DOUBLE EAGLE PETROLEUM COMPANY
777 OVERLAND TRAIL P. O. BOX 766 CASPER, WYOMING 82602
PHONE 307 / 237-9330
FAX 307 / 266-1823
www.dble.us

April 19, 2006

Mr. David Simmons, Project Lead
Bureau of Land Management
P.O. Box 2407
Rawlins, Wyoming 82301

RE: Environmental Impact Study
Atlantic Rim Natural Gas Development Project Area
Carbon County, Wyoming

Dear Dave:

Enclosed please find a copy of the testimony submitted to the Wyoming Oil and Gas Conservation Commission on April 11, 2006 concerning their Docket # 208-2006. This information is in the public record and addresses increased density for an area including portions of the Atlantic Rim Environmental Impact Study. While the comment period for the Draft EIS ended February 17, 2006, this information is public information and material not considered by BLM in the formulation of the Draft EIS and unavailable at the end of the said comment period. Therefore, this information must be considered in the composition of the Final EIS.

You will note that engineering exhibits E-1 through E-15 clearly evaluated the scientific results of wells drilled on 80 and 160 acre spacing under the Interim Drilling Plan. These scientific results support the conclusion in exhibit E-15 that the most economic and efficient manner. to develop coalbed natural gas in this area is on an 80 acre spacing pattern. Ignoring this information could result in the waste of natural resources.

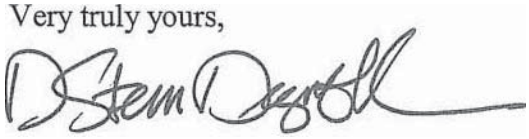
Additionally, engineering exhibit E-14 clearly addresses the operational and safety involved with directionally drilling and most importantly, operating directionally drilled CBNG wells in the Atlantic Rim Area.

0 2006

684-1 I hereby request the enclosed packet of new information be incorporated into the material examined in the composition of the Final EIS for the Atlantic Rim CBM Development Area. Should you decide this information will not be considered by Rawlins BLM as being material to

684-1 the Atlantic Rim CBNG Development EIS, I request you notify me within thirty (30) days and provide an explanation for said decision.

Very truly yours,



D. Steven Degenfelder
Vice President, Land

cc: Mr. Bob Bennett
State Director
Bureau of Land Management
P.O. Box 1828
Cheyenne, WY 82009

RECEIVED
APR 20 2006
BUREAU OF LAND MANAGEMENT
RAWLINS FIELD OFFICE

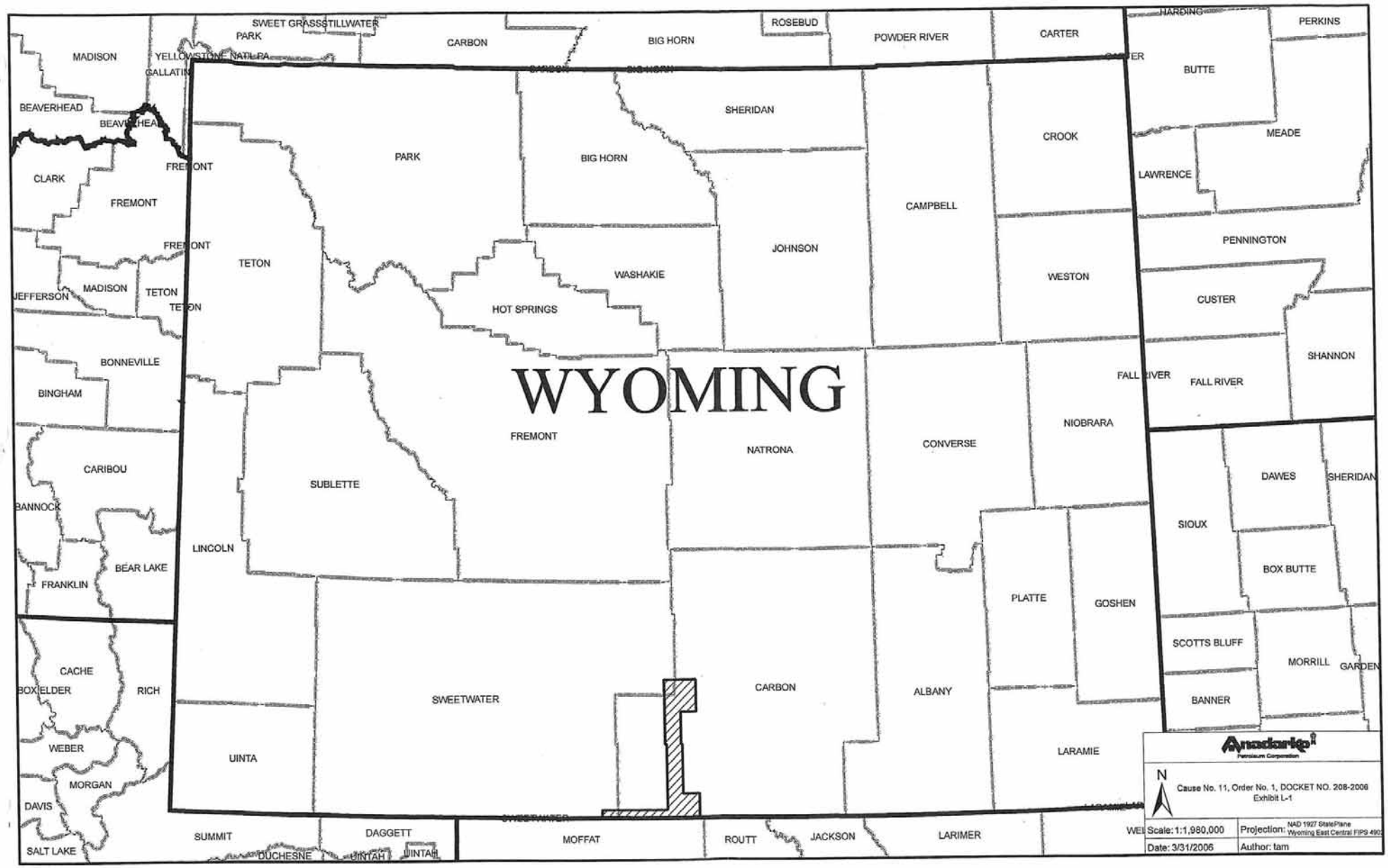
Atlantic Rim Increased Well Density Hearing

Cause No. 11, Order No. 1,
DOCKET NO. 208-2006

Exhibits of Interested Parties

Anadarko Petroleum Corporation
Double Eagle Petroleum Company
Warren E&P, Inc.

COPY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CARTER
HARDING
PERKINS
BUTTE
MEADE
LAWRENCE
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CLARK
FREMONT
SHERIDAN
CROOK
CAMPBELL
JOHNSON
WESTON
PENNINGTON
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SHANNON
WASHAKIE
HOT SPRINGS
TETON
JEFFERSON
BONNEVILLE
BINGHAM
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FRANKLIN
LINCOLN
SUBLETTE
NATRONA
CONVERSE
NIOBRARA
DAWES
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BOX BUTTE
SCOTTS BLUFF
MORRILL
GARDEN
BANNER
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DAVIS
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SWEETWATER
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DUCHESNE
UINTAH
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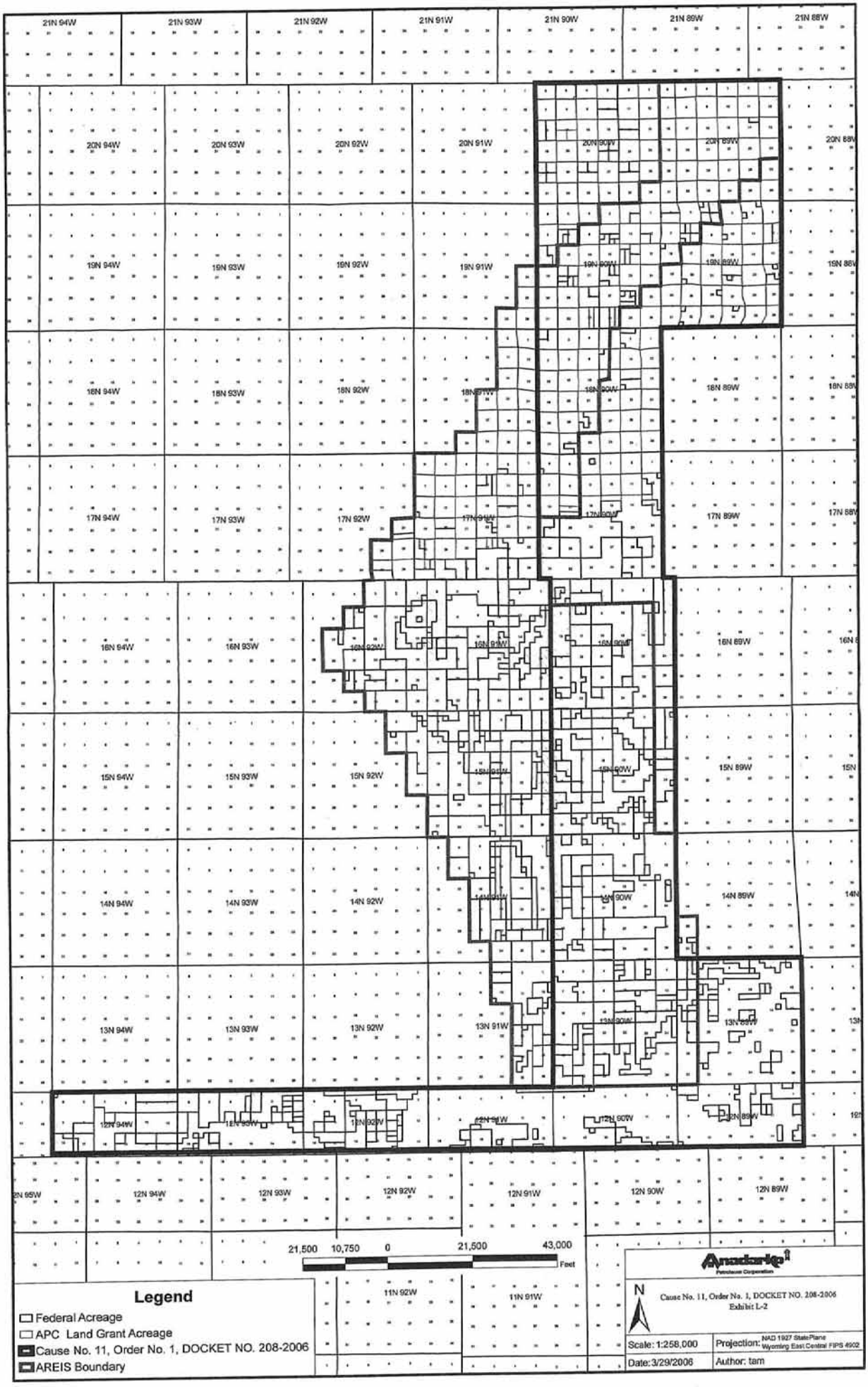
Date: 3/31/2006
Author: tam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Scale: 1:258,000
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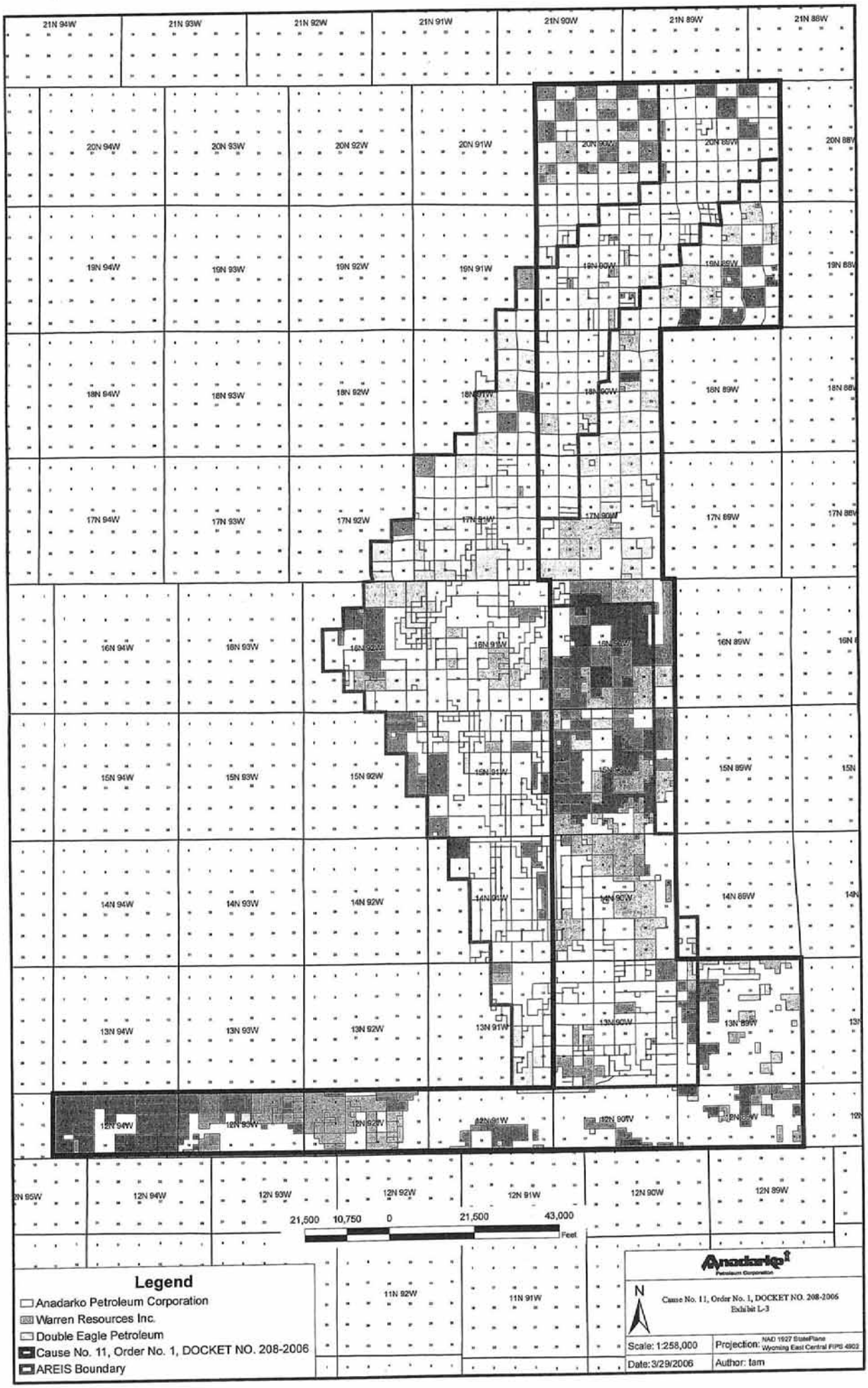
Date: 3/29/2006
Author: tam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Warren Resources Inc.
Double Eagle Petroleum
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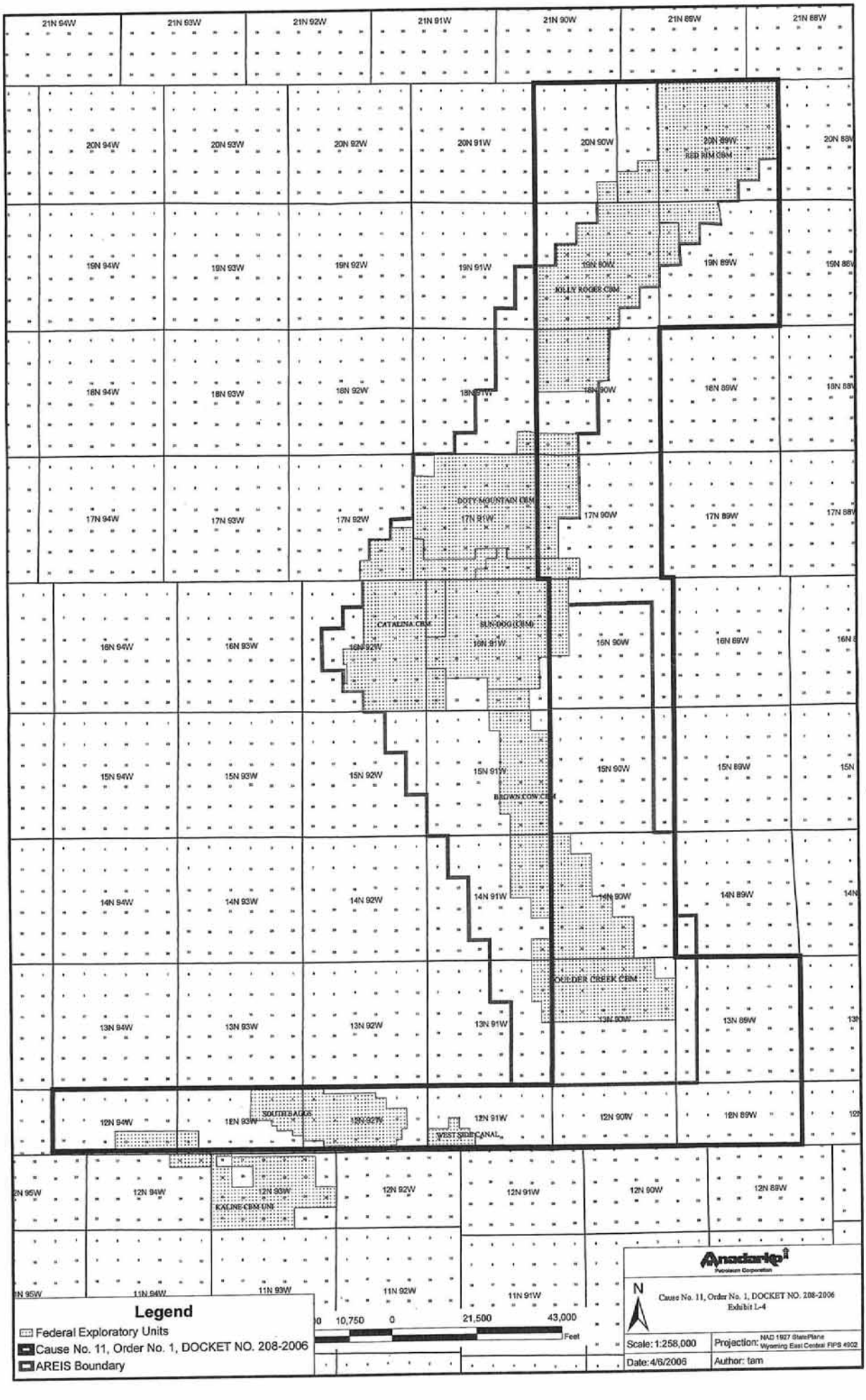
Date: 3/29/2006
Author: tam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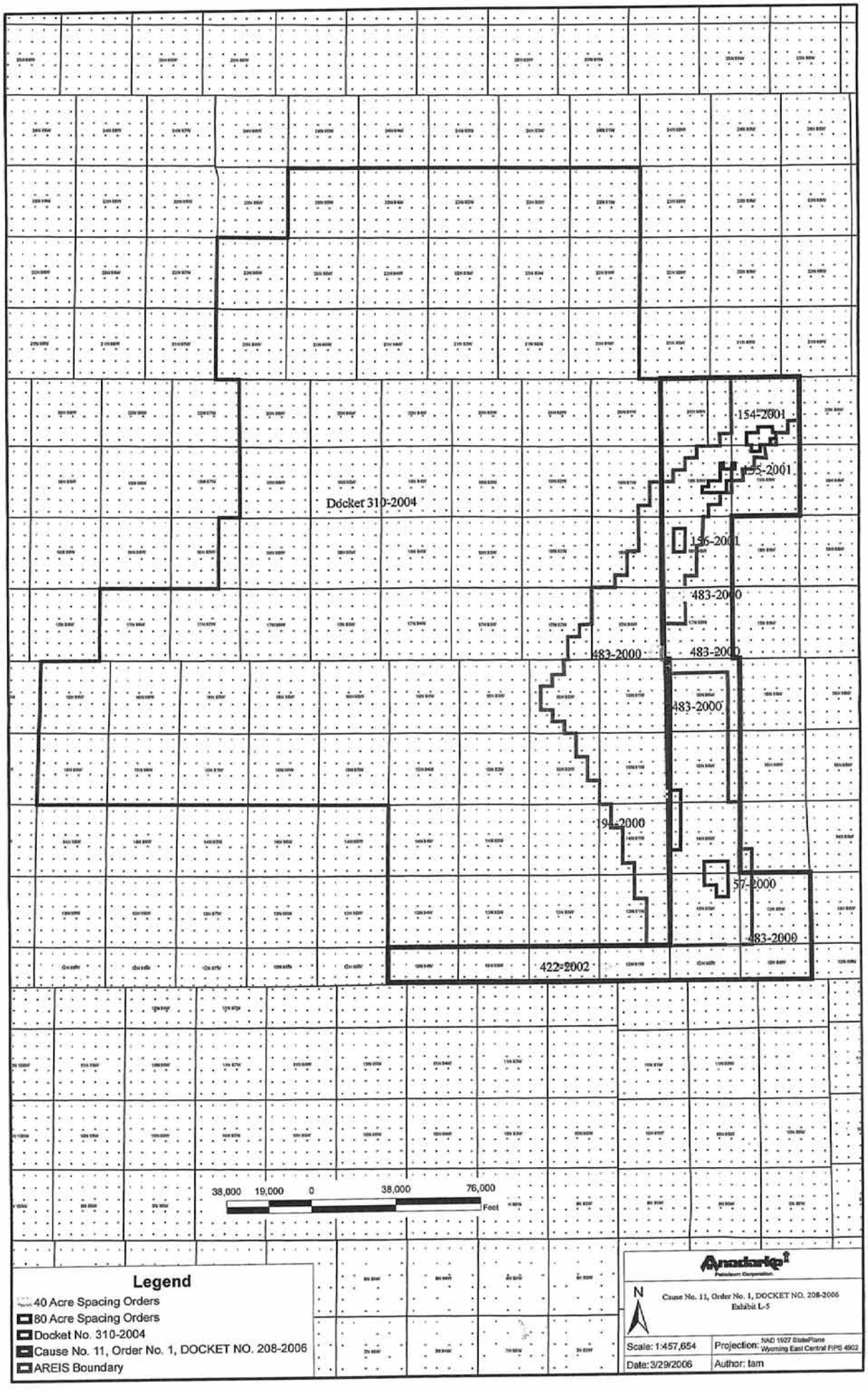
Date: 4/6/2006
Author: tam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Cause No. 11, Order No. 1, DOCKET NO. 208-2006
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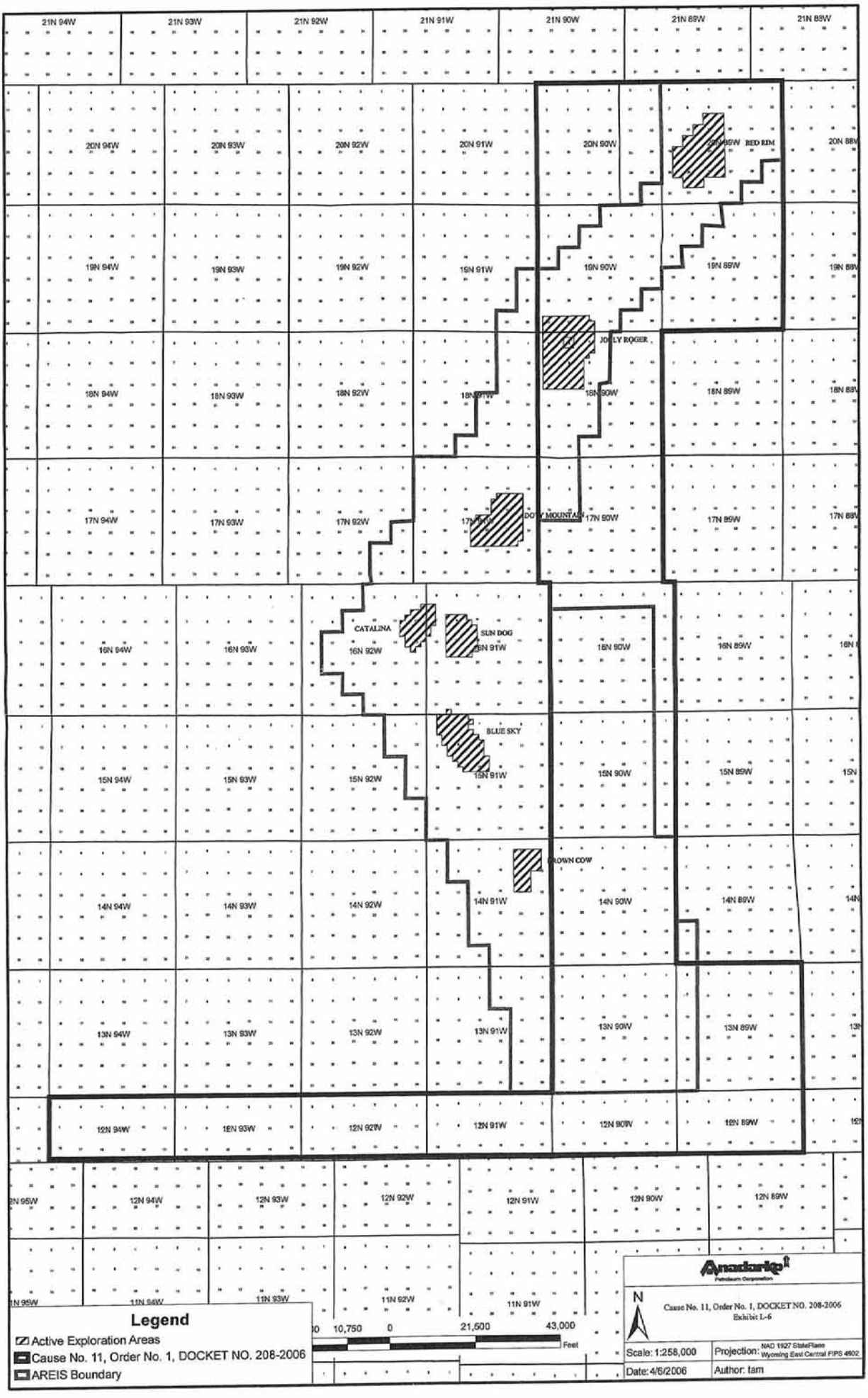
Date: 3/29/2006
Author: tam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Anadarko Petroleum Corporation
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Exhibit L-6
Scale: 1:258,000
Projection: NAD 1927 StatePlane Wyoming East Central FIPS 4902
Date: 4/6/2006
Author: tam

3100

Memorandum

To: Field Manager, Rawlins Field Office

From: Chief, Reservoir Management Group, Wyoming State Office

Subject: Economic Development of Coalbed Natural Gas, Pertaining to Spacing and Directional Drilling in the Atlantic Rim Natural Gas Development Area

The Reservoir Management Group, Wyoming State Office, has prepared the attached report addressing the economic issues regarding coalbed natural gas well spacing and directional drilling in the Atlantic Rim Coal Bed Natural Gas Development area.

