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7
8 BEFORE THE STATE ENVIRONMENTAL COMMISSION
9 STATE OF NEVADA

10
11 *In re:*
12 Appeal of Permit NV0023027

13
14 **INTERVENOR'S ANSWERING BRIEF**

15 COMES NOW, Intervenor, Rockview Farms, Inc., and hereby files its Answering Brief in
16 response to the Appellants and ACE's Opening Brief.¹

17
18 **INTRODUCTION**

19 This appeal concerns the Nevada Division of Environmental Protection's ("NDEP")
20 decision to renew Rockview Farms' water pollution control permit (NV0023027) on October 25,
21 2007. Appellants' Opening Brief was filed with the Commission on June 12, 2009 in anticipation
22 of a hearing scheduled on July 9 and 10, 2009. Appellants and ACE have failed to identify any
23 material error in NDEP's decision to renew the permit. Accordingly, the Commission should
24 affirm NDEP's decision, and reject the Appellants' appeal.
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28 ¹ Rockview Farms hereby incorporates NDEP's response to the Opening Brief.

1 **FACTS**

2 Rockview Farms owns and operates the Ponderosa Dairy in Amargosa Valley, Nye
3 County, Nevada.² Because Ponderosa Dairy is a concentrated animal feeding operation
4 (“CAFO”) – as defined by NAC 445A.228—and applies its process wastewater³ (“green water”) to
5 865 acres of cropland, it is a point source from which pollutants are or may be discharged and
6 must obtain a discharge permit from NDEP as required by NRS 445A.465. Rockview Farms’
7 permit was originally issued on June 16, 2000.⁴

9 Nevada’s water pollution control law was enacted in 1973 in response to the federal water
10 pollution control law (Clean Water Act). *33 U.S.C. §1251 et seq.* Nevada law requires any
11 person seeking to discharge any pollutant from a point source into waters of the State to obtain
12 authorization from NDEP. *NRS 445A.465.* Contrary to the Appellants and ACE’s assertions,
13 however, Nevada law does not require the Ponderosa Dairy’s green water and manure solids to
14 meet secondary treatment standards. Nevada law requires a CAFO to ensure appropriate
15 agricultural use of the nutrients in the green water and manure solids in accordance with an
16 approved water pollution control discharge permit.

17
18 The permit authorizes Rockview Farms to land apply green water from the Ponderosa
19 Dairy in an amount that is controlled by the green water’s measured nitrogen concentration and
20 the annual nitrogen uptake rate of the crops grown on the dairy’s land application fields. In other
21 words, Rockview Farms is authorized to discharge only as much nitrogen as will be taken up by
22 the crops annually. The nitrogen uptake rate for Ponderosa Dairy’s crops is calculated using the

24 ² The Appellants and ACE incorrectly state that the Beverly Hills Dairy is controlled by the same entity as the
25 Ponderosa Dairy. The AK Coral Kay Trust owns the Beverly Hills Dairy.

26 ³ Water directly or indirectly used in the operation of a CAFO for: spillage or overflow from animal watering
27 systems; washing, cleaning, or flushing pens, barns, manure pits, or other facilities; direct contact swimming,
28 washing, or spray cooling animals; or dust control. The term includes any water which comes into contact with
raw materials, products, or byproducts including manure, litter, feed, milk, eggs, or bedding. 40 C.F.R. §
412.2(d).

⁴ See, NDEP Fact Sheet, p. 1.

1 crop uptake rates determined by the United States Department of Agriculture, Natural Resources
2 Conservation Service (NRCS). The nitrogen concentration is based on the measured nitrogen
3 concentration of Ponderosa Dairy's green water. The nitrogen application rates are calculated
4 based on agronomic rates using nutrient recommendations from NRCS Conservation Practice
5 Standard Code 590, Nutrient Management. Accordingly, by using NRCS crop uptake rates for
6 the Ponderosa Dairy's crops and the measured nitrogen concentration of the Dairy's green water,
7 the amount of green water that may be applied to the fields as fertilizer is calculated. The permit
8 also authorizes Rockview Farms to compost the manure solids that are collected from green water
9 separators, corrals, and evaporation ponds. NDEP complied with all applicable laws and
10 regulations in reviewing Rockview Farms' application and in renewing the permit. The permit
11 requires Rockview Farms to operate in compliance with all applicable State and federal
12 requirements.
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15 In addition, the permit is conditioned on accurate monitoring, sampling, and reporting.
16 Under the terms of the permit, Rockview Farms must take samples of the manure from the
17 separators and the corrals, the green water, the finished compost, any storm related discharges,
18 the soil from all fields before and after green water is applied, and from the dairy's six irrigation
19 wells. Table I.1 of the permit lists and describes in detail each parameter that must be measured,
20 recorded, and reported to NDEP. Rockview Farms is also required to submit a quarterly
21 Discharge Monitoring Report in addition to more specific reporting requirements listed on Table
22 I.1. The permit also required groundwater monitoring wells at all non-synthetically lined
23 lagoons.⁵ Lastly, Rockview Farms recently volunteered to initiate a groundwater monitoring plan
24 in which it will construct and maintain three monitoring wells downgradient from the Ponderosa
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27 ⁵ When the permit was issued only one monitoring well (MW-1) was constructed because only one lagoon was not
28 synthetically lined. All lagoons have been synthetically lined, and thus, under the permit, no further monitoring
was required.

1 Dairy's lagoons and one upgradient from the Dairy. *A true and correct copy of the Draft*
2 *Monitoring Plan is attached hereto as Exhibit 1.* Rockview Farms submitted the draft
3 groundwater monitoring plan to NDEP for approval on June 19, 2009.

4 In addition to nutrient management and groundwater monitoring, the permit also contains
5 requirements for design, construction, operation, and maintenance of the dairy's facilities. The
6 production area must be properly designed, constructed, operated, and maintained to contain
7 manure, green water, direct precipitation, and the runoff from a 25-year, 24-hour storm event⁶ or
8 a chronic rainfall event⁷ in order to meet the Nevada and NPDES guidelines for the potential
9 discharge to surface water.⁸

10
11 John Bosta and Antonio Guerra Martinez were the only two parties who appealed
12 Rockview Farms' permit. In their appeals, Bosta and Martinez state that (1) NDEP's decision to
13 renew the permit and its assurance that waters of the State will not be degraded are "colorable"⁹
14 or "bias", (2) the information provided and used to make the decision was insufficient because
15 facts were withheld or denied, and (3) the June 12, 2007 public hearing on the permit violated the
16 Nevada Open Meeting Law (NRS Ch. 241). Despite Appellants' allegations, however, the record
17 shows that NDEP complied with all procedural and substantive requirements in renewing
18 Rockview Farms' permit. Accordingly, the Commission should affirm NDEP's decision to
19 renew the permit.
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23 ⁶ A precipitation event with a probable recurrence interval of once in twenty-five years, as defined by the National
24 Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States" May, 1961, or
equivalent regional or State rainfall probability information developed from this source. (NDEP).

