Monticello, Utah, National Priorities List Sites
Federal Facility Agreement (FFA) Quarterly Report:
January 1−March 31, 2011

This report summarizes project status and activities implemented January through March 2011 and provides a schedule for near-term activities at the Monticello Vicinity Properties (MVP) site and the Monticello Mill Tailings Site (MMTS) located in and near Monticello, Utah.

The MMTS and MVP were placed on the U.S. Environmental Protection Agency (EPA) National Priorities List (NPL) in 1989 and 1986, respectively. The U.S. Department of Energy (DOE) implemented remedial actions at the MVP in 1986 and at the MMTS in 1989, to conform to requirements of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act. MMTS and MVP remedial actions were completed by September 1999, except for the remediation of contaminated groundwater (Operable Unit III [OU III] of the MMTS), which is an ongoing process. The MMTS and MVP are administered as the Monticello Disposal and Processing Sites by the DOE Office of Legacy Management (LM).

1.0 MMTS Activities and Status

1.1 Repository Site

The repository site consists of the waste disposal cell and associated leachate management system, the temporary waste storage facility [TSF], and support infrastructure (drainage controls, fencing, signage, roads, etc.). As directed by the LM *Long-Term Surveillance and Maintenance Plan for the Monticello NPL Sites* (LTSM plan), monthly and quarterly inspections of the repository site are conducted by on-site LM contractor personnel to document site conditions that may affect the integrity of the site in protecting human health and the environment.

- Disposal cell leachate collection in the upper sumps (i.e., the Leachate Collection and Recovery System [LCRS]) was normal for the quarter. Leachate production has decreased 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 2; see attached graph).
- Operation of the LCRS at the leachate collection pond (Pond 4) was normal (i.e., no water was collected during the quarter; see attached graph).
- Disposal cell and Pond 4 leachate collection in the lower sumps (Leak Detection System [LDS]) remains at zero (see attached graphs).
- All disposal cell and Pond 4 leachate management equipment (pumps, pump controls, monitoring devices, and data transmission devices) are functional.
- Monthly and quarterly inspections identified no abnormalities or unacceptable conditions at the repository site (see attached Repository Area Surveillance Checklists and Monthly Pond 4 Surveillance Checklists).
- The inventory of contaminated material in the TSF remains at about 1.5 cubic yards (see attached TSF Record Book Inspection Reports). In accordance with the LTSM plan (Section

3.4), DOE initiates transfer of material from the TSF to the LM Grand Junction Disposal Site (GJDS), Grand Junction, Colorado, when contents of the TSF approach 75 cubic yards. The most recent transfer of material from the TSF to GJDS occurred in June 2010, as documented in the July 1–September 31, 2010, quarterly report.

1.2 Operable Unit I (Former Mill Site [City-Owned])

Periodic surveillance of the former mill site is conducted to ensure compliance with land and groundwater use restrictions (i.e., institutional controls that were implemented to preserve the selected remedies for soil and groundwater on this property).

- No land use or groundwater use compliance issues were observed or reported by on-site LM contractor personnel.

1.3 Operable Unit II (Peripheral Properties [Private and City-Owned])

Periodic surveillance of the properties surrounding the former mill site is conducted to ensure compliance with land and groundwater use restrictions (i.e., institutional controls that were implemented to preserve the selected remedies for soil and groundwater on these properties).

- No land use or groundwater use compliance issues were observed or reported by on-site LM contractor personnel.
- DOE continues in the process to dispose parcel MP-01081-VL, located east of the repository site, to non-DOE ownership.

1.4 Operable Unit III (Contaminated Groundwater and Surface Water)

1.4.1 Groundwater Management Area

Periodic surveillance of properties where residual groundwater contamination is present is conducted to ensure compliance with groundwater use restrictions (i.e., institutional controls to prevent exposure to contaminated groundwater).

- No groundwater use compliance issues were observed or reported by on-site LM contractor personnel.

1.4.2 Ex Situ Groundwater Treatment System

Contaminated alluvial groundwater is extracted and treated on private property at a location approximately 600 feet east of the former mill site. The contaminated groundwater is treated using zero-valent iron in two ex situ treatment vessels. The effluent is then discharged to Montezuma Creek or returned to the aquifer.