If you have any questions, please call Lee Almasy (307) 261-7628 of this office.

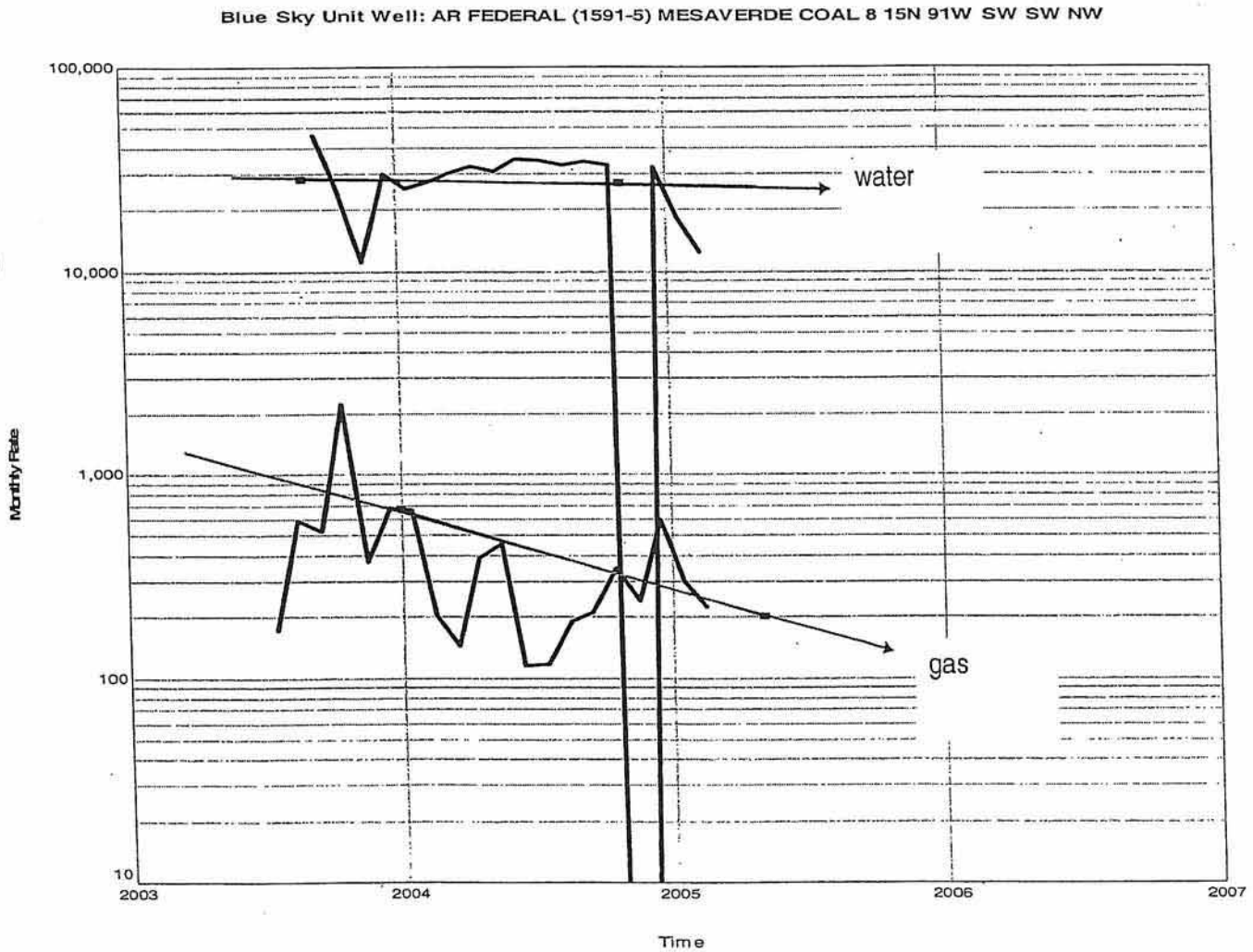
Attachments

cc: Alan Rabinoff (WSO-920) w/report

Anadarko/Double Eagle/Warren
Docket No. 208-2006
Hearing Date: 04/11/06
Exhibit I 7

2-C.1) Localized Assessments of Vertical Water Influx:

Of the individual wells production histories, the following production histories for two wells in the Blue Sky Unit were selected because they show some signs of vertical water influx (declining gas rates, steady water production and low peak gas rate, (ref. 3)). The current well spacing for this unit is 80-acre. CBNG recovery from the Blue Sky Unit recovery may be influenced by 'vertical water influx' in which case recovery will be significantly reduced. This statement assumes that the initial gas content for the individual wells was good (e.g.143.5 scf/ton or greater). Switching to 40–acre spacing in this particular unit would increase gas recovery. The following two graphs suggest the possibility of 'vertical water influx' for two Blue Sky Unit wells.



Economic Development of Coalbed Natural Gas, Pertaining to Spacing and Directional Drilling in the Atlantic Rim Natural Gas Development Area

Summary and Conclusions:

Rawlins Field Office has asked that the Reservoir Management Group (RMG) answer the following questions.

Q1: Can the coalbed natural gas (CBNG) resources in the modified study area be economically developed with 160-acre spacing?

160-acre well spacing for CBNG development in the Atlantic Rim Area (AR Area) is possible only under very special geologic conditions. As a general rule, existing production data suggests that 80-acre well spacing is the best standard well spacing. It is the local geologic setting that must be considered.

Q2: If the project area requires 80-acre spacing, can the project be developed economically utilizing directional drilling techniques?

Directional drilling does not appear to be a viable technical or economic alternative. Directional Drilling would require a severe deviation angle (49 degrees) and this presents both drilling difficulties and operational difficulties. In addition to these difficulties, the range and variation in estimated ultimate recoveries (EUR) in this area would make directional drilling (when considering the extra cost associated with it) an economic burden that would jeopardize many of the proposed wells' economics.

Table of Contents

Discussions

Q1: Can the coalbed natural gas (CBNG) resources in the modified study area be economically developed with 160-acre spacing?

Issues regarding the geology of the target coal seams need to be addressed. Specifically, the Meservede Group of coals in the Atlantic Rim (AR) Area are thin and discontinuous and thus, the probability of 'missing' a coal seam with a well borehole increases with larger well spacings. A well spacing area of 160-acres may be too large and may compromise the full exploitation of the CBNG resources in the AR Area.

A CBNG well has to have the ability to de-water a coal seam. The physical ability of a well to drain an area involves several factors which includes having sufficient permeability in the coal seam to permit the pumping of water from the coal's natural fracture system (de-watering). The de-watering process is responsible for the initiation of the gas desorption process from the coal seam's matrix. The area of gas desorption that is associated with a CBNG well's gas production is the 'drainage area'. The value of the well spacing area should be sized to be equal to the drainage area in order to fully exploit the CBNG resources for the developed area.

The drainage area of the existing wells in the Cow Creek Unit is estimated to be 60 to 112 acres. Drainage areas were estimated using two approaches, the 'Cumulative Produced Water' approach and the 'Gas Content' approach. Both approaches use a generalized mass balance in which broad assumptions regarding reservoir parameters are made. These simple calculations regarding drainage areas do not take into account unexpected water influx sources such as 'vertical water influx' from adjacent over-laying or under-laying formations. The effect of 'vertical water influx' in CBNG production reduces the effective drainage area by limiting and/or reducing the effect of pressure reduction in the coal that the de-watering process creates. There are four wells assessed in this report where we considered localized assessments of 'vertical water influx', two of which show the lack of 'vertical water influx' when 40-acre well spacing is used and two other wells where the presence of 'vertical water influx' appears to be curtailing gas production. Whenever large well spacings (160-acres) are used, the probability of 'vertical water influx' increases. As a result, 80-acre spacing is recommended as a 'standard well spacing' for the AR Area.

Other factors influencing a well's de-watering effort is the well placement in the development area. If a CBNG well is isolated (i.e. not part of a developed CBNG area) or is located on the boundary of a development area (a boundary well), then that well's de-watering effort may never result in a significant gas desorption area. The influx of water from outside the developed area may overwhelm the well's ability to produce the influx of water. This would result in an insufficient pressure reduction in the coal and hence no (or very little) gas desorption would occur. CBNG wells located in the interior portion of a developed area will benefit from the boundary wells interception of the influx water and will have more effective de-watering ability and associated drainage areas. At this time, the AR Area CBNG development is young and without large development areas. Therefore, the existing wells do not benefit from the boundary wells to the extent that CBNG wells in developed areas enjoy

such as CBNG wells in the eastern portion of the Powder River Basin (PRB). Should CBNG well counts in the existing units increase (and thus ratio of boundary wells-to-interior wells decreases), then well spacings of 160-acres might be possible in the interior of unit. But at this time, 80-acre spacing is again recommended as a standard value of well spacing.

Q2: If the project area requires 80-acre spacing, can the project be developed economically utilizing directional drilling techniques?

A directional well for this purpose means a well drilled where the bottom-hole location has been directed to be displaced from the surface location such that there is a horizontal displacement of hundreds (or thousands) of feet and a deviation angle less than 75 degrees. The deviation angle is the angle between the trajectory of a vertical borehole and the directional portion of the borehole (which begins at the kick-off point, from the vertical borehole). Typically deviation angles are less than 30 degrees for directional wells. Directional wells are not the same as horizontal wells. A horizontal well's borehole penetrates a target formation such as to be situated parallel and located within the target formation. Horizontal CBNG wells do have dramatically improved productivity and reserves but the thin and discontinuous nature of the Meseverde Coals when combined with the dramatically higher drilling and completion (D&C) costs of horizontal wells prevent their application in the AR Area doubtful. Directional wells are not advisable because of the higher D&C costs, the lower gas recovery efficiencies (ref.1), and operational difficulties involved with de-watering the well using artificial lift (i.e. high tubing failure rate).

Estimations for original gas in place (OGIP) ranges for a 80-acre tract having a thickness of 20.5 feet (the average coal thickness for a Cow Creek well), having a gas content of 143.5 scf /ton is 0.4098 BCF. Cow Creek wells produce from the Almond Coal of the Meseverde Group of coals. Gas content values for the Almond range from 21 to 266 scf/ton (ref.2)and the 143.5 scf/ton value used here represents an average of this range. If a 70 % 'typical' recovery factor is assumed, then an estimated ultimate recovery (EUR) of 0.2869 BCF is calculated for an 80-acre spacing unit (or tract). This is an average value based upon limited data. It is possible the range of EURs may be from 0.1 to 1.0 BCF.

The economics of AR Area CBNG wells involves D&C costs and infrastructure investments. The CBNG wells in the AR Area cost approximately $900,000 for a directional well. This includes a $700,000 D&C cost and a $200,000 infrastructure cost. The infrastructure costs include the purchase and operation of electrical generation equipment and the costs associated with drilling water disposal/injection wells and associated injection pumps costs. The AR Area infrastructure is not well developed and accounts for extremely high development costs and operating costs when compared with the PRB.

It is estimated that a economic 'break-even' gas recovery for a vertical well is 0.23 BCF and for a directional well is 0.30 BCF. Recall that the estimation for average EURs for an 80-acre tract is 0.2869 BCF so, drilling of directional wells is not economic.

Technical Analysis

1) Geologic Concerns:

Currently, there is CBNG production from the Mesaverde Group of coals (mainly the Almond and Allen Ridge Formations). Structurally, the Mesaverde outcrops on its eastern flank and dips down to the west (8 to18 degrees). The discontinuous nature of these coals would suggest that the probability of a borehole 'missing' a coal seam increases with larger well spacing (e.g. 160 acre spacing). Attachment No.1 is a 'type log' for the AR Area.

2-A) The Ability of a CBNG Well to Dewater a Coal Seam:

The physical ability of an economic CBNG well to drain an area involves several factors. A coal seam must have sufficient permeability to permit the pumping of water from the coal's natural fracture system (de-watering). The de-watering process reduces the pressure in the coal's fractures which initiates gas desorption process from the coal matrix. The rate of de-watering (and resulting drainage area) is constrained by the coal permeability and the degree of 'vertical water influx' from possible adjacent overlying aquifers. The Meseverde coals have good permeability (estimated to be 100 milliDarcies) and good gas content (21 to 295 scf/ton (ref.2)). These coals in general are gas saturated and will thus produce gas from beginning of production and will result in a short (or no) de-watering period for these wells. This will help the operators economically by eliminating the wait for a positive cash flow.

2-B) What is the Drainage Area of the Existing Wells?

Two approaches will be used here to estimate drainage areas. One approach will be based upon the produced cumulative water volume (the 'cumulative produced water' approach) and the other method will use gas contents of the coal and gas EUR (the 'gas content').

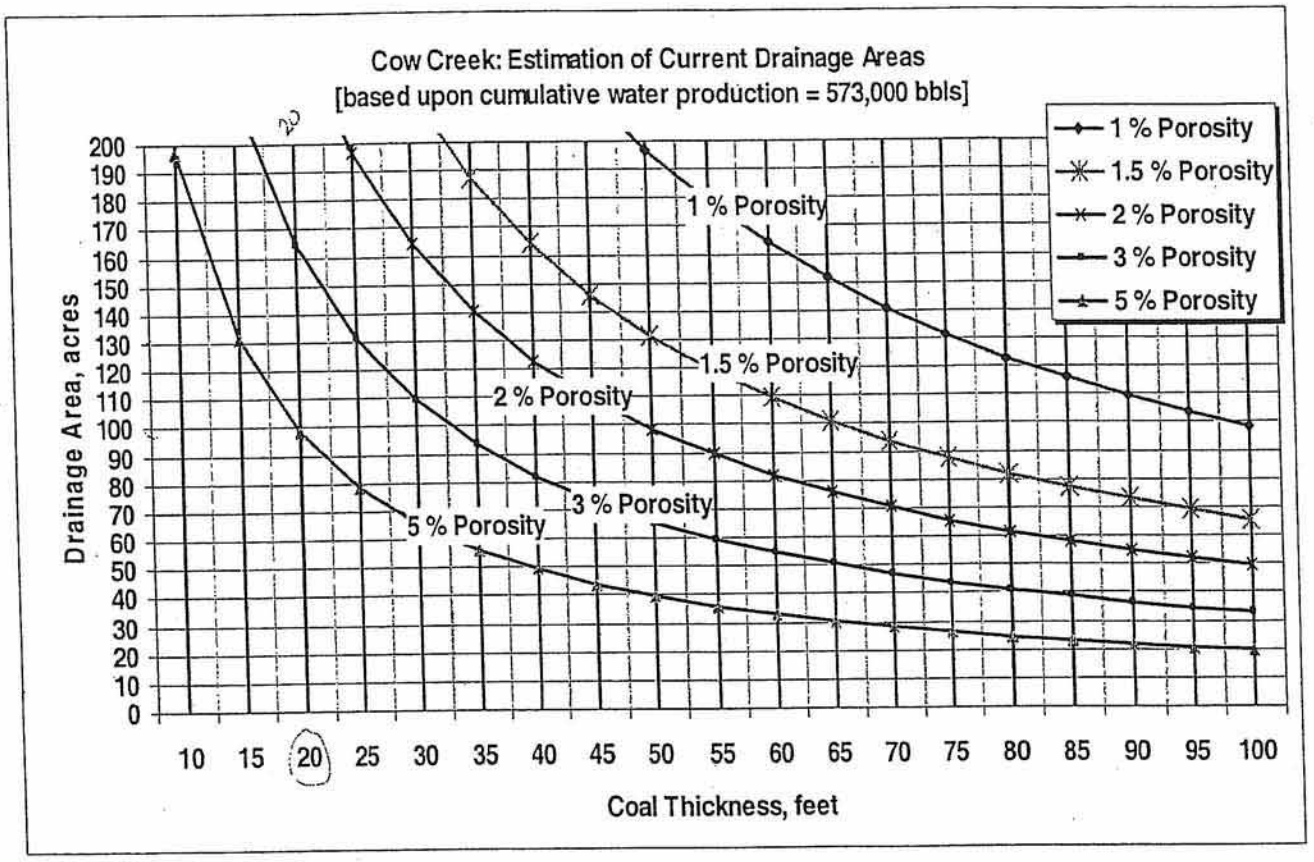
2-B.1) The 'Cumulative Produced Water' Approach:

In the 'cumulative produced water' approach it is assumed that the pore volume is represented by the volume of the coal's natural fracture cleat system. This pore volume is assumed to be 100% saturated with water and 75% of this water will be produced by the CBNG well. The 75% water recovery factor assumes that there will be some irreducible water saturation. The following equation will be solved for area (A), the area which is required to hold the produced amount of water for a given coal thickness and porosity.

$$Wp = 7758 \times A \times H \times \text{Porosity} \times 0.75,$$ (75 % of the initial water in place is produced)

where: Wp = cumulative water production, bbls
A = area, acres
H = coal thickness, feet
Porosity = coal porosity (= cleat volume / bulk volume)

The following chart is a graph of estimated current drainage areas as a function of coal thicknesses for various coal porosities (and assumes a cumulative produced water of 573,000 barrels of water which is the average cumulative produced water for a Cow Creek Unit well.



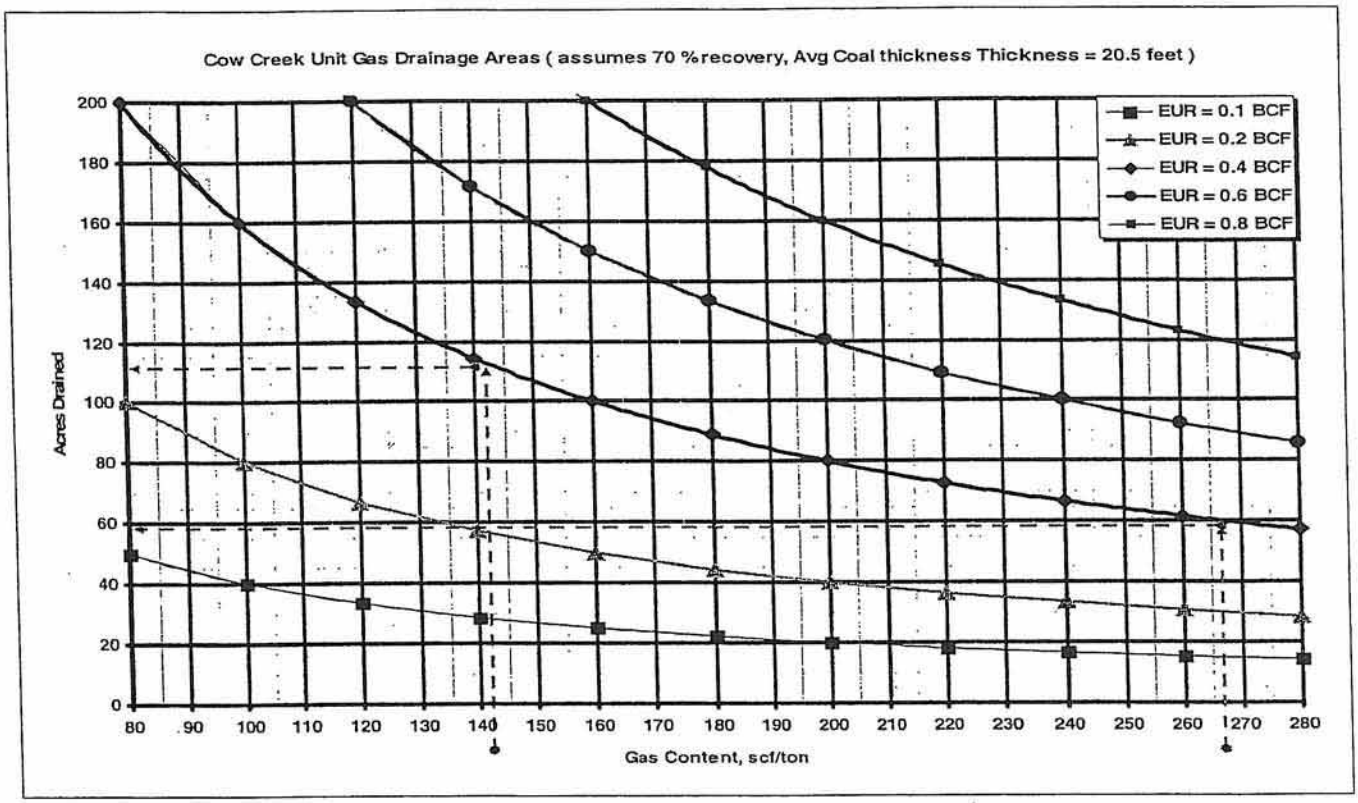
The porosity of the Mesaverde coals is not known. Typically CBM porosities range from 0.1 to 2.0 %. For the Powder River Basin (PRB) coals, estimations for coal porosity values range from 1 % to 5 %. The average perforated thickness for wells in the Cow Creek Unit is 20.5 feet. To get an idea what the drainage are might be for a average Cow Creek Unit well, using this graph and porosity values of 1 % to 5 %, a net coal thickness of 20.5 feet and a cumulative 573,000 bbls, then a range of 'average' drainage area estimates is calculated to be from 99 to 492 acres. Although, these drainage areas are quite large, we must consider other factors. They do not represent the final drainage areas for the AR area. This approach uses the 'cumulative produced water' to calculate the drainage area.

If reservoir simulation models were constructed and 'history matches' were to suggest higher porosity values (i.e. > 2 %), then this would indicate that a portion of the produced water may be coming from other sources (e.g. 'vertical water influx'). Porosity values of the Mesaverde coals need to be determined using pressure transient testing and reservoir simulation in order to improve the accuracy of these estimates.

2-B.2) The 'Gas Content Approach':

For estimations of an average Cow Creek Unit well's drainage areas based upon the 'gas content approach, we use the following equation and the results are in the following graph.

EUR = 0.70 **x** area **x** Thickness **x** 1,741 tons coal/acre-ft **x** Gas Content scf/ton



This approach calculates the drainage area based upon 'gas content' of the coal, net coal thickness, and a recovery factor. Limited core samples have been gathered for Cow Creek Unit wells and the gas content ranges from 21 to 266 scf/ton for the Almond Coal (all wells in the Cow Creek Unit are producing from only the Almond Coal). Using the above graph, drainage areas of 60 acre is estimated (assuming a gas content of 266 scf/ ton) or 112 acres (assuming a gas content of 143.5 scf/ton which is the average of the gas content range for the core sample from the Almond Coal).

The Original-Gas-In-Place (OGIP) for a 40-acre tract having a thickness of 20.5 feet and a gas content of 143.5 scf /ton is 0.2049 BCF and 0.3797 BCF if a gas content of 266 scf/ton is assumed. Using the optimistic estimate of OGIP (0.3797 BCF) and multiplying it by 0.7 (a 'typical' recovery factor) then an optimistic gas reserve of 0.2659 BCF is calculated for a 40-acre tract. The average EUR for a Cow Creek Unit well has been estimated to be 0.4 BCF. Clearly the average range of drainage areas for the Cow Creek Unit shows that more than 40-acres is being drained.

In comparing the drainage areas calculated using the 'cumulative produced water' and 'gas content' approaches, there is a significant difference. From a cylindrical void point of view, the 'gas content' approach's estimation of the gas drainage area is probably more accurate (112 acres). The cylinder void method yields drainage areas that are conservative. This approach assumes the gas content in the gas drained area is at an abandonment 'gas content' value then abruptly jumps up to the initial gas content, at the boundary between the drained and un-drained gas region.

