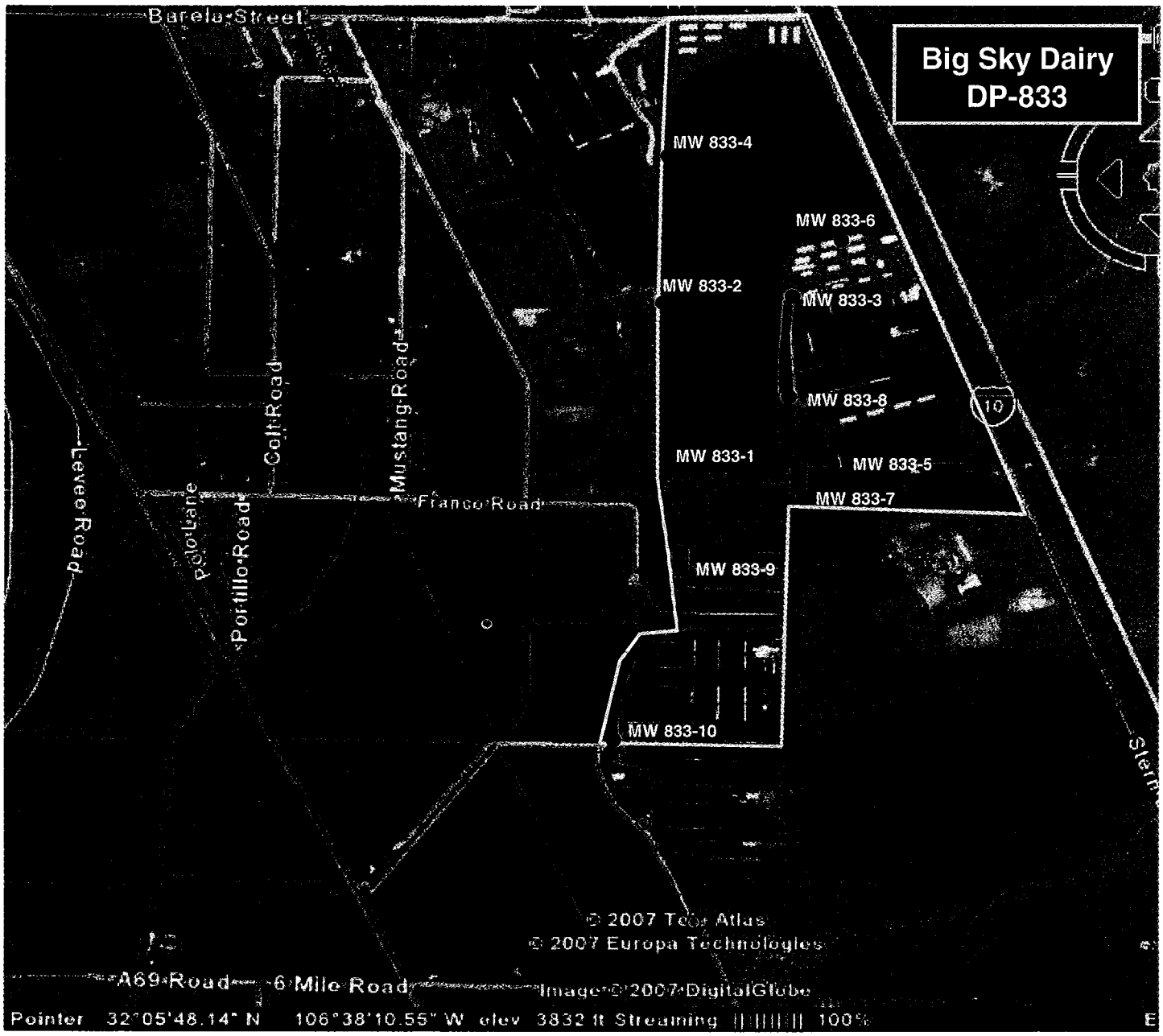
DP-833



- Big Sky Dairy Existing Monitoring Wells
- Big Sky Proposed Well Locations
- Sunset Dairy Existing Monitoring Wells

The northern most new well is downgradient of the application area.
All other new wells are downgradient of runoff or wastewater lagoons.

