

Capeau Range #1 UG Pumping 1933

Mon	6 th Hr - Min to Surf	1000 G	13 th H - M to 6 th	1000 G	21 st H - M to 13 th	1000 G	27 th H - M to 21 st	1000 G
Jan	220-50	3070	224-55	2700	208-15	2500	139-25	1670
Feb	202-40	2820	202-35	2430	185-5	2220	125-35	1510
Mar	227	3160	212	2550	207	2490	140-5	1680
Apr	281-20	3910	274-45	3300	255-45	3070	196-15	2360
May	327-25	4570	327	3930	317	3810	217	2600
June	248	3450	237-35	2850	236-30	2840	158-45	1900
July	223	3100	218	2620	204-55	2460	154-45	1860
Aug	224-30	3130	230-45	2770	209-35	2520	158-20	1900
Sept	202-20	2820	205	2460	186-40	2240	145-30	1750
Oct	211-55	2950	198-45	2380	214-40	2580	144-25	1730
Nov	232	3230	226-40	2720	225-40	2710	142-35	1710
Dec	245-30	3420	249-35	2990	235-20	2830	161-40	1940
Total	2846-30	39,630	2807-35	33,700	2686-25	32,270	1884-20	22,610

Total gals to surface 1933 = 39,630,000
 " " " " 1932 = 37,950,000

Copper Range #4 U G Pumping 1933

Month	6 th to Surface	1000 Gals	13 th H-M	1000 G to 6 th	21 st H-M	1000 G to 13 th	29 th H-M	1000 G to 21 st
Jan	126-50	2280	142-45	1710	117-35	1520	117	1400
Feb	110-40	1990	119	1430	106-20	1370	104-40	1260
Mar	110-35	1990	131-10	1570	120-10	1550	110	1820
Apr	130-10	2340	144-10	1750	145-20	1870	137-20	1650
May	145-40	2620	156-30	1980	148-25	1910	166-30	2000
June	118-15	2130	115-30	1380	121-15	1570	127-20	1530
July	124-40	2240	135-15	1420	115-45	1490	134-15	1610
Aug	140	2520	117-45	1410	117-30	1540	105	1260
Sept	112-20	2020	108-35	1300	101-20	1310	90-40	1080
Oct	132-20	2380	143-5	1720	132-15	1710	126-40	1520
Nov	135-15	2440	151-5	1820	151-45	1960	139-40	1680
Dec	133-40	2400	141-30	1700	139	1790	128	1530
Total	1524-25	27,350	1408-20	19,290	1516-40	19,570	1487-5	17,860

Total gals to surface 1933 27,350,000
 " " " " 1922 24,040,000

Champion no 1 V G Pumping 1932

Mon.	6 th	13 th	21 st	27 th	1000 G	1000 G	1000 G	1000 G
	H-M	H-M	H-M	H-M	to Surf	to 6 th	to 13 th	to 21 st
Jan	177-25	176-5	198-20	129-35	2470	2120	2140	1555
Feb	199-0	192-20	191-45	148-15	2770	2310	2300	1780
Mar	225-30	215-35	212-35	153	3140	2590	2550	1840
Apr	287-15	279-35	284-50	212	4000	3360	3420	2550
May	261-40	250-30	257-40	193-10	3640	3010	3090	2320
Jun	240-55	244-30	248-40	170-50	3350	2940	2990	2050
July	224-5	222-50	216-25	155-25	3120	2680	2600	1865
Aug	249-15	250-0	246-45	161-50	3460	3000	2960	1940
Sept	210-50	223-50	207-20	145-30	2935	2680	2490	1750
Oct	203-0	206-55	198-15	141-10	2820	2490	2380	1695
Nov	212-15	226-40	207-45	155-20	2950	2720	2490	1865
Dec	236-30	234-0	230-10	154-55	3300	2830	2760	1860
Total	2727-40	2723-40	2680-30	1921-20	37,955	32,730	32,170	23,070

Total gals to surface 1932 37,950,000
 " " " " 1931 33,743,000

1/7/33

Champion #4 UG Pumping 1932

Mon.	18000	12000	12900	12000				
	6 th to Surface	1000 Gals	13 th H-M	1000 G to 6 th H-M	21 st H-M	1000 G to 13 th H-M	29 th H-M	1000 G to 21 st
Jan	71-5	1280	83-45	1005	89-25	1150	93-50	1125
Feb	101-55	1835	111-20	1340	96-10	1240	106-10	1275
Mar	93-15	1675	105-25	1265	100-30	1290	98-25	1180
Apr	103-30	1865	102-45	1230	88-55	1150	103-55	1245
May	168-40	3040	154-10	1850	142-35	1840	142-25	1710
June	121-25	2190	123-45	1485	116-50	1510	140-50	1695
July	109-20	1970	122-45	1475	119-15	1540	126-15	1515
Aug	126-40	2280	139-50	1680	130-55	1705	138-55	1670
Sept	119-25	2150	114-25	1375	118-10	1525	121-45	1460
Oct	112-45	2030	137-50	1455	125-10	1615	132-5	1590
Nov	94-45	1705	128-15	1540	106-	1365	120-35	1450
Dec	112-5	2020	143-5	1720	111-45	1440	128-45	1545
Total	1334-50	24040	1467-20	17620	1345-40	17370	1453-55	17460