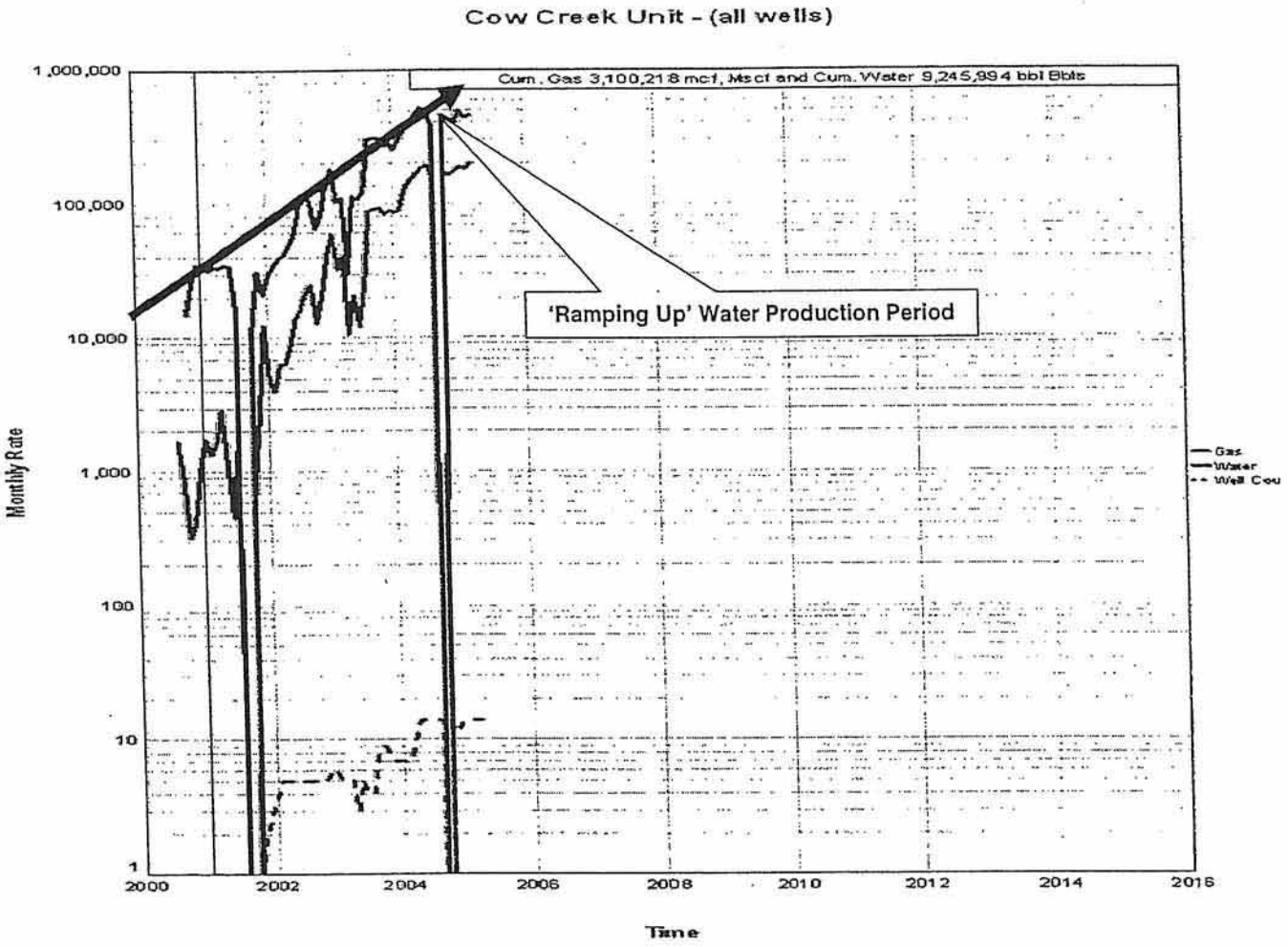
The 112 acre drainage area value would be a conservative estimate from a real reservoir point of view. If the drainage area value of 112 acres is our best interpretation and this value is compared with the drainage area calculated from the 'cumulative produced water' approach (which has a value in excess of 200 acres when a coal porosity of 1.5 % is assumed), then it is safe to say that there is a significant portion of the cumulative (83%) produced water originating from outside the 40-acre well spacing area. It is plausible that 160-acre spacing could be implemented if the local geology permitted (i.e. if there is no 'vertical water influx' from adjacent overlying aquifers). Without this kind of specific localized geologic knowledge, it is suggested here that the 80-acre well spacing is a standard well spacing.

2-C) The Role of 'Vertical Water Influx' in Reducing Drainage Areas

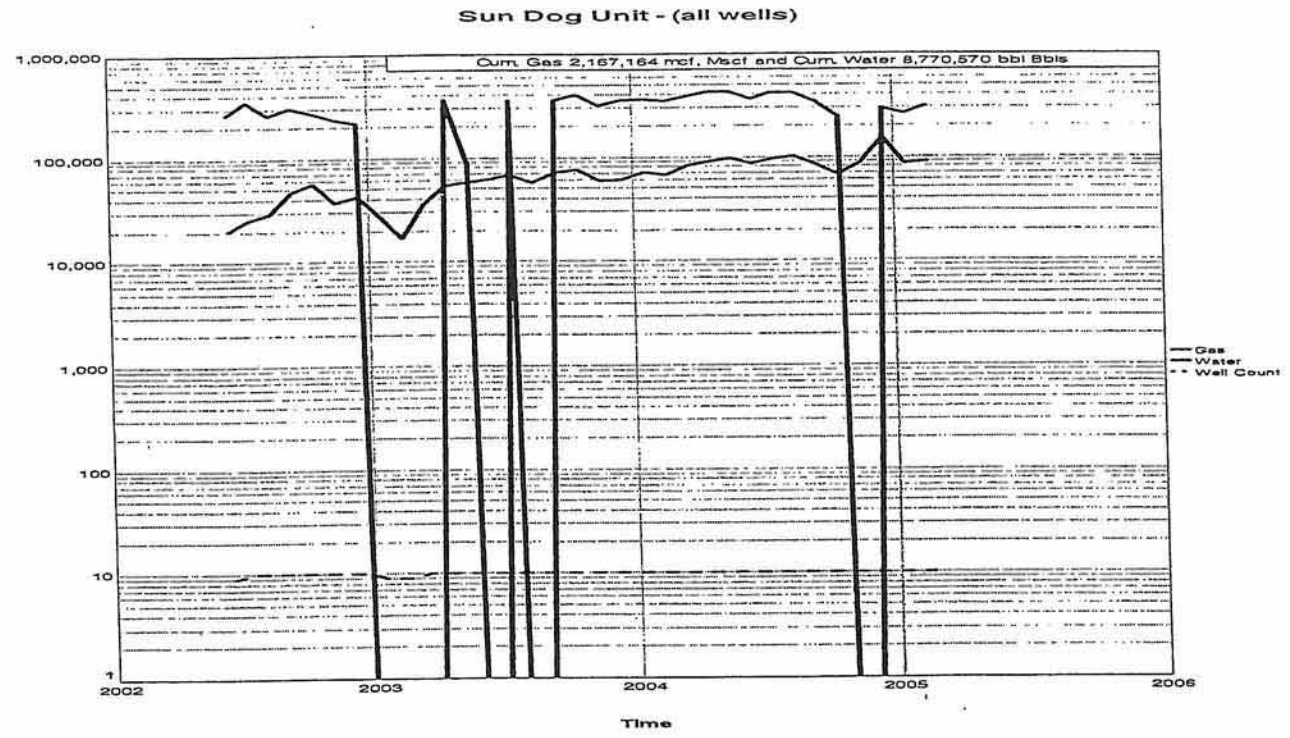
Vertical water influx has been a limiting factor in some of the well spacing of CBNG wells in the PRB and has resulted in well spacing as low as 40-acres. If the total water influx is greater than a de-watering CBNG well's water production rate, then the diffusion of gas from the coal's matrix will not occur and gas production will cease.

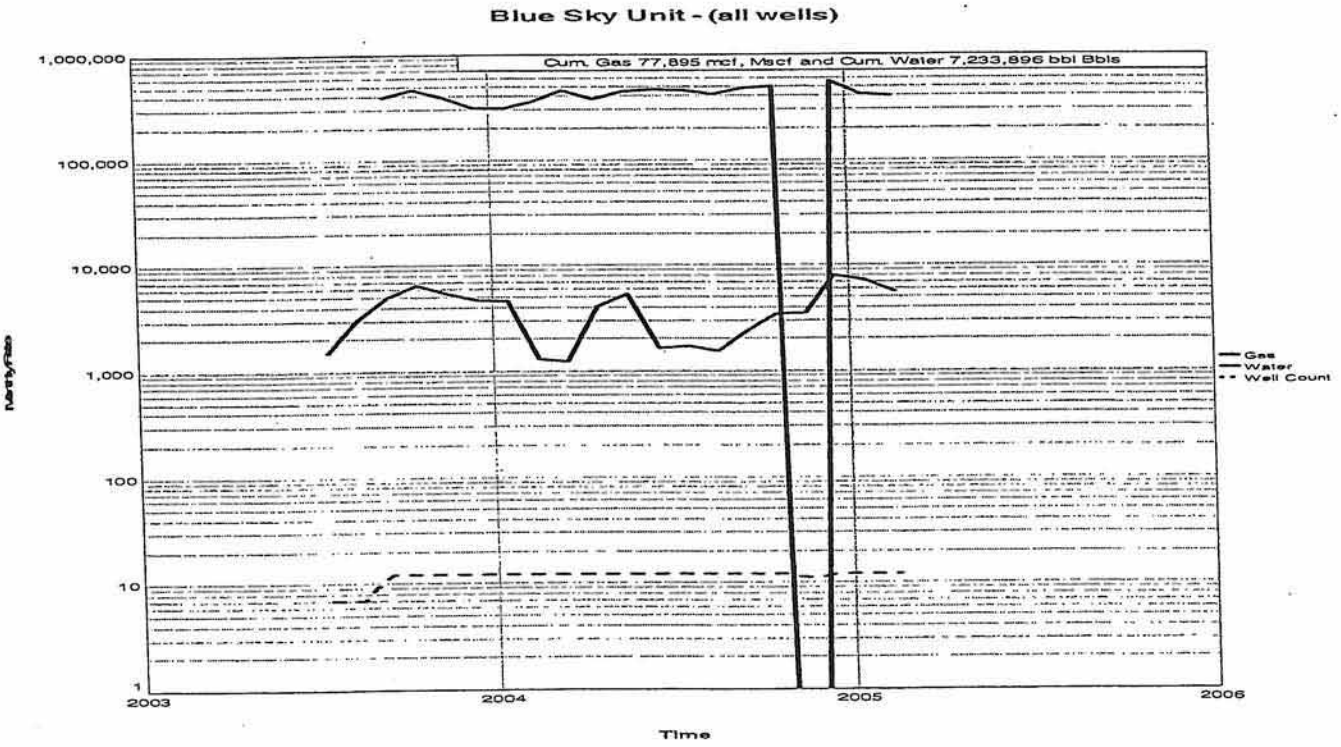
'Vertical water influx' may be inferred from the rate-time production histories of water and gas (ref.3). In a well that is not experiencing vertical water influx, the water production rate should decline and the gas production rate should be increasing 'ramping up'. The production histories on the following three graphs are not mature. There is no gas production rate decline history to conclude (or exclude) the possibility that vertical water influx is occurring at this time, on a 'unit wide basis'. There are a few well histories where it may be possible to quantify the existence of localized vertical water influx and they will be discussed later in this report.

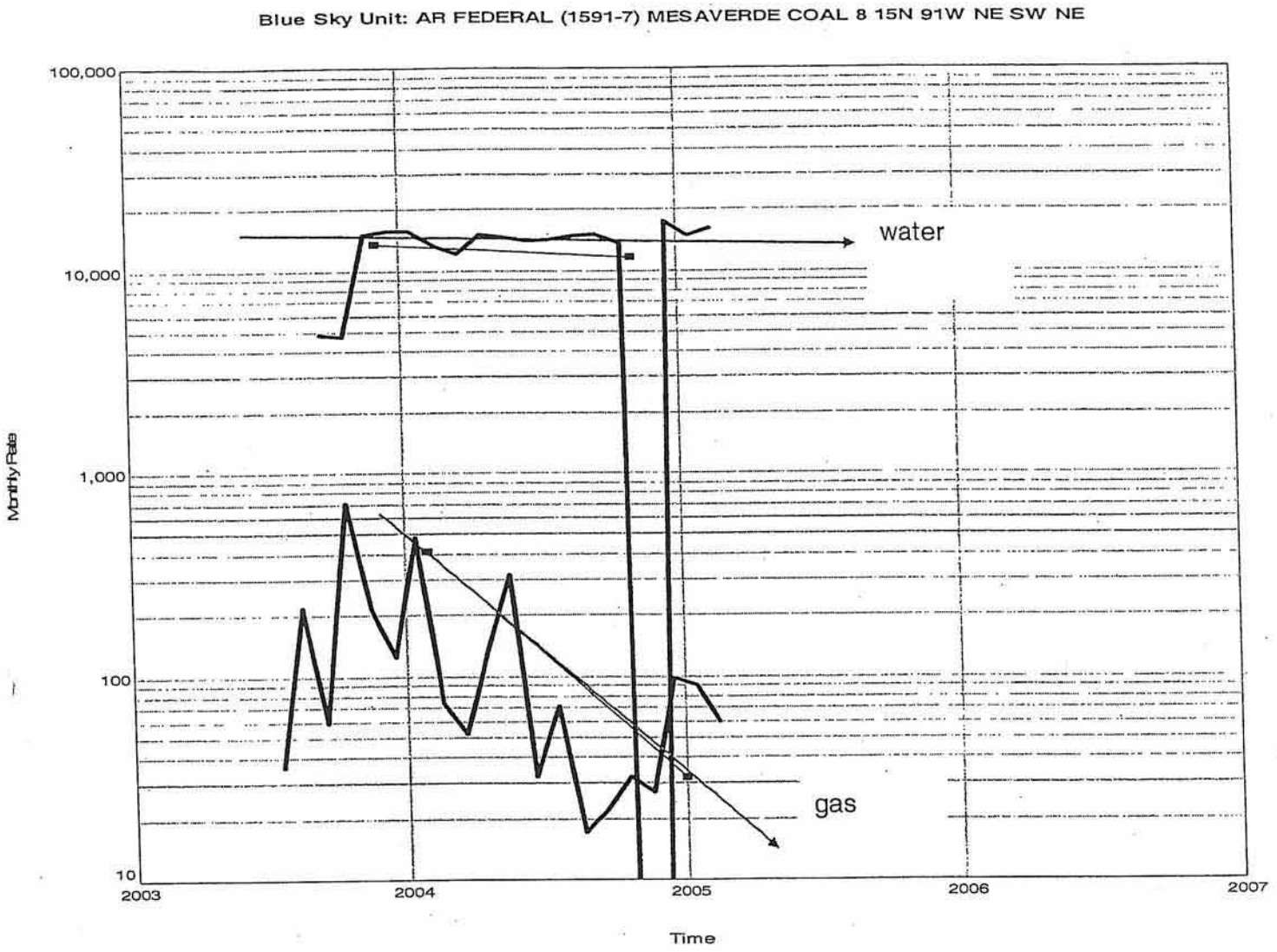
The following graph indicates the production in the Cow Creek Unit is still young and is 'ramping up'.



Production in the Sun Dog and Blue Sky Units and is also 'ramping up' (following two graphs).

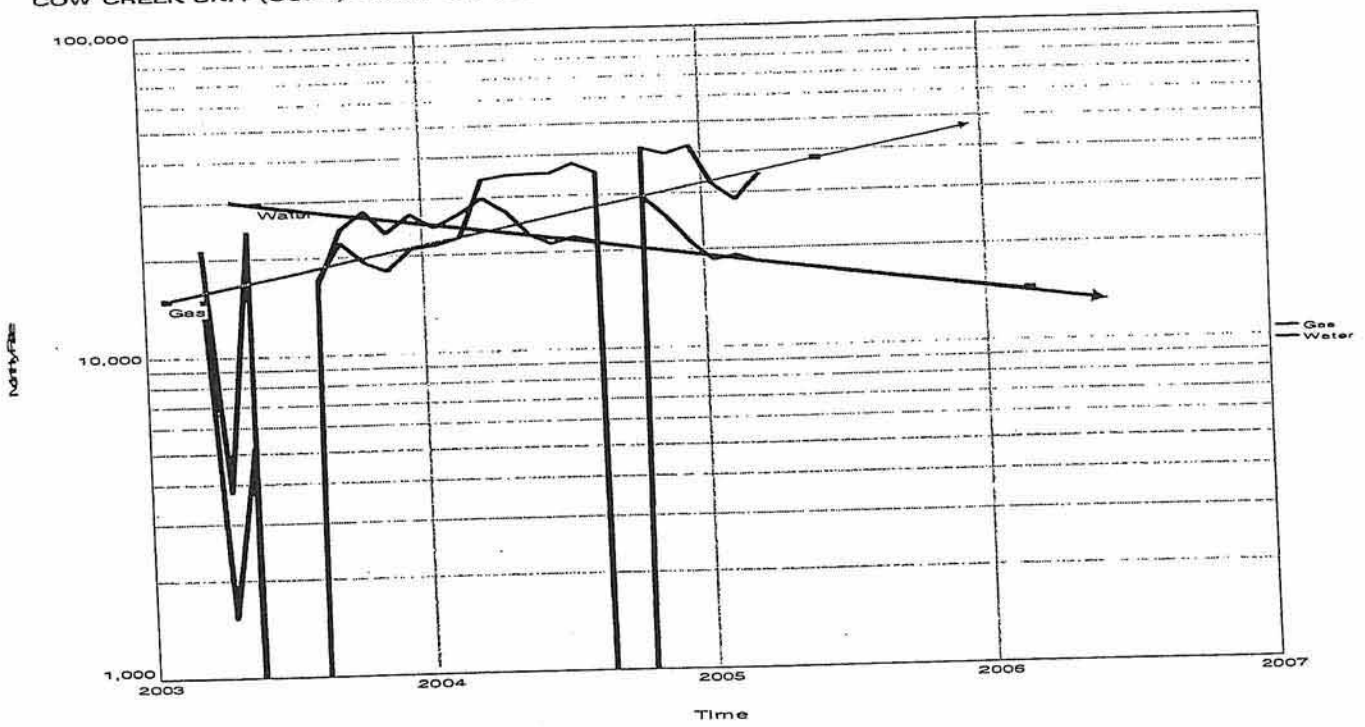




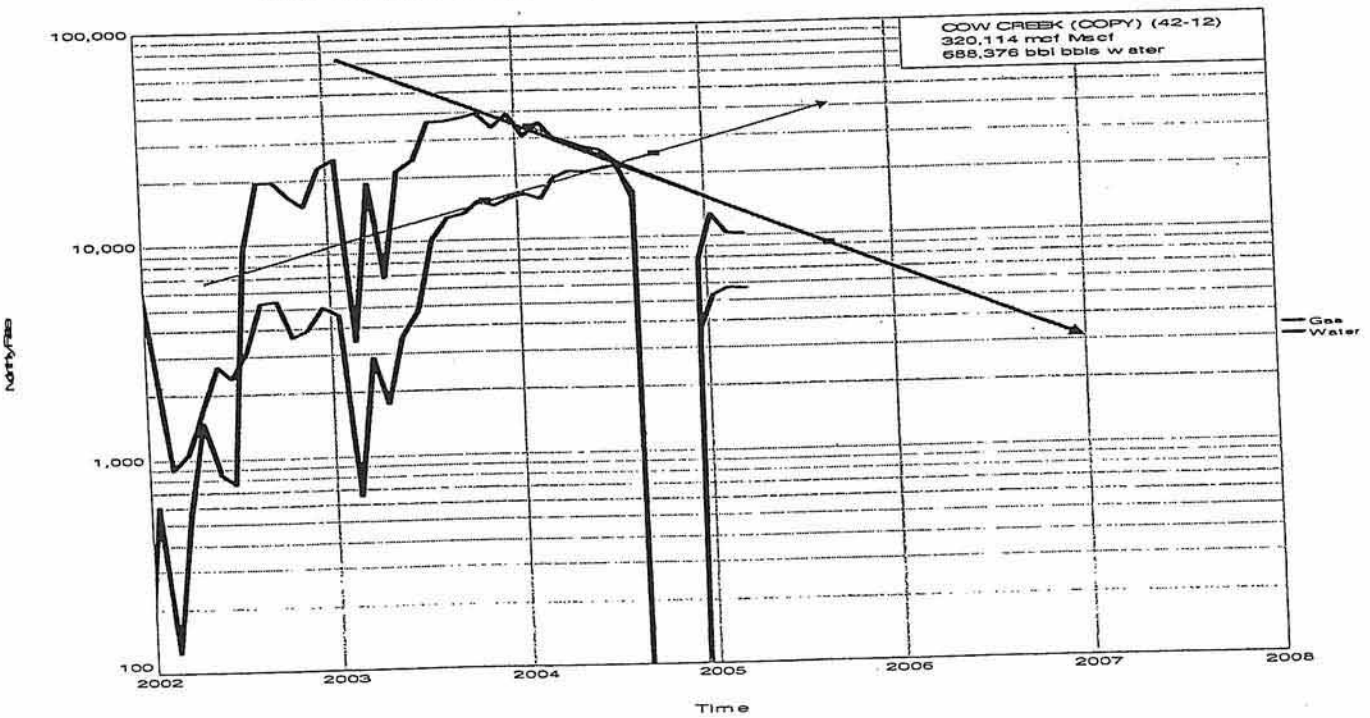


In comparison, the following two production history graphs for two Cow Creek Unit wells suggest that there is little or no 'vertical water influx' occurring (gas production is increasing and the water production is decreasing with time, (ref. 3)). This unit is spaced at 40-acres.

COW CREEK UNIT (COPY) - COW CREEK COW CREEK UNIT (COPY) (13-7) MESAVERDE COAL 7 16N 91W SW



COW CREEK (COPY) (42-12) MESAVERDE COAL 12 16N 92W SW SE NE



The majority of the Cow Creek Unit wells are still producing water (at rates in excess 1,000 bpd) and hence the 'current average' drainage area will continue to grow. Permeability in the Almond and Allen Ridge coals appear to be high and thus will permit coal seam de-watering at rates in excess of 1000 bpd.

3) The Role of Well Locations in the Dewatering:

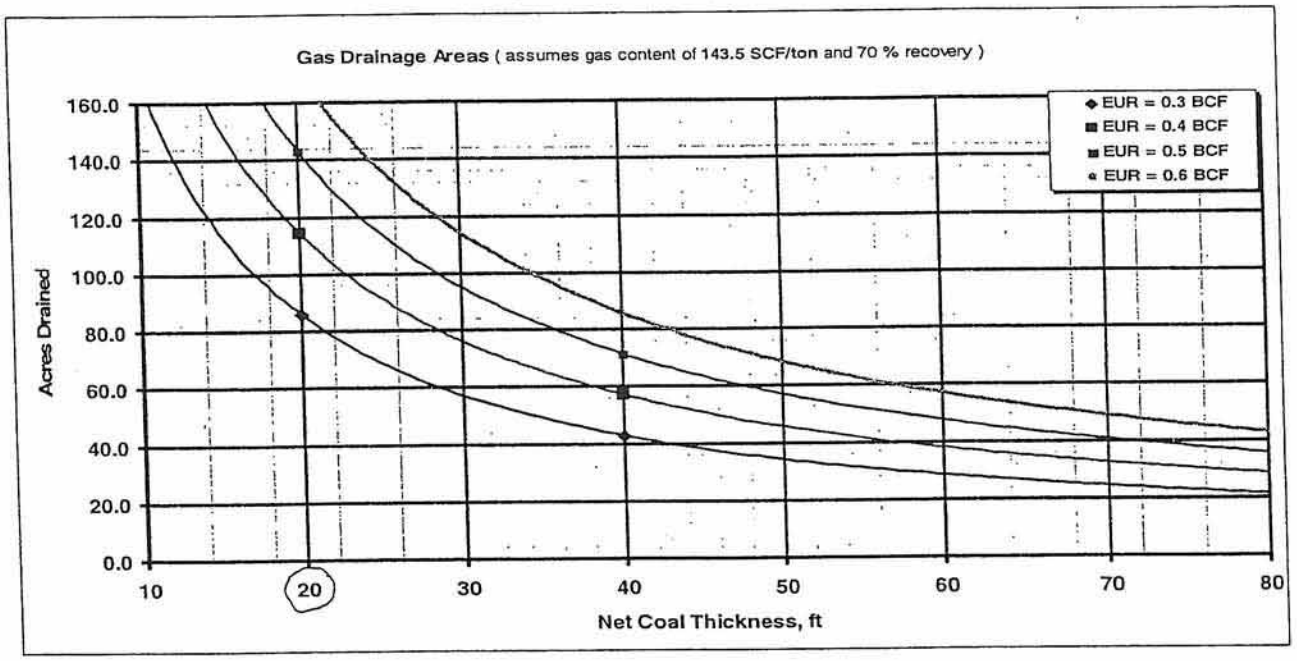
The 'drainage area' estimations are simple volumetric calculations and do not include the effects of any 'vertical water influx' (if any) or the geologic effect of well locations. The location of a well within CBNG development affects its ability to produce gas. If a CBNG well were located within the inner boundary of a developed area and vertical water influx was not occurring, then the simple volumetric approach used here would apply. If a well were located on the 'boundary' of a developed area (i.e. a 'boundary well'), then the water influx from outside the developed area would likely continue and the efficacy of the 'de-watering' of the 'boundary well' would be reduced significantly. If 'vertical water influx' is not a problem, then 160-acre spacing is plausible. Local geology must be evaluated for the presence of over-laying aquifers. The key issues associated with well spacing is the ability of a well to de-water the coal seam and EUR values.

