

MONTICELLO PROJECTS
FEDERAL FACILITY AGREEMENT REPORT
March/April 2005
Report Period: March 1 – April 30, 2005
DOE Project Coordinator: Art Kleinrath

HIGHLIGHTS

MSG

Semi-annual ground water and surface water samples were collected during the week of April 4, in accordance with the *Monticello Mill Tailings Site Operational Unit III Post-Record of Decision Monitoring Plan*.

DOE initiated biomonitoring at the wetland areas on the former millsite and down-gradient at the sediment pond as required by the *Record of Decision for the Monticello Mill Tailings (USDOE) Site Operable Unit III, Surface and Ground Water, Monticello, Utah* (May 2004).

MRAP

DOE submitted the final *2004 Annual Inspection of the Monticello Mill Tailings (USDOE) and Monticello Radioactively Contaminated Properties Sites* to the Environmental Protection Agency (EPA) and Utah Department of Environmental Quality (UDEQ) on March 18.

In early April, the repository cover was interseeded with a seed mixture formulated to control the spread of cheatgrass and increase shrub density.

MVP

No significant activities to report.

**MONTICELLO PROJECTS
FEDERAL FACILITIES AGREEMENT REPORT
March/April 2005**

**Report Period: March 1 – April 30, 2005
DOE Project Coordinator: Art Kleinrath**

STATUS

Operable Units I and II

DOE submitted the final *2004 Annual Inspection of the Monticello Mill Tailings (USDOE) and Monticello Radioactively Contaminated Properties Sites* to EPA and UDEQ on March 18.

Most of the success criteria for vegetation of the repository cover have been met; however, it may take several years for the remaining success criteria to be achieved. A decision was made to release the retainage fee to the subcontractor and augment the vegetation on the repository cover by seeding with plant species that will compete with the undesirable cheat grass species. In early April, the repository cover was interseeded with a seed mixture that will compete with cheat grass. The seed mix also contains several species, including shrub species, which are identified in the acceptance criteria. The goal of interseeding is to control the spread of cheatgrass and to increase shrub density on the cover. Another application of seed is being considered for the pre-monsoon timeframe.

In response to a request from the Monticello City Manager for information concerning remediation and historical documentation, DOE sent a letter to the City of Monticello discussing information located at DOE's Monticello office. The letter suggested several files the City should review that should contain the information requested. The City was informed that it could copy any information in the Information Repository and Administrative Records, which are located at DOE's Monticello office.

Four deer gates in the repository fence were replaced with pedestrian gates. The deer gates were replaced because deer do not use them and can become trapped. The pedestrian gates will be locked to provide better security from human intrusion but they can be opened in the event that deer are seen inside the repository fence.

A replacement check was issued to Mr. and Mrs. Bryan Bowring for their well access agreement, because the original check issued on September 24, 2004, was lost. The original check had not been cashed and subsequently has been voided.

SCHEDULE/EXPECTATIONS

See attached document submittal table for projected submittal dates.

NEW ISSUES/RESOLUTIONS

No new issues.

MONTICELLO SURFACE- AND GROUND-WATER PROJECT (MSG)

STATUS

Semi-annual ground water and surface water samples were collected during the week beginning April 4, in accordance with the *Monticello Mill Tailings Site Operational Unit III Post-Record of Decision Monitoring Plan*. Two sampling teams were used to conduct the sampling.

Ground and surface water and biomonitoring data from the October 2004 sampling event were sent to EPA and UDEQ on March 30. These data will also be presented for discussion at the next Federal Facilities Agreement meeting.

DOE has initiated biomonitoring at the wetland areas on the former millsite and down-gradient at the sediment pond as required by the *Record of Decision for the Monticello Mill Tailings (USDOE) Site Operable Unit III, Surface and Ground Water, Monticello, Utah* (May 2004). There is concern that selenium concentrations in the surface water and sediment could potentially bioaccumulate and affect avian species nesting in or using the wetlands. DOE has conducted the following biomonitoring activities:

- Program Directive MSG 05-03, which is the macroinvertebrate sampling and analysis plan, was completed on March 30 by the Biological Technical Assistance Group. DOE deployed Hester-Dendy samplers in accordance with the macroinvertebrate sampling and analysis plan for the collection of macroinvertebrates in the sediment pond east of the millsite on April 5. The samplers will accumulate macroinvertebrates until the week of May 23, when they will be harvested. The macroinvertebrates will be analyzed for selenium to determine if selenium is accumulating in excess of agreed upon benchmarks.
- On April 5, sediment and co-located surface water samples were collected from the three wetlands on the millsite and the sediment pond located down-gradient of the millsite, in accordance with the sampling and analysis plan described in Program Directive MSG-04-02. These samples are required for monitoring potential bioaccumulation of selenium.
- The first scheduled bird surveys targeting avian species that will likely use the wetland habitat were completed on the morning of April 20. Eighteen species of birds were observed in the four wetland areas during the surveys. DOE will conduct eight more surveys throughout the summer.

