APPENDIX H

Startup/Performance Test Logs

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/23/2009

Operators Initials:

AM	Mid-day	PM
	1650	2020

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)	Observ	Mid-Day Observ	PM Observ	Comments
Extraction Well PW-1	8		3.57	OK			
Extraction Well PW-2	15		6.98	OK			
Extraction Well PW-4	8						
Extraction Well PW-5	10						
Extraction Well PW-6	8						
Extraction Well PW-8							
Extraction Well PW-9	4						
Extraction Well EW-2							
Extraction Well EW-6							

Description	Instrument ID	Reading type	AM	Mid-Day	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM		43.8	43.5	
Level in Equalization Tank	LIT 1011	FT		20	20	
DAF Feed Pump 1	50P1101	ON/OFF		ON	ON	
Seal Water flow	Flow Meter	GPM		N/A	0.25	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%		48.6	67.9	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG		2	3	
DAF Feed Pump 2	50P1102	ON/OFF		N/A	N/A	
Seal Water flow	Flow Meter	GPM		N/A	N/A	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%		N/A	N/A	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG		N/A	N/A	
Flowrate to DAF	FIT 1110	GPM		N/A	55.3	
Level in DAF Froth Chamber	LIT 1131	FT		1.7	1.5	
Level in DAF Effluent Well	LIT 1211	FT		4	4	
DAF Mixer	SHK 1121A	ON/OFF		ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%		50	50	
DAF Auger	HS 1121 B	ON/OFF		OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF		ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%		50	50	
DAF Recirculation Pump	HS 1135	ON/OFF		ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG		101`	100	
DAF Recirculation Flowrate	FIT 1137	GPM		75.7	75.6	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/23/2009

Operators Initials:

AM	Mid-day	PM
	1650	2020

Description	Target Flow	AM OBSERVATION			Mid-Day	PM	Comments
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM		110	110		
Air Saturation Tank Pressure	PI 1138	PSIG		66	66		
DAF Effluent Turbidity	AIT 1245	NTU		23.1	20.4		
Filter Feed Pump 1	50P1241	ON/OFF		ON	ON		
Seal Water flow	Flow Meter	GPM		0.5	0.25		
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%		38	52.9		
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG		13	15		
Filter Feed Pump 2	50P1242	ON/OFF		OFF	OFF		
Seal Water flow	Flow Meter	GPM		OFF	OFF		
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%		OFF	OFF		
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG		OFF	OFF		
Froth Pump 1	50P1251	ON/OFF		ON	ON		
Froth Pump 1 Stroke Speed	50P1251	0 - 100%		3%	1.5		
Froth Pump 1 Discharge Pressure	PI 1251	PSIG			3		
Froth Pump 2	50P1252	ON/OFF		OFF	OFF		
Froth Pump 2 Stroke Speed	50P1252	0 - 100%		N/A	N/A		
Froth Pump 2 Discharge Pressure	PI 1252	PSIG		N/A	N/A		
Froth Tank Level	LIT 1381	FT		2.1	3		
Decant Pump 1	50P1251	ON/OFF		ON	ON		
Seal Water flow	Flow Meter	GPM		0.25	0.25		
Decant Pump 1 Speed	50P1251	0 - 100%		15	81		
Decant Pump 1 Discharge Pressure	PI 1391	PSIG		0	8		
Decant Pump 2	50P1252	ON/OFF		OFF	OFF		
Seal Water flow	Flow Meter	GPM		N/A	N/A		
Decant Pump 2 Speed	50P1252	0 - 100%		N/A	N/A		
Decant Pump 2 Discharge Pressure	PI 1392	PSIG		N/A	N/A		
Hydromation Filter Discharge Pressure	PI 1282	PSIG		12.5	10		
Hydromation Filter Differential Pressure	DPI 1231	PSIG		1	1		
Air Pressure at Hydromation Filter	--	PSIG		86	86		
GAC System Inlet Pressure	PI 1310	PSIG		12	11		
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE		LEAD	LEAD		
GAC 1 Discharge Pressure	PI 1311	PSIG		11	11		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/23/2009

Operators Initials:

AM	Mid-day	PM
	1650	2020

Description	Target Flow	AM OBSERVATION		Mid-Day	PM	Comments
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE		MID	MID	
GAC 2 Discharge Pressure	PI 1312	PSIG		10	10	
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE		LAG	LAG	
GAC 3 Discharge Pressure	PI 1313	PSIG		9.8	9.5	
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE		OFF	OFF	
GAC 4 Discharge Pressure	PI 1314	PSIG		0	1	
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE		OFF	OFF	
GAC 5 Discharge Pressure	PI 1315	PSIG		0	1	
Flowrate to Effluent Tank	FIT 1321	GPM		26.6	44.3	
Level in Effluent Tank	LIT 1331	FT		19.9	20	
Backwash Pump 1	50P1351	AUTO/ON/OFF		AUTO	OFF	
Seal Water flow	Flow Meter	GPM		0.35		
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG				
Backwash Pump 2	50P1352	AUTO/ON/OFF		OFF	OFF	
Seal Water flow	Flow Meter	GPM		135		
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG				
Backwash Flowrate	FIT 1371	GPM				
Product Tank Level	--	VISUAL OBSERVATION		N/A	N/A	
Product Tank Stored Volume	--	GAL		N/A	N/A	
Digester Tank Level	LIT 1421	FT		N/A	N/A	
Dirty Backwash Tank Level	LIT 1441	FT		N/A	N/A	
Backwash Recycle Pump	50P1461	ON/OFF		OFF	OFF	
Seal Water flow	Flow Meter	GPM		OFF	OFF	
Backwash Recycle Pump Pressure	PI 1461	PSIG		OFF	OFF	
Containment Area Sump	--	VISUAL OBSERVATION		OK	OK	
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF		AUTO	AUTO	
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF		AUTO	AUTO	
Containment Area Sump Pump Pressure	PI 1504	PSIG		N/A	N/A	
Stormwater Tank Level	LIT 1521	FT		12.8	12.8	
Stormwater/Recycle Pump	50P1544	ON/OFF		OFF	OFF	
Seal Water flow	Flow Meter	GPM		OFF	OFF	
Stormwater/Recycle Pump Pressure	PI 1544	PSIG		OFF	OFF	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/23/2009

Operators Initials:

AM	Mid-day	PM
	1650	2020

Description	Target Flow	AM OBSERVATION			Mid-Day	PM	Comments
Plant Water Storage Tank Level	LSHL 1570	FT		5.5	8.1		
Plant Water Pump 1	50P1581	ON/OFF		ON	ON		
Plant Water Pump 2	50P1582	ON/OFF		OFF	OFF		
Plant Water Pump Discharge Pressure	PI 1591	PSIG		62.3	63.5		
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW		0	OK		NOT MIXING POLYMER
Polymer Panel	--	AUTO/MANUAL/OFF		AUTO	AUTO		
Polymer Storage Tank Level	---	VISUAL OBSERVATION		50%	50%		
Polymer Concentration in Storage Tank	--	mg/L		0.16	0.16		
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG		1	1		
Polymer Pump Stroke % (manual control only)	--	0 - 100%		AUTO	AUTO		
Polymer Dosage Rate (automatic control only)	--	PPM		1	7.1		
Rotary Blower		ON/OFF		OFF	OFF		NOT IN OPERATION
Rotary Blower Speed		0-100%		N/A	N/A		
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG		N/A	N/A		
Plant Air Pressure	PI 1466	PSIG		114.6			
Instrument Air Pressure	PI 1650	PSIG		114.6			
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF		OFF			
Total Hours		HRS		19757			
Compressor Pressure		PSIG		OFF			
Compressor Temperature		Deg. F		OFF			
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF		AUTO			
Total Hours		HRS		17856			
Compressor Pressure		PSIG		117			
Compressor Temperature		Deg. F		138			

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/24/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM	PM
15	415	650	1208	1610	1830	2330

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)	Observ	Observ	Observ	Observ	Observ	Observ	Observ	Comments
Extraction Well PW-1	8	4880	3.94			OK	OK				
Extraction Well PW-2	15	8810	7.06			OK	OK				
Extraction Well PW-4	8	6813	6.4			OK	OK				
Extraction Well PW-5	10	6937	5.69			OK	OK				
Extraction Well PW-6	8	4446	3.6			OK	OK				
Extraction Well PW-8		6525	5.37			OK	OK				
Extraction Well PW-9	4	713	3.86			OK	OK				
Extraction Well EW-2		5904	4.8			OK	OK				
Extraction Well EW-6		2952	2.4			OK	OK				

Description	Instrument ID	Reading type	AM	AM	AM	Mid-Day	PM	PM	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	43.4	44	44.1	56.5	56.9	56.7	56.1	
Level in Equalization Tank	LIT 1011	FT	20	20	20	20	20.7	19.2	18.9	set point set to 19'
DAF Feed Pump 1	50P1101	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	55	55.9	49	55.1	100%	99.6	85.4	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG						5	4	
DAF Feed Pump 2	50P1102	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Flowrate to DAF	FIT 1110	GPM	44.4	45.6	44.7	56.6	79.4	79.4	67.4	
Level in DAF Froth Chamber	LIT 1131	FT	1.6	1.7	1.8	1.9	2.3	2.4	2.8	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	4	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	50	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	pumped sludge
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	50	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	100	100	100	100	100	100	99	
DAF Recirculation Flowrate	FIT 1137	GPM	75.6	75.6	75.7	75.7	75.1	75.1	75.3	
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	110	110	2	2	2	100	110	
Air Saturation Tank Pressure	PI 1138	PSIG	66	66	65	65	63	66	66	
DAF Effluent Turbidity	AIT 1245	NTU	20.7	20	19.6	19.1	18.1	19.4	18.2	
Filter Feed Pump 1	50P1241	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	49.4	49.6	49	56.5	72.4			
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	14	14	21	16.5	26	15	17.5	
Filter Feed Pump 2	50P1242	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/24/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM	PM
15	415	650	1208	1610	1830	2330

Description	Target Flow	AM OBSERVATION								Comments
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 1	50P1251	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	2.5	2.5	2.75	2.5	3	3.5	3.5	
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	3	3	1.5	2	2	3	3	
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Tank Level	LIT 1381	FT	3	3	3	1.9	2.3			
Decant Pump 1	50P1251	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Decant Pump 1 Speed	50P1251	0 - 100%	81.4	81.4	81.8	81	82	79.8	78.6	
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	8	8	8	8	8	8	8	
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Hydromation Filter Discharge Pressure	PI 1282	PSIG	10	10.5	14	12	15	14	13	
Hydromation Filter Differential Pressure	DPI 1231	PSIG	1	1	1.5	1.4	2.4	2	1	
Air Pressure at Hydromation Filter	--	PSIG	86	86	85	85	85			
GAC System Inlet Pressure	PI 1310	PSIG	11	12	11	13	19	19	13	
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD	LEAD	LEAD	LEAD	LEAD	
GAC 1 Discharge Pressure	PI 1311	PSIG	11	12	11	12	14	14	12	
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID	MID	MID	MID	MID	
GAC 2 Discharge Pressure	PI 1312	PSIG	10	11	10	11	13	13	11	
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG	LAG	LAG	LAG	LAG	
GAC 3 Discharge Pressure	PI 1313	PSIG	9.4	9.6	9.5	10	11	13	11	
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
GAC 4 Discharge Pressure	PI 1314	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
GAC 5 Discharge Pressure	PI 1315	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Flowrate to Effluent Tank	FIT 1321	GPM	44.4	45.5	44.4	58.3	80.5	79.5	53.98	
Level in Effluent Tank	LIT 1331	FT	20	20	20	20	20	20	20	
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 2	50P1352	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	N/A	N/A	N/A	N/A	N/A			

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/24/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM	PM
15	415	650	1208	1610	1830	2330

Description	Target Flow	AM OBSERVATION								Comments
Backwash Flowrate	FIT 1371	GPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Digester Tank Level	LIT 1421	FT	0.2	0.2	0.2	0.7	0.7	0.7	0.7	
Dirty Backwash Tank Level	LIT 1441	FT	6.2	6.2	6.2	6.5	4.6	4.9	5.5	
Backwash Recycle Pump	50P1461	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	pumped 2' into EQ tank
Seal Water flow	Flow Meter	GPM	0.25	0.25	0	0	0.25			
Backwash Recycle Pump Pressure	PI 1461	PSIG			5.5	5	8			
Containment Area Sump	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump Pressure	PI 1504	PSIG			10	10	10			
Stormwater Tank Level	LIT 1521	FT	12.8	13.8	12.8	12.8	12.8	12.8	12.8	
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Plant Water Storage Tank Level	LSHL 1570	FT	2.9	4.8	2	6.9	7.7	4	4.8	
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON	ON	ON	ON	ON	
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Plant Water Pump Discharge Pressure	PI 1591	PSIG	67	63.4	62.8	63.9	63.5	62.7	63.3	
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK	OK	OK	OK	OK	
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Polymer Storage Tank Level	---	VISUAL OBSERVATION	50	50	OK	OK	OK	OK	OK	
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	0.16	0.16	0.16	0.16	0.16	
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG	1	1	1	1	1	1	1	
Polymer Pump Stroke % (manual control only)	--	0 - 100%	60	60	60	60	60	60	60	
Polymer Dosage Rate (automatic control only)	--	PPM	7.6	7.8	1	1	1	1	1	
Rotary Blower		ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Rotary Blower Speed		0-100%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Plant Air Pressure	PI 1466	PSIG	117.7	114.9	114.3	113.9	116.9			
Instrument Air Pressure	PI 1650	PSIG	117.6	114.8	114.2	113.7	116.9			
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Total Hours		HRS	N/A	N/A	19756	19756	19756			
Compressor Pressure		PSIG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Compressor Temperature		Deg. F	N/A	N/A	80	80	78	N/A	N/A	
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Total Hours		HRS	17857	17858	17859	17860	17861	17861	17863	
Compressor Pressure		PSIG	120	118	120	115	115	135	120	
Compressor Temperature		Deg. F	150	140	140	130	152	135	140	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/25/2009