Total gallons to Surface 1932 24,040,000
 " " " " 1931 15,564,000

35th automatic not included

mt

No. 4. Champion U. S. Pumping 1930

Month.	6 th to	1000 gals to Surface	13 th Hr. Min.	1000 gals to 6 th	21 st Hr. Min.	1000 gals to 13 th
Jan		1092	9-15	117	8-55	1037
Feb.		1503		105		1131
Mar		1953		360		1410
Apr.		2100		192		1372
May		1970	66-20	774	53-35	691
June		1899	93-25	1119	87-05	1121
July		1990	88-55	1060	94-05	1213
Aug.		1972	107-55	1294	108-35	1400
Sept.		1991	90-45	1085	86-25	1114
Oct.	96-30	1731	66-20	994	91-00	915
Nov.	98-10	1766	98-15	1179	98-05	1262
Dec.	90	1620	86-5	1039	90-0	1160
Total.	1,216	21,887	758-40	9,138	1,073 ²⁵	13,862

Total Sal. to surface 1930 @ 4 cent 21,887,000
 1929 " " 14,920,000

1/6/20

no 1 Champion UG Pumping 1929

Month	6 th Hr	1000 G Surface	13 th Hr	1000 G to 6 th	21 st Hr	1000 G to 13 th
Jan	308	4290	247	2964	230	2760
Feb	300	4180	210	2520	212	2544
Mar	306	4270	240	2880	226	2712
Apr	451	6280	345	4140	310	3720
May	350	4880	295	3540	315	3780
June	295	4110	275	3300	280	3360
July	300	4180	247	2964	265	3180
Aug	325	4530	250	3000	230	2760
Sept	295	4110	230	2760	210	2520
Oct	280	3900	222	2664	205	2460
Nov	260	3620	206	2472	225	2700
Dec	255	3550	200	2400	215	2580
Total		51,900		35,604		35,076

Total gals 1929 51,900,000 gals
 " " 1928 51,342,000

WPM

1/6/30

no. 4 champion UG Pumping 1929

Month	6 th to No-min	1000 gals to Surface	13 th Hr-min	1000 gals to 6 th	21 st Hr min	1000 gals to 13 th
Jan	117-50	2120	1-30	11.03	85-30	1105
Feb	113-35	2043	3-25	35.83	80-15	1036
Mar	105-20	1896	7-10	75.2	103-50	1335
Apr	86-10	1550	11-20	119.0	113-30	1464
May	71-0	1278	18-15	191.7	106-15	1373
June	60-15	1085	33-20	350.0	98-50	1277
July	53-25	958	30-5	316.7	104-20	1346
Aug	48-50	882	75-15	791.0	101-45	1312
Sept	31-50	568	5-55	62.2	99-30	1285
Oct	33-05	594	5-30	57.75	100-45	1298
Nov	80-15	1442	6-30	68.25	101-30	1310
Dec	28-0	504	18-10	190.6	97-30	1255
Total	829-20	14,920		2,169.26		15396

gals to surface		electric 1928	electric 1929
no 1 ch		5,136,200	5,190,000
" " "	no 4 ch	27,315,000	14,957,000
" " "	3 rd 4 ch	513,050,000	485,427,100
" " "	6 th 4 ch	414,580,000	396,970,500 electric

no 4

1/4/29

Champion UG Pumping 1928 No 1

Month	6 th Hr	1000 G Surface	13 th Hr	1000 G to 6 th	1000 G to 13 th	21 st Hrs
Jan	281	3910 ✓	224	2688	2472	206
Feb	275	3830 ✓	220	2640	2280	190
Mar	324	4510 ✓	260	3120	3012	251
Apr	363	5050 ✓	340	4080	3960	330
May	340	4740 ✓	322	3864	3780	315
June	310	4320 ✓	268	3192	3600	300
July	313	4360 ✓	265	3180	3588	299
Aug	300	4180 ✓	240	2880	3240	270
Sept	290	4030 ✓	232	2784	3156	243
Oct	285	3962 ✓	280	3360	3024	252
Nov	300	4180 ✓	285	3420	3120	260
Dec	308	4290 ✓	256	3072	2664	222
Total		51,362 ✓		38,280	37,896	

Total gals to surface 1928 51,362,000
 " " " " 1927 44,195,000

mem

1/4/29

Champion V.G. Pumping no 4, 1928

300 GPM

175 GPM

215 GPM

Month	6 th to Surface	Gals in 1000 ^s	13 th Hr-min	Gals to 6 th	21 st Hr-min	Gals to 13 th
Jan	130-27	2350 /	5-0	52,500	94-0	1,210,000
Feb	118-10	2130 /	4-45	49,800	90-05	1,160,000
Mar	102-05	1835 /	11-25	119,500	91-45	1,182,000
Apr	134-35	2420 /	4-10	64,800	112-30	1,450,000
May	136-25	2445 /	6-40	70,000	111-30	1,436,000
June	137-15	2470 /	120-0	126,000	94-20	1,215,000
July	118-45	2135 /	2-40	28,000	96-0	1,235,000
Aug	134-05	2410 /	9-0	94,500	93-40	1,207,000
Sept	114-50	2065 /	16-50	177,000	90-0	1,160,000
Oct	137-25	2475 /	26-20	276,000	96-15	1,240,000
Nov	135-10	2430 /	115-50	1,215,000	94-35	1,220,000
Dec	119-25	2150 /	4-30	47,300	97-20	1,255,000
Total		27,315 /				

gals to Surface no 1 ch.	1928	51,362,000	1927	44,195,000
" " " centrif no. 4 ch.		27,315,000		34,210,000
" " " 3 rd & 6 th Prescott 4 ch		927,630,000		803,300,000
		1,006,307,000		881,705,000

1/10/28

Champion VG Pumping 1927 no 1

Month	13920GPH		12000GPH		12000GPH	
	6 th Hr-min	1000G to surface	13 th Hr-min	1000 Gals	21 st Hr-min	1000 Gals
Jan	178	2480 ✓	177	2124	166	1992
Feb	213	2965 ✓	208	2496	190	2280
Mar	291	4050 ✓	279	3348	246	2952
Apr	303	4220 ✓	285	3440	281	3372
May	267	3720 ✓	267	3204	240	2880
June	299	4160 ✓	296	3552	274	3288
July	290	4030 ✓	307	3684	280	3360
Aug	280	3900 ✓	294	3528	271	3252
Sept	242	3370 ✓	239	2868	220	2640
Oct	262	3640 ✓	241	2892	223	2676
Nov	270	3760 ✓	244	2928	225	2700
Dec	280	3900 ✓	245	2942	224	2688
Total		44,195 ✓		37,006		34,080

Total Gals to Surface 1927 44,195,000
 " " " " 1926 38,535,000

2/12/28

Champion UG Pumping 1927 No 4.