Due to the heavy snow pack in the Abajo Mountains, up to 65 cubic feet per second of water has been released from Loyd's Lake. Additionally, flow in North Creek has contributed about 60 to 70 cubic feet per second, resulting in a total of 130 cubic feet per second flowing in Montezuma Creek through Operable Unit III. All structures (e.g., ponds, irrigation diversion structures, creek bed) have handled the flow adequately. Erosion damage will be assessed when stream flows have subsided.

Mr. Lisle Adams, owner of a supplemental standards property, is tilling soil in an area where contamination had been left in place. DOE provided oversight and radiological monitoring to ensure that contaminated soil is not removed from the supplemental standards area. DOE is also monitoring the construction of a water diversion structure being built by Mr. Adams. No radiologically contaminated material has been removed from the supplemental standards area and the projects are being conducted within all institutional controls applicable to supplemental standards areas.

DOE completed its review of the draft *Monticello Long-Term Surveillance and Maintenance Operating Procedures for Surface and Ground Water* and submitted it to EPA and UDEQ on March 23. Delivery of this document to the regulators by April 14 is a penalty milestone in the *Monticello Site Management Plan*.

SCHEDULE/EXPECTATIONS

See attached document submittal table for projected submittal dates.

NEW ISSUES/RESOLUTIONS

No new issues.

MONTICELLO VICINITY PROPERTIES (MVP)
SITE ACTIVITIES

STATUS

The Monticello city streets and utility maps were updated on the AutoCAD system. These maps identify all known contamination remaining in place in Monticello city streets. Results of radiological scanning from the previous year are included in the electronic update.

SCHEDULE/EXPECTATIONS

Not established.

NEW ISSUES/RESOLUTIONS

No new issues.

OPERABLE UNITS I, II and III
Projected Deliverables to Regulatory Agencies
June through July 2005

Op. Unit or Site	Deliverable	Projected Submittal/ Resubmittal	Regulator Input or Concurrence Needed (Yes / No)	Status/Progress/Comments as of: April 30, 2005
OU I, II, & III	<ul style="list-style-type: none"> • Initiate Millsite Restoration • Annual Settlement Plate Survey 	5/16/05 7/29/05	No No	
OU III	<ul style="list-style-type: none"> • Conduct wildlife surveys 	06/13-14/05 06/27-28/05 07/10-11/05 07/18-19/05	No	
OU III	<ul style="list-style-type: none"> • Monticello LTSM Operating Procedures for Surface and Ground Water – Draft • Receive EPA/UDEA Comments 	5/15/05	Yes	Draft submitted to EPA/UDEQ 3/13/05
OU III	<ul style="list-style-type: none"> • Collect macroinvertebrate samples 	5/31/05	No	

Monthly Repository Surveillance Checklist

Monticello LTSM Representative JOE SLADE  Date 3-2-2005

Meteorological Data for the period beginning See weather ending Data Logs.

Average wind speed _____ Prevailing wind direction _____
 Average temperature _____ High Temperature _____ Low Temperature _____
 Current barometric pressure _____
 Total precipitation _____ Inches of Precipitation in last 24 hours _____

Inspection Item	Acceptable (Yes/No)	Comments and Recommendations
<u>Condition of:</u>		
Fence	<u>yes</u>	_____
Roads	<u>yes</u>	_____
Signs	<u>yes</u>	_____
Site Marker	<u>yes</u>	_____
Drainage ditches	<u>yes</u>	_____
Manholes	<u>yes</u>	_____
Settlement Plates	<u>yes</u>	_____
Vegetation	<u>yes</u>	_____
<u>Evidence of erosion of:</u>		
Top of Repository	<u>NO</u>	_____
Repository Sideslopes	<u>NO</u>	_____
Ditches	<u>NO</u>	_____
Surrounding area	<u>NO</u>	_____
<u>Evidence of:</u>		
Vandalism	<u>NO</u>	_____
Intrusion by wildlife	<u>NO</u>	_____
Burrowing Animal Damage	<u>NO</u>	_____
Intrusion by humans	<u>NO</u>	_____
Accumulation of trash	<u>NO</u>	_____

Additional Comments
water continues to seep into the manholes - thru the elect conduit holes - access tubes etc.
Pumping these manholes continues -
Roads around the Cell have some wheel tracks as it has been so muddy
to get to these manholes to do the pumping.

