

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

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

ORIGINAL

AGAVE ENERGY COMPANY'S MOTION TO
AMEND ORDER NO. R-13507, LEA COUNTY,
NEW MEXICO

Case No. 14720

REPORTER'S TRANSCRIPT OF PROCEEDINGS
COMMISSIONER HEARING

BEFORE: JAMI BAILEY, Chairman
DR. ROBERT BALCH, Commissioner
SCOTT DAWSON, Commissioner

June 28, 2012
Santa Fe, New Mexico

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This matter came on for hearing before the New Mexico Oil Conservation Commission, JAMI BAILEY, Chairman, on Thursday, June 28, 2012, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South St. Francis Drive, Room 102, Santa Fe, New Mexico.

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ALSO PRESENT:

Florene Davidson

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1 CHAIRMAN BAILEY: Good morning. This is
2 the meeting of the Oil Conservation Commission on June
3 28th, in Porter Hall, in the Wendell Chino Building here
4 in Santa Fe, New Mexico.

5 I am Jami Bailey, Chairman of the Commission.
6 To my right is Scott Dawson, designee of the Commissioner
7 of Public Lands; and to my left is Dr. Robert Balch, who
8 is the designee of the Secretary of Energy, Minerals and
9 Natural Resources. All three Commissioners are here
10 today, so there is a quorum of the Commission.

11 We have cases to be continued. Case Number
12 14763, which is the application of Mack Energy
13 Corporation for compulsory pooling in Lea County, New
14 Mexico, will be continued to the July 18th, 2012,
15 Commission meeting.

16 Case 14764, which is the application of
17 Cimarex Energy Company of Colorado for approval of a
18 non-standard oil spacing and proration unit, unorthodox
19 location and compulsory pooling in Lea County, New
20 Mexico, that case is continued to the July 18th, 2012,
21 Commission meeting.

22 Now I call Case Number 14720, which is the
23 application of Agave Energy Company's Motion to Amend
24 Order Number R-13507, requesting the Commission to amend
25 Order R-13507, which authorizes Agave Energy to dispose

1 of treated acid gas, TAG, from the Red Hills Gas
2 Processing Plant by injecting the TAG stream into Agave
3 Energy's Red Hills AGI Number 1 well.

4 Ask for appearances.

5 MR. LARSON: Good morning, Madam Chair,
6 Commissioners. Gary Larson, of Hinkle, Hensley, Shanor &
7 Martin, for Agave Energy Company. I have three
8 witnesses.

9 CHAIRMAN BAILEY: Would you call your
10 first witness? And do you have an opening statement?

11 MR. LARSON: I'll waive opening statement.

12 I do have some extra copies of our exhibit. I
13 don't know if the Commissioners have copies with them,
14 but I do have extra copies.

15 I'll first call Mr. Ivan Villa.

16 IVAN VILLA

17 Having been first duly sworn, testified as follows:

18 DIRECT EXAMINATION

19 BY MR. LARSON:

20 Q. Mr. Villa, could you state your full name for
21 the record?

22 A. Ivan Villa.

23 Q. And by whom are you employed and in what
24 capacity?

25 A. I am the Engineering Manager for Agave Energy

1 Company.

2 Q. Did you testify before the Commission at the
3 hearing in December of 2011 on Agave's application for
4 injection authority?

5 A. Yes, I did.

6 Q. And did the Commission qualify you as an
7 expert in engineering at that time?

8 A. Yes, they did.

9 MR. LARSON: Madam Chair, I ask that
10 Mr. Villa be qualified as an expert engineer for purposes
11 of the hearing today.

12 CHAIRMAN BAILEY: He is so accepted.

13 MR. LARSON: Thank you.

14 Q. (By Mr. Larson) Before we move on with the
15 slides, Mr. Villa, could you inform the Commissioners
16 what that photo shows?

17 A. Yes. The slide depicts the basic energy
18 workover unit that was rigging up on our Government
19 Number 2 Well last Thursday, the 21st.

20 Q. When you say, "Our Government Number 2,"
21 that's a plugged and abandoned well?

22 A. Yes. It's part of our plugging program.
23 That's correct.

24 Q. If you'll move on to the next slide.

25 And you testified at the previous hearing that

1 Agave's plan was to begin operating the Red Hills Gas
2 Processing Plant in March of this year. Did Agave meet
3 that target date?

4 A. No, they didn't. No, we didn't.

5 Q. What's the current status of the plant
6 construction?

7 A. Currently, the construction is approximately
8 about 84 percent complete. We've got a slide here that
9 depicts a couple of the major milestones for the plant.
10 We did prepare the site in July of last year. We did
11 erect the demethanizer tower May 2012. We're in the
12 process of rigging up to move in the amine contactor
13 tower on the 9th of July.

14 Right now, the way things are looking, we're
15 scheduled for completion September 1st of 2012, with
16 commissioning of the plant October 1st, 2012.

17 Q. And once the plant comes on line, when do you
18 anticipate receiving sweet field gas at the plant?

19 A. Immediately as soon as the plant comes on
20 line.

21 Q. Do you have a sense of when the plant will
22 start accepting sour gas with CO2 and H2S?

23 A. Right now, our timing is looking like
24 September, October of 2013. There's a couple of
25 long-lead critical path items, surface equipment. But

1 right now, that's what the game plan looks like.

2 Q. Since the Commission issued its order in
3 January of this year authorizing Agave to drill and
4 operate the Red Hills AGI Well, what has Agave done to
5 satisfy the requirement in the order that Agave re-enter
6 and re-plug four plugged and abandoned wells within a
7 one-mile radius of Red Hills AGI well?

