

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:

ORIGINAL

APPLICATION OF HESS CORPORATION FOR  
APPROVAL OF ENLARGEMENT OF THE WEST  
BRAVO DOME CARBON DIOXIDE GAS UNIT,  
HARDING COUNTY, NEW MEXICO

Case No. 14545

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, Technical Examiner  
DAVID K. BROOKS, Legal Examiner

September 16, 2010

Santa Fe, New Mexico

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This matter came on for hearing before the  
New Mexico Oil Conservation Division, WILLIAM V. JONES,  
Technical Examiner, and DAVID K. BROOKS, Legal Examiner,  
on Thursday, September 16, 2010, at the New Mexico  
Energy, Minerals and Natural Resources Department, 1220  
South St. Francis Drive, Room 102, Santa Fe, New Mexico.

REPORTED BY: Jacqueline R. Lujan, CCR #91  
Paul Baca Professional Court Reporters  
500 Fourth Street, N.W., Suite 105  
Albuquerque, NM 87103 505-843-9241

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A P P E A R A N C E S

FOR THE APPLICANT:

HOLLAND & HART  
WILLIAM F. CARR, ESQ.  
110 North Guadalupe, Suite 1  
Santa Fe, New Mexico 87501  
(505)988-4421

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1 EXAMINER JONES: Let's go back on the  
2 record and call Case 14545, application of Hess  
3 Corporation for approval of enlargement of the West Bravo  
4 Dome Carbon Dioxide Gas Unit, Harding County, New Mexico.  
5 Call for appearances.

6 MR. CARR: May it please the Examiners?  
7 My name is William F. Carr, with the Santa Fe office of  
8 Holland & Hart. We represent Hess Corporation in this  
9 matter. I have three witnesses.

10 EXAMINER JONES: Any other appearances?  
11 Will the witnesses please stand and state your  
12 names?

13 MR. HUGHART: My name is James Hughart.

14 MR. SLAMET: My name is Germawan Slamet.

15 MR. MARTINEZ: I'm Joaquin Martinez.

16 EXAMINER JONES: Will the court reporter  
17 please swear the witnesses?

18 (Three witnesses were sworn.)

19 MR. CARR: May it please the Examiners?  
20 We're here today to finish an effort to unitize certain  
21 lands that has taken over 25 years.

22 Hess Corporation is before you seeking an  
23 order approving the enlargement of the West Bravo Dome  
24 carbon dioxide agreement. These enlargements are  
25 authorized by the unit agreement and were recognized by

1 the OCD in the original order approving the West Bravo  
2 Dome.

3 As you will see, the acreage now to be  
4 included in West Bravo Dome was originally within what  
5 was proposed as the Bravo Dome. It's in the southwest  
6 quarter. And there was a large lease that was not  
7 committed to the Bravo Dome Unit, rendering this acreage  
8 not contiguous with the rest of the unit. Therefore, it  
9 was developed as a separate voluntary unit.

10 It was approved by the Division in 1984, and  
11 the lands have been maintained since that time. And I  
12 have three witnesses here today who are going to explain  
13 to you briefly the history of the unit and the status of  
14 the voluntary commitment to this unit plan. I will also  
15 call a witness to explain the basis for the unit  
16 boundaries for the expanded unit and, finally, a witness  
17 who can show you the impact of this expanded unitization  
18 on the state, federal, and fee lands within the unit  
19 area.

20 And my first witness Mr. Hughart.

21 JAMES HUGHART

22 Having been first duly sworn, testified as follows:

23 DIRECT EXAMINATION

24 BY MR. CARR:

25 Q. Would you state your name for the record,

1 please?

2 A. Yes, sir. My name is James Hughart.

3 Q. Spell your last name?

4 A. H-u-g-h-a-r-t.

5 Q. Mr. Hughart, where do you reside?

6 A. Houston, Texas.

7 Q. By whom are you employed?

8 A. Hess Corporation.

9 Q. What is your position with Hess Corporation?

10 A. I am the land manager for the Americas on  
11 Shore.

12 Q. Have you previously testified before the New  
13 Mexico Oil Conservation Division?

14 A. No, I have not.

15 Q. Could you review for Mr. Jones and Mr. Brooks  
16 your educational background?

17 A. Yes. I have a Bachelor of Arts degree from  
18 Colorado State University in 1970. Then I have a  
19 Master's of Business Administration from that same  
20 school, Colorado State University, in 1974.

21 Q. Since graduation, for whom have you worked?

22 A. I have worked for three different companies.  
23 I started with Texaco in 1974, in Denver, and I worked  
24 for them as a landman doing, basically, Rocky's land work  
25 until 1978. At which time I left, and I went to work for

1 Ashland Exploration, also in Denver, again, doing Rockies  
2 land work.

3 And in 1979, when Ashland sold all of their  
4 assets to a variety of different companies, I found  
5 myself out of work. And I ended up going to work for  
6 Amerada Hess Corporation, which is now Hess Corporation,  
7 and I have been there with that company for 31 years in  
8 both Denver and in Houston.

9 Q. Are you the land person who has been  
10 responsible for combining the lands in this enlarged unit  
11 area?

12 A. Yes.

13 Q. Are you familiar with the application filed in  
14 this case?

15 A. Yes, I am.

16 Q. Are you familiar with the status of the lands  
17 in the second enlarged West Bravo Dome Carbon Dioxide Gas  
18 Unit?

19 A. Yes, sir.

20 Q. Have you prepared exhibits for presentation  
21 here today?

22 A. Yes, I have.

23 MR. CARR: We tender Mr. Hughart as expert  
24 in land matters.

25 EXAMINER JONES: Mr. Hughart is qualified

1 as an expert in petroleum land matters.

2 MR. CARR: Mr. Examiners, we had proposed  
3 originally to present part of this case with a PowerPoint  
4 presentation. We have no audience. Everyone has a copy  
5 of the slides. It means there's one less thing I can  
6 have go wrong, so I'd like to suggest we work off the  
7 slides in the exhibit book.

8 So I'd ask that everyone turn to the first  
9 slide, which is behind Tab 1 in the book.

10 Q. (By Mr. Carr) And, Mr. Hughart, would you  
11 identify this slide and then review Hess' proposal and  
12 the reasons for the proposal?

13 A. Certainly. Slide Number 1, as you can see,  
14 the basic proposal is to expand the West Bravo Dome  
15 Carbon Dioxide Gas Unit from its present size of 34,619  
16 acres, by adding 42,331 acres of primarily federal,  
17 state, and mostly fee lands, such that the expanded unit,  
18 if approved, would be a total of 76,950 acres.

19 Q. Would this enlargement more than double the  
20 size of the unit?

21 A. Yes.

22 Q. This is a voluntary unit?

23 A. Yes, sir.

24 Q. Would you review for the Examiners the reasons  
25 for this proposal?

1           A.       Yes, I will. The largest reason for doing  
2 this is that we can do it, whereas up until now, we have  
3 not, and neither have our predecessors been able to do  
4 it.

5                    You will hear me describe throughout my  
6 testimony that there's a lease. It is a 63,000-acre  
7 lease which Hess now owns but previously had been owned  
8 by Amerigas. It dates back to 1943, and it was a lease  
9 for which Amerigas and the royalty owner, Mitchell, chose  
10 not to be included in the original Bravo Dome Gas Unit,  
11 which is a million-acre voluntary unit agreement which  
12 you will see in some of the slide materials.

