2022 ANNUAL HYDROLOGY REPORT

HAYDEN GULCH TERMINAL LOADOUT

PERMIT C-92-081

FEBRUARY 2023

Submitted To: Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Prepared By: Hayden Gulch Terminal, LLC
PO Box 670
Hayden, CO 81639

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FIGURES

APPENDICES

1.0 INTRODUCTION

This Annual Hydrology Report presents the hydrologic monitoring data collected during the 2022 water year (October 2021 – September 2022) at the Hayden Gulch Terminal, LLC Hayden Gulch Loadout (HGT). The AHR fulfills the reporting requirements under the Colorado Division of Reclamation, Mining, and Safety (CDRMS) Permit No. C-1992-081.

1.1 BACKGROUND

The HGT is a former coal loadout located in Routt County, approximately 2 miles southeast of Hayden, Colorado (Figure 1). The tipple and coal storage area were reclaimed in 2011, followed by the east office in 2013, and the west office in 2014. On February 18, 2022 the Division approved bond release package SL-2, allowing for the release of the reclaimed rail spur area. This area has been transferred to the Town of Hayden as part of their Track to Trails program and will serve as a recreational park for residents and visitors. Only the tie-across haul road and a small area of agricultural/hayland along Highway 40 remain in the permit.

2.0 METEOROLOGICAL

Meteorological data for the 2022 water year is presented in Appendix A. The 2022 data was obtained from NOAA weather station USC00053867 located in Hayden, Colorado (www.ncdc.noaa.gov/cdo-wb/). A total of 18.74 inches of precipitation was measured in 2022, which is 0.60 inches less than the 1981-2022 average of 18.14 inches. October, December, April, May, and September were wetter than normal, but the remaining months were drier. Potential snowpack runoff, as estimated by totaling November through March precipitation, was 6.87 inches, which was 0.64 inches below the 1981-2022 average of 7.51 inches.

3.0 GROUNDWATER

The HGT groundwater monitoring program includes one monitoring well (HGDAL4). Monitoring well HGDAL3 was abandoned in late 2021 and is no longer part of the groundwater monitoring program. The following table identifies the water bearing unit HGDAL4 is screened in and its required monitoring frequency and parameter list. The well location is shown on Figure 1. Groundwater monitoring was completed by experienced personnel and samples were collected following the monitoring practices described in Tab 13 of Permit C-1992-081. All samples were analyzed by ACZ Laboratories.

Site	Unit	Monitoring Frequency		Parameter List
		Water Level	Water Quality	
HGDAL4	Dry Creek Alluvium	A	A	GW

Note
HGDAL3 was abandoned in December 2021 for the SL-2 Bond Release
A: Annual
GW: Field conductivity, field pH, field temperature, dissolved iron, dissolved manganese, total dissolved solids

3.1 WATER LEVELS

The static water level measured at HGDAL4 during the 2022 water year is included in Appendix B along with the groundwater quality data. The water level hydrographs is provided in Appendix C. Although the static water level measured at HGDAL4 in 2022 was on the lower end of the historic measurements, it was within its respective range. The water table in the alluvial well fluctuates in response to seasonal precipitation events, with the water table typically at its highest during the spring snowmelt seasons and then declining through late summer/early fall in response to the dry conditions. The HGT has been inactive for several year and no alluvial groundwater was utilized by the facility in 2022. The low water level measured in 2022 is likely a reflection of the water tables natural response to the 2022 drought conditions.

3.2 GROUNDWATER QUALITY

Groundwater points of compliance (GWPOC) were determined to be unwarranted at the Hayden Gulch Loadout (CDRMS GWPOC Determination Memo dated June 5, 2008). The basis for this finding were: 1) alluvial groundwater in this area has naturally elevated total dissolved solids concentrations which results in the groundwater having a "Limited Use and Quality" designation; and, 2) insufficient hydraulic head is present to allow for any recharge originating at the site to migrate into the underlying, low permeability, Lewis Shale. Native groundwater in the Lewis Shale exhibits high concentrations of dissolved solids, and irrigation return water upstream of the HGST which is in contact with soils derived from the Lewis Shale, also contribute to elevated concentrations of selenium and dissolved solids. Table B.1 includes the analytical results for well HGDAL4 in 2022. The monitoring conducted this year continues to support CDRMS findings.

4.0 SURFACE WATER

The HGT is located principally (former coal handling facility area and majority of the railroad spur) in the lower portion of the Dry Creek watershed (Yampa River Segment 13h). The surface water monitoring program includes two NPDES outfalls and two instream sample points. The following table provides the required monitoring frequency and parameter list for each of these points. See Figure 1 for the locations of the surface water monitoring points. Surface water monitoring was completed by experienced personnel and samples were collected following the monitoring practices described in Tab 13 of Permit C-1992-081. All samples were analyzed by ACZ Laboratories.

Site	Type	Watershed	Monitoring Frequency		Parameter List
			Flow	Water Quality	
HGSD1	Surface Water	Dry Creek	SA	SA	SW
NPDES1H	NPDES	Dry Creek	M	M	NPDES
NPDES2H	NPDES	Dry Creek	M	M	NPDES
HGSD3	Surface Water	Dry Creek	SA	SA	SW

Note
SA: Semiannual
M: Monthly
SW: Field conductivity, field pH, field temperature, total recoverable iron, dissolved manganese, nitrate, nitrite, dissolved selenium, total dissolved solids, total suspended solids
NPDES: See NPDES permit COG85008

Analytical results for the 2022 monitoring conducted at stream point HGSD1 and HGSD3 are provided in Table D.1. Analytical results for NPDES outfalls NPDES1H and NPDES2H are provided in Table D.2. Neither outfall discharged in 2022 and there were no exceedances of NPDES permit limits or instream water quality standards. Dry weather conditions have prevented discharges from both outfalls since 2011. Exceedances of the chronic dissolved selenium aquatic life standard and agricultural use standards occurred at upstream monitoring point HGSD1 and downstream monitoring point HGSD3. Dry Creek flows through the selenium laden Lewis Shale and the elevated selenium is likely the result of a combination of natural contributions and irrigation return water that contacts soils derived from the Lewis Shale. While selenium exceeded the chronic aquatic life standard at upstream point HGSD1 during

both the April and June event, downstream points HGSD3 exhibited a higher concentration than the upstream point during the June event. Dry Creek is a losing stream and although the site had not received rain for several days and neither of the NPDES outfalls were discharging, the flow at downstream point HGSD3 (28.6 gpm) was approximately three times greater than the flow observed at upstream point HGSD1 (10.3 gpm). It is likely that irrigation return water from one of the adjacent agricultural fields contributed to both the increased flow and elevated selenium. There were no other exceedances of the Yampa Segment 13h aquatic life or agricultural use standards at the HGT surface water monitoring points.