Monthly Pond 4 Surveillance Checklist

Monticello LTSM Representative Joe Slade

Date 3-2-2005

Level of Water in Pond 4 3.5 ft approx

Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
<u>Condition of:</u>		
Fence	<u>yes</u>	
Roads	<u>yes</u>	
Signs	<u>yes</u>	
Visible Piping	<u>yes</u>	
Visible Liner	<u>yes</u>	
Life Saver Station	<u>yes</u>	
<u>Evidence of erosion of:</u>		
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>	
<u>Evidence of:</u>		
Vandalism	<u>NO</u>	
Intrusion by wildlife	<u>NO</u>	
Intrusion by humans	<u>NO</u>	
Accumulation of trash	<u>NO</u>	

Additional Comments:
Water in the pond has mainly come thru the storms this winter -

LMNT 4.4

Monthly Repository Surveillance Checklist

Monticello LTSM Representative JOE SLADE *[Signature]* Date 4-4-2005

Meteorological Data for the period beginning see weather log ending 0

Average wind speed _____ Prevailing wind direction _____
 Average temperature _____ High Temperature _____ Low Temperature _____
 Current barometric pressure _____
 Total precipitation _____ Inches of Precipitation in last 24 hours _____

Inspection Item	Acceptable (Yes/No)	Comments and Recommendations
<u>Condition of:</u>		
Fence	<u>yes</u>	
Roads	<u>yes</u>	
Signs	<u>yes</u>	
Site Marker	<u>yes</u>	
Drainage ditches	<u>yes</u>	
Manholes	<u>yes</u>	
Settlement Plates	<u>yes</u>	
Vegetation	<u>yes</u>	
<u>Evidence of erosion of:</u>		
Top of Repository	<u>NO</u>	
Repository Sideslopes	<u>NO</u>	
Ditches	<u>NO</u>	
Surrounding area	<u>NO</u>	
<u>Evidence of:</u>		
Vandalism	<u>NO</u>	
Intrusion by wildlife	<u>NO</u>	
Burrowing Animal Damage	<u>NO</u>	
Intrusion by humans	<u>NO</u>	
Accumulation of trash	<u>NO</u>	

Additional Comments

* weather is still mixed - snow/RAIN - we have a snow cover then it will a few days later Rain -
 * Liner samples were disposed of - Farley P. helped with this task.
 * Deer gates were Replaced on the Repos with Chain Link gates and were locked with the LTSM Key -

[Signature]

Monthly Pond 4 Surveillance Checklist

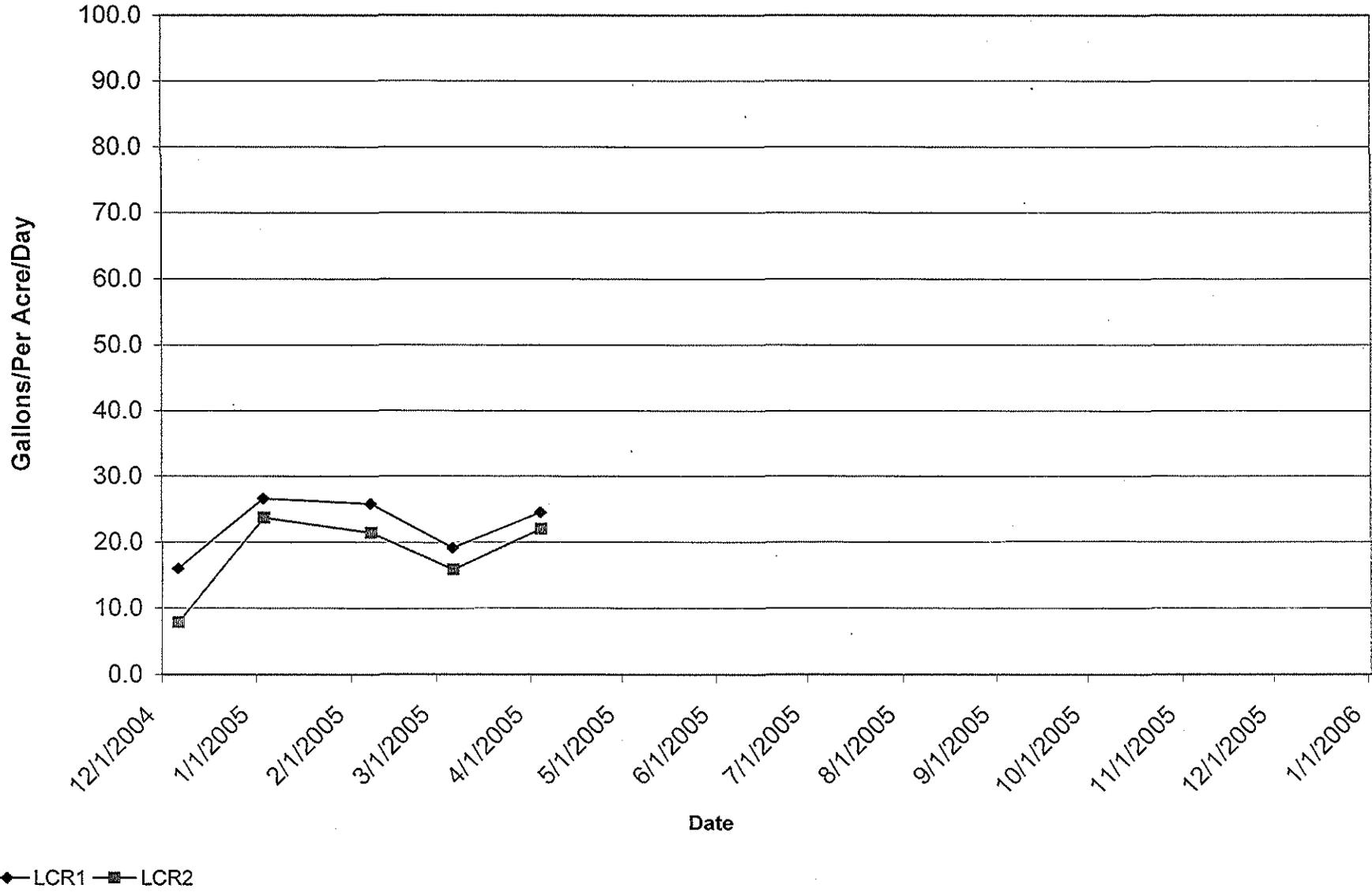
Monticello LTSM Representative JOE SLADE Date 4-4-2005