Operators Initials:

AM	AM	Mid-day	PM	PM
430	630	1400	1650	2000

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)	Observ	Observ	Observ	Observ		Comments
Extraction Well PW-1	8	9459	6.63	OK					
Extraction Well PW-2	15	12843	8.93	OK					
Extraction Well PW-4	8	10695	7.5	OK					
Extraction Well PW-5	10	14440	10.22	OK					
Extraction Well PW-6	8	8471	5.69	OK					
Extraction Well PW-8		9958	6.72	OK					
Extraction Well PW-9	4	5789	4.05	OK					
Extraction Well EW-2		8333	5.6	OK					
Extraction Well EW-6		4627	3.2	OK					

Description	Instrument ID	Reading type	AM	AM	Mid-Day	PM	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	55.2	55.1	55.8	56.5	55.4	
Level in Equalization Tank	LIT 1011	FT	19.1	19	18	20.5	19	
DAF Feed Pump 1	50P1101	ON/OFF	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.35	0.25	0.25	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	99.6	72.7	100	100	85.8	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	5	3.5	4	4	4	
DAF Feed Pump 2	50P1102	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	N/A	N/A	N/A	N/A	N/A	
Flowrate to DAF	FIT 1110	GPM	74.2	58.7	79.3	79.6	77.3	
Level in DAF Froth Chamber	LIT 1131	FT	2.8	2.8	2.7	2.7	2.7	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	99	98	98	98	98	
DAF Recirculation Flowrate	FIT 1137	GPM	75.3	75.6	74.5	74.2	74.1	
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	110	2	110	2	110	
Air Saturation Tank Pressure	PI 1138	PSIG	66	64	63	62	66	
DAF Effluent Turbidity	AIT 1245	NTU		18.4	19.6	22.1	20.3	
Filter Feed Pump 1	50P1241	ON/OFF	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/25/2009

Operators Initials:

AM	AM	Mid-day	PM	PM
430	630	1400	1650	2000

Description	Target Flow		AM OBSERVATION					Comments
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	52.8	57.6	71.7	72%	85.1	
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG		167.5	22.5	22.5	17	
Filter Feed Pump 2	50P1242	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	N/A	N/A	N/A	N/A	N/A	
Froth Pump 1	50P1251	ON/OFF	ON	ON	ON	ON	ON	
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	3.75	3.75	3.75	3.75	3.75	
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	2	1.75	1.75	2	3	
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A	N/A	N/A	
Froth Tank Level	LIT 1381	FT		3	3	2.27	3	
Decant Pump 1	50P1251	ON/OFF	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	
Decant Pump 1 Speed	50P1251	0 - 100%	78.9	79.5	77.5	15%	78.6	
Decant Pump 1 Discharge Pressure	PI 1391	PSIG		8	8	0	8	
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A	N/A	N/A	
Hydromation Filter Discharge Pressure	PI 1282	PSIG	14	11	15	15	11.4	
Hydromation Filter Differential Pressure	DPI 1231	PSIG	2.5	1.2	2	1.9	1	
Air Pressure at Hydromation Filter	--	PSIG		85	85	85	85	
GAC System Inlet Pressure	PI 1310	PSIG	19	13	18	18	11	
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD	LEAD	LEAD	
GAC 1 Discharge Pressure	PI 1311	PSIG	14	13	18	18	11	
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID	MID	MID	
GAC 2 Discharge Pressure	PI 1312	PSIG	13	12	14	16	10	
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG	LAG	LAG	
GAC 3 Discharge Pressure	PI 1313	PSIG	11	10	11	12	9.7	
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	0	0	0	
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	0	0	0	
Flowrate to Effluent Tank	FIT 1321	GPM	79.2	55.7	80.3	80.1	48.4	
Level in Effluent Tank	LIT 1331	FT	20.1	20	20	20.1	20	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/25/2009

Operators Initials:

AM	AM	Mid-day	PM	PM
430	630	1400	1650	2000

Description	Target Flow	AM OBSERVATION						Comments
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	AUTO	AUTO	AUTO	AUTO	
Seal Water flow	Flow Meter	GPM	N/A	0.25	0.25	0.25	1.25	
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	8	8	8	8	
Backwash Pump 2	50P1352	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	0	0	0	0		
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG		0	0	0	8	
Backwash Flowrate	FIT 1371	GPM		0	0	0		
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A	
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A	N/A	N/A	
Digester Tank Level	LIT 1421	FT	0.7	0.7	0.7	0.7	0.7	
Dirty Backwash Tank Level	LIT 1441	FT		3.3	4.5	6.5	6.5	
Backwash Recycle Pump	50P1461	ON/OFF		OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM		0	0	0	0	
Backwash Recycle Pump Pressure	PI 1461	PSIG		N/A	N/A	N/A	7	
Containment Area Sump	--	VISUAL OBSERVATION		OK	OK	OK	OK	
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF		AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF		AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump Pressure	PI 1504	PSIG		9.75	10	10		
Stormwater Tank Level	LIT 1521	FT	12.8	12.8	12.8	5.7	4.9	
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A	N/A	N/A	
Plant Water Storage Tank Level	LSHL 1570	FT	5.6	3.1	6.4	3.4	5.6	
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON	ON	ON	
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Plant Water Pump Discharge Pressure	PI 1591	PSIG	63.5	67	63.6	62.5	63.1	
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW		OK	OK	OK	OK	
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	
Polymer Storage Tank Level	---	VISUAL OBSERVATION		75%	75%	50%		
Polymer Concentration in Storage Tank	--	mg/L		0.16	0.16	0.16	0.16	
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG			1	1.9	1	
Polymer Pump Stroke % (manual control only)	--	0 - 100%	60	60	45%	20%	20	
Polymer Dosage Rate (automatic control only)	--	PPM	1	1	1	1.9	1.9	
Rotary Blower		ON/OFF		OFF	OFF	OFF	OFF	
Rotary Blower Speed		0-100%		OFF	OFF	OFF	OFF	
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG		OFF	OFF	OFF	OFF	
Plant Air Pressure	PI 1466	PSIG	114.9	117	118.7	120.4	119	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/25/2009

Operators Initials:

AM	AM	Mid-day	PM	PM
430	630	1400	1650	2000

Description	Target Flow		AM OBSERVATION					Comments
Instrument Air Pressure	PI 1650	PSIG	114.9	116.9	118.7	120.3	119	
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF	OFF	OFF	
Total Hours		HRS		197568	197568	197568		
Compressor Pressure		PSIG		0	0	0		
Compressor Temperature		Deg. F		76	76	80		
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	
Total Hours		HRS	17864	17865	17866	17867	17867.8	
Compressor Pressure		PSIG	125	125	1`22	125	118	
Compressor Temperature		Deg. F	168	167	158	160	140	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date:	3/26/2009	Operators Initials:	AM	AM	AM	Mid-day	PM
			0	400	623	1200	2100

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)		Observ				Comments
Extraction Well PW-1	8	9346	6.5		OK				
Extraction Well PW-2	15	12621	8.86		OK				
Extraction Well PW-4	8	10527	7.55		OK				
Extraction Well PW-5	10	14243	10.9		OK				
Extraction Well PW-6	8	8135	5.69		OK				
Extraction Well PW-8		9548	6.55		OK				
Extraction Well PW-9	4	5749	4.07		OK				
Extraction Well EW-2		7913	5.6		OK				
Extraction Well EW-6		3391	2.4		OK				

Description	Instrument ID	Reading type	AM	AM	AM	Mid-Day	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	55.1	54.1	54.3	57.9	55.3	
Level in Equalization Tank	LIT 1011	FT	19	19	19	18.6	20.7	
DAF Feed Pump 1	50P1101	ON/OFF	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	85.8	69.5	67.8	100	99.6	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	4	3.5	6	6	5	
DAF Feed Pump 2	50P1102	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	N/A	N/A	N/A	N/A	N/A	
Flowrate to DAF	FIT 1110	GPM	55.1	55.5	54.9	79.5	79.8	
Level in DAF Froth Chamber	LIT 1131	FT	2.7	2.6	2.4	3.2	2.6	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	99	98	98	98	98	
DAF Recirculation Flowrate	FIT 1137	GPM	74	74.2	73.9	74.5	74.4	
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	110	110	2	2	110	
Air Saturation Tank Pressure	PI 1138	PSIG	66	66	65	63	66	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/26/2009

Operators Initials:

AM	AM	AM	Mid-day	PM
0	400	623	1200	2100

Description	Target Flow	AM OBSERVATION						Comments
DAF Effluent Turbidity	AIT 1245	NTU	19.3	19.3	18.7	15.8	15	
Filter Feed Pump 1	50P1241	ON/OFF	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	55.5	81`.9	56.5	71.9	71.6	
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	17	17	24	23	27	
Filter Feed Pump 2	50P1242	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Speed	50AFD1242	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	N/A	N/A	N/A	N/A	N/A	
Froth Pump 1	50P1251	ON/OFF	ON	ON	ON	ON	OFF	air pump manual to move froth
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	3.75	3.75	3.75	3.75	N/A	
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	3	2	0.5	0.5	N/A	
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	N/A	
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A	N/A	N/A	
Froth Tank Level	LIT 1381	FT	N/A	N/A	3	3.3	3	
Decant Pump 1	50P1251	ON/OFF	ON	ON	ON	ON	OFF	will turn on when needed
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	N/A	
Decant Pump 1 Speed	50P1251	0 - 100%	79.1	78.4	79.1	82.6	N/A	
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	8	8	8	8	N/A	
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A	N/A	N/A	
Hydromation Filter Discharge Pressure	PI 1282	PSIG	11	11.8	14	17	15	
Hydromation Filter Differential Pressure	DPI 1231	PSIG	1.5	1.8	2.5	1.9	2	
Air Pressure at Hydromation Filter	--	PSIG	85	85	85	85	85	
GAC System Inlet Pressure	PI 1310	PSIG	13	13	20	19	19	
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD	LEAD	LEAD	
GAC 1 Discharge Pressure	PI 1311	PSIG	12	12	14	14	14	
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID	MID	MID	
GAC 2 Discharge Pressure	PI 1312	PSIG	11	11	13	13	13	
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG	LAG	LAG	
GAC 3 Discharge Pressure	PI 1313	PSIG	10	10	11	11	11	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/26/2009

Operators Initials:

AM	AM	AM	Mid-day	PM
0	400	623	1200	2100

Description	Target Flow	AM OBSERVATION						Comments
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	0	0	0	
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	0	0	0	
Flowrate to Effluent Tank	FIT 1321	GPM	58.1	56.5	80.4	79.5	80.9	
Level in Effluent Tank	LIT 1331	FT	20	20	20.1	20	20	
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	AUTO	AUTO	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	0.25	0.25	N/A	
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	8	8	8	8		
Backwash Pump 2	50P1352	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	8	8				
Backwash Flowrate	FIT 1371	GPM						
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A	
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A	N/A	N/A	
Digester Tank Level	LIT 1421	FT	0.7	0.7	0.7	0.7	0.7	
Dirty Backwash Tank Level	LIT 1441	FT	6.6	6.6	6.6	7.5	7.4	
Backwash Recycle Pump	50P1461	ON/OFF	OFF	OFF	OFF	ON	OFF	
Seal Water flow	Flow Meter	GPM				N/A	N/A	
Backwash Recycle Pump Pressure	PI 1461	PSIG	5			13		
Containment Area Sump	--	VISUAL OBSERVATION			OK	OK		
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump Pressure	PI 1504	PSIG			9	10		
Stormwater Tank Level	LIT 1521	FT	5	3.1	3.1	3	11.6	
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A	N/A	N/A	
Plant Water Storage Tank Level	LSHL 1570	FT	7.6	3.1	6.3	7	7.8	
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON	ON	ON	
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Plant Water Pump Discharge Pressure	PI 1591	PSIG	63.7	62.9	63.4	63.7	64.1	
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK	OK	OK	
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/26/2009

Operators Initials:

AM	AM	AM	Mid-day	PM
0	400	623	1200	2100

Description	Target Flow	AM OBSERVATION						Comments
Polymer Storage Tank Level	---	VISUAL OBSERVATION			OK	OK		
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	0.16	0.16	0.16	
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG			0.5	0.5	>1	
Polymer Pump Stroke % (manual control only)	--	0 - 100%	20	20	30	30	20	
Polymer Dosage Rate (automatic control only)	--	PPM	1.9	1.9	1.9	1.9	1.9	
Rotary Blower		ON/OFF	OFF	OFF	OFF	OFF	OFF	
Rotary Blower Speed		0-100%	N/A	N/A	N/A	N/A	N/A	
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	N/A	N/A	N/A	N/A	N/A	
Plant Air Pressure	PI 1466	PSIG		120.4	117.4	114.3	119.9	
Instrument Air Pressure	PI 1650	PSIG		120.3	117.4	114.3	119.8	
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF	OFF	OFF	
Total Hours		HRS			19757	19757		
Compressor Pressure		PSIG			0	0		
Compressor Temperature		Deg. F			78	75		
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	
Total Hours		HRS	17869	17869	17870	17871	17873.3	
Compressor Pressure		PSIG	125	120	120	120	125	
Compressor Temperature		Deg. F	168	130	140	130	150	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/27/2009

Operators Initials:

AM	Mid-day	PM
0	400	1933

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)	Observ	Mid-Day Observ	PM Observ	Comments
Extraction Well PW-1	8						
Extraction Well PW-2	15						
Extraction Well PW-4	8						
Extraction Well PW-5	10						
Extraction Well PW-6	8						
Extraction Well PW-8							
Extraction Well PW-9	4						
Extraction Well EW-2							
Extraction Well EW-6							

Description	Instrument ID	Reading type	AM	Mid-Day	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	55.3	55.3	57.9	
Level in Equalization Tank	LIT 1011	FT	18.3	20	19.9	
DAF Feed Pump 1	50P1101	ON/OFF	ON	ON	OFF	
Seal Water flow	Flow Meter	GPM	0.25	0.25	N/A	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	99.6	99.6	N/A	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	5	5	N/A	
DAF Feed Pump 2	50P1102	ON/OFF	OFF	OFF	ON	
Seal Water flow	Flow Meter	GPM	N/A	N/A	0.25	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	N/A	N/A	99.3	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	N/A	N/A	6	
Flowrate to DAF	FIT 1110	GPM	79.4	79.5	79.7	
Level in DAF Froth Chamber	LIT 1131	FT	3.2	3.3	2.2	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	98	98	98	
DAF Recirculation Flowrate	FIT 1137	GPM	74.4	74.8	75	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/27/2009

Operators Initials:

AM	Mid-day	PM
0	400	1933

Description	Target Flow	AM OBSERVATION			Mid-Day	PM	Comments
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	110	110	110		
Air Saturation Tank Pressure	PI 1138	PSIG	66	66	66		
DAF Effluent Turbidity	AIT 1245	NTU	17.1	12.2	19		
Filter Feed Pump 1	50P1241	ON/OFF	ON	ON	OFF		
Seal Water flow	Flow Meter	GPM	0.25	0.25	N/A		
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	71.6	71.9	N/A		
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	27	28	N/A		
Filter Feed Pump 2	50P1242	ON/OFF	OFF	OFF	ON		
Seal Water flow	Flow Meter	GPM	N/A	N/A	0.25		
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	N/A	N/A	70.6		
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	N/A	N/A	24		
Froth Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	manual pump to froth tank	
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	N/A	N/A	N/A		
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	N/A	N/A	N/A		
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF		
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A		
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A		
Froth Tank Level	LIT 1381	FT	2.9	3			
Decant Pump 1	50P1251	ON/OFF	OFF	ON	OFF	will turn on as needed	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Decant Pump 1 Speed	50P1251	0 - 100%	N/A	N/A	N/A		
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	N/A	N/A	N/A		
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A		
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A		
Hydromation Filter Discharge Pressure	PI 1282	PSIG	15	15	15		
Hydromation Filter Differential Pressure	DPI 1231	PSIG	1.9	2.2	2.2		
Air Pressure at Hydromation Filter	--	PSIG	85	85	85		
GAC System Inlet Pressure	PI 1310	PSIG	19	19	19		
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD		
GAC 1 Discharge Pressure	PI 1311	PSIG	14	14	15		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/27/2009

Operators Initials:

AM	Mid-day	PM
0	400	1933

Description	Target Flow	AM OBSERVATION			Mid-Day	PM	Comments
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID		
GAC 2 Discharge Pressure	PI 1312	PSIG	13	13	14		
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG		
GAC 3 Discharge Pressure	PI 1313	PSIG	11	11	12		
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF		
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	1		
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF		
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	1		
Flowrate to Effluent Tank	FIT 1321	GPM	80.9	79.7	80.8		
Level in Effluent Tank	LIT 1331	FT	20.1	20.1	20		
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	N/A	N/A		
Backwash Pump 2	50P1352	AUTO/ON/OFF	N/A	N/A	N/A		
Seal Water flow	Flow Meter	GPM	OFF	OFF	OFF		
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	N/A	N/A	N/A		
Backwash Flowrate	FIT 1371	GPM	N/A	N/A	N/A		
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A		
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A		
Digester Tank Level	LIT 1421	FT	0.7	0.7	0.7		
Dirty Backwash Tank Level	LIT 1441	FT	7.5	3.1	4.7		
Backwash Recycle Pump	50P1461	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Backwash Recycle Pump Pressure	PI 1461	PSIG	N/A	N/A	N/A		
Containment Area Sump	--	VISUAL OBSERVATION					
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO		
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO		
Containment Area Sump Pump Pressure	PI 1504	PSIG					
Stormwater Tank Level	LIT 1521	FT	11.7	13.2	6.3		
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/27/2009

Operators Initials:

AM	Mid-day	PM
0	400	1933

Description	Target Flow	AM OBSERVATION			Mid-Day	PM	Comments
Plant Water Storage Tank Level	LSHL 1570	FT	4.7	6.6	2.6		
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON		
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF		
Plant Water Pump Discharge Pressure	PI 1591	PSIG	63.4	63.9	62.9		
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK		
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO		
Polymer Storage Tank Level	---	VISUAL OBSERVATION					
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	1.16		
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG	1	1	1		
Polymer Pump Stroke % (manual control only)	--	0 - 100%	20	20	20		
Polymer Dosage Rate (automatic control only)	--	PPM	1.9	1.9	1.9		
Rotary Blower		ON/OFF	OFF	OFF	OFF		
Rotary Blower Speed		0-100%	N/A	N/A	N/A		
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	N/A	N/A	N/A		
Plant Air Pressure	PI 1466	PSIG	114.6	116.4	116.9		
Instrument Air Pressure	PI 1650	PSIG	114.5	116.3	116.9		
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF		
Total Hours		HRS	N/A	N/A	N/A		
Compressor Pressure		PSIG	N/A	N/A	N/A		
Compressor Temperature		Deg. F	N/A	N/A	N/A		
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO		
Total Hours		HRS	17874	17875	17878.3		
Compressor Pressure		PSIG	120	120	120		
Compressor Temperature		Deg. F	137	144	140		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date:	3/28/2009	Operators Initials:	AM	AM	AM	Mid-day	PM	PM
			0	400	641	1130	1610	2010

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)			Observ				Comments
Extraction Well PW-1	8	9021	6.72			OK				
Extraction Well PW-2	15	12502	9.35			OK				
Extraction Well PW-4	8	10176	7.65			OK				
Extraction Well PW-5	10	13838	10.39			OK				
Extraction Well PW-6	8	10192	7.78			OK				
Extraction Well PW-8		9612	7.08			OK				
Extraction Well PW-9	4	6444	4.07			OK				
Extraction Well EW-2		8862	5.6			OK				
Extraction Well EW-6		3798	2.4			OK				

Description	Instrument ID	Reading type	AM	AM	AM	Mid-Day	PM	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	58	58.5	58.6	57	56.3	55.8	
Level in Equalization Tank	LIT 1011	FT	18	15.4	14	18.9	19.7	20.11	
DAF Feed Pump 1	50P1101	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2	50P1102	ON/OFF	ON	ON	ON	OFF	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.3	0.25	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	99.3	99.3	59.8	0	100	79.7	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	6		0	6	5.5	6	
Flowrate to DAF	FIT 1110	GPM	79.5	79.7	47.6	0	79.7	79.7	
Level in DAF Froth Chamber	LIT 1131	FT	2.2	2.8	2.8	2.1	1.5	2.5	
Level in DAF Effluent Well	LIT 1211	FT	4	4	6	4.1	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	98.3	99.1	97	97	98	96	
DAF Recirculation Flowrate	FIT 1137	GPM	75.1	75	75	75	75.3	75.4	
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	110	110	2	2	2	110	
Air Saturation Tank Pressure	PI 1138	PSIG	66	66	64	64	63	62	
DAF Effluent Turbidity	AIT 1245	NTU	20	18.6	19	11.3	21.4	15.6	
Filter Feed Pump 1	50P1241	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/28/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
0	400	641	1130	1610	2010

Description	Target Flow		AM OBSERVATION						Comments
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2	50P1242	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Tank Level	LIT 1381	FT	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 1 Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Hydromation Filter Discharge Pressure	PI 1282	PSIG	16.5	15	11	7.9	17	16	
Hydromation Filter Differential Pressure	DPI 1231	PSIG	2	2.2	1.2	0	2	2.2	
Air Pressure at Hydromation Filter	--	PSIG	85	85	85	85	85	85	
GAC System Inlet Pressure	PI 1310	PSIG	20	19	13	0	16	20	
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD	LEAD	LEAD	LEAD	
GAC 1 Discharge Pressure	PI 1311	PSIG	15	14	12	9.2	15	14	
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID	MID	MID	MID	
GAC 2 Discharge Pressure	PI 1312	PSIG	13	13	11	8.8	14	13	
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG	LAG	LAG	LAG	
GAC 3 Discharge Pressure	PI 1313	PSIG	11	11	9.9	8.4	13	11	
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF	
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	0	0	0	0	
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF	
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	0	0	0	0	
Flowrate to Effluent Tank	FIT 1321	GPM	81.8	80.1	55.7	0		79.6	
Level in Effluent Tank	LIT 1331	FT	20	20	20	19.8		20	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/28/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
0	400	641	1130	1610	2010

Description	Target Flow	AM OBSERVATION							Comments
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 2	50P1352	AUTO/ON/OFF	OFF	OFF	AUTO	AUTO	AUTO	AUTO	
Seal Water flow	Flow Meter	GPM	N/A	N/A	0.25	0.25	0.25	N/A	
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	N/A	N/A	8	8	5	N/A	
Backwash Flowrate	FIT 1371	GPM	0	0	0	0	0	0	
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A	N/A	
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A	N/A	N/A	N/A	
Digester Tank Level	LIT 1421	FT	0.7	0.7	0.7	0.7	0.7	0.7	
Dirty Backwash Tank Level	LIT 1441	FT	4.7	4.7	4.7	5.7	10.5	7.2	
Backwash Recycle Pump	50P1461	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Recycle Pump Pressure	PI 1461	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Containment Area Sump	--	VISUAL OBSERVATION							
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump Pressure	PI 1504	PSIG			10	10	10		
Stormwater Tank Level	LIT 1521	FT	6.3	6.4	6.4	6.3	6.3	6.4	
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Plant Water Storage Tank Level	LSHL 1570	FT	5.3	2.3	6.5	3.7	7.4	4.7	
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON	ON	ON	ON	
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Plant Water Pump Discharge Pressure	PI 1591	PSIG	63.6	62.9	65	63.5	64.3	63.4	
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK	OK	OK	OK	
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Polymer Storage Tank Level	---	VISUAL OBSERVATION	OK	OK	75%	OK	75%	OK	
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	0.16	0.16	0.16	0.16	
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG	1	1	0.5	0	0.5	1	
Polymer Pump Stroke % (manual control only)	--	0 - 100%	20	20	30	20	20	20	
Polymer Dosage Rate (automatic control only)	--	PPM	1.9	1.9	1.9	1.9	1.9	1.9	
Rotary Blower		ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Rotary Blower Speed		0-100%	N/A	N/A	N/A	N/A	N/A	N/A	
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Plant Air Pressure	PI 1466	PSIG	116.4	117.8	113	115.8	112.4	115	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/28/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
0	400	641	1130	1610	2010

Description	Target Flow		AM OBSERVATION						Comments
Instrument Air Pressure	PI 1650	PSIG	116.1	117.8	112.9	115.7	112.4	114.9	
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Total Hours		HRS	19757	19757	19757	19757	19757	19757	
Compressor Pressure		PSIG	0	0	0	0	0	0	
Compressor Temperature		Deg. F			80	80	80		
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Total Hours		HRS	17879	17880	17881	17882	17883	17884	
Compressor Pressure		PSIG	120	120	122	120	120	120	
Compressor Temperature		Deg. F	140	146	167	140	170	130	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date:	3/29/2009	Operators Initials:	AM	AM	AM	Mid-day	PM	PM
			9	400	622	1147	1608	2000

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)		Observ			Mid-Day Observ	PM Observ	Comments
Extraction Well PW-1	8	9504	6.59		OK	OK	OK			
Extraction Well PW-2	15	13196	9.25		OK	OK	OK			
Extraction Well PW-4	8	10570	7.48		OK	OK	OK			
Extraction Well PW-5	10	14539	10.24		OK	OK	OK			
Extraction Well PW-6	8	10539	7.42		OK	OK	OK			
Extraction Well PW-8		9672	6.82		OK	OK	OK			
Extraction Well PW-9	4	5793	4.02		OK	OK	OK			
Extraction Well EW-2		10122	5.6		OK	OK	OK			0749-7gpm
Extraction Well EW-6		4338	2.4		OK	OK	OK			0751-3gpm