(Not to Scale)

9/18/2007

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PP833

GROUND WATER

NOV

BUREAU

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 083109051
Sample Collection Date: 08-31-09
Report Date: 10-29-09

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Well Number/ Lagoon	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)
083109051-1	08/31/09	833-01	4	34.87	37.30	15.3	ND	999	2894
083109051-2	08/31/09	833-02	4	30.15	53.75	12.4	ND	660	2170
083109051-3	08/31/09	833-03	4	60.77	66.30	8.9	ND	1760	4216
083109051-4	08/31/09	833-04	4	38.28	57.50	16.1	ND	630	1986
083109051-5	08/31/09	833-05	4	58.96	76.20	9.0	ND	1220	3152
083109051-6	08/31/09	833-06	4	71.16	88.20	25.1	1.96	790	2708
083109051-7	08/31/09	833-07	4	56.70	75.60	74	ND	1180	3978
083109051-8	08/31/09	833-08	4	56.89	75.00	63	ND	1020	3576
083109051-9	08/31/09	833-09	4	22.65	40.45	6.6	ND	870	3178
083109051-10	08/31/09	833-10	4	16.20	36.50	4.7	ND	750	2548
083109051-11	08/31/09	Lagoon	4	N/A	N/A	88	204.4	790	4260

ND-Not Detected
NA: Not Applicable

Additional Information:

Parameter:	**Method Ref:**	**Date Analyzed:**	**Analyst:**
Nitrate (as N)	SW 9056	09-03-09	Joseph Limon
Total Kjeldahl Nitrogen (as N)	SM 4500-N org B	09-14-09	Joseph Limon
Chloride	SM 4500-Cl-B	09-21-09	Joseph Limon
Total dissolved Solids	SM 2540 C	09-07-09	Joseph Limon

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GROUND WATER

DP-833

JUL 1 6 2009

BUREAU

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 060109002
Sample Collection Date: 06-01-09
Report Date: 07-06-09

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Well Number/ Lagoon	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)
060109002-1	06-01-09	Lagoon	4			36.3	336	1100	3180
060109002-2	06-01-09	833-05	4	59.00	76.20	3.43	ND	1230	3026
060109002-3	06-01-09	833-07	4	56.76	75.60	12.4	8.68	1180	3964
060109002-4	06-01-09	833-09	4	22.70	40.45	18.1	1.12	880	3164
060109002-5	06-01-09	833-10	4	16.24	36.50	7.1	ND	650	2458
060109002-6	06-01-09	833-08	4	56.94	75.00	41.4	ND	1000	3492
060109002-7	06-01-09	833-06	4	71.23	88.20	106	ND	680	2280
060109002-8	06-01-09	833-03	4	60.85	66.30	90.4	ND	1620	3060
060109002-9	06-01-09	833-04	4	38.32	57.50	3.03	ND	580	1968
060109002-10	06-01-09	833-02	4	30.21	53.75	<0.5	ND	650	3358
060109002-11	06-01-09	833-01	4	34.96	37.30	8.6	ND	1030	2382

ND-Not Detected
NA: Not Applicable

Additional Information:

Parameter:	**Method Ref:**	**Date Analyzed:**	**Analyst:**
Nitrate (as N)	SW 9056	06-04-09	Alamo
Total Kjeldahl Nitrogen (as N)	SM 4500-N org B	06-22-09	Joseph Limon
Chloride	SM 4500-Cl-B	06-08-09	Joseph Limon
Total dissolved Solids	SM 2540 C	06-05-09	Joseph Limon

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DP-833

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 030209002
Sample Collection Date: 03-02-09
Report Date: 03-30-09

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Well Number/ Lagoon	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)
030209002-1	03-02-09	833-01	4	34.90	37.30	37.1	ND	1070	3750
030209002-2	03-02-09	833-02	4	30.10	53.75	3.54	13.44	585	1978
030209002-3	03-02-09	833-03	4	60.70	66.30	21.2	ND	1580	3970
030209002-4	03-02-09	833-04	4	38.30	57.50	14.6	ND	600	1884
030209002-5	03-02-09	833-06	4	59.18	76.20	66.4	ND	610	2160
030209002-6	03-02-09	833-08	4	71.28	88.20	121	ND	700	2038

ND-Not Detected
NA: Not Applicable

Additional Information:

Parameter:	**Method Ref:**	**Date Analyzed:**	**Analyst:**
Nitrate (as N)	SW9056	03-05-09	Alamo Labs
Total Kjeldahl Nitrogen (as N)	SM4500N org B	03-20-09	Maria Petrikat
Chloride	SM4500Cl B	03-10-09	Maria Petrikat
Total dissolved Solids	SM2540C	03-04-09	Maria Petrikat

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DP-833

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 030309004
Sample Collection Date: 03-03-09
Report Date: 03-31-09

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Well Number/ Lagoon	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)
030309004-1	03-03-09	Lagoon	4	34.90	37.30	4.708	411.6	812	5300
030309004-2	03-03-09	833-05	4	30.10	53.75	11	ND	1255	3134
030309004-3	03-03-09	833-07	4	60.70	66.30	33.2	ND	1380	3866
030309004-4	03-03-09	833-09	4	38.30	57.50	7.07	ND	825	3202
030309004-5	03-03-09	833-10	4	59.18	76.20	2.43	ND	855	2954

ND-Not Detected
NA: Not Applicable

Additional Information:

Parameter:	**Method Ref:**	**Date Analyzed:**	**Analyst:**
Nitrate (as N)	E353.2	03-09-09	Alamo
Total Kjeldahl Nitrogen (as N)	EPA 351.3	03-20-09	Maria Petrikat
Chloride	EPA 325.2	03-10-09	Maria Petrikat
Total dissolved Solids	EPA 160.1	03-04-09	Maria Petrikat

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DP-833

Archana, Inc
Environmental and Geotechnical Engineering Consultants

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 120108001
Sample Collection Date: 12-01-08
Report Date: 12-23-08

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Well Number/ Lagoon	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)	
120108001-1	12-01-08	833-01	4	34.90	37.30	37	ND	1045	3152	LA
120108001-2	12-01-08	833-02	4	30.10	53.75	15	ND	605	2194	LA
120108001-3	12-01-08	833-03	4	60.70	66.30	7.7	ND	1789	4098	LA
120108001-4	12-01-08	833-04	4	38.30	57.50	29	ND	1015	3132	NG
120108001-5	12-01-08	833-05	4	59.18	76.20	11	ND	1305	3222	WW
120108001-6	12-01-08	833-06	4	71.28	88.20	30	ND	620	2060	LA
120108001-7	12-01-08	833-07	4	56.85	75.60	115	ND	1205	4132	RCS
120108001-8	12-01-08	833-08	4	56.90	75.00	77	ND	1040	3570	RCS
120108001-9	12-01-08	833-09	4	22.90	40.45	5.4	ND	750	2902	RCS
120108001-10	12-01-08	833-10	4	16.40	36.50	3.5	ND	760	2798	Combo
120108001-11	12-01-08	Lagoon	N/A	N/A	N/A	ND	311	810	2700	

ND-Not Detected
NA: Not Applicable

Additional Information:

Parameter:	**Method Ref:**	**Date Analyzed:**	**Analyst:**
Nitrate (as N)	E353.2	12-18-08	Energy
Total Kjeldahl Nitrogen (as N)	EPA 351.3	12-17-08	Derrick Mott
Chloride	EPA 325.2	12-08-08	Maria
Total dissolved Solids	EPA 160.1	12-02-08	Maria

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Archana, Inc
Environmental and Geotechnical Engineering Consultants

DP-833

GROUND WATER

OCT 27 2008

BUREAU

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 092308049
Sample Collection Date: 09-23-08
Report Date: 10-21-08

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Well Number/ Lagoon	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)
092308049-1	09-23-08	833-03	4	60.70	60.70	9.57	ND	1530	4080
092308049-2	09-23-08	Lagoon	N/A	N/A	N/A	0.34	165.2	915	2600
092308049-3	09-23-08	833-01	4	34.60	37.31	22.0	ND	1102	3190
092308049-4	09-23-08	833-02	4	29.90	53.75	77.5	3.92	806	2570
092308049-5	09-23-08	833-04	4	38.50	57.50	20.5	ND	702	2280
092308049-6	09-23-08	833-06	4	70.93	88.20	55.0	ND	760	2942
092308049-7	09-23-08	833-08	4	56.55	75.00	118.9	ND	948	3252
092308049-8	09-23-08	833-05	4	61.10	76.20	28.6	44.8	1328	3634
092308049-9	09-23-08	833-07	4	56.55	75.60	21.6	ND	1046	4036
092308049-10	09-23-08	833-09	4	22.22	40.44	22.6	15.96	658	2774
092308049-11	09-23-08	833-10	4	17.00	36.50	ND	39.2	614	614 ?