Level of Water in Pond 4 approx 2ft.

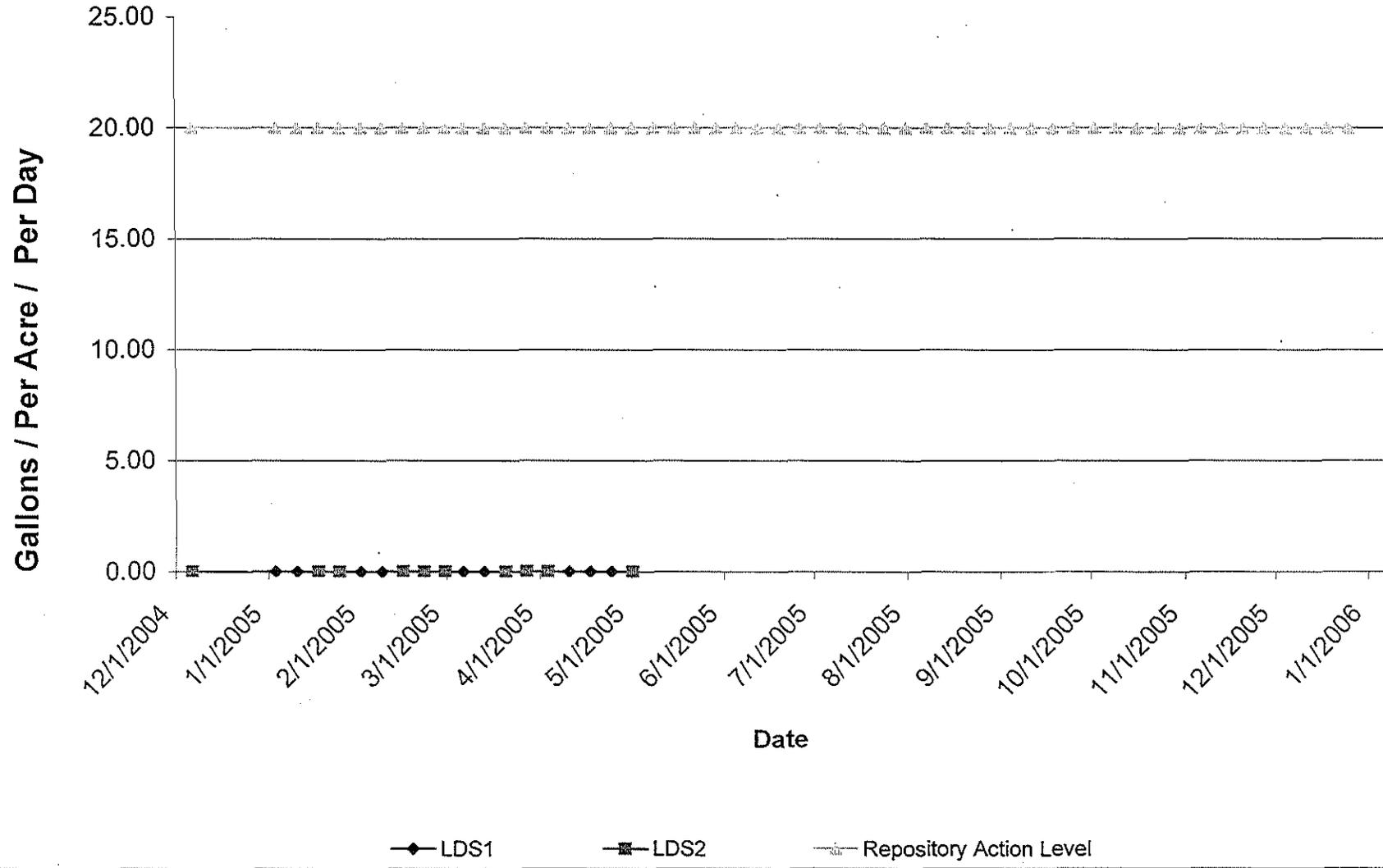
Inspection Item	Acceptable (Yes/No)	Comments & Recommendation
<u>Condition of:</u>		
Fence	<u>yes</u>	
Roads	<u>yes</u>	
Signs	<u>yes</u>	
Visible Piping	<u>yes</u>	
Visible Liner	<u>yes</u>	
Life Saver Station	<u>yes</u>	
<u>Evidence of erosion of:</u>		
Top of Pond 4 Berm	<u>NO</u>	
Pond 4 Sideslopes	<u>NO</u>	
Ditches	<u>NO</u>	
Surrounding area	<u>NO</u>	
Seepage from Pond 4	<u>NO</u>	
Overtopping of Pond 4		
<u>Evidence of:</u>		
Vandalism	<u>NO</u>	
Intrusion by wildlife	<u>NO</u>	
Intrusion by humans	<u>NO</u>	
Accumulation of trash	<u>NO</u>	

