

Monticello, Utah, National Priorities List (NPL) Sites Federal Facilities Agreement (FFA) Quarterly Report: July 1–September 30, 2010

This report summarizes project status and activities implemented July through September 2010, and provides a schedule of near-term activities for the Monticello Mill Tailings Site (MMTS) and the Monticello Vicinity Properties (MVP) Site. This report also includes disposal cell and Pond 4 leachate collection data, quarterly site inspection reports, site meteorological data, and a performance summary for the ex situ groundwater treatment system.

The annual inspection of the MMTS and MVP was conducted during the week of September 13, 2010. This quarterly report does not present the findings of that inspection. Findings of that inspection are instead documented in the annual site inspection report for 2010, scheduled for completion by December 31, 2010. A semiannual meeting conducted under the Monticello FFA occurred at the U.S. Department of Energy (DOE) Office of Legacy Management (LM) field office in Monticello, Utah, on September 14, 2010. Proceedings and action items from that meeting were reported to the U.S. Environmental Protection Agency (EPA) and the Utah Department of Environmental Quality (UDEQ) on September 21, 2010, and are not repeated in this quarterly report.

1.0 MMTS Activities and Status

1.1 Repository Site Inspections

- Monthly and quarterly inspections of the repository site (waste disposal cell, Pond 4, temporary storage facility [TSF], and associated infrastructure) are conducted by LM contractor on-site personnel. The inspections identified damage to outer perimeter livestock fencing surrounding the repository. No other abnormalities or unacceptable conditions were identified (see attached inspection reports). On-site staff has been notified to repair damaged fencing.
- Approximately 55 cubic yards of radiologically contaminated material were transferred from the TSF to the LM Grand Junction Disposal Site, Grand Junction, Colorado, on June 22 and 23, 2010, in preparation for utility construction projects in Monticello. The inventory of contaminated material in the TSF is presently about 1.5 cubic yards. In accordance with the long-term surveillance and maintenance plan, DOE typically initiates material transfer when TSF contents approach 75 cubic yards.
- Repository leachate collection in the upper sumps (Leachate Collection and Recovery System [LCRS]) was normal for the quarter. Leachate production has decreased in quantity from approximately 30,000 gallons per week following final waste encapsulation in 1999 to current values of about 1,000 gallons per week or less for each of the two sumps (LCRS 1 and LCRS 2; see attached graph).
- The LCRS 1 water level transducer was replaced in July 2010. The transducer became defective in July 2009. The LCRS 1 pump was operated manually each month between July 2009 and July 2010. Automated pump operation to evacuate leachate from LCRS 1 resumed in July with the installation of the new transducer.

- All repository and Pond 4 telemetry components are functional.
- Pond 4 LCRS operation was normal (no water collected during the quarter).
- Disposal cell and Pond 4 leachate collection in the lower sumps (Leachate Detection System) remains at zero (see attached graphs).

1.2 Former Millsite

- No land use or groundwater use compliance issues were observed or reported by long-term surveillance and maintenance on-site staff.

1.3 Peripheral Properties (Private and City-Owned)

- DOE continues the process to excess DOE-owned property MP-01081-VL, east of the repository site (this property was incorrectly identified in the previous quarterly report as MP-01080-VL).
- No land use or groundwater use compliance issues were observed or reported by long-term surveillance and maintenance on-site staff.
- Property MP-01077-VL was incorrectly identified in the previous quarterly report as MP-01070-VL) regarding a minor land-use impact on the property.

1.4 Operable Unit (OU) III (Surface Water and Groundwater)

- No issues were observed by on-site staff regarding the OU III institutional controls that affect land use and groundwater use.

1.5 Ex Situ Groundwater Treatment System

- Water samples are collected monthly at influent and effluent locations to monitor the performance of the treatment system in removing uranium and to monitor compliance with the pH and iron discharge allowances.
- Discharge allowances to Montezuma Creek were negotiated between DOE, EPA, UDEQ, and Utah Department of Water Quality (DWQ) in May 2008. These allowances are based on the Utah standard for acute iron toxicity to aquatic wildlife (1 milligram per liter) and the in-stream standard for pH for all water-use categories. The default perennial flow rate for the receiving surface water (Montezuma Creek) is 2 cubic feet per second, as established by DWQ. The maximum allowed discharge rate of treated water to Montezuma Creek is 10 gallons per minute. Discharge of treated water to the infiltration trench was negotiated with the UDEQ Underground Injection Control Program in June 2005.
- Table 1 provides monthly results of total iron and pH for the combined effluent of the two treatment cells. Iron concentration and pH for the quarter are within the discharge allowances as specified by DWQ.
- Table 2 summarizes recent treatment system performance. Flow information is from the LM Systems Operations and Analysis at Remote Sites telemetry system. Uranium concentrations are from inflow and outflow water samples collected monthly. Prior to June 2008, water samples were analyzed at the LM Environmental Sciences Laboratory (ESL) in Grand Junction. Samples have since been analyzed at the LM contract laboratory in Fort Collins, Colorado. DOE on occasion analyzes a split of selected samples at the ESL.