4) CBNG Well Types:

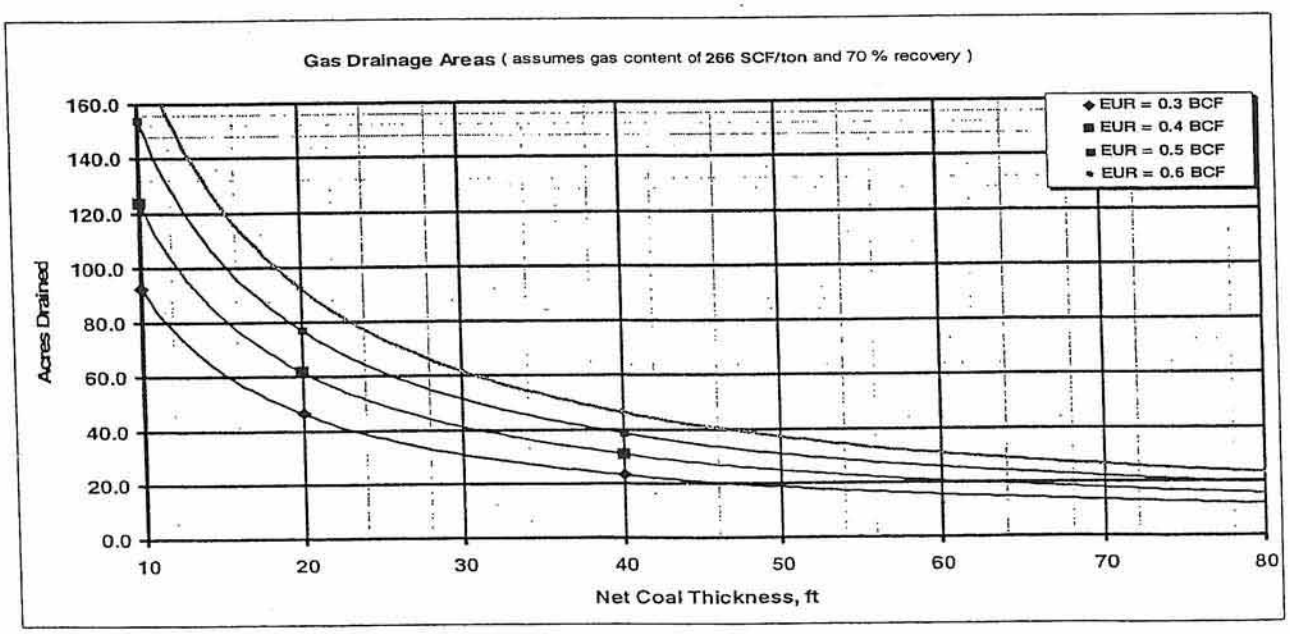
An economic analysis was conducted which assumed that two wells are drilled per 160 acres, one well vertical and one well directionally, both situated on the same drill pad. Directional wells in CBNG plays have historically (in the San Juan Basin) been shown to have lower productions rates and recoveries when compared to conventional vertical wells (ref.1). A directional well for this purpose means a well drilled where the bottom-hole location has been directed to be displaced from the surface location such that there is a horizontal displacement of hundreds (or thousands) of feet and a deviation angle less than 75 degrees. The deviation angle is the angle between the trajectory of a vertical borehole and the directional portion of the borehole (which begins at the kick-off point, from the vertical borehole). Typically deviation angles are less than 30 degrees for directional wells. Horizontal wells are not the same as directional wells. Unlike directional wells, a horizontal well's borehole penetrates a target formation such as to be situated parallel and located within the target formation. Horizontal CBNG wells do have dramatically improved productivity and reserves (ref.1), but is still a young technology. The drilling costs associated with horizontal wells are four times the cost of a vertical well. There is an environmentally favored drilling development plan called 'Z-Pinnate'. 'Z-Pinnate' system consists of drilling a central vertical well with a system of multiple lateral horizontal boreholes drilled from it (Attachment No.2). 'Z-Pinnate' system may drain as much as 1,200 acres from one central vertical borehole. At this point in time, the 'Z-Pinnate' system would not be considered to be an alternative.

5) Original Gas In Place, (OGIP):

The following is a graph of volumetric estimates of OGIP for an average gas content of 143.5scf/ton and various coal thicknesses. Coal thicknesses and gas contents will vary. The following graph may be used to estimate gas drainage areas for various thicknesses.



The following is a graph of volumetric estimates of OGIP for a gas content of 266 scf/ton (upper limit) and various coal thicknesses.



6) The Economics of CBNG Wells in the Atlantic Rim:

6-A) Drill and completion costs for a 1,600 foot directional CBNG well

According to Double Eagle Petroleum, the typical cost to drill and complete a 1,600 foot vertical CBNG well in the Cow Creek Unit is approximately $450,000. Addition cost to directionally drill adds approximately $250,000 to the D&C costs. As a result the D&C costs for a directional well is $700,000. In addition, these wells require compression, electrical generation equipment, and re-injection of the produced water. This adds at least an additional $200,000 per well and brings the total cost for a vertical well (including production equipment) is $650,000. The total estimated drill and completion costs for a 1,600 foot directional CBNG well including production equipment is $900,000. The infrastructure costs include the purchase and operation of electrical generation equipment and the D&C costs associated with water disposal/injection and associated injection pumps. The AR Area infrastructure is not well developed and this results in extremely high development costs and operating costs.

6-B) Viability of Directional Wells in the AR Area

An extreme departure angle of 49 degrees would be required for a 1,600 feet deep borehole to obtain a 1,866 feet horizontal departure (figures in Attachment No.3) for a well to be drilled to an offset 80-acre tract. CBNG development in this area is relatively young (development beginning in 2001). To date, there have been no CBNG wells drilled directionally in the AR Area.

There are several issues regarding the viability of directional wells in this area. One issue is the deviation angle. The CBNG wells need to utilize artificial lift to produce the water. The use of rod pumping units is required. Submersible pumps and other artificial lift methods can not be used because problem of coal fines. Highly deviated boreholes can not utilize rod pumping because the there would be a high rate of tubing failure associated caused by the rods rubbing against the tubing. Operators in the San Juan Basin report drilling difficulties when the deviation angle exceeds 30 to 35 degrees (ref.1).

Studies of directional CBNG wells in the San Juan Basin (ref. 1) suggest that directional wells have lower productivity and EURs than conventional vertical CBNG wells located in adjacent leases.

The Meseverde coals in this area are thin and discontinuous and thus higher well densities (i.e.80-acre well spacing) will be required. The Meseverde coals' depths range from 1,000 to 3,000 feet and the distance between these thin coals is considerable (hundreds of feet) and thus it may necessary to perform multiple completions.

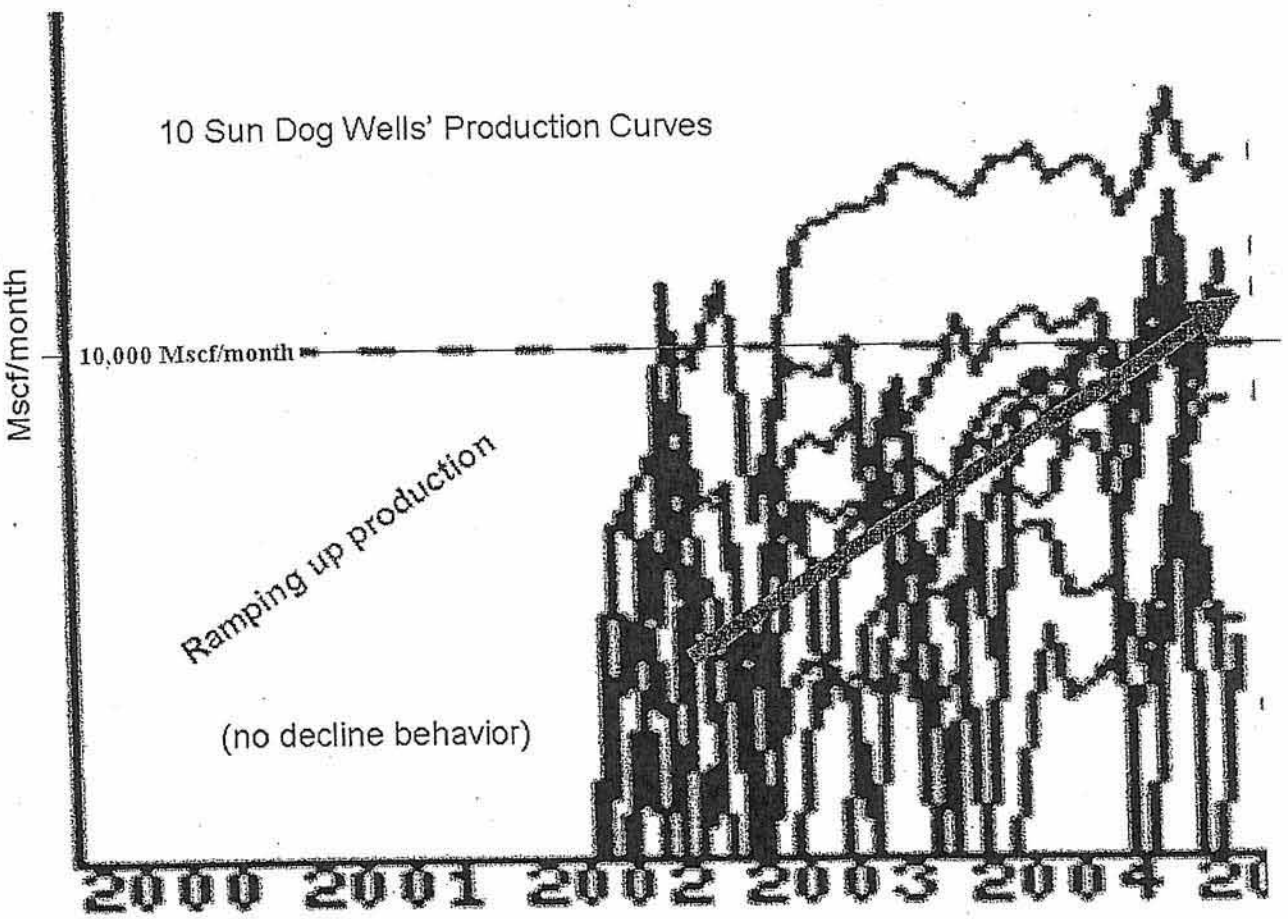
6-C) Cash flows for Vertical and Directional Wells:

In order to get an idea of the economic viability of future CBNG wells economic analyses were conducted and estimates of 'break-even' EURs were calculated. In these analyses a 1,600 foot deep well was assumed and a drill and completion costs of $650,000 (for a vertical well) and $900,000 (for a directional well). It was estimated that an economic 'break-even' gas recovery volume is 0.23 BCF for a vertical well and 0.30 BCF for a directional well. The average EUR of all AR Area CBNG wells is about 0.250 BCF (for the 36 wells where EURs are estimations are possible). Drilling of directional wells does not appear to be profitable. It is not likely that directional wells in the AR Area would be viable as a result of the extra drilling expenses, drilling difficulties, and severe operational difficulties associated with rod pumping a highly deviated CBNG well.

Background of Existing Units:

The Atlantic Rim Coal Bed Methane development area is located in southwest Wyoming and is approximately 5 miles wide (R89W to R92W) and is 50 miles long (T13N to T20N, north-south). Currently, there is CBNG production from the Almond and Allen Ridge Formations of the Mesaverde group of coals.

Atlantic Rim CBNG development is relatively young, with gas production beginning in the year 2001. Of the producing units in the AR Area, only the Cow Creek and Sun Dog Units have enough production history for the purpose of estimating economic viability. These units' production histories were used for assessing the potential average estimated ultimate recovery (EUR) for an Atlantic Rim CBNG well. There are not any well defined production rate-time decline curves available for the Cow Creek or Sun Dog Units. The majority of these wells are in the ramp-up stage of production. The following figure illustrates the 'ramp up' gas production rate trends in the Sun Dog Unit utilizes all the individual well gas production curves.



Production data for the Sun Dog and Cow Creek units were gathered and rough estimates of EURs were made and used in our analysis. Both the Sun Dog and Cow Creek units have good average values for EUR and current cumulative gas production.

7) Cow Creek Unit is located T16N, R91-92W and targets the Almond Formation which has a depth range of 1,180 to 1,800 feet (average well depth 1,301 feet). There are 14 producing wells. CBNG is being developed on 40-acre spacing. This unit is located on a localized structural trap and hence the EURs in of these wells may be optimistic if used as a metric for estimating an average EUR for a typical Atlantic Rim CBNG well. The following table summarizes the production for an average well in the Cow Creek Unit.

Cow Creek Unit					
Wells in Averages	Average Date of 1st Production	Avgerage EUR, Mscf	Avg Cumulative Gas, Mscf	Avg Days Producing	Average Cumulative Water, Bbls
14	1/2/2003	412,051	184,503	875	573,026

The following table summarizes individual well productions for Cow Creek Unit.

Cow Creek								
API Number	1st Prod Date	T	R	S	EUR, Mscf	Cum Gas, Mscf	Days Producing	Cum Water, Bbls
49007223960000	4/1/2004	16	92	1	35,166	20,227	421	151,839
49007223680000	4/1/2004	16	92	12	36,220	22,824	421	138,866
49007223970000	4/1/2004	16	92	12	147,751	44,615	421	220,386
49007219200000	1/1/2002	16	92	12	184,072	136,112	1242	849,934
49007050940001	8/1/2000	16	92	12	205,620	91,385	1760	1,580,681
49007219210000	11/1/2001	16	92	12	254,171	193,318	1303	468,696
49007223230000	11/1/2002	16	91	7	316,339	142,519	938	558,357
49007221570000	4/1/2004	16	91	7	360,981	85,465	421	164,431
49007219190000	12/1/2001	16	92	12	423,187	308,670	1273	667,794
49007223950000	4/1/2004	16	92	12	485,826	99,360	421	257,358
49007223210000	8/1/2003	16	91	6	501,506	207,832	665	911,357
49007219180000	2/1/2002	16	92	12	610,632	263,936	1211	547,399
49007223220000	11/1/2002	16	91	7	1,100,045	475,198	938	1,071,791
49007221560000	3/1/2003	16	91	7	1,107,201	491,588	818	433,487

8) Sun Dog Unit is located in T16N, R91W and targets the Almond and some Allen Ridge Formations which have a depth range of 800 to 1,000 feet. This unit has 10 producing wells and the cumulative production is 1.726 BCF and 7.49 millions barrels of water since production began in 2003. The estimated ultimate recovery (EUR) for these 10 wells is 0.389 BCF per well. Both water and gas production began at the same time which suggests these coals are saturated with gas. CBNG is being developed on 40-acre spacing. The following table summarizes the production for an average well in the Sun Dog Unit.

Sun Dog Unit					
Wells in Averages	Average Date of 1st Production	Average EUR, Mscf	AvgCumulative Gas, Mscf	Avg Days Producing	Average Cumulative Water, bbls
10	6/4/2002	389,474	189,650	1088	807,742

The following table summarizes individual well productions for Sun Dog Unit.

Sun Dog Unit								
API Number	1st Prod Date	T	R	S	EUR, Mscf	Cum Gas, Mscf	Days Producing	Cum Water, Bbls
49007219350000	6/1/2002	16	91	8	116,026	57,860	1091	545,034
49007221920000	6/1/2002	16	91	17	151,001	115,555	1091	1,597,412
49007219370000	6/1/2002	16	91	8	161,205	91,982	1091	425,870
49007221910000	6/1/2002	16	91	17	253,354	163,300	1091	829,073
49007221930000	6/1/2002	16	91	17	382,034	201,097	1091	922,960
49007221890000	6/1/2002	16	91	17	385,507	215,255	1091	973,253
49007221880000	6/1/2002	16	91	17	400,923	178,184	1091	415,267
49007219360000	7/1/2002	16	91	8	437,653	195,772	1061	824,802
49007219380000	6/1/2002	16	91	8	444,394	138,897	1091	393,179
49007221900000	6/1/2002	16	91	17	1,162,641	538,606	1091	1,150,574

9) Blue Sky Unit is located in T15N, R91W and has 10 wells and the gas production is disappointing. Production began in mid 2003. The Blue Sky Unit wells have an average EUR of 0.074 BCF. The following table summarizes the production for an average well in the Blue Sky Unit.

Blue Sky Summary					
Wells Used in Averages	Average Date of 1st Production	Average EUR, Mscf	AvgCumulative Gas, Mscf	Avg Days Producing	Average Cumulative Water, bbls
12	8/3/2003	7,430	4,742	663	486,976

The following table summarizes individual well productions for Blue Sky Unit.

Blue Sky Unit								
API No.	1st Prod Date	T	R	S	EUR, Mscf	Cum Gas, Mscf	Days Producing	Cum Water, Bbls
49007221850000	11/1/2003	15	91	9	236	203	573	858,597
49007221780000	10/1/2003	15	91	9	276	263	604	617,347
49007221860000	9/1/2003	15	91	9	612	606	634	425,745
49007222490000	9/1/2003	15	91	16	2,229	2,223	634	391,627
49007222160000	9/1/2003	15	91	16	2,296	2,288	634	706,852
49007221820000	7/1/2003	15	91	8	2,652	2,624	696	182,317
49007221800000	7/1/2003	15	91	8	2,789	2,694	696	238,994
49007221740000	7/1/2003	15	91	5	3,688	3,566	696	367,437
49007221730000	7/1/2003	15	91	5	4,194	4,053	696	513,067
49007221830000	7/1/2003	15	91	8	8,857	7,640	696	427,167
49007221700000	7/1/2003	15	91	5	17,603	11,607	696	419,729

49007221690000	7/1/2003	15	91	5	43,741	19,148	696	694,838

10) Doty Mountain Unit is located T17N, R91W and targets the Almond and Allen Ridge Formations. There are currently 24 wells and they have an average depth of 2,189 feet. These wells were completed late in the year 2004 and are just beginning to produce gas, and hence decline curve is not possible at his time. All of these wells began to produce gas after 1 to 2 months of de-watering and this suggests that these coals are (or nearly) gas saturated. CBNG is being developed on 80-acre spacing. .

11) Brown Cow Unit is located in T14N, R91W and targets the Almond and some Allen Ridge Formations which have a depth range of 1,425 to 1,825 feet. There is currently only water production from five wells. CBNG is being developed on 80-acre spacing.

References

1. Malkewicz Hueni Associates, 'Evaluation of Coalbed Methane Well Types in the San Juan Basin', March 2004, Appendix D, pages 4 and 7-11.

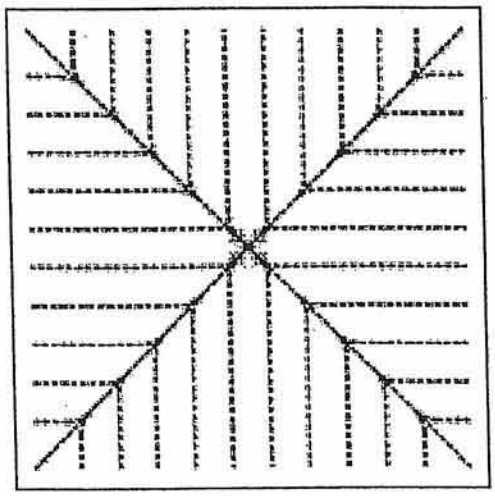
2. Robert A. Lamarre and Stephen K. Ruhl ,'Atlantic Rim Coalbed Methane Play: The Newest Successful CBM Play in the Rockies', Rocky Mountain Section AAPG Meeting, August 9, page 1.

3. P.R.Onsager and D.O. Cox, 'Aquifer Controls on Coalbed Methane Development in the Powder River Basin, Wyoming', paper SPE 63090, October 2000, pages 3 and 4.

Z-Pinnate Drilling System

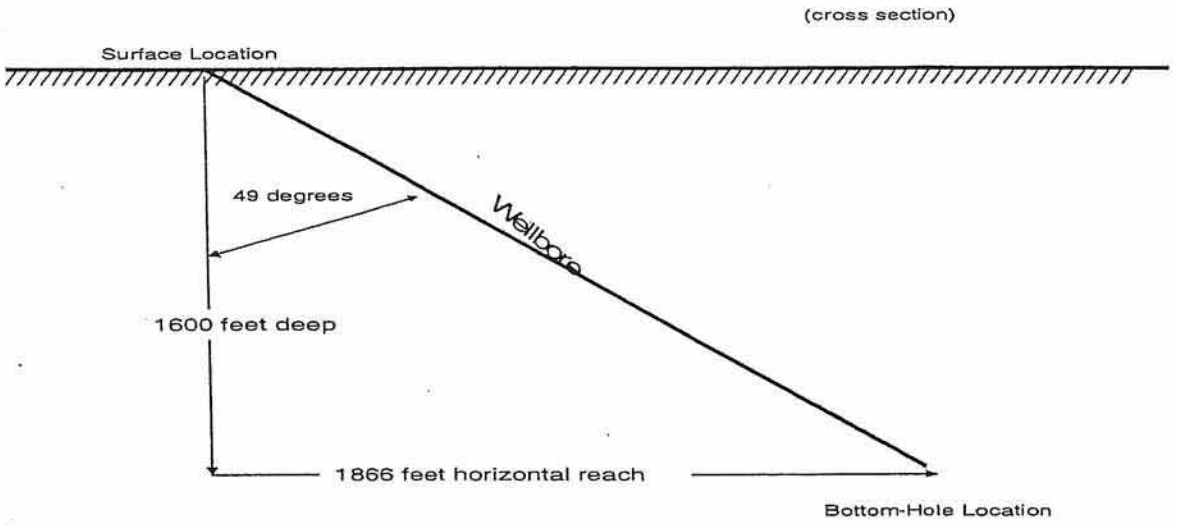
'Z-Pinnate' is an environmentally favored drilling development plan (developed by and patented by CDX Gas, LLC. 'Z-Pinnate' system consists of drilling a central vertical borehole (8 5/8' diameter) to the coal seam's depth. Then a branched herringbone pattern of uncased 4 ¾ inch diameter horizontal boreholes are drilled horizontally from the central borehole, to form a 'Pinnate' pattern (similar to a shape of a leaf). Four pinnate patterns (each oriented 90 degrees from each other) can be drilled from the central well and the resulting drainage area could encompass 1200 acres. The 'Z-Pinnate' system increase ultimate gas recovery and rates. A down-hole separation of gas and water is achieved by a pipe located in the center of the borehole where the water is pumped and gas flows in the annulus space. This down-hole separation eliminates the de-watering time. 'Z-Pinnate' drilling has been used in Appalachia but has not yet been used in the AR Area and would likely require a learning curve for its implementation. President of CDX Gas (Doug Wight) has expressed interest in implementing a 'Z-Pinnate' system in the Powder River Basin (Wyoming) coals this year. Costs for a 'Z-Pinnate' system are contingent on many variables. Historically costs have been approximately 1.5 million dollars per 1200 acre system. Simulation studies suggest a recovery of 80-90 % of the gas in place. The 'Z-Pinnate' system at this time in Wyoming must be considered to be a new technology and will no doubt need to be refined for the local conditions in Wyoming.

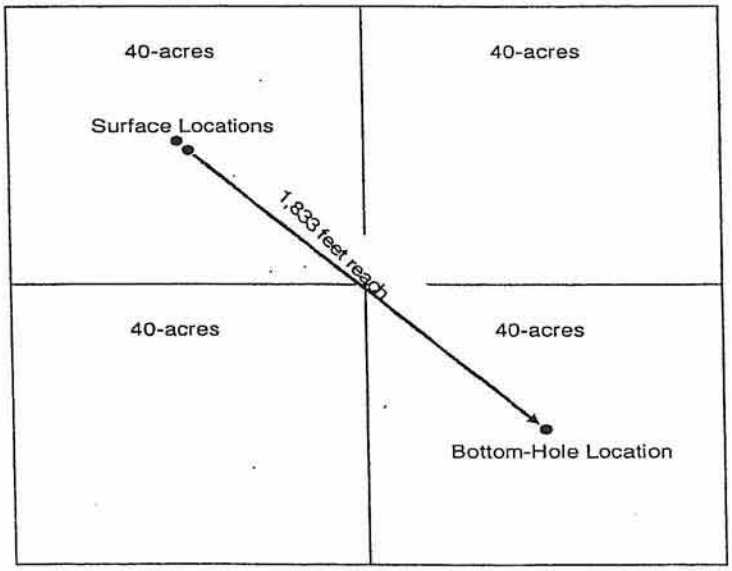
This diagram represents the horizontal boreholes' pinnate pattern. The square boundary may represent a 1200 acres drainage area.



Z-PINNATE℠ System Pattern

Attachment No.2 – 'Z-Pinnate' System





Attachment No.3 - Diagrams of Directional Well's deviation angles and bottom-hole departure.