Additional Comments
* water is accumulating in the Pond from the Rain/snow that we keep getting -

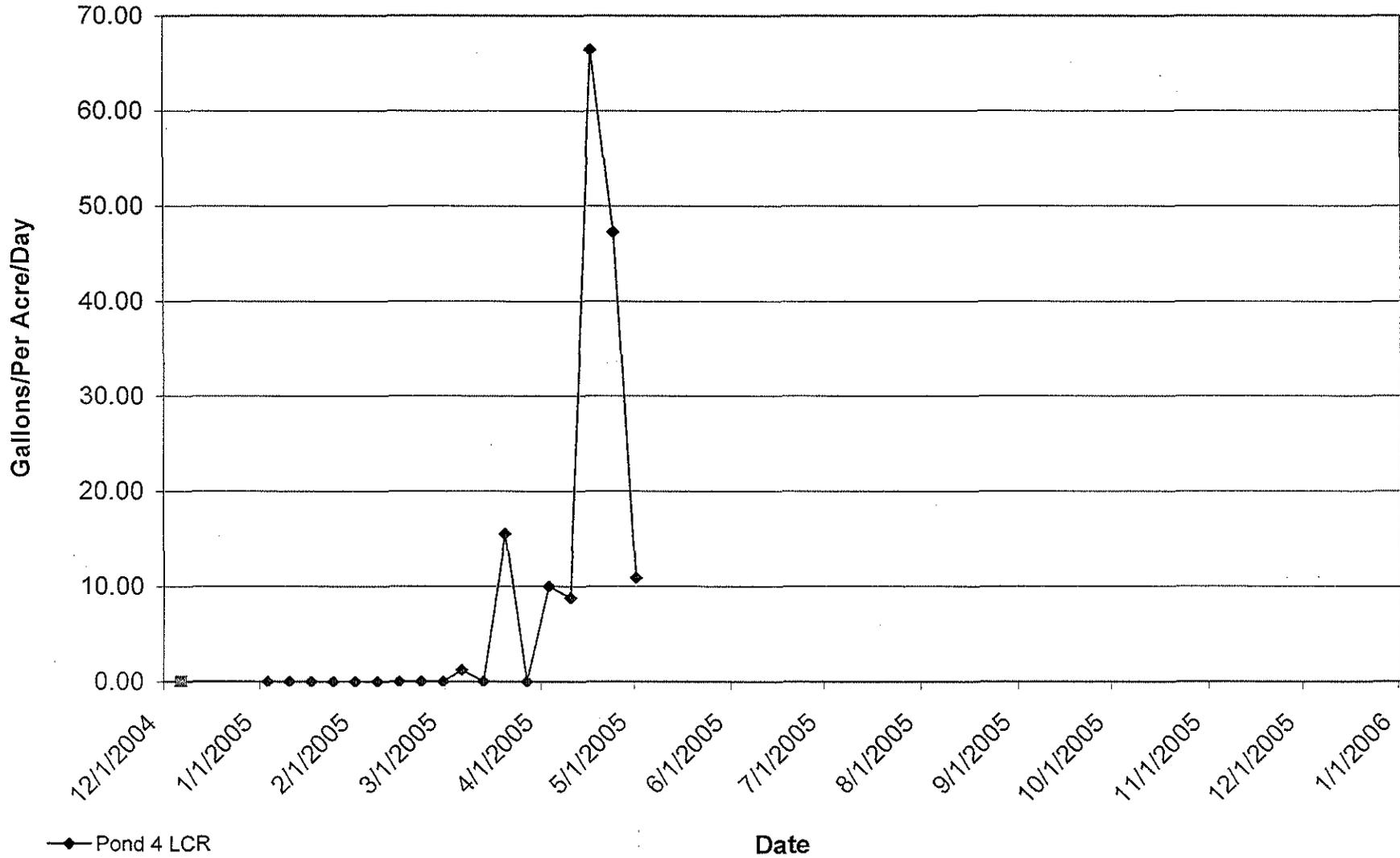
Repository Leachate Collection Removal (LCR) Data 2005