5.0 SUMMARY

No significant hydrologic impacts attributable to the HGT were noted during 2022. The groundwater level was within the historic range. Groundwater monitoring continues to demonstrate that the native Dry Creek alluvium contains naturally elevated concentrations of dissolved solids, providing further support for CDRMS's determination that it is of Limited Use and Quality. Exceedances of the selenium chronic aquatic life standard occurred at both upstream monitoring point HGSD1 and downstream point HGSD3. Neither of the outfalls were discharging during these events. Dry Creek flows through the selenium laden Lewis Shale and the elevated selenium was likely the result of natural contributions and irrigation return water that contacts soils derived from the Lewis Shale. There were no exceedances of the NPDES permit limits or water quality standards at the HGT outfalls.

K:\Laramie\Peabody\2018-005_PEC_PSCM_HydrologicServices(2018)\05Cad\CADD base maps\190205_Field mapmoffat and routt_C083-NF_quads.dwg HGT-1 2/6/2019 4:07:34 PM

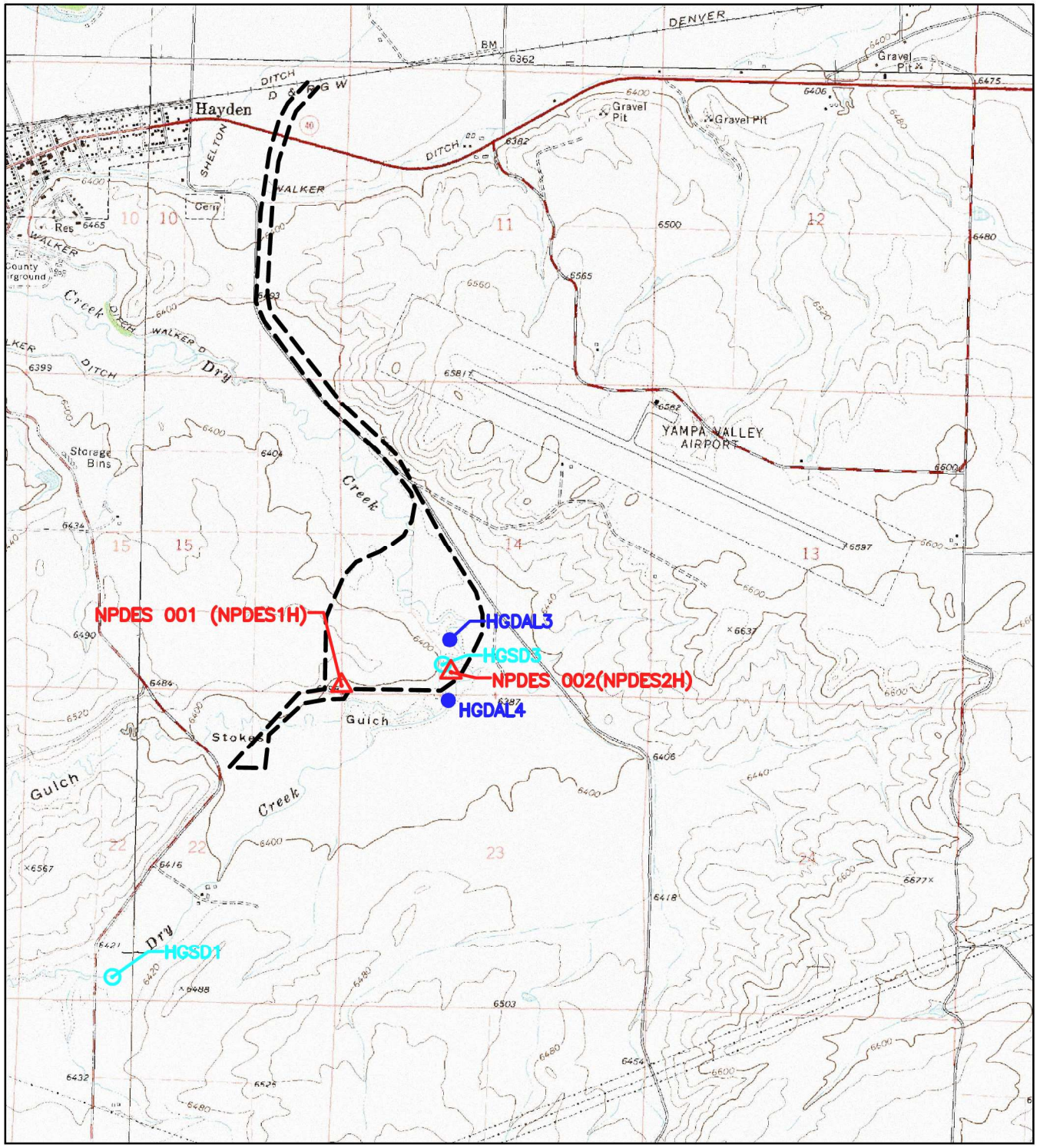

IMAGE SOURCE:
DIGITAL RASTER GRAPHIC COUNTY MOSAIC BY NRCS OF ROUTT COUNTY, COLORADO FROM GEOSPATIAL DATA GATEWAY (HTTPS://GDG.SC.EGOV.USDA.GOV) DOWNLOADED 10/16

LEGEND

- GROUNDWATER
- SURFACE WATER
- NPDES
- PERMIT BOUNDARY

0 2500'
SCALE

DESIGNED BY: WWC	FIGURE 1 MONITORING SITE LOCATIONS
DRAWN BY: SDG	
CHECKED BY: TNS	HAYDEN GULCH TERMINAL LOADOUT HAYDEN GULCH TERMINAL, LLC PEABODY ENERGY
DATE: 2019	WWC ENGINEERING

