

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 13962
ORDER NO. R-12811**

**APPLICATION OF GANDY CORPORATION FOR AUTHORIZATION TO
INJECT INTO THE JULIA CULP WELL NO 2, LEA COUNTY, NEW MEXICO**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came before the Oil Conservation Division at 8:15 a.m. on July 26, 2007, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 24th day of September, 2007, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Gandy Corporation ("Gandy"), seeks authority to re-enter the plugged and abandoned Julia Culp Well No. 2 (API No. 30-025-30879) located 2310 feet from the North line and 660 feet from the East line (Unit H) of Section 34, Township 15 South, Range 35 East, NMPM, Lea County, New Mexico, and to utilize this well for commercial disposal of oil field waste waters into the Devonian formation at perforated and open hole depths of 13,865 to 14,500 feet.

(3) Gandy filed on February 1, 2007 an administrative application to re-enter and inject into this well. On February 12, after reviewing the application, the Division sent an email requesting clarification of certain items in Gandy's submittal. Gandy's consultant, Mr. Terry Duffey, replied to the data request on February 14. As part of the Division's requirements, notice was sent to approximately 93 affected parties. Prior to the 15-day suspense period, the Division received protest letters and deferred the application until such time as settlement could be reached between Gandy and the protesting parties. Protests or letters of concern were received from P. Kay Stokes and D.B. Wharton of Arkansas, Jerry and Jan Carlisle of Lovington ("J&J Service, Inc"),

Edgar J. Huffman ("VISA Industries of Arizona") and Energen Resources Corporation ("Energen").

(4) On June 13, 2007, after reaching a tentative agreement with Energen, Gandy submitted a letter to the Division requesting this matter be heard before an Examiner and on July 19 submitted its pre-hearing statement.

(5) Energen entered an appearance in this case and submitted a pre-hearing statement. At the July 26 hearing, Energen stated through counsel it no longer protested the application.

(6) At the hearing, Mr. Jerry Carlisle of J&J Service, Inc. appeared to make a statement in opposition to the proposed injection well. J&J Service, Inc. did not file an entry of appearance or pre-hearing statement for this hearing. Mr. Carlisle presented a letter from Visa Industries of Arizona ("VISA") protesting Gandy's proposed injection well. Mr. Carlisle further stated that P. Kay Stokes and her uncle, Mr. Wharton, had called him prior to the hearing and stated they had already objected to Gandy's application.

(7) VISA also did not file an official entry of appearance or pre-hearing statement for this hearing and did not appear at the hearing. The letter dated July 24th from VISA authorized Jerry Carlisle to represent VISA's interests at the hearing. The letter expressed concerns of VISA's that (i) its remaining interest in the lease would be lost if this injection is approved, (ii) Gandy's injection in this area may have caused or could cause corrosion to wellbores in, or damage to production from, its Strawn wells in the West Lovington Strawn Unit.

(8) Mr. Carlisle made a statement that his company, J&J Service, Inc., helped pay for the drilling of the subject well, and now owns an interest in the Wolfcamp formation within this well, and wished to retain the well for possible production from the Wolfcamp formation. Further, Mr. Carlisle does not understand how Gandy could assume ownership of the well without dealing with all existing owners of record.

(9) DKD, LLC entered an appearance in this case by fax to the Division on July 22nd and entered a pre-hearing statement by fax on July 23rd as an "interested party who may present testimony based on the applicants presentation". By fax on July 23rd, DKD, LLC filed a "notice of intervention" as a competitor of the applicant who has concerns about the application. The reason given for late filing was (i) intervenor's usual attorney was conflicted out and (ii) DKD, LLC called its new attorney on time, but attorney was moving his office and did not get filings done until Sunday.

(10) On July 25th, applicant's attorney filed a motion with the Division to determine DKD as a non-party and to prohibit DKD's participation in the upcoming hearing. Reasons given, included; (i) DKD was not a person to whom Division rules require notice of the original administrative application or of the Division hearing; (ii) DKD is simply a competitor to Gandy in this area; and (iii) DKD did not timely file entry

of appearance or pre-hearing statement. Gandy asked therefore that DKD be limited at the discretion of the Examiner in the hearing to "making a relevant statement, and being subject to cross-examination."