Month	300 GPM		175 GPM		215 GPM	
	6 th Hr-min	Gals to Surface	13 th Hr-min	Gals to 6 th	21 st Hr-min	Gals to 13 th
Jan	158E	2,845				
Feb	158E	2,845				
Mar	158E	2,845				
Apr	158E	2,845				
May	141-45	2,550				
June	128-30	2,310	83-10	873	46-25	597
July	164-20	2,960	209-10	2,200	107-55	1,394
Aug	174-5	3,140	133-22	1,400	123-0	1,590
Sept	160-0	2,880	0		148-21	1,914
Oct	183-10	3,300	0		151-35	1,955
Nov	161-45	2,915	0		125E	1,612
Dec	153-58	2,775	0		106-25	1,370

Total	34,210	4,473	10,432
Gals. to surface No 1 Ch	44,195,000	1927	1926
" " " centre No 4	34,210,000		38,535,000
" " " (2) Plunger No 4	803,300,000		0
	<u>881,705,000</u>		<u>757,360,000</u>
			795,895,000

W8M

1/1/27

Champion UG Pumping at No 1 - 1926

Month	13920GPH		12000GPH		12000GPH	
	6 th Hr - Min	1000 Gal to surface	13 th Hr - min	1000 Gals	21 st Hr - min	1000 Gals to 13 th
Jan	1,51	2105 ✓	160	1920	159	1908
Feb	140	1950 ✓	145	1740	142	1704
Mar	173	2410 ✓	166	1992	167	2004
Apr	249	3470 ✓	235	2820	204	2448
May	234	3260 ✓	228	2736	216	2592
June	250	3480 ✓	252	3024	222	2664
July	291	4050 ✓	254	3048	236	2832
Aug	256	3560 ✓	255	3060	218	2616
Sept	266	3710 ✓	268	3216	232	2784
Oct	263	3660 ✓	261	3132	230	2760
Nov	264	3680 ✓	262	3144	232	2784
Dec	230	3200 ✓	237	2844	229	2748
Total		38,535 ✓		32,676		29,844

Total Gals to surface 1926 38,535,000
 " " " " 1925 31,088,000

WJW

Champion pumping.

1910.

E-6th

E-13th

B-6th

Jan'y	Hrs - 48 $\frac{2}{3}$	34 $\frac{1}{2}$	17 $\frac{2}{3}$
KWH - 9400	gal - 969000	406500	246000
Feb'y	45 $\frac{1}{2}$	29 $\frac{2}{3}$	15 $\frac{1}{2}$
KWH - 8600	907500	350000	216000
Mar	48 $\frac{1}{2}$	36	26
KWH - 9370	966000	424000	362000
April	52 $\frac{1}{2}$	35	22 $\frac{1}{2}$
KWH - 9080	1047000	412500	313000
May	49	31 $\frac{1}{4}$	21
KWH - 8780	977000	369000	292100
June	54 $\frac{2}{3}$	36 $\frac{1}{4}$	20
KWH - 9520	1090000	428000	278200
July	49 $\frac{2}{3}$	32	18 $\frac{1}{3}$
KWH - 8890	992000	377000	252300
Aug	52	32.8	22 $\frac{2}{3}$
KWH 9100	1037000	386500	316000
Sep.	50-50'	34-35	21-40
9080	1012000	407800	302000
Oct.	54-00	32-45	20-00
8580	1077000	385000	278200
Nov	49-45	23-00	23-20
8000	991000	389000	324400
Dec.	48-20	33-35	20-05
9180	966000	395800	279360

1/5/23

Champion Underground Pumping 1922

Month	6 th N ^o 1	1000	13 th N ^o 1	1000	21 st N ^o 1	1000	6 th N ^o 4	1000	13 th N ^o 4	1000		
Total Kwh	Hrs-Min	Gals	Hrs-Min	Gals	Hrs-Min	Gals	Hrs-Min	Gals	Hrs-Min	Gals		
Jan.	36100	148	2060	153	1836	148	1777	105-15	2096	113-45	1340	
Feb.	43200	239	3328	243	2916	239	2870	97-26	1940	114-50	1354	
Mar.	46250	230	3200	225	2700	220	2640	104-30	2080	106-35	1257	
Apr.	49000	267	3717	286	3432	277	3322	103	2050	105	1237	
May.	46200	227	3160	278	3336	261	3130	102-35	2042	120-20	1420	
June	39080	216	1296 air	1949	245	2940	240	2880	104	2070	121	1426
July	32300	468	2808	280	3360	186	2232	101-0	2012	120-45	1424	
Aug.	32500	486	2916	192	2304	188	2256	99	1970	118	1392	
Sept.	32300	468	2808	186	2232	193	2316	87-55	1750	105-20	1242	
Oct.	30200	468	2808	192	2304	185	2220	98-45	1966	118-0	1390	
Nov.	31800	468	2808	184	2208	181	2172	97-45	1947	105-35	1245	
Dec.	29600	450	2700	174	2088	176	2110	99-25	1980	118-35	1397	
Total		35,558		31,656		29,925		23,903		16,124		

Gallons to Surface N^o 1 = 35,558,000

" " " N^o 4 = 23,903,000

Total 59,461,000

Note. Air pump used at 6th N^o 1 from June 18th on.