APPENDIX A

METEOROLOGICAL DATA

PERIOD OF RECORD PRECIPITATION SUMMARY													
Water Year	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**TOTAL**
2022	1.82	0.62	2.79	1.18	0.85	1.43	2.07	3.14	0.61	1.14	0.99	2.1	18.74
2021	0.87	0.74	1.46	1.03	1.59	1.67	0.5	1.02	0.15	0.86	1.09	1.46	12.44
2020	1.90	1.37	2.60	2.53	2.40	1.67	1.75	1.63	0.77	0.71	0.43	0.43	18.19
2019	2.14	1.81	1.62	2.45	1.46	2.89	1.66	1.88	3.57	0.38	0.44	1.53	21.83
2018	2.45	1.31	1.36	1.65	1.92	1.90	2.95	0.85	0.15	0.15	1.33	0.17	16.19
2017	1.29	0.91	2.06	2.70	1.47	0.84	2.06	1.85	0.13	1.68	0.46	1.74	17.19
2016	1.39	1.90	2.55	2.65	1.16	1.40	3.02	1.94	0.40	0.81	0.19	1.02	18.43
2015	1.60	2.10	1.84	0.55	1.02	1.30	1.60	4.36	0.61	2.36	1.53	0.90	19.77
2014	2.69	1.75	1.42	2.02	0.78	1.96	1.19	2.58	0.72	1.50	3.77	0.87	21.25
2013	0.86	0.46	3.21	1.02	0.73	1.29	3.58	1.67	0.06	0.46	1.48	2.76	17.58
2012	1.41	1.65	0.36	0.87	1.97	0.50	1.13	0.22	0.15	2.43	0.55	1.56	12.80
2011	2.18	1.91	2.98	1.59	2.09	2.52	4.50	3.56	0.85	1.82	0.65	1.14	25.79
2010	1.22	0.77	1.24	0.75	0.90	0.73	1.98	2.80	1.34	1.19	1.56	0.62	15.10
2009	0.53	1.16	1.38	2.80	0.60	1.32	1.40	1.89	2.08	0.51	1.04	0.48	15.19
2008	1.41	0.13	3.36	2.51	1.70	1.64	0.94	1.68	0.37	0.57	0.75	0.91	15.97
2007	2.64	0.76	0.86	1.04	1.34	1.46	0.62	0.87	0.33	0.52	1.12	2.72	14.28
2006	2.27	2.04	2.01	1.78	0.58	1.06	0.95	0.93	0.24	1.48	2.71	2.75	18.80
2005	1.34	1.68	0.50	1.49	0.84	0.99	1.97	1.41	3.36	0.57	1.57	1.30	17.02
2004	0.44	2.90	1.58	0.74	1.64	0.40	1.57	1.26	0.86	1.00	1.44	2.76	16.59
2003	1.88	1.09	1.28	0.74	1.95	0.99	2.57	1.15	1.33	0.47	0.62	1.83	15.90
2002	1.14	1.17	0.54	0.88	0.92	1.06	1.39	0.40	0.37	0.78	1.26	1.94	11.85
2001	0.67	1.60	1.16	0.96	1.41	1.07	1.28	1.15	0.85	1.11	2.06	1.66	14.98
2000	0.43	0.61	1.66	1.66	1.68	1.46	1.84	1.94	0.54	0.75	2.38	2.00	16.95
1999	1.85	0.81	1.13	2.13	0.99	0.57	3.21	2.00	1.39	2.10	1.85	0.78	18.81
1998	2.37	1.08	0.95	1.34	1.93	1.77	1.77	0.62	2.51	1.50	0.48	1.50	17.82
1997	1.79	2.39	1.69	2.88	0.97	0.48	3.19	2.75	1.60	1.05	3.57	5.48	27.84
1996	1.32	2.20	1.26	3.60	2.19	0.99	1.34	2.10	1.00	1.33	0.35	1.37	19.05
1995	0.95	2.09	0.68	1.47	0.97	0.82	3.36	4.48	1.54	1.23	0.73	2.69	21.01
1994	3.02	1.61	1.16	0.69	1.13	0.56	1.85	1.07	0.43	0.24	0.98	0.72	13.46
1993	1.46	1.48	1.33	2.28	1.66	1.53	2.55	1.14	1.29	0.65	1.37	1.39	18.13
1992	1.18	2.79	0.85	0.88	1.16	1.20	1.66	3.08	1.15	4.38	0.95	0.98	20.26
1991	3.20	1.71	1.18	1.75	0.86	2.42	1.09	0.96	1.74	1.59	2.00	1.32	19.82
1990	0.77	1.38	2.08	0.65	1.64	1.54	1.36	1.12	1.38	1.14	0.51	1.22	14.79
1989	0.13	2.79	1.13	1.02	2.50	1.38	0.45	1.39	0.53	1.82	1.33	1.52	15.99
1988	1.27	1.22	2.32	2.80	0.70	1.31	0.83	1.85	1.93	0.60	1.03	2.31	18.17
1987	2.65	1.00	0.56	1.28	1.35	1.50	1.60	1.92	0.64	1.78	1.35	0.46	16.09
1986	3.51	4.19	1.34	0.79	3.01	1.59	2.70	0.99	1.00	1.65	1.96	2.12	24.85
1985	2.61	1.68	1.80	2.40	1.01	2.40	3.77	1.40	0.68	1.28	0.64	1.17	20.84
1984	2.16	2.82	5.03	0.59	0.43	2.31	2.68	1.33	2.36	1.84	2.61	1.31	25.47
1983	1.64	1.52	1.03	1.10	1.66	2.17	2.28	1.57	2.76	1.88	1.08	0.79	19.48
1982	3.76	0.78	2.51	1.71	0.62	2.64	1.92	0.97	0.46	1.60	1.19	2.64	20.80
1981	1.09	0.33	0.43	0.53	0.45	2.50	0.69	3.97	1.65	2.24	1.12	1.33	16.33
AVG	1.70	1.53	1.63	1.56	1.34	1.46	1.92	1.78	1.09	1.27	1.30	1.57	18.14