Description	Instrument ID	Reading type	AM	AM	AM	Mid-Day	PM	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	55.6	56.6	56.9	59.8	59.4	57.9	
Level in Equalization Tank	LIT 1011	FT	20.3	18.8	17.2	15.2	21.3	18.7	
DAF Feed Pump 1	50P1101	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2	50P1102	ON/OFF	ON	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	0.25	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	99.3	99.3	100	100	100	99.3	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	6	6	5.75		5.5	6	
Flowrate to DAF	FIT 1110	GPM	79.7	79.7	79.5	79.5	79.8	79.7	
Level in DAF Froth Chamber	LIT 1131	FT	3.3	2.3	2.8	2.6	1.6	2.6	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	51	52	53	54	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	51	52	53	54	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	96	96	96	96	98	96	
DAF Recirculation Flowrate	FIT 1137	GPM	75.5	72.4	75.7	75.7	75.9	75.6	
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	2	2	2	2	2	2	
Air Saturation Tank Pressure	PI 1138	PSIG	63	64	64	64	64	65	
DAF Effluent Turbidity	AIT 1245	NTU	12.9	14.3	16.9	17.8	10.8	15.2	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/29/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
9	400	622	1147	1608	2000

Description	Target Flow		AM OBSERVATION					Mid-Day	PM	Comments
Filter Feed Pump 1	50P1241	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A		
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A		
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Filter Feed Pump 2	50P1242	ON/OFF	ON	ON	ON	ON	ON	ON		
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	0.25		
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	72	72.5	73.8	72.4	72.7	72.8		
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	25	26	26	25	25	26		
Froth Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A		
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A		
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Froth Tank Level	LIT 1381	FT	3	2.9	2.9	2.9	3	3.1		
Decant Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A		
Decant Pump 1 Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A		
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A		
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A		
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Hydromation Filter Discharge Pressure	PI 1282	PSIG	16	16	16	16	16	17		
Hydromation Filter Differential Pressure	DPI 1231	PSIG	2.3	2.6	2.8	2	2.1	2.6		
Air Pressure at Hydromation Filter	--	PSIG	86	86	85	85	84	85		
GAC System Inlet Pressure	PI 1310	PSIG	20	21	21	20	17	22		
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD	LEAD	LEAD	LEAD		
GAC 1 Discharge Pressure	PI 1311	PSIG	14	14	14	14	14	14		
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID	MID	MID	MID		
GAC 2 Discharge Pressure	PI 1312	PSIG	13	13	13	13	13	13		
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG	LAG	LAG	LAG		
GAC 3 Discharge Pressure	PI 1313	PSIG	11	11	11	11	11	11		
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF		
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	0	0	0	0		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/29/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
9	400	622	1147	1608	2000

Description	Target Flow		AM OBSERVATION					Mid-Day	PM	Comments
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF		
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	0	0	0	0		
Flowrate to Effluent Tank	FIT 1321	GPM	80	79.8	80.7	80	79.5	79.9		
Level in Effluent Tank	LIT 1331	FT	20.1	20.1	20.1	20	20	20		
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A		
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Backwash Pump 2	50P1352	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A		
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Backwash Flowrate	FIT 1371	GPM	N/A	N/A	N/A	N/A	N/A	N/A		
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A	N/A		
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A	N/A	N/A	N/A		
Digester Tank Level	LIT 1421	FT	0.7	0.7	0.7	0.6	5.4	6.2	filling tank for blower test	
Dirty Backwash Tank Level	LIT 1441	FT	4.1	2.7	2.8	8.5	3.7	4.9		
Backwash Recycle Pump	50P1461	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A		
Backwash Recycle Pump Pressure	PI 1461	PSIG	N/A	N/A	N/A	N/A	N/A	N/A		
Containment Area Sump	--	VISUAL OBSERVATION			OK	OK	OK	OK		
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO		
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO		
Containment Area Sump Pump Pressure	PI 1504	PSIG			9.25	10	10			
Stormwater Tank Level	LIT 1521	FT	6.4	6.4	6.4	6.4	6.3	6.3		
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	OFF	OFF	OFF	OFF	OFF	OFF		
Stormwater/Recycle Pump Pressure	PI 1544	PSIG								
Plant Water Storage Tank Level	LSHL 1570	FT	2.6	6.9	5.6	2.6	2.7	7.9		
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON	ON	ON	ON		
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Plant Water Pump Discharge Pressure	PI 1591	PSIG	63.3	64.2	63.9	63.5	47.5	64.7		
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK	OK	OK	OK		
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO		
Polymer Storage Tank Level	---	VISUAL OBSERVATION			60%	75%	75%			
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	0.16	0.16	0.16	0.16		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/29/2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
9	400	622	1147	1608	2000

Description	Target Flow		AM OBSERVATION					Mid-Day	PM	Comments
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG	1	1	0.5	0.5	0.5	1		
Polymer Pump Stroke % (manual control only)	--	0 - 100%	20	20	30	30	30	20		
Polymer Dosage Rate (automatic control only)	--	PPM	1.9	1.9	1.9	1.9	1.9	1.9		
Rotary Blower		ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Rotary Blower Speed		0-100%	N/A	N/A	N/A	N/A	N/A	N/A		
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	0.2	0.2						
Plant Air Pressure	PI 1466	PSIG	118.5	112.1	119.6	118.2	112.4	113.7		
Instrument Air Pressure	PI 1650	PSIG	118.5	112	119.4	118.1	112.5	113.4		
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF	OFF	OFF	OFF		
Total Hours		HRS			19757	19757	19757			
Compressor Pressure		PSIG			0	0	0			
Compressor Temperature		Deg. F			79	80	80			
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO		
Total Hours		HRS	17885	17886	17886	17888	17889	17889.5		
Compressor Pressure		PSIG	124	124	118	120	125	130		
Compressor Temperature		Deg. F	168	164	148	150	172	180		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date:	3/30/2009	Operators Initials:	AM	AM	Mid-day	PM	PM
			400		1205	1620	2000

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)		Observ		Mid-Day Observ	PM Observ	Comments
Extraction Well PW-1	8	9573	6.76						
Extraction Well PW-2	15	13385	9.39						
Extraction Well PW-4	8	10794	7.59						
Extraction Well PW-5	10	14826	10.47						
Extraction Well PW-6	8	11127	7.78						
Extraction Well PW-8		10448	7.21						
Extraction Well PW-9	4	5672	4.02						
Extraction Well EW-2		8941	6.4						
Extraction Well EW-6		4470	3.2						

Description	Instrument ID	Reading type	AM	AM	Mid-Day	PM	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	57.8	58.4	59.2	58.7	57.3	
Level in Equalization Tank	LIT 1011	FT	13.8	12.4	16.5	14	20.5	
DAF Feed Pump 1	50P1101	ON/OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2	50P1102	ON/OFF	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	99.3	100	100.1	100.1	99.1	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	5	5.5	6	6	6	
Flowrate to DAF	FIT 1110	GPM	79.9	79.4	80	79.8	80.3	
Level in DAF Froth Chamber	LIT 1131	FT	2	2.6	1.9	2.7	3.4	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	96	96	96	96	95	
DAF Recirculation Flowrate	FIT 1137	GPM	75.6	75.6	76	75.6	76.1	
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	2	2	2	2	2	
Air Saturation Tank Pressure	PI 1138	PSIG	64	64	64	64	64	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/30/2009

Operators Initials:

AM	AM	Mid-day	PM	PM
400		1205	1620	2000

Description	Target Flow		AM OBSERVATION				Mid-Day	PM	Comments
DAF Effluent Turbidity	AIT 1245	NTU	20.8	17.3	9.6	10.3	13.8		
Filter Feed Pump 1	50P1241	ON/OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A		
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	N/A	N/A	N/A	N/A	N/A		
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	N/A	N/A	N/A	N/A	N/A		
Filter Feed Pump 2	50P1242	ON/OFF	ON	ON	ON	ON	ON		
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25		
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	72	73.6	73.9	74.3	73.6		
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	25	26	26	27			
Froth Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF		
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A		
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	N/A	N/A	N/A	N/A	N/A		
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF		
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A		
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A	N/A	N/A		
Froth Tank Level	LIT 1381	FT	3	3	3.6	3	3		
Decant Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A		
Decant Pump 1 Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A		
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	N/A	N/A	N/A	N/A	N/A		
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A		
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A		
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A	N/A	N/A		
Hydromation Filter Discharge Pressure	PI 1282	PSIG	17	17	18	18	18		
Hydromation Filter Differential Pressure	DPI 1231	PSIG	2	2	2.5	2.9	2		
Air Pressure at Hydromation Filter	--	PSIG	85	85	85	86	85		
GAC System Inlet Pressure	PI 1310	PSIG	17	21	22	21	22		
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD	LEAD	LEAD		
GAC 1 Discharge Pressure	PI 1311	PSIG	14	14	14	14	14		
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID	MID	MID		
GAC 2 Discharge Pressure	PI 1312	PSIG	13	13	12	13	13		
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG	LAG	LAG		
GAC 3 Discharge Pressure	PI 1313	PSIG	11	11	11	11	11		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/30/2009

Operators Initials:

AM	AM	Mid-day	PM	PM
400		1205	1620	2000

Description	Target Flow	AM OBSERVATION					Mid-Day	PM	Comments
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF		
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	0	0	0		
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF		
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	0	0	0		
Flowrate to Effluent Tank	FIT 1321	GPM	80.2	79.2	85.7	80	80.3		
Level in Effluent Tank	LIT 1331	FT	19.8	20	20	20	20		
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A		
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	N/A	N/A	N/A	N/A		
Backwash Pump 2	50P1352	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO		
Seal Water flow	Flow Meter	GPM	N/A	0.25	0.25	0.25	0.25		
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	N/A	8.25	8	8	8.5		
Backwash Flowrate	FIT 1371	GPM	N/A	N/A	N/A	N/A	N/A		
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A		
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A	N/A	N/A		
Digester Tank Level	LIT 1421	FT	6.3	6.3	6.3	6.3	6.3		
Dirty Backwash Tank Level	LIT 1441	FT	5.4	4	4.3	9.6	5.5		
Backwash Recycle Pump	50P1461	ON/OFF	OFF	ON	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	0.25	0.25	0.25	0.25		
Backwash Recycle Pump Pressure	PI 1461	PSIG	N/A	11	0	8			
Containment Area Sump	--	VISUAL OBSERVATION		OK	OK	OK			
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO		
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO		
Containment Area Sump Pump Pressure	PI 1504	PSIG		10	11	10			
Stormwater Tank Level	LIT 1521	FT	6.4	6.4	6.3	6.3	6.3		
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	OFF	OFF	OFF	OFF	OFF		
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A	N/A	N/A		
Plant Water Storage Tank Level	LSHL 1570	FT	4.4	6.4	6.2	6.2	7.4		
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON	ON	ON		
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF	OFF	OFF		
Plant Water Pump Discharge Pressure	PI 1591	PSIG	63.7	60.3	63.7	65	64.6		
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK	OK	OK		
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/30/2009

Operators Initials:

AM	AM	Mid-day	PM	PM
400		1205	1620	2000

Description	Target Flow	AM OBSERVATION					Mid-Day	PM	Comments
Polymer Storage Tank Level	---	VISUAL OBSERVATION		60%	75%	75%	50%		
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	0.16	0.16	0.16		
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG	1	1	0.5	1	1		
Polymer Pump Stroke % (manual control only)	--	0 - 100%	20	30	20	20	20		
Polymer Dosage Rate (automatic control only)	--	PPM	1.9	1.9	1.9	1.9	1.9		
Rotary Blower		ON/OFF	OFF	OFF	OFF	OFF	OFF		
Rotary Blower Speed		0-100%	N/A	N/A	N/A	N/A	N/A		
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	N/A	N/A	N/A	N/A	N/A		
Plant Air Pressure	PI 1466	PSIG	120.3	115.8	118.8	119.1	117.4		
Instrument Air Pressure	PI 1650	PSIG	120.2	115.8	119	118.5	117.2		
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF	OFF	OFF		
Total Hours		HRS		19757	19757	19757			
Compressor Pressure		PSIG		0	0	0			
Compressor Temperature		Deg. F		80	80	80			
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO		
Total Hours		HRS	17892	17892	17894	17895	17895.4		
Compressor Pressure		PSIG	124	118	120	120	117		
Compressor Temperature		Deg. F	164	138	142	151	142		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date:	3/31-4/1 2009	Operators Initials:	AM	AM	AM	Mid-day	PM	PM
			0	400	630			2000

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)		Observ			Observ	Observ	Comments
Extraction Well PW-1	8	9743	6.65		OK					
Extraction Well PW-2	15	13574	9.29		OK					
Extraction Well PW-4	8	10885	7.48		OK					
Extraction Well PW-5	10	15048	10.41		OK					
Extraction Well PW-6	8	11103	7.46		OK					
Extraction Well PW-8		10500	7.12		OK					
Extraction Well PW-9	4	5819	4.02		OK					
Extraction Well EW-2		8109	5.6		OK					0724- 7 gpm
Extraction Well EW-6		3475	2.4		OK					0726- 3 gpm