13                   But as a result of Hess obtaining ownership of  
14 that Amerigas lease, which we obtained in 1989 from  
15 Amerigas, we have been successful, really, since 2006,  
16 when we decided to develop West Bravo Dome, to persuade  
17 the Mitchells to the benefits of unitization, so we have  
18 now had their permission to do so. And the good news is  
19 now we can go ahead and develop the West Bravo Dome Gas  
20 Unit lease in conjunction with the Mitchell lease and  
21 several other leases, which are non-Mitchell but Hess  
22 also owns, and develop them as nearly as possible as one  
23 large lease.

24                   And there are just many efficiencies that come  
25 from doing something like that. One of the bigger ones

1 is, hopefully, not having to drill unnecessary wells to  
2 save leasehold, and thereby minimize the footprint that  
3 is ultimately left out there.

4 Q. Let's go to the next slide, please. Would you  
5 identify and review that?

6 A. The next slide is just a plat, and it's merely  
7 there to help orient the Examiners as to where we are and  
8 what we're doing. It's a plat of the -- basically, the  
9 eastern half of New Mexico and a substantial portion of  
10 the Panhandle of Texas.

11 If you look up in the central portion of that  
12 map, you'll see what is northeastern New Mexico, the  
13 counties of Union, Harding, and Quay Counties. And there  
14 is an outline there and a designation of the Bravo Dome  
15 Carbon Dioxide Gas Unit, and that is in a black outline.

16 And if you look off on the southwest edge of  
17 Bravo Dome, you will see a very blurry red outline,  
18 which, in essence, is the existing West Bravo Dome Carbon  
19 Dioxide Gas Unit.

20 If you don't mind, let me turn you to the next  
21 slide, and that will give you a better appreciation of  
22 what it is you're looking at. The red outline in this  
23 case being the Bravo Dome Carbon Dioxide Gas Unit, which,  
24 incidentally, is operated by OXY, of which I'll also  
25 admit that Hess is a 10 percent owner in that.

1           And then the hundred percent Hess-owned West  
2 Bravo Dome, which is that black outline, which is very  
3 convoluted -- it looks like somebody threw spaghetti  
4 against the wall -- that is what we own. We have 100  
5 percent of that.

6           Going back to the original slide, which is  
7 slide two, through that map, you will see a line that  
8 runs from Colorado all the way down into Texas. That is  
9 the Sheep Mountain Pipeline, and Hess is a partial owner  
10 of that line. And it is that line that we use to  
11 transport our share of the Bravo Dome gas that is  
12 produced, so that we can take it down into Texas, and it  
13 also takes 100 percent of our West Bravo Dome CO2.

14           That gas goes all the way down to Gaines  
15 County. And our Seminole San Andres Unit, that is a unit  
16 that dates back into the 1930s. It's an old unit which  
17 is presently under tertiary oil recovery techniques to  
18 enhance the oil production of that. And we use our CO2  
19 for that field, and that's why we are here in Harding  
20 County, and it's what it's for, is to develop and enhance  
21 the production out of the Seminole San Andres unit.

22           Q.     What is the primary formation unitized in the  
23 West Bravo Dome?

24           A.     That is the Tubb formation and only the Tubb  
25 formation.

1 Q. If we go back two slides, the slide is  
2 entitled, "West Bravo Dome Gas Unit Background." Would  
3 you go to those and review the history of this unit?

4 A. This would be slides, essentially, 4, 5, 6.  
5 They start out talking about when the West Bravo Dome Gas  
6 Unit was formed in December of 1984, and goes all the way  
7 up to the present day of Hess' operations. And I'll try  
8 to not go over all of this, but just on the high points.

9 In 1984, City Service, which was a majority  
10 lease owner under the lands that were then West Bravo  
11 Dome, they, in conjunction with Amerada Hess, which was a  
12 non-operating partner, along with Chevron and a company  
13 called CO2 and Action, all came together and decided to  
14 unitize what available acreage there was to unitize that  
15 had not already been put in Bravo Dome and was still  
16 available to be unitized for the purposes of CO2  
17 development, and that became the West Bravo Dome Carbon  
18 Dioxide Gas Unit.

19 It was approved by the New Mexico Oil  
20 Conservation Commission, the New Mexico State Land  
21 Commissioner, the BLM, and all the working owners, which  
22 included Amerada Gas, Chevron, Cities, and CO2, and  
23 Action. That all came about with Cities as operator, and  
24 the Mitchell lease, which was the void -- if we go back  
25 for a minute -- let's go back to Slide 2. You'll see

1 what we would call the land west of the red outline and  
2 east of the black outline, that is the Mitchell Ranch.  
3 That was under lease to Amerigas at the time, so it was  
4 not available for unitization because they didn't want to  
5 unitize.

6 When the West Bravo Dome was formed, it did  
7 not contain the Amerigas Mitchell lease, and when Bravo  
8 Dome formed, it did not contain the Amerigas Mitchell  
9 lease, so there was a void or a hiatus between those two  
10 units.

11 What happened was -- several things happened  
12 in the history of this unit. Two years after the initial  
13 unit was formed -- let me go back. I missed a point.

14 When Cities initially formed that unit, they  
15 ended up drilling approximately 22 wells, 20 of which  
16 were deemed to be wells capable of commercial production,  
17 but they did not produce them because there was not a  
18 market for CO2 at that time for Cities and its  
19 non-operating partners. To have done that, they would  
20 have had to build a pretty extensive infrastructure,  
21 gathering lines, a processing plant. They would have to  
22 have had a transmission or a sales line probably over to  
23 the Sheep Mountain Pipeline, all of which was too  
24 expensive to do when you don't have a market for it.

25 Q. How was this unit maintained during this

1 period of time when the wells were shut in?

2 A. The unit was maintained pursuant to the  
3 leases, which called for minimum royalty payments,  
4 shut-in payments, as well as escalations of those  
5 payments at 5 percent per year, as well as some road  
6 maintenance and things that needed to be done to keep the  
7 unit up where the wells had been drilled. So that's how  
8 we maintained it.

9 Q. Today we're seeking enlargement of the unit  
10 pursuant to the unit agreement. Has the unit previously  
11 been enlarged?

12 A. Yes, it has. Two years after the initial  
13 formation of the unit, Cities, as operator, came along  
14 and expanded the unit by 7,307 acres, to approximately  
15 50,000 acres. And then following along with that, in  
16 1995, the unit was contracted, and there's a provision in  
17 the unit agreement that called for that, as well, so it  
18 was contracted.

19 What happened between these two times -- it's  
20 very, very important to get this point -- to make this  
21 point. I don't have these bullets in here, and I should  
22 have. Two things happened. Number one, Amerigas, in  
23 1989, sold the Mitchell lease to Hess Corporation, so  
24 that's at least getting us in the right direction of  
25 being able to do something out here.

1           The second thing was that Cities decided it no  
2 longer wanted to be in the West Bravo Dome Gas Unit, so  
3 we bought their interest out, as well as Chevron's and  
4 CO2's and Action's. So we ended up owning all of the  
5 interest in West Bravo Dome, and we owned the Amerigas  
6 lease.

7           It was on the basis of that that we  
8 continued -- Hess didn't have a market for this CO2  
9 either, so we then assumed the same thing that Cities was  
10 doing, and that's maintaining the leases through shut-in  
11 payments. There was some minor production that was going  
12 on on the Mitchell lease that went to a food processing  
13 plant called the BOC Plant that was out there on the  
14 premises.