- The system was attended for maintenance and modification on three occasions during the quarter. These activities were conducted in attempt to develop calibrate inflow and outflow meters to enable accurate measurement of water that is diverted to the infiltration trench. The previous and current flow metering system continues to ensure that the discharge allowance to the creek is not exceeded.
- No water was discharged to the infiltration trench during the quarter.
- Approximately 0.87 million gallons of water were treated during the quarter, and approximately 1.7 pounds of uranium were removed from the aquifer during the quarter as a result of groundwater treatment.
- The treatment media was most recently changed out on March 18, 2009. At that time the cumulative treatment volume was approximately 9.7 million gallons. The media is scheduled for replacement on October 11 and 12, 2010, because of rising effluent concentrations, reduced flow capacity, and in anticipation of inclement winter weather. Each treatment cell will have treated approximately 3 million gallons of contaminated groundwater since the last media exchange. The cells treated a similar volume prior to the March 2009 media exchange. Treatment of 3 million gallons of groundwater containing similar concentrations of uranium to those observed over the past several years is identified as an approximate target volume for future media exchange.

Table 1. Treatment System Compliance Summary

Outfall to Creek (sample location TCOU)	June 2010	July 2010	August 2010	September 2010
pH ^a	7.34	7.09	7.20	6.91
Iron (total, micrograms per liter) ^b	17.4	13	12	11

^a Discharge allowance range = 6.5–9 standard units

^b Discharge limit = 45.4 milligrams per liter at outfall to creek

Table 2. Treatment System Performance Summary

Treatment Parameter	June 2010	July 2010	August 2010	September 2010
Gallons treated	181,700	296,780	275,905	300,106
Average treatment rate, gallons per minute	4.2	6.9	6.4	6.9
Uranium influent, micrograms per liter	258.5	240	310	300
Uranium outfall, micrograms per liter	13.3	44	26	62
Uranium mass removed, pounds	0.37	0.48	0.65	0.59
Cumulative uranium mass removed, pounds	36.5	36.9	37.6	38.2
Cumulative volume treated, gallons	14,953,053	15,250,000	15,526,000	15,826,000

2.0 MVP Activities and Status

2.1 City Streets and Utilities, and Utah Department of Transportation (UDOT) Rights-of-Way

- On-site long-term surveillance and maintenance staff continue to coordinate with City, UDOT, and utility company officials regarding radiological control at highway, street, and utility excavations.
- Storm water and natural gas utility construction activities continued through the quarter within city streets and utility corridors. On-site long-term surveillance and maintenance staff report that construction activities will continue in 2010 as long as weather permits.