Description	Instrument ID	Reading type	AM	AM	AM	Mid-Day	PM	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM	57.5	56.9	56.3	60.3	59.6	56.9	
Level in Equalization Tank	LIT 1011	FT	17.8	18.9	18.9	16.3	17.4	16.8	
DAF Feed Pump 1	50P1101	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
DAF Feed Pump 2	50P1102	ON/OFF	ON	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	0.25	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	99.3	99.3	100	100	100	99.3	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	6	6	6	6	6	5	
Flowrate to DAF	FIT 1110	GPM	80.4	80.4	80.4	75.6	80.1	80.3	
Level in DAF Froth Chamber	LIT 1131	FT	1.7	2.7	2.1	2.1	3.3	3	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	96	95	96	96	96	95	
DAF Recirculation Flowrate	FIT 1137	GPM	76	75.9	75.9	75.9	75.7	75.7	
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	2	2	2	2	2	2	
Air Saturation Tank Pressure	PI 1138	PSIG	64	64	63	64	64	64	
DAF Effluent Turbidity	AIT 1245	NTU	11.8	12.3	14.7	19.1	22.8	14.9	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/31-4/1 2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
0	400	630			2000

Description	Target Flow		AM OBSERVATION						Comments
Filter Feed Pump 1	50P1241	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Filter Feed Pump 2	50P1242	ON/OFF	ON	ON	ON	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	0.25	0.25	0.25	
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	74.9	75.6	76	73.3	74.8	74.8	
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	27	28	20	21	25	25	
Froth Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Froth Tank Level	LIT 1381	FT	3	3	2.9	2.9	2	3	
Decant Pump 1	50P1251	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 1 Speed	50P1251	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A	N/A	N/A	N/A	
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Hydromation Filter Discharge Pressure	PI 1282	PSIG	18	18	18	17	18	19	
Hydromation Filter Differential Pressure	DPI 1231	PSIG	2	2.9	4.7	2.1	2	2.6	
Air Pressure at Hydromation Filter	--	PSIG	85	85	85	84	84	85	
GAC System Inlet Pressure	PI 1310	PSIG	23	24	25	20	20	23	
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD	LEAD	LEAD	LEAD	
GAC 1 Discharge Pressure	PI 1311	PSIG	14	14	14	14	14	14	
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID	MID	MID	MID	
GAC 2 Discharge Pressure	PI 1312	PSIG	13	13	13	13	13	13	
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG	LAG	LAG	LAG	
GAC 3 Discharge Pressure	PI 1313	PSIG	11	11	11	11	11	11	
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF	
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	0	0	0	0	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/31-4/1 2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
0	400	630			2000

Description	Target Flow	AM OBSERVATION							Comments
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF	OFF	OFF	OFF	
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	0	0	0	0	
Flowrate to Effluent Tank	FIT 1321	GPM	80	80.2	80.5	81.1	78.6	79.1	
Level in Effluent Tank	LIT 1331	FT	20.1	20.1	20.1	20	20	20.1	
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 2	50P1352	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Flowrate	FIT 1371	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A	N/A	N/A	N/A	
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A	N/A	N/A	N/A	
Digester Tank Level	LIT 1421	FT	6.3	6.3	6.3	6.3	5.5	5.5	
Dirty Backwash Tank Level	LIT 1441	FT	9.4	8.7	7.1	8.1	4.5	2.7	
Backwash Recycle Pump	50P1461	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	N/A	N/A	N/A	
Backwash Recycle Pump Pressure	PI 1461	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Containment Area Sump	--	VISUAL OBSERVATION							
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Containment Area Sump Pump Pressure	PI 1504	PSIG							
Stormwater Tank Level	LIT 1521	FT	6.3	6.3	6.3	6.4	6.3	6.3	
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	OFF	OFF	OFF	OFF	OFF	OFF	
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Plant Water Storage Tank Level	LSHL 1570	FT	5.5	3.7	2.8	6.8	4.9	2.8	
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON	ON	ON	ON	
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Plant Water Pump Discharge Pressure	PI 1591	PSIG	63.9	63.6	63.5	64.2	63.7	63.2	
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK	OK	OK	OK	
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Polymer Storage Tank Level	---	VISUAL OBSERVATION	50%	50%	60%	60%	60%	60%	
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	0.16	0.16	0.16	0.16	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 3/31-4/1 2009

Operators Initials:

AM	AM	AM	Mid-day	PM	PM
0	400	630			2000

Description	Target Flow		AM OBSERVATION						Comments
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG	1	1	1	1	1	1	
Polymer Pump Stroke % (manual control only)	--	0 - 100%	20	20	30	30	30	20	
Polymer Dosage Rate (automatic control only)	--	PPM	1.9	1.9	1.9	1.9	1.9	1.9	
Rotary Blower		ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Rotary Blower Speed		0-100%	N/A	N/A	N/A	N/A	N/A	N/A	
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	N/A	N/A	N/A	N/A	N/A	N/A	
Plant Air Pressure	PI 1466	PSIG	113.3	112.7	119	117	116.2	112.6	
Instrument Air Pressure	PI 1650	PSIG	113.2	112.7	119	116.9	116	112.7	
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Total Hours		HRS		19766	19766	19766			
Compressor Pressure		PSIG		0	0	0			
Compressor Temperature		Deg. F		80	80	80			
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
Total Hours		HRS	17896	17897	17899	17899	17900	17901	
Compressor Pressure		PSIG	115	123	120	125	127	125	
Compressor Temperature		Deg. F	160	175	150	141	124	176	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 4/1/2009

Operators Initials:

AM	AM	AM
0	400	

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)			PM Observ	Comments
Extraction Well PW-1	8	9646	6.7		OK		
Extraction Well PW-2	15	13436	9.31		OK		
Extraction Well PW-4	8	10722	7.5		OK		
Extraction Well PW-5	10	14908	10.45		OK		
Extraction Well PW-6	8	11029	7.72		OK		
Extraction Well PW-8		10413	7.19		OK		
Extraction Well PW-9	4	5706	4.02		OK		
Extraction Well EW-2		9126	6.4		OK		0710-8 gpm
Extraction Well EW-6		4563	3.2		OK		0712-4 gpm

Description	Instrument ID	Reading type	AM			Comments
Flowrate From Extraction Wells	FIT 1009	GPM	57.9	58.1	57.9	
Level in Equalization Tank	LIT 1011	FT	14.1	12	12.8	
DAF Feed Pump 1	50P1101	ON/OFF	OFF	OFF	OFF	
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A	
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%	N/A	N/A	N/A	
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG	N/A	N/A	N/A	
DAF Feed Pump 2	50P1102	ON/OFF	ON	ON	ON	
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25	
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%	99.3	70	100	
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG	5	4	5.5	
Flowrate to DAF	FIT 1110	GPM	80.2	52.1	79.9	
Level in DAF Froth Chamber	LIT 1131	FT	3.7	2.2	2.6	
Level in DAF Effluent Well	LIT 1211	FT	4	4	4	
DAF Mixer	SHK 1121A	ON/OFF	ON	ON	ON	
DAF Mixer Speed	SHK 1121A	0 - 100%	50	50	50	
DAF Auger	HS 1121 B	ON/OFF	OFF	OFF	OFF	
DAF Skimmer	SHK 1121C	ON/OFF	ON	ON	ON	
DAF Skimmer Speed	SHK 1121C	0 - 100%	50	50	50	
DAF Recirculation Pump	HS 1135	ON/OFF	ON	ON	ON	
DAF Recirc. Pump Discharge Pressure		PSIG	95	93	94	
DAF Recirculation Flowrate	FIT 1137	GPM	75.7	75.8	75.6	

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 4/1/2009

Operators Initials:

AM	AM	AM
0	400	

Description	Target Flow		AM OBSERVATION			PM	Comments
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM	2	2	2		
Air Saturation Tank Pressure	PI 1138	PSIG	64	64	63		
DAF Effluent Turbidity	AIT 1245	NTU	21.8	22.6	19.1		
Filter Feed Pump 1	50P1241	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%	N/A	N/A	N/A		
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG	N/A	N/A	N/A		
Filter Feed Pump 2	50P1242	ON/OFF	ON	ON	ON		
Seal Water flow	Flow Meter	GPM	0.25	0.25	0.25		
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%	75	63.4	74.9		
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG	27	23.5	23		
Froth Pump 1	50P1251	ON/OFF	OFF	OFF	OFF		
Froth Pump 1 Stroke Speed	50P1251	0 - 100%	N/A	N/A	N/A		
Froth Pump 1 Discharge Pressure	PI 1251	PSIG	N/A	N/A	N/A		
Froth Pump 2	50P1252	ON/OFF	OFF	OFF	OFF		
Froth Pump 2 Stroke Speed	50P1252	0 - 100%	N/A	N/A	N/A		
Froth Pump 2 Discharge Pressure	PI 1252	PSIG	N/A	N/A	N/A		
Froth Tank Level	LIT 1381	FT	3	3	3.3		
Decant Pump 1	50P1251	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Decant Pump 1 Speed	50P1251	0 - 100%	N/A	N/A	N/A		
Decant Pump 1 Discharge Pressure	PI 1391	PSIG	N/A	N/A	N/A		
Decant Pump 2	50P1252	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Decant Pump 2 Speed	50P1252	0 - 100%	N/A	N/A	N/A		
Decant Pump 2 Discharge Pressure	PI 1392	PSIG	N/A	N/A	N/A		
Hydromation Filter Discharge Pressure	PI 1282	PSIG	19	14	18		
Hydromation Filter Differential Pressure	DPI 1231	PSIG	2.8	1.7	3.4		
Air Pressure at Hydromation Filter	--	PSIG	85	84	85		
GAC System Inlet Pressure	PI 1310	PSIG	23	16			
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE	LEAD	LEAD	LEAD		
GAC 1 Discharge Pressure	PI 1311	PSIG	14	11	14		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 4/1/2009

Operators Initials:

AM	AM	AM
0	400	

Description	Target Flow	AM OBSERVATION				PM	Comments
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE	MID	MID	MID		
GAC 2 Discharge Pressure	PI 1312	PSIG	13	10	13		
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE	LAG	LAG	LAG		
GAC 3 Discharge Pressure	PI 1313	PSIG	11	9.9	11		
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF		
GAC 4 Discharge Pressure	PI 1314	PSIG	0	0	0		
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE	OFF	OFF	OFF		
GAC 5 Discharge Pressure	PI 1315	PSIG	0	0	0		
Flowrate to Effluent Tank	FIT 1321	GPM	80	54.5	80.8		
Level in Effluent Tank	LIT 1331	FT	20.1	20	20.1		
Backwash Pump 1	50P1351	AUTO/ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG	N/A	N/A	N/A		
Backwash Pump 2	50P1352	AUTO/ON/OFF	AUTO	AUTO	AUTO		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG	N/A	N/A	N/A		
Backwash Flowrate	FIT 1371	GPM	N/A	N/A	N/A		
Product Tank Level	--	VISUAL OBSERVATION	N/A	N/A	N/A		
Product Tank Stored Volume	--	GAL	N/A	N/A	N/A		
Digester Tank Level	LIT 1421	FT	5.5	5.5	5.5		
Dirty Backwash Tank Level	LIT 1441	FT	2.7	2.8	2.9		
Backwash Recycle Pump	50P1461	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	N/A	N/A	N/A		
Backwash Recycle Pump Pressure	PI 1461	PSIG	N/A	N/A	N/A		
Containment Area Sump	--	VISUAL OBSERVATION			OK		
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF	AUTO	AUTO	AUTO		
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF	AUTO	AUTO	AUTO		
Containment Area Sump Pump Pressure	PI 1504	PSIG			9.5		
Stormwater Tank Level	LIT 1521	FT	6.4	6.4	6.4		
Stormwater/Recycle Pump	50P1544	ON/OFF	OFF	OFF	OFF		
Seal Water flow	Flow Meter	GPM	OFF	OFF	OFF		
Stormwater/Recycle Pump Pressure	PI 1544	PSIG	N/A	N/A	N/A		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: 4/1/2009

Operators Initials:

AM	AM	AM
0	400	

Description	Target Flow	AM OBSERVATION				PM	Comments
Plant Water Storage Tank Level	LSHL 1570	FT	7.3	5.2	3.7		
Plant Water Pump 1	50P1581	ON/OFF	ON	ON	ON		
Plant Water Pump 2	50P1582	ON/OFF	OFF	OFF	OFF		
Plant Water Pump Discharge Pressure	PI 1591	PSIG	64.5	63.8	63.3		
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW	OK	OK	OK		
Polymer Panel	--	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO		
Polymer Storage Tank Level	---	VISUAL OBSERVATION	60%				
Polymer Concentration in Storage Tank	--	mg/L	0.16	0.16	0.16		
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG	1	1	0.5		
Polymer Pump Stroke % (manual control only)	--	0 - 100%	20	20	20		
Polymer Dosage Rate (automatic control only)	--	PPM	1.9	1.9	1.9		
Rotary Blower		ON/OFF	OFF	OFF	OFF		
Rotary Blower Speed		0-100%	N/A	N/A	N/A		
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG	N/A	N/A	N/A		
Plant Air Pressure	PI 1466	PSIG	115.1	114.7	113.3		
Instrument Air Pressure	PI 1650	PSIG	115.2	114.7	113.1		
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF	OFF	OFF	OFF		
Total Hours		HRS					
Compressor Pressure		PSIG			19757		
Compressor Temperature		Deg. F					
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF	AUTO	AUTO	AUTO		
Total Hours		HRS	17902	17903	17903		
Compressor Pressure		PSIG	120	117	120		
Compressor Temperature		Deg. F	150	134	167		