Discharge allowances to Montezuma Creek were negotiated between DOE, EPA, the Utah Department of Environmental Quality (UDEQ), and the Utah Division 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 [mg/L]) and the in-stream standard for pH for all water-use categories (greater than 6.5 and less than 9.0 standard units). 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 from the OU

III treatment system is 10 gallons per minute (gpm). The corresponding discharge allowance for iron (total) is 45.4 mg/L.

- Water samples were collected monthly during the quarter at influent and effluent locations to monitor performance of the treatment system in removing uranium from groundwater and to monitor compliance with the water quality (pH and iron) discharge allowances.
- 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.
- Table 2 summarizes treatment system performance. Flow information is from the LM System Operation and Analysis at Remote Sites (SOARS) telemetry and data management system. Uranium concentrations are from inflow and outflow water samples collected monthly.
- Effluent discharge to Montezuma Creek did not exceed the allowed rate.
- Approximately 1.15 million gallons of water were treated and approximately 2.5 pounds of uranium were removed from the aquifer during the quarter as a result of groundwater treatment.
- The reactive media in each treatment cell was last replaced with fresh media on October 11 and 12, 2010. At that time, 16 tons of radiologically contaminated treatment media was transferred to GJDS directly and had not been stored at the TSF. The previous media exchange was March 18, 2009. Each treatment cell treated approximately 3.5 million gallons of contaminated groundwater between these two media exchanges. Each cell treated a similar volume prior to the March 2009 media exchange. Treatment of about 3 million gallons of groundwater per cell at similar concentrations of influent uranium is therefore an approximate target volume for future media exchange. At present rates of extraction and treatment, the next media exchange will occur in September or October 2011.
- Maintenance of the system minor adjustments to the outfall tipping bucket, a minor electrical repair. Riser pipes installed during the last media exchange were capped to prevent groundwater bypass of the treatment media. All maintenance was successfully completed and the system ran essentially uninterrupted for the entire quarter.
- Discharge of treated water to the infiltration trench was negotiated with the UDEQ Underground Injection Control Program in June 2005 (specific water quality criteria were not negotiated). No water was discharged to the infiltration trench during the quarter.

Table 1. Treatment System Compliance Summary

Treatment System Effluent to Montezuma Creek	December 2010	January 2011	February 2011	March 2011
pH[a]	7.34	6.99	7.19	7.15
Iron (total, micrograms per liter)[b]	33	22	22	21

[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	December 2010	January 2011	February 2011	March 2011
Gallons treated	408,578	435,696	312,815	399,121
Average treatment rate, gpm	9.2	9.8	7.8	8.9
Uranium influent, micrograms per liter	340	330	330	340
Uranium outfall, micrograms per liter	8.5	150	16	21
Uranium mass removed, pounds	1.13	0.65	0.82	1.06
Cumulative uranium mass removed, pounds	41.0	41.7	42.5	43.6
Cumulative volume treated, gallons	16,876,529	17,312,225	17,625,040	18,024,161

2.0 MVP Activities and Status

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

- On-site LM contractor personnel continued to coordinate with the City of Monticello, UDOT, and utility company officials regarding radiological control at highway, street, and utility excavations. Winter conditions inhibited all significant construction activity during this quarter.