8 A. We basically submitted and received approval
9 for the sundry notice on the Government Number 1, also
10 submitted and received approval for the C-103 on the
11 Government Number 2 and the Simms Number 1. We've
12 successfully negotiated the surface use agreement for all
13 three wells, cleared the location and prepped it for the
14 workover rig and, as we mentioned earlier, rigged up last
15 Thursday on the first well.

16 Q. And initially did you task Geolex, Inc., with
17 reviewing and evaluating the plugging data on these four
18 wells?

19 A. Yes, we did.

20 Q. And is Geolex doing anything further with
21 regard to compliance for the requirement of the
22 Commission's order?

23 A. Yes. Geolex will oversee the plugging program
24 for the wells and also oversee the drilling and
25 completion of the Red Hills Acid Gas Injection Well.

1 Q. Did Geolex complete its post-hearing analysis
2 of the four plugged and abandoned wells under your
3 direction?

4 A. Yes..

5 MR. LARSON: That's all I have for
6 Mr. Villa.

7 CHAIRMAN BAILEY: Any questions of the
8 witness?

9 COMMISSIONER DAWSON: I have no questions.

10 EXAMINATION

11 BY COMMISSIONER BALCH:

12 Q. Can you say anything about the Smith well?
13 You're not able to obtain service rights there or
14 something?

15 A. Actually, we have set plans. We have moved
16 forward with plans, as far as surface ownership, to move
17 in on the Smith. We are just basically waiting on the
18 outcome of the hearing today to move further with the
19 work on the well.

20 COMMISSIONER BALCH: That's all I have.

21 CHAIRMAN BAILEY: That's all I have.

22 You may be excused. Okay.

23 MR. LARSON: I next call Jennifer
24 Knowlton.

25

1 JENNIFER KNOWLTON

2 Having been first duly sworn, testified as follows:

3 DIRECT EXAMINATION

4 BY MR. LARSON:

5 Q. Ms. Knowlton, will you state your full name
6 for the record, please?

7 A. Jennifer Knowlton.

8 Q. And by whom are you employed an in what
9 capacity?

10 A. I'm the Environmental Manager for Agave Energy
11 Company.

12 Q. Did you also testify before the Commission at
13 the hearing in December of 2011?

14 A. I did.

15 Q. And were you qualified as an expert in
16 environmental engineering?

17 A. I was.

18 MR. LARSON: Madam Chair, I ask that
19 Ms. Knowlton be qualified as an expert in environmental
20 engineering for purposes of today's hearing.

21 CHAIRMAN BAILEY: She is so qualified

22 MR. LARSON: Thank you.

23 Q. (By Mr. Larson) Mr. Villa has testified that
24 the Red Hills Gas Processing Plant will come on line in
25 the fall. What is the time frame for Agave drilling the

1 AGI well?

2 A. With the caveat for rig availability, some of
3 the MSA work that we have to do in house, we hope to
4 start on that location the first part of November of
5 2012.

6 Q. What has been your role in Agave's efforts to
7 address the requirement that it re-enter four plugged and
8 abandoned wells near the AGI well?

9 A. I have co-managed that project with our
10 engineering manager.

11 Q. And what have those efforts entailed?

12 A. Coordinating with Agave's Land Department on
13 the surface use agreements, coordinating with Geolex on
14 the technical issues, and preparing summaries and
15 presenting those to our management as the project has
16 progressed.

17 Q. And has Agave begun remedial work on any of
18 those wells?

19 A. Yes. As we showed in the picture, we rigged
20 up on the Government Number 2 last Thursday.

21 Q. And have you calculated the costs involved
22 with re-entering and re-plugging the two Government wells
23 and the third plugged and abandoned well that's
24 identified in the order?

25 A. Yes. We estimate about a quarter million

1 dollars for each of those. That includes the plugging
2 work, the geologic work, the surface prep and reclamation
3 and the surface use costs.

4 Q. Does it also include the permitting with the
5 OCD and BLM?

6 A. Yes, it does.

7 Q. Why hasn't Agave moved forward with the
8 remedial work on the Smith Federal Number 1?

9 A. After the post-hearing analysis performed by
10 Geolex, we used that post-hearing analysis to determine
11 what our costs would be. And after reviewing Geolex's
12 work on that, that's when we decided to ask for this
13 hearing. So we decided to wait on the surface prep work
14 until after this hearing today.

15 Q. Have you estimated what the cost would be for
16 re-entering and re-plugging the Smith Federal Number 1?

17 A. Probably close to the same, a half million
18 dollars -- a quarter of a million dollars. I'm sorry.
19 The surface use agreement and the reclamation -- the prep
20 and reclamation are about the same.

21 The drilling costs, of course, are going to be
22 variable, depending on how long we have to stay at each
23 well. But we're anticipating about a quarter of a
24 million dollars.

25 Q. In your opinion, is it necessary, from either

1 an environmental or an engineering standpoint, for Agave
2 to re-enter and re-plug the Smith Federal Number 1 Well?

3 A. No, it is not.

4 MR. LARSON: That's all I have for
5 Ms. Knowlton.

6 CHAIRMAN BAILEY: Do you have any
7 questions?

8 COMMISSIONER DAWSON: I do not have any
9 questions.

10 CHAIRMAN BAILEY: Commissioner Balch, do
11 you have any questions?

12 COMMISSIONER BALCH: Sure.

13 EXAMINATION

14 BY COMMISSIONER BALCH:

15 Q. What is it that makes the Smith well different
16 than the other three?

17 A. Mr. Gutierrez will go into more detail about
18 that. Its location and its geological formation. And
19 he'll be going into more detail on that.