25 ⁷ A series of wet weather conditions that preclude reducing the volume of properly designed, constructed,
26 operated, and maintained waste storage or treatment facilities and that total a volume in excess of the 25-year,
24-hour storm event. (NDEP).

27 ⁸ During extreme storm events the Dairy may discharge to a dry wash that is potentially tributary to the ephemeral
Amargosa River.

28 ⁹ "Intended to deceive, counterfeit." Black's Law Dictionary (Bryan A. Garner ed., 7th ed., West (1999)).

1 ARGUMENT

2 **1. NDEP complied with all public notice requirements.**

3 Appellants claim that NDEP did not follow certain procedures in reviewing Rockview
4 Farms' application for a discharge permit. But the record shows that NDEP provided notice of
5 the application and the public hearing as required by NAC 445A.234(1) and NAC
6 445A.239(1)(d) and made available all documents as required by NAC 445A.237(1). Moreover,
7 NDEP made numerous permit documents available online and informed the Appellants that they
8 could request copies of all necessary documents. Further, the Appellants and ACE representative
9 Bill Barrackman obviously had notice of the hearing because they attended it. Accordingly, the
10 Appellants and ACE cannot reasonably assert that NDEP did not comply with the public notice
11 regulations and the Commission should conclude that NDEP did not violate any procedural
12 requirements in its permitting process and affirm NDEP's decision.
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15 **A. NDEP provided more public notice than is required by the regulations.**

16 NDEP complied with all notice requirements and in certain circumstances
17 provided greater notice than is required. Appellants and ACE have failed to offer any evidence to
18 support their claim that notice was not provided as required by NAC 445A.234(1).
19

20 **(1) Notice of Permit Application**

21 NDEP must publish notice of every complete application for a discharge
22 permit in a local newspaper or periodical and send it to a list of people who have indicated that
23 they want to be notified of NDEP's proposed actions. NAC 445A.234(1). Here, the record
24 shows that NDEP published the notice of proposed action for Rockview Farms' permit
25 application in the Las Vegas Review-Journal as required by NAC 445.234(1), and in the Pahrump
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1 Valley Times.¹⁰ Additionally, NDEP mailed the notice of proposed action to all persons listed on
2 NDEP's mailing list and to those who requested notice. Accordingly, the Appellants' assertion
3 that NDEP failed to comply with the notice requirements or that NDEP's permitting process is
4 somehow not designed to inform the general public is simply incorrect.

5
6 **(2) Notice of Public Hearing**

7 The Appellants also claim that NDEP failed to provide at least 30 days'
8 advance notice of the public hearing on Rockview Farms' application and did not provide notice
9 to those who requested the hearing. These claims are simply wrong. First, NDEP's notice of
10 public hearing was actually published on May 11, 2007 for the June 12, 2007 hearing.¹¹
11 Accordingly, NDEP complied with NAC 445A.239(1)(d) and NAC 445A.238(4); and thus,
12 Appellants' claims are clearly incorrect. Second, NDEP provided notice of the public hearing at
13 least as widely as it provided notice of the permit application. *See*, NAC 445A.239. Contrary to
14 Appellants' assertion, the regulations do not require NDEP to notify those persons who requested
15 the public hearing. NAC 445A.239 requires NDEP to provide notice of the public hearing to all
16 persons who received a copy of the notice or the fact sheet or to any person upon request.
17 Moreover, despite the claims that notice was inadequate both Appellants attended the public
18 hearing and were prepared to give their comments and ask questions about the permit. Based on
19 the foregoing, the Appellants have failed to establish that NDEP violated any notice requirements.
20 Accordingly, the Appellants' assertions should be rejected and the Commission should conclude
21 that NDEP complied with the notice requirements under NAC 445A.234(1).
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27 ¹⁰ See, Notice of Public Hearing dated May 16, 2007.

28 ¹¹ See, Notice of Decision NV0023027, response to Comment 43.10.

1 **B. NAC 445A.237(1) does not require that all application documents be held for**
2 **inspection in southern Nevada, and thus, the Appellants' claim is**
3 **unsupported and must be denied.**

4 NDEP must ensure that “any application, reporting or related forms, including the
5 draft permits,...or any public comment upon those forms...” are available to the public for review
6 and copying. NAC 445A.237(1). The Appellants cannot reasonably dispute that NDEP failed to
7 make Rockview Farms’ discharge permit application and related documents available for
8 inspection and copying in Carson City. Instead, Appellants interpret NAC 445A.237(1) as
9 requiring NDEP to maintain duplicate files at its northern and southern Nevada offices.
10 Notwithstanding the significant cost burden the Appellants’ interpretation would impose on
11 NDEP, such an interpretation is not consistent with the plain language of the regulation.
12 Additionally, because Appellants could have easily requested copies from NDEP, their
13 interpretation is unnecessary. Therefore, because NDEP made Rockview Farms’ application file
14 publicly available for inspection and copying, the Commission should conclude that NDEP
15 complied with the requirements of NAC 445A.237(1).
16

17 **C. NDEP approved Ponderosa Dairy’s NMP prior to renewing the permit.**

18 The Appellants contend that any procedure that allows post-permit approval
19 review of an NMP violates NAC 445A.233(1)(b)(1), NAC 445A.234(3), and *Waterkeeper*
20 *Alliance v. EPA*, 399 F.3d 486 (2005). To the extent Appellants assert that NDEP’s regulations
21 violate *Waterkeeper*, their arguments are not properly before the Commission in this appeal
22 because it concerns an appeal of an individual NPDES permit and not an attack on NDEP’s
23 regulatory framework. Therefore, the Commission does not have jurisdiction in this appeal to
24 reverse the permit based on the *Waterkeeper* decision.
25

26 More importantly, however, Appellants are simply wrong. Appellants assert that
27 NDEP violated NAC 445A.233(1)(b)(1) because it allowed post-permit approval of an NMP. But
28