1/12/22

Champion Underground Pumping 1921

3 4 5 1 2

Month	6 th No.1 Hours	1000's of Gals.	13 th No.1. Hours	1000's of Gals.	21 st No.1 Hours	1000's of Gals.	6 th No.4 Hours	1000's of Gals.	13 th No.4 Hours	1000's of Gals.
Jan. 33700	147	2046	140	1680	133	1596	96	1912	108-20	1276
Feb 32700	140	1949	136	1632	129	1548	76-30	1524	101-15	1193
Mar 31975	155	2158	145	1740	137	1644	87	1733	121-40	1433
Apr. 40300	186	2589	182	2184	149	1788	82	1633	122-34	1443
May 41492	178	2478	168	2016	144	1728	85	1693	102-25	1206
June 32798	170	2366	160	1920	152	1824	88	1753	104-0	1225
July 38570	165	2297	154	1848	155	1860	94	1872	100-0	1178
Aug. 35000	161	2241	151	1812	142	1704	87-20	1740	110-35	1296
Sept. 33600	151	2102	160	1920	145	1740	90-25	1798	100-20	1182
Oct. 33900	145	2017	152	1824	130	1560	98	1952	95-0	1118
Nov. 31920	143	1990	146	1752	139	1668	76-25	1519	86-30	1019
Dec. 33500	150	2090	155	1860	135	1620	95-5	1902	105-35	1245
Totals		26,323		22,188		20,280		21,031		14,814

Gallons to Surface No.1 = 26,323,000
 " " " No.4 = 21,031,000
 Total " " " 4,7354,000

mlm

1/13/21

Champion Underground Pumping 1920

Month	6 th No 1 Shaft Hours	Thousands of Gallons	13 th No 1 Shaft Hours	Thousands of Gallons	21 st No 1 Shaft Hours	Thousands of Gallons	6 th No 4 Shaft Hours	Thousands of Gallons	13 th No 4 Shaft Hours	Thousands of Gallons
Jan. 31,500	135	1879	145	1740	135	1620	84	1674	110	1,295
Feb. 23,880	120	1670	120	1440	121	1452	70	1,395	92	1,082
Mch. 28,330	135 ^{3/4}	1889	134	1608	125	1500	79	1,574	96	1,130
Apr. 35,870	150	2088	142	1704	140	1680	91	1,812	114	1,342
May 32,250	160	2227	152	1824	150	1800	88	1,753	120	1,412
June 30,720	162	2255	160	1920	155	1860	75	1,495	112	1,319
July 32,890	148	2060	152	1824	150	1800	83	1,654	99	1,165
Aug. 31,300	140	1949	143	1716	148	1776	86	1,713	100	1,178
Sept. 30,530	138	1921	140	1680	145	1740	84	1,674	96	1,130
Oct. 32,260	135	1879	133	1596	140	1680	82	1,634	93	1,095
Nov. 28,580	133	1851	136	1632	135	1620	87	1,733	113	1,330
Dec. 30,080	135	1879	134	1608	134	1608	81	1,614	101	1,189

23,547

19,725

*4 Shaft - 6th & 13th level pump readings taken from 1919.

M.G.M.

23,547,000
 19,725,000

 43,272,000 gal to surface

Champion Underground Pumping 1919

Month K.W.H.	6 th #1 Shaft	Thousands of gallons	13 th #1 Shaft	Thousands of gallons	21 st #1 Shaft	Thousands of gallons	6 th #4 Shaft	Thousands of gallons	13 th #4 Shaft	Thousands of gallons
Jan 31300	150 ^{hrs}	2088	125	1500	122	1464	84	1674	110	1295
Feb 27130	130	1810	112	1344	108	1296	70	1395	92	1082
Mch 28940	164	2282	130	1560	122	1464	79	1574	96	1130
Apr 39200	174	2422	139	1668	140	1680	91	1812	114	1342
May 250	170	2364	141	1692	79	948	88	1753	120	1412
June 90	140	1948	136	1632	0	0	75	1495	112	1319
July 5340	135	1879	130	1560	0	0	83	1654	99	1165
Aug 6910	133	1851	129	1548	37	444	86	1713	100	1178
Sept 31040	130	1810	134	1608	129	1548	84	1674	96	1130
Oct 23400	130	1810	41	492	125	1500	82	1634	93	1095
Nov 33740	125	1740	132	1584	142	1704	87	1733	113	1330
Dec 32190	130	1810	135	1620	136	1632	81	1614	101	1189

M.A.R.

Champion Underground Pumping, 1918.

Month K.W.H.	6 th # 1 Hours + min.	Thousands of gallons @ 13920 g.p.h.	13 th # 1 Hours + min.	Thousands of gallons 12000 g.p.h.	21 st # 1 Hours + min.	Thousands of gallons @ 12000 g.p.h.	6 th # 4 Hours + min.	Thousands of gallons @ 19920 g.p.h.	13 th # 4 Hours + min.	Thousands of gallons @ 11780 g.p.h.
Jan. 18000	54	752					80-15	1600	120-5	1422
Feb. 16720	46	640	35	420			70-50	1411	103-25	1218
Mch. 21570	69	961	62	744	38	456	77-15	1540	109-55	1294
April 24660	59	822	69	828	80-30	966	79-45	1590	110-40	1302
May 36260	91-30	1274	90-45	1089	94-15	1132	77-40	1549	106-5	1250
June 17320	96-15	1341	105-15	1263	111-30	1338	80-30	1640	107-40	1268
July 28490	125	1740	120	1440	127	1530	78-35	1568	112-50	1328
Aug. 30230	121-45	1694	117	1430	148-30	1782	75-25	1520	111-15	1310
Sept. 28790	135	1880	110-30	1326	113-45	1364	76-25	1521	109-40	1292
Oct. 28460	130	1810	103-30	1241	115-30	1385	73-50	1471	92-50	1093
Nov. 28220	126	1754	130	1570	120	1440	84-10	1678	103-10	1218
Dec. 30950	145-30	2025	132	1583	139	1668	76-35	1526	108-15	1275

13th # 1 started in Feb 1918.
21st " " " Mch "

W. A. R.
7/1/19.

Champion Pumping.