20 Q. Right. But as an environmental engineer, you
21 are comfortable with that?

22 A. I am comfortable with his analysis, yes.

23 Q. What's your basis for -- I'd like to know why
24 you have a comfort level with the decision?

25 A. When we did the post-hearing analysis and

1 Alberto presented it and explained it to us, the cement
2 work -- both the cement work, the physical location is
3 outside. And for me, in environmental, that's the
4 biggest thing, is that the location is outside of our
5 potential radius of impact. Even using a very large
6 safety factor in calculating that radius of impact, the
7 location is outside of it.

8 So even under the best of circumstances, over
9 30 years, I don't think the acid gas plume will reach the
10 Smith well.

11 COMMISSIONER BALCH: Okay. Thank you.

12 CHAIRMAN BAILEY: I don't have any
13 questions.

14 Any redirect?

15 MR. LARSON: No. I'll save it for
16 Mr. Gutierrez.

17 CHAIRMAN BAILEY: All right. You may be
18 excused.

19 MR. LARSON: Alberto?

20 ALBERTO GUTIERREZ

21 Having been first duly sworn, testified as follows:

22 DIRECT EXAMINATION

23 BY MR. LARSON:

24 Q. Mr. Gutierrez, could you please state your
25 full name for the record?

1 A. Yes. Alberto Alejandro Gutierrez.

2 Q. And what is the name of your company?

3 A. Geolex.

4 Q. And what is your position with Geolex?

5 A. I'm the president of Geolex.

6 Q. And besides geological and hydrogeological
7 analyses, what other service does Geolex provide?

8 A. In the context of this work and in the context
9 of our work on acid gas injection wells in general, we
10 kind of do a turnkey service where we provide the
11 geological investigations, the permitting, and then we
12 actually oversee the drilling and completion of the
13 wells.

14 Q. And did you also testify at the December
15 hearing on Agave's application?

16 A. Yes, sir, I did.

17 Q. Were you qualified as an expert in petroleum
18 geology and hydrogeology at that hearing?

19 A. Yes, I was.

20 MR. LARSON: Madam Chair, I also ask that
21 Mr. Gutierrez be qualified as an expert in petroleum
22 geology and hydrogeology for purposes of today's hearing.

23 CHAIRMAN BAILEY: He is qualified.

24 MR. LARSON: Thank you.

25 Q. (By Mr. Larson) I direct your attention to

1 the hard copy of what's been marked as Agave Energy
2 Exhibit Number 1. Did you prepare this exhibit?

3 A. I did.

4 Q. When Geolex was tasked by Agave with
5 addressing the re-entering and re-plugging requirements
6 in Order R-13507, what work did Geolex do first?

7 A. The first thing that we did was to review
8 again the full plugging records that were available from
9 the OCD and the BLM on these wells, but not only the
10 records that were on line, but the records that actually
11 resided physically at the offices. And especially in the
12 case of the BLM, that was critical in terms of just
13 getting all of the information on the plugging.

14 We then also went back and looked at our
15 initial analysis of the potential extent of the acid gas
16 plume over a 30-year period and then went and did a more
17 detailed look at the relative location of each of those
18 wells that were required by the Commission to be plugged
19 as part of the order in terms of their vulnerability, if
20 you will, to being affected or being conduits for getting
21 acid gas out of the injection zone.

22 Q. And based on that evaluation and post-hearing
23 review of the records, what conclusion did you draw
24 regarding the Simms Number 1, Government L Com Number 1
25 and Government L Com Number 2 plugged and abandoned wells

1 that are identified in the Commission's order?

2 A. Well, as I testified in the hearing back in
3 December, we did not feel that it was necessary to go
4 back and re-enter these wells, based on their plugging
5 status.

6 We did understand why the Commission was
7 concerned about that. And the fact that the three wells,
8 the Government 1 and 2 and the Simms, do end up falling
9 within the -- or very close to being within our projected
10 AGI plume after 30 years of injecting at an average rate
11 of approximately 8 million a day, which is what it will
12 balance out, based on our best estimates of the plant,
13 those we determined were reasonable for the Commission to
14 require that for those three wells because in large
15 measure of their proximity to that projected acid gas
16 plume after 30 years.

17 We then -- and we followed the same process
18 for each of the four wells. And we came up with those
19 three being -- you know, our recommendation to Agave was
20 yes, let's proceed and make plans to plug those according
21 to the requirements of the order.

22 When we went back and reviewed the Smith
23 Federal Well, however, we felt that kind of it was like
24 the reverse of throwing the baby out with the bath water.
25 It's like the baby got thrown in with the bath water

1 here.

2 We believe that there's some fundamental
3 issues relative to the plugging status of the well, four
4 basic independent lines of evidence that indicate to us
5 that that well is not a potential conduit for acid gas
6 out of the injection zone. And those four independent
7 lines of evidence we reviewed and had prepared.

8 And based on that, we recommended to Agave
9 that we come back to the Commission with this new data,
10 new analysis, and present to the Commission why we
11 believe that plugging the Smith Federal is not necessary
12 for protecting either other production zones in the area,
13 the integrity of the injection zone, or any surface
14 release of acid gas or freshwater impact.

15 Q. And what was the measurement of the radius
16 that you testified to during the December hearing?

17 A. Based on our calculation, the well will, after
18 30 years, have an approximate radius of about .39 miles
19 away from the well in terms of the extent of the plume of
20 acid gas away from the well.