15           But for the most part, we ended up paying the  
16 minimum royalty on the Mitchell lease and minimum shut-in  
17 royalties with escalations on the West Bravo Dome Gas  
18 Unit lease, and we just left it alone.

19           We left it alone until -- if you go to the  
20 next page -- Hess decided that we wanted to develop this,  
21 what we call the Residual Oil Zone, in the Seminole San  
22 Andres Unit. We needed a large supply of CO2, and we  
23 looked -- we always had considered this whole area as an  
24 insurance policy, if you will, of CO2 supply, if we ever  
25 needed it.

1 Hess, in 2006, went through a rather extensive  
2 approval process, and we decided we wanted to develop the  
3 ROZ, and we wanted to use as the source of supply of CO2  
4 what was up here in West Bravo Dome, which meant  
5 developing, not only West Bravo Dome, but developing the  
6 Mitchell lease. Those are two key important points.

7 What happened was that in 2007, we decided to  
8 drill 18 wells, and we did. And those 18 wells were not  
9 just on the West Bravo Dome unit. They were also on the  
10 the Mitchell lease. And even one was on a state lease we  
11 bought out there. So we did that.

12 And in 2008, we constructed a rather expensive  
13 production infrastructure of gathering lines, flow lines,  
14 trunk lines, built a plant that was capable of  
15 processing -- somebody may help me. I think it was like  
16 90 million --

17 MR. MARTINEZ: 75.

18 A. -- 75 million cubic feet of gas a day to  
19 process and ship through a transmission line over to the  
20 Sheep Mountain Pipeline -- which you may recall, back in  
21 that second sheet -- that's that pipeline that runs all  
22 the way down through the Bravo Dome unit and all the way  
23 down to Seminole.

24 So we did all of that and started production  
25 in December of 2008, finished turning all its wells to

1 production, 43 wells to production, by June of 2009, and  
2 we also started to make royalty payments and do the kind  
3 of lease maintenance that we needed to do to have a  
4 productive operation out here.

5 We also had to -- because of the nature of  
6 spacing in the area, we had to form communitization  
7 agreements, which more often than not, it took portions  
8 of West Bravo Dome and combined with portions of the  
9 Mitchell lease and other leases, and apportion out the  
10 ownership based on the 640-acre pooling patterns.

11 We ended up with -- I think today we've  
12 probably got 25 or more communitization agreements in  
13 place to handle the accounting and the division of  
14 proceeds for production out here.

15 Several other things happened in 2009. We'll  
16 go to the next page. As I said, we turned those 43 wells  
17 to production. In 2010, this year, we went out and  
18 drilled 14 new wells, and out of them, we returned 12 of  
19 those wells to production. Just to summarize what we're  
20 getting out of there, we're getting about 58 million  
21 cubic feet of gas per day from 56 wells.

22 Q. The remaining PowerPoint slides are going to  
23 be addressed by other witnesses. If we could turn to the  
24 document behind Tab 2. Mr. Hughart, would you identify  
25 that, please?

1           A.     That is the original unit agreement for the  
2     development and operation of the West Bravo Dome Carbon  
3     Dioxide Gas Unit, which was recorded on December 12th,  
4     1984.

5           Q.     This is the agreement that was approved in  
6     1984 by the Oil Conservation Division?

7           A.     Yes, it was.

8           Q.     Now, Article 12 of that agreement provides for  
9     enlargement of the unit area, does it not?

10          A.     Yes, it does.

11          Q.     What are the prescribed procedures for  
12     enlarging a unit area?

13          A.     I'll reiterate those. Those procedures to  
14     enlarge a proposed -- to have an enlargement, it has to  
15     be proposed by all the working interest owners.

16          Q.     That's Hess?

17          A.     Again, that's Hess. We need the approval of  
18     the Commissioner of Public Lands and the approval of the  
19     Bureau of Land Management.

20          Q.     Those are the three requirements in the unit  
21     agreement; is that correct?

22          A.     That is true.

23          Q.     Why have we brought this application before  
24     the Oil Conservation Division for approval?

25          A.     We had done that because the preliminary

1 approval letter that we obtained from the Commissioner of  
2 Public Lands has made an order from the OCD approving  
3 enlargement a condition of his approval.

4 Q. Does the initial OCD order, Order R-7707, also  
5 require that enlargements and contractions be submitted  
6 to the Division Director for approval?

7 A. Yes.

8 MR. CARR: May it please the Examiners? I  
9 have a copy of that order just for your reference, if you  
10 desire. But it does provide that the Director shall  
11 improve enlargements and contractions.

12 Q. (By Mr. Carr) Mr. Hughart, let's go to the  
13 information behind Tab 3. Would you identify that,  
14 please?

15 A. This is going to be Exhibit A to the enlarged  
16 or expanded unit, the second enlargement. It is a map  
17 that essentially shows all of the tracts that will be  
18 included in the unit. And it has some other things. It  
19 has a legend there, and we'll go over the details of that  
20 legend in a moment. But that's what that's supposed to  
21 show. It also shows the color of the acreage. The green  
22 acreage is state leasehold, the orange acreage or  
23 flesh-colored is federal, and the fee acreage is all in  
24 blue.

25 Q. Would you identify the document behind Tab 4?

1           A.     That is what is going to be Exhibit B to the  
2     second enlargement, and it is -- if you were to compare  
3     it to the map, you would find every tract on that map on  
4     this exhibit. It just goes into detail, telling you what  
5     the ownership is on every tract.

6           I think if you look on the first page of  
7     Exhibit B, you'll see there's tract numbers. If it's a  
8     federal lease, it's an F number, a description of the  
9     acreage associated with that tract, the amount of acres.  
10    If there's a serial number, federal or state, it shows  
11    it. It also shows who owns all -- the basic royalty  
12    ownership, the lessee of record, who owns the overriding  
13    royalty ownership, if any is present, as well as who owns  
14    the working interest. And in every case, it's going to  
15    show Hess Corporation.

16          Q.     Let's go to the next document behind Tab 5.  
17    What is this?

18          A.     That is the third -- or Exhibit C to the  
19    second enlargement. It does nothing more than just take  
20    all of those tracts and assign a percentage of  
21    participation to the total, to the whole.

22          Q.     Would these revised Exhibits A, B, and C be  
23    filed in the public records of Harding County?

24          A.     Yes.

25          Q.     Is that required as a condition precedent to

1 expansion of the unit area?

2 A. Yes, it is.

3 Q. If approved, when would the expanded or  
4 enlarged unit become effective?

5 A. It would become effective 7:00 a.m. of the  
6 first day of the calendar month following compliance with  
7 conditions for enlargement, as specified by working  
8 interest owners, and the filing of the revised Exhibits  
9 A, B, and C.

10 Q. And so as to the working interest, Hess has  
11 leased all 76,000 plus acres, 76,950 acres?

12 A. Yes, sir.

13 Q. All those leases are committed to the West  
14 Bravo Dome?

15 A. Yes.

16 Q. Now, let's take a look at the royalty  
17 ownership. Has the Commissioner of Public Lands given  
18 preliminary approval to the proposal unit agreement?

19 A. Yes.

20 Q. Is that letter included behind Tab 6 in the  
21 exhibit?

22 A. Yes.

23 Q. Has the Bureau of Land Management designated  
24 the expanded area as an area logically suited for  
25 development under a unit plan?