1915.

Month. K.I.H.	6 th * 1, 13920 ^{gal} per hr.		6 th * 4, 19920 ^{gal} per hr.		13 th * 4, 11790 ^{gal} per hr.	
	Hours	Gallons	Hours	Gallons	Hours	Gallons
Jan'y 15150	27 ^{hr} 30 ^{mi}	382,500	71 ^{hr} 30 ^{mi}	1,425,000	82 ^{hr} 20 ^{mi}	971,000
Feb'y 13590	29 - 50	415,000	66 - 30	1,327,000	78 - 45	668,000
March 16210	49 - 20	686,000	73 - 30	1,465,000	92 - 10	1,087,000
April 15360	51 - 0	710,000	69 - 25	1,380,000	82 - 5	968,000
May 17430	55 - 30	772,000	80 - 0	1,595,000	94 - 5	1,110,000
June 16700	54 - 50	763,000	75 - 0	1,495,000	88 - 0	1,038,000
July 15310	57 - 40	802,000	74 - 35	1,482,000	96 - 30	1,127,000
August 17990	52 - 30	730,500	81 - 10	1,618,000	102 - 50	1,212,000
Sept. 16870	56 - 30	786,000	68 - 5	1,357,000	113 - 10	1,335,000
Oct. 18430	68 - 0	946,000	68 - 50	1,372,000	112 - 10	1,323,000
Nov. 13940	98 - 0	1,363,000	58 - 20	1,162,500	71 - 15	840,600
Dec. 17270	100 - 0	1,392,000	72 - 35	1,447,000	78 - 30	925,500

W. A. Rankin
1/6/16

Champion Pumping 1914

Month, K.W.H.	6 ^B B 13920	6 ^B E 19920	13 ^B E 11790
Jan'y 14580	21 ^{hr} 15 ^{ms} 293,100	79 ^{hr} 25 ^{ms} 1,563,000	68 ^{hr} 50 ^{ms} 812,500
Feb'y 13050	19 - 25 271,000	67 - 35 1,346,000	61 - 45 728,000
March 12250	21 - 05 292,500	75 - 55 1,514,000	67 - 53 800,500
April 16180	26 - 30 369,000	72 - 30 1,444,000	67 - 25 795,000
May 17140	32 - 40 454,500	87 - 05 1,735,000	91 - 45 1,080,000
June 16260	37 - 05 515,500	85 - 50 1,713,000	92 - 0 1,083,000
July 15070	42 - 0 585,000	75 - 45 1,510,000	80 - 0 743,000
Aug 14900	36 - 40 510,000	75 - 40 1,508,300	82 - 35 973,000
Sept 16060	43 - 0 598,500	78 - 40 1,566,000	86 - 40 1,022,000
Oct 16850	38 - 10 531,000	83 - 40 1,668,000	89 - 40 1,057,000
Nov 14340	36 - 55 515,000	76 - 30 1,525,000	94 - 0 1,190,000
Dec 15230	33 - 50 471,500	81 - 40 1,627,000	86 - 50 1,023,000

W.A. Rankin
1/5/15

#1521
H-6g.

Champion Pumping. 1913.

Month K.W.H.	6 th - B 13920	6 th - E 19920	13 th - E 11790
✓ Jan'y. 9920	25 ^{hr} - 5 ^{ms} 349,000 ^{gal}	48 ^{hr} - 40 ^{ms} 948,000 ^{gal}	47 ^{hr} - 25 ^{ms} 558,500 ^{gal}
✓ Feb'y. 8920	18 - 20 254,600	46 - 50 938,000	45 - 55 542,000
✓ March. 9060	17 - 25 242,200	46 - 40 928,500	45 - 5 532,000
✓ April 10360	37 - 0 515,000	61 - 35 1,228,500	55 - 50 658,000
✓ May 12680	30 - 5 418,500	70 - 30 1,405,000	58 - 20 688,000
✓ June 11930	22 - 50 317,400	64 - 40 1,288,000	57 - 50 682,000
✓ July 12410	19 - 0 264,500	71 - 40 1,426,000	62 - 15 734,000
✓ Aug. 12730	22 - 50 317,400	73 - 40 1,468,000	57 - 25 676,500
✓ Sept. 12350	28 - 0 390,000	77 - 0 1,534,000	61 - 45 728,000
✓ Oct. 14350	29 - 40 412,000	72 - 30 1,444,000	63 - 50 752,500
✓ Nov. 14240	32 - 05 447,000	72 - 55 1,452,000	62 - 55 741,500
✓ Dec. 13590	26 - 0 362,000	83 - 30 1,664,000	69 - 03 814,500

W. A. Rankin
1/4/14

12/4/12

H. J. Mercer

Champion Pumping

~~7th~~
Tot. To Surface

Month	6 th B	6 th E	13 th E	KWH	
August ✓	398,400 ^{gal}	1,485,000 ^{gal}	587,000 ^{gal}	11980	1883400
Sept ✓	419,500	1,321,000	513,500	10660	1740500
Oct ✓	324,500	1,500,000	604,000	12090	1824500
Nov ✓	369,400	1,012,000	475,000	9120	1381400