21 Q. And your recommendation to Agave resulted in
22 the motion that I filed on behalf of Agave in our hearing
23 today; is that correct?

24 A. Yes, sir.

25 Q. If you'll move to the next slide, what's the

1 technical basis for your conclusion regarding the Smith
2 Federal Number 1?

3 A. As I mentioned, there's really four different
4 and separate lines of evidence. The well's current
5 plugging configuration is adequate to protect the Cherry
6 Canyon Zone, and it will prevent the potential for acid
7 gas to leave the injection zone if that acid gas were
8 ever even to potentially come into contact with the well.
9 And I'll go through each of these in more detail. That
10 was an important issue.

11 The second issue, and perhaps the second and
12 third, are -- really go together. The Smith Federal is
13 located almost three-quarters of a mile or about
14 three-quarters of a mile -- I think it's actually .76
15 miles away from the location of the proposed AGI. That
16 is significantly farther, almost twice the distance for
17 all of the other three wells that are part of the order,
18 the Simms and the Government 1 and 2.

19 And because of that, the area impacted by
20 injection, if we calculate -- we all know that the
21 circular or cylindrical model is only an approximation.
22 However, even if we were off by a factor of three in our
23 assessment of the shape or volume of the plume that would
24 be created after 30 years of injection, this well would
25 still fall outside of that radius.

1 In other words, if we either had a porosity
2 that was -- or an ultimate reservoir capacity that was a
3 third of what we think it is, or we injected more volume
4 than we thought, we would still have only about a
5 three -- with a 3X safety factor, we're still outside of
6 that .76-mile distance to the Smith Federal.

7 And lastly, while we -- and I testified in the
8 original hearing that I did not think that the dip made a
9 huge difference in terms of the ultimate configuration of
10 the plume, we did concede that the fact that the Cherry
11 Canyon Zone is more porous and more productive to the
12 north and to the northeast of the proposed well, that if
13 there was any effect at all of the dip, it would result
14 in migration preferentially to the north and northwest.
15 And this well is located southeast of the proposed well.

16 So when you put all four of these lines of
17 evidence together, it seemed to make sense to us that it
18 would be reasonable to exclude this well from those
19 re-entry requirements.

20 Q. Just to clarify something in your third bullet
21 point there in that slide, how did you calculate that 3X
22 safety factor?

23 A. Sure. We calculated the volume of acid gas
24 that would be injected into the reservoir over the
25 30-year period at an average rate of -- if I recall

1 correctly, I testified in the original hearing it was
2 just around 8 million cubic feet a day.

3 And based on that volume, and then based on
4 the porosity and irreducible water saturation within the
5 reservoir, we calculated how much volume that plume would
6 take up in a circular model or a cylindrical model in the
7 reservoir, and that was a radius of .39 miles.

8 Then what we did was essentially assume that
9 either we reduce the porosity, because there is some
10 variation in porosity, so we reduced the porosity to a
11 third of what the porosity is that we see on the logs, or
12 we increase the volume by threefold, and then we looked
13 at what radius would be affected. And that radius would
14 be .68 miles if we did it three times. And so that's how
15 we calculated that factor.

16 Q. If you could move to the next slide, please?

17 A. So then these next slides really summarize our
18 analysis for each of these lines of evidence that I'm
19 speaking of here.

20 The first one is relative to the cementing and
21 the current plugging configuration in the Cherry Canyon.
22 Just to refresh everybody's recollection, this well is a
23 well that has been drilled and plugged, and it extends
24 well below the Cherry Canyon, and it has a 9 5/8-inch
25 casing that runs from about 5,200 feet to 12,400 feet,

1 which spans the Cherry Canyon Zone from 6215 to 6515.

2 Prior to plugging, the well was killed with
3 heavy brine mud which filled the casing. They also then
4 did a squeeze job at 6,900 feet, which is about 400 feet
5 below the Cherry Canyon, and they injected 100 sacks of
6 cement with a retainer set at 6,870.

7 And interestingly enough, this was a point
8 that Commissioner Bailey raised in our original hearing
9 in asking me about the cementing across there. And while
10 it's difficult to say exactly where that cement is
11 actually that was done from that squeeze job, because we
12 don't have a bond log, my calculations show that it
13 extends up into at least a portion of the Cherry Canyon,
14 probably about the lowermost 60 or 70 feet of the Cherry
15 Canyon. And that's based on a conservative 1.2 cubic
16 feet per sack of the cement in the squeeze job, as best
17 we can tell from the plugging records.

18 Then that well -- they pulled the casing from
19 5,254 and then had two substantial plugs that were set
20 over that casing stub and then an additional plug set
21 above that. And of course, the surface casing remains in
22 that well, cemented to the surface.

23 So in our view, the squeeze job, the spots
24 combined with the heavy mud, effectively isolate the
25 casing between 5,100 and 6,900 feet, which protects the

1 Cherry Canyon.

2 In this next drawing, you can see a blowup of
3 the zone that we are interested in in the well. Here is
4 where approximately the Cherry Canyon is. We had heavy
5 brine mud that filled both the borehole inside there and
6 then a set of plugs within the borehole and above here,
7 and then here is the squeeze.

8 Now, we haven't attempted to show this to
9 scale in terms of where that cement would lie. But as I
10 said, in my calculations, between the 9 5/8 and the
11 12 1/4-inch bore, that cement from this squeeze job would
12 extend into the base of the Cherry Canyon here. So that
13 covers the cementing of the well itself.