ND-Not Detected

Additional Information:

Parameter:	Method Ref:	Date Analyzed:	Analyst:
Nitrate (as N)	SM – 4500-NO3 E	10-14-08	Derrick Mott
Total Kjeldahl Nitrogen (as N)	EPA 351.3	10-06-08	Ivy A.
Chloride	EPA 325.2	10-01-08	Ivy A.
Total dissolved Solids	EPA 160.1	10-02-08	Derrick Mott

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DP-833

Archana, Inc
Environmental and Geotechnical Engineering Consultants

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 062108027
Sample Collection Date: 06-21-08
Report Date: 07-14-08

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Well Number/ Lagoon	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)
062108027-1	06-21-08	833-1	4	36.1	37.0	31.7	33.6	856	2860
062108027-2	06-21-08	833-2	4	32.0	53.5	19.3	ND	500	1320
062108027-3	06-21-08	833-3	4	61.8	62.9	16.5	114.8	774	4280
062108027-4	06-21-08	833-4	4	39.8	55.5	16.4	ND	862	1810
062108027-5	06-21-08	833-5	4	63.8	74.1	13.8	ND	1048	2860
062108027-6	06-21-08	833-6	4	72.9	85.9	49.6	ND	554	2040
062108027-7	06-21-08	833-7	4	58.0	74.3	37.01	ND	1268	3592
062108027-8	06-21-08	833-8	4	58.1	74.6	129.4	50.8	935	2800
062108027-9	06-21-08	833-9	4	24.9	40.3	16.27	ND	796	2466
062108027-10	06-21-08	833-10	4	19.8	38.3	1.57	ND	572	2302
062108027-11	06-21-08	Lagoon	N/A	N/A	N/A	0.112	420	158	3100

ND-Not Detected

Additional Information:

Parameter:	**Method Ref:**	**Date Analyzed:**	**Analyst:**
Nitrate (as N)	SM – 4500-NO3 E	06-25-08	Derrick Mott
Total Kjeldahl Nitrogen (as N)	EPA 351.3	06-24-08	Deepthi M
Chloride	EPA 325.2	06-23-08	Ivy A.
Total dissolved Solids	EPA 160.1	06-23-08	Deepthi M

Derrick Mott
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Archana, Inc
Environmental and Geotechnical Engineering Consultants

DP-833

GROUND WATER

SEP 2 4 2007

BUREAU

Client Information:
Big Sky Dairy, Inc
P. O. Box 167
Mesquite, New Mexico 88048
ATTN: Mr. Ed De Ruyter
Laboratory Project No: 090107001
Sample Collection Date: 09-01-07
Report Date: 09-17-07

Report of Monitoring of Wells, Lagoons, and Analytical Record

Laboratory ID	Sample Date	Location	Well dia. (In.)	Depth to water (Ft.)	Total depth (Ft.)	Nitrate (as N) (mg/l)	TKN (as N) (mg/l)	Chloride (mg/l)	TDS (mg/l)
090107001-1	09-01-07	Well # 1	4	35.1	37.0	12.6	2.52	958	2408
090107001-2	09-01-07	Well # 2	4	30.0	53.5	46.6	1.96	926	3688
090107001-3	09-01-07	Well # 3	4	60.7	62.9	4.8	1.96	2136	4728
090107001-4	09-01-07	Well # 4	4	38.0	55.5	27	1.68	1178	3812
090107001-5	09-01-07	**Lagoon**	N/A	N/A	N/A	24	**509**	1980	5692

Additional Information:

Parameter:	**Method Ref:**	**Date Analyzed:**	**Analyst:**
Nitrate (as N)	EPA 353.2	09-03-07	Elizabeth Gonzales/Susan Rivera
Total Kjeldahl Nitrogen (as N)	EPA 351.3	09-03-07	Elizabeth Gonzales/Susana Rivera
Chloride	EPA 325.2	09-04-07	Monica Gomez
Total dissolved Solids	EPA 160.1	09-03-07	Elizabeth Gonzales/Susana Rivera

Pratap G. Reddy, Ph.D.
Archana, Inc.

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