



NOTES

- 1. STREAM DATA IS FOR PEAK FLOW.

STREAM NO.		120	202	226	229	250	251	255	256	257	302
DESCRIPTION		WELL WATER	WELL WATER	CO2	CO2	HARVEST RETURN	HARVEST RETURN	INOCULUM	INOCULUM	INOCULUM	HARVEST RETURN
FLOW	LB/HR	400,320	62,371	188	47	2,502,000	1,251,000	93,575	93,575	93,575	2,476,797
FLOW	GPM	800	125			5,000	2,500	187	187	187	4,953
TEMPERATURE	°F	68	68	60	60	68	68	68	68	68	68
PRESSURE	PSIA	22.6	12.6	136.6	15.6	12.6	12.6	12.6	12.6	12.6	30.5
VAPOR FRACTION		0	0	100	100	0	0	0	0	0	0
% SOLIDS IN AQ SOLNS		0	0	0	0	0.005	0.005	0.05	0.05	0.05	0.020
WATER	LB/HR	0	0	0	0	2,501,065	1,250,533	93,525	93,525	93,525	2,475,859
ALGAE OIL	LB/HR	0	0	0	0	0	0	0	0	0	0
ALGAE BIOMASS	LB/HR	0	0	0	0	407	203	44	44	44	403
ASH	LB/HR	0	0	0	0	95	47	5	5	5	94
CO2	LB/HR	0	0	188	47	0	0	0	0	0	0
UREA SOLUTION	LB/HR	0	0	0	0	386	193	0	0	0	382
PHOSPHORIC ACID	LB/HR	0	0	0	0	47	24	0	0	0	47
SULFURIC ACID	LB/HR	0	0	0	0	0	0	0	0	0	0
TOLUENE	LB/HR	0	0	0	0	0	0	0	0	0	0
METHANE	LB/HR	0	0	0	0	0	0	0	0	0	0
PROPANE	LB/HR	0	0	0	0	0	0	0	0	0	0
OXYGEN	LB/HR	0	0	0	0	0	0	0	0	0	0
NITROGEN	LB/HR	0	0	0	0	0	0	0	0	0	0
FLOCCULANT	LB/HR	0	0	0	0	0	0	0	0	0	0
COAGULANT	LB/HR	0	0	0	0	0	0	0	0	0	0



XXX DENOTES CHANGE IN STREAM TEMPERATURE ONLY. NO COMPOSITION CHANGE.  
XXX DENOTES CHANGE IN STREAM PRESSURE ONLY. NO COMPOSITION CHANGE.

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**Brown AND Caldwell**  
201 NORTH CMC DRIVE, SUITE 115  
WALNUT CREEK, CA 94596

Scale: NO SCALE  
PMgr: B. ZINN  
Appr: M. GERHARDT

Drawn: Z. BURKE  
Check: M. GERHARDT

Engr: M. GERHARDT  
Check: L. SLEZAK

**SAPPHIRE ENERGY  
SAN DIEGO  
CALIFORNIA**

**IABR Columbus, NM.**

**PROCESS FLOW DIAGRAMS  
INOCULATION AND HARVEST RETURN STORAGE  
POND**

Project No.: 139197  
Drawing: 02-F-220  
Rev: 0