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: / /

Operators Initials:

AM	Mid-day	PM

Description	Target Flow (GPM)	AM OBSERVATION Total Q	Flow (GPM)	Observ	Mid-Day Observ	PM Observ	Comments
Extraction Well PW-1	8						
Extraction Well PW-2	15						
Extraction Well PW-4	8						
Extraction Well PW-5	10						
Extraction Well PW-6	8						
Extraction Well PW-8							
Extraction Well PW-9	4						
Extraction Well EW-2							
Extraction Well EW-6							

Description	Instrument ID	Reading type	AM	Mid-Day	PM	Comments
Flowrate From Extraction Wells	FIT 1009	GPM				
Level in Equalization Tank	LIT 1011	FT				
DAF Feed Pump 1	50P1101	ON/OFF				
Seal Water flow	Flow Meter	GPM				
DAF Feed Pump 1 Speed	50AFD1101	0 - 100%				
DAF Feed Pump 1 Discharge Pressure	PI 1111	PSIG				
DAF Feed Pump 2	50P1102	ON/OFF				
Seal Water flow	Flow Meter	GPM				
DAF Feed Pump 2 Speed	50AFD1102	0 - 100%				
DAF Feed Pump 2 Discharge Pressure	PI 1112	PSIG				
Flowrate to DAF	FIT 1110	GPM				
Level in DAF Froth Chamber	LIT 1131	FT				
Level in DAF Effluent Well	LIT 1211	FT				
DAF Mixer	SHK 1121A	ON/OFF				
DAF Mixer Speed	SHK 1121A	0 - 100%				
DAF Auger	HS 1121 B	ON/OFF				
DAF Skimmer	SHK 1121C	ON/OFF				
DAF Skimmer Speed	SHK 1121C	0 - 100%				
DAF Recirculation Pump	HS 1135	ON/OFF				
DAF Recirc. Pump Discharge Pressure		PSIG				
DAF Recirculation Flowrate	FIT 1137	GPM				

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: / /

Operators Initials:

AM	Mid-day	PM

Description	Target Flow	AM OBSERVATION			Mid-Day	PM	Comments
Plant Air Flow to Air Saturation Tank	FI 1133	SCFM					
Air Saturation Tank Pressure	PI 1138	PSIG					
DAF Effluent Turbidity	AIT 1245	NTU					
Filter Feed Pump 1	50P1241	ON/OFF					
Seal Water flow	Flow Meter	GPM					
Filter Feed Pump 1 Speed	50AFD1241	0 - 100%					
Filter Feed Pump 1 Discharge Pressure	PI 1292	PSIG					
Filter Feed Pump 2	50P1242	ON/OFF					
Seal Water flow	Flow Meter	GPM					
Filter Feed Pump 2 Speed	50AFD1242	0 - 100%					
Filter Feed Pump 2 Discharge Pressure	PI1291	PSIG					
Froth Pump 1	50P1251	ON/OFF					
Froth Pump 1 Stroke Speed	50P1251	0 - 100%					
Froth Pump 1 Discharge Pressure	PI 1251	PSIG					
Froth Pump 2	50P1252	ON/OFF					
Froth Pump 2 Stroke Speed	50P1252	0 - 100%					
Froth Pump 2 Discharge Pressure	PI 1252	PSIG					
Froth Tank Level	LIT 1381	FT					
Decant Pump 1	50P1251	ON/OFF					
Seal Water flow	Flow Meter	GPM					
Decant Pump 1 Speed	50P1251	0 - 100%					
Decant Pump 1 Discharge Pressure	PI 1391	PSIG					
Decant Pump 2	50P1252	ON/OFF					
Seal Water flow	Flow Meter	GPM					
Decant Pump 2 Speed	50P1252	0 - 100%					
Decant Pump 2 Discharge Pressure	PI 1392	PSIG					
Hydromation Filter Discharge Pressure	PI 1282	PSIG					
Hydromation Filter Differential Pressure	DPI 1231	PSIG					
Air Pressure at Hydromation Filter	--	PSIG					
GAC System Inlet Pressure	PI 1310	PSIG					
GAC 1	50M1301	LEAD/MID/LAG/OFFLINE					
GAC 1 Discharge Pressure	PI 1311	PSIG					

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: / /

Operators Initials:

AM	Mid-day	PM

Description	Target Flow	AM OBSERVATION		Mid-Day	PM	Comments
GAC 2	50M1302	LEAD/MID/LAG/OFFLINE				
GAC 2 Discharge Pressure	PI 1312	PSIG				
GAC 3	50M1303	LEAD/MID/LAG/OFFLINE				
GAC 3 Discharge Pressure	PI 1313	PSIG				
GAC 4	50M1304	LEAD/MID/LAG/OFFLINE				
GAC 4 Discharge Pressure	PI 1314	PSIG				
GAC 5	50M1305	LEAD/MID/LAG/OFFLINE				
GAC 5 Discharge Pressure	PI 1315	PSIG				
Flowrate to Effluent Tank	FIT 1321	GPM				
Level in Effluent Tank	LIT 1331	FT				
Backwash Pump 1	50P1351	AUTO/ON/OFF				
Seal Water flow	Flow Meter	GPM				
Backwash Pump 1 Discharge Pressure	PI 1351	PSIG				
Backwash Pump 2	50P1352	AUTO/ON/OFF				
Seal Water flow	Flow Meter	GPM				
Backwash Pump 2 Discharge Pressure	PI 1352	PSIG				
Backwash Flowrate	FIT 1371	GPM				
Product Tank Level	--	VISUAL OBSERVATION				
Product Tank Stored Volume	--	GAL				
Digester Tank Level	LIT 1421	FT				
Dirty Backwash Tank Level	LIT 1441	FT				
Backwash Recycle Pump	50P1461	ON/OFF				
Seal Water flow	Flow Meter	GPM				
Backwash Recycle Pump Pressure	PI 1461	PSIG				
Containment Area Sump	--	VISUAL OBSERVATION				
Containment Area Sump Pump 1	40P1501	AUTO/ON/OFF				
Containment Area Sump Pump 2	40P1502	AUTO/ON/OFF				
Containment Area Sump Pump Pressure	PI 1504	PSIG				
Stormwater Tank Level	LIT 1521	FT				
Stormwater/Recycle Pump	50P1544	ON/OFF				
Seal Water flow	Flow Meter	GPM				
Stormwater/Recycle Pump Pressure	PI 1544	PSIG				

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

WYCKOFF GROUNDWATER TREATMENT PLANT
READINGS AND ROUNDS

Operation Date: / /

Operators Initials:

AM	Mid-day	PM

Description	Target Flow	AM OBSERVATION			Mid-Day	PM	Comments
Plant Water Storage Tank Level	LSHL 1570	FT					
Plant Water Pump 1	50P1581	ON/OFF					
Plant Water Pump 2	50P1582	ON/OFF					
Plant Water Pump Discharge Pressure	PI 1591	PSIG					
Plant Water Flow to Polymer System	FSL 1620	OKAY/LOW					
Polymer Panel	--	AUTO/MANUAL/OFF					
Polymer Storage Tank Level	---	VISUAL OBSERVATION					
Polymer Concentration in Storage Tank	--	mg/L					
Polymer Feed Pump Discharge Pressure	PI 1641	PSIG					
Polymer Pump Stroke % (manual control only)	--	0 - 100%					
Polymer Dosage Rate (automatic control only)	--	PPM					
Rotary Blower		ON/OFF					
Rotary Blower Speed		0-100%					
Rotary Air Blower Discharge Pressure	PIT 1555	PSIG					
Plant Air Pressure	PI 1466	PSIG					
Instrument Air Pressure	PI 1650	PSIG					
Air Compressor System 1	50M1651	AUTO/MANUAL/OFF					
Total Hours		HRS					
Compressor Pressure		PSIG					
Compressor Temperature		Deg. F					
Air Compressor System 2	50M1652	AUTO/MANUAL/OFF					
Total Hours		HRS					
Compressor Pressure		PSIG					
Compressor Temperature		Deg. F					

READINGS THAT MUST BE OBSERVED LOCALLY ARE SHOWN IN GREY

1503 - Well Field lines out to New Plant.
1507 - PW-6 on @ 6.80 gpm.
1508 - PW-8 on @ 6.21 gpm.
1509 - PW-1 on @ 5.39 gpm.
1511 - PW-5 on @ 8.46 gpm.
1517 - PW-2 on @ 7.29 gpm.
1520 - Cleared PW-5 flow meter.
1522 - Ramped down PW-6 to 5.80 gpm.
1525 - Ramped down PW-5 to 6.06 gpm.

Sent 3/22/09

0700 QUICK CHECK of PLANT, EQ TANK Level 20.1 FT John

Keith 3-21-09

0702 - @ EQ tank @ 14.8', 27.1 gpm from Well Field.
0832 - Pumped PW-1, 2, 4, 5 & 6 sumps.
0925 - EQ tank @ 16.3'
1200 - EQ tank @ 19.1'
1248 - EQ tank @ 19.8'
1310 - Well Field off -
1325 - Closed PLI-61 @ EQ tank.

STAN, VINCE, KEITH, SUZANNE MONDAY 3-23-

0906 - AIR COMPRESSOR #2 ON LINE.
0906 - #1 WATER PUMP ON LINE.
0924 - HVAC System ON FOR EQUIPMENT ROOM.
0924 - BLEW DOWN CONDENSATION FROM #2 COMPRESSOR & PARTICULATE FILT
1023 - Westech in plant testing DAF, tested Torque Limiter, Started recycle pump and set pump to 23.9 gpm @ 100 psi with saturation tank @ 70 psi
1108 - Mixed Polymer - polymer .16% in tank Feed rate .5 ppm
1158 - PW-4 on @ 2.16 gpm.
1159 - PW-6 on @ 4.30 gpm
1204 - PW-8 on @ 4.90 gpm.
1206 - PW-5 on @ 5.61 gpm.
1208 - PW 2 on @ 6.98 gpm
1212 - PW-1 on @ 3.57 gpm
1214 - PW-9 on @ 3.06 gpm

1248 - EW-2 on @ 7 spm - 5.6 gpm.
1249 - EW-6 on @ 3 spm - 2.4 gpm.
1315 - Turned on Froth pump #1 1.2 ft in DAF froth tank
1334 - Turned off Froth pump #1 1.1 ft in Daf tank alarm at 1.0 ft
1430 - Increased Polymer Dosage to 1 ppm

1439 - Robert (Holmes) installing Pressure guage and closing STW-13 on EQ tank to run flow and pressure test on Decant pumps
1500 Robert running Decant Pumps performing flow + Pressure checks

1610 - Went through Valves in preparation to start Hydromation filter
1625 - Started Hydromation filter put filter and GAC's on line
1642 - Started DAF Influent and Effluent Composite Samplers
1706 - PW-4 off to clean flow meter.
1735 - PW-4 on cleaned flow meter - 6.23 gpm
1750 - Turn DAF Feed pump and Filter feed pump off to Adjust and grease packing on Agitator of Hydromation filter
1800 - Turned DAF feed pump back on and filter feed pump Back on Hydromation filter Back on line.
1902 - Did manual Backwash of Hydromation filter - Set Backwash pump #1 to 70 gpm
2022 Adjusted Froth Pump STROKE SPEED FROM 3.0 TO 1.5
2100 Shift Change ECC
2110 Adjusted Froth pump stroke speed from 1.5 to 2.75
2130 Performed underdose & overdose of polymer jar test findings favorable

2145 noted small amount of oil under drain plug of decant pump 1 tightened to fix
2155 small leak in turbidity bottom drain line off center tube
2210 turned heater OFF in electric room
louvers continuously go ON & OFF
0530 CONDUCTED POLYMER TEST ON DAF EFFLUENT: 1) DAF EFF ADDED 2 PPM 1022 & STIRRED & SAW NO FLOC 2) 500 ml of DAF INFLUENT + 500 ml of DAF EFFLUENT ALSO SAW NO FLOC. POLYMER DOSAGE LOOKS GOOD FOR OIL/TSS REMOVAL & NO RESIDUAL POLYMER IN THE EFFLUENT