14 As I mentioned, of course we still have all of
15 this surface casing, which is 13 and -- I'm sorry 13 3/8,
16 all the way down to 5,200 feet, and it is cemented all
17 the way to the surface with 4,400 sacks of cement.

18 So we clearly have isolated the upper zones,
19 which are the productive zones in this area. And we have
20 isolated the lower zones that are potentially productive
21 in this area as well in this well.

22 Q. You alluded to the question that the
23 Commission Chair posed to you during the previous
24 hearing, which specifically was: Is there unprotected
25 annulus in the well from 6,450 to 5,300?

1 As you sit here today, would your answer be
2 different than the one you gave her in December?

3 A. Well, what I said is I couldn't tell exactly.
4 And you know, I can't define exactly what the limits of
5 that cement are. But based on the calculations, it's
6 reasonable to anticipate that certainly the basal portion
7 of that Cherry Canyon is isolated there, and we do have
8 casing with cement across it.

9 The next item that I raised, which is the
10 distance of the well, and I think this map shows it
11 pretty dramatically. If you see, this is -- the red
12 circle right here is the approximate extent of acid gas
13 after 30 years of injection.

14 And this is important to note. If you look at
15 where the three other wells are that we're referring to,
16 we've got the Simms, which is located right here; we have
17 the Government Number 2, which is located right here; and
18 the Government Number 1, which is located right here.

19 Even though the Government 1 is also farther
20 from this and not intersecting our anticipated radius of
21 injection, it is in the direction where the Cherry Canyon
22 is the most permeable and most likely deflection, if you
23 will, of a circular or cylindrical model.

24 The Smith Federal --

25 CHAIRMAN BAILEY: Could I interrupt?

1 THE WITNESS: Sure.

2 CHAIRMAN BAILEY: You said the well is
3 located here, the well is located here. For the record,
4 could you define north, south, east, west of the
5 projected zone here?

6 THE WITNESS: Certainly. The Simms Number
7 1 Well is located approximately .4 miles to the northwest
8 of the proposed well. The Government Number 2 is located
9 approximately .4 miles to the east, or slightly
10 northeast. The Government Number 2 is located
11 approximately .7 miles to the northeast of the proposed
12 location and to the northeast of the Government Number 2.
13 And then the Smith Federal is located approximately .75
14 miles to the southeast of the proposed AGI.

15 CHAIRMAN BAILEY: Thank you.

16 THE WITNESS: This yellow circle shows the
17 calculated radius with the 3X safety factor that I was
18 discussing. So in other words, if our porosity really is
19 significantly lower than we anticipate, we don't think
20 there's any chance it's going to be three times off. But
21 what we tried to do is show how far this well really is,
22 in terms of its relative position, to the anticipated
23 plume of acid gas after 30 years. So that covers the
24 distance away from the well, as well as the area impacted
25 by injection.

1 Now, the other and last item, as I mentioned,
2 is just strictly the structural position. And this is a
3 structure-contour map of the Cherry Canyon, which shows
4 you that essentially the Smith Federal is approximately
5 50 feet downdip of the position of the Red Hills AGI.

6 You can see that same thing here in this
7 cross-section. So that you actually see that the Cherry
8 Canyon Zones that we are proposing for injection,
9 actually these lower Cherry Canyon Zones, are the primary
10 zones we anticipate will be utilized, and the Smith
11 Federal is south and east and downdip of that.

12 Q. (By Mr. Larson) Alberto, you had another
13 slide with a cross-section?

14 A. Right. I mean I think -- yeah. The
15 cross-section, that is what I just showed, right. You
16 can see how it is downdip from the Smith Federal.

17 And in summary, you know, Agave has initiated
18 a plugging program for the following three wells: The
19 Government Number 2 -- and I can give you an
20 up-to-the-minute or I guess up to about an
21 hour-and-a-half-ago report on where we are with the
22 Government Number 2.

23 Yesterday we milled a grand total of about 19
24 feet, because there's some metal junk mixed in with the
25 cement plug at 550 feet in that well. But this morning,

1 when I talked to our site supervisor, he informed me that
2 it looked like they had made about a foot and a half in
3 about half an hour this morning, which was a lot better
4 than what they were doing yesterday.

5 And they are monitoring the returns in the mud
6 pit. And if it appears that they're through the metal
7 junk that they were milling through yesterday, they'll
8 trip out of the hole, go back in with a more aggressive
9 bit, and hopefully we can make some quicker progress.

10 But this is the typical thing that you
11 encounter in some of these old wells that are plugged.
12 You don't know what people have actually put in them.
13 Here it appears there was just a piece of tubing or pipe
14 stuck in the cement itself, in the cement plug, that we
15 had to mill through. So that's where we are with the
16 Government Number 2.

17 Our plan is that we would move from the
18 Government Number 2, which is actually the most difficult
19 of the three wells to address, because it has casing that
20 has been pulled from the Cherry Canyon Zone. So we
21 wanted to do that one first. And we're moving along. I
22 hope to have it completed by this time next week.

23 Then we will move to the Government Number 1
24 and do it, and then to the Simms Number 1. And depending
25 on the outcome of this request, we would either remove

1 the Smith Federal from the plugging program or we would
2 continue and plug it after the Simms Number 1.

3 As I mentioned, we have -- or as Jennifer
4 mentioned, we have -- Geolex prepared for Agave some
5 detailed remediation plans for these wells. Agave has
6 obtained access from all the landowners. We've done the
7 surface prep for the three wells that we're currently
8 working on, and we are executing the plugging program for
9 those wells in the sequence that I just laid out.