Repository Leak Detection System (LDS) Data 2005

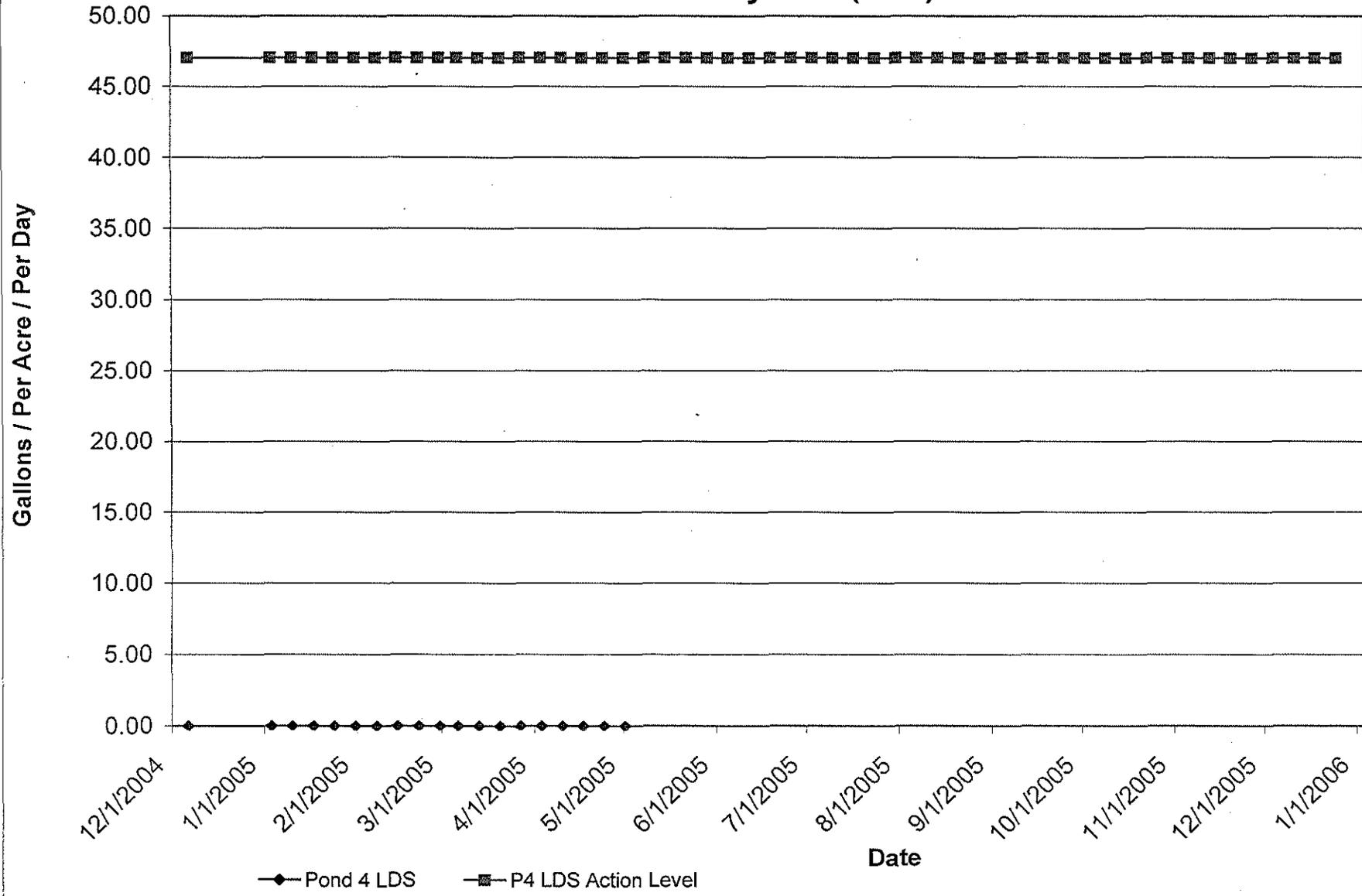


Pond 4 Leachate Collection Removal (LCR) Data 2005



Action Level 2000

Pond 4 Leak Detection System (LDS) 2005



Total Gallons Pumped from LCR1 as Measured by Flowmeter Monthly Basis

Month Begin	Total for Month	Average Per Day	Gallons Per Acre Per Day	DA YS	Comments
12/6/2004	5587	159.6	16.0	35	
1/3/2005	9324	266.4	26.6	35	
2/7/2005	7230	258.2	25.8	28	
3/6/2005	5370	191.8	19.2	28	
4/4/2005	6891	246.1	24.6	28	
5/2/2005		0.0	0.0	28	
6/6/2005		0.0	0.0	35	
7/4/2005		0.0	0.0	28	
8/1/2005		0.0	0.0	28	
9/5/2005		0.0	0.0	35	
10/3/2005		0.0	0.0	28	
11/7/2005		0.0	0.0	28	
12/5/2005		0.0	0.0	28	
1/2/2006		0.0	0.0	28	
Total	28815				