1 A. Yes.

2 Q. What is the status of the fee royalty  
3 ownership?

4 A. The fee royalty owners in the original unit  
5 area is committed.

6 Q. And with the commitment of the state lands and  
7 the commitment of the federal lands and the commitment of  
8 these fee lands, being really the Mitchells, will 100  
9 percent of the royalty be committed to the unit?

10 A. Yes, it will.

11 Q. I went out of order on here, Mr. Hughart. I  
12 would like to, before we wrap up, ask you if you could  
13 review your efforts to bring both the Mitchell interests  
14 and the OXY interests into the unit.

15 A. Certainly. If you recall, I mentioned that a  
16 very good thing that happened in 1989 is that Hess became  
17 the operator of that lease. We bought it from Amerigas.  
18 So now that we have 100 percent ownership of the unit and  
19 100 percent ownership of Mitchell, and as we have, as a  
20 company, made the decision to go ahead and develop this,  
21 what we did is we started a very long process of trying  
22 to get to know the Mitchells.

23 I can still remember -- Joaquin Martinez, who  
24 is one of the witnesses shortly, and myself and two other  
25 guys, we showed up at the Mitchells' ranch house, sat

1 down and had a long meeting in the morning and got to  
2 know them, explained what our processes were and what we  
3 intended to do and, from that point forward, started to  
4 have regular phone conversations and regular meetings  
5 with the Mitchells, trying to convince them we were the  
6 real deal. We weren't going to be like everybody else  
7 that has ever had ownership of this property and just  
8 made these minimum royalty payments. We truly intended  
9 to do it.

10 Well that was a big job, because we needed  
11 surface use agreements to be worked out. We needed to  
12 buy property to put a gas plant out there that would be  
13 processing gas, his gas and the West Bravo Dome Gas Unit  
14 gas. And anybody that knows the law, you can't do that  
15 without the consent. So we worked with the Mitchells on  
16 these types of issues.

17 Along with it, we very slowly introduced them  
18 to the concept of unitizing their leasehold. If you  
19 recall, the Mitchells didn't want to do this going all  
20 the way back to Terry's father. Terry Mitchell is  
21 president. They wanted no part of this.

22 Well, over about a half a year to a year  
23 period of time, we were successful in working with the  
24 Mitchells and convincing them that this truly was in  
25 their best interest. And at the end of the day, they

1 have committed to do this. It just took a long time to  
2 do, but we now have that.

3           There was another piece of this, though, that  
4 needed to be dealt with. There was some leasehold that  
5 was owned by OXY inside the boundaries of the Mitchell  
6 leasehold. It was state leasehold, but they owned it.

7           And over three years ago, they let on to me  
8 that they wanted no part of participating in West Bravo  
9 Dome. They had their own troubles in Bravo Dome. They  
10 wanted nothing to do with it. I said, "Fine. Sell me  
11 your acreage." That's not that easy to do with a company  
12 like OXY. So we got into -- I won't bore you with the  
13 details of all the different types of trades that we  
14 tried to work out.

15           But at the end of the day, after three years,  
16 we worked out a trade that involved, not only this, but  
17 some interests in some other properties elsewhere,  
18 outside of here. And we now own an assignment of that  
19 OXY acreage that's four state leases comprising 1,280  
20 acres. We felt that we had to have that 1,280 acres,  
21 just like we had to have the Mitchell acreage. Now we  
22 have that. And when we say we're committing an interest  
23 under all that acreage, that's exactly what we are doing.  
24 We own it, and we are -- when we join that unit, we're  
25 joining it with our rights to join that other acreage.

1 So that took a long time.

2 Q. Mr. Hughart, how long have you actually been  
3 working to pull these interests together for the  
4 proposed --

5 A. Over three years.

6 Q. In addition to bringing all the interests  
7 together, did Hess secure a title opinion on the  
8 property?

9 A. Yes, we did. We obtained an opinion from a  
10 title attorney in Roswell, New Mexico, covering this  
11 entire 77,000 acres, and that took the better part of a  
12 year and a half to abstract it and for him to render an  
13 opinion. And he also had to render a shadow opinion so  
14 that we could operate outside of the expanded unit.

15 We still have production going out there, so  
16 we need to form communitization agreements and divide the  
17 ownership or production on the basis of that, so he did  
18 that as well. This thing, in all, took well over two  
19 years to get the title done. But we have it done, and  
20 it's on the basis of that title work that we're not only  
21 paying and operating now, but we will use that title  
22 opinion for the expanded unit, to pay and develop the  
23 expanded West Bravo Dome Gas Unit.

24 Q. In your opinion, are all available interests  
25 now voluntarily committed to this community plan?

1           A.     Yes, sir.

2           Q.     Are there tracts in the unit area not  
3 committed to the unit?

4           A.     Yes, there are. There are a total of three  
5 different tracts that are not going to be tracts in the  
6 unit.

7           Q.     These are windows in the unit?

8           A.     These are windows in the unit. One of them,  
9 it's less than an acre, and it is owned by people that we  
10 cannot locate and we cannot find. In fact, one of the  
11 wells that we've already drilled out in this section, we  
12 will need to go through the proper channels, go before  
13 you again sometime soon, and we'll have to have that  
14 interest force pooled, to demonstrate to you that we have  
15 been unable to locate these people. So that's one tract.

16                   There's another 40-acre tract that is owned by  
17 some individuals that -- that 40-acre tract was never  
18 included in the original unit. It has nothing to do with  
19 the Mitchell lease. It's just a tract that was a window  
20 all the way back then.

21                   I have secured the services of a contract  
22 lease broker to try to acquire that lease. They never  
23 heard from them, so we feel they still desire not to be  
24 part of this.

25                   Finally, there is 400 acres of land down in

1 the extreme southern portion of the 77,000-acre block  
2 that is a federal lease. It's owned by a company called  
3 Spike Box Land & Cattle Company. They are not in the oil  
4 and gas business.

5           There is a long story about what I -- I think  
6 this is a federal lease that's got some questionable  
7 reason why it even exists. And it's got even more  
8 onerous overriding royalty issues. I spoke to the people  
9 at Spike Box Land & Cattle and told them, "We don't want  
10 to buy that lease from you. But if you want to  
11 participate in our unit, you're welcome to do so." He  
12 brushed me off about as fast as he could brush me off.  
13 He wants no part of this.

14           They're not oil and gas people. They're in  
15 the cattle business. So he's saying, no, they don't want  
16 to be a part of this.

17           Q.    As to these three tracts, if there is  
18 development in the spacing unit that would include these  
19 lands, you would honor their ownership based on their  
20 mineral interests or their leasehold interests?

21           A.    Yes, we will.

22           Q.    If you can't reach agreement with them when  
23 and if you're drilling a well on those properties, you  
24 would have to force pool them?

25           A.    That is true.

1 Q. Does Hess Corporation desire to be designated  
2 operator of the enlarged unit area?

3 A. Yes, we do.

4 Q. Does the unit agreement provide for periodic  
5 filing of plans of development?

6 A. Yes, it does.

7 Q. And those have been filed?

8 A. Yes.

9 Q. How often are they filed?

10 A. Once a year.

11 Q. Are they filed with the Oil Conservation  
12 Division and the Land Office and the BLM?

13 A. Yes.

14 Q. Would you identify Hess Exhibit 8 behind Tab  
15 8?

16 A. Hess Exhibit 8 is the proposed order of the  
17 Division which would create this expanded unit.

18 MR. CARR: Mr. Examiner, we will also  
19 provide that by email. But the property description is  
20 the really difficult part of this, and we have prepared  
21 it and checked it and checked it. We believe it is  
22 accurate and can be relied on. So as you consider this,  
23 you don't have to worry about that. This is the correct  
24 description by section, township, and range, of the  
25 expanded area.