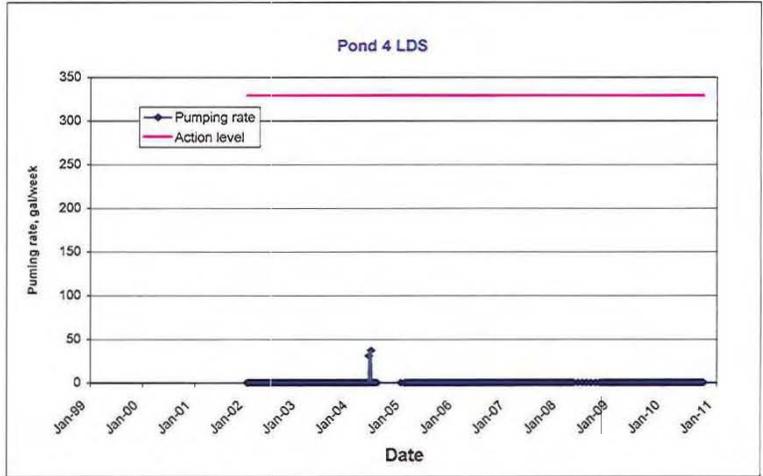
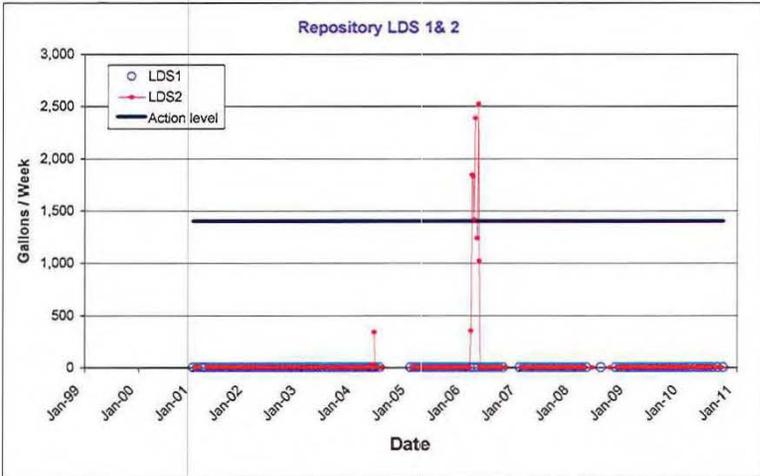
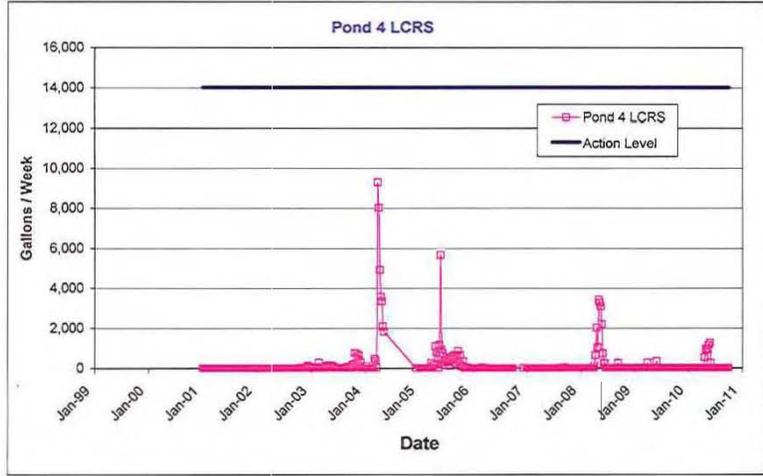
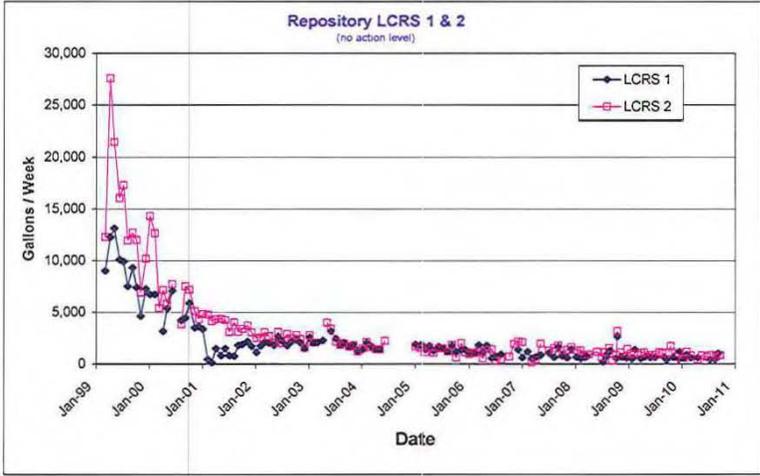
3.0 Schedule and Deliverables

- Table 3 summarizes the near-term schedule of activities for the Monticello NPL Sites and DOE reporting obligations

Table 3. Completed and Near-Term Activity and Deliverables Schedule

Near Term Activity/Deliverable	Status/Schedule
FFA quarterly report for April 2010–June 2010	Submitted by e-mail to EPA and UDEQ on July 8, 2010.
FFA semiannual meeting	Held in Monticello, Utah, September 14, 2010. DOE submitted meeting minutes were by e-mail on September 21, 2010, to EPA and UDEQ.
Site Management Plan, Section 5.0, 2010 annual update	Draft submitted by e-mail to EPA and UDEQ for review and comment on July 19, 2010. Comments not received to date.
Remedial Design/Remedial Action Work Plan for Groundwater Remediation Expansion	Draft submitted by e-mail to EPA and UDEQ for review and comment on July 28, 2010. EPA and UDEQ comments received by e-mail on September 13, 2010. Comment resolution is in progress.
MMTS OU III Annual Groundwater Report, May 2009 through April 2010	Hand delivered to EPA and UDEQ with cover letter on September 14, 2010 at the FFA meeting.
Analyze and distribute 2010 biomonitoring results	Data analysis in progress. Reporting format and content discussed at September 2010 FFA meeting.
Biological technical assistance group meeting/conference call regarding future scope	Schedule to be determined pending availability of group members and 2010 biomonitoring sampling results.
Annual Site Inspection and inspection report	Inspection completed September 13 and 14, 2010; final report incorporating EPA and UDEQ review comments by December 31, 2010.