1 the Appellants fail to mention that the Ponderosa Dairy was already operating under an approved
2 CNMP,¹² which was approved by NDEP on January 11, 2006 and updated annually. The current
3 CNMP was available to the public during the permit renewal process.¹³ Appellants seem
4 confused because the renewal permit allowed Rockview Farms to submit an updated NMP within
5 30 days after issuance of the permit.¹⁴ But the updated NMP was required only to include minor
6 changes to the documents as a result of the renewal (changes that could not appropriately be made
7 until after NDEP had decided to renew the permit). Neither NDEP regulations nor *Waterkeeper*
8 require such NMP updates to be made available to the public or approved prior to issuance of a
9 permit. The currently applicable NMP was available and could have been reviewed by
10 Appellants during the permitting process. As soon as the update was submitted, the updated
11 NMP was also publicly available. Based on the foregoing, Appellants' arguments as to NMP
12 availability should be dismissed.
13
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15 **2. Rockview Farms' Permit Complies with all state and federal requirements.**

16 Appellants claim that NDEP should have required more groundwater monitoring as a
17 condition of the permit, that the CNMP is inadequate, and that NDEP should require dairies to
18 treat green water and manure solids to domestic wastewater standards. As discussed below,
19 Appellants' arguments are misplaced because (1) groundwater monitoring under NAC
20 445A.250(1) is not the proper subject of this appeal and is moot in light of the monitoring plan
21 submitted by Rockview Farms, (2) Appellants' expert CNMP review is flawed and largely
22 irrelevant, and (3) the sewage definition issue is not subject to this appeal, does not affect
23 NDEP's regulation of CAFOs, and has been rejected by the Commission. Accordingly, the
24

25 ¹² A CNMP is required by NRCS when it provides financial assistance to CAFOs to implement conservation
26 practices. An NMP is required by state and federal CAFO regulations to ensure proper agricultural utilization of
27 green water and manure solids.

28 ¹³ NDEP Fact Sheet, p. 3.

¹⁴ NV0023027 at p. 10, I.A.34, Schedule of Compliance.

1 Commission should conclude that NDEP did not violate any procedural requirements in renewing
2 the permit.

3 **A. The Commission should reject the Appellants' request for groundwater**
4 **monitoring under NAC 445A.250(1) because it is not subject to this appeal,**
5 **unnecessary, and is moot considering Rockview Farms' voluntary**
6 **groundwater monitoring program.**

7 All discharges already authorized under a discharge permit are subject to
8 groundwater monitoring *at any time* if NDEP determines that monitoring is necessary. NAC
9 445A.250(1). But NAC 445A.250(1) does not apply during the permitting process because it
10 states that NDEP may require groundwater monitoring of any discharge authorized by a permit.
11 Accordingly, the regulation reflects NDEP's ability to require groundwater monitoring if
12 reasonably required. When it renewed the permit, NDEP reasonably concluded that because the
13 lagoons were lined, no further groundwater monitoring was required. Further, Appellants'
14 reliance on NAC 445A.250(1) is misplaced because in an appeal of an individual permit the
15 appellants cannot attack NDEP's post-permit decision not to require groundwater monitoring.

16 Even if groundwater monitoring was properly before the Commission in this
17 appeal, the Appellants' argument is now moot because Rockview Farms has voluntarily decided
18 to carry out a groundwater monitoring plan and groundwater will be monitored. *See, Exhibit 1.*
19 Exhibit A of Appellants' Opening Brief states in relevant part:
20

21 Only through required monitoring of groundwater in areas
22 close to lined lagoons can the Bureau insure that the liners
23 are creating an adequate seal and are effectively protecting
24 the groundwater from further contamination. [Western
25 Environmental Law Center report, p. 8].

26 Based on Appellants' own admission, Rockview Farms' groundwater monitoring
27 program effectively protects groundwater, and therefore, their argument is moot.
28

1 Appellants' general allegation that monitoring is necessary because Rockview
2 Farms has a history of non-compliance is not relevant to this appeal. Rockview Farms is in
3 compliance with the permit terms and conditions and NDEP regulations. Further, the outdated
4 chronology of events—which ends three years before this permit was renewed— shows only a
5 handful of compliance issues. More particularly, the chronology shows that NDEP was taking
6 action to enforce the applicable regulations and that the Dairy was working to address water
7 quality problems. The Nevada Division of Water Resources' letter attached as Exhibit D to
8 Appellants' Opening Brief is irrelevant to this appeal because NDEP does not have jurisdiction
9 over water rights in the State of Nevada. Lastly, although the Appellants allege that Ponderosa
10 Dairy's operations have caused groundwater pollution, they fail to offer any evidence to support
11 their allegation.
12

13
14 **B. Rockview Farms' CNMP complies with NDEP regulations and the Nevada
water pollution control law.**

15 NDEP fulfilled its primary duty to protect the waters of the State of Nevada in
16 renewing the permit because the CNMP prepared by Rockview Farms and approved by NDEP on
17 January 11, 2006 (including all subsequent updates) complies with NDEP regulations. Therefore,
18 the Commission should affirm NDEP's decision to renew the permit.
19

20 Here, Appellants state that the CNMP has fundamental problems and urge the
21 Commission to remand the permit to NDEP for further consideration of those problems.
22 Appellants' conclusions are based solely on the memorandum of Alex J. Sagady. Mr. Sagady's
23 memorandum, however, does not support Appellants' request to remand the permit to NDEP
24 because it (1) contains material largely irrelevant to this appeal (air quality, odors, flies, water
25 conservation), (2) is not based on a review of the entire CNMP, and (3) does not describe any
26 material deficiency that would justify overturning NDEP's decision.
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1 Factual determinations of an agency should be entitled to deference if based on
2 substantial evidence. *State Indus. Ins. Sys. v. Swinney*, 103 Nev. 17, 20, 731 P.2d 359, 361
3 (1987). Substantial evidence is that which a reasonable mind might accept as adequate to support
4 the conclusion. *State Employment Sec. Dep't v. Hilton Hotels Corp.*, 102 Nev. 606, 608, 729
5 P.2d 497, 498 (1986). Further, an agency's interpretation of its own regulations should be given
6 "great weight." *State Dep't of Wildlife v. Bentz*, 106 Nev. 294, 297, 792 P.2d 28, 30 (1990).

8 Here, the approved CNMP complies with NDEP's regulations and meets all
9 applicable national standards for CAFOs. Appellants' Opening Brief states that the CNMP has
10 fundamental problems with its emergency action plan, fails to address track out of sewage, plan
11 facilities information, pest management, mortality disposal plan, nutrient management plan, and
12 wastewater irrigation and conservation. But a review of the entire file shows that the Appellants'
13 claims are not accurate and would not affect NDEP's decision to renew the permit. Accordingly,
14 any critique of a CNMP that is not based on the entire record in a case should not be given much
15 weight.
16

17 First, Sagady's conclusions regarding the emergency action plan are immaterial
18 because they are not required by NDEP regulations and fail to consider the objectives of the plan.
19 The plan is designed to provide direct and concise recommendations for an immediate emergency
20 response. The plan must be concise and basic for use in emergency situations and is not intended
21 to manage daily work practices associated with operation and maintenance at a dairy. The
22 emergency action plan provides basic and necessary guidance for a variety of spill situations so
23 that qualified responders (farm manager and qualified equipment operators) are able to assess a
24 situation and determine the best level of response. Specific maintenance practices, such as lagoon
25 level observation documented in inspections, are best handled through a dairy's periodic training
26 to ensure consistency and provide familiarity for employees who may report conditions that may
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1 requirement maintenance. These practices are integral to the prevention side of the Dairy's
2 operation and are conducted during the weekly and monthly inspections.