Annual CashFlow Report

Lease Name: COW CREEK UNIT - 'Type Well' (43-12)
County, ST: CARBON, WY Operator: DOUBLE EAGLE PETROLEUM & MINING COMPANY
Location: 12 16N 92W NW NE SE

Date	Well Count	Gross Production Oil (Bbl)	Gross Production Gas (Mcf)	Net Production Oil (Bbl)	Net Production Gas (Mcf)	Average Prices Oil ($/Bbl)	Average Prices Gas ($/Mcf)	Sales Total ($)
12/2005	1	0	67,058	0	58,675	0.00	5.58	327,409
12/2006	1	0	95,120	0	83,230	0.00	5.58	464,424
12/2007	1	0	112,029	0	98,025	0.00	5.58	546,982
12/2008	1	0	78,278	0	68,493	0.00	5.58	382,192
12/2009	1	0	36,404	0	31,853	0.00	5.58	177,742
09/2010	1	0	13,825	0	12,097	0.00	5.58	67,502
Grand Total:		0	402,714	0	352,375	0.00	5.58	1,966,251

Date	Operating Expenses ($)	Taxes ($)	Operating Income ($)	Other Costs ($)	Periodic Cash Flow ($)	Cumulative Cash Flow ($)	5% Cash Flow ($)
12/2005	60,000	38,110	229,299	900,000	-670,701	-670,701	-673,496
12/2006	60,000	54,059	350,365	0	350,365	-320,337	323,946
12/2007	60,000	63,669	423,313	0	423,313	102,976	373,980
12/2008	60,000	44,487	277,705	0	277,705	380,682	234,529
12/2009	60,000	20,689	97,053	0	97,053	477,735	78,156
09/2010	45,000	7,857	14,645	0	14,645	492,379	11,323
Grand Total:	345,000	228,872	1,392,379	900,000	492,379	492,379	348,439

Discount Present Worth:
0.00 % 492,379
5.00 % 348,439

Economic Dates:
Effective Date 01/2005
Calculated Limit 09/2010
Economic Life 69 Months
5 Years 9 Months

Economics Summary:

	Bbl Oil	Mcf Gas
Remaining Gross	0	402,714

Economics Information:
Net Payout Date: 10/2007
Rate of Return: 22.97 %
Return on Investment:1.55
Disc Return on Invest1.39

Initial Division of Interest:

		NRI	ORI
WI: 100.000000	Oil:	87.500000	0.000000
	Gas:	87.500000	0.000000

Attachment No.4 – Cash Flow Statement – vertical CBNG well with 0.4 BCF reserves

Annual CashFlow Report

Lease Name: COW CREEK UNIT - 'Type Well'(43-12)
County, ST: CARBON, WY Field Name: COW CREEK
Location: 12 16N 92W NW NE SE

Date	Well Count	Gross Production Oil (Bbl)	Gross Production Gas (Mcf)	Net Production Oil (Bbl)	Net Production Gas (Mcf)	Average Prices Oil ($/Bbl)	Average Prices Gas ($/Mcf)	Sales Total ($)
12/2005	1	0	67,058	0	58,675	0.00	5.58	327,409
12/2006	1	0	95,120	0	83,230	0.00	5.58	464,424
12/2007	1	0	112,029	0	98,025	0.00	5.58	546,982
12/2008	1	0	78,278	0	68,493	0.00	5.58	382,192
12/2009	1	0	36,404	0	31,853	0.00	5.58	177,742
09/2010	1	0	13,825	0	12,097	0.00	5.58	67,502
Grand Total:		0	402,714	0	352,375	0.00	5.58	1,966,251

Date	Operating Expenses ($)	Taxes ($)	Operating Income ($)	Other Costs ($)	Periodic Cash Flow ($)	Cumulative Cash Flow ($)	5% Cash Flow ($)
12/2005	60,000	38,110	229,299	900,000	-670,701	-670,701	-673,496
12/2006	60,000	54,059	350,365	0	350,365	-320,337	323,946
12/2007	60,000	63,669	423,313	0	423,313	102,976	373,980
12/2008	60,000	44,487	277,705	0	277,705	380,682	234,529
12/2009	60,000	20,689	97,053	0	97,053	477,735	78,156
09/2010	45,000	7,857	14,645	0	14,645	492,379	11,323
Grand Total:	345,000	228,872	1,392,379	900,000	492,379	492,379	348,439

Discount Present Worth:
0.00 % 492,379
5.00 % 348,439

Economic Dates:
Effective Date 01/2005
Calculated Limit 09/2010
Economic Life 69 Months
5 Years 9 Months

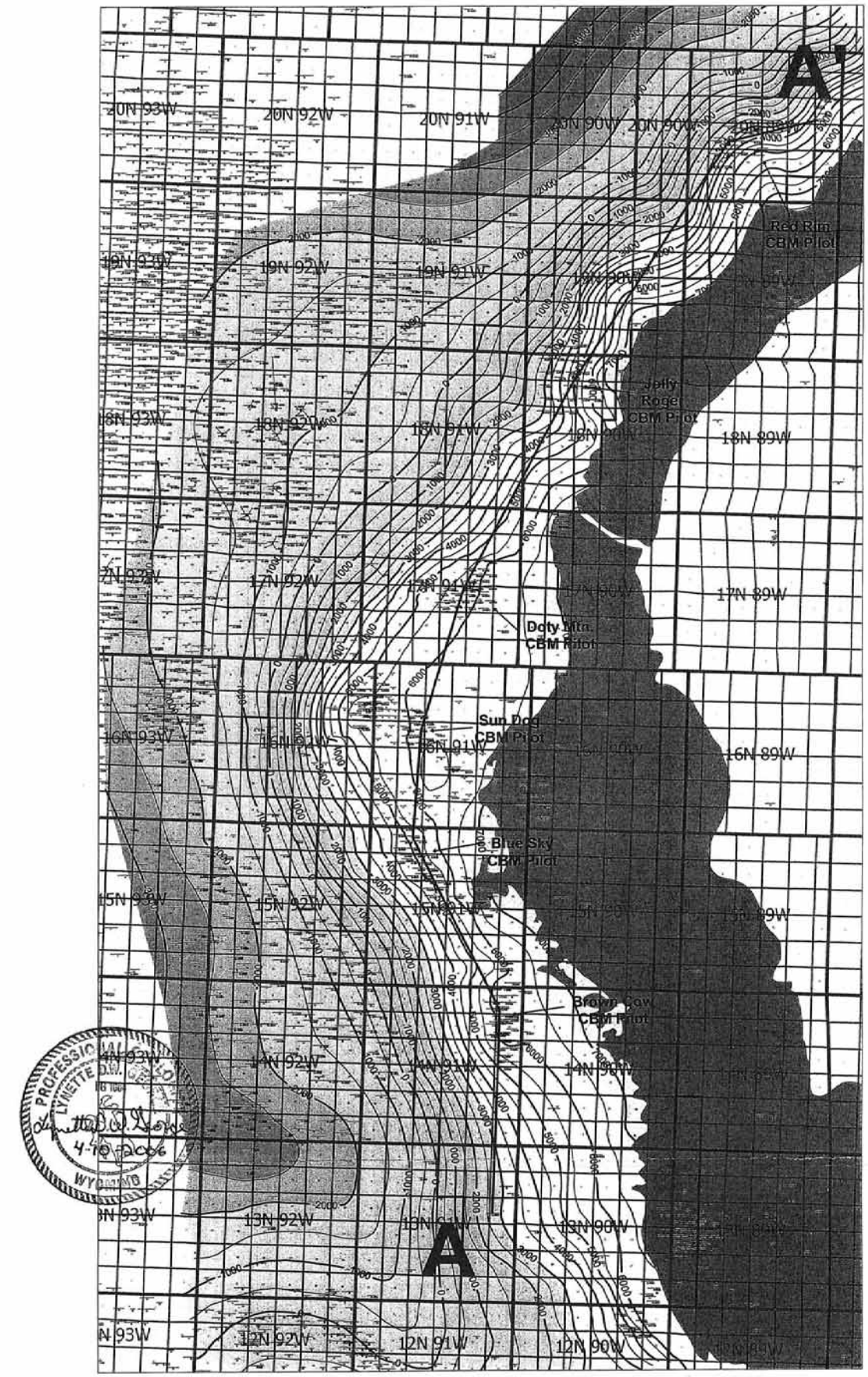
Economics Summary:

	Bbl Oil	Mcf Gas
Remaining Gross	0	402,714

Economics Information:
Net Payout Date: 10/2007
Rate of Return: 22.97 %
Return on Investment:1.55
Disc Return on Invest1.39

Initial Division of Interest:		NRI	ORI
WI: 100.000000	Oil:	87.500000	0.000000
	Gas:	87.500000	0.000000

Attachment No.5 – Cash Flow Statement – directional CBNG well with 0.4 BCF reserves



Atlantic Rim EIS
Proposed Action Boundary
Cause No.11, Order No.1
Docket No. 208-2006

MVRD Outcrop

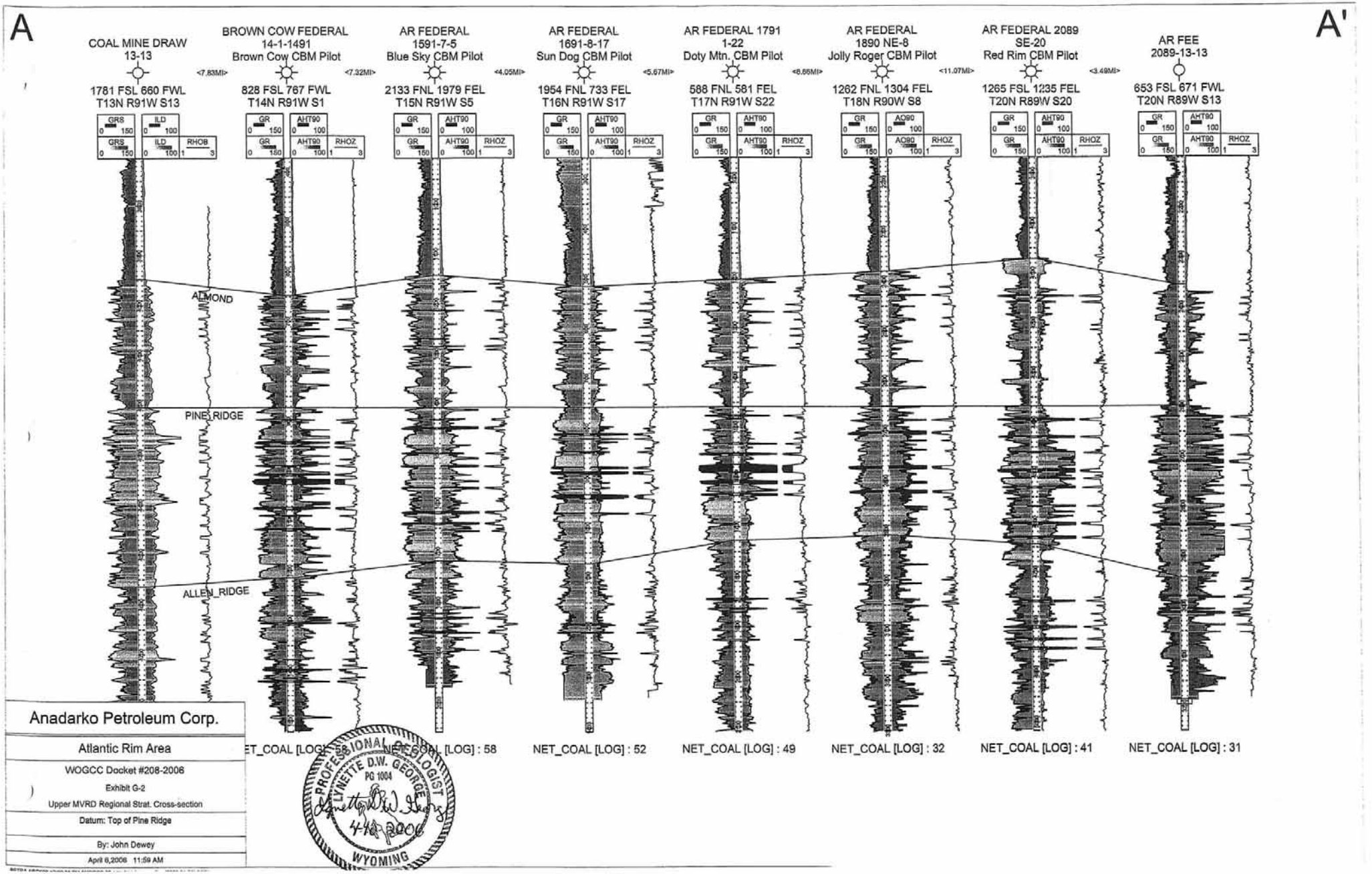
Line of Cross-section
(Exhibit G-2)

1:225000
1 0 1 2 3 mi
Contour interval=500 ft.

N

Anadarko Petroleum Corporation

WOGCC Docket #208-2006
Exhibit G-1
Atlantic Rim Area-Top Almond Structure Map



Anadarko Petroleum Corp.

Atlantic Rim Area

WOGCC Docket #208-2006

Exhibit G-2

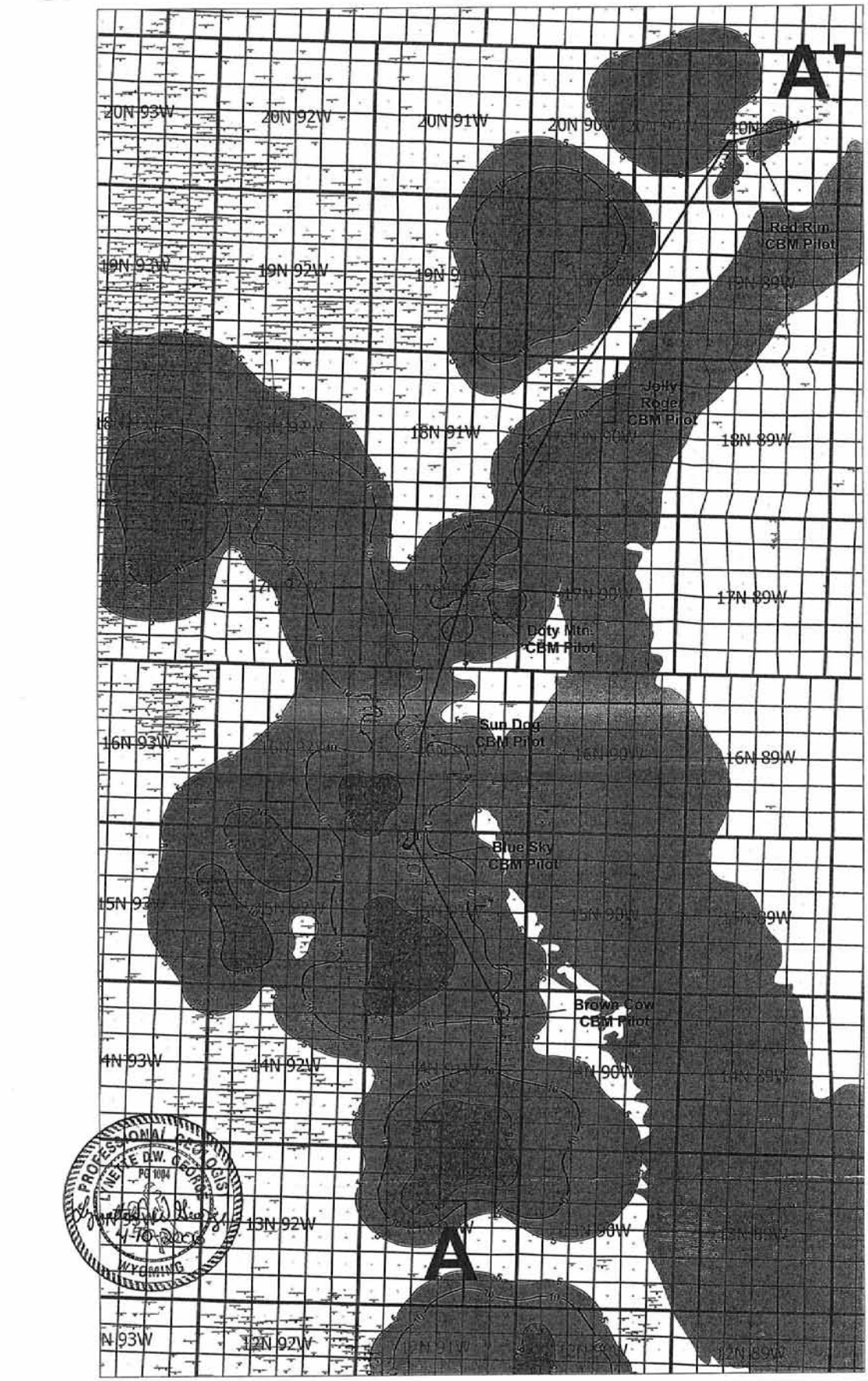
Upper MVRD Regional Strat. Cross-section

Datum: Top of Pine Ridge

By: John Dewey

April 6,2006 11:59 AM

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
4-10-2006
WYOMING



Atlantic Rim EIS
Proposed Action Boundary

Cause No.11, Order No.1
Docket No. 208-2006

MVRD Outcrop

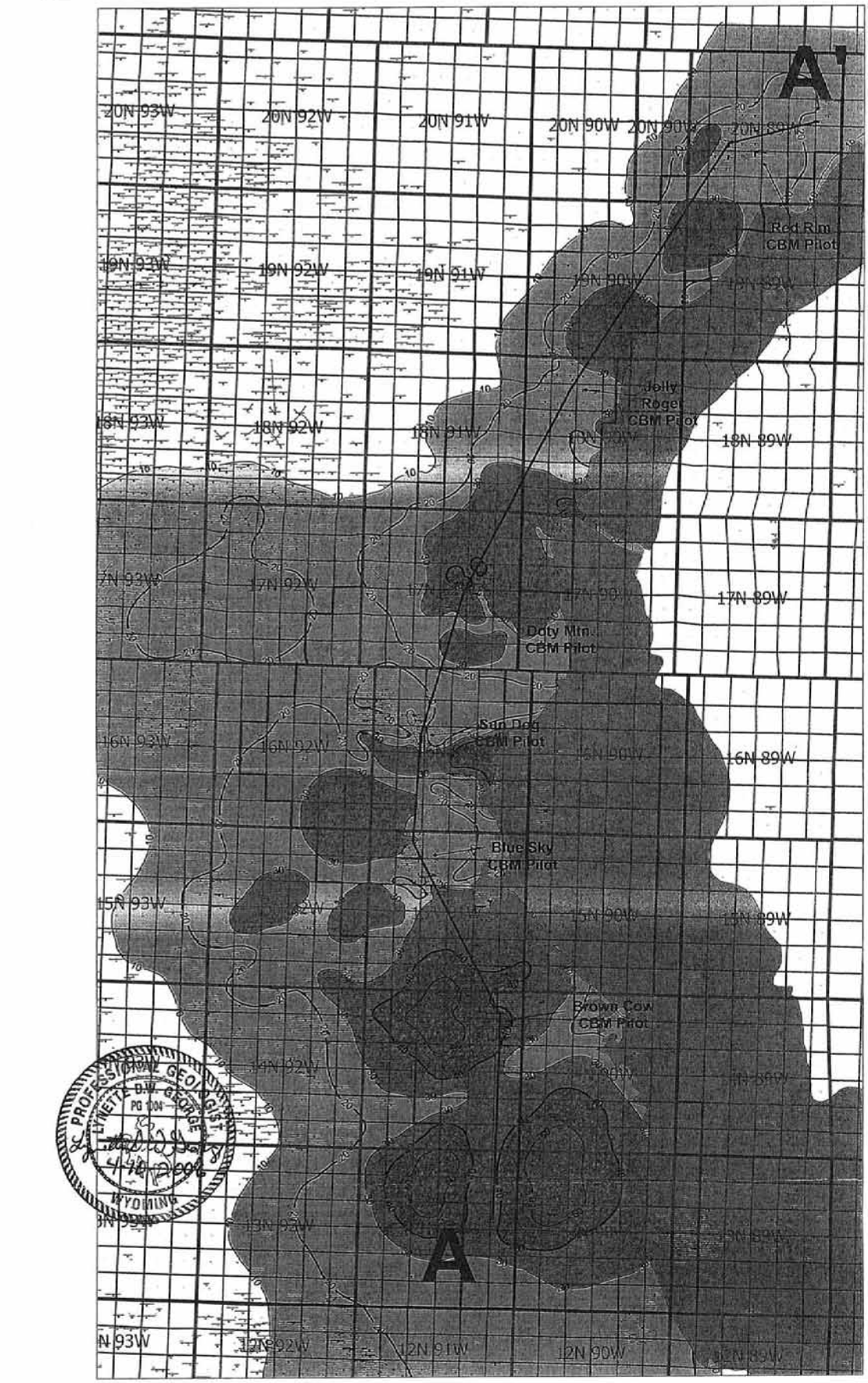
Line of Cross-section
(Exhibit G-2)

1:225000
1 0 1 2 3 mi
Contour interval=5 ft.

N

Anadarko Petroleum Corporation

WOGCC Docket 8208-2006
Exhibit G-3A
Atlantic Rim Area-Almond Net Coal Isopach Map



Atlantic Rim EIS Proposed Action Boundary

Cause No.11, Order No.1 Docket No. 208-2006

MVRD Outcrop

Line of Cross-section (Exhibit G-2)

1:225000

1 0 1 2 3 mi

Contour interval=10 ft.

N

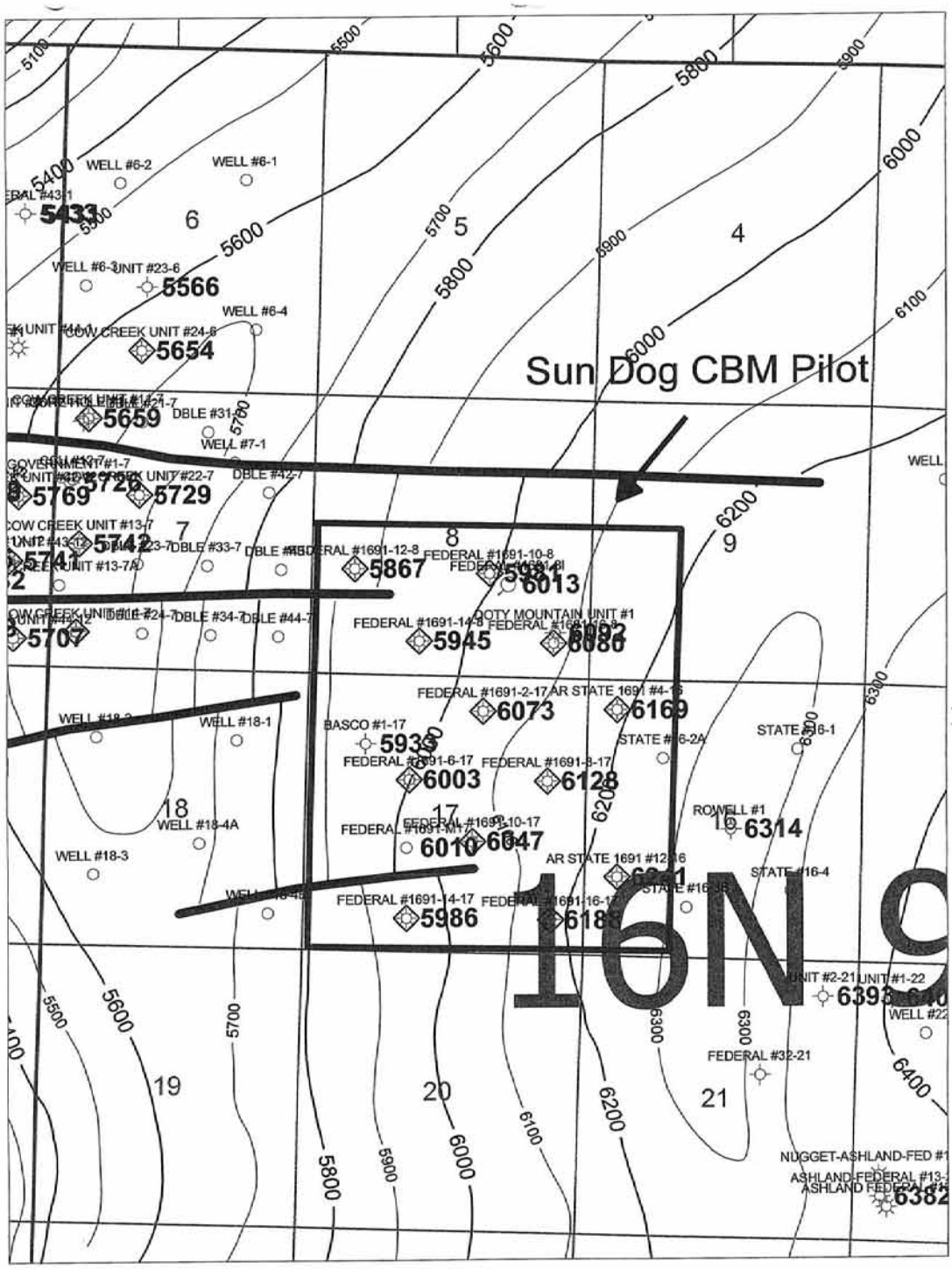
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-3B

Atlantic Rim Area-Pine Ridge Net Coal Isopach Map


A'
20N 93W
20N 92W
20N 91W
20N 90W
Red Rim
CBM Pilot
19N 93W
19N 92W
19N 91W
Jolly
Roger
CBM Pilot
18N 93W
18N 92W
18N 89W
17N 92W
17N 89W
Doty Mtn.
CBM Pilot
Sun Dog
CBM Pilot
16N 93W
16N 92W
16N 89W
Blue Sky
CBM Pilot
15N 93W
Brown Cow
CBM Pilot
14N 93W
14N 92W
13N 92W
A
12N 92W
Atlantic Rim EIS
Proposed Action Boundary
Cause No.11, Order No.1
Docket No. 208-2006
MVRD Outcrop
Line of Cross-section
(Exhibit G-2)
1:225000
1 0 1 2 3 mi
Contour interval=5 ft.
N
Anadarko
WOGCC Docket #208-2006
Exhibit G-3C
Atlantic Rim Area-Allen Ridge Net Coal Isopach



1:24000

0.2500 0 0.2500 0.5000 0.7500 mi

N

Contour interval=100 ft.