10 Both the districts in the case of the Simms 1
11 and Government 2 have approved the C-103s with the
12 plugging program. And I have been informing, or our site
13 manager, one of us, has been in contact with E.L. at the
14 district on a daily or every-other-day basis to give him
15 progress on these wells. And we'll do the same thing on
16 the Simms Number 1 to the BLM and the OCD on the
17 Government Number 1.

18 So for the reasons that I detailed earlier, we
19 believe it is prudent and safe to leave the Smith Federal
20 in its current condition and that it doesn't pose any
21 significant hazard to the Cherry Canyon or to adjacent
22 formations because of the four lines of evidence that I
23 discussed.

24 So we would request that the Commission
25 reconsider the need to re-enter and remediate that

1 particular well, because we believe its current condition
2 is protective of the environment and of public health and
3 of correlative rights.

4 Q. Is it your professional opinion that the
5 current plugging condition of the Smith Federal Number 1
6 is sufficient to protect the Cherry Canyon?

7 A. I'd say yes, it is, in conjunction with all
8 four of the lines of evidence that we discussed.

9 Q. And in your opinion, is there any reasonable
10 likelihood that the TAG plume created by the injection of
11 CO2 and H2S will reach the Smith Federal Number 1?

12 A. No. I'm convinced that it will not.

13 Q. In your opinion, would it be appropriate and
14 reasonable to require Agave to spend a quarter of a
15 million dollars to re-enter and re-plug the Smith Federal
16 Number 1 Well?

17 A. No, I do not. That's why I made this
18 recommendation.

19 MR. LARSON: Madam Chair, I move the
20 admission of Agave Exhibit Number 1.

21 CHAIRMAN BAILEY: It is admitted.

22 (Exhibit 1 was admitted.)

23 MR. LARSON: Thank you. That's all I have
24 for Mr. Gutierrez.

25 CHAIRMAN BAILEY: Commissioner Dawson, do

1 you have any questions?

2 COMMISSIONER DAWSON: I do have a few
3 questions.

4 EXAMINATION

5 BY COMMISSIONER DAWSON:

6 Q. On your cross-section -- can you go to the
7 cross-section that you have on your presentation, please?

8 A. Yes, sir.

9 Q. The Smith Federal Number 1 -- okay. The Smith
10 Federal Number 1, is that the far -- I can't really read
11 this very well.

12 A. Sure. I'm sorry. Let me see if I can blow it
13 up a little.

14 This is the Smith Federal Number 1, right
15 here. And if you look at the trace of the cross-section,
16 you can see -- the cross-section doesn't really go
17 through the Red Hills AGI, but the location of the Red
18 Hills AGI is projected onto it.

19 So there's this well, and the next well is the
20 Smith Federal, and then the bottom well in this
21 cross-section is way down here. So those wells are --
22 the AGI well site is here. It would be projected into
23 the same location as that well that is located to the
24 east of it. And then this is the Smith Federal, right
25 here.

1 If you go back to the map again, to the
2 cross-section line, you can see this well right here is
3 the one that's right next to where we would project the
4 Red Hills AGI. It's on strike with that one. And then
5 here is the Smith Federal. It's the next one along the
6 cross-section.

7 So it would be -- this is the Smith Federal.
8 And this is the one that is -- essentially we believe to
9 be what we will encounter when we drill the Red Hills
10 AGI. It's directly on strike with the well.

11 Q. What well is that? What's the name of that
12 well, the one that you're using as an analogy here?

13 A. That well right here is the Government Number
14 2.

15 Q. On the far right well located on your
16 cross-section that has the blue arrow on it --

17 A. Yes, sir.

18 Q. Can you go back to your cross-section?

19 A. Yep. This well right here.

20 Q. Yeah. It indicates that there's some
21 perforations in that zone that's planned to be injected
22 into?

23 A. Yes, sir.

24 Q. Do you know how old that well is and/or when
25 it was drilled and completed?

1 A. Right off the top of my head, I don't. But
2 that well was in our -- I believe in our original
3 application. Let me see if I can find that information
4 for you.

5 It is quite -- just so that we put it in
6 context, though, it is quite a ways away from -- that
7 well is all the way down here, almost three miles away
8 from the current proposed AGI site. So that well is this
9 one down here.

10 Q. Yeah. But it was a Cherry Canyon producer at
11 one time?

12 A. It was perforated in the Cherry Canyon. I
13 don't think it produced anything but water out of the
14 Cherry Canyon.

15 Q. It was not a prolific or a commercial well?

16 A. No, it was not.

17 Q. When you prepared this cross-section, what did
18 you hang that cross-section on? Is that a structural or
19 a stratigraphic cross-section?

20 A. No. It's essentially a structural
21 cross-section. We just hung it on --

22 Q. Ground level ground elevation?

23 A. Yes. That's right.

24 Q. So on your plugging is not needed slide --

25 A. Yes, sir.

1 Q. -- the Smith Federal Number 1 regarding
2 plugging is not needed because current plugging
3 configuration protects the Cherry Canyon, on your data
4 that you used for the plugs that were above and below the
5 Cherry Canyon, that was from the completion card from the
6 well? Is that where you got that information, or from
7 the OCD well files?

8 A. Yes, sir.

9 Q. Did it have any indication as to what pound
10 the heavy brine mud that was utilized in --

11 A. No, it did not have a specific weight. There
12 were some records on the drilling of the well that
13 indicated that they were using about 10 1/2 to
14 10 3/4-pound mud. So I can only assume that it would be
15 that or maybe slightly heavier, if it had lost some
16 fluid.