Graphs Showing Performance History for Repository and Pond 4 Leachate Collection and Recovery System (LCRS) and Leak Detection System (LDS)



Repository Area Surveillance Checklist

Monthly Surveillance _____ Quarterly Surveillance (Feb., May, Aug., Nov.)

_____ Storm Event Triggered Surveillance due to _____ inches of rainfall over the past 24 hours.

Inspection Item	Acceptable (Yes/No)	Comments and Recommendations
Condition of:		
Fences and gates	Yes	_____
Roads ^a	Yes	_____
Signs	Yes	_____
Site monuments	Yes	_____
Drainage ditches ^a	Yes	_____
Manholes	Yes	_____
Vegetation	Yes	_____
Evidence of erosion of:		
Top of disposal cell ^a	NO	_____
Disposal cell sideslopes ^a	NO	_____
Ditches	NO	_____
Surrounding area	NO	_____
Evidence of:		
Vandalism	NO	_____
Intrusion by livestock	NO	_____
Burrowing animal damage	NO	_____
Intrusion by humans	Yes	Appears fence was cut North of Gate on west side
Accumulation of trash	NO	_____

Additional Quarterly Surveillance Requirements

Note: All transects, shown in Figure 3-1, must be walked during this inspection.

Condition of:		
Settlement plate structures	_____	_____
Manholes ^b	_____	_____
Sediment Ponds	_____	_____
Evidence of:		
Structural Instability	_____	_____

Additional Comments Appears that fence line North of main Gate on west side was cut earlier in the year. Damage may be due to snow. Not able to determine how fence line was damaged. Will repair damage to fence.

Signature Judd Moon
Monticello LM Representative

Date 07-01-10

^aInspections required following a significant storm event
^bOpen to inspect quarterly

Repository Area Surveillance Checklist

Monthly Surveillance _____ Quarterly Surveillance (Feb., May, Aug., Nov.)

_____ Storm Event Triggered Surveillance due to _____ inches of rainfall over the past 24 hours.

Inspection Item	Acceptable (Yes/No)	Comments and Recommendations
Condition of:		
Fences and gates	YES	_____
Roads ^a	YES	_____
Signs	YES	_____
Site monuments	YES	_____
Drainage ditches ^a	YES	_____
Manholes	YES	_____
Vegetation	YES	_____
Evidence of erosion of:		
Top of disposal cell ^a	NO	_____
Disposal cell sideslopes ^a	NO	_____
Ditches	NO	_____
Surrounding area	NO	_____
Evidence of:		
Vandalism	NO	_____
Intrusion by livestock	NO	_____
Burrowing animal damage	NO	_____
Intrusion by humans	NO	_____
Accumulation of trash	NO	_____

Additional Quarterly Surveillance Requirements

Note: All transects, shown in Figure 3-1, must be walked during this inspection.

Condition of:		
Settlement plate structures	_____	_____
Manholes ^b	_____	_____
Sediment Ponds	_____	_____
Evidence of:		
Structural Instability	_____	_____

Additional Comments _____

Signature *Feld Moran*
 Monticello LM Representative

Date 9-01-10

^aInspections required following a significant storm event
^bOpen to inspect quarterly

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 2.7

Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
Condition of:		
Fences, gates, and locks	<u>yes</u>	_____
Roads	<u>yes</u>	_____
Signs	<u>yes</u>	_____
Visible piping	<u>yes</u>	_____
Visible liner and anchors	<u>yes</u>	_____
Rescue equipment	<u>yes</u>	_____
Evidence of erosion of:		
Top of Pond 4 berm	<u>no</u>	_____
Pond 4 sideslopes	<u>no</u>	_____
Ditches	<u>no</u>	_____
Surrounding area	<u>no</u>	_____
Seepage from Pond 4	<u>no</u>	_____
Overtopping of Pond 4	<u>no</u>	_____
Evidence of:		
Vandalism	<u>no</u>	_____
Intrusion by wildlife	<u>no</u>	_____
Intrusion by humans	<u>no</u>	_____
Accumulation of trash	<u>no</u>	_____

