

KEY STORAGE FACILITIES

Reservoir: SPENCER (or LAK, ENL OF 1890R & 4917R)

Date: 12 Feb. 2001

Location: SWNE 6,T44N,R60W

Owner: TRUE RANCHES, INC.

Year of Construction: 1910

Enlargement History: 1940, 1953

Total Storage: 2,847 acre-feet

Active Storage: 2,162 acre-feet

Dead Storage: Data not available



Area/Capacity Data: *(Source: Feb. 1941 "Map to Accompany Application for Enlargement of Spencer Reservoir," The Ohio Company, applicant, on file in SEO Safety of Dams office.)*

Contour	Area (acres)	Capacity (af)
1015	104	
		467
1010	83	
		390
1005	73	
		320
1000	55	
		207
995	28	
		108
990	15	
		62
965	10	
		33
980	3	
TOTAL	104	1587

Dam Construction Type: Earth Fill

Outlet: Two 18" x ¼" welded steel pipes, asphalt coated, "placed on six-inch centers," (permit). This could mean the pipes were placed with their walls six inches apart.

Spillway: 100 x 5-foot, rock-lined channel cut in the crest of the dam

End-of-Month Storage Records: No

Water Rights:

(Source: Tabulation of Adjudicated Surface Water Rights of the State of Wyoming, Water Division Number Two, Oct. 1999)

Reservoir	Permit Number	Permitted Use	Priority Date	Volume (af)	Headgate Location (S-T-R)
Spencer Res	1890R	I	07-05-1910	98.28	31-45-060
Enl. Spencer	4917R	I	06-18-1938	1489	6-44-060
Enl. Spencer	5410R	I	02-12-1941	575	6-44-060

Designated Use: Irrigation

Associated Irrigation Diversions: Information not available.

Associated Industrial Diversions: (Source: Tabulation of Adjudicated Surface Water Rights of the State of Wyoming, Water Division Number Two, Oct. 1999)

Diversion	Permit	Priority Date	Permitted use	Flow (cfs)
L A K Power Plant	17853	03-27-1931	Power	12

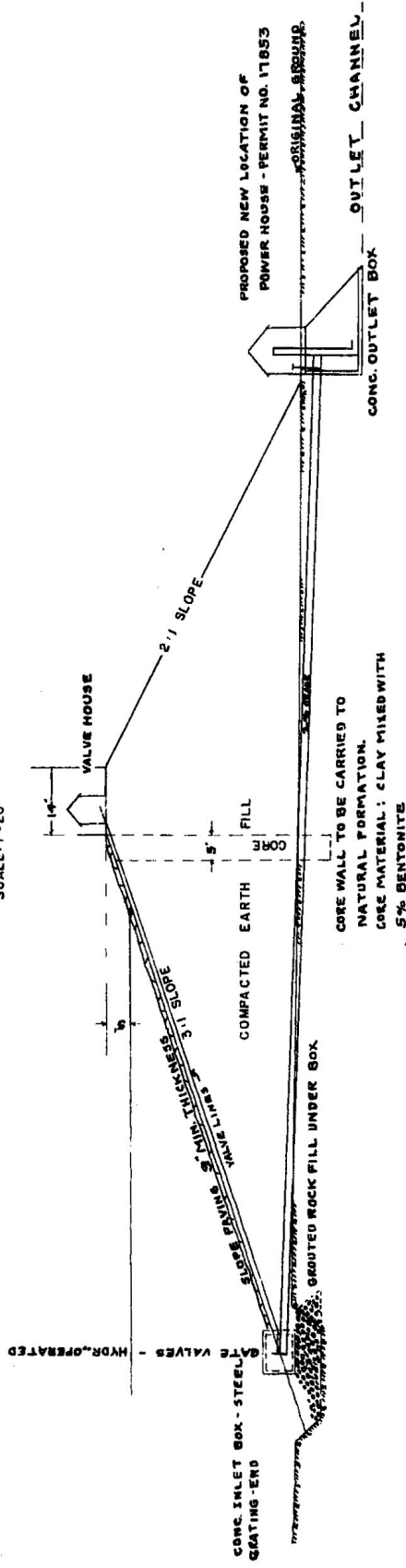
References:

Map to Accompany Application for Enlargement of Spencer Reservoir, the Ohio Company, Newcastle, Wyoming, 3 Feb. 1941.

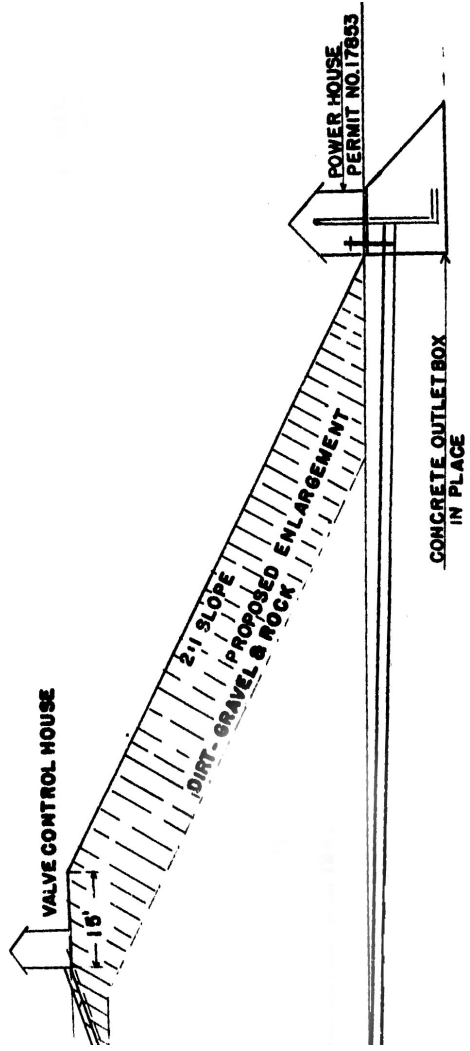
Tabulation of Adjudicated Surface Water Rights of the State of Wyoming, Water Division Two, Oct. 1999.

Spencer Dam cross sections ("Map to Accompany Application for Enlargement of Spencer Reservoir", the Ohio Company, Newcastle, Wyoming, 3 Feb. 1941):

TYPICAL SECTION STA. 12
SCALE: 1" = 20'



STA. 12



Net evaporative loss for Spencer Reservoir:

Lewis Annual Evaporation 40
 Total Storage 2,847

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average percent of storage	54.3	58.0	66.5	69.8	76.5	78.1	76.6	74.4	72.2	53.8	53.5	53.7
Generated storage (acre-feet)	1546	1653	1894	1988	2177	2222	2182	2117	2056	1531	1523	1528
Corresponding area (acres)	103.2	105.2	109.8	111.5	115.1	115.9	115.1	113.9	112.8	102.9	102.8	102.9

Calculations:

Monthly Lewis Evap. (inches)	1.08	1	1.56	3.2	4.6	5.24	6.84	6.24	4.6	3.04	1.56	1.04
Monthly Precipitation (inches)	0.25	0.75	0.75	1.75	2.75	2.75	1.75	1.75	1.25	0.75	0.75	0.75
Net Evaporation (inches)	0.83	0.25	0.81	1.45	1.85	2.49	5.09	4.49	3.35	2.29	0.81	0.29
Total Net Evaporation (acre-feet)	7	2	7	13	18	24	49	43	31	20	7	2
												224