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
◇	CBM test
	Fault
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
4-10-2006
WYOMING

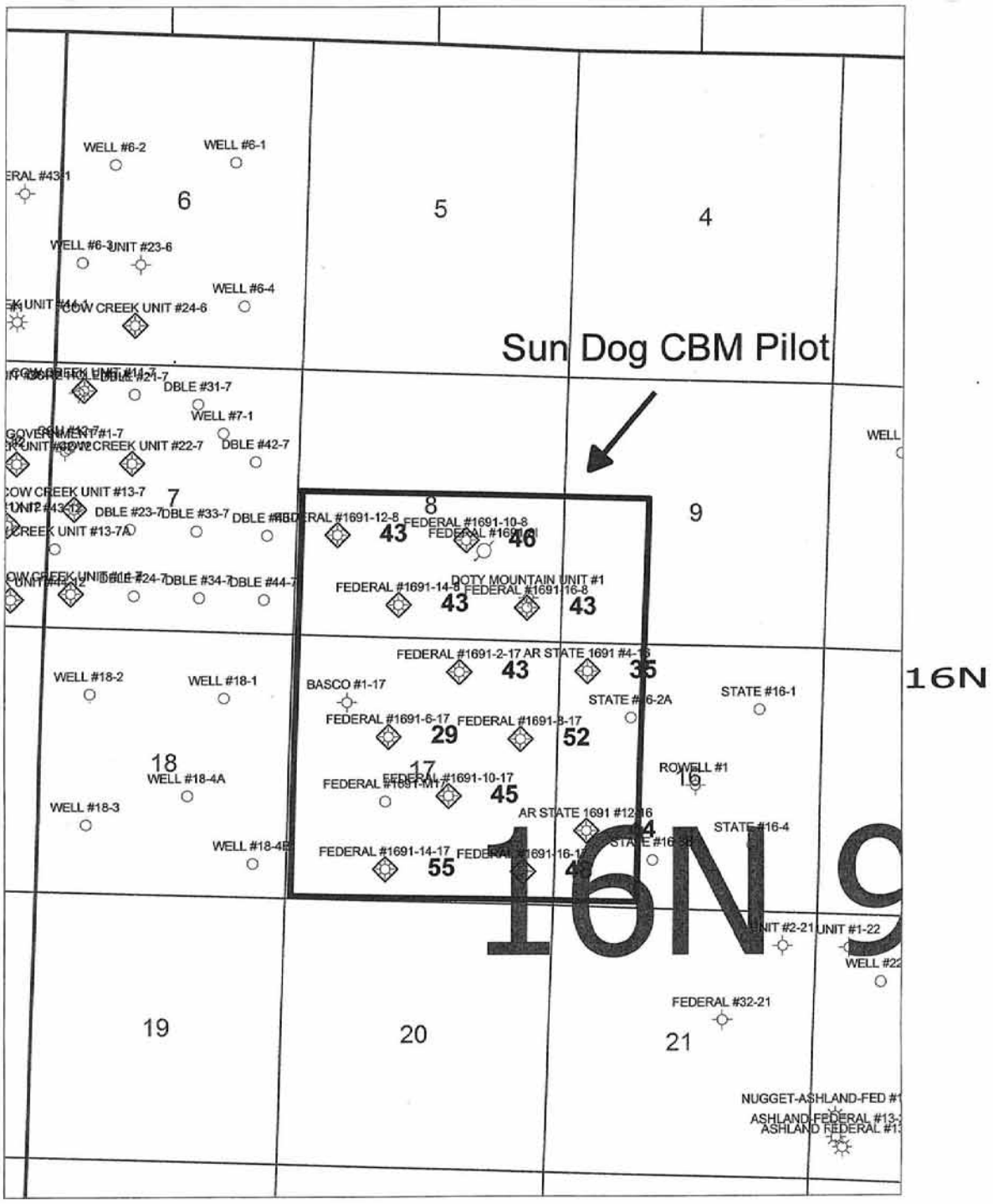
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-4A

Sun Dog Pilot-Top Almond Structure Map

Author: John Dewey	Tech:	
Scale:	Creation Date: 1/3/2006	Last Modified Date: 4/6/2006



1:24000

0.2500 0 0.2500 0.5000 0.7500 mi

N

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
◇	CBM test
/	Fault
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING
4-10-2006

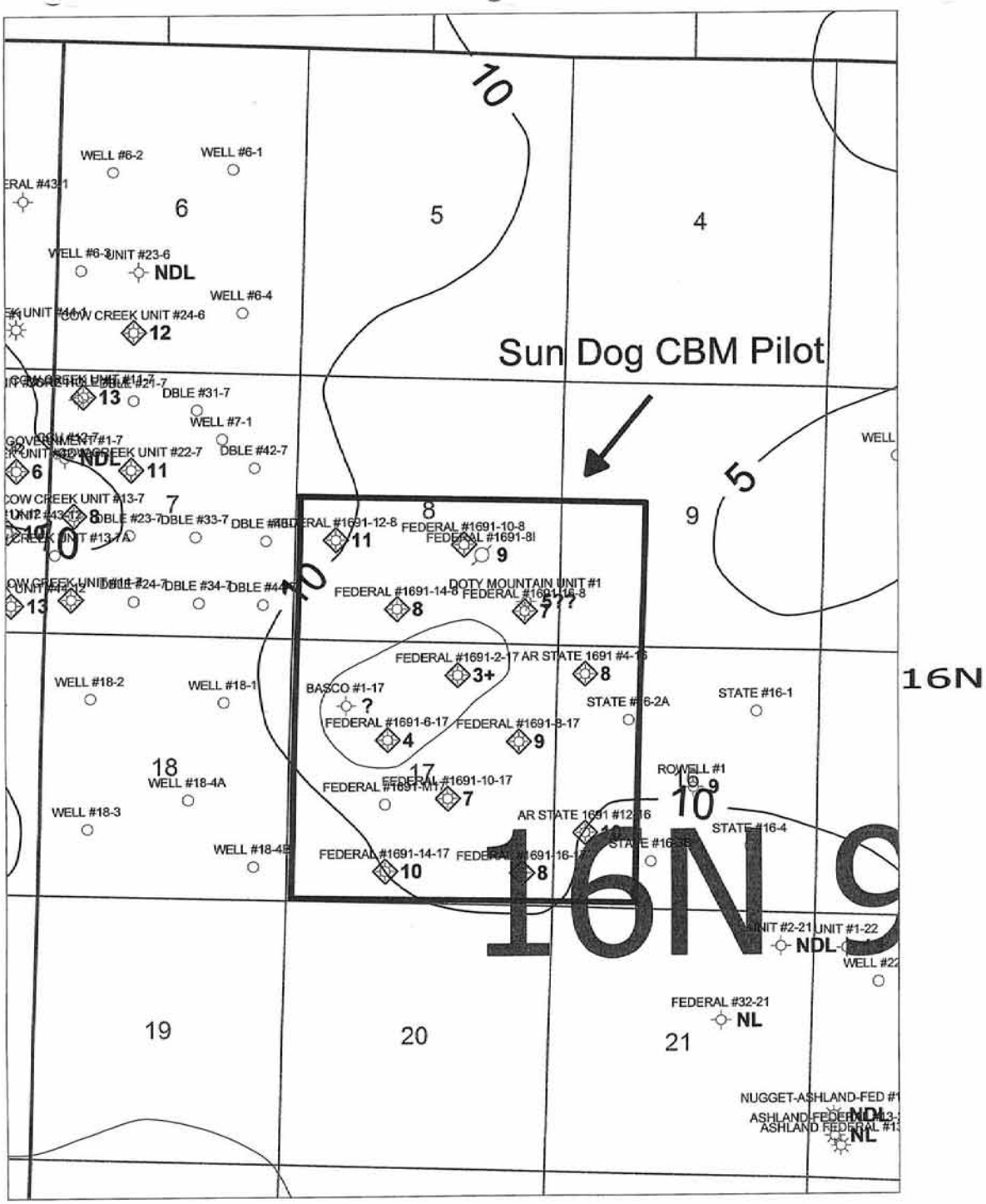
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-4B

Sun Dog Pilot-MVRD Total Net Coal Data for Volumetric Evaluation

Author:	Tech:	
Scale:	Creation Date:	Last Modified Date: 4/6/2006



1:24000

0.2500 0 0.2500 0.5000 0.7500 mi

N

Contour interval=5 ft.

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
◇	CBM test
	Fault
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING

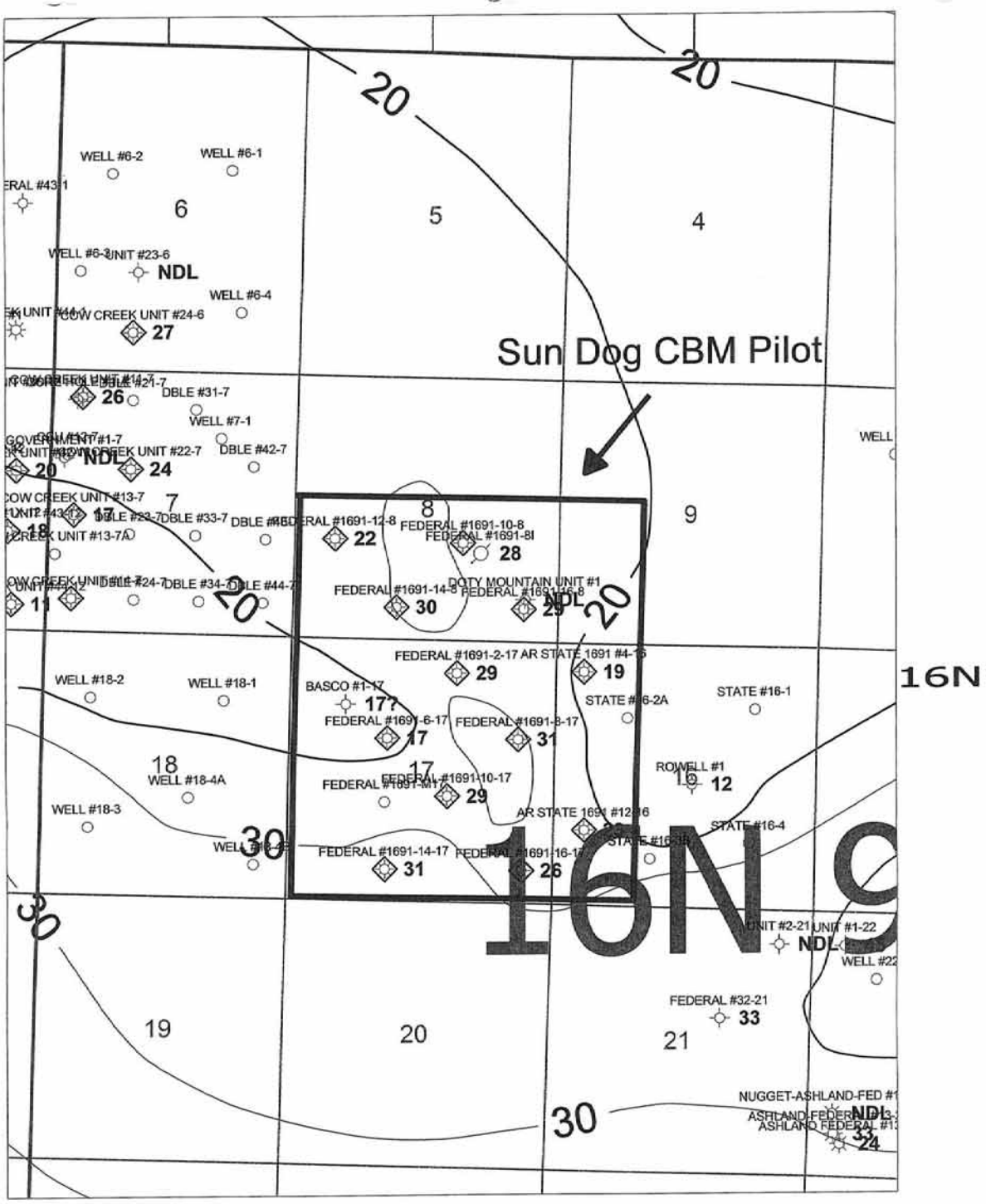
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-4C

Sun Dog Pilot- Almond Net Coal Isopach Map

Author:	Tools:	
Scale:	Creation Date: 1/1/2006	Last Modified Date: 4/6/2006



1:24000

0.2500 0 0.2500 0.5000 0.7500 mi

N

Contour interval=10 ft.

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
◇	CBM test
/	Fault
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1084
WYOMING
4-10-2006

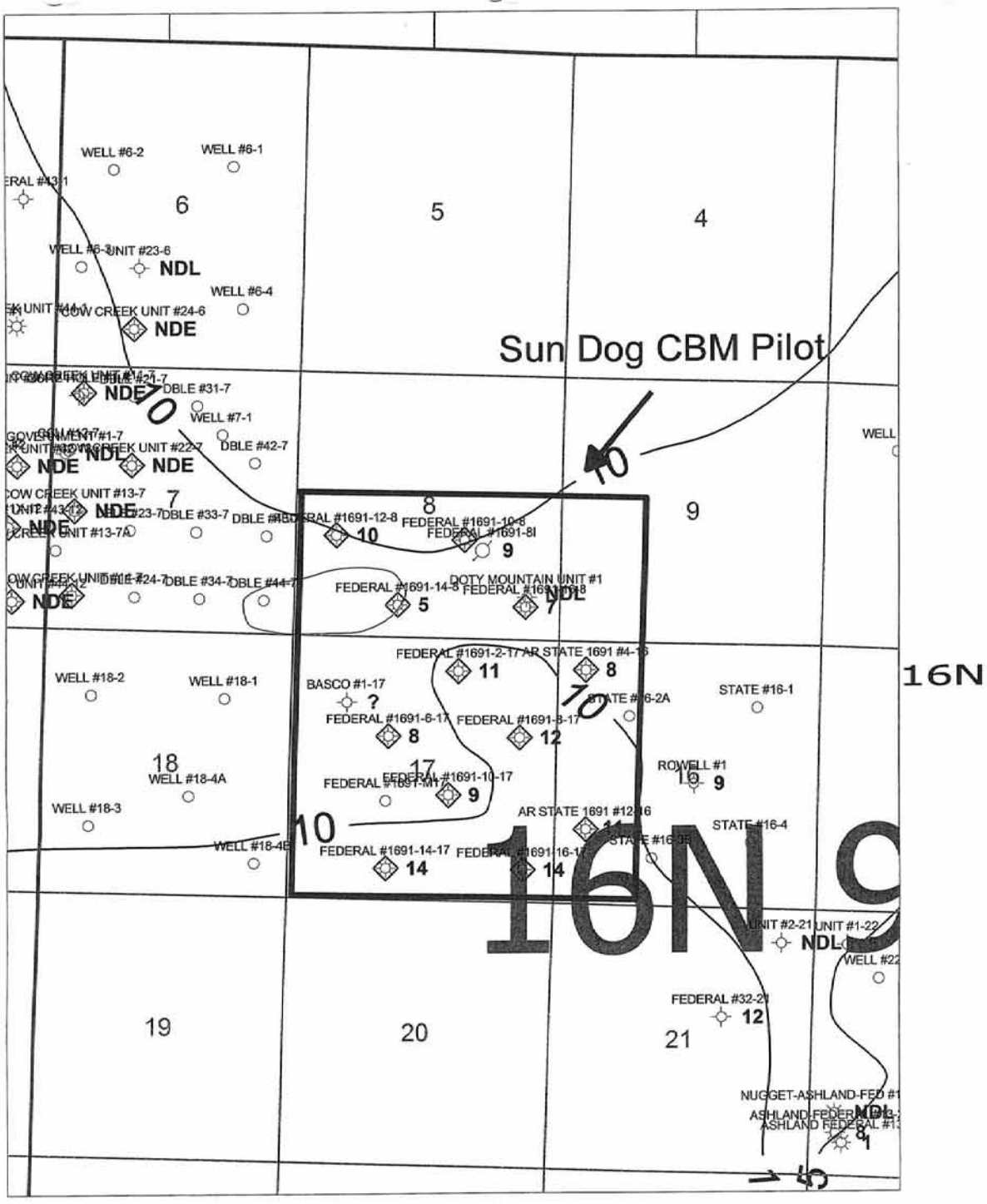
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-4D

Sun Dog Pilot- Pine Ridge Net Coal Isopach Map

Author:	Tools:	
Scale:	Creation Date: 1/7/2004	Last Modified Date: 4/6/2006



1:24000

0.2500 0 0.2500 0.5000 0.7500 mi

Contour interval=5 ft.

N

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
◇	CBM test
	Fault
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
4-10-2006
WYOMING

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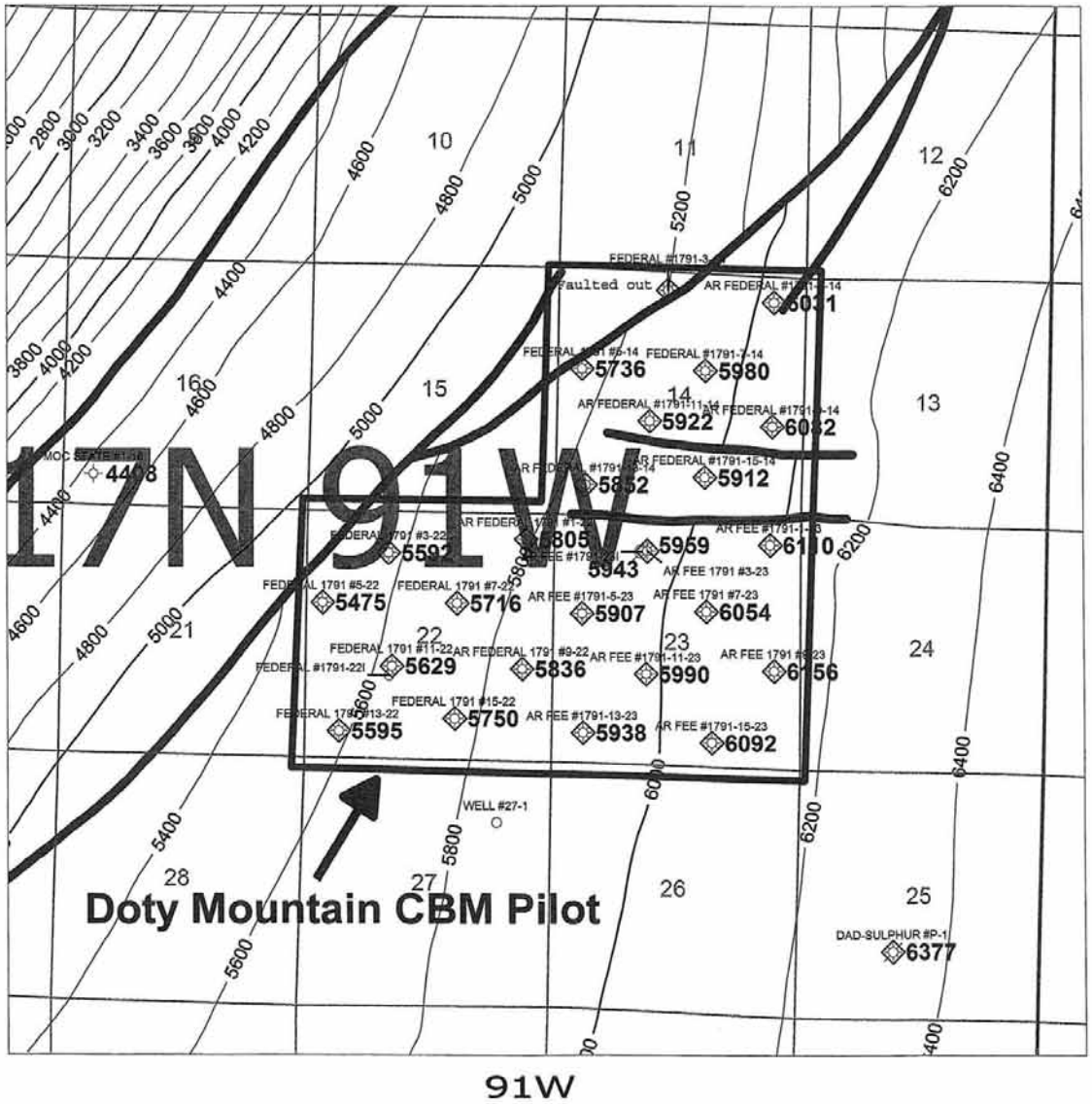
Exhibit G-4E

Sun Dog Pilot- Allen Ridge Net Coal Isopach Map

Author:	Tools:	
Scale:	Creation Date: 1/3/2006	Last Modified Date: 4/6/2006



91W

17N

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

N

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING
4-10-2006

1:30000

0.2500 0 0.2500 0.5000 mi

Contour interval=200 ft.

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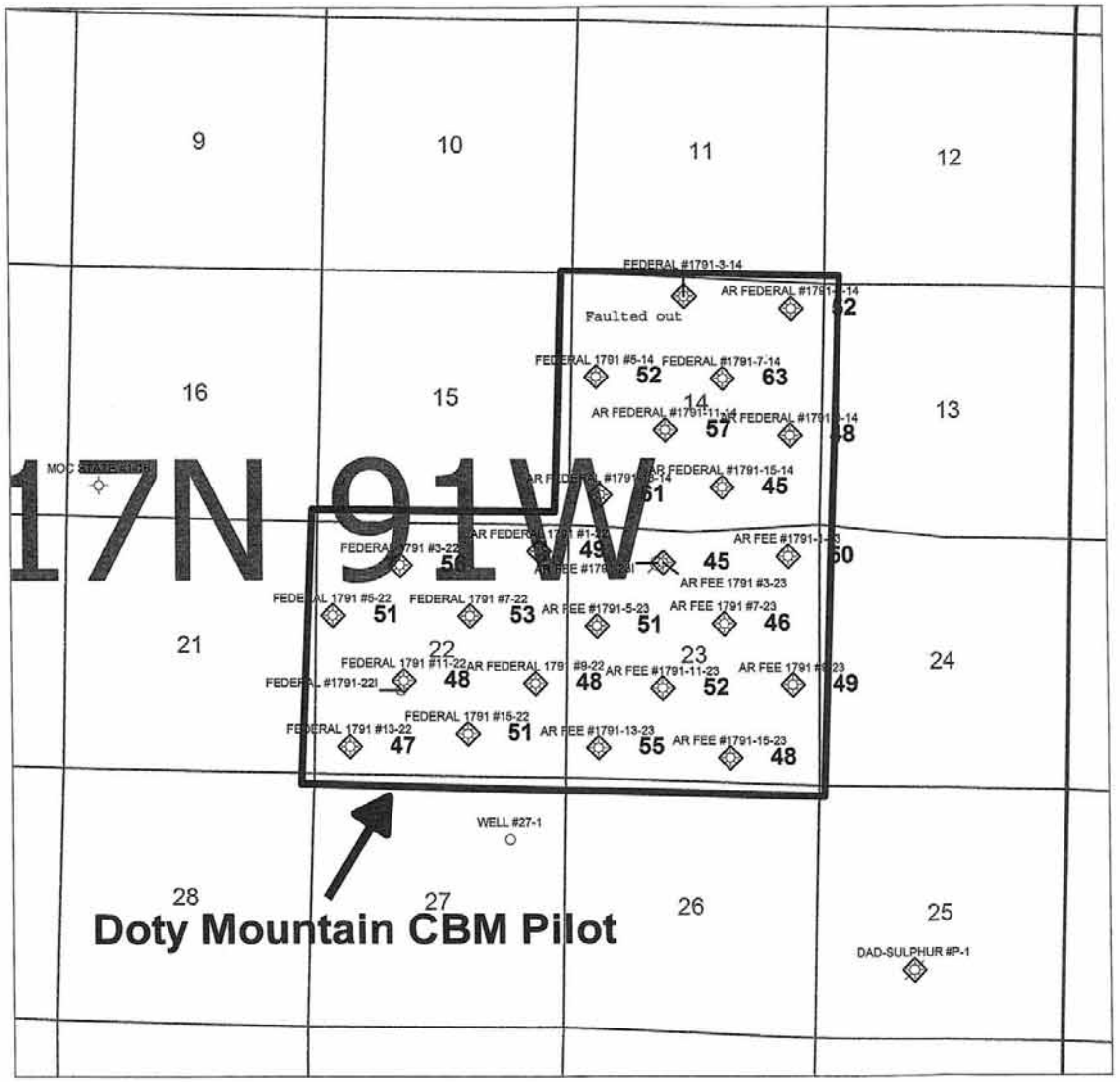
Exhibit G-5A

Doty Mountain Pilot-Top Almond Structure Map

Author:		Tech:
Scale:	Creation Date:	Last Modified Date:4/7/2006
GMP name/path:		



Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

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PG 1004
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WYOMING

1:30000

0.2500 0 0.2500 0.5000 mi

N

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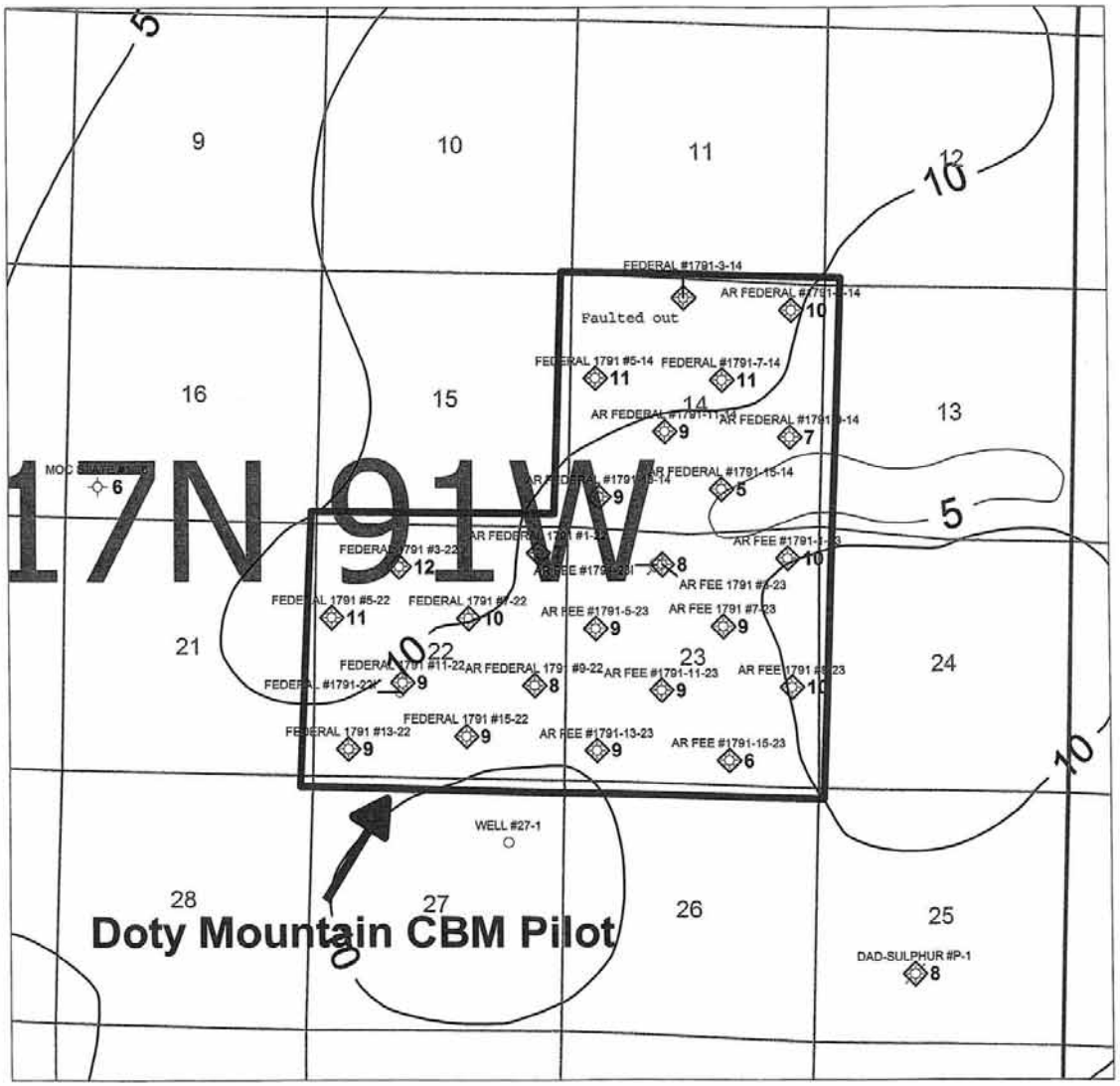
WOGCC Docket #208-2006

Exhibit G-5B

Doty Mountain Pilot-MVRD Total Net Coal Data for Volumetric Evaluation

Author:		Tech:
Scale:	Creation Date:	Last Modified Date:4/7/2006



91W

17N

N

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING
4-10-2006

1:30000

0.2500 0 0.2500 0.5000 mi

Contour interval=5 ft.