Additional Comments _____

Monticello LM Representative Judd Mann Date 7-1-10

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 3.6

Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
Condition of:		
Fences, gates, and locks	<u>yes</u>	_____
Roads	<u>yes</u>	_____
Signs	<u>yes</u>	_____
Visible piping	<u>yes</u>	_____
Visible liner and anchors	<u>yes</u>	_____
Rescue equipment	<u>yes</u>	_____

Evidence of erosion of:		
Top of Pond 4 berm	<u>NO</u>	_____
Pond 4 sideslopes	<u>NO</u>	_____
Ditches	<u>NO</u>	_____
Surrounding area	<u>NO</u>	_____
Seepage from Pond 4	<u>NO</u>	_____
Overtopping of Pond 4	<u>NO</u>	_____

Evidence of:		
Vandalism	<u>NO</u>	_____
Intrusion by wildlife	<u>NO</u>	_____
Intrusion by humans	<u>NO</u>	_____
Accumulation of trash	<u>NO</u>	_____

Additional Comments _____

Monticello LM Representative Jedd Moon Date 8-2-10

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 3.9

Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
Condition of:		
Fences, gates, and locks	<u>yes</u>	_____
Roads	<u>yes</u>	_____
Signs	<u>yes</u>	_____
Visible piping	<u>yes</u>	_____
Visible liner and anchors	<u>yes</u>	_____
Rescue equipment	<u>yes</u>	_____
 Evidence of erosion of:		
Top of Pond 4 berm	<u>NO</u>	_____
Pond 4 sideslopes	<u>NO</u>	_____
Ditches	<u>NO</u>	_____
Surrounding area	<u>NO</u>	_____
Seepage from Pond 4	<u>NO</u>	_____
Overtopping of Pond 4	<u>NO</u>	_____
 Evidence of:		
Vandalism	<u>NO</u>	_____
Intrusion by wildlife	<u>NO</u>	_____
Intrusion by humans	<u>NO</u>	_____
Accumulation of trash	<u>NO</u>	_____

Additional Comments Rad Rope has been replaced.

Monticello LM Representative Judd Mason Date 09-01-10

**Monticello Long-Term Surveillance and Maintenance
Temporary Storage Facility Record Book
Inspection Report**

**Acceptable?
Yes / No**

- yes Was the gate locked upon arrival?
- yes Are signs posted in accordance with Section 3.4.4?
- yes Are all postings legible?
- yes Are enclosures on the concrete bin and stored drum containers tight?
- yes Are containers in good physical condition (no rust, no holes, no bulges, etc.)?
- 0 How much radiologically contaminated material is in the concrete bin? Note: the material should be shipped when the volume in storage approaches 75 percent of the storage capacity.
- yes Is the surface area of the TSF in good physical condition (no erosion, no flood damage, no excessive vegetation growth, etc.)?
- yes Has radiological monitoring been conducted in accordance with Section 3.4.5?
- yes Is the security fence in good condition?

Comments: _____

Jodd Moon
Signature of Monticello LM Representative

7-15-10
Date of Inspection

**Monticello Long-Term Surveillance and Maintenance
Temporary Storage Facility Record Book
Inspection Report**

Acceptable?

Yes / No

- yes Was the gate locked upon arrival?
- yes Are signs posted in accordance with Section 3.4.4?
- yes Are all postings legible?
- yes Are enclosures on the concrete bin and stored drum containers tight?
- yes Are containers in good physical condition (no rust, no holes, no bulges, etc.)?
- 0 How much radiologically contaminated material is in the concrete bin? Note: the material should be shipped when the volume in storage approaches 75 percent of the storage capacity.
- yes Is the surface area of the TSF in good physical condition (no erosion, no flood damage, no excessive vegetation growth, etc.)?
- yes Has radiological monitoring been conducted in accordance with Section 3.4.5?
- yes Is the security fence in good condition?

Comments: _____

 Todd Moon
Signature of Monticello LM Representative

 8-16-10
Date of Inspection

**Monticello Long-Term Surveillance and Maintenance
Temporary Storage Facility Record Book
Inspection Report**

Acceptable?

Yes / No

- yes Was the gate locked upon arrival?
- yes Are signs posted in accordance with Section 3.4.4?
- yes Are all postings legible?
- yes Are enclosures on the concrete bin and stored drum containers tight?
- yes Are containers in good physical condition (no rust, no holes, no bulges, etc.)?
- 105 How much radiologically contaminated material is in the concrete bin? Note: the material should be shipped when the volume in storage approaches 75 percent of the storage capacity.
- yes Is the surface area of the TSF in good physical condition (no erosion, no flood damage, no excessive vegetation growth, etc.)?
- yes Has radiological monitoring been conducted in accordance with Section 3.4.5?
- yes Is the security fence in good condition?