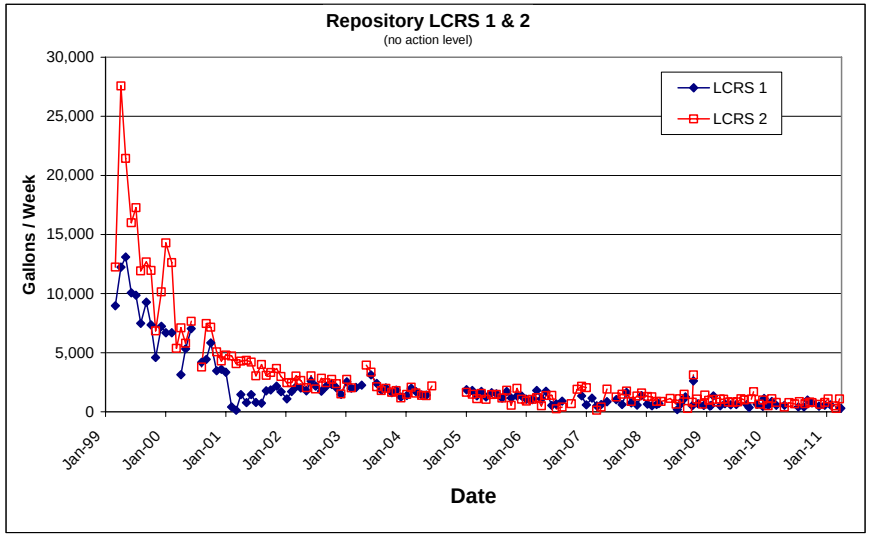
3.0 Schedule and Deliverables

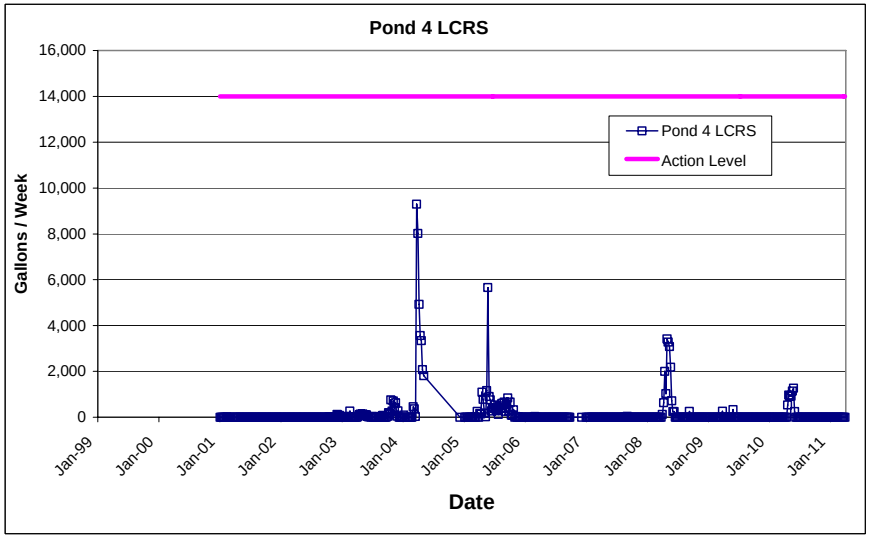
Table 3 summarizes the near-term schedule of activities for the Monticello NPL Sites and DOE reporting obligations.

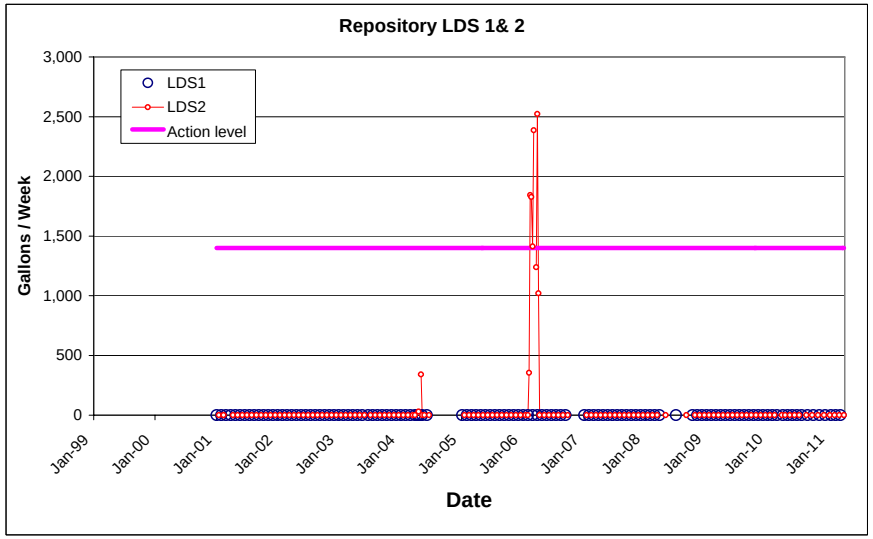
Table 3. Completed and Near-Term Activity and Deliverables Schedule