1 EXAMINER JONES: I was going to ask for  
2 that. Thank you.

3 Q. (By Mr. Carr) Mr. Hughart, were Slides 1  
4 through 6 and Exhibits 2 through 8 in the exhibit book  
5 prepared by you or compiled at your direction?

6 A. Yes.

7 Q. Can you testify to their accuracy?

8 A. Yes.

9 MR. CARR: At this time, may it please the  
10 Examiners? We move the admission into evidence of Hess  
11 Exhibit 1, Slides 1 through 6, and Exhibits 2 through 8.

12 EXAMINER JONES: Hess Exhibit 1, Slides 2  
13 through 6 --

14 MR. CARR: Slides 1 through 6.

15 EXAMINER JONES: -- Slides 1 through 6  
16 will be admitted.

17 MR. CARR: And Exhibits 2 through 8.

18 EXAMINER JONES: And Exhibits 2 through 8.  
19 (Exhibit 1 Slides 1 through 6 and Exhibits 2 through 8  
20 were admitted.)

21 MR. CARR: That concludes my direct  
22 examination of Mr. Hughart.

23 EXAMINER JONES: I'll quickly punt this  
24 off to David.

25

## EXAMINATION

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BY EXAMINER JONES:

Q. But from '98 to 2007, it took quite a while to start drilling wells. I know there was some downturn in the prices at the time. Is that what happened?

A. It certainly was what happened. It wasn't just -- when you say, "downturn in prices," you have to say "oil prices," because we use CO2 for oil enhancement purposes. CO2 itself is on the market. There almost is no market anymore for arm's length transactions of value CO2. But for our purposes, we use it for enhanced oil recovery, so we always targeted this CO2 supply for what we have called a Residual Oil Zone Recovery Project in Seminole.

Seminole has historically produced what we call the Main Pay Zone or the MPZ. That's what it's done for years and years and years. We used as our source of supply 10 percent ownership in Bravo Dome. In 2006, finally oil prices got high enough where we began to think -- we knew this Residual Oil Zone that existed beneath the Main Pay Zone was there. The question is -- we knew it was going to be expensive to extract, and then to drill new wells and injector wells and develop the cells necessary to produce this.

But the economics got good in 2006, and that's

1 when Joaquin and I were both part of an extensive peer  
2 review process where we ran this thing all the way up the  
3 highest levels of the corporation. They said, "Okay.  
4 Get started on developing the ROZ." And by doing that,  
5 we ended up then having to, at the same time, develop  
6 West Bravo Dome.

7           When I say, "West Bravo Dome," I'm talking  
8 about both the Mitchell lease and the actual West Bravo  
9 Dome Carbon Dioxide Gas Unit. We had to develop it all.  
10 That's what happened in 2006, and then we started that  
11 drilling program in 2007, and tried to dovetail it  
12 according to our needs of CO2 at Seminole.

13           Q.     Okay. So you have to drill wells periodically  
14 on this expanded unit to maintain the unit? I didn't  
15 read the unit requirement. But you have to drill so many  
16 wells a year; is that correct?

17           MR. CARR: There is no separate  
18 requirement. There's a requirement for an annual plan of  
19 development. That has been filed with you, the Land  
20 Office, the BLM, every year.

21           There's been years where there's been no  
22 activity out there, but these plans of development were  
23 approved primarily because if this unit once failed, it  
24 was a concern that it could never be put back together  
25 and these resources would never be developed. So we had

1 meetings year after year after year moving towards this  
2 time.

3 Q. Okay. So this Sheep Mountain Pipeline is  
4 owned partially by Hess?

5 A. At the point of the Rosebud interconnect, we  
6 actually have an ownership interest in that line, and  
7 it's -- what we use is our portion of that line to take  
8 the 10 percent of the product that comes out of Bravo  
9 Dome, and we take our product in kind.

10 And we don't ship it where OXY ships theirs.  
11 Theirs goes through another line. We use the Sheep  
12 Mountain to send that product down to Seminole. And now  
13 we are using the Sheep Mountain Line to ship our product  
14 from West Bravo Dome. Whereas where we have 100 percent  
15 of the product coming out of West Bravo Dome, we have  
16 only 10 percent coming out of Bravo Dome. That line gets  
17 both.

18 Q. Does any get dropped off at the Wasson Field?

19 A. It goes down to Denver City, and from there,  
20 we take it down to Seminole.

21 Q. I would have thought that residual zone could  
22 have been -- could have used the CO2 that's already in  
23 the main zone of the Seminole Unit. But it sounds like  
24 you do definitely need more CO2.

25 A. Certainly.

1 EXAMINER JONES: What notice was required  
2 for this particular hearing here?

3 MR. CARR: This is unique. It's a  
4 voluntary unit. It only affects the interests that are  
5 committed.

6 We've been able to commit everybody, but we  
7 have these windows, and we'll honor those on a lease  
8 basis, like other voluntary units. We didn't have  
9 anyone, really, to notify, because it only affects those  
10 who signed. If they decided they're going to exercise  
11 correlative rights by committing to the unit, they're in.  
12 If not, they're developed pursuant to their mineral  
13 interest ownership or the ownership they have on the  
14 lease.

15 Q. (By Examiner Jones) Was there any vertical  
16 changes in the vertical limits of this unit at the time  
17 it was expanded?

18 A. Not to my knowledge. It covered the Tubb  
19 formation. And also you'll hear the words "Granite Wash"  
20 used later on as an opportunity formation. But it is  
21 part of the unitized interval. That's never changed  
22 going all the way back to when the original order came  
23 out.

24 MR. CARR: Mr. Jones, in response to your  
25 last question, the unit was enlarged at one time. It had

1 been contracted at one time, adding as much as 7,000  
2 acres. There was no hearing and no notice the unit  
3 agreement provides.

4 But when we met with the Land Office they  
5 asked us or told us to come here and get an approval  
6 order principally because what we're doing is more than  
7 doubling the size of the unit. So that's why we're here.

8 EXAMINER JONES: Mr. Brooks?

9 EXAMINER BROOKS: I don't think I have any  
10 questions.

11 EXAMINER JONES: Well, okay. Thanks a  
12 lot.

13 MR. CARR: At this time we'll call our  
14 geological witness, Mr. Slamet.

15 We're going to be starting with the seventh  
16 slide in the exhibit book. It's entitled, "Stratigraphic  
17 Section, Typical Well in Unit." It's the seventh slide  
18 behind Tab 1.

19 GERMAWAN SLAMET

20 Having been first duly sworn, testified as follows:

21 DIRECT EXAMINATION

22 BY MR. CARR:

23 Q. Would you state your name for the record,  
24 please?

25 A. My name is Germawan Slamet.

1 Q. Will you spell your name?

2 A. G-e-r-m-a-w-a-n S-l-a-m-e-t.

3 Q. Mr. Slamet, where do you reside?

4 A. Houston, Texas.

5 Q. By whom are you employed?

6 A. Hess Corporation.

7 Q. What is your position with Hess Corporation?

8 A. I'm the geologist for the Permian Subsurface  
9 Team of America's production.

10 Q. Have you previously testified before the New  
11 Mexico Oil Conservation Division?

12 A. No, I haven't.

13 Q. Could you review for Mr. Jones and Mr. Brooks  
14 your educational background?

15 A. I have a Bachelor of Science Degree majoring  
16 in Geophysics from 1999, from Bandung Institute of  
17 Technology in Indonesia.