Keith, Vince, Stan Tuesday 3-24-2009

0600 - Completed Shift Change - Safety Brief
0650 - AM Rounds
0740 ~~AM Rounds~~ Adjusted Seal Water flow to DAF Feed pumps.
0747 - Ramped up Froth Pump #1 to 2.75%
0813 - Started Plant Effluent Composite Sampler.
0815 - AM Rounds completed OK
0839 - Ramped up PW-4 to 7.61 gpm from 6.40 gpm.
0843 - Ramped up PW-6 to 5.09 gpm from 3.60 gpm.
0848 - ~~PW~~ Ramped up PW-8 to 7.08 gpm from 5.37 gpm.
0851 - Ramped up PW-5 to 10.39 gpm from 5.69 gpm.
0853 - Ramped up PW-2 to 9.06 gpm from 7.06 gpm.
0857 - Ramped up PW-1 to 6.74 gpm from 3.94 gpm.
0907 - PW-9 lost prime, reprimed flow @ 3.85 gpm.
0910 - Added water to digester tank to clear alarm Level .7 ft, checked OK
1100 - Increased froth pump stroke to 3% froth tank level rose to 1.9 ft.
1208 - COMPLETED MID DAF ROUNDS, ALL CONDITIONS NORMAL.
1245 - Pulled composite samples from DAF Influent & Effluent - will start samplers @ 1645 every day for sampling DAF
1304 - Lowered Set point on EQ tank from 20.0 to 19.0 FT
1324 - Started pumping DAF Sludge
1420 - Did Calibration test on Polymer pump @ 100% Flow rate
1422 - Did Calibration test on Polymer Pump @ 80% flow
1430 - Switched DAF valves Back to pumping froth turned off DAF Augers
1435 - Went to 30% pump flow on DAF Influent pumps to Do polymer calibration te
1437 - Went to 50% pump flow on DAF Influent pumps for polymer calibration tes
1442 - DAF Influent pump Back to Auto running @ 100%
1514 - DIRTY BACKWASH PUMP ON LINE TO TRANSFER WATER TO EQ TANK.
1550 - DIRTY BACKWASH PUMP OFF LINE.
1610 - Took Afternoon Readings
1640 - Started DAF Influent & Effluent Composite Samplers
1648 - Ramped up Froth Pump to 3.5% - Float Tank @ 2.3'.
1800 Shift change Suzanne & John briefed on activities
1911 TAGOUT BKR #14 PANEL LP-1 (EXTERIOR LIGHTS) TO CHANGE PHOTOCELL
1943 CLEAR TAGOUT BKR #14 PANEL LP-1, PHOTOCELL REPLACED - LIGHTS - OK
2003 HDBF Major fault High pressure to GAC 70 psi 65 psi at HDBF
2019 RELIEVE PRESSURE OFF HYDROMATION UNIT THROUGH VENT VALUE.
PLANT PARTIALLY OFFLINE FOR HMI TROUBLESHOOTING.
2015 UPON RESTART - MANUAL VENTING OF HYDROMATION UNIT UNTIL CORRECTED.
2055 restarted HDBF, filterfeed, daf feed
2112 open relief valve vent on HDBF vented 5 minutes closed valve
2214 VENT HDBF FOR 5 MIN
2322 opened relief valve vent for 5 minutes

Wednesday 3.25.2009

0035 VENT HDBF FOR 5 MIN.
0115 Dirty Backwash pump on line to transfer water to EQ tank DBT 5.5 FT / EQ TANK 19.0 FT
0153 WATER TRANSFER Complete, DBT 3.2 FT, EQ TANK 21.0 FT, BACKWASH Pump off, BWR02 ~~off~~ CLOSED.
0155 VENT HDBF FOR 5 MIN
0232 RAMPED UP FACTH PUMP TO 3.75% FAILS LEVEL 2.8'
0255 Vent HDBF for 5 minutes
0300 CONDUCTED POLYMER JAR TESTS 1) DAF EFF PLUS 2PPM 1022 POLYMER SHOWED NO ADDITIONAL FLOC 2ND TEST) 500 ml DAF EFF + 500 ml DAF INFLUENT SHOWED MINIMAL FLOC PRODUCTION ∴ POLYMER DOSAGE IS HIGHER THAN NECESSARY. SHOULD CONSIDER REDUCING POLYMER DOSAGE WHEN WATER /EQ ARRIVES IN AFM
0315 PULLED DISCONNECTS ON RECIRC #2, DAF FEED #2 & F.F. #2. VERIFIED NO SOAK WATER TO OFF PUMPS
0355 Vent HDBF for 5 minutes
0455 Vent HDBF for 5 minutes
0654 Set EQ tank level from 19 ft to 18 ft.
0720 - Started Backwash recycle pump to transfer water from Backwash tank to EQ starting level in Backwash tank 3.3 ft.
0734 - Stopped Backwash recycle pump Backwash tank level 26 ft.
0739 - AM Rounds complete -OK
0814 - Completed pumping sumps @ PW-1, 2, 4, 5 and 6.
0830 - Extraction Well Rounds & Readings Complete.
0844 - Readjusted stroke on polymer pump from 60% to 38% to Decrease flow 425 ml/min to 300 mls/min
0908 - HYDROMATION FILTER WENT INTO BACKWASH CYCLE. DURING BACKWASH FILTER VENT VALVE OPENED AND WALNUT MEDIA WAS DISCHARGED TO DAF. MEDIA LEVEL WAS LOWERED APPROX 8".
1050 - Adjusted polymer stroke to 45% @ 360 ml/min. 1.9 ppm dose rate
1125 - Shut Down Plant For PLC/HMI Reboot
1135 - Started Plant Back up - running Normal
1143 - Ran a Manual Backwash with Back wash timer increased from 4.3 min. to 10 min. Backwash was successful
1155 - Set EQ tank to 17 ft.
1215 - Shut down DAF Feed & Filter Feed pumps so electrician can change wire tags in Hydromation filter control cabinet
1226 - Restarted System - Hydromation Filter Valves did not open for normal filtration - Shut down system, rebooted and uploaded computer
1230 - Restarted Plant and is running normal

1245 - Took DAF influent and effluent samples
1303 - Started transfer of water from existing plant to new Plant Sump via Deron Pad.
1400 - Took plant Readings - Normal
1535 - Started pumping Storm Water tank to EQ Tank.
1558 - STARTED MANUAL BACKWASH OF HYDROMATION FILTER.
1610 - INCREASED BACKWASH CYCLE OF HYDROMATION FILTER TO 18 HR
1640 - Completed Transfering Water from Existing plant to new plant Sum
1712 - Completed PM Rounds. all Running Normal.
1635 Switched to DAF Feed Pump #2 & Filter feed pump #2 for electrical test
1640 - Switche Back to DAF feed Pump #1 & Filter feed pump #1
1642 - Started DAF Influent & Effluent Samplers
1645 - Switched to Decant Pump 2 for electrical tests
1647 - Switched Back to Decant Pump #1
1700 - Switched to froth pump #2 for electrical test
1705 - Switched Back to froth pump #1
1900 Shift change Suzanne & John on duty
polymer changes today stroke length on polymer dosin pump reduced to 20% from 60%. Polymer dosage to DAF was increased to 1.9 ppm from 1 ppm
2020 conducted readings and rounds
2120 GREASE MOTORS DAF FEED #1/#2, DAF RECIRC, FILTER FEED #1/#2, STORM WA Recycle Pump, BACKWASH Recycle, DECANT Pumps #1/#2, BACKWASH #1/#2, LUBE DAFT FLOAT SKIMMER BEARINGS,

THURSDAY MARCH 26, 2009

0000 Rounds & Readings
0045 Started stormwater recycle pump to move to EQ tank
5.0' at start EQ tank at 19'
0113 Stopped stormwater recycle pump, shut valve stormwater tank
at 3.0' EQ tank at 19.7'
0400 readings & rounds
0430 Aeration Blower discharge Pressure LOLO Alarm - red
pressure 0.0 - not in use
0630 - Set EQ level from 19 to 18.
0715 - Pumping DAFT sludge to froth tank - froth tk @ 3.0 - DAFT float tk @ 2.5
0719 - Pumping Dirty Backwash tk to EQ tk.
0810 - Turned off Dirty Backwash pump EQ Tank @ 20.9
0815 - Returned to pumping froth off of DAF and turned off Augur
0703 - Draining T-401 to Old Decon sump to Dirty Backwash tk.
0753 - Pumped PW-1, 2, 4, 5 & 6 sumps.
1000 - Did DAF effluent Polymer check - Added polymer 2ppm checked
for flock - None, Took 800 mls of DAF Effluent Add 200 mls of
Influent checked for flock - None
1200 - Turned on Backwash recycle pump to transfer liquid from Backwash
tank to EQ tank - Starting level in Backwash tank - 8.1 ft
205 - Took midday Reading - Plant running Normal
245 - Pulled influent and effluent DAF Samples
405 - Increased Froth pump from 3.25 to 5.0 DAF Froth Level 3.5 ft
510 - #1 FROTH PUMP & INFLUENT LINE PLUGGED WITH WALNUT
SHELLS.
1520 - Unplugged and cleared DAF of walnut shells - Froth pumps
#1 + #2 not operational plugged with walnut shells. Will use
portable diaphram pump for Froth removal until repairs
to froth pumps are made
1630 - Turned on backwash recycle pump Backwash tank 9.5 ft
EQ tank 18.6
1640 - Started Samplers on DAF Influent + Effluent
701 - Completed Pumping Water from Existing plant T-401 to new plant
sump.
732 - Removed Walnut shell media from DAFT and Froth Pump
influent piping.
735 - Backwash Recycle Pump offline.
813 - Manual Backwash
8:16 attached pump to move froth from DAF to froth tank
18:58 low level in froth chamber shut off air to pump
18:58 Manual Backwash again
19:32 Manual Backwash again

1940 opened valves to move water from dirty backwash to stormwater tank dirty backwash tank level 10.9'
stormwater tank level 2.9'
2000 programmers continue to look at backwash HDBF problem
2008 turned on HDBF
2010 HDBF off
2015 HDBF ON filtration mode
2020 HDBF backwash mode
2034 Backwash cycle completed CH2 completed testing for tonite
2038 Dirty Backwash 7.9' Stormwater 10.9' will pump to 11.5'
20:43 Stormwater recycle at 11.5' shut backwash recycle pump closed vale dirty backwash tank at 7.4'
plant inf at 20.9'
20:47 plant water tank Hi level at 8.5'
opened water valve to plant sump
2100 Rounds and Readings

FRIDAY MARCH 27, 2009

0000 Rounds & Readings
0125 Started pumping dirty backwash 7.5' to EQ 18'
0235 Shut backwash pump dirty backwash tank 3.0' EQ 20.7
0248 Opened air to pump froth to froth tank
froth chamber in DAF 3.6' turned on decant pump
0255 Moved too fast high alarm in froth tank shut air pump
0258 Shut decant pump froth tank in DAF 3.1' froth tank 2.9'
0308 plant water tank high level alarm 8.5' opened water valve to lower high level
0330 change valving to prepare to move stormwater to EQ
0400 Rounds & Readings
0430 Washed floor
0600 started stormwater recycle pump EQ tank 18.5' stormwater 13.2'
0605 Shut off stormwater pump
0610 - Changed Shifts - Vince + Keith on duty
0700 - Took rounds running normal - Froth pumps off using Diaphram pump
0700 - Turned on Decant pump #1
0705 - Pumping froth from DAF unit using Daiphram pump
0730 - Started Stormwater recycle pump to transfer stormwater to EQ tank Stormwater level 13.1 EQ tank Level 18.0
0750 - Put Backwash pump #2 in Lead position
0755 - Switch to DAF Feed, Filter Feed, Decant pumps #2
0812 - Started pumping sludge from DAF
0830 AM Rounds complete - OK
0900 - Stopped stormwater recycle pump Stormwater tank @ 6.4 EQ @ 20.9
0905 - Stopped pump sludge from DAF unit - Shut down Decant pump #2 until we pump Froth
0915 - PW-6 Variator leaking oil
0934 - PW-6 off to add Variator oil.
0945 - PW-6 on
1220 - Completed Mid Day Rounds.
1308 - #2 Decant pump on line. Pumping DAF froth chamber.
1323 - #2 Decant pump off line. DAF Froth tank, 1 foot.
1457 - DAF Recirc pump, Floc, & Skimmer off.
1527 - LOTO DAF TO CHANGE RECIRC PUMP OIL.
1423 - Shut Down system - Checked inside of DAF for walnut shells - OK
1245 - Pulled Samples from Influent + Effluent of DAF
1540 - OIL CHANGE COMPLETE ON SULZER PUMP AT EXACTLY 100.00 HRS.
1630 - Took afternoon readings - Running Normal
1800 SHIFT CHANGE JOHN AND SUZANNE ON DUTY

1820 - Increased HDBF backwash cycle to 15 Hrs. Backwash now scheduled for approx 09:00 on 3/28.
2007 FIRST SET OF ROUNDS COMPLETE, CONDITIONS NORMAL
2225 Changed EQ setting to 17'
2230 LUBE DAFT BEARINGS (SLIGHT SQUEAKING NOISE.
0024 ROUNDS COMPLETE, CONDITIONS NORMAL