Comments: Annual Site Inspection tour

Zedd Moon
Signature of Monticello LM Representative

9-13-10
Date of Inspection

MONTHLY CLIMATOLOGICAL SUMMARY for JUL. 2010

NAME: Monticello CITY: STATE:
 ELEV: 7000 ft LAT: 37° 36' 00" N LONG: 122° 06' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	68.9	80.3	4:30p	60.0	6:00a	0.7	4.6	0.00	7.9	26.0	12:00p	SSW
2	66.9	79.0	2:30p	58.8	6:30a	1.1	3.0	0.09	7.3	31.0	3:00p	SSW
3	69.2	80.6	6:00p	58.4	6:00a	1.2	5.4	0.00	9.5	29.0	12:30p	SW
4	63.9	77.8	2:30p	50.3	11:00p	3.8	2.7	0.00	10.2	51.0	6:30p	NNW
5	63.1	78.7	5:30p	45.9	5:00a	5.8	3.8	0.00	4.7	19.0	11:30a	NW
6	70.0	82.2	5:30p	56.3	3:30a	2.0	7.0	0.00	6.8	25.0	2:00p	W
7	70.6	80.7	2:00p	58.4	7:00a	0.6	6.2	0.00	6.8	42.0	7:30p	NW
8	66.9	79.1	4:30p	56.6	3:00a	2.2	4.1	0.00	6.2	30.0	3:00p	WSW
9	66.1	76.3	4:00p	57.0	3:30a	1.6	2.8	0.00	6.9	26.0	3:00p	W
10	68.2	79.3	5:00p	57.8	5:30a	1.3	4.5	0.00	5.0	31.0	1:30p	W
11	66.4	78.8	12:30p	56.7	4:00a	2.0	3.4	0.16	3.8	23.0	8:30p	SSW
12	70.5	85.2	5:30p	53.8	6:30a	2.5	7.9	0.00	4.0	20.0	5:00p	NNW
13	74.6	87.6	4:30p	57.1	6:00a	0.8	10.4	0.00	5.7	23.0	2:00p	WSW
14	75.4	87.7	3:30p	62.9	3:00a	0.1	10.5	0.00	5.3	22.0	2:00p	WNW
15	78.3	89.5	3:00p	65.5	6:00a	0.0	13.3	0.00	6.3	23.0	4:00p	NW
16	79.1	91.4	2:30p	65.6	5:30a	0.0	14.1	0.00	5.2	21.0	2:30p	WNW
17	77.7	89.6	4:00p	59.9	7:00a	0.3	13.0	0.00	7.4	26.0	6:30p	NW
18	80.3	90.4	6:30p	66.5	6:30a	0.0	15.3	0.00	5.9	20.0	10:00p	NW
19	78.9	90.1	5:30p	65.7	4:30a	0.0	13.9	0.01	6.3	28.0	7:30p	NW
20	72.0	85.4	3:00p	60.7	6:30a	0.6	7.7	0.40	6.5	37.0	7:00p	SSE
21	66.3	77.7	2:30p	60.2	7:00a	1.3	2.6	0.09	4.5	32.0	3:30p	SW
22	67.0	76.1	5:30p	59.5	7:00a	1.0	2.9	0.00	8.3	32.0	8:00p	S
23	69.6	81.7	2:30p	59.0	1:00a	1.3	5.8	0.00	5.5	20.0	3:30a	SSW
24	68.0	84.3	1:30p	54.2	5:30a	1.9	4.9	0.09	5.4	34.0	4:30p	S
25	70.1	84.8	6:30p	55.0	6:30a	1.7	6.8	0.00	6.7	21.0	1:30p	S
26	69.3	80.6	4:00p	60.5	5:30a	1.0	5.4	0.00	8.5	24.0	12:30p	SSW
27	66.6	78.1	12:30p	57.7	6:00a	1.3	2.9	0.49	4.6	20.0	2:00p	SW
28	70.2	81.9	2:30p	59.8	7:00a	0.5	5.7	0.00	5.3	21.0	5:00p	SW
29	66.3	77.8	3:00p	60.1	5:30a	1.4	2.8	0.19	6.3	24.0	6:30p	NW
30	68.7	82.2	4:30p	58.4	6:30a	1.2	4.8	0.34	3.6	18.0	9:30p	NW
31	67.9	77.5	5:30p	58.9	6:00a	1.0	3.9	0.00	6.0	19.0	10:30a	S