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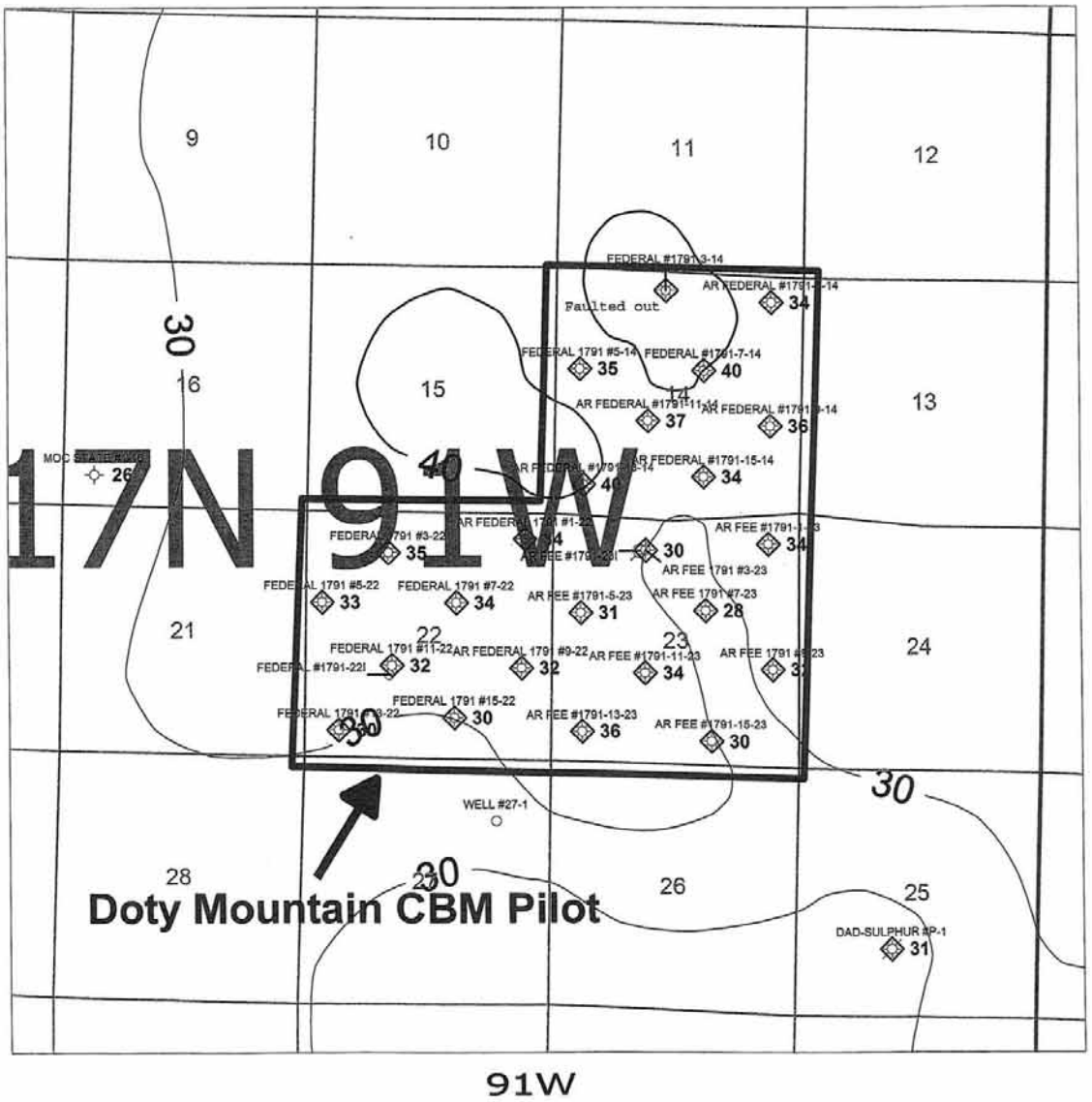
WOGCC Docket #208-2006

Exhibit G-5C

Doty Mountain Pilot-Almond Net Coal Isopach Map

Author:	Tech:	
Scale:	Creation Date:	Last Modified Date:4/7/2006
GMP name/path:		



Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

17N

PROFESSIONAL GEOLOGIST
LYNETTE D. GEORGE
4-10-2006
WYOMING

N

1:30000

0.2500 0 0.2500 0.5000 mi

Contour interval=10 ft.

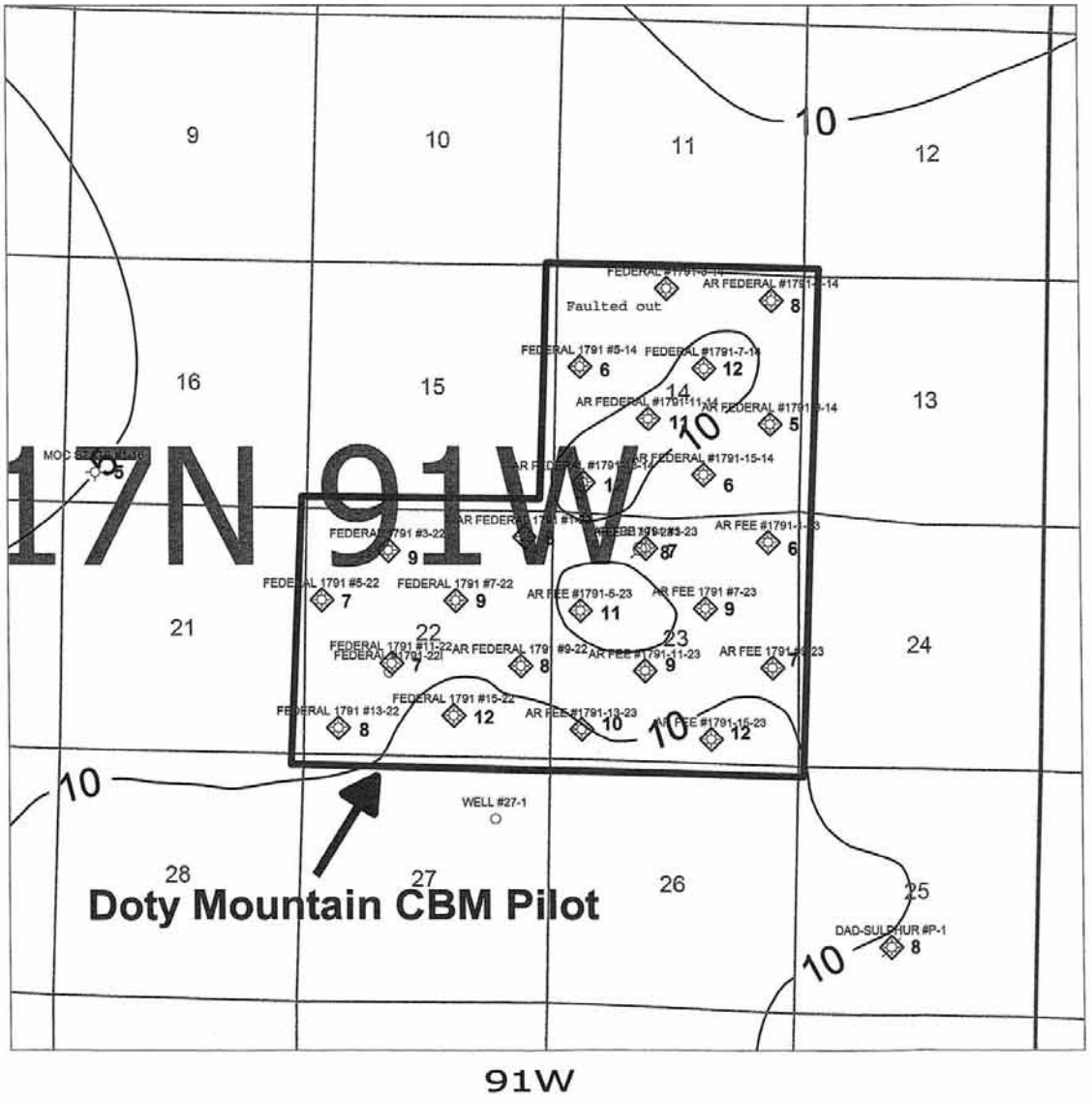
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-5D

Doty Mountain Pilot-Pine Ridge Net Coal Isopach Map

Author:	Tech:	
Scale:	Creation Date:	Last Modified Date:4/7/2006
GMP name/path:		



17N

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING

N

1:30000

0.2500 0 0.2500 0.5000 mi

Contour interval=5 ft.

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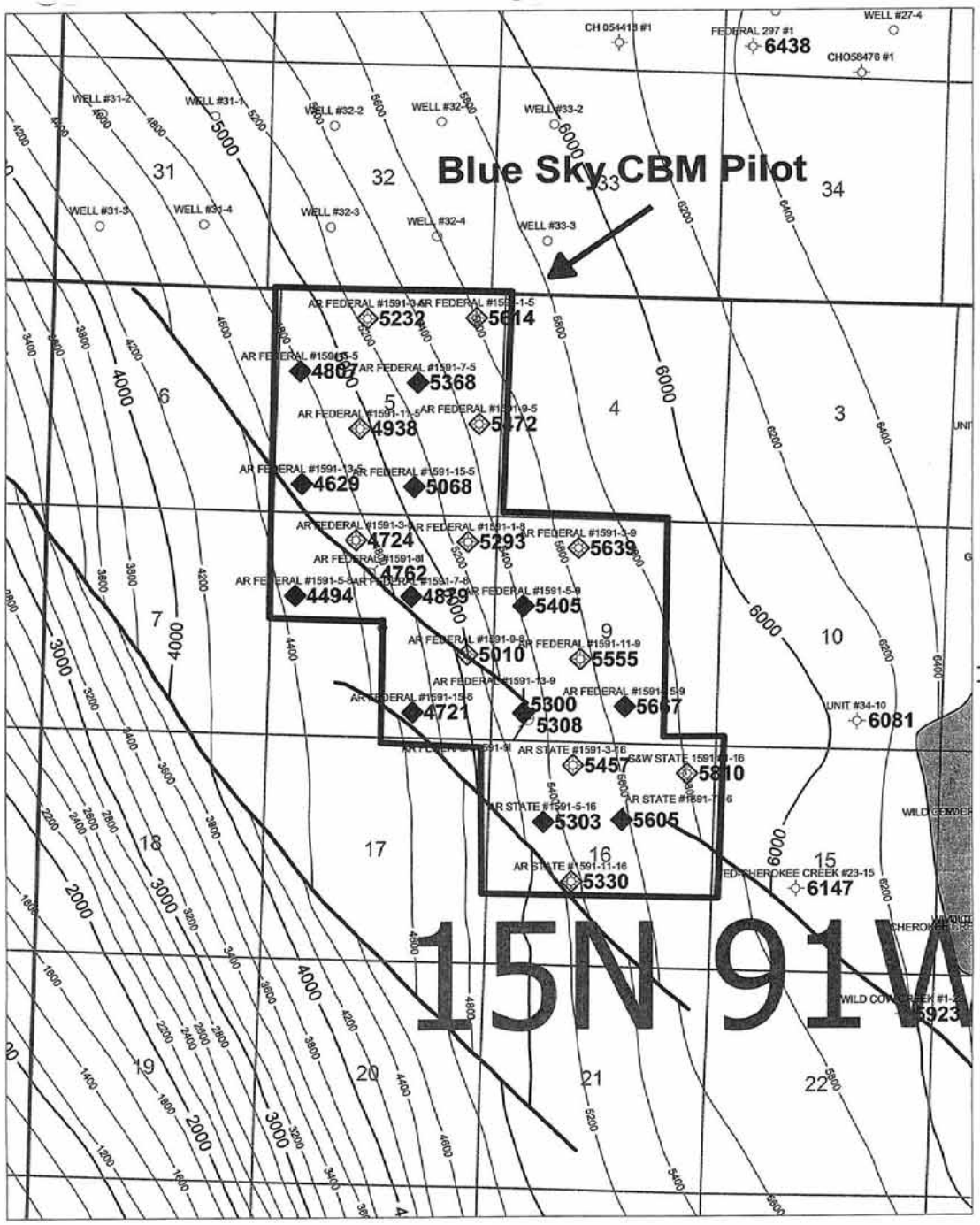
WOGCC Docket #208-2006

Exhibit G-5E

Doty Mountain Pilot-Allen Ridge Net Coal Isopach Map

Author:	Tech:	
Scale:	Creation Date:	Last Modified Date:4/7/2006
GMP name/path:		



Legend

10	Net coal value
6000	Structural elevation (sea-level datum)
	Fault
	CBM test
	Original 160-acre pilot well
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING
4-10-2006

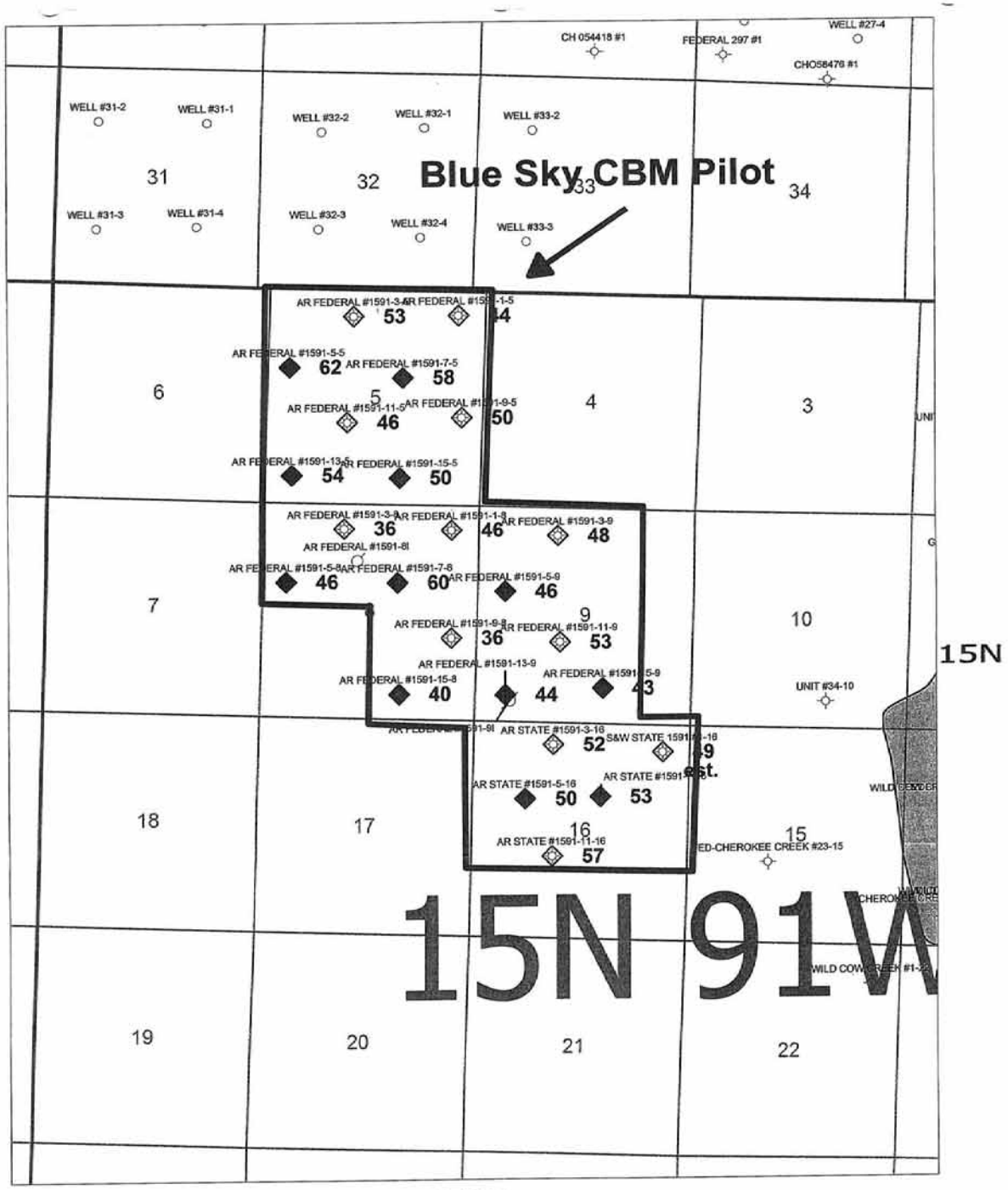
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-6A

Blue Sky Pilot-Top Almond Structure Map

Author:	Tools:	
Scale:	Creation Date:	Last Modified Date: 4/2/2006
GMP name/path:		



Legend

10	Net coal value
6000	Structural elevation (sea-level datum)
	Fault
◇	CBM test
◆	Original 160-acre pilot well
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
4-10-2006

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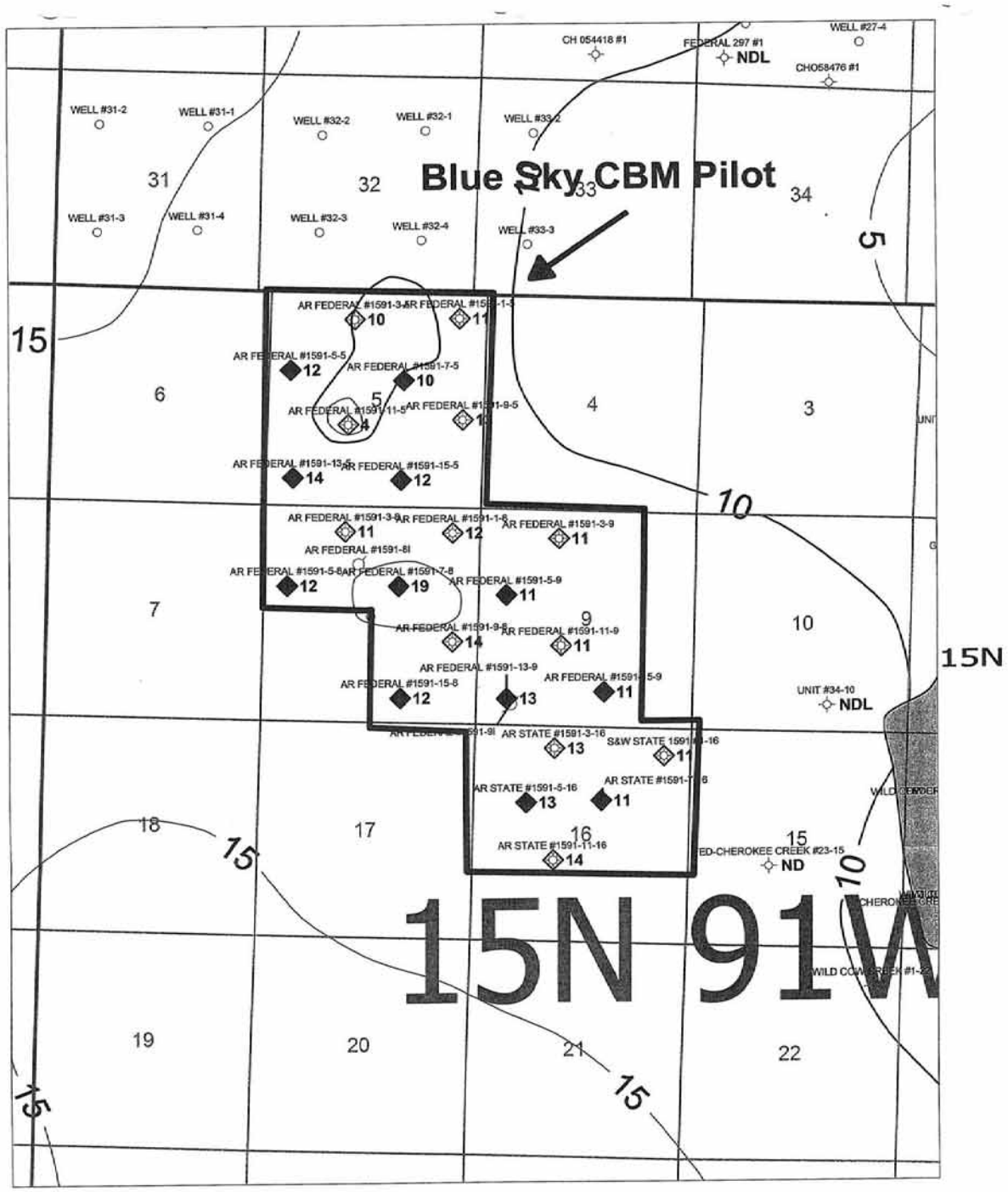
WOGCC Docket #208-2006

Exhibit G-6B

Blue Sky Pilot-MVRD Net Coal Data for Volumetric Evaluation

Author:	Tech:	
Scale:	Creation Date:	Last Modified Date: 4/7/2006



Legend

10	Net coal value
6000	Structural elevation (sea-level datum)
	Fault
◇	CBM test
◆	Original 160-acre pilot well
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING
4-10-2006