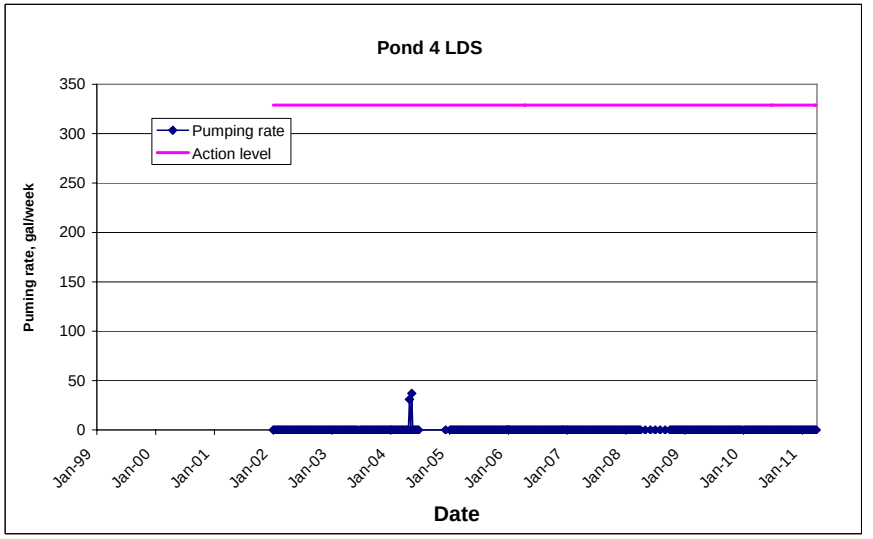
Near Term Activity/Deliverable	Status/Schedule
FFA quarterly report for October 2010–December 2010.	Submitted by e-mail to EPA and UDEQ on January 10, 2011.
Monticello Mill Tailings Site Operable Unit III Remedial Design/Remedial Action Work Plan for Groundwater Remediation Expansion.	Submitted by regular mail to EPA and UDEQ on January 19, 2011.
EPA and UDEQ review of engineering design for groundwater remediation expansion.	Design drawings presented/discussed at the April 5, 2011, FFA meeting. Review schedule to be determined.
Monticello Mill Tailings Site Operable Unit III Biomonitoring Program Status and Analytical Update.	Submitted by regular mail to EPA and UDEQ on March 24, 2011.
FFA meeting and Biological Technical Assistance Group (BTAG) meeting/conference call regarding future scope.	FFA meeting scheduled for April 5, 2011, at the Monticello, UT, field office. BTAG meeting schedule to be determined pending availability of BTAG members and review of OU III biomonitoring report.

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	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 Todd Moon Date 01-05-2011

Monticello LM Representative

[a]Inspections required following a significant storm event
[b]Open 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	Yes	
Manholes[b]	Yes	
Sediment Ponds	Yes	
Evidence of:		
Structural Instability	NO	

Additional Comments_____

Signature Todd Moon Date 02-02-2011

Monticello LM Representative

[a]Inspections required following a significant storm event
[b]Open 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 Todd Moon
Monticello LM Representative

Date 03-02-2011

[a]Inspections required following a significant storm event
[b]Open to inspect quarterly

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 3.8

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

Additional Comments

Monticello LM Representative Todd Moon Date 01-05-2011

Monthly Pond 4 Surveillance Checklist

Level of Water in Pond 4 3.8

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

Additional Comments

Monticello LM Representative Todd Moon Date 02-02-2011

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	yes	
Roads	yes	
Signs	yes	
Visible piping	yes	
Visible liner and anchors	yes	
Rescue equipment	yes	
Evidence of erosion of:		
Top of Pond 4 berm	NO	
Pond 4 sideslopes	No	
Ditches	NO	
Surrounding area	No	
Seepage from Pond 4	NO	
Overtopping of Pond 4	No	
Evidence of:		
Vandalism	NO	
Intrusion by wildlife	NO	
Intrusion by humans	No	
Accumulation of trash	NO	

Additional Comments

Monticello LM Representative Todd Moon Date 03-02-2011

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.)?
1.5	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

01-05-2011
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.)?
1.5	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: _____

Judd Moon
Signature of Monticello LM Representative

02-07-2011
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.)?