18 Q. Since graduation, for whom have you worked?

19 A. I initially worked for Schlumberger for five  
20 years. And then I joined Hess in 2005, and initially was  
21 in their Jakarta office operation for three years. Then  
22 I moved here in Houston in 2008, and since then, I've  
23 been working as a geologist on Permian Basin team.

24 Q. Are you familiar with the proposed enlargement  
25 of the West Bravo Dome unit?

1           A.     Yes.

2           Q.     Have you made a geological study of the  
3 subject formations in this unit?

4           A.     Yes.

5           Q.     Are you prepared to share the results of your  
6 work with the Examiners?

7           A.     Yes.

8                         MR. CARR: We tender Mr. Slamet as an  
9 expert in petroleum geology.

10                        EXAMINER JONES: He is so qualified.

11           Q.     (By Mr. Carr) Mr. Slamet, what is the primary  
12 objective in this unit?

13           A.     The primary objective in this unit is the Tubb  
14 formation, and it has a thickness ranging between 20 and  
15 200 feet.

16           Q.     Is the Tubb present across the entire unit  
17 area?

18           A.     Yes.

19           Q.     Has this formation been tested and developed  
20 in the enlargement area?

21           A.     Yes. We have over 70 wells currently  
22 producing in the area and over 50 wells producing.

23           Q.     Are there secondary objectives in the unit?

24           A.     Yes, there are.

25           Q.     What are they?

1           A.     It's the interval that we call the Granite  
2 Wash, which is also part of the Tubb formation.

3           Q.     So we have, as a secondary objective, the  
4 Granite Wash. It's part of the Tubb. Is it included  
5 within the interval that's unitized?

6           A.     Yes.

7           Q.     What is the basis for the unit boundary?

8           A.     The basis of the unit boundary is a  
9 combination of geological boundary and political  
10 boundary.

11          Q.     Could you just describe for us the regional  
12 setting for this unit?

13          A.     Yes. The West Bravo Dome field is located in  
14 the northeastern part of New Mexico. Basically, it's an  
15 extensional area of the Sierra Grande uplift. It's  
16 permian-age formation.

17          Q.     What did you utilize or what is the basis for  
18 your geologic interpretation?

19          A.     Using well data and surface geology data.

20          Q.     Let's go to slide Number 7 behind Tab 1. It's  
21 entitled, "Stratigraphic Section West Bravo Dome Gas  
22 Unit/Typical Well in Unit." Would you identify the two  
23 parts of this exhibit and explain to the Examiners what  
24 this shows?

25          A.     The stratigraphic section here basically

1 explain or give you some idea on where our interest  
2 formation is located. Our interest formation is the top  
3 sandstone, which is highlighted in yellow in this  
4 stratigraphic section. The top sandstone or the Abo  
5 formation, we call it as part of the upper Tubb, the  
6 middle Tubb, the lower Tubb, and the Granite Wash in our  
7 area. But the area around Northwest New Mexico, normally  
8 they call it Tubb sandstone or the Abo formation.

9           On the right-hand side, the typical well unit  
10 just gives you idea of how the typical well depth are in  
11 our field. Because we have a topographical difference,  
12 it's quite extreme. We have half part of the field  
13 sitting on Cap Rock, and we call it as a mesa. On that  
14 area, most of the wells are around 3,000 feet deep. The  
15 other half of the field is in the valley, and that area  
16 the wells are typically 2,000 feet deep.

17           Q.     Let's go to Slide Number 8. Would you  
18 identify this and explain what it shows?

19           A.     This slide is trying to show the top of the  
20 Tubb structure map. So on the left-hand side it's the  
21 Tubb structure map around the West Bravo Dome area, while  
22 on the right-hand side, it's the top of the Tubb  
23 structure map around the Bravo Dome area.

24                     This is just to illustrate the continuation of  
25 the Tubb structure around this whole area, and also to

1 show that there is no major structural variance in this  
2 area, which means there is no fault compartment that lies  
3 at the Tubb formation.

4 Q. Let's go to Slide Number 9. This is also to  
5 support the previous slide. This is the distribution of  
6 the bottomhole pressure around West Bravo Dome area and  
7 the West Bravo Dome area that is adjacent to the Bravo  
8 Dome area.

9 Again, on this map, we try to show that we  
10 don't have any abrupt pressure changes in the whole area.  
11 We don't expect to see any compartmentalization in the  
12 Tubb formation.

13 Q. Let's take a look at the Tubb Pore Volume  
14 Height Map, which is Slide 10.

15 A. This is a hydrocarbon pore volume height map,  
16 and the hydrocarbon in this case is basically CO<sub>2</sub>. This  
17 map shows the net thickness of the Tubb formation that  
18 contains CO<sub>2</sub> after we apply a certain cutoff to the  
19 thickness. We apply an 8 percent porosity cutoff and 65  
20 water saturation cutoff.

21 Q. On this exhibit the unit boundary is shown,  
22 but what you're really mapping are production Tubb sets;  
23 is that right?

24 A. Correct. Also shown on this map is, on the  
25 left-hand side or on the western side of the field, the

1 field is bounded by a fault. While on the southern part  
2 of the field, we are bounded by the gas water contact.  
3 As you see, there is also one well on the southern part  
4 of the field which have a zero hydrocarbon pore volume,  
5 which is a dry well, which strengthen our boundary. And  
6 on the northern and eastern side of the field, the  
7 boundary is basically the unit boundary of Bravo Dome.

8 Q. So you have a political boundary north and  
9 east?

10 A. Yes.

11 Q. You have a fault to the west?

12 A. Yes.

13 Q. You have a gas water contact to the south?  
14 And that's how the unit boundaries are determined?

15 A. Correct.

16 Q. Could you summarize the geologic conclusions  
17 you have reached from your study?

18 A. Basically, the conclusion is that the Tubb  
19 formation in the original West Bravo Dome area and the  
20 expanded West Bravo Dome area are one formation. They  
21 are continuous.

22 Q. In your opinion, from a geologic point of  
23 view, can these sands be developed under a unit plan?

24 A. Yes.

25 Q. In your opinion, will approval of the

1 application be in the best interest of conservation and  
2 prevention of waste and protection of correlative rights?

3 A. Yes.

4 Q. Were Slides 7 through 10 prepared by you or  
5 have you reviewed them, and can you confirm their  
6 accuracy?

7 A. Yes, I can.

8 MR. CARR: May it please the Examiners?  
9 At this time we would move the admission of Slides 7  
10 through 10.

11 EXAMINER JONES: Slides 7 through 10 will  
12 be admitted.

13 (Exhibit 1 Slides 7 through 10 were admitted.)

14 MR. CARR: That concludes my direct of  
15 Mr. Slamet.

16 EXAMINATION

17 BY EXAMINER JONES:

18 Q. You had the Santa Rosa formation code in on  
19 your stratisection?

20 A. Yes. The Santa Rosa in this part is basically  
21 to the upper Dakota Sandstone. So the main formation  
22 that we typically found in the well that we drilled is  
23 after Santa Rosa. Normally we found the San Andres  
24 formation and the Yeso formation. And after that, we hit  
25 the Cimarron anhydrite, which is our seal, and after

1 that, we hit the Tubb formation, the upper Tubb, middle  
2 Tubb, lower Tubb, and the Granite Wash.