(11) At the hearing, DKD presented argument and reasoning for status as a party with "standing." DKD's owner, Mr. Danny Watson, stated that:

(a) DKD operates a commercial disposal in this area, the Watson "6" Well No. 1, and therefore is a competitor to Gandy's proposed commercial operations;

(b) DKD is also concerned about possible corroded casing and poor cement in Gandy's proposed injection well over the equivalent interval that DKD is using for injection; and

(c) Injection or casing leaks in this area have been shown in previous Division cases to affect wells located more than ½ mile away.

(12) After listening to arguments, the Examiner decided to not allow DKD to have standing in this case for the following reasons:

(a) This matter was first considered by the Division in February at which time newspaper notice within Lea County was provided. Gandy finally made application for a hearing in June, and the hearing date was in late July. Despite this extended time period, DKD did not timely file an objection to the application.

(b) DKD's nearest injection well is located over a mile from Gandy's proposed well and therefore much further than the ½ mile cutoff required for consideration of "affected" parties as per Division Rule 701B(2).

(c) Gandy's proposed injection well would inject into the Devonian while DKD's nearest injection well uses a shallower interval for injection.

(d) Within Gandy's well or any other proposed injection wells, the Division would not allow injection without adequate casing and cement and would require periodic internal Mechanical Integrity Testing ("MIT") to ensure injection is confined to the permitted injection interval.

(e) Enforcement cases related to any future alleged rule or permit violations by the operator of the proposed injection well can be proposed by offset operators [such as DKD] and the merits would be considered at a Division hearing.

(13) Gandy produced two witnesses at this hearing who testified as follows:

(a) Gandy has a need for additional disposal in this area and chose the Devonian as an injection horizon because it may take water on a vacuum and would not pressure up as other injection formations have done, restricting injection or causing problems with offset wells. Also, it is below the deepest producing horizon in this general area which is the Strawn.

(b) The proposed well was drilled in 1990 and therefore is a relatively new wellbore compared to other Devonian wells. The well is not near any Devonian production and is in fact located in a structural trough. The well is wet in the Devonian and likely has adequate permeability as shown by the drill stem test done by the driller from 13,865 to 13,900 feet. Due to interest in the Mississippian at 13,391 to 13,522 feet, casing was run on this well to 13,950 feet.

(c) Gandy proposes to re-enter this plugged well, tie in new 5-1/2 inch casing, squeeze off perforations in the depleted gas interval in the Mississippian and in the unproductive Atoka formation, squeeze cement to cover the corrosion prone interval in the upper Glorieta and lower San Andres formations, test the wellbore for mechanical integrity, test the Devonian injection capability and, if necessary, drill out of the casing to a maximum open hole depth of 14,500 feet to add additional injection capacity.

(d) There is only one well within 1/2 mile of this well that penetrated the Devonian. The Daisy Chambers Well No. 1 is located approximately 1/2 mile from the proposed injection well. It was drilled in 1955, produced from the Permo Penn formations at approximately 10,500 feet, and was plugged and abandoned in 1992.

(e) Gandy will run a water pipeline to this well from its existing injection facility and will obtain a permit for this pipeline separately from this application.

(f) Gandy provided notice and received no protest from the surface owner of the wellsite, Mr. Dan Fields. Gandy also worked out agreement with Energen Resources and provided notice to approximately 90 other affected parties within the 1/2 mile Area of Review. The parties who lodged a protest were primarily concerned about use of the wellbore – especially in the Permo Penn formations.

(g) Gandy did a study of possible productivity of the Permo Penn (Wolfcamp) formation in the vicinity of the proposed injection well and concluded that attempting to perforate and produce this interval would be risky. Wolfcamp production would be poor at best and probably already drained by previous nearby production.

(h) Many types of oil field waste waters will be injected into this well. The Devonian waters are relatively compatible with those waste waters. The

Devonian water quality is very saline and is not protectable under the federal Safe Drinking Water Act or the New Mexico Water Quality Act.

