

Estimate of Southern Booster Withdrawal Volume

Brockway Engineering, PLLC

Well: Loughmiller - Southern Booster

Use pumping water level and efficiency to develop theoretical PCC.

Motor HP: 50
Pumping level: 4 feet
Discharge pressure: 60 psi
Discharge line diameter: 6 inches
Pump efficiency: 75.0%
Electrical efficiency: 95.0%

Theoretical Q: 2.20 cfs = 989 gpm
Discharge line velocity: 11.23 ft/s
TDH: 144.4 feet
Theoretical PCC: 204.6 KWH / ac-ft

RECEIVED
VIA E-MAIL
11/3/2005

POWER RECORDS FROM IDAHO POWER: Loughmiller

Usage Date	kW	kWh	Ac-Ft	Ac-Ft/Anually
06/27/2002	27.0	1061.0	5.18	
05/29/2002	36.0	13047.0	63.75	68.94
07/19/2000	41.0	7726.0	37.75	
06/19/2000	45.0	26339.0	128.71	
05/18/2000	43.0	15534.0	75.91	242.37

POWER RECORDS FROM IDAHO POWER: Beta Western

Usage Date	kW	kWh	Ac-Ft	Ac-Ft/Anually
07/19/2000	38.0	7732.0	37.78	
06/19/2000	39.0	23074.0	112.75	
05/18/2000	38.0	10413.0	50.88	201.42

AVERAGE 256.36