3 Second, Sagady states that, "the NM [New Mexico] NRCS job sheet never shows
4 the availability in the present crop year from past applications in previous crop years of applied
5 'organic N.'"¹⁵ The NM NRCS 590 job sheet is a dynamic workbook that adjusts recommended
6 nutrient application rate based on annual soil test results, crop yields, TKN concentration in
7 lagoon and manure solids. According to Dr. Flynn from New Mexico State University, soil
8 organic matter increases over time as manure and effluent water is added to the soil. Testing for
9 soil organic matter and crediting nitrogen release for plant growth is a suitable method of
10 accounting for prior additions of organic nitrogen. See, Exhibit 2, attached hereto. Accordingly,
11 Sagady's conclusions in this regard are based on a fundamental misunderstanding of the CNMP
12 process.
13

14
15 Finally, Sagady states that the nitrogen balance spreadsheets from New Mexico
16 State University are based on grazing heifers and dry cows and the Dairy's grazing sheet shows
17 that it will be grazing milking cows and heifers. Due to the lack of many published grazing
18 models for the southwest region, the New Mexico State University Grazing N model was used for
19 milking cows and heifers even though the spreadsheet is meant to be used for grazing dairy
20 heifers and dry cows. The use of this model, however, means that nitrogen removal will be
21 underestimated. Accordingly, Sagady's comment actually shows that the Dairy is using
22 conservative estimates of nitrogen removal. See, Exhibit 3, attached hereto.
23

24 Appellants state that the permit and CNMP must address the waste generated by
25 the calves at the Dairy and the disposal of manure at Beverly Hills Dairy. The manure generated
26 by the calves is composted at the Ponderosa Dairy's composting facility and is authorized under
27

28 ¹⁵ Sagady memorandum, p. 4.

1 the permit.¹⁶ Additionally, manure from the Beverly Hills Dairy is authorized by Ponderosa
2 Dairy's permit and referenced in the Beverly Hills Dairy permit. The composting is authorized
3 by NDEP, Bureau of Waste Management, under Permit SW289REV01¹⁷ and no green water is
4 produced by these animals or discharged by the Ponderosa Dairy.

5
6 **C. Federal and State regulations do not require green water and manure solids
from dairies to be treated to domestic wastewater standards.**

7 Appellants urge the Commission to require NDEP to regulate green water and
8 manure solids from all dairies the same as domestic sewage. This argument, however, is not
9 proper in an appeal of an individual discharge permit because other parties may be affected.
10 Therefore, the Commission should dismiss this claim.

11
12 Even if the Commission considers the Appellants' request, it is not necessary to
13 require dairies to treat green water and manure solids to secondary or tertiary treatment standards
14 to protect groundwater quality. Nothing in Nevada's CAFO regulations, the Clean Water Act, or
15 the 2008 federal CAFO rule, require such treatment. To the Appellants "sewage is sewage." But
16 this simple conclusion ignores the entire regulatory framework that has been designed to allow
17 CAFOs to manage and reuse their green water. The law does not require NDEP to regulate green
18 water and manure solids from a dairy the same as domestic wastewater. By regulation, CAFOs
19 are agricultural operations that are specifically and intentionally regulated differently than
20 domestic wastewater treatment plants.

21
22 Further, interpreting the definition of sewage under NAC 445A.107 to include
23 green water and manure solids does not trigger any additional regulatory standard. Even though
24 Appellants label green water and manure solids as sewage, NDEP would not be required to
25 change its regulatory process. For instance, Appellants assert that NDEP must ensure that no
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27 ¹⁶ NV0023027, p. 2, I.A.1.

28 ¹⁷ NDEP Fact Sheet, p. 2.

1 runoff occurs from fields where green water has been applied because it is sewage. But the Clean
2 Water Act and the federal CAFO rule “carves out an exception where the discharge in question is
3 ‘an agricultural stormwater discharge,’” which are a category of discharges expressly excluded
4 from the statutory definition of a point source under the Clean Water Act. *Waterkeeper*, 399 F.3d
5 at 507 (quoting 42 C.F.R. § 122.23(e); 33 U.S.C. § 1362(14)). Agricultural stormwater is any
6 “precipitation-related discharge of manure, litter, or process wastewater from land areas under the
7 control of a CAFO” where the “manure, litter or process wastewater has [otherwise] been applied
8 in accordance with site specific nutrient management practices that ensure appropriate
9 agricultural utilization.” *Waterkeeper*, 399 F.3d at 507, (quoting 40 C.F.R. § 122.23(e)). Stated
10 differently, a CAFO cannot be liable for any agricultural stormwater runoff where green water
11 has been applied in accordance with approved site specific nutrient management practices. And
12 there are no nutrient management standards that require dairy green water to be treated to
13 secondary standards. Therefore, Appellants’ claim that dairies cannot use green water unless
14 NDEP finds that it meets secondary standards is not supported by the Clean Water Act or
15 applicable federal and state regulations. Based on the foregoing, the Commission should dismiss
16 the Appellants’ claim that NDEP should require all dairies to treat their green water to secondary
17 treatment standards before using it in accordance with an approved discharge permit.
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CONCLUSION

Based on the foregoing, the Commission should affirm NDEP's decision to renew Rockview Farms' water pollution control discharge permit and dismiss the Appellants' appeal.

Witness List:


- Jay Lazarus, President and Senior Geohydrologist, Glorietta Geoscience, Inc.
- Reddy Ganta, Senior Agronomist, Glorietta Geoscience, Inc.

AFFIRMATION

Pursuant to NRS 239B.030, the undersigned hereby affirms that the preceding document does not contain the Social Security number of any person.