Firemountain Pumping

Month	7 th #2	14 th #2	K.W.H.	
August	597,000 ^{gal}	422,500 ^{gal}	9350	✓
Sept.	672,000	434,300	7520	
Oct	595,000	412,000	7700	
Nov.	530,500	354,500	7190	
	2394,500	1623,300	31760	

M. A. Rankin

2 394 500
 1 623 300

 4 017 800

Winters, pumping 1913

Aug 6700	49 - 20 591,500	25 - 35 345,800	
Sept 6200	50 - 0 600,000	28 - 35 386,000	
OCT 7400	48 - 15 579,000	27 - 30 371,500	
Nov 7300	45 - 35 546,000	26 - 50 362,000	
Dec 6900	40 - 05 481,000	27 - 10 367,000	

✓
M. A. Rankin
1/4/14

Trimountain Pumping. 1918

2/11/19

Month K.W.H	7 th level Hours	Gallons @ 12000 per hr	14 th level Hours	Gallons @ 13500	22 nd level Hours	Gallons @ 13000
Jan. 6910	39-50 ^{min}	478000	31-30 ^{min}	425000	18-40 ^{min}	243000
Feb 6590	40-35	488000	29-25	397000	17-30	228000
March 7240	41-50	502000	29-35	399000	16-05	209000
April 8450	45-45	549000	31-55	429000	14-20	186000
May 8820	39-50	478000	30-55	417000	17-20	225000
June 6940	43-10	518000	27-45	374000	16-15	211000
July 6890	39-20	480000	29-10	393000	19-25	252000
Aug 7550	37-25	462000	36-30	493000	20-40	268000
Sept 5920	35-30	426000	33-20	449000	18-20	238000
Oct 7550	38-50	466000	29-50	402000	17-45	231000
Nov 6560	34-20	412000	33-55	447000	17-05	222000
Dec 6710	36-45	441000	36-35	494000	16-20	212000

86130 5700000 5,119,000 2725,000
W. A. R.

5700000
 5119000
 2725000

 13,544,000

1/20/20

Trimountain Pumping. 1919.

Month. K.W.H.	7 th level.	Gallons to Surface.	14 th level.	Gallons to 7 th level.	22 nd level.	Gallons to 14 th level.
Jan 6770	40 ^{hrs} 0 ^m	480 000	35 ^{hrs}	472 500	18 ^{hrs}	234 000
Feb 5830	33 - 0	396 000	29	391 500	14	182 000
Mar 6810	31 - 0	372 000	36	486 000	17	221 000
April 7350	36 - 0	432 000	33	445 500	16	208 000
May 7700	38 - 0	456 000	41	553 500	15	195 000
June 7190	38 - 0	456 000	36	486 000	15	195 000
July 7740	42 - 0	504 000	39	526 500	18	234 000
Aug 7080	38 - 0	456 000	34	458 000	17	221 000
Sept 6620	34 - 0	408 000	36	486 000	13	169 000
Oct 6980	40 - 0	480 000	40	530 000	18	234 000
Nov 5720	38 - 0	456 000	35	472 500	17	221 000
Dec 8330	39 - 0	468 000	35	472 500	16	208 000

5,364,000

W. A. R.

1/13/21

Trimountain Pumping 1920

Month Kwh	7 th Level	Gallons to Surface	14 th Level	Gallons to 7 th Level	22 nd Level	Gallons to 14 th Level
Jan 8490	41 ^{hrs} - 0 ^{min}	492,000	35 ^{hrs} - 05 ^{min}	473,000	17 ^{hr} 25 ^{min}	226,500
Feb. 6310	31 - 45	381,000	30 - 55	417,500	16 - 15	211,000
Mar. 7510	42 - 55	515,000	37 - 40	508,500	18 - 00	234,000
Apr. 6570	34 - 10	410,000	36 - 05	487,000	14 - 50	192,500
May 7520	41 - 10	494,000	35 - 10	474,000	19 - 05	248,000
June 6540	36 - 15	435,000	35 - 05	473,000	16 - 10	210,000
July 6730	37 - 25	449,000	35 - 45	482,500	19 - 10	249,000
Aug. 6410	36 - 55	443,000	35 - 15	476,000	17 - 10	223,000
Sept. 7070	34 - 15	411,000	31 - 25	424,000	18 - 35	242,000
Oct. 7270	37 - 05	445,000	31 - 50	429,000	17 - 20	225,000
Nov. 6630	32 - 25	389,000	33 - 15	448,500	18 - 55	246,000
Dec. 7710	38 - 25	461,000	36 - 25	491,500	18 - 15	237,000

5325,000

M.G.M.

1/12/22

Trimountain Pumping 1921

Month Kwh	7 th Level Hr. Min	Gallons to Surface	14 th Level Hr. Min	Gallons to 7 th Level	22 nd Level Hr. Min	Gallons to 14 th Level
Jan 7180	33-15	399,000	32-35	440,000	17-15	224,000
Feb 9000	33-20	400,000	30-50	417,000	19-10	249,000
Mar. 5335	36-25	437,000	30-15	408,000	19-10	249,000
Apr. 8670	39-05	469,000	34-55	472,000	26-10	340,000
May 8396	36-25	437,000	32-20	437,000	30-45	400,000
June 7061	34-25	413,000	30-20	410,000	21-55	285,000
July 9140	36-25	437,000	30-15	408,000	18-45	244,000
Aug 8325	35-30	426,000	33-50	457,000	23-0	299,000
Sept. 7440	36-35	439,000	34-45	469,000	19-15	250,000
Oct. 7260	35-35	427,500	28-40	387,000	19-20	251,000
Nov. 6900	37-40	452,500	28-45	388,000	17-55	233,000
Dec. 7450	34-15	411,000	29-25	397,000	19-45	257,000
Total	424 ⁶⁰ ²⁹ ⁵⁵ 4 <u>428-55</u>	5,148,000	370 ⁶⁰ ⁴¹ ⁵⁵ 360 <u>376-55</u>	5,090,000	247 ⁶⁰ ³² ⁵⁵ 30 <u>252-25</u>	3,281,000