17 Q. Did you ever prepare a porosity map for those
18 wells?

19 A. We did, as part of our original C-108. And in
20 the original hearing we, presented it. And if you --

21 Q. I thought you did.

22 A. Yeah. And it basically had a sweet spot of
23 porosity that extended to the east and northeast of the
24 well, of the proposed AGI. As you went to the west and
25 northwest, we basically went from about 170 feet of pay

1 to like 140 feet of pay. And then up to the northeast in
2 the Cherry Canyon, we had close to 220 feet.

3 Q. Do you feel there's any potential for
4 commercial Cherry Canyon production within that radius,
5 that .68 radius?

6 A. Absolutely not, no.

7 COMMISSIONER DAWSON: I think that's all
8 the questions I have. Thank you.

9 CHAIRMAN BAILEY: Commissioner Balch?

10 COMMISSIONER BALCH: I also have some
11 clarifications, if you will, for the cross-section.

12 Good morning, Mr. Gutierrez.

13 THE WITNESS: Good morning.

14 EXAMINATION

15 BY COMMISSIONER BALCH:

16 Q. So if you go back to the cross-section, I'd
17 just like to place myself geographically here in a
18 vertical sense. You're planning on injecting in the
19 bottom three zones?

20 A. It will depend on what we -- currently our
21 approval is to inject into the Cherry Canyon, which could
22 be any one of these zones. But generally our assessment,
23 based on the nearest logs -- now granted, the old
24 Government Number 2, they're old logs. So when we drill
25 the well and have our own logs and our own core data,

1 we'll have a better sense.

2 But from everything we can tell right now, the
3 most likely zones would be the bottom three or four zones
4 there.

5 Q. And in the Government Number 2 well, which I
6 think you --

7 A. This is essentially the Government Number 2.

8 Q. Could you give me a depth of the top-most
9 Cherry Canyon and a depth of the bottom-most Cherry
10 Canyon?

11 A. Yes, sir.

12 Q. I know this is in the record. I just want to
13 refresh my memory.

14 A. The Government Number 2 Well, the bottom of
15 the Cherry Canyon is approximately 6,450 feet, and the
16 top is 6,150 feet. And as it turns out, there is a
17 balance plug set -- we will set a balance plug across
18 that zone. Right now, that zone is naked in the
19 Government Number 2.

20 Q. In the Smith Federal, I'd like to locate the
21 current plugs on my copy of that map or cross-section.

22 A. Okay. These are the current plugs in the
23 Smith Federal. There was a squeeze of 100 sacks at 8,985
24 feet, with six holes, which they squeezed 100 sacks into.
25 There's actually a plug below that one, as well.

1 I don't have that right off the top of my
2 head, where that plug is. But there is -- let me see if
3 I can blow that up. I should have brought my original
4 application.

5 Q. I'm glad it just wasn't my eyesight.

6 A. No, it's not.

7 So there is a cast iron bridge plug that was
8 set at 10,250 feet. And they spotted -- it looks like
9 33 -- I can't read it right here. I'll have to go back
10 and look at the original record. It was so far below the
11 area that we were going to --

12 Q. If you go to the cross-section, 6,900 feet
13 would be about where on the cross-section?

14 A. Okay. In the Smith Federal Well, 6,900 feet
15 would be approximately here, right about here, below the
16 bottom of the Cherry Canyon. Because the bottom of the
17 Cherry Canyon is at approximately 6,515 feet in the Smith
18 Federal.

19 Q. And then I think the other plugs at 52 and 54,
20 is that also on the cross-section? Was that above the
21 cross-section?

22 A. The upper plug is going to be approximately
23 here in the cross-section. It's near the top of the
24 cross-section, yes. And that would be these two plugs up
25 here. They're kind of at the bottom of the casing shoe

1 and across the connection between the intermediate and
2 the surface casing.

3 Q. You said the difference in altitude is about
4 50 feet --

5 A. Yes, sir.

6 Q. -- top structure?

7 A. Yes, sir.

8 COMMISSIONER BALCH: That's all I have.

9 CHAIRMAN BAILEY: Commissioner Dawson, do
10 you have any more questions?

11 COMMISSIONER DAWSON: Yeah, I have one
12 more question.

13 FURTHER EXAMINATION

14 BY COMMISSIONER DAWSON:

15 Q. You said you were in contact with the district
16 office, and they have approved your C-103s, your sundry
17 notices --

18 A. Yes, sir.

19 Q. -- for the work plan?

20 A. Yes, sir.

21 Q. You said, "E.L." Who is --

22 A. That's Elidio Gonzales. He is the acting
23 district director at the Hobbs District.

24 Q. Did the OCD personnel -- did they come out, or
25 are they planning on coming out and witnessing any of

1 these pluggings?

2 A. We've certainly made that available to them.
3 They haven't come out yet to see the Government Number 2.
4 But frankly, it's not very exciting right now.

5 When we get to where we are actually in that
6 one, drilling out the bottom of -- drilling back into the
7 open hole where the casing has been pulled, I think they
8 probably will come out at that point.

9 But we're keeping them apprised on a daily
10 basis of, you know, our progress. And they're certainly
11 welcome to come out any time.

12 COMMISSIONER DAWSON: No further
13 questions. Thank you.

14 EXAMINATION

15 BY CHAIRMAN BAILEY:

16 Q. Has E.L. Gonzales told you about the plugging
17 program, that he has saved us three-quarters of a million
18 dollars on the plugging program that was just completed
19 using Basic as a plugger?