DATED this 26 day of June, 2009

PARSONS BEHLE & LATIMER

By: 
Jim B. Butler, NSB# 8389
John R. Zimmerman, NSB# 9729

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INDEX OF EXHIBITS

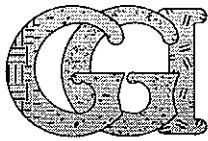
<u>Exhibit No.</u>	<u>Document</u>	<u>No. of Pages</u>
1	Draft Monitoring Plan	8
2	June 25, 2009 Letter from Robert Flynn	1
3	June 25, 2009 Letter from Douglas W. DeGroff	1

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EXHIBIT 1

EXHIBIT 1

EXHIBIT 1



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June 19, 2009

Alexi Lanza, P.E.
Permits Branch, Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Ste 4001
Carson City, NV 89701

RE: PONDEROSA DAIRY, NV0023027, DRAFT GROUND WATER MONITORING PLAN

Dear Mr. Lanza,

Thank you for the opportunity to present this proposed ground water monitoring plan for Ponderosa Dairy, NV0023027. Glorieta Geoscience, Inc. (GGI) has prepared draft proposed location and design information for four new on-site monitoring wells, including the required replacement of Monitoring Well 1 (MW-1A). The wells will be sampled for nitrate, TKN (Total Kjeldhal Nitrogen), chloride and Total Dissolved Solids (TDS). The ground water flow direction in the near vicinity of Ponderosa Dairy is to the east. Enclosed, please find the following items for your review:

1. Ponderosa Dairy Site Map with specified proposed locations of four new monitoring wells: MW-1A, MW-2A, MW-3, and MW-4, as well as Old MW-1 for plugging and abandonment
2. Ponderosa Dairy Schematic of design for MW-1A and other new monitoring wells
3. Bid Sheet for drilling and installation of four new monitoring wells
4. Bid Sheet for plugging and abandonment of Old MW-1
5. Potentiometric Surface Map constructed using April 2009 water level data

Hydrogeology of the Ponderosa Dairy Area

Ponderosa Dairy is located in the Amargosa Valley, in the Basin and Range province of the southwestern U.S. From the surface down, Ponderosa is underlain by Pleistocene basin-fill and playa lake sediments. Cenozoic limestone, basalt and volcanic rocks underlie the younger basin-fill sediments. The groundwater recharge area is to the north and east of the Dairy, in the Yucca Mountain area. Groundwater discharges at various locations to the southwest of the Dairy. Regionally, groundwater generally flows from the northeast and north towards the south and southwest (USGS, 2004). There are however, some areas where the direction of regional groundwater flow is to the west or north.

Groundwater for dairy and irrigation uses is produced from wells completed into the basin-fill deposits. As shown on the attached potentiometric surface map, groundwater beneath the dairy flows to the east and southeast. The local groundwater flow direction may be influenced by the dairy pumping its permitted water rights.

Green Water and Manure Management

Green water lagoons store water for subsequent irrigation reuse. All green water lagoons at the dairy are synthetically lined with current, state-of-the art, designs to protect water quality. The storage/settling ponds south of Barn 1 are clay lined. Since the green water lagoons and ponds store water year round and there is a constant head of water in them, Ponderosa proposes

to install monitoring wells downgradient of each green water storage lagoon. These wells will detect seepage from the synthetically lined lagoons in the unlikely event that the synthetic liner(s) leak.

Land application fields are irrigated with fresh water and green water. All manure solids are collected from the corals and solids separator and composted under an approved permit from the NDEP Solid Waste Bureau. Green water is applied to the land application fields at agronomic rates in accordance with Ponderosa's approved Comprehensive Nutrient Management Plan (CNMP). Since green water is applied to the land application fields at agronomic rates, and soil sampling will be conducted according to the terms of the Discharge Permit, soil sampling will sufficiently address any potential vertical migration of nitrogen, or other regulated constituents, through the vadose zone. As such, no monitoring wells are necessary to monitor ground water quality beneath, or downgradient of, the land application areas.

Proposed Monitoring Wells

To ensure that groundwater quality is protected, in addition to the current discharge permit requirements, Ponderosa Dairy has voluntarily prepared and submitted this plan for installation and monitoring of four monitoring wells. One monitoring well will be located upgradient of the facility and three of the wells will be located downgradient of the active green water lagoons at Barns 1, 2, and 3. Monitoring well No. 1A will replace MW No. 1 that has gone dry and will monitor potential seepage from the Barn 1 green water lagoon and storage ponds. Monitoring well No. 2 will be located downgradient of the green water lagoons at Barn 2 and will monitor potential seepage from the Barn 2 green water lagoon. Monitoring well No. 3 will be located downgradient of the lined green water lagoon for Barn 3 and will monitor potential seepage from the Barn 3 green water lagoon. Monitoring well No. 4 will be located upgradient of the Dairy, along Mecca Road. A map showing the locations of the proposed monitoring wells is attached.

The new proposed monitoring wells will be installed, developed, and representative ground water samples will be collected by November 2009 so that the results of sample analyses will be available and submitted to your office by December 31, 2009. MW-1 Old will be plugged and abandoned during the same timeframe that the new wells are installed. The exact locations of MW-4, the up-gradient monitoring well, and the other wells will be determined based on proximity to production wells and infrastructure.

Since green water is applied to the land application fields at agronomic rates specified in the Comprehensive Nutrient Management Plan (CNMP), these four wells will serve as an early warning of potential seepage through the synthetic liners.

Soil Sampling of Land Application Areas

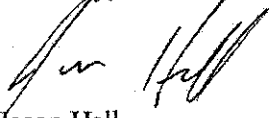
To protect ground water quality and to ensure that Ponderosa land applies green water in accordance with the requirements of its discharge permit, Ponderosa will sample and analyze soils on annually cropped land application areas every three years, or when a major change in crop rotation occurs. Ponderosa will sample and analyze soils on perennially cropped fields every five years. Soil samples will be analyzed in accordance with the permit requirements and NRCS Standard 590 for:

- Total --N
- Nitrate-N
- TKN
- Ammonia

- Total Phosphorus
- Soil pH
- Electrical conductivity
- Soil organic matter
- Potassium (K)
- Magnesium (Mg)
- Calcium (Ca)
- Sodium (Na)

Please contact me with any questions regarding this submittal at 505.983.5446 ext. 105, or Jay Lazarus at ext. 111. For any questions or comments regarding the dairy operations or discharge permit, please contact Jay Lazarus or Reddy Ganta at ext. 107.