1.5 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 Mason
Signature of Monticello LM Representative

03-07-2011
Date of Inspection

MONTHLY CLIMATOLOGICAL SUMMARY for JAN. 2011

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	2.2	11.6	1:00p	-7.8	7:30a	62.8	0.0	0.00	3.4	15.0	1:00a	S
2	6.1	15.3	11:30p	-4.0	2:30a	58.9	0.0	0.00	2.6	14.0	11:30p	S
3	18.7	26.4	2:00p	11.8	5:30a	46.3	0.0	0.01	2.5	20.0	2:00a	SE
4	17.7	28.5	1:30p	10.0	9:30p	47.3	0.0	0.00	2.0	8.0	11:30a	SE
5	18.0	31.8	2:00p	8.1	5:00a	47.0	0.0	0.01	2.4	14.0	9:30p	SSW
6	23.6	37.3	1:30p	12.0	7:00a	41.4	0.0	0.00	3.7	18.0	12:00p	N
7	23.8	36.6	12:00p	12.1	7:00a	41.2	0.0	0.00	1.8	7.0	3:30a	WNW
8	24.6	34.0	3:00p	14.0	5:30a	40.4	0.0	0.00	3.1	12.0	12:00m	SE
9	21.9	29.2	2:00p	14.3	12:00m	43.1	0.0	0.01	7.6	33.0	8:00p	SSE
10	9.6	15.2	2:30p	2.9	11:30p	55.4	0.0	0.00	8.9	28.0	2:00a	NNW
11	10.1	18.5	3:30p	-0.8	7:00a	54.9	0.0	0.00	3.9	12.0	12:00p	NW
12	20.6	30.1	3:30p	11.0	12:30a	44.4	0.0	0.00	2.6	9.0	9:30p	S
13	28.1	42.9	12:30p	18.9	1:30a	36.9	0.0	0.00	2.5	12.0	9:00p	NNW
14	31.5	37.3	4:00p	23.0	5:30a	33.5	0.0	0.00	9.8	30.0	8:30a	NNW
15	33.4	40.6	2:00p	24.8	12:00m	31.6	0.0	0.00	8.6	29.0	1:00p	NNW
16	32.6	44.1	4:30p	21.0	2:00a	32.4	0.0	0.00	2.2	15.0	5:00p	NNE
17	39.6	46.4	11:00a	29.8	12:30a	25.4	0.0	0.00	10.4	46.0	12:00p	NNW
18	33.8	42.0	3:00p	24.7	7:30a	31.2	0.0	0.00	3.7	25.0	2:00a	SSE
19	31.1	38.5	12:30p	22.8	12:00m	33.9	0.0	0.00	12.5	34.0	1:30p	NNW
20	23.3	30.5	1:30p	18.6	9:30p	41.7	0.0	0.00	7.3	25.0	3:30a	NNE
21	27.6	39.1	3:30p	18.3	3:00a	37.4	0.0	0.00	3.9	16.0	7:00a	ENE
22	29.1	38.6	2:00p	22.7	12:30a	35.9	0.0	0.00	9.5	37.0	2:00p	NNW
23	26.1	35.1	3:00p	18.4	11:30p	38.9	0.0	0.00	7.8	31.0	1:30a	NNW
24	25.6	30.9	2:30p	17.8	12:30a	39.4	0.0	0.00	10.7	31.0	1:30p	NNW
25	27.2	37.4	2:00p	18.9	3:30a	37.8	0.0	0.00	8.4	28.0	8:30p	NNW
26	29.3	36.2	2:30p	22.7	12:00m	35.7	0.0	0.00	10.3	24.0	6:00p	NNW
27	33.6	40.9	2:30p	22.6	2:30a	31.4	0.0	0.00	7.2	18.0	9:30p	NNW
28	35.6	44.7	2:30p	28.9	12:00m	29.4	0.0	0.00	4.0	16.0	12:30a	SSW
29	34.3	45.8	3:30p	24.7	5:30a	30.7	0.0	0.00	1.9	11.0	11:00p	W
30	32.0	38.8	4:00p	24.8	3:00a	33.0	0.0	0.00	7.4	26.0	9:30a	SSW
31	27.9	33.9	12:00p	21.2	12:00m	37.1	0.0	0.00	8.6	32.0	10:00p	NNW
	25.1	46.4	17	-7.8	1	1236.4	0.0	0.03	5.8	46.0	17	NNW