Note

Data from October 1980 to February 1982, and 2011 Water Year and later, from U.S. Department of Commerce - NOAA - Hayden Station. All other data from Seneca II Mine Meteorological Station with Belfort Weighing Bucket Rain Gage. Site relocated to USGS site on August 31, 1991. Precipitation recorded in inches.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 01/20/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	10	01	60	36	60	0.00		0.0		0.0								
2021	10	02	67	36	66	0.00		0.0		0.0								
2021	10	03	68	36	66	0.00		0.0		0.0								
2021	10	04	72	40	68	0.00		0.0		0.0								
2021	10	05	73	41	68	0.00		0.0		0.0								
2021	10	06	70	40	60	0.00		0.0		0.0								
2021	10	07	68	41	60	0.00		0.0		0.0								
2021	10	08	60	41	52	0.03		0.0		0.0								
2021	10	09	55	40	44	0.36		0.0		0.0								
2021	10	10	51	36	45	0.12		0.0		0.0								
2021	10	11	57	31	53	0.00		0.0		0.0								
2021	10	12	53	32	35	0.12		T		0.0								
2021	10	13	36	25	34	0.26		3.0		0.0								
2021	10	14	39	28	35	0.07		0.0		0.0								
2021	10	15	40	25	39	0.00		0.0		0.0								
2021	10	16	59	23	52	0.00		0.0		0.0								
2021	10	17	68	31	60	0.00		0.0		0.0								
2021	10	18	68	32	53	0.00		0.0		0.0								
2021	10	19	53	32	40	0.14		0.0		0.0								
2021	10	20	54	24	48	0.02		0.0		0.0								
2021	10	21	60	30	57	0.00		0.0		0.0								
2021	10	22	62	30	52	0.00		0.0		0.0								
2021	10	23	55	30	52	0.00		0.0		0.0								
2021	10	24	56	35	50	0.11		T		0.0								
2021	10	25	70	32	62	0.00		0.0		0.0								
2021	10	26	64	30	32	0.50		1.0		1.0								
2021	10	27	42	28	40	0.09		0.5		0.0								
2021	10	28	48	25	47	0.00		0.0		0.0								
2021	10	29	54	32	54	0.00		0.0		0.0								
2021	10	30	59	20	55	0.00		0.0		0.0								
2021	10	31	55	28	51	0.00		0.0		0.0								
Summary			58	32		1.82		4.5										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Record of Climatological Observations

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Generated on 01/20/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	11	01	51	36	46	0.01		0.0		0.0								
2021	11	02	51	36	46	0.37		0.0		0.0								
2021	11	03	51	38	48	0.03		0.0		0.0								
2021	11	04	56	30	55	0.00		0.0		0.0								
2021	11	05	60	29	51	0.00		0.0		0.0								
2021	11	06	64	28	57	0.00		0.0		0.0								
2021	11	07	69	32	51	0.00		0.0		0.0								
2021	11	08	57	34	45	0.00		0.0		0.0								
2021	11	09	55	26	50	0.00		0.0		0.0								
2021	11	10	50	34	37	0.03		0.0		0.0								
2021	11	11	44	30	44	0.00		0.0		0.0								
2021	11	12	45	34	44	T		0.0		0.0								
2021	11	13	52	29	48	0.00		0.0		0.0								
2021	11	14	55	24	45	0.00		0.0		0.0								
2021	11	15	58	31	49	0.00		0.0		0.0								
2021	11	16	55	35	43	0.00		0.0		0.0								
2021	11	17	43	20	25	0.06		0.5		0.0								
2021	11	18	44	14	40	0.00		0.0		0.0								
2021	11	19	52	29	42	0.00		0.0		0.0								
2021	11	20	45	34	35	0.12		0.5		0.0								
2021	11	21	43	19	32	0.00		0.0		0.0								
2021	11	22	47	18	35	0.00		0.0		0.0								
2021	11	23	50	18	48	0.00		0.0		0.0								
2021	11	24	48	24	27	T		T		0.0								
2021	11	25	40	10	30	0.00		0.0		0.0								
2021	11	26	48	18	33	0.00		0.0		0.0								
2021	11	27	48	20	34	0.00		0.0		0.0								
2021	11	28	50	22	39	0.00		0.0		0.0								
2021	11	29	53	24	40	0.00		0.0		0.0								
2021	11	30	51	16	35	0.00		0.0		0.0								
		Summary	51	26		0.62		1.0										

Empty, or blank, cells indicate that a data observation was not reported.

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2021	12	01	57	22	42	0.00		0.0		0.0								
2021	12	02	60	25	42	0.00		0.0		0.0								
2021	12	03	57	25	40	0.00		0.0		0.0								
2021	12	04	57	20	42	0.00		0.0		0.0								
2021	12	05	52	20	39	0.00		0.0		0.0								
2021	12	06	39	19	36	0.00		0.0		0.0								
2021	12	07	48	27	35	0.00		0.0		0.0								
2021	12	08	42	16	39	0.00		0.0		0.0								
2021	12	09	40	30	31	T		0.0		0.0								
2021	12	10	31	13	19	0.30		3.0		2.0								
2021	12	11	30	-5	17	0.00		0.0		2.0								
2021	12	12	38	8	24	0.00		0.0		2.0								
2021	12	13	47	10	31	0.00		0.0		1.0								
2021	12	14	50	21	37	0.00		0.0		1.0								
2021	12	15	48	15	21	0.28		3.0		3.0								
2021	12	16	32	5	25	0.00		0.0		3.0								
2021	12	17	30	15	22	0.20		2.5		5.0								
2021	12	18	30	-2	15	0.00		0.0		5.0								
2021	12	19	34	2	17	0.00		0.0		5.0								
2021	12	20	36	5	21	0.00		0.0		4.0								
2021	12	21	37	9	25	0.00		0.0		4.0								
2021	12	22	37	7	28	0.00		0.0		3.0								
2021	12	23	43	23	38	T		T		2.0								
2021	12	24	42	22	25	0.97		14.0		14.0								
2021	12	25	38	20	28	0.00		0.0		12.0								
2021	12	26	37	19	23	0.13		2.0		12.0								
2021	12	27	34	12	28	0.00		0.0		12.0								
2021	12	28	28	8	19	0.27		3.0		14.0								
2021	12	29	24	12	19	0.14		3.0		15.0								
2021	12	30	34	18	33	0.00		0.0		13.0								
2021	12	31	33	20	20	0.50		10.0		19.0								
Summary			40	15		2.79		40.5										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

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U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