Sincerely,

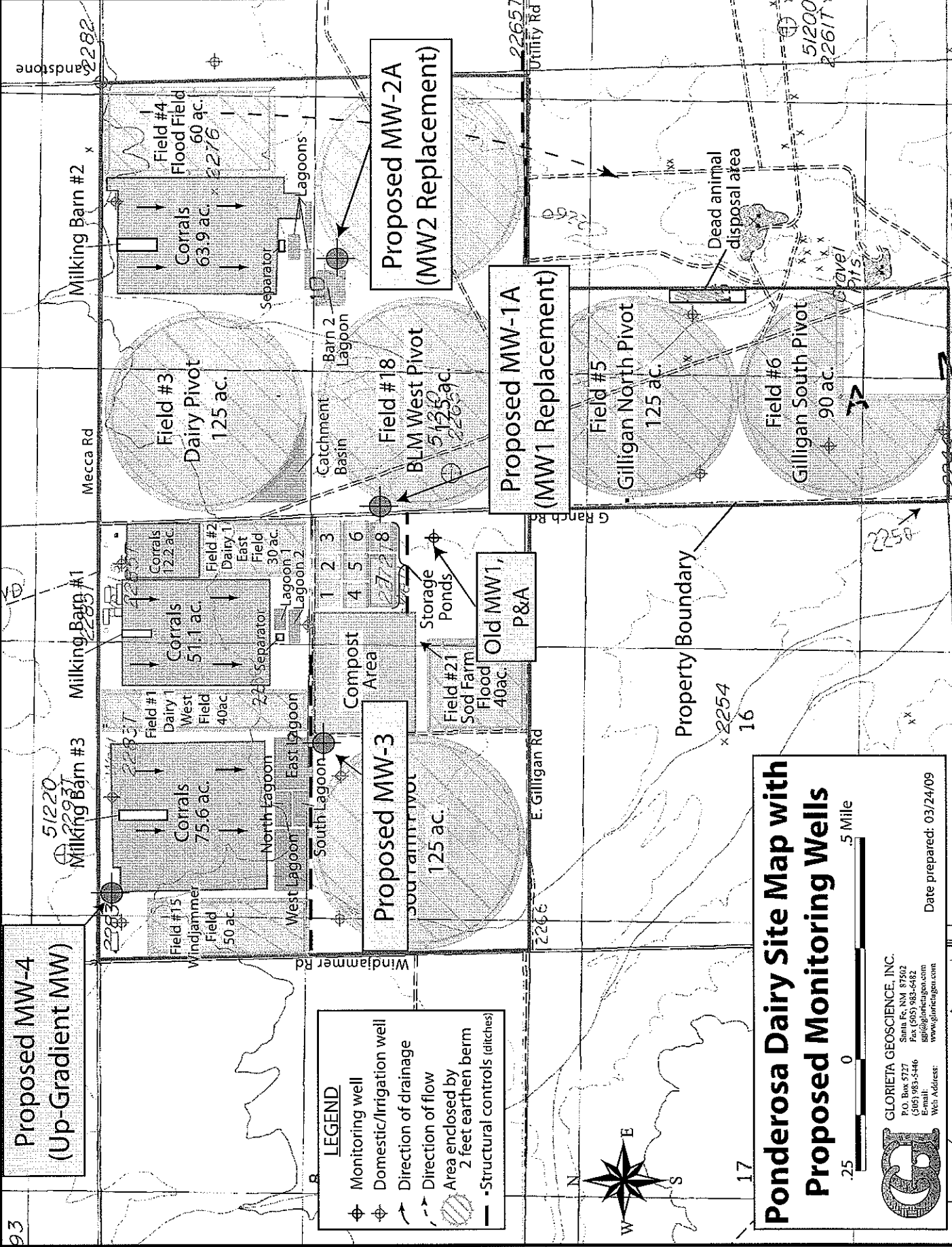


Jason Hall
Glorieta Geoscience, Inc.

Cc: Nevada Division of Environmental Protection, Attn: Valerie King, Supervisor of Enforcement and Compliance, Bureau of Water Pollution Control
Glorieta Geoscience, Inc., Attn: Reddy Ganta, Sr. Agronomist/Project Manager
Ponderosa Dairy, Attn: Michael Kwiatkowski, P.O. Box 70, Amargosa Valley, NV 89020
Ponderosa Dairy, Attn: Ed Goedhart, P.O. Box 70, Amargosa Valley, NV 89020

Reference:

U.S. Geological Survey, 2004, Death Valley Regional Ground-Water flow System, Nevada and California- Hydrogeologic Framework and Transient Ground-Water Flow Model, Scientific Investigations Report 2004-5205



**Proposed MW-4
(Up-Gradient MW)**

- LEGEND**
- ⊕ Monitoring well
 - ⊕ Domestic/Irrigation well
 - Direction of drainage
 - Direction of flow
 - ▨ Area enclosed by 2 feet earthen berm
 - Structural controls (ditches)



**Ponderosa Dairy Site Map with
Proposed Monitoring Wells**



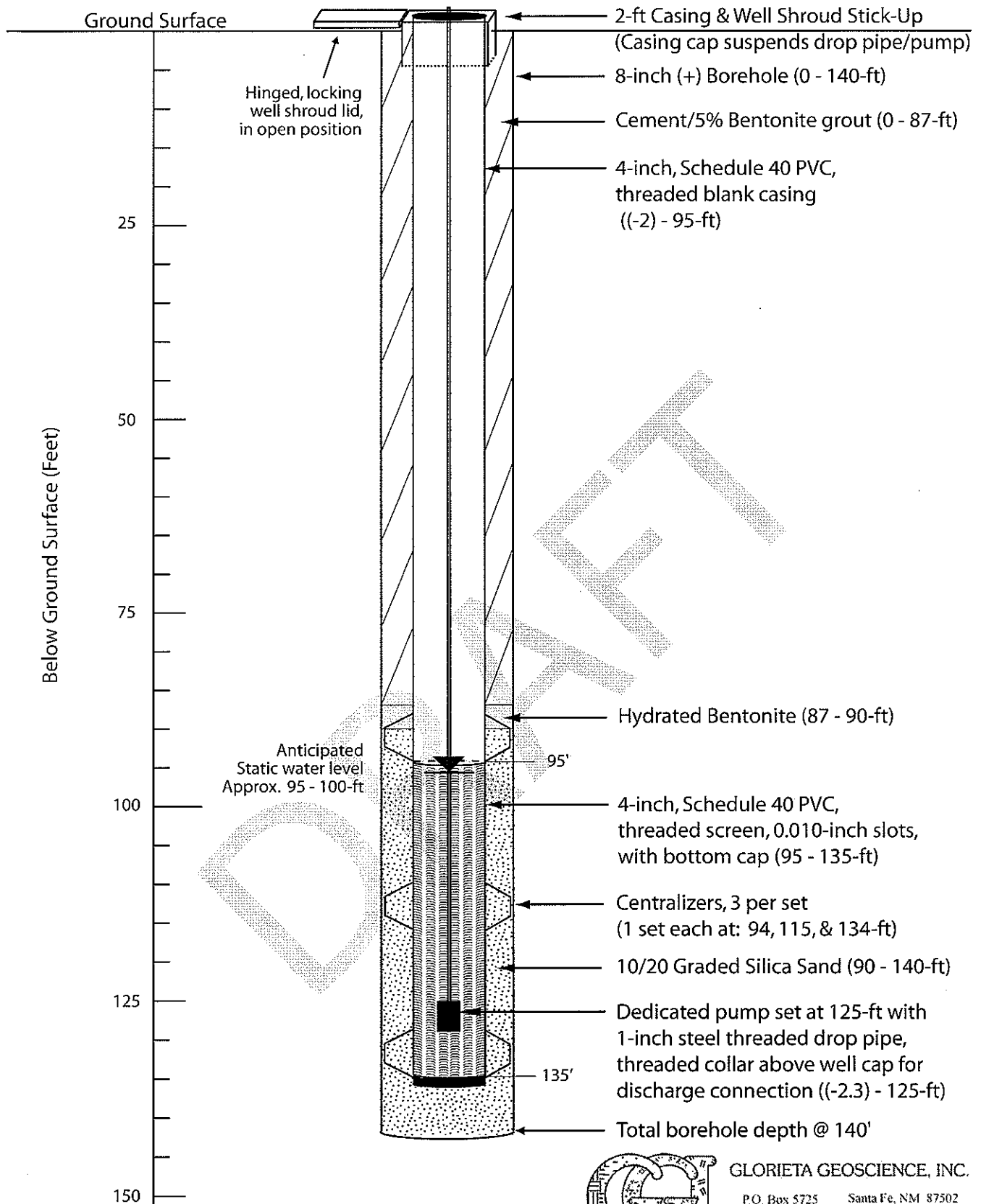
GLORIETA GEOSCIENCE, INC.
 P.O. Box 5737 Santa Fe, NM 87502
 (505) 983-6482 Fax (505) 983-6482
 (505) 983-5546 E-mail: gg@glorieta.com
 Web Address: www.glorieta.com