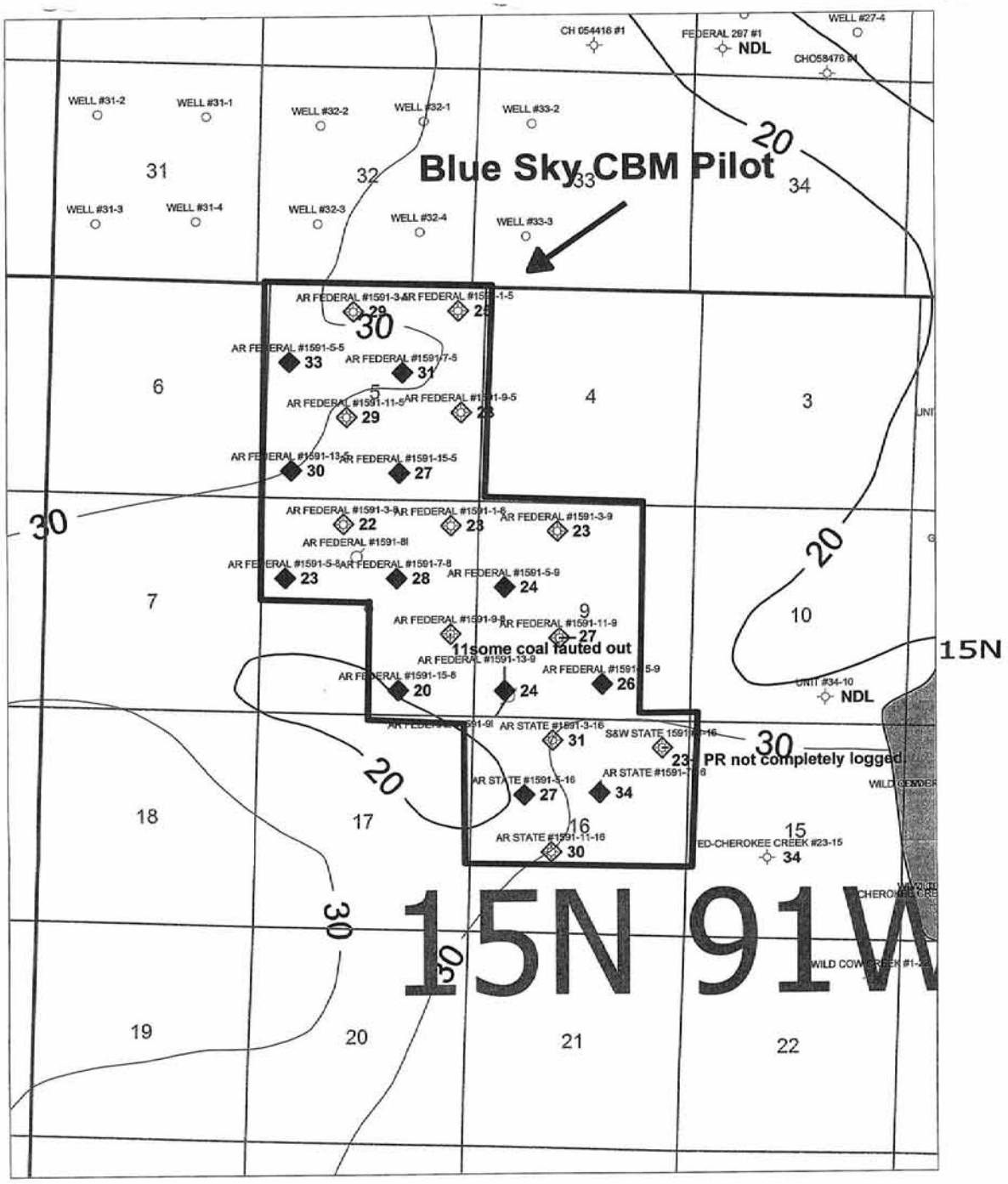
Anadarko Petroleum Corporation

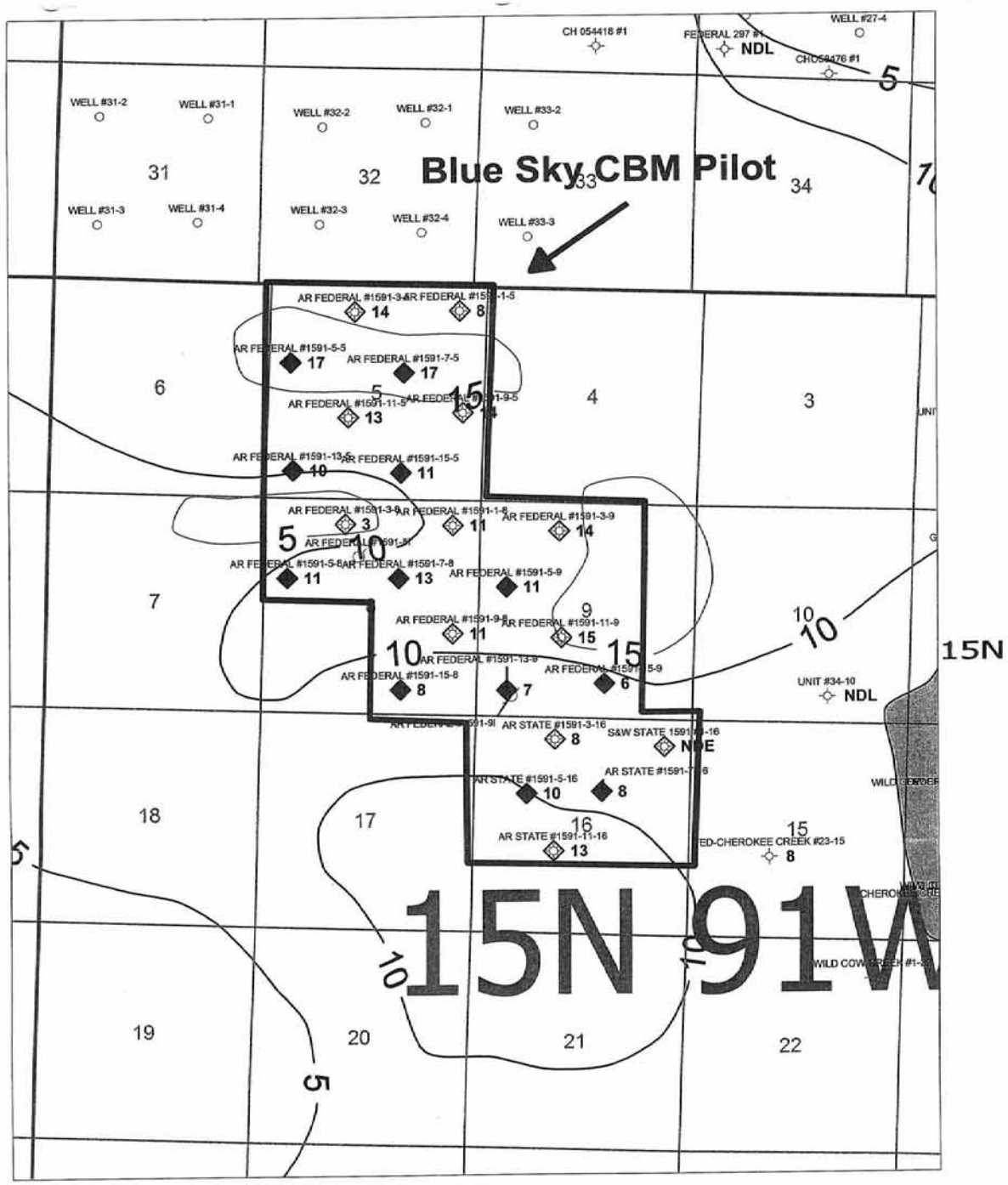
WOGCC Docket #208-2006

Exhibit G-6C

Blue Sky Pilot-Almond Net Coal Isopach Map

Author:	Tech:	
Scale:	Creation Date:	Last Modified Date:4/7/2006
GMF name/path:		


Blue Sky CBM Pilot
11some coal fauted out
PR not completely logged
15N 91W
91W
15N
1:30000
Contour interval=10 ft.
N
Legend
10 Net coal value
6000 Structural elevation (sea-level datum)
Fault
CBM test
Original 160-acre pilot well
Mesaverde outcrop
NL Interval not logged
NDL No density log
NDE Well not deep enough
PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING
4-10-2006
Anadarko Petroleum Corporation
WOGCC Docket #208-2006
Exhibit G-6D
Blue Sky Pilot-Pine Ridge Net Coal Isopach Map



Legend

10	Net coal value
6000	Structural elevation (sea-level datum)
	Fault
	CBM test
	Original 160-acre pilot well
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
4-10-2006
WYOMING

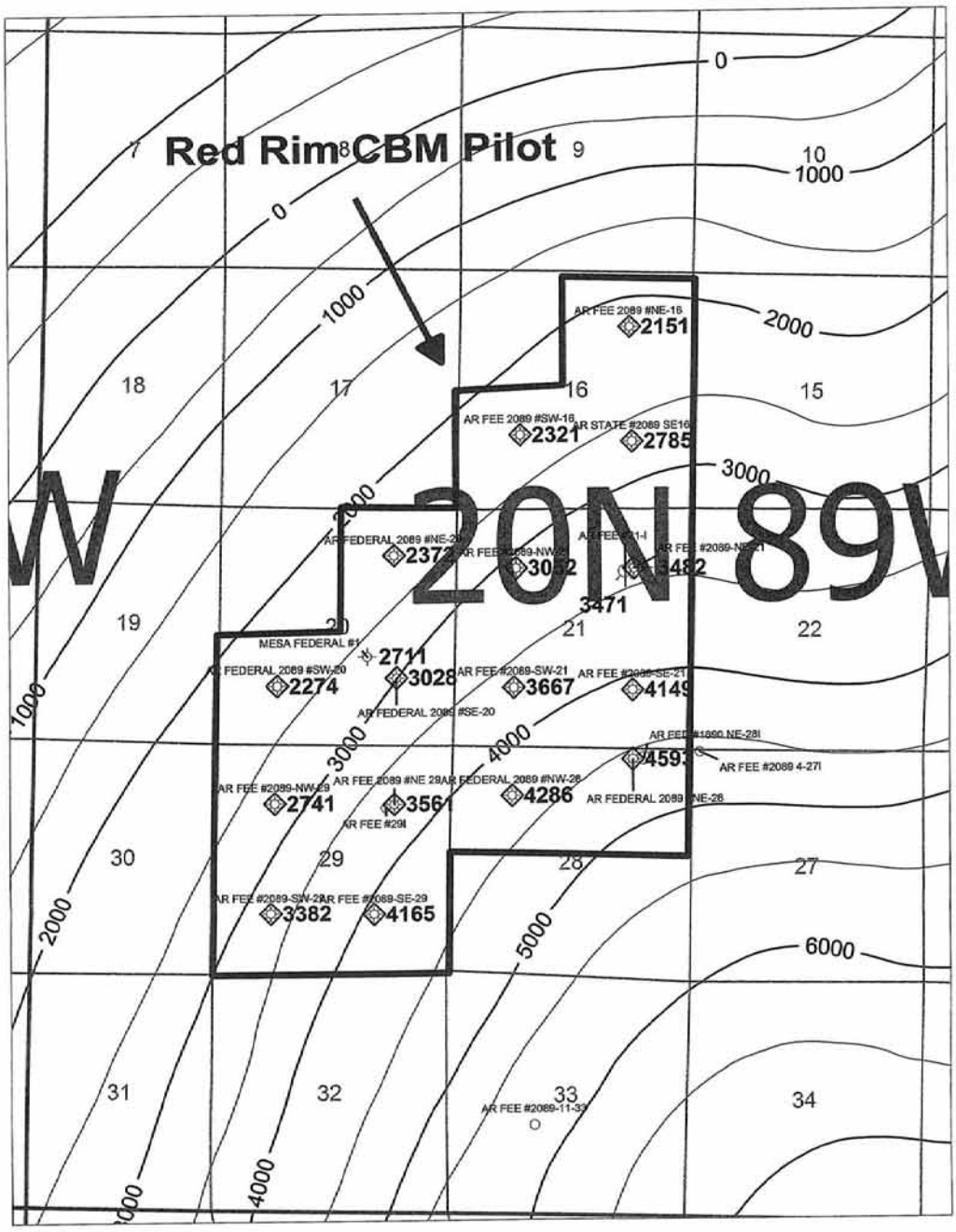
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-6E

Blue Sky Pilot-Allen Ridge Net Coal Isopach Map

Author:	Tech:	
Scale:	Creation Date:	Last Modified Date:4/3/2006
GMP name/path:		



89W

20N

1:30000

0.2500 0 0.2500 0.5000 0.7500 mi

Contour interval=500 ft.

N

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
◇	CBM test
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING
4-10-2006

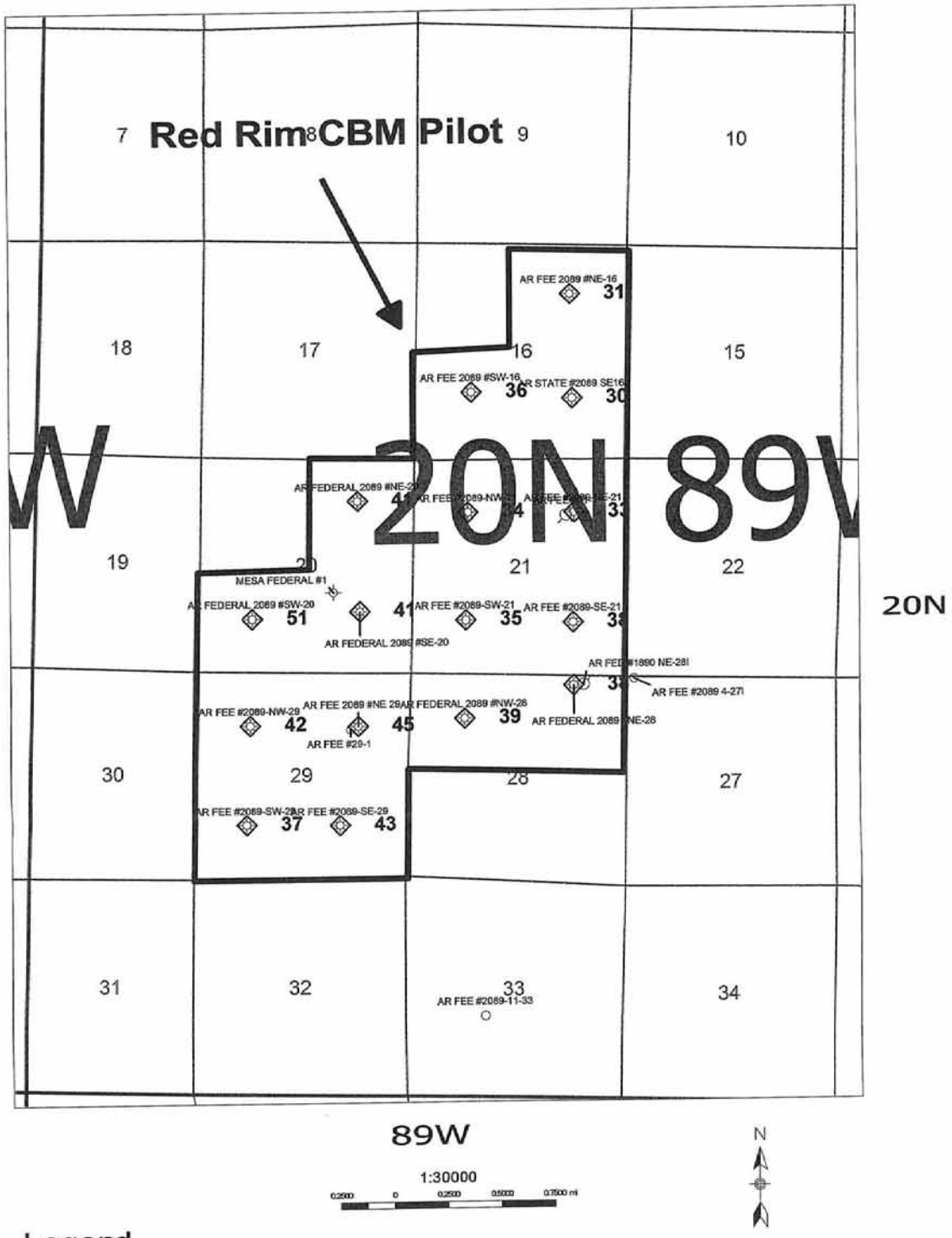
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-7A

Red Rim Pilot-Top Almond Structure Map

Author: John Dewey	Tech:	
Scale:	Creation Date:	Last Modified Date: 4/7/2006
GMP name/path:		



Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
4-10-2006
WYOMING

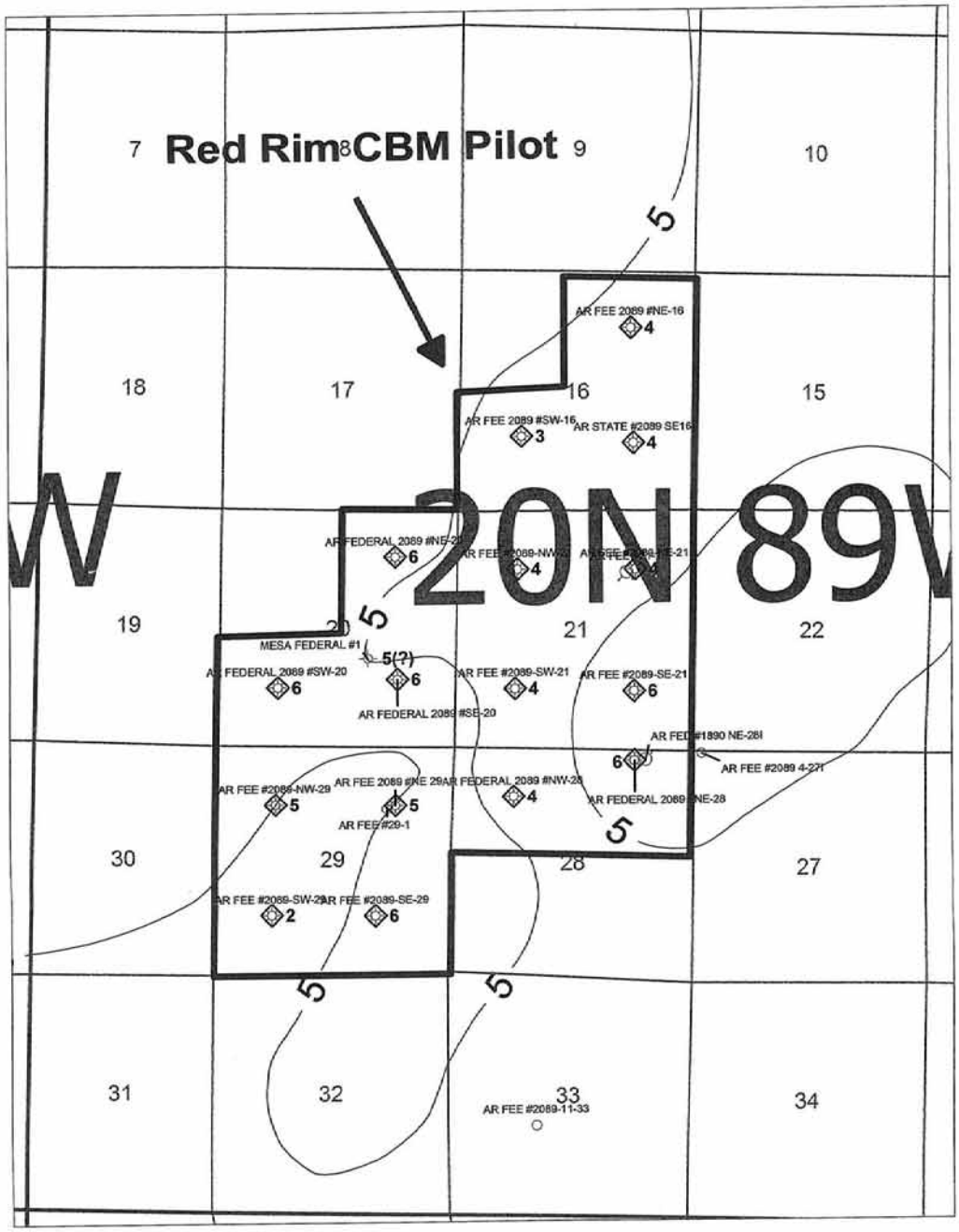
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-7B

Red Rim Pilot-MVRD Total Net Coal Data for Volumetric Evaluation

Author: John Dewey	Tech:	
Scale:	Creation Date:	Last Modified Date: 4/7/2006



Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
◇	CBM test
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING

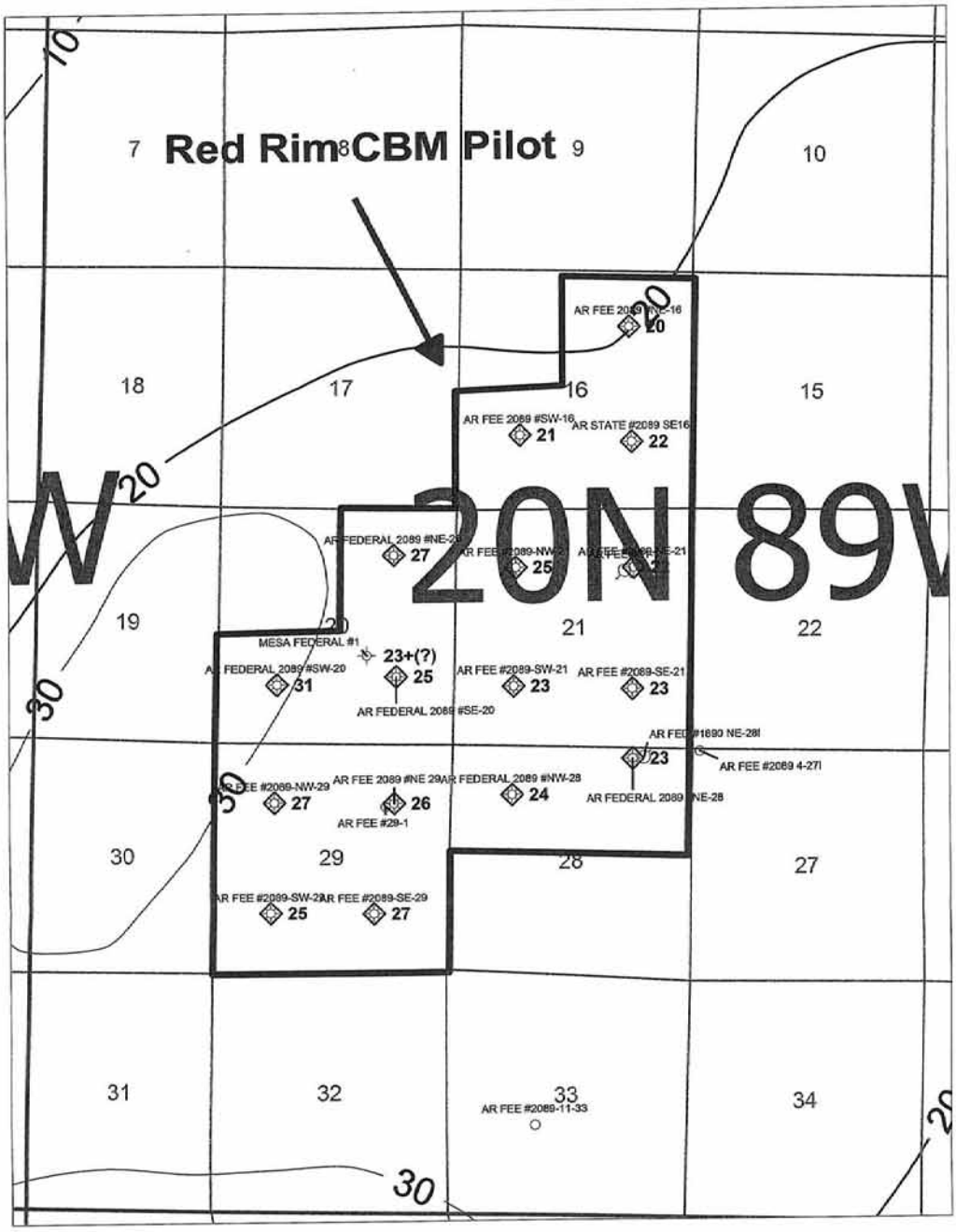
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-7C

Red Rim Pilot-Almond Net Coal Isopach Map

Author: John Dewey		Tech:
Scale:	Creation Date:	Last Modified Date: 4/7/2006
GMP name/path:		



1:30000

0.2500 0 0.2500 0.5000 0.7500 mi

Contour interval=10 ft.

N

Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
WYOMING

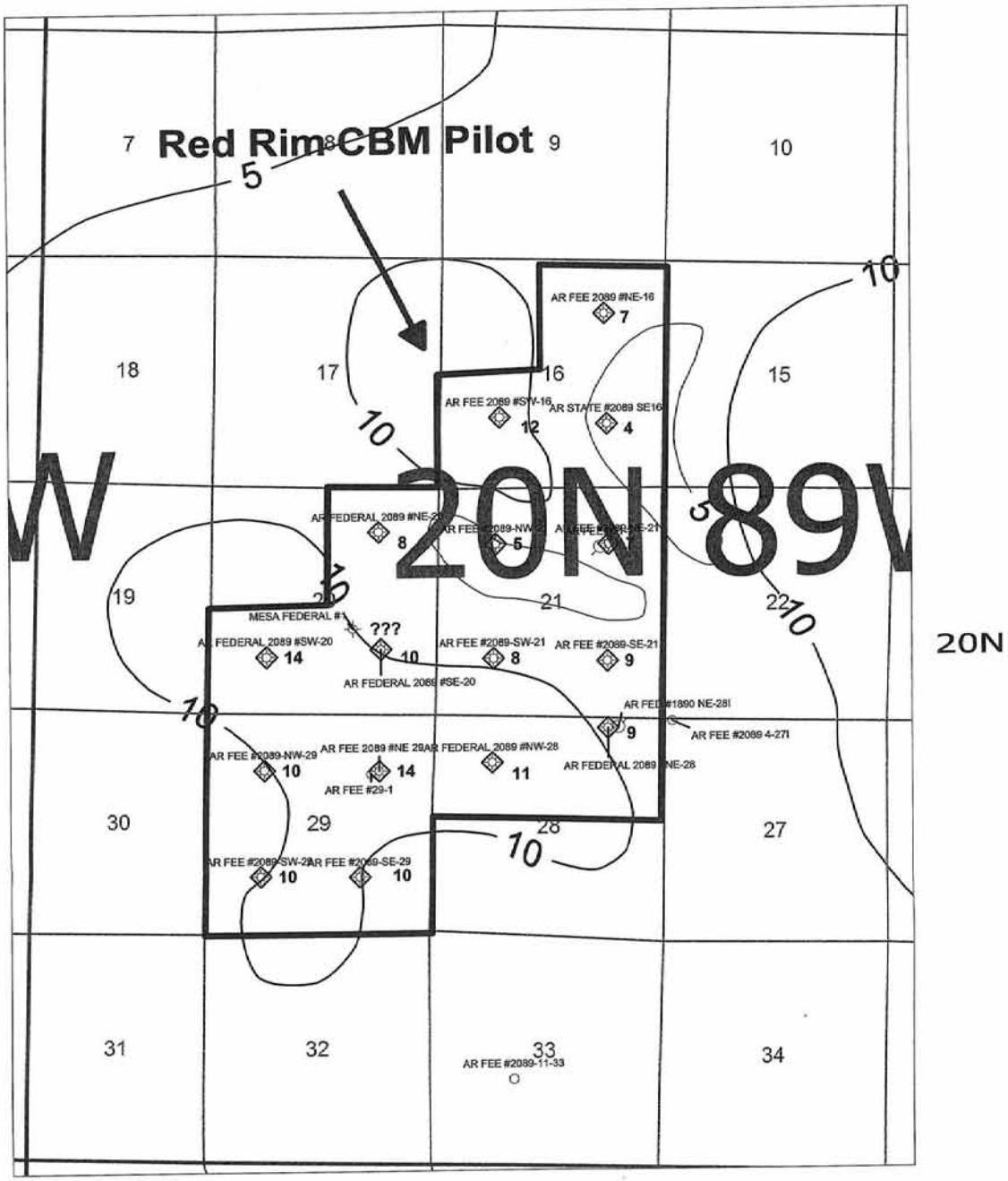
Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-7D

Red Rim Pilot-Pine Ridge Net Coal Isopach Map

Author: John Dewey	Task:	
Scale:	Creation Date:	Last Modified Date: 4/7/2006
GMP name/path:		



Legend

6000	Structural elevation (sea-level datum)
10	Net coal value
	Fault
	CBM test
	Mesaverde outcrop
NL	Interval not logged
NDL	No density log
NDE	Well not deep enough

PROFESSIONAL GEOLOGIST
LYNETTE D.W. GEORGE
PG 1004
4-10-2006
WYOMING

Anadarko Petroleum Corporation

WOGCC Docket #208-2006

Exhibit G-7E

Red Rim Pilot-Allen Ridge Net Coal Isopach Map

Author: John Dewey		Tech:
Scale:	Creation Date:	Last Modified Date: 4/7/2006
GMP name/path:		