	70.2	91.4	16	45.9	5	40.2	202.1	1.86	6.2	51.0	4	SSW

Max >= 90.0: 3
 Max <= 32.0: 0
 Min <= 32.0: 0
 Min <= 0.0: 0
 Max Rain: 0.49 ON 07/27/10
 Days of Rain: 8 (>.01 in) 5 (>.1 in) 0 (>1 in)
 Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for AUG. 2010

NAME: Monticello CITY: STATE:
 ELEV: 7000 ft LAT: 37° 36' 00" N LONG: 122° 06' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	63.0	72.6	5:30p	59.7	6:30a	2.7	0.7	0.53	3.6	17.0	5:00a	SW
2	62.4	68.5	6:30p	58.7	7:00a	3.0	0.4	0.00	4.5	32.0	9:30p	SE
3	65.4	76.9	3:30p	53.7	6:30a	2.7	3.1	0.00	4.4	19.0	5:30p	W
4	67.2	79.6	3:30p	56.3	6:30a	2.1	4.3	0.01	6.7	28.0	11:30p	SSW
5	63.1	74.4	4:00p	55.2	6:30a	3.7	1.9	0.34	5.6	21.0	11:30a	W
6	67.9	79.1	4:30p	57.1	7:00a	1.8	4.7	0.00	4.9	26.0	7:00p	SSW
7	61.8	71.9	1:30p	54.5	9:30p	4.2	1.0	0.06	4.5	21.0	4:00p	S
8	62.5	73.5	4:30p	53.5	7:00a	4.4	1.9	0.01	4.7	17.0	1:00p	S
9	65.4	75.8	3:30p	57.1	6:00a	2.8	3.2	0.00	5.3	22.0	4:00p	WSW
10	66.7	77.5	4:00p	54.5	4:00a	2.5	4.2	0.00	6.2	23.0	2:00p	W
11	64.6	77.9	3:30p	55.1	6:30a	3.0	2.6	0.20	5.5	32.0	7:00p	W
12	67.7	79.6	4:00p	56.1	1:30a	2.0	4.7	0.00	8.4	31.0	5:00p	SSW
13	68.9	80.4	4:30p	54.3	6:30a	1.6	5.5	0.00	6.9	21.0	12:30p	W
14	71.2	82.5	4:00p	56.0	5:30a	0.8	7.0	0.00	7.3	23.0	12:00p	W
15	74.3	86.3	5:30p	58.8	1:00a	0.4	9.7	0.00	6.1	23.0	11:30p	W
16	68.6	79.6	4:00p	57.5	12:00m	0.9	4.5	0.01	7.3	40.0	5:30p	SSW
17	68.2	80.5	4:30p	57.0	2:00a	2.0	5.1	0.00	6.5	18.0	11:30a	SSW
18	70.9	79.6	1:00p	63.5	12:00m	0.0	5.9	0.00	7.4	27.0	2:00p	S
19	62.7	76.3	1:30p	52.9	12:00m	3.9	1.7	0.10	8.5	41.0	4:00p	SW
20	63.4	77.6	4:30p	47.1	6:00a	5.3	3.8	0.00	4.3	19.0	3:00p	NNE
21	68.9	81.9	3:30p	54.6	6:30a	2.0	5.9	0.00	5.8	20.0	2:00p	WNW
22	67.7	76.6	4:30p	59.2	5:30a	0.8	3.4	0.00	7.3	23.0	4:30p	SSW
23	67.6	79.0	5:00p	60.4	6:30a	1.2	3.7	0.00	6.6	25.0	5:30p	S
24	68.9	81.5	4:30p	53.4	6:00a	1.9	5.8	0.00	5.5	18.0	12:30a	NW
25	68.1	80.9	4:00p	57.3	7:00a	1.7	4.8	0.00	6.8	18.0	1:30a	SSW
26	70.3	81.8	3:30p	58.8	4:30a	1.0	6.2	0.00	6.9	24.0	4:00p	SSW
27	70.0	80.3	4:00p	58.9	6:00a	0.8	5.9	0.00	7.9	23.0	10:00a	SSW
28	62.7	71.2	5:30p	56.8	3:30a	3.1	0.8	0.08	5.6	22.0	4:30p	SSW
29	63.7	74.4	3:00p	52.7	6:30a	3.5	2.1	0.00	10.4	38.0	3:00p	SSW
30	62.5	72.6	5:00p	53.2	7:00a	4.1	1.6	0.00	10.4	33.0	2:00p	SSW
31	61.7	72.8	5:00p	48.9	7:00a	5.2	1.8	0.00	5.4	22.0	3:00p	SSW
	66.4	86.3	15	47.1	20	75.1	117.9	1.34	6.4	41.0	19	SSW