Total Gallons pumped to Surface 5,148,000

1/3/23

Trimountain Pumping 1922

Month	7 th Level Kwh Hr-Min	Gallons to Surface	14 th Level Hr-Min	Gallons to 7 th	22 nd Level Hr-Min	Gallons to 14 th
Jan.	4976	350,000	24-10	326,200	16-10	210,000
Feb.	7140	394,000	28-05	378,500	15-50	206,000
Mar	7100	418,000	28-15	381,500	17-15	224,000
Apr	6680	424,000	26-35	345,000	16-40	217,000
May	6500	417,000	28-40	387,000	18-05	235,000
June	7375	449,000	29-55	404,000	16-15	211,300
July	7450	425,000	27-30	371,000	18-10	236,000
Aug	8009	429,000	28-45	388,000	18-10	236,000
Sept	8100	418,000	28-10	380,500	16-50	218,700
Oct	6650	379,000	27-40	374,000	18-40	242,500
Nov	6500	390,000	33-50	457,000	23-00	299,000
Dec	6800	500,000	37-15	503,000	15-05	196,000
Total		4,995,000		4,695,700	210-10	2,731,500
Per day		13700		12865		7483
		9 1/2 per min.		8.9		5.2

Total gallons pumped to surface 4,995,000

Baltic U G Pumping 1931

Month	9 th 24120 Gal Total KwH Hr-Min	1000 Gal to Surf	25 th	24120 Gal 1000 Gal to Surf	Total 1000 Gal/s
Jun 3355	20	483			
Feb 2210	18-50	447			
Mar 2450	24-45	590			
Apr 6490	385-10	9,200	403-10	9,750	
May 77140	450-0	10,830	478-0	11,550	
June 103890	605-45	14,550	642-50	15,540	
July 78450	595-25	7,130	302-0	7,280	
Aug 70770	285-40	6,900	230-15	7,550	
Sept 77050	267-40	6,450	279-0	6,740	
Oct 77100	353-20	8,530	325-10	7,850	
Nov 85600	344-30	8,320	319-0	7,700	
Dec	269-25	6,500	256-20	6,190	
Total	3316-30	79,930	3235-45	80,150	

Baltic U. S. Pumping 1930

Month Total Kwh.	24,120		24,120		Total 1000 gal.
	9 th Deane 1000 gal. Hr.-min. to Surface		25 th Prescott 1000 gal. Hr.-min. to 9 th		
Jan	336 ⁴⁰	8,120	319 ²⁵	7,700	15,820
Feb.	375 ³⁵	9,050	329 ⁵⁵	8,440	17,490
Mar.	444 ⁴⁰	10,774	408	9,840	20,614
Apr.	600 ⁴⁵	14,620	547 ⁵⁰	10,321	24,941
May	446 ²⁵	10,790	416 ¹⁵	10,030	20,820
June	385	9,290	355 ⁴⁵	8,560	17,850
July	397 ¹⁵	9,590	371 ²⁵	8,950	18,540
Aug.	355 ³⁰	8,560	335 ⁵⁵	8,560	17,120
Sept.	340 ⁵⁰	8,210	326 ³⁰	7,860	16,070
Oct.	322 ⁵⁰	7,850	358 ⁴⁵	8,650	16,500
Nov.	31 ⁰⁵	749			749
Dec.	19 ²⁵	459			459
Total	4,055	98,062	3,789.50	88,911	182,973

Total Gal. to Surface 1930 98,062,000
 1929 115,905,000

1/7/30

Trinitie Pumping 1929

month Kwh	7 th Hr	1000 gals to surface	14 th Hr	1000 gals to 7 th	22 nd Hr	1000 gals to 14 th
Jan 11320	73	876	55	743	21 $\frac{1}{2}$	279
Feb 11990	70	840	51	689	20	260
Mar 10200	67	804	43	581	18	234
Apr 11840	60	720	40	540	23	299
May 10692	64	768	52 $\frac{1}{2}$	709	24	312
June 9650	65 $\frac{1}{2}$	786	53	717	22	286
July 11550	62	744	47	635	24	312
Aug 10260	77	928	53	717	21	273
Sept 10880	62	744	54	729	23	299
Oct 10940	59	708	42 $\frac{1}{2}$	574	21	273
Nov 11233	60	720	37	500	41	533
Dec 15100	72	864	52	703	43	559
Total 135595		9502		7837		3919

to surface 1929 9,502,000 gals
 " " 1928 16,968,000 "

mtu

1/4/29

Tramontain Pumping 1928

Month	7th	Gals to	14th	Gals to	22th	Gals to	Month	12th	Gals to
Jan	87	1,044,000	60	812,000	30	390,000	Jan	12600	390,000
Feb	82	984,000	64-30	872,000	30-30	396,500	Feb	12630	396,500
Mar	110	1,320,000	98	1,323,000	61	793,000	Mar	16150	793,000
Apr	140	1,680,000	106	1,432,000	76	988,000	Apr	26550	988,000
May	200	2,400,000	134	1,810,000	123	1,599,000	May	31200	1,599,000
June	194	2,328,000	141-30	1,912,000	113-30	1,475,500	June	36620	1,475,500
July	146	1,752,000	100	1,350,000	86	1,118,000	July	27500	1,118,000
Aug	76	912,000	43	581,000	21	273,000	Aug	22550	273,000
Sept	77	924,000	45	608,000	23	299,000	Sept	22000	299,000
Oct	100	1,200,000	51	690,000	30	390,000	Oct	12320	390,000
Nov	102	1,224,000	59	798,000	34	442,000	Nov	10800	442,000
Dec	100	1,200,000	55	743,000	31-30	409,500	Dec	11450	409,500
Total		16,968,000		12,931,000		8,573,500	Total	242370	8,573,500