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Generated on 01/20/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	01	01	20	0	3	T		T		19.0								
2022	01	02	27	-10	10	0.00		0.0		17.0								
2022	01	03	24	-6	9	0.00		0.0		17.0								
2022	01	04	32	3	27	0.00		0.0		17.0								
2022	01	05	34	20	32	0.23		2.5		17.0								
2022	01	06	43	14	39	0.27		3.5		16.0								
2022	01	07	54	24	36	0.00		0.0		12.0								
2022	01	08	45	18	18	0.25		4.0		16.0								
2022	01	09	31	2	8	0.00		0.0		16.0								
2022	01	10	28	0	9	0.00		0.0		16.0								
2022	01	11	31	2	15	0.00		0.0		14.0								
2022	01	12	38	2	20	0.00		0.0		14.0								
2022	01	13	36	10	30	0.00		0.0		13.0								
2022	01	14	35	12	28	T		T		13.0								
2022	01	15	34	7	20	0.00		0.0		13.0								
2022	01	16	31	4	17	0.00		0.0		13.0								
2022	01	17	32	4	17	0.00		0.0		13.0								
2022	01	18	36	8	18	0.00		0.0		13.0								
2022	01	19	32	4	21	0.00		0.0		13.0								
2022	01	20	29	12	24	0.02		0.5		13.0								
2022	01	21	38	20	25	0.28		4.0		17.0								
2022	01	22	28	8	8	0.01		T		17.0								
2022	01	23	31	1	11	0.00		0.0		17.0								
2022	01	24	29	-2	17	0.00		0.0		17.0								
2022	01	25	37	10	11	0.12		1.5		18.0								
2022	01	26	27	-5	15	0.00		0.0		18.0								
2022	01	27	33	2	11	0.00		0.0		18.0								
2022	01	28	33	-3	8	0.00		0.0		18.0								
2022	01	29	38	0	11	0.00		0.0		17.0								
2022	01	30	32	-3	10	0.00		0.0		17.0								
2022	01	31	28	-4	17	0.00		0.0		17.0								
Summary			33	5		1.18		16.0										

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"s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

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Record of Climatological Observations

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Generated on 01/20/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	02	01	25	2	8	0.00		0.0		17.0								
2022	02	02	20	-16	3	0.00		0.0		17.0								
2022	02	03	21	-17	5	0.00		0.0		17.0								
2022	02	04	30	-5	15	0.00		0.0		17.0								
2022	02	05	32	0	17	0.00		0.0		17.0								
2022	02	06	35	12	17	0.00		0.0		16.0								
2022	02	07	38	4	22	T		T		16.0								
2022	02	08	37	4	23	0.00		0.0		15.0								
2022	02	09	36	10	30	0.00		0.0		15.0								
2022	02	10	43	22	33	0.00		0.0		15.0								
2022	02	11	44	10	27	0.00		0.0		14.0								
2022	02	12	38	2	22	0.00		0.0		14.0								
2022	02	13	37	6	22	0.00		0.0		14.0								
2022	02	14	45	2	30	0.00		0.0		14.0								
2022	02	15	47	13	35	0.00		0.0		14.0								
2022	02	16	37	24	25	0.16		2.0		16.0								
2022	02	17	37	0	13	0.00		0.0		16.0								
2022	02	18	38	10	29	0.00		0.0		16.0								
2022	02	19	43	12	24	0.00		0.0		15.0								
2022	02	20	46	9	40	0.00		0.0		15.0								
2022	02	21	40	20	34	0.00		0.0		15.0								
2022	02	22	34	0	5	0.19		2.0		17.0								
2022	02	23	15	1	6	0.35		4.0		21.0								
2022	02	24	30	0	10	0.05		1.0		21.0								
2022	02	25	32	0	10	0.10		1.5		22.0								
2022	02	26	36	-10	13	0.00		0.0		22.0								
2022	02	27	38	-3	17	0.00		0.0		21.0								
2022	02	28	44	4	26	0.00		0.0		20.0								
Summary			36	4		0.85		10.5										

Empty, or blank, cells indicate that a data observation was not reported.

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National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Record of Climatological Observations

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	03	01	52	12	31	0.00		0.0		20.0								
2022	03	02	51	22	34	0.00		0.0		19.0								
2022	03	03	60	22	37	0.00		0.0		18.0								
2022	03	04	53	24	37	T		0.0		18.0								
2022	03	05	44	29	29	0.42		2.0		19.0								
2022	03	06	41	14	18	T		T		19.0								
2022	03	07	32	3	14	0.00		0.0		19.0								
2022	03	08	41	0	25	T		T		19.0								
2022	03	09	32	12	16	0.18		3.0		21.0								
2022	03	10	22	-1	3	0.06		1.0		21.0								
2022	03	11	33	-16	19	0.00		0.0		21.0								
2022	03	12	50	12	30	0.00		0.0		20.0								
2022	03	13	46	10	33	T		T		20.0								
2022	03	14	46	21	33	0.06		1.0		21.0								
2022	03	15	53	12	41	0.00		0.0		20.0								
2022	03	16	41	31	38	0.25		1.5		21.0								
2022	03	17	47	22	30	0.02		T		20.0								
2022	03	18	46	14	40	0.00		0.0		20.0								
2022	03	19	50	12	40	0.00		0.0		20.0								
2022	03	20	52	30	47	0.00		0.0		19.0								
2022	03	21	47	22	34	0.02		0.5		19.0								
2022	03	22	41	12	36	T		T		19.0								
2022	03	23	48	12	36	0.00		0.0		19.0								
2022	03	24	51	22	43	0.00		0.0		18.0								
2022	03	25	58	23	53	0.00		0.0		17.0								
2022	03	26	63	33	53	0.00		0.0		15.0								
2022	03	27	67	34	57	0.00		0.0		12.0								
2022	03	28	68	34	55	0.00		0.0		8.0								
2022	03	29	55	32	37	0.42		T		5.0								
2022	03	30	50	32	43	0.00		0.0		4.0								
2022	03	31	54	22	49	0.00		0.0		0.0								
Summary			48	18		1.43		9.0										

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U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Record of Climatological Observations