Pond4 LDS

Weekly Basis

Week Begin	Level Measure	Gallons Per Day	Level Measurement	Feet Above
12/27/2004	1.47	0.00	6939.80	1.80
1/3/2005	0.33	0.00	6938.10	0.10
1/10/2005	0.36	0.00	6938.10	0.10
1/17/2005	0.34	0.00	6938.10	0.10
1/24/2005	0.33	0.00	6938.10	0.10
1/31/2005	0.34	0.00	6938.10	0.10
2/7/2005	0.35	0.00	6938.10	0.10
2/14/2005	1.05	0.00	6941.20	3.20
2/21/2005	1.06	0.00	6941.44	3.44
2/28/2005	1.05	0.00	6941.45	3.45
3/6/2005	1.06	0.00	6941.40	3.40
3/13/2005	1.09	0.00	6941.40	3.40
3/20/2005	1.07	0.00	6941.30	3.30
3/27/2005	1.11	0.00	6941.50	3.50
4/3/2005	1.12	0.00	6941.40	3.40
4/10/2005	1.17	0.00	6941.40	3.40
4/17/2005	1.16	0.00	6941.20	3.20
4/24/2005	1.17	0.00	6941.10	3.10
5/1/2005	1.16	0.00	6941.10	3.10
5/8/2005	0.00	0.00	0.00	-6938.00
5/15/2005	0.00	0.00	0.00	-6938.00
5/22/2005	0.00	0.00	0.00	-6938.00
5/29/2005	0.00	0.00	0.00	-6938.00
6/5/2005	0.00	0.00	0.00	-6938.00
6/12/2005	0.00	0.00	0.00	-6938.00
6/19/2005	0.00	0.00	0.00	-6938.00
6/26/2005	0.00	0.00	0.00	-6938.00
7/3/2005	0.00	0.00	0.00	-6938.00
7/10/2005	0.00	0.00	0.00	-6938.00
7/17/2005	0.00	0.00	0.00	-6938.00
7/24/2005	0.00	0.00	0.00	-6938.00
7/31/2005	0.00	0.00	0.00	-6938.00
8/7/2005	0.00	0.00	0.00	-6938.00
8/14/2005	0.00	0.00	0.00	-6938.00
8/21/2005	0.00	0.00	0.00	-6938.00
8/28/2005	0.00	0.00	0.00	-6938.00
9/4/2005	0.00	0.00	0.00	-6938.00
9/11/2005	0.00	0.00	0.00	-6938.00
9/18/2005	0.00	0.00	0.00	-6938.00
9/25/2005	0.00	0.00	0.00	-6938.00
10/2/2005	0.00	0.00	0.00	-6938.00
10/9/2005	0.00	0.00	0.00	-6938.00
10/16/2005	0.00	0.00	0.00	-6938.00
10/23/2005	0.00	0.00	0.00	-6938.00
10/30/2005	0.00	0.00	0.00	-6938.00
11/6/2005	0.00	0.00	0.00	-6938.00
11/13/2005	0.00	0.00	0.00	-6938.00
11/20/2005	0.00	0.00	0.00	-6938.00
11/27/2005	0.00	0.00	0.00	-6938.00
12/4/2005	0.00	0.00	0.00	-6938.00
12/11/2005	0.00	0.00	0.00	-6938.00
12/18/2005	0.00	0.00	0.00	-6938.00
12/25/2005	0.00	0.00	0.00	-6938.00
1/1/2006	0.00	0.00	0.00	-6938.00

