					MGC	Trip out to jet.
6/10/99	1215	jet		6,400						MGC	Screen 1. Jetted two loads well J water.
6/15/99	1215	"		3,200						MGC	Screen 2. Jetted one load water.
6/16/99	0645	pump	9	25	11,735					MGC	Screen 1. Flow meter reading: 104158.

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6/16/99	0745	pump	9	234	11,969				5.38	MGC	Flow meter reading: 104392
"	1210	"	"	2,062	14,031				1.31	MGC	106454
"	1520	"	"	1,452	15,483				1.18	MGC	107906
6/18/99	1530	pump		1,049	16,532				0.76	GCG	108955
6/19/99	1225	"		3,603	20,135			1,044	1.08	MEM	112583. Cond. Based on assumed 26 deg. C.
"	1525	"		707	20,842					MEM	113290. Alfred is tripping to screen 2.
6/21/99	1500	jet		16,000						JWP	Jetted 4 loads. Five loads anticipated.
6/22/99	1315	pump	9	1,400	22,242					JWP	114690 at 1315. Screen 2. Clear water.
6/23/99	0630	"	9	1,604	23,846					JWP	116294. Pump off at beginning of day.
"	1152	"	"	2,909	26,755					MGC	119203. Water is clear.
"	1545	"	"	837	27,592				0.92	MGC	120040
"	1815	end	"	493	28,085					MGC	120533. End pump.
6/24/99	1015	pump	"	1,031	29,116	6.94	26.3	1,079	1.25	MGC	121564. Screen 2.
"	1815	end	"	358	29,474					MGC	121922. End pump.
"	1350	pump	"	0	29,474					MGC	121922. Start screen 3.
"		"	"	533	30,007					MGC	122455. Restart pump.
"	1630	"	"	262	30,269					MGC	122717. Pump had shut off. Lower discharge.
6/28/99	1230	end		1,581	31,850					GCG	124298. Pump is off. Request 5-6 gpm.
"	1515	pump	7 to 8	472	32,322	7.28	29.0	1,027	1.82	GCG	124770. Flow rate 7-8 gpm.
"	1830	end		633	32,955					MGC	125403. Stop for day.
6/29/99	0850	pump	7 to 8	857	33,812	7.07	26.4	1,065	2.00	MGC	126260
6/29/99	1538	end		1,709	35,521					MGC	127969. Pump shut off.

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6/29/99	1539	restart		0	35,521					MGC	Lowered discharge to 5.6 gpm.
"	1815	end		840	36,361					MGC	128809. End/start 6/30.
6/30/99	0850	pump		529	36,890	7.10	26.3	1,049	3.00	MGC	129338
"	1215	"		1,202	38,092	7.30	26.3	1,091	1.80	MGC	130540. Temperature assumed.
"	1600	end		460	38,552					MGC	Zone developed. Move pump. 131000.
7/2/99	1230			0	38,552					GCG	No activity. Pump tripped out for repairs.
7/7/99	1515	pump	6.6	0	38,552					MGC	Screen 4. 131232-132166.
"	1815	end	"	934	39,486					MGC	132166
7/8/99	0650	pump	"	0	39,486					MGC	132166 start. Need turb. meter.
"	1345	"	"	2,644	42,130	10.60	27.6	1,041	2.19	MGC	134810. Temp. and pH questionable.
"	1715	"	"	1,330	43,460					MGC	136140
"	1815	end	"	396	43,856					MGC	Pump shut off. Flow meter 136536.
7/9/99	0720	pump	6.6	64	43,920					LHM	136600. Water clear.
"	1225	"	"	1,980	45,900	7.13	28.5	1,042	1.50	LHM	138580
"	1350	"	"	545	46,445					LHM	139125. 6.6 gpm.
"	1815	end	"	1,666	48,111					LHM	140791
8/24/99									Following camera log, water was murky. Pumped to clear the zones.		
8/25/99	all day	pump	10	4,405	52,516					MGC	Screen 4.
8/26/99	all day	pump	10	4,558	57,074					MGC	Screen 3.
8/27/99	all day	pump	10	5,374	62,448					MGC	Screen 2. End 67106.
9/7/99	1345	pump	12	2,084	64,532				1.56	GCG	69190. Screen 1.
9/8/99	0830	end		2,129	66,661					GCG	71319. Screen 1. Development complete.