SATURDAY MARCH 28, 2009

000 Rounds and readings
132 EQ at 17.0' changed setpoint to 16.0'
255 EQ at 16.0' changed setpoint to 15.0'
300 started decant pump #2 opened seal water valve
pumped froth chamber from 3.7' to 2'
320 pumped down froth tank to 2.9' shut down decant pump #2
shut off seal water
400 Rounds and Readings
447 EQ at 14.9' changed setpoint to 14'
714 AM Rounds complete - OK.
708 - Pumping Froth from Daf - Turned on Froth tank Decant pump #2
717 - Pumping Sludge From DAF
730 - Started Backwash recycle pump Backwash tank Level 4.8, EQ tank 14.0
806 - BACKWASH RECYCLE PUMP OFF LINE, BACKWASH TANK LEVEL
AT 2.8 FT. EQ TANK AT 16.1 FT.
816 - Completed Pumping DAF sludge, air Diaphragm pump
off line.
825 - Backwash hydromation Filter to check valve sequencing.
831 - Shut down hydromation Filter "E" STOP. Valves did not
properly sequence.
5 Completed Mid Day Rounds. Hydromation Filter and plant
are off line Due to filter Valve Timing Issues.
48 Restarted Hydromation Filter.
50 ADJUSTED DAF CHAIN TENSION. TIGHTENED ADJUSTER BLOCKS
4 TURNS EACH SIDE.
24 HYDROMATION UNIT ON LINE, PLANT ON LINE.
5 Completed Pumping DAF FROTH TANK. DECANT Pump #2 OFF.
45 - Composite sampler taken.
20 - Burped all 3 GAC's - very little air.
30 - Shut Down Plant to work on HMI + PLC Automation and Checks
10 - Plant up and running Normal
16 - Shut down Flow From tank T-401 - Level @ 68"
20 - Completed PM checks - Plant running Normal
300 - Shift Change John & Suzanne on duty
811 - turned on backwash pump to move dirty backwash 106'
to EQ tank 18.3'
900 STOP BACKWASH Pump, CLOSE BWR02, DBT Level 7.2", EQ TANK 21.0"
10 Shut Seal water valve
210 Rounds and readings
228 Opened seal water valve & started backwash recycle pump
dirty backwash tank 7.3' EQ tank 18.4'
218 EQ at 21' Shut off backwash pump dirty backwash 4.1' shut seal

Sunday March 29, 2009 (~~Sat 3-28-09 cont.~~)

0026 Rounds + Readings Conditions Normal.
0218 pumped froth from DAF to froth tank
0242 DAF froth chamber pumped from 3.7' to 2.0'
pumped down froth tank to 2.9'
0247 EQ tank 18.5' turned on backwash pump to pump dirty backwash to EQ
0309 turned off backwash - dirty backwash pumped down to 2.7'
plant influent EQ at 19.6'
0423 Rounds + Readings Conditions, Normal.
0652 - AM Rounds complete - OK
0640 - Pumping froth from DAF Tank using Diaphram pump turned on Froth Tank Decant pumps - Froth chamber level 2.8
0655 - Switched to pumping sludge from DAF unit - stopped pumping froth tank level 1.5 ft. Turned on DAF Auger
0800 - Turned off Diaphram pump to stop pumping sludge - resolved for froth shut down Decant pumps
0713 - T-401 @ 74", draining to Old Plant Decon sump.
0745 - Pumped sumps @ PW.01, 2, 4 5 & 6.
0920 - Tested Hydromation Filter Valve Sequencing for normal Timed Backwash - Test SAT, Filter Shut down - Filter Feed pump & DAF Feed pump shut Down as per Design, and Completed master Filter Stop - SAT.
0955 - Tested all Emergency Eyewashes and Showers. All worked as per Design. The Only Shower to Dial out was the tank Farm.
1010 - all Three Emergency Showers activate Dial out alarm.
1037 - Completed Manual Backwash of HDBF test. - Test SAT.
1140 - Completed Filter press test. Pumped water from Tank farm mix tank to filter press and blew Decon press to filtrate Tank. Test SAT.
1208 - Completed mid Day Rounds. all conditions normal
1305 - Started Filling Digester tank with W-2 Water. Digester tank level @ 10.7 feet.
1330 - Started Transfering Water from DIRTY Backwash tank to EQ Tank. Dirty Backwash pump on line. BACKWASH TANK LEVEL AT 10.0 FT.
1445 - Pumping Froth level 3.2 ft started Decant pump #2
1530 - Stopped pumping Froth level 1.3 ft Shut down Decant pump #2
1543 - Stopped pumping Backwash tank to EQ tank - EQ tank @ 21.5'
1700 - Shut off water to Digester tank Level 6.2 ft.
1705 - Took afternoon Readings - Plant Running Normal
1800 - Shift change Suzanne & John on duty

Sunday March 29, cont.

00 Rounds & Readings Normal Operation

Monday March 30, 2009
0000 Reading & Rounds normal operations
0139 turned on decant pump #2 opened air valve to pump froth to froth tank froth chamber 3.7' froth tank 3.
0207 completed pumping froth. DAF froth chamber 1.5' froth tank 3.0'
0240 EQ tank level 14.2' changed setpoint to 13.0'
0210 Aeration Blower Discharge Pressure LOLO alarm (& LO)
0303 Aeration Blower Discharge Pressure LO & LOLO
0406 Aeration Blower Discharge Pressure LO & LOLO alarm
0400 Rounds & Readings Normal Operations
Hydromation went into backwash cycle as scheduled
filter feed pump low pressure alarm when backwash begu
0500 Influent EQ at 13.1' changed setpoint to 12'
0510 Aeration Blower Discharge Pressure LO & LOLO Alarm
0615 - Backwash Recycle pump on pumping Backwash tank to EQ tank
0649 - AM Rounds complete - OK
0655 - Shut down Backwash recycle pump Level in tank 2.8 ft
0700 - T-402 @ 58"
0701 - T-401 @ 136", draining to Old Decon Pad sump.
0738 - Started Plant Effluent Composite Sampler.
0920 - Pumping froth from DAF Level 3.2 ft started Decant pump #2
0935 - Start Backwash recycle pump Level Backwash tank 6.0 ft EQ tank level 12.7
0953 - Froth Tank Level 1.2 Ft. Shutdown pump - Shut down decant pump #2.
1051 - Stopped Pumping Backwash Tank to EQ tank, Decant Pump off.
1105 - Started pumping sludge from DAF to Froth tank Decant pump #2 on line.
1200 - Completed pumping sludge from DAF. DECANT PUMP #2 OFF
1205 - MID ~~AM~~ PM Rounds performed
1249 - MID day rounds complete
1528 - Started Pumping DAF Sludge, Decant Pump #2 on.
1500 - Ran Low pressure blower - found cracked check valve @ Digester tank
1618 - Lock out - TAG OUT #1 and #2 Froth Pumps. WALNUT SHELLS PLUGGING INFLUENT & EFFLUENT Check Valves.
1620 - Completed afternoon rounds - plant operations normal
1653 - T-402 MT, closed drain valve.
1655 - Old sump off locally, bag filter has a leak.
1657 - T-401 @ 85" draining to Old Decon Pad sump.
1729 - Pumping Backwash tank to EQ tank
1729 - Started manual backwash of Hydromation filter.

Monday 3-30 cont.

00 Shift change Suzanne & John on duty
27 Shut off backwash recycle pump. EQ tank at 20.8'
dirty backwash tank at 5.0'.
52 Aeration Blower Discharge Pressure LO & LOLO alarm
00 Rounds & Readings Normal Operations
142 turned on decant pump 2 turned on air to pump froth
from DAF. Froth chamber 3.7'
55 Aeration Blower discharge Pressure LO LOLO alarm
10 shut off air pump froth chamber in DAF at 1.2'
shut off decant pump 2 - shut valve at froth pumps. shut
seal water to decant. froth tank at 3.0'
26 Aeration Blower discharge Pressure LO & LOLO alarm

Tuesday March 31, 2009

0000 Rounds & Readings
0014 START Backwash/Recycle Pump Pump From DBT 9.5 FT to E.Q 17.7
0026 Aeration Blower discharge LO & LOLO alarm
0114 stopped backwash/recycle pump & closed valve EQ tank at 21
Dirty Backwash at 6.3'
0118 Aeration Blower alarm
0130 Aeration Blower alarm
0234 Aeration Blower alarm
0337 Aeration Blower alarm
0400 Readings & Rounds OK
0438 Aeration Blower alarm
0521 turned on backwash recycle pump to move water from
dirty backwash 8.7' to EQ tank 18.0'
0529 turned on decant pump 2 & air pump to move froth 3.0'
to froth tank 3.0'
0544 turned off decant pump & air pump. froth tank in DAF 1.9'
Froth tank 2.9'
0545 Shut backwash recycle pump off dirty backwash tank 7.1
plant influent EQ 19.4'
0600- Shift change Keith, Vince & Kevin on
0651 AM Rounds complete - OK
0845- Started Aeration Blower locally to Digester. Running @ 50%
speed 30 Hz.
0940 - Shutdown Aeration Blower locally
1045 - Hydromation Media backwashed in Auto mode
1124- Manually backwashed Hydromation Media for amp
readings by Ahearn Electrician for data collection
on plant equipment
1154- Mid day plant rounds + readings collected
1255- Drained Digester tank to Sump to Support AHEARN ELECTRIC
POWER Readings on Process pumps. Lowered level from 6.3 FT
to 5.4 FT.
1428 Started Pumping DAF sludge to froth Tank.
1447 Completed pumping DAF sludge.
1448 Started Pumping DAF froth tank to froth tank. DAF
froth tank level @ 3.7', Decant pump #2 on line.
1509 Completed Pumping DAF froth. DAF froth tank level @ 1.8 FT.
Decant pump #2 off.
1514 - Turned ON Backwash/Recycle Pump Pumping down
Dirty Backwash Tank to EQ Tank.

600- PM plant readings & rounds collected
:38- Turned OFF Backwash/Recycle Pump.
800 shift change Suzanne & John on duty
:010 Rounds Complete, Conditions Normal.

Wednesday April 1, 2009

0000 Rounds & Readings Normal Operations
0050 pumping froth from DAF to froth tank Daf froth 3.9
froth tank 3.0 decant pump #2 used
0111 shut off air pump & decant pump - froth chamber in DAF 1.
froth tank 3.1
shut off seal water valve for decant pump 2
0400 Rounds & Readings

0451 DAF Feed flow LO W1110A\LO
0455 Backwash pump 2 fail
0537 reset HDBF opened valve D101 DAF Feed pump 2 turned on filter feed pump 2
scheduled HDBF Backwash at 0424
0600 - Shift change Kevin & Kevin on
0645 - Turned Auger off.
0655 - AM Rounds complete - OK.
1020 - DAF Froth chamber level at 3.3 ft. It appeared that at a WL of 3.3 ft, the water was 6" below beach. Based on this info, the high alarm on the froth chamber to 3.0 ft.
1040 - All equipment off for planned power outage.
1057 - POWER TO PLANT OFF LINE.
1058 - Emergency lighting in process area EAST & WEST not operating. Equipment Room Emergency lighting Non Operational and Electrical Room Non Operational.
1118 - Power Restored to plant.
1130 - ATTEMPTED TO RESTART PLANT. HMI NOT OPERATING AS PER DESIGN. STARTING TO REBOOT COMPUTER.
1216 - Plant off line. Working on HMI Controls. Loss of HMI Cont.
1312 - Plant off line Due to Computer/HMI Issues.
1342 - Disarmed Verbatim alarm Panel for VFD Testing.
1510 - Plant off line Due to PLC malfunction.
1504 - PW-1, 2, 4, 5, 6, 8 & 9 off in Old MCC.
1506 - EW-2 & EW-6 off @ Wells.
1548 - WD-2 pump off.
1550 - Comp. #2 & Air Dryer off.
1630 - Plant and Extraction wells are offline Due to PLC and HMI Malfunction.
1700 - Reactivated Verbatim Plant alarm system. There are no active alarms.
1820 PM Rounds, Plant Shutdown. Tank Levels Taken on LIT Guages Recorded on Rounds Sheet. Conditions Normal.

Keith

Thur.
4-2-09

605 - Quick check - OK, Effl. tank @ 19.81', EQ tank @ 19.01',
Stormwater tank @ 6.37', Dirty Backwash tank @ 4.91', Digester tank @ 5.51'.
845 Wellfield and Treatment plant are off-line. Working on PLC issues.
856 - air compressor #2 in auto. Plant water pump #1 on line.
200 - Wellfield and plant are off line Due to PLC Programing issues.
250 - Completed mid Day Rounds.
348 - Treatment plant on line.
610 - Collected plant readings & rounds
627 - Master Stop. Plant shutdown.
631 - Restart Plant.
640 - Plant shutdown for the night. Closed FRE-07 valve.
649 - #1 air Comp. off. drained condensate, air dryer off.

John, KEITH, STAN 4-3-0

0810- Started #1 Air Comp & Air Dryer on.
0816- #1 Fresh Water pump on line
0825- aligned tank farm Sub pumps to Storm Water Tank.
0826- Started pumping down DAF to Remove Walnut shell
0835- Started Draining Hydromation filter to Decon pad Su
0847- Completed Draining Water from Hydromation Filter.
'055- Completed Filling Hydromation filter w/walnut m
1116- Filled Hydromation Filter with Plant effluent wa and Vented Filter.
1208 Pumping DAF, Pumping Froth Tank with #1 & #2 Decant Pumps
1450 Pumping Backwash tank to EQ Tank.
1510 Completed Pumping Backwash tank to EQ.
1630 Wellfield and treatment plant are off line.

4/4/09

PLANT OFFLINE FOR Computer Problems.