Max >= 90.0: 0
 Max <= 32.0: 0
 Min <= 32.0: 0
 Min <= 0.0: 0
 Max Rain: 0.53 ON 08/01/10
 Days of Rain: 6 (>.01 in) 3 (>.1 in) 0 (>1 in)
 Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for SEP. 2010

NAME: Monticello CITY: STATE:
 ELEV: 7000 ft LAT: 37° 36' 00" N LONG: 122° 06' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	65.4	78.4	5:00p	52.3	6:00a	3.8	4.1	0.00	5.7	27.0	4:00p	NW
2	66.5	77.7	4:30p	55.3	4:30a	2.5	4.0	0.00	8.3	24.0	12:00p	N
3	67.2	80.2	6:00p	55.2	7:30a	2.3	4.5	0.00	6.8	21.0	12:00p	WNW
4	71.3	83.8	3:30p	55.3	5:30a	1.4	7.7	0.00	7.3	26.0	2:30p	WSW
5	72.5	81.8	5:00p	62.0	7:30a	0.1	7.6	0.00	9.2	33.0	2:00p	SW
6	63.0	72.9	4:00p	52.1	7:30a	4.3	2.3	0.00	10.1	28.0	12:30a	N
7	61.4	75.4	1:30p	51.4	6:00a	5.7	2.1	0.12	6.9	28.0	7:30p	WNW
8	56.4	65.6	3:00p	52.3	2:00a	8.6	0.0	0.28	5.5	21.0	1:00a	SSE
9	57.7	67.0	4:30p	49.9	7:00a	7.5	0.2	0.00	11.6	35.0	10:30a	SSW
10	56.5	67.5	5:00p	46.3	12:00m	8.7	0.1	0.00	5.3	20.0	3:30p	NW
11	58.1	72.4	6:00p	44.3	7:00a	8.4	1.5	0.00	4.5	30.0	2:00p	NW
12	63.1	76.4	4:00p	49.3	4:30a	4.8	3.0	0.00	5.5	26.0	4:30p	WSW
13	66.0	78.1	3:00p	55.4	7:30a	3.1	4.1	0.00	6.6	24.0	4:00p	W
14	65.8	77.8	3:30p	52.0	5:00a	3.4	4.3	0.00	6.3	29.0	2:30p	WSW
15	67.0	78.6	4:00p	54.7	7:00a	2.0	3.9	0.00	5.9	34.0	10:30a	WNW
16	66.5	79.8	4:30p	54.0	4:30a	3.2	4.7	0.00	6.2	32.0	1:00p	W
17	67.6	79.8	4:00p	53.1	7:00a	2.4	5.0	0.00	5.5	21.0	11:00a	W
18	66.9	80.1	5:00p	54.4	6:30a	2.9	4.8	0.00	5.7	25.0	2:00p	W
19	68.0	81.1	4:00p	52.8	5:30a	2.3	5.4	0.00	6.7	24.0	2:30p	SSW
20	66.0	79.1	4:00p	56.7	2:00a	2.3	3.3	0.00	6.5	28.0	3:30p	SW
21	64.6	76.5	4:30p	52.1	7:00a	3.4	3.1	0.00	6.6	27.0	1:00p	SSW
22	55.1	60.3	12:30a	49.3	11:00p	9.9	0.0	0.46	6.3	26.0	5:30p	S
23	55.2	66.0	5:30p	47.6	7:00a	9.8	0.0	0.01	5.2	22.0	3:00p	NW
24	58.3	70.8	4:30p	46.7	6:30a	7.9	1.2	0.00	5.1	18.0	2:30p	W
25	62.7	74.7	2:30p	49.0	5:00a	4.9	2.6	0.00	7.0	22.0	4:00p	NW
26	64.7	77.4	4:30p	49.6	7:00a	3.9	3.6	0.00	5.0	15.0	11:00a	WNW
27	69.3	82.1	3:30p	58.0	1:00a	1.5	5.8	0.00	6.7	18.0	5:00p	NW
28	68.6	81.4	4:30p	58.2	3:00a	1.8	5.3	0.00	6.1	17.0	3:00p	WNW
29												
30												

	64.0	83.8	4	44.3	11	122.8	94.2	0.87	6.6	35.0	9	W

Max >= 90.0: 0
 Max <= 32.0: 0
 Min <= 32.0: 0
 Min <= 0.0: 0
 Max Rain: 0.46 ON 09/22/10
 Days of Rain: 3 (>.01 in) 3 (>.1 in) 0 (>1 in)
 Heat Base: 65.0 Cool Base: 65.0 Method: Integration

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