Date prepared: 03/24/09

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Ponderosa Dairy MW-1 Replacement Well Schematic



GLORIETA GEOSCIENCE, INC.

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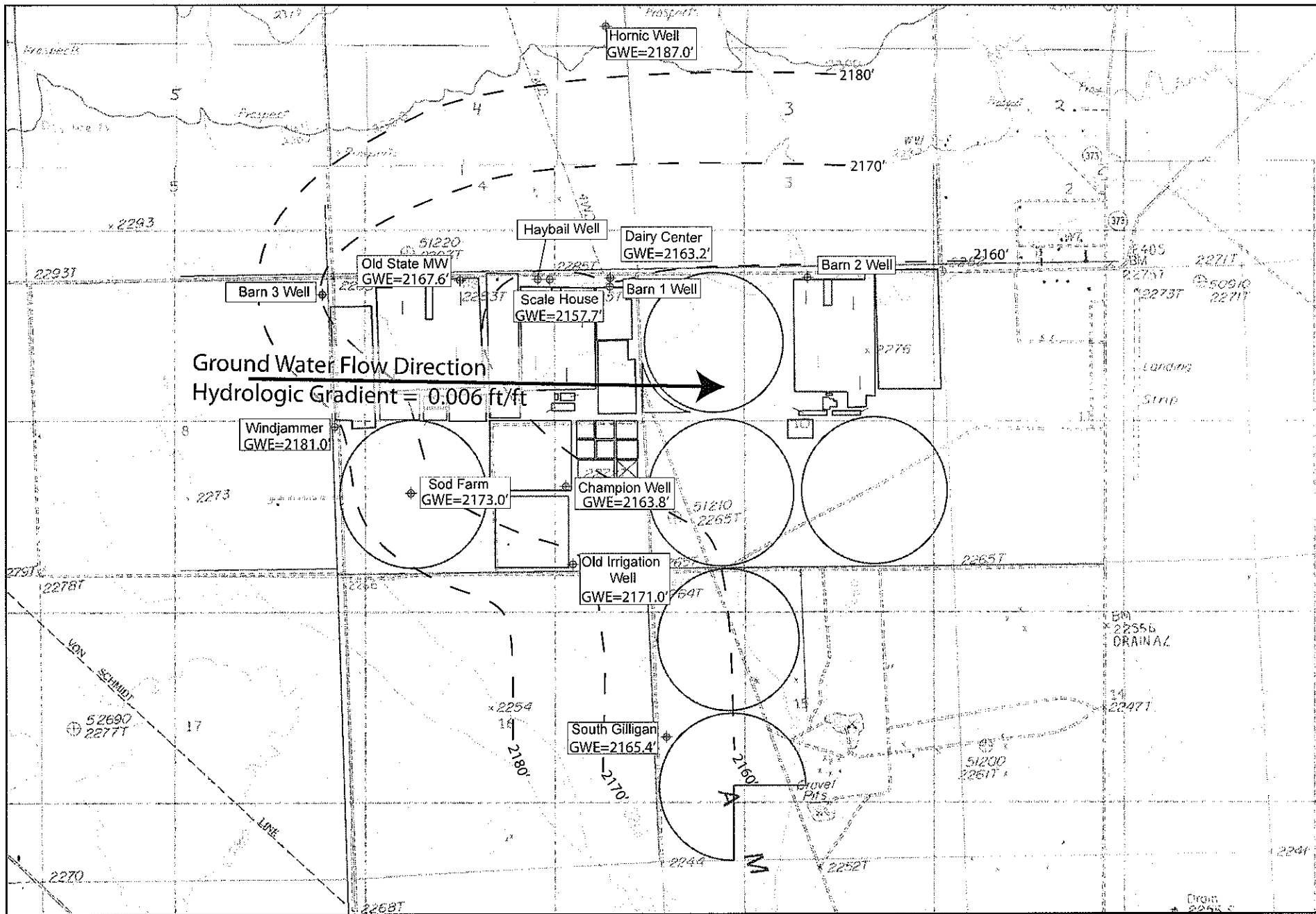
**BID SHEET FOR DRILLING AND INSTALLATION OF FOUR MONITORING WELLS,
APPROXIMATELY 140-ft DEEP EACH
Ponderosa Dairy, Nye County, Nevada**