Max >= 90.0: 0
Max <= 32.0: 11
Min <= 32.0: 31
Min <= 0.0: 3
Max Rain: 0.01 ON 01/03/11
Days of Rain: 0 (>.01 in) 0 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for FEB. 2011

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	10.7	21.6	1:00a	-4.4	12:00m	54.3	0.0	0.00	16.3	42.0	9:30p	NNW
2	-0.7	5.8	2:30p	-6.5	5:30a	65.7	0.0	0.00	15.1	43.0	1:00a	NNW
3	19.4	30.0	1:30p	-0.3	1:00a	45.6	0.0	0.00	15.8	36.0	9:00p	NNW
4	31.2	38.3	3:30p	24.4	1:00a	33.8	0.0	0.00	14.6	32.0	4:00a	NNW
5	32.2	38.3	12:00p	26.3	6:00a	32.8	0.0	0.00	15.1	40.0	2:00p	NNW
6	24.3	28.5	2:30p	18.1	11:00p	40.7	0.0	0.00	9.3	31.0	1:30p	N
7	27.3	35.1	3:00p	18.5	12:30a	37.7	0.0	0.00	8.3	30.0	3:30p	W
8	20.3	28.4	12:30a	15.1	12:00m	44.7	0.0	0.00	16.8	44.0	3:00p	NNW
9	14.2	21.2	3:30p	8.1	7:30a	50.8	0.0	0.00	10.7	36.0	3:00a	NNW
10	19.0	28.0	4:00p	12.2	6:30a	46.0	0.0	0.00	7.6	22.0	10:30a	NNW
11	24.8	36.8	2:30p	12.6	5:30a	40.2	0.0	0.00	4.3	18.0	1:00p	NW
12	31.0	44.0	4:30p	17.5	3:00a	34.0	0.0	0.00	2.3	9.0	6:00a	E
13	35.1	45.1	2:30p	25.2	4:30a	29.9	0.0	0.00	4.7	22.0	5:00a	SSE
14	39.9	48.1	3:30p	29.7	2:30a	25.1	0.0	0.00	8.0	27.0	11:00a	S
15	38.4	46.2	3:00p	27.0	5:00a	26.6	0.0	0.00	7.6	25.0	4:00p	S
16	40.7	46.6	4:00p	35.9	12:00m	24.3	0.0	0.00	13.9	39.0	4:00p	SSW
17	36.7	43.1	4:30p	32.1	7:30a	28.3	0.0	0.00	11.9	31.0	4:00a	SSW
18	36.7	43.5	3:30p	27.7	6:30a	28.3	0.0	0.00	9.2	28.0	2:30p	SSW
19	34.4	43.3	2:30p	25.8	12:00m	30.6	0.0	0.57	10.6	47.0	5:00p	SSW
20	24.3	30.8	2:30p	15.9	10:30p	40.7	0.0	0.01	7.3	25.0	5:00a	S
21	24.5	32.4	3:00p	15.0	12:30a	40.5	0.0	0.01	6.0	19.0	12:00p	SSW
22	29.2	36.4	4:00p	21.5	1:30a	35.8	0.0	0.00	8.8	24.0	12:00p	S
23	30.4	39.1	3:30p	19.8	6:30a	34.6	0.0	0.00	6.3	25.0	11:30a	SSW
24	30.7	38.4	3:00p	20.1	6:00a	34.3	0.0	0.00	7.4	26.0	10:30a	SSW
25	31.3	36.2	3:30p	26.1	6:30a	33.7	0.0	0.00	11.6	29.0	4:30p	SE
26	32.8	37.0	12:30p	28.5	11:30p	32.2	0.0	0.00	13.9	39.0	6:00a	SSW
27	30.9	36.5	5:00p	24.6	12:00m	34.1	0.0	0.03	6.9	29.0	8:30a	SW
28	30.7	40.3	4:00p	20.0	6:00a	34.3	0.0	0.00	10.0	30.0	10:30a	S
	27.9	48.1	14	-6.5	2	1039.6	0.0	0.62	10.0	47.0	19	SSW

Max >= 90.0: 0
Max <= 32.0: 8
Min <= 32.0: 26
Min <= 0.0: 3
Max Rain: 0.57 ON 02/19/11
Days of Rain: 2 (>.01 in) 1 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