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	04	01	53	24	52	0.11		0.0		0.0								
2022	04	02	61	23	61	0.00		0.0		0.0								
2022	04	03	61	33	53	0.00		0.0		0.0								
2022	04	04	53	24	53	0.00		0.0		0.0								
2022	04	05	53	30	30	T		T		0.0								
2022	04	06	49	14	43	0.00		0.0		0.0								
2022	04	07	53	14	50	0.00		0.0		0.0								
2022	04	08	60	23	60	0.00		0.0		0.0								
2022	04	09	63	31	57	0.00		0.0		0.0								
2022	04	10	57	20	40	0.18		1.0		0.0								
2022	04	11	45	30	45	0.00		0.0		0.0								
2022	04	12	55	20	32	0.32		5.0		2.0								
2022	04	13	34	12	26	0.07		1.0		2.0								
2022	04	14	48	10	48	0.05		0.5		1.0								
2022	04	15	50	30	50	0.00		0.0		0.0								
2022	04	16	60	30	54	0.00		0.0		0.0								
2022	04	17	55	34	54	0.33		0.5		0.0								
2022	04	18	70	30	70	0.00		0.0		0.0								
2022	04	19	70	32	66	0.00		0.0		0.0								
2022	04	20	66	34	62	0.00		0.0		0.0								
2022	04	21	72	40	72	0.00		0.0		0.0								
2022	04	22	72	38	38	T		0.0		0.0								
2022	04	23	42	31	33	0.85		4.0		2.0								
2022	04	24	55	32	55	0.02		T		0.0								
2022	04	25	55	22	55	0.00		0.0		0.0								
2022	04	26	58	30	58	0.00		0.0		0.0								
2022	04	27	70	35	70	0.00		0.0		0.0								
2022	04	28	73	34	64	0.00		0.0		0.0								
2022	04	29	64	32	47	0.14		1.5		0.0								
2022	04	30	60	24	60	0.00		0.0		0.0								
		Summary	58	27		2.07		13.5										

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Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Record of Climatological Observations

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National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	05	01	66	28	55	0.00		0.0		0.0								
2022	05	02	59	32	57	0.68		0.0		0.0								
2022	05	03	60	32	32	0.16		0.5		1.0								
2022	05	04	48	32	46	0.18		2.0		0.0								
2022	05	05	68	40	67	0.00		0.0		0.0								
2022	05	06	73	42	67	0.00		0.0		0.0								
2022	05	07	67	45	50	0.06		0.0		0.0								
2022	05	08	62	40	55	0.16		0.0		0.0								
2022	05	09	55	32	55	0.05		0.0		0.0								
2022	05	10	70	24	64	0.00		0.0		0.0								
2022	05	11	77	41	70	0.00		0.0		0.0								
2022	05	12	70	40	57	0.00		0.0		0.0								
2022	05	13	65	24	65	0.00		0.0		0.0								
2022	05	14	72	30	72	0.00		0.0		0.0								
2022	05	15	78	40	78	0.00		0.0		0.0								
2022	05	16	81	46	74	0.00		0.0		0.0								
2022	05	17	78	40	65	T		0.0		0.0								
2022	05	18	75	42	75	0.00		0.0		0.0								
2022	05	19	75	40	73	0.00		0.0		0.0								
2022	05	20	73	30	49	0.47		6.0		0.0								
2022	05	21	53	20	53	T		T		0.0								
2022	05	22	62	31	57	0.00		0.0		0.0								
2022	05	23	57	33	57	0.06		0.0		0.0								
2022	05	24	60	34	60	0.00		0.0		0.0								
2022	05	25	68	31	68	0.00		0.0		0.0								
2022	05	26	78	40	78	0.00		0.0		0.0								
2022	05	27	83	46	76	0.00		0.0		0.0								
2022	05	28	76	42	66	0.00		0.0		0.0								
2022	05	29	66	40	41	0.86		0.0		0.0								
2022	05	30	55	34	43	0.40		0.0		0.0								
2022	05	31	66	30	55	0.06		0.0		0.0								
Summary			68	36		3.14		8.5										

Empty, or blank, cells indicate that a data observation was not reported.

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151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	06	01	75	30	73	0.00		0.0		0.0								
2022	06	02	87	47	77	0.00		0.0		0.0								
2022	06	03	83	46	73	0.00		0.0		0.0								
2022	06	04	81	43	73	0.00		0.0		0.0								
2022	06	05	73	50	70	0.01		0.0		0.0								
2022	06	06	74	44	71	0.19		0.0		0.0								
2022	06	07	76	41	74	0.00		0.0		0.0								
2022	06	08	79	39	72	0.00		0.0		0.0								
2022	06	09	86	52	83	0.00		0.0		0.0								
2022	06	10	89	45	84	0.00		0.0		0.0								
2022	06	11	91	50	84	0.00		0.0		0.0								
2022	06	12	90	55	88	0.00		0.0		0.0								
2022	06	13	88	48	65	0.00		0.0		0.0								
2022	06	14	67	43	66	0.00		0.0		0.0								
2022	06	15	77	33	76	0.00		0.0		0.0								
2022	06	16	87	38	85	0.00		0.0		0.0								
2022	06	17	93	52	78	0.00		0.0		0.0								
2022	06	18	78	60	72	0.03		0.0		0.0								
2022	06	19	76	54	71	0.15		0.0		0.0								
2022	06	20	71	42	67	0.00		0.0		0.0								
2022	06	21	80	35	78	0.00		0.0		0.0								
2022	06	22	81	45	79	0.00		0.0		0.0								
2022	06	23	82	50	70	0.03		0.0		0.0								
2022	06	24	73	46	71	0.12		0.0		0.0								
2022	06	25	81	46	75	0.00		0.0		0.0								
2022	06	26	82	53	79	0.00		0.0		0.0								
2022	06	27	86	50	85	0.00		0.0		0.0								
2022	06	28	88	51	86	0.00		0.0		0.0								
2022	06	29	86	50	62	T		0.0		0.0								
2022	06	30	76	54	61	0.08		0.0		0.0								
		Summary	81	46		0.61		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 01/20/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	07	01	83	51	80	0.28		0.0		0.0								
2022	07	02	83	51	73	0.03		0.0		0.0								
2022	07	03	84	50	78	0.02		0.0		0.0								
2022	07	04	88	52	86	0.00		0.0		0.0								
2022	07	05	86	57	70	T		0.0		0.0								
2022	07	06	83	53	70	0.00		0.0		0.0								
2022	07	07	87	51	84	T		0.0		0.0								
2022	07	08	91	52	88	0.00		0.0		0.0								
2022	07	09	94	52	90	0.00		0.0		0.0								
2022	07	10	92	53	81	0.00		0.0		0.0								
2022	07	11	90	55	87	0.00		0.0		0.0								
2022	07	12	92	51	89	0.00		0.0		0.0								
2022	07	13	90	51	80	0.00		0.0		0.0								
2022	07	14	92	53	90	0.06		0.0		0.0								
2022	07	15	90	61	78	0.06		0.0		0.0								
2022	07	16	87	57	84	0.23		0.0		0.0								
2022	07	17	90	56	89	0.00		0.0		0.0								
2022	07	18	92	56	87	0.03		0.0		0.0								
2022	07	19	91	57	80	0.00		0.0		0.0								
2022	07	20	90	55	90	0.00		0.0		0.0								
2022	07	21	91	52	89	0.00		0.0		0.0								
2022	07	22	94	53	86	0.00		0.0		0.0								
2022	07	23	90	61	69	0.10		0.0		0.0								
2022	07	24	71	56	61	0.22		0.0		0.0								
2022	07	25	85	51	82	0.00		0.0		0.0								
2022	07	26	89	51	86	0.00		0.0		0.0								
2022	07	27	91	52	86	0.00		0.0		0.0								
2022	07	28	87	55	68	0.00		0.0		0.0								
2022	07	29	84	52	76	0.11		0.0		0.0								
2022	07	30	89	50	82	0.00		0.0		0.0								
2022	07	31	87	53	85	0.00		0.0		0.0								
Summary			88	54		1.14		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