3 Q. Granite Wash is part of the Abo?

4 A. It's part of the Abo formation.

5 EXAMINER JONES: Okay. I don't have any  
6 more questions.

7 EXAMINER BROOKS: No questions.

8 MR. CARR: May it please the Examiners?  
9 At this time we would call Joaquin Martinez.

10 EXAMINER JONES: Thank you, Mr. Slamet.

11 MR. CARR: We will be starting with the  
12 next slide, that looks like this.

13 JOAQUIN MARTINEZ

14 Having been first duly sworn, testified as follows:

15 DIRECT EXAMINATION

16 BY MR. CARR:

17 Q. Mr. Martinez, state your name for the record,  
18 please.

19 A. Joaquin Martinez.

20 Q. Where do you reside?

21 A. Midland, Texas.

22 Q. By whom are you employed?

23 A. Hess Corporation.

24 Q. What is your position with Hess Corporation?

25 A. I'm the operations manager for Texas and New

1 Mexico, including West Bravo Dome.

2 Q. Have you previously testified before this  
3 Division?

4 A. No, I have not.

5 Q. Could review your educational background for  
6 Mr. Jones and Mr. Brooks?

7 A. I have a Bachelor of Science Degree in Civil  
8 Engineering from the University of Arizona from 1993.

9 Q. Following graduation, for whom have you  
10 worked?

11 A. I worked for two companies, and I have 16  
12 years of industry experience. I worked 11 years for  
13 Exxon Mobil in a variety of locations around the globe,  
14 primarily as a reservoir engineer. And for the last five  
15 years, I worked for Hess in primarily managerial and  
16 supervisory roles.

17 Q. Are you familiar with the application of the  
18 enlarged West Bravo Dome that is the subject of this  
19 hearing?

20 A. Yes, I am.

21 Q. Are you familiar with the status of the lands  
22 and engineering considerations that have gone into this  
23 proposed enlargement?

24 A. Yes.

25 Q. Are you prepared to share the results of your

1 work and your studies on this area with the Examiners?

2 A. Yes, I am.

3 MR. CARR: We tender Mr. Martinez as an  
4 expert in reservoir engineering.

5 EXAMINER JONES: He's so qualified.

6 Q. (By Mr. Carr) Mr. Martinez, let's go to the  
7 slides behind Tab 1, and we will start with Slide Number  
8 11. Would you identify that and review it for the  
9 Examiners?

10 A. Yes. Slide 11 depicts a zooming in of the  
11 West Bravo Dome Gas Unit as it exists today, and it is  
12 highlighted in the bold, black outline. Within that  
13 bold, black outline, you have the categorizations of the  
14 different types of leases. Those being the fee leases in  
15 the tan color, federal leases in the orange color, and  
16 the state leases in green.

17 Also in this diagram you have the outline of  
18 the Bravo Dome unit outlined in the bold red. In between  
19 that, you have the Mitchell leases, as Mr. Hughart  
20 referred to earlier and described in fairly good detail.

21 One thing that I want to point out with the  
22 boundaries of the West Bravo Dome Gas Unit as it exists  
23 today is that it is contorted and it is difficult to  
24 operate and develop because of the nature of the  
25 boundaries.

1           If we were to expand the unit to make it  
2     contiguous, it would allow for a more orderly and  
3     efficient development of the overall resource, and it  
4     would also allow engineering, geologic, and operational  
5     considerations to govern, as opposed to a surface  
6     boundary.

7           Q.     Let's go --

8           A.     In addition to that, by being more efficient  
9     and perhaps drilling fewer wells to develop the resource,  
10    we would minimize our surface footprint at the same time.

11          Q.     Let's look at Slide 12, because I think this  
12    illustrates one of the principal benefits obtained on the  
13    proposed enlargement.  What is Slide 12?

14          A.     Slide 12 depicts the expanded unit.  You've  
15    seen this slide before in Mr. Hughart's testimony.  What  
16    the expanded unit does is it erases those contorted  
17    boundary lines and allows for a contiguous development.

18                 What you also have on this slide is, again,  
19    the highlighting of the different types --  
20    categorizations of leases, whether they be state, fee, or  
21    federal.  In the upper right-hand corner, there's a small  
22    box that summarizes the number of federal tracts, state  
23    tracts, and fee tracts, totalling 122 in total, and also  
24    the acreage assigned to each of those types of tracts and  
25    the percentage of the proposed expanded unit.

1 Q. Let's go to your volumetric calculations, the  
2 next slide, Slide 13. Would you review this exhibit and  
3 explain what it shows?

4 A. Slide 13 is a summary of the volumetric  
5 calculation for both the existing West Bravo Dome Gas  
6 Unit and the proposed expanded West Bravo Dome Gas Unit.  
7 The existing summary calculations are on the left-hand  
8 side of the page, and the expanded calculations are on  
9 the right-hand side of the page.

10 The volumetrics take into account the area,  
11 the height, the porosity, as well as the formation volume  
12 factor of CO2 at the various pressures. As you work  
13 through the calculations, there is an arrow pointing to  
14 the original gas in place for the existing West Bravo  
15 Dome Gas Unit, that being approximately 445 bcf of gas in  
16 place, approximately 70 percent of which is recoverable,  
17 bringing the total recoverable reserves to approximately  
18 311 bcf.

19 Turning your attention to the right-hand side  
20 of the page, you have the expanded West Bravo Dome Gas  
21 Unit and similar calculations in the volumetrics. The  
22 total gas in place for the expanded unit is estimated at  
23 928 bcf, of which approximately 650 bcf are recoverable.

24 Q. Let's move to the next slides and look at the  
25 percentage ownership and the gas reserves before and

1 after enlargement. First go to Slide 14, the comparison  
2 of the existing unit and the proposed expanded unit.

3 A. What slide 14 summarizes is the different type  
4 of lease, the net acres, and the portion of the unit in  
5 both the existing unit, as well as the expanded unit.  
6 The state portion percentage of the unit goes from 38  
7 percent in the existing unit to 21 percent in the  
8 expanded unit. Along the same terms, the federal goes  
9 from 20 percent to 10 percent of the unit, and the fee  
10 goes from 42 to 69 percent of the expanded unit.

11 Q. Let's go to the next slide and look at the  
12 allocation of these reserves based on 2008 projections.

13 A. Before the 2010 drilling campaign, as we  
14 described earlier, we had calculated some volumetrics and  
15 recoverable reserves back in 2008. That's what this  
16 Slide 15 summarizes.

17 In the existing West Bravo Dome Gas Unit,  
18 using the information that we knew in 2008, the  
19 recoverable reserves, as I reviewed a second ago, was 311  
20 bcf recoverable. Again, that's a recovery factor of  
21 approximately 70 percent. And in the expanded unit, we  
22 have about 650 bcf recoverable.

23 The fee share would go from 130 to 123 bcf.  
24 The state share would increase from 118 to 136. The  
25 federal share would increase from 62 to 65 bcf, and for

1 completeness' sake, the Mitchell shares are also  
2 identified there as 325 bcf. Again, this was  
3 calculations that we conducted back in 2008.

4 Q. Let's go to 2010 calculations, the next slide.

5 A. Slide 16 depicts our current understanding of  
6 the original gas in place, as well as the recoverable  
7 reserves, similar to what Slide 15 did, with the  
8 additional information and well control that we gained  
9 from the additional wells that we drilled in 2010.