MONTHLY CLIMATOLOGICAL SUMMARY for MAR. 2011

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	38.7	47.2	3:00p	32.2	6:00a	26.3	0.0	0.00	7.9	22.0	9:30a	SSW
2	41.3	50.3	3:30p	33.1	6:30a	23.7	0.0	0.00	6.5	22.0	12:00p	WSW
3	39.9	49.6	3:00p	31.7	7:00a	25.1	0.0	0.00	9.7	30.0	12:00m	SW
4	33.5	40.1	3:00p	28.6	7:00a	31.5	0.0	0.00	12.7	34.0	2:30p	NNW
5	34.9	44.5	4:00p	26.2	6:30a	30.1	0.0	0.00	8.0	27.0	10:30a	SSW
6	37.3	40.6	3:30p	31.2	5:30a	27.8	0.0	0.00	7.0	23.0	9:30p	S
7	33.0	39.2	4:00p	29.8	11:00p	32.0	0.0	0.05	6.1	21.0	10:00a	S
8	30.8	37.1	4:00p	25.5	7:00a	34.2	0.0	0.02	11.3	35.0	9:30a	NNW
9	35.9	47.4	3:30p	24.3	3:30a	29.1	0.0	0.01	4.9	20.0	3:30p	N
10	41.4	52.3	3:00p	30.7	7:00a	23.6	0.0	0.00	6.3	21.0	1:30p	NNW
11	46.1	57.0	4:00p	37.7	12:30a	18.9	0.0	0.00	8.7	25.0	2:00p	S
12	47.2	56.8	4:00p	37.1	5:00a	17.8	0.0	0.00	7.4	28.0	11:30p	S
13	40.9	51.3	4:30p	29.7	8:00a	23.1	0.0	0.00	6.6	27.0	1:00a	N
14	45.4	57.6	5:00p	34.2	8:00a	19.6	0.0	0.00	6.4	24.0	11:30a	NW
15	46.5	57.2	2:00p	35.3	7:00a	18.5	0.0	0.00	4.0	13.0	12:30p	WNW
16	49.7	59.6	3:00p	37.5	5:30a	15.3	0.0	0.00	11.9	32.0	3:00p	SW
17	44.3	54.7	1:30p	33.2	12:00m	20.7	0.0	0.00	10.4	32.0	3:30p	N
18	41.3	53.5	5:00p	29.9	7:30a	23.7	0.0	0.00	6.5	32.0	1:30p	S
19	45.8	56.0	4:00p	35.7	12:30a	19.2	0.0	0.00	14.9	40.0	1:30p	SW
20	43.5	52.7	2:30p	32.7	7:30a	21.5	0.0	0.00	13.4	38.0	3:00p	N
21	40.5	49.1	1:00p	29.1	11:30p	24.5	0.0	0.02	12.8	45.0	1:30p	S
22	31.4	41.5	4:30p	25.3	8:00a	33.6	0.0	0.00	7.1	27.0	1:30p	SW
23	34.8	45.6	4:00p	22.0	5:00a	30.2	0.0	0.00	5.5	23.0	3:00p	WSW
24	37.5	44.8	4:00p	27.8	7:30a	27.5	0.0	0.00	11.1	40.0	12:30p	SSW
25	37.1	46.9	3:00p	29.9	12:00m	27.9	0.0	0.00	13.2	36.0	1:30p	SSW
26	32.2	44.1	2:30p	20.4	7:00a	32.8	0.0	0.00	4.7	24.0	2:00p	NNW
27	38.1	47.8	3:00p	24.3	7:30a	26.9	0.0	0.14	7.9	26.0	5:00p	SSW
28	42.3	54.9	4:00p	31.8	7:30a	22.7	0.0	0.00	8.9	45.0	4:00p	NNW
29	29.0	36.1	11:00a	22.6	6:30a	16.5	0.0	0.00	8.1	22.0	4:00a	N
30												
31												
	39.3	59.6	16	20.4	26	724.3	0.0	0.24	8.6	45.0	21	S

Max >= 90.0: 0
Max <= 32.0: 0
Min <= 32.0: 19
Min <= 0.0: 0
Max Rain: 0.14 ON 03/27/11
Days of Rain: 4 (>.01 in) 1 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

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