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U.S. Department of Commerce
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Current Location: Elev: 6467 ft. Lat: 40.4926° N Lon: -107.2548° W
Station: **HAYDEN, CO US USC00053867**

Record of Climatological Observations

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Generated on 01/20/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	08	01	91	56	72	0.15		0.0		0.0								
2022	08	02	85	56	74	0.02		0.0		0.0								
2022	08	03	87	54	81	0.00		0.0		0.0								
2022	08	04	91	53	90	0.00		0.0		0.0								
2022	08	05	90	57	71	0.00		0.0		0.0								
2022	08	06	91	58	89	0.00		0.0		0.0								
2022	08	07	89	53	82	0.00		0.0		0.0								
2022	08	08	90	48	87	0.00		0.0		0.0								
2022	08	09	93	51	91	0.00		0.0		0.0								
2022	08	10	95	60	91	0.00		0.0		0.0								
2022	08	11	93	55	86	0.00		0.0		0.0								
2022	08	12	90	54	88	0.02		0.0		0.0								
2022	08	13	89	60	83	0.00		0.0		0.0								
2022	08	14	86	59	68	0.32		0.0		0.0								
2022	08	15	82	54	66	0.04		0.0		0.0								
2022	08	16	84	54	75	0.00		0.0		0.0								
2022	08	17	87	49	85	0.00		0.0		0.0								
2022	08	18	89	49	81	0.00		0.0		0.0								
2022	08	19	85	53	74	0.00		0.0		0.0								
2022	08	20	74	48	63	0.00		0.0		0.0								
2022	08	21	76	52	67	0.36		0.0		0.0								
2022	08	22	85	48	84	0.00		0.0		0.0								
2022	08	23	87	52	81	0.00		0.0		0.0								
2022	08	24	86	53	83	0.02		0.0		0.0								
2022	08	25	83	51	72	0.00		0.0		0.0								
2022	08	26	82	49	68	0.00		0.0		0.0								
2022	08	27	85	47	70	0.06		0.0		0.0								
2022	08	28	81	47	75	0.00		0.0		0.0								
2022	08	29	85	46	80	0.00		0.0		0.0								
2022	08	30	90	47	88	0.00		0.0		0.0								
2022	08	31	90	50	85	0.00		0.0		0.0								
Summary			87	52		0.99		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

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Year	Month	Day	Temperature (F)			Precipitation					Evaporation		Soil Temperature (F)					
			24 Hrs. Ending at Observation Time		At Obs.	24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth		
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	Snow, Ice Pellets, Hail, Ice on Ground (in)			Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	09	01	90	49	84	0.00		0.0		0.0								
2022	09	02	91	48	88	0.00		0.0		0.0								
2022	09	03	92	56	88	0.00		0.0		0.0								
2022	09	04	94	49	67	0.00		0.0		0.0								
2022	09	05	92	47	87	0.00		0.0		0.0								
2022	09	06	92	46	85	0.00		0.0		0.0								
2022	09	07	94	47	88	0.00		0.0		0.0								
2022	09	08	91	49	81	0.00		0.0		0.0								
2022	09	09	81	47	73	0.02		0.0		0.0								
2022	09	10	73	37	69	0.00		0.0		0.0								
2022	09	11	85	35	77	0.00		0.0		0.0								
2022	09	12	85	39	80	0.00		0.0		0.0								
2022	09	13	80	44	62	0.00		0.0		0.0								
2022	09	14	73	46	71	0.04		0.0		0.0								
2022	09	15	71	51	60	0.25		0.0		0.0								
2022	09	16	69	45	66	0.21		0.0		0.0								
2022	09	17	74	47	73	0.37		0.0		0.0								
2022	09	18	80	43	76	0.00		0.0		0.0								
2022	09	19	83	42	79	0.00		0.0		0.0								
2022	09	20	79	46	64	0.05		0.0		0.0								
2022	09	21	71	47	55	0.34		0.0		0.0								
2022	09	22	71	51	64	0.44		0.0		0.0								
2022	09	23	69	35	65	0.00		0.0		0.0								
2022	09	24	72	35	68	0.00		0.0		0.0								
2022	09	25	76	36	72	0.00		0.0		0.0								
2022	09	26	79	40	73	0.00		0.0		0.0								
2022	09	27	79	42	73	0.00		0.0		0.0								
2022	09	28	82	46	72	0.00		0.0		0.0								
2022	09	29	73	47	60	0.00		0.0		0.0								
2022	09	30	61	48	50	0.38		0.0		0.0								
Summary			80	45		2.10		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

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APPENDIX B

GROUNDWATER QULITY DATA

Table B.1. Analytical results for monitoring well HDAL4 during water year 2022.