10 The fee share goes from 122 bcf, approximately  
11 10 more, to 132 bcf. The state share increases from 125  
12 to 146. The federal share is increased from 63 to 70  
13 bcf. And again, for completeness' sake, the Mitchell  
14 recoverable reserves are 348 bcf.

15 Q. What we see here is that even though the  
16 percentage of the state interest and the federal interest  
17 declines, what they are going to receive is a smaller  
18 portion of a larger pie that actually is a net increase  
19 in the total gas attributable to those interests?

20 A. That's correct. Although the percentage decreases,  
21 the resource base has increased, which results in an  
22 overall increase of the recoverable reserves due to the  
23 state as well as the federal portions.

24 Q. Let's go to Slide 17, "West Bravo Dome Field  
25 Future Activity."

1           A.     Looking forward, we estimate there being  
2 approximately 43 additional locations. That would bring  
3 the total number of wells to develop the reserves that I  
4 summarized a little while ago to about 120 wells total,  
5 and we will continue to develop these on a regular basis.  
6 We currently have approximately 20 wells in the budget  
7 for next year, and we will continue to develop this  
8 resource as we need it in the Seminole San Andres unit,  
9 as Mr. Hughart discussed earlier.

10           Q.     Now let's go to Slide 18, the July 30, 2010  
11 update.

12           A.     Slide 18 shows the number of existing wells in  
13 the green crosses, and it also shows the wells that were  
14 drilled in 2010 in the red crosses.

15                     It also has a couple of other features that I  
16 wanted to highlight. One is the unit boundary so you can  
17 see that we're developing the field throughout the  
18 expanded area. It also shows the extensive gathering  
19 system, which includes flow lines and trunk lines, to a  
20 central compression station. It shows the export  
21 pipeline which is a 12-inch, 12-mile pipeline connecting  
22 to the Sheep Mountain Pipeline on the right-hand side of  
23 the page at an interconnect we call Rosebud.

24           Q.     And the next slide, the last slide?

25           A.     The last slide is the development of the full

1 field resource depicting approximately 120 wells.  
2 Overlaid on the gathering system and the well locations  
3 is the topographical feature that Mr. Slamet referred to  
4 earlier. There's approximately 1,000 feet of relief from  
5 what we call the mesa wells down into the valley wells.

6 Q. The Cap Rock is basically the acreage shaded  
7 in yellow?

8 A. Yes.

9 Q. In your opinion, has all acreage in the  
10 enlarged area been reasonably proven to be productive of  
11 CO2?

12 A. Yes.

13 Q. Will approval of the proposed enlarged unit  
14 and the implementation of unitized operation and  
15 management in the enlarged unit area be in the best  
16 interest of conservation, the prevention of waste and  
17 protection of correlative rights?

18 A. Yes, it will.

19 Q. Were Slides 11 through 19 prepared by you, or  
20 have you reviewed them and can you confirm their  
21 accuracy?

22 A. Yes.

23 MR. CARR: At this time, Mr. Examiners, we  
24 move the admission into evidence of Slides 11 through 19  
25 of Hess Corporation Exhibit Number 1.

1 EXAMINER JONES: Slides 11 through 19 of  
2 Hess Corporation Exhibit Number 1 will be admitted.

3 (Exhibit 1 Slides 11 through 19 were admitted.)

4 MR. CARR: That concludes my direct  
5 examination of Mr. Martinez.

6 EXAMINATION

7 BY EXAMINER JONES:

8 Q. Have you had any concerns by any environmental  
9 groups out here in this area?

10 A. Not to my knowledge. In fact, we were  
11 recently nominated by one of the local landowners as  
12 being the conservationist of the year. Whether or not we  
13 won that award, I haven't heard one way or the other.

14 Q. What about impact on the water out here from  
15 your drilling operations? Is there much impact on the  
16 groundwater?

17 A. To my knowledge, there's been no impact to the  
18 groundwater based on the well design and the well  
19 construction, the cementing procedures, as part of  
20 drilling each well.

21 Q. And the water disposal target, is it the  
22 existing disposals?

23 A. We do a combination of water disposal. We  
24 have an on-site water disposal well. However, that well  
25 is not taking the full amount and we have to truck water

1 to a disposal site in Texas, I believe.

2 Q. Did you ask for a pressure increase on your  
3 disposal well?

4 A. To my knowledge, we did ask for a pressure  
5 increase. I'm not sure of the status of that approval.  
6 However, regardless of whether that's approved or not, I  
7 don't believe that that would sufficiently be able to  
8 handle all of the water that we're currently producing,  
9 which is approximately 200 barrels a day.

10 Q. But it would go up if you drill more wells, or  
11 will it drop off with the other wells as they produce?

12 A. The idea is to minimize the amount of water  
13 production with low pressure gas wells. And we learned  
14 quite a bit about the reservoir and the existence of  
15 water in the last drilling campaign.

16 We originally would have a large frac in  
17 previous wells drilled before 2010, approximately 100,000  
18 pound frac on these wells. What we've done in 2010 is a  
19 more focused effort to define where the water is coming  
20 from and which zones within the Tubb, staying away from  
21 those zones, pinpointing the fracs, and our fracs are  
22 approximately 20,000 pounds now.

23 In 2010, after the frac work, we had no  
24 additional water production. The water production came  
25 from wells drilled before 2010. So I feel confident

1 going forward that the amount of water that we produce  
2 should be minimized.

3 Q. You stayed out of the water zone?

4 A. Yes. We engaged some experts from our  
5 technology group. We developed a new algorithm for  
6 understanding the mobility of the water and the presence  
7 of water, and we stayed away from those zones in our frac  
8 techniques.

9 Q. On your volume calculations, are you using  
10 just a BGI/BGF-type calculation, or are you using the POZ  
11 calculation?

12 A. We're using a formation volume factor. If you  
13 noticed on the pressure maps that Mr. Slamet presented,  
14 that the pressure varies from 600 pounds to 800 pounds.  
15 With CO2 and the characteristics of CO2, you need to have  
16 a BCG that would allow you to correctly and accurately  
17 depict what the volume would be at standard conditions.

18 Q. And your abandonment pressure, what do you  
19 think that will be out there?

20 A. I think, as we understand the performance of  
21 the reservoir, that will be determined. Right now the  
22 existing infrastructure can take the pressure down to  
23 about 110 pounds at the facility, which relates to about  
24 125 pounds at the well head. There is a possibility  
25 going forward that we could put a blower-type compressor

1 on the front end of the existing facility and draw that  
2 down even further, but that is still to be determined.

3 EXAMINER JONES: I have no more questions.

4 EXAMINER BROOKS: No questions.

5 MR. CARR: May it please the Examiners?  
6 That concludes our presentation in this case.

7 EXAMINER JONES: Thank you all for coming  
8 and showing this to us.

9 We'll take Case 14545 under advisement, and  
10 the hearing is adjourned.

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I hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. \_\_\_\_\_  
heard by me on \_\_\_\_\_  
\_\_\_\_\_, Examiner  
Oil Conservation Division

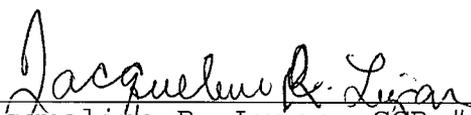
REPORTER'S CERTIFICATE

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I, JACQUELINE R. LUJAN, New Mexico CCR #91, DO  
HEREBY CERTIFY that on September 16, 2010, 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 29th day of September,  
2010.

  
Jacqueline R. Lujan, CCR #91  
Expires: 12/31/2010