Tasks and Materials	Estimated Quantity	Units	Unit Price	Total Price
DRILL ONE BORING, NO LESS THAN 8-INCH DIAMETER, TO 140-FT BELOW GROUND SURFACE (bgs)				
Using hollow stem auger, or air-rotary method with a temporary surface conductor. (Drill cutting samples collected every 5 ft and/or split spoon every 10 ft)	140	Lin. Ft		
INSTALL ONE 140-FT MONITORING WELL				
Install 40 feet of 4-inch ID, sch. 40, threaded PVC screen, 0.010 mill slot, with bottom cap. Install centralizers (3 per set) at top, middle, and bottom. Land casing ~5 ft above boring total depth, approx. 135 ft bgs	40	Lin. Ft		
Install 100 feet of blank, 4-inch ID, sch. 40, threaded PVC casing with 24-in. stick up (above ground surface)	100	Lin. Ft		
Install well cap with capacity to suspend drop pipe/pump	1	Each		
Install 10/20 silica sand from 140 - 90 ft (50 feet) via tremie pipe (approximately 0.3 cu.ft. per lin. ft), settle filter pack via surging or bailing inside well screen	50	Lin. Ft		
Install 1/4" bentonite pellet seal from 90 - 87 ft (3 feet) and hydrate pellets after placement (approximately 0.3 cu.ft. per lin. ft)	3	Lin. Ft		
Install cement/5% bentonite grout via tremie (approximately 0.3 cu.ft. per lin. ft) from 87 ft to ground surface (87 feet)	87	Lin. Ft		
SURFACE COMPLETION & DEVELOPMENT				
Set steel monitoring well shroud: 6x6-inch square or 6-inch (nominal) diameter, with hinged, locking lid. Shroud in open position should be set with exactly the same stick up height as the top edge of the well casing.	1	Each		
Set concrete pad at well surface: minimum 2x2-ft x 4-inch thick, sloping away from well head	1	Each		
Development time (air lifting or wireline bailer)	8	Hours		
Bollards	4	Each		
SET DEDICATED PUMP				
Furnish 1/2 hp pump with shroud and set at 125-ft bgs	1	Each		
Approx. 130-ft of 1-inch threaded steel drop pipe, with threaded collar above well cap for temporary discharge pipe connection when purging and sampling well.	130	Lin. Ft		
135-ft of electrical wire rated for pump size and depth	135	Lin. Ft		
SUBTOTAL FOR ONE 140-FT MONITORING WELL DRILL, INSTALL AND DEVELOP				
Mob/Demob	1	Lump Sum		
Steam Cleaner	1	Lump Sum		
TOTAL ESTIMATED COST FOR FOUR WELLS (not including NVGRT):				

**BID SHEET FOR PLUGGING AND ABANDONMENT OF ONE MONITORING WELL,
APPROXIMATELY 95-ft DEEP
Ponderosa Dairy, Nye County, Nevada**

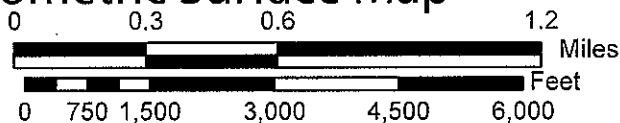
Tasks and Materials	Estimated Quantity	Units	Unit Price	Total Price
PLUG AND ABANDON ONE 4-INCH DIAMETER MONITORING WELL FROM 95-ft BELOW GROUND SURFACE (bgs) TO GROUND SURFACE Install cement/5% bentonite grout into 4-in well via tremie pipe (approximately 0.1 cu.ft. per lin. ft) from 95-ft bgs to ground surface (95 feet)	95	Lin. Ft		
REMOVE SURFACE COMPLETION Remove steel monitoring well shroud stick up and well casing stick up above existing well pad. Leave well pad in place for future protection of aquifer water quality.	1	Each		
Mob/Demob	1	Lump Sum		
TOTAL ESTIMATED COST FOR P&A ONE WELL (not including NVGRT):				

DRAFT



Ponderosa Dairy Potentiometric Surface Map

2009 DTW measurements
 Well DTW measured by Dairy staff, 4/22/09
 surface elev. estimated from 1:24k scale USGS
 topo quadrangle, CI=10'



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 E-mail: gg@glorietageo.com
 Web Address: www.glorietageo.com

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EXHIBIT 2

EXHIBIT 2

EXHIBIT 2



College of Agriculture and Home Economics

Agricultural Science Center at Artesia

67 East Four Dinkus Road

Artesia, NM 88210

Tel: 505-748-1228

Fax: 505-748-1229

6/25/2009

Reddy Ganta
Senior Agronomist
P.O. Box 5727
Glorieta Geoscience Inc.
Santa Fe, NM 87502

Dear Mr. Ganta:

Thank you for your email of June 22, 2009, regarding the NMSU Soil Test Interpretation workbook, otherwise known as Jobsheet 590 for New Mexico's NRCS.

I believe the basic question being posed by the reviewer of Pondera Dairy's CNMP is how the New Mexico NRCS Jobsheet 590 accounts for nitrogen in the crop, field, and manure or effluent water.

The specific statement from the reviewer that I can address is:

"NM NRCS jobsheet never shows the availability in the present crop year from past applications in previous crop years of applied "organic N.""

The 590 Jobsheet that NM NRCS uses is a dynamic workbook that was designed in collaboration with NMSU to be used on an annual basis with soil samples being taken before each and every growing season or crop. Soil nitrate and nitrogen released from soil organic matter is used to assess potential plant available nitrogen for the current season crop. New Mexico credits thirty pounds of plant available nitrogen from every one percent of organic matter. Soil organic matter increases over time as manure and effluent water is added to the soil. Testing for soil organic matter and crediting nitrogen release for plant growth is a suitable method of accounting for prior additions of organic nitrogen. Furthermore, it is recommended that soils be sampled in one-foot increments for deep rooted crops with nitrate being accounted for in each of those depths and used to "fine-tune" management practices such as irrigation water management. Finally, users that are familiar with the workbook can make additional changes to the amount of supplemental nutrient by crediting other sources of nitrogen, or adjusting for differences in perceived mineralization rates.

The NMSU Soil Testing Workbook is a dynamic workbook that can help planners justify changes to management practices based on real-world, biological systems.

Sincerely,

Robert Flynn, Ph.D.
Agronomy and Soils

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EXHIBIT 3

EXHIBIT 3

EXHIBIT 3

DDS DIVERSIFIED DAIRY SOLUTIONS, LLC

Specializing in Dairy Nutrition

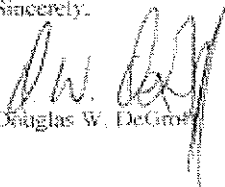
June 25, 2009

To Whom It May Concern:

I, Douglas W. DeGroot, President of Diversified Dairy Solutions, LLC, am a 1996 graduate of Cornell University with a degree in Dairy Management with an emphasis in Ruminant Nutrition. I currently work as the nutritionist for Ponderosa Dairies in Amargosa, NV.

Using the Grazing spreadsheet, it is my professional opinion that it will underestimate the amount of Nitrogen uptake by grazing milking cows vs. dry cows or heifers.

Sincerely,



Douglas W. DeGroot