Pond 4 Evaporation Pond Elevation

Weekly Basis

Week Begin	Level Measure	Gallons Per Day	Level Measurement	Feet Above
12/27/2004	1.47	0.00	6939.80	1.80
1/3/2005	0.33	0.00	6938.10	0.10
1/10/2005	0.36	0.00	6938.10	0.10
1/17/2005	0.34	0.00	6938.10	0.10
1/24/2005	0.33	0.00	6938.10	0.10
1/31/2005	0.34	0.00	6938.10	0.10
2/7/2005	0.35	0.00	6938.10	0.10
2/14/2005	1.05	0.00	6941.20	3.20
2/21/2005	1.06	0.00	6941.44	3.44
2/28/2005	1.05	0.00	6941.45	3.45
3/6/2005	1.06	0.00	6941.40	3.40
3/13/2005	1.09	0.00	6941.40	3.40
3/20/2005	1.07	0.00	6941.30	3.30
3/27/2005	1.11	0.00	6941.50	3.50
4/3/2005	1.12	0.00	6941.40	3.40
4/10/2005	1.17	0.00	6941.40	3.40
4/17/2005	1.16	0.00	6941.20	3.20
4/24/2005	1.17	0.00	6941.10	3.10
5/1/2005	1.16	0.00	6941.10	3.10
5/8/2005	0.00	0.00	0.00	-6938.00
5/15/2005	0.00	0.00	0.00	-6938.00
5/22/2005	0.00	0.00	0.00	-6938.00
5/29/2005	0.00	0.00	0.00	-6938.00
6/5/2005	0.00	0.00	0.00	-6938.00
6/12/2005	0.00	0.00	0.00	-6938.00
6/19/2005	0.00	0.00	0.00	-6938.00
6/26/2005	0.00	0.00	0.00	-6938.00
7/3/2005	0.00	0.00	0.00	-6938.00
7/10/2005	0.00	0.00	0.00	-6938.00
7/17/2005	0.00	0.00	0.00	-6938.00
7/24/2005	0.00	0.00	0.00	-6938.00
7/31/2005	0.00	0.00	0.00	-6938.00
8/7/2005	0.00	0.00	0.00	-6938.00
8/14/2005	0.00	0.00	0.00	-6938.00
8/21/2005	0.00	0.00	0.00	-6938.00
8/28/2005	0.00	0.00	0.00	-6938.00
9/4/2005	0.00	0.00	0.00	-6938.00
9/11/2005	0.00	0.00	0.00	-6938.00
9/18/2005	0.00	0.00	0.00	-6938.00
9/25/2005	0.00	0.00	0.00	-6938.00
10/2/2005	0.00	0.00	0.00	-6938.00
10/9/2005	0.00	0.00	0.00	-6938.00
10/16/2005	0.00	0.00	0.00	-6938.00
10/23/2005	0.00	0.00	0.00	-6938.00
10/30/2005	0.00	0.00	0.00	-6938.00
11/6/2005	0.00	0.00	0.00	-6938.00
11/13/2005	0.00	0.00	0.00	-6938.00
11/20/2005	0.00	0.00	0.00	-6938.00
11/27/2005	0.00	0.00	0.00	-6938.00
12/4/2005	0.00	0.00	0.00	-6938.00
12/11/2005	0.00	0.00	0.00	-6938.00
12/18/2005	0.00	0.00	0.00	-6938.00
12/25/2005	0.00	0.00	0.00	-6938.00
1/1/2006	0.00	0.00	0.00	-6938.00

Total Gallons Pumped from LCR2 as Measured by Flowmeter Monthly Basis

Month Begin	Total for Month	Average Per Day	Gallons Per Acre Per Day	DA YS	Comments
12/6/2004	2757	78.8	7.9	35	
1/3/2005	8281	236.6	23.7	35	
2/7/2005	5989	213.9	21.4	28	
3/6/2005	4445	158.8	15.9	28	
4/4/2005	6200	221.4	22.1	28	
5/2/2005		0.0	0.0	28	
6/6/2005		0.0	0.0	35	
7/4/2005		0.0	0.0	28	
8/1/2005		0.0	0.0	28	
9/5/2005		0.0	0.0	35	
10/3/2005		0.0	0.0	28	
11/7/2005		0.0	0.0	28	
12/5/2005		0.0	0.0	28	
1/2/2006		0.0	0.0	28	
Total	24915				

Total Gallons Pumped from Pond 4 LDS Sump

Month Begin	Total for Month	Average Per Day	Gallons Per Acre Per Day	DA YS	Comments
12/6/2004	0	0.0	0.0	35	Level is monitored
1/3/2005	0	0.0	0.0	35	Level is monitored
2/7/2005	0	0.0	0.0	28	Level is monitored
3/6/2005	0	0.0	0.0	28	Level is monitored
4/4/2005	0	0.0	0.0	28	
5/2/2005		0.0	0.0	28	
6/6/2005		0.0	0.0	35	
7/4/2005		0.0	0.0	28	
8/1/2005		0.0	0.0	28	
9/5/2005		0.0	0.0	35	
10/3/2005		0.0	0.0	28	
11/7/2005		0.0	0.0	28	
12/5/2005		0.0	0.0	28	
1/2/2006		0.0	0.0	28	
Total	0				

Total Gallons Pumped from Pond4 LCR as Measured by Flowmeter Weekly Basis

Week Begin	Total for Week	Average Per Day	Gallons Per Acre Per Day	Number of Days	Comments
12/6/2004	0				
1/3/2005	0				
1/10/2005	0				
1/17/2005	0				
1/24/2005	0				
1/31/2005	0				
2/7/2005	0				
2/14/2005	0				
2/21/2005	0				
2/28/2005	0				
3/6/2005	0				
3/13/2005	0				
3/20/2005	4914	36.4	15.5	135	
3/27/2005	0				
4/3/2005	329	23.5	10.0	14	
4/10/2005	145	20.7	8.8	7	
4/17/2005	1092	156.0	66.4	7	
4/24/2005	778	111.1	47.3	7	
5/1/2005	179	25.6	10.9	7	
5/8/2005					
5/15/2005					
5/22/2005					
5/29/2005					
6/5/2005					
6/12/2005					
6/19/2005					
6/26/2005					
7/3/2005					
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