(i) All fresh water intervals will be protected with casing and cement in the proposed injection well.

(14) Gandy did not provide testimony from a Landman, but did state in the hearing through counsel that its position is that the landowner now owns this wellbore, and Gandy has reached agreement with the landowner. In addition, and in case the landowner does not own this wellbore, Gandy has also reached an agreement with Energen as the operator of a lease which has production holding this wellbore. Thus Gandy demonstrated a good faith claim of ownership. In any case, ownership disputes are not within the jurisdiction of the Oil Conservation Division.

(15) The Division concludes that Gandy's proposed injection well should be approved and the proposed injection operation can be conducted in a safe and responsible manner, without causing waste, impairing correlative rights or endangering fresh water, public health or the environment.

IT IS THEREFORE ORDERED THAT:

(1) Gandy Corporation ("Gandy" or "operator") OGRID 8426, is hereby authorized to inject for disposal purposes into its Julia Culp Well No. 2 (API No. 30-025-30879) which will be re-entered at a location 2310 feet from the North line and 660 feet from the East line (Unit H) of Section 34, Township 15 South, Range 35 East, NMPM, in Lea County, New Mexico. Within this well, oil field waste waters are permitted for disposal into the Devonian formation through perforations from approximately 13,865 feet to 13,885 feet and through an open-hole interval from 13,950 feet to 14,500 feet, through plastic coated tubing set in a packer located within 100 feet of the top injection perforation or interval being used for injection.

(2) Prior to injecting into this well, the plugged wellbore shall be re-entered, new casing installed as deep as is practical, the existing cement top at 9280 feet raised with squeeze cementing operations to tie-in to the intermediate casing so as to cover all potential corrosive intervals, existing perforations in the Mississippian and the Atoka squeezed off, and the wellbore tested for mechanical integrity. If additional injection capacity is needed after perforating and testing the upper Devonian, the well shall be deepened to a maximum of 14,500 feet.

(3) After perforating the Devonian or while deepening the well, Gandy shall monitor the well for hydrocarbon shows and shall report any shows or swab test results to the Hobbs district office on sundry forms.

(4) After equipping the well with plastic coated tubing and packer, the casing-tubing annulus shall be loaded with an inert, corrosion resistant fluid as specified by the

Hobbs district office and equipped with a leak detection device capable of determining any leakage in the casing, tubing, or packer.

(5) Mechanical integrity testing is required after installation of the injection tubing and prior to commencing injection operations and thereafter as required by Division rules.

(6) The operator shall notify the Hobbs district office of the time of the setting of the tubing and packer and of any mechanical integrity test ("MIT") so that such operations can be witnessed.

(7) The tubing shall have a gauge and pressure limiting device installed in order to control and to record injection pressures. The surface injection pressure shall be continuously regulated such that it never exceeds 2,773-psi. The Director may administratively authorize an increase in this injection pressure if the operator shows that a higher pressure will not result in formation fracturing or migration of injected fluids from the permitted injection formation. As justification, the operator must submit results of an injection test such as a Step-Rate-Test.

(8) The operator of the well (Gandy or any successor operator) shall take all steps necessary to insure that injected fluids enter the proposed injection interval and do not escape to other formations or onto the surface.

(9) Without limitation on the duties of the operator as provided in Division Rules 19 and 116, or otherwise, the operator shall immediately notify the Hobbs district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from or around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

(10) The operator shall submit monthly reports of injection volumes of waste water on Form C-115, in accordance with Division Rules 706 and 1115.

(11) The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations pursuant hereto; provided however, the Division Director, upon written request of the operator received by the Division prior to the end of one year, may extend this time for good cause.

(12) Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health, and the environment.

(13) At the discretion of the Division Director and after proper notice is provided, any proposed amendments or changes to this order may be done administratively; provided however, proposed amendments to raise the depth of the

Case No. 13962
Order No. R-12811
Page 7 of 7

injection interval or change the target injection formation shall be done only after notice and hearing.

(14) Jurisdiction is retained by the Division for the entry of further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (i) to protect fresh water or (ii) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


for MARK E. FESMIRE, P.E.
DIRECTOR