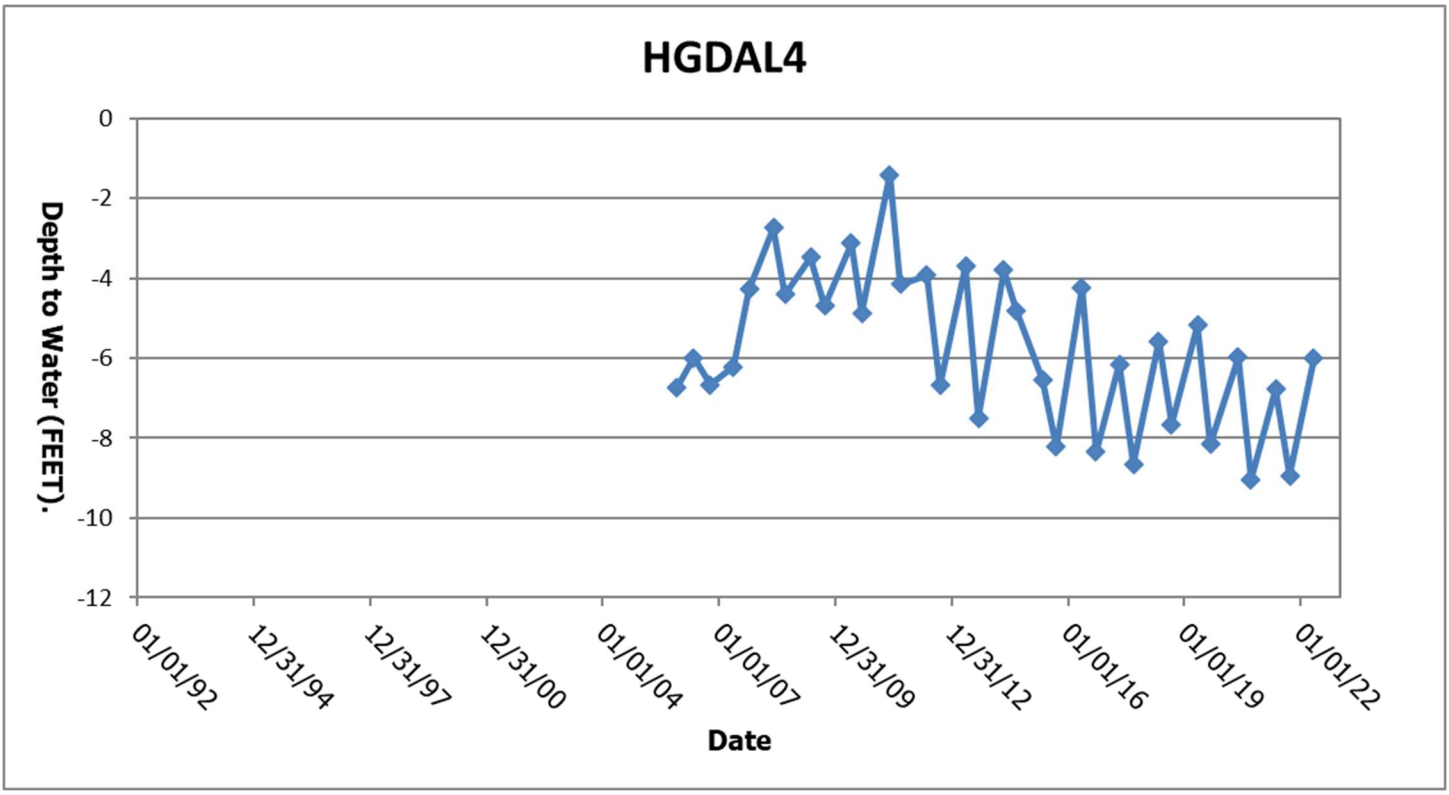
Well	Date	Depth to Water ft btoc	SPC, Field N UMHOS/CM	pH, Field N S.U.	Temp., Field N DEG-C	Iron D MG/L	Manganese D MG/L	TDS, Lab N MG/L
HGDAL4	5/3/2022	6.01	5060	7.87	9.7	0.514	5.37	4180

Note

HGDAL3 was abandoned as part of approved Bond Release SL.2

APPENDIX C

GROUNDWATER HYDROGRAPHS


HGDAL4
Depth to Water (FEET).
0
-2
-4
-6
-8
-10
-12
01/01/92
12/31/94
12/31/97
12/31/00
01/01/04
01/01/07
12/31/09
12/31/12
01/01/16
01/01/19
01/01/22
Date

APPENDIX D

SURFACE WATER QUALITY DATA

Table D.1 Stream point analytical data for water year 2022.

Location	Date	Flow N GPM	SpC, Field N UMHOS/CM	pH, Field N S.U.	Temp., Field N C	Iron TR MG/L	Manganese D MG/L	Nitrate N. N MG/L	Nitrite N. N MG/L	Selenium D UG/L	Selenium TR UG/L	TDS, Lab N MG/L	TSS N MG/L
HGSD1	4/19/2022	4396	2331	8.16	6.8					**48.3**	53.5	2100	
HGSD1	6/21/2022	10.3	4470	7.39	10.3	< 0.12	0.073	0.117	< 0.01	**9.47**	8.99	3860	5
HGSD1	7/19/2022	0											
HGSD1	9/6/2022	0											
HGSD3	6/21/2022	28.6	4960	7.55	12.2	0.514	0.085	< 0.02	< 0.01	**42**	36.6	4070	8
HGSD3	9/6/2022	0											
Yampa Segment 13h Standards - Acute		-	-	6.5 - 9.0	-	-	4.738	100	0.05	18.4	-	-	-
Yampa Segment 13h Standards - Chronic		-	-	-	-	1	2.618	-	-	4.6	-	-	-
Agricultural Use Standards		-	-	-	-	-	0.2	100	10	20	-	-	-

Notes

Bold Analyte exceeds the Yampa Segment 13h or Agricultural Use Standards

Table D.2 NPDES Outfall monitoring data for water year 2022.

Location	Date	Flow N MGD
NPDES1H	10/28/2021	0
NPDES1H	11/9/2021	0
NPDES1H	12/2/2021	0
NPDES1H	1/11/2022	0
NPDES1H	2/8/2022	0
NPDES1H	3/22/2022	0
NPDES1H	4/20/2022	0
NPDES1H	5/10/2022	0
NPDES1H	6/23/2022	0
NPDES1H	7/20/2022	0
NPDES1H	8/18/2022	0
NPDES1H	9/7/2022	0
NPDES2H	10/28/2021	0
NPDES2H	11/9/2021	0
NPDES2H	12/2/2021	0
NPDES2H	1/11/2022	0
NPDES2H	2/8/2022	0
NPDES2H	3/22/2022	0
NPDES2H	4/20/2022	0
NPDES2H	5/10/2022	0
NPDES2H	6/23/2022	0
NPDES2H	7/20/2022	0
NPDES2H	8/18/2022	0
NPDES2H	9/7/2022	0