To surface 1928 " " 16,968,000 gals. 14,028,000 " " 8,573,500 " " 1927

4/12/28

Trimountain Pumping 1927 No 2

Month KWh	7 th Hr-min	Gals to Surface	14 th Hr-Min	Gals to 7 th	22 nd Hr-min	Gals to 14 th
Jan 10,500	61-0	732,000	37	500,000	30	390,000
Feb 10,000	71	852,000	41	554,000	19	247,000
Mar 12,400	98	1,176,000	48-30	655,000	25-30	332,000
Apr 10,600	105	1,260,000	54	730,000	35	455,000
May 12,100	90	1,080,000	48	648,000	36	468,000
June 12,100	85-30	1,026,000	47-30	642,000	29	377,000
July 14,500	125	1,500,000	68	918,000	48	624,000
Aug 13,180	120	1,440,000	70	945,000	50	650,000
Sept 13,650	101-30	1,218,000	61	823,000	40	520,000
Oct 12,628	119	1,428,000	54	729,000	30-30	396,000
Nov 11,900	103	1,236,000	56	757,000	41	533,000
Dec 12,200	90	1,080,000	58-30	790,000	38	494,000
Total 145,758		14,028,000		8,691,000		5,486,000

To Surface 1927 14,028,000 Gals.
 " " 1926 13,266,000 "

mjm

1/3/27

Trimountain Pumping 1926

Month Kwh	12000GPH		13500GPH		13000GPH.	
	7 th #2 Hr-min	Gals to Surface	14 th #2 Hr-min	Gals to 7 th	22 nd #2 Hr-min	Gals to 14 th
Jan 9500	71	852,000	34	459,000	24	312,000
Feb 8800	68	816,000	31	418,500	26	338,000
Mar 10420	87	1,044,000	40	540,000	30	390,000
Apr 13530	101	1,212,000	45	607,500	41	533,000
May 11750	83	996,000	41	553,500	40	520,000
June 11400	73	876,000	32	432,000	25	325,000
July 10380	73.5	882,000	33	445,500	28	364,000
Aug 9150	74.5	894,000	34	459,000	26	338,000
Sept 16482	112	1,344,000	50	675,000	47	611,000
Oct 17850	124	1,488,000	59	797,500	56	728,000
Nov 22150	145	1,740,000	72	972,500	72	936,000
Dec 14100	93.5	1,122,000	26.5	358,000	45	584,000
Total 155,512		13,266,000		6,718,000		5,979,000

To Surface 1926 13,266,000
 " " 1925 10,704,000 Gals.

wkm

Requisition No. _____

ENGINEER'S OFFICE

F. P. No. _____

Drawn by _____

CHAMPION COPPER CO.

PAINESDALE, MICH.

Checked by _____

Date _____ 191

SUBJECT _____

Electric Pump			Champion Steam Pump				22656 gal. per Hour @ 32 R.P.M.			
21720 Gal. per Hour 362 " Min. 521280 24 Hours			11.8 gal. per Revolution 24840 gal. per Hour @ 35 R.P.M. 414 " Min.							
Hours Per Mon.	Hours Per Day	Gal. per Day	1914	Hours Per Mon.	Hours Per Day	Gal. per Day	Coal Tons	Gal. per Day Both Pumps	Ditto Trimount Pump	Ditto All Pumps
414	13.4	291,000	Jan	163 $\frac{1}{4}$	5.3	120,200	42	411,200	396,300	807,500
364	16.6	360,500	Feb	139 $\frac{1}{2}$	5.0	113,400	36	473,900	445,500	919,400
403 $\frac{1}{2}$	13.0	282,300	Mar.	177 $\frac{1}{2}$	5.7	129,200	45	411,500	439,000	850,500
371	12.4	269,200	Apr.	202	6.7	151,800	51	421,000	421,000	842,000
296 $\frac{3}{4}$	9.6	208,500	May	375 $\frac{3}{4}$	12.1	274,300	62	482,800	459,500	942,300
426 $\frac{1}{4}$	14.2	308,200	June	341 $\frac{1}{4}$	11.4	258,200	58	566,400	448,000	1,014,400
435 $\frac{1}{4}$	14.0	304,000	July	236 $\frac{1}{2}$	7.6	172,300	68	476,300	419,400	895,700
416 $\frac{1}{4}$	13.4	291,000	Aug	285	9.2	208,500	72	499,500	387,400	886,900
329	11.0	239,000	Sept	285	9.5	215,200	72	454,200	408,000	862,200
122 $\frac{3}{4}$	4.0	86,850	Oct	591	19.0	431,000	98 $\frac{1}{2}$	517,850	397,600	915,450
74	2.5	54,300	Nov	538 $\frac{1}{4}$	17.9	405,700	91	460,000	422,200	882,200
279 $\frac{1}{4}$	9.0	195,500	Dec	349	11.3	256,100	87	451,600	465,500	917,100
3932			Total	3684						
327 $\frac{2}{3}$	10.7	232,400	Avq.	307	10.1	228,900		461,300	426,500	887,800
			1915							
205 $\frac{1}{2}$	6.1	132,600	Jan	421 $\frac{1}{2}$	13.6	308,200	95	440,800	412,500	853,300
152 $\frac{1}{4}$	5.4	117,300	Feb	459	16.4	371,700	96	489,000	430,000	919,000