20 A. No, he hasn't. I haven't spoken to him about
21 that.

22 Q. I was just wondering why Basic would be
23 charging you a quarter of a million dollars per well, if
24 there were some unusual circumstances, when that number
25 is so much higher than what the OCD has been paying this

1 summer.

2 A. I don't know, Commissioner Bailey. I think it
3 depends on each individual well. You know, I mean the
4 AFE that we have for those wells from Basic runs
5 approximately somewhere between 175- to 200,000 or so per
6 well just for Basic's services.

7 I think the quarter million dollars also takes
8 into account the surface access agreements, the -- our
9 services, overseeing the plugging, the permitting, and
10 the actual reclamation of the site afterwards, the
11 surface work that has to be done.

12 But I don't know how deep the wells were or
13 what plugging had to be done. But I think in most cases,
14 where they're talking about plugging wells that haven't
15 been plugged, they're not having to go and drill out all
16 these old plugs. I think that's mainly what's taking the
17 time.

18 Q. Have you notified the affected parties within
19 the AOR of your request to not plug this well?

20 A. We provided notice to Mr. Bruce. We have not
21 re-noticed everyone that was noticed in the original
22 hearing.

23 Q. So affected parties within this Area of Review
24 may not be aware of your application today, other than
25 Mr. Bruce's client?

1 A. Yes. Except for the fact, if we recall that
2 from the -- in terms of operators in the area, it was a
3 unitized area that Kaiser-Francis is operating. So
4 they're the sole operator in that area.

5 And certainly the surface owners, the primary
6 surface owners, the Maderas, are well aware of our plans,
7 since we had obtained access from them not only for these
8 wells, but in fact we purchased the land to build the
9 plant on from them.

10 But we have not gone out and specifically
11 notified -- re-noticed everyone that was originally
12 noticed. Although, in my mind, that was only the surface
13 owners, the Maderas and the unitized operators,
14 Kaiser-Francis, in that whole one-mile area.

15 CHAIRMAN BAILEY: Those are all the
16 questions I have.

17 Do you have any redirect?

18 MR. LARSON: I do not.

19 CHAIRMAN BAILEY: Then you may be excused.

20 Do you have a closing statement?

21 MR. LARSON: I do. In accordance with the
22 requirements of Order Number R-13507, Agave has moved
23 forward with analyzing plugging data on the four wells
24 identified in the order and has actually moved forward
25 with re-entering and re-plugging three of those wells.

1 However, Agave's witnesses, I think, have
2 demonstrated today that it's neither necessary nor cost
3 effective for Agave to re-enter and plug the Smith
4 Federal Number 1 Well. Accordingly, I request that the
5 Commission grant the relief requested by Agave in its
6 motion. Thank you.

7 CHAIRMAN BAILEY: Commissioners, would you
8 like to go into closed session to debate?

9 COMMISSIONER BALCH: I'll move to go into
10 closed session.

11 COMMISSIONER DAWSON: I'll second.

12 CHAIRMAN BAILEY: All those in favor?

13 In accordance with New Mexico Statute 10-15-1
14 and the OCC resolution on Open Meetings, we will go into
15 closed session to debate this case.

16 (Whereupon the Commission went into closed session.)

17 CHAIRMAN BAILEY: Do I hear a motion to go
18 back on the record?

19 COMMISSIONER DAWSON: I will motion.

20 COMMISSIONER BALCH: And I will second.

21 CHAIRMAN BAILEY: All those in favor?

22 We are coming back on the record from a closed
23 session that was conducted in accordance with New Mexico
24 Statute 10-15-1 and the OCC resolution on the Open
25 Meetings. The only thing that was discussed was the acid

1 gas injection well.

2 And the unanimous decision of the Commission
3 is to grant the request. I asked Mr. Larson to develop a
4 draft rule for the attorney to save him some time and
5 some effort

6 MR. LARSON: Certainly in the form of a
7 proposed draft order?

8 CHAIRMAN BAILEY: Yes. I meant order, not
9 rule.

10 Okay. Is there any other discussion or
11 business before the Commission today?

12 MR. BRANCARD: Madam Chair, just to
13 clarify, you'll do a formal motion at the time the order
14 is approved?

15 CHAIRMAN BAILEY: Okay. Yes.

16 Do I hear a motion to approve the application
17 to develop an order approving the application?

18 COMMISSIONER BALCH: I will make that
19 motion.

20 COMMISSIONER DAWSON: And I will second.

21 CHAIRMAN BAILEY: All those in favor?

22 Any other business? Okay. Thank you very
23 much.

24 (The hearing was concluded at 10:45 a.m.)

25

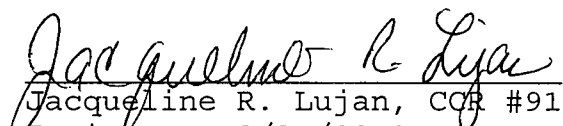
REPORTER'S CERTIFICATE

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I, JACQUELINE R. LUJAN, New Mexico CCR #91, DO
HEREBY CERTIFY that on June 28, 2012, proceedings in the
above captioned case were taken before me and that I did
report in stenographic shorthand the proceedings set
forth herein, and the foregoing pages are a true and
correct transcription to the best of my ability.

I FURTHER CERTIFY that I am neither employed by
nor related to nor contracted with any of the parties or
attorneys in this case and that I have no interest
whatsoever in the final disposition of this case in any
court.

WITNESS MY HAND this 11th day of July, 2012.


Jacqueline R. Lujan, CCR #91
Expires: 12/31/2012