511 DOCUMENTS

BEFORE THE OIL & GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND ESTABLISHMENT OF FIELD RULES TO GOVERN OPERATIONS FOR THE WILLIAMS FORK AND ILES FORMATIONS (INCLUDING THE SEGO SANDSTONE), SURPHUR CREEK FIELD, RIO BLANCO COUNTY, COLORADO	))))))	CAUSE NO. 527 DOCKET NO. 1412-AW-29

REQUEST FOR RECOMMENDATION OF
APPROVAL OF APPLICATION WITHOUT A HEARING

WPX Energy Rocky Mountain, LLC ("Applicant"), by and through its undersigned attorneys, hereby requests pursuant to Rule 511.a. of the Rules and Regulations of the Colorado Oil and Gas Conservation Commission for the Director to recommend approval of its October 16, 2014 verified application ("Application") and the supporting exhibits without a hearing.

Applicant requests that the above-captioned matter be approved based upon: (i) the merits of the Application, and (ii) Applicant's sworn written testimony verifying sufficient facts along with exhibits that adequately support the relief requested in the Application. To Applicant's information and belief, no protests were timely filed in this matter.

WHEREFORE, Applicant requests that its request for a recommendation for approval of its Application without a hearing be granted.

DATED this 24 day of November, 2014.

Respectfully submitted,

WPX ENERGY ROCKY MOUNTAIN, LLC

By: _____

Robert A. Willis
Jillian Fulcher
Beatty & Wozniak, P.C.
Attorneys for Applicant
216 16th Street, Suite 1100
Denver, Colorado 80202
(303) 407-4499

WPX ENERGY ROCKY MOUNTAIN, LLC

Cause No. 527
Docket No. 1412-AW-29

STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

Verified Statement of Maxwell G. Faith

In support of the request for Director approval of the Verified Application of WPX Energy Rocky Mountain, LLC in Cause No. 527, Docket No. 1412-AW-29, pursuant to Rule 511.b, Maxwell Faith, Senior Landman for WPX Energy, upon oath, deposes and states as follows:

My name is Maxwell Faith, and I am currently employed as a Senior Landman – Piceance Basin for WPX Energy Rocky Mountain, LLC ("Applicant" or "WPX"). I graduated from Tulane University in 2002 and received a Bachelor of Arts in Communications, additionally I graduated from the University of Colorado – Denver and received a Master's of Science in Global Energy Management. I have over ten (10) years of experience in oil and gas land and contract work. I have worked directly or in a supervisory role with the properties that are subject of this matter.

The Applicant has filed this application to allow well density on a 1 well per 10 acre basis. Approval of this application would enable WPX to develop our assets of the Ryan Gulch area in an economic matter, assure the greatest ultimate recovery of gas and associated hydrocarbon substances from the formations, prevent waste, and protect our correlative rights. Geologic and Engineering testimony is also being submitted with this application.

In support of this application ("Application") and my sworn testimony herein, I have prepared three (3) exhibits. This testimony and the accompanying exhibits provide the supporting basis for approval of Applicant's request for an order pooling all interests in the drilling and spacing unit comprised of the following lands (the "Subject Lands"):

Township 1 South, Range 98 West, 6th P.M.
Section 8: E½NE¼, S½S½, N½SE¼
Section 9: N½N½, S½NW¼, S½
Section 10: NW¼NE¼, N½NW¼, N½SW¼, SW¼SW¼, SE¼SE¼
Section 13: Lots 9-24
Section 14: Lots 16-23
Section 15: Lots 1-13

1. Exhibit No. C-1

Exhibit C-1 is an overview of WPX's Ryan Gulch prospect situated in Rio Blanco County, Colorado. Ryan Gulch is located in Townships 1 through 4 South, Ranges 97 through 99 West. Only a small portion of the prospect is being considered in this application and the Subject Lands are contained within the red dashed outline and detailed on the following Exhibit. This is a core area of focus for WPX, which operates substantial leasehold interest the area in the Ryan Gulch

area which is comprised entirely of Federal Oil & Gas Leases, most of which are under federal-owned surface estate. The lands in yellow are lands that have been previously approved for 10-acre density development.

2. Exhibit No. C-2

   Exhibit C-2 is a detailed plat of the Subject Lands, shaded dark green. The subject lands are immediately offset from the WPX-operated Ryan Gulch Federal Exploratory Unit, which is eligible for 10-acre well density. Detailed in a green dashed box is a focused area of the Ryan Gulch Unit that WPX has developed on 10-acre well density in recent years. We feel developing the Subject Lands adjacent to this focused area would result in a better recovery factory of the hydrocarbon resource.

3. Exhibit No. C-3

   Exhibit C-3 is my resume.

The parties identified on the Exhibit A to the Verified Application are the parties entitled to notice under the rules of the COGCC. I have not been advised of and am not aware of any protests to this Verified Application.

Affirmation

The matters described herein were all conducted under my direction and control. To the best of my knowledge and belief, all of the matters set forth herein and in the exhibits are true, correct, and accurate.

Maxwell Faith, CPL
Senior Landman – Piceance Basin
WPX Energy Rocky Mountain, LLC

The foregoing instrument was subscribed and sworn to before me this 20th day of November, 2014, by Maxwell Faith, CPL, Senior Landman for WPX Energy Rocky Mountain, LLC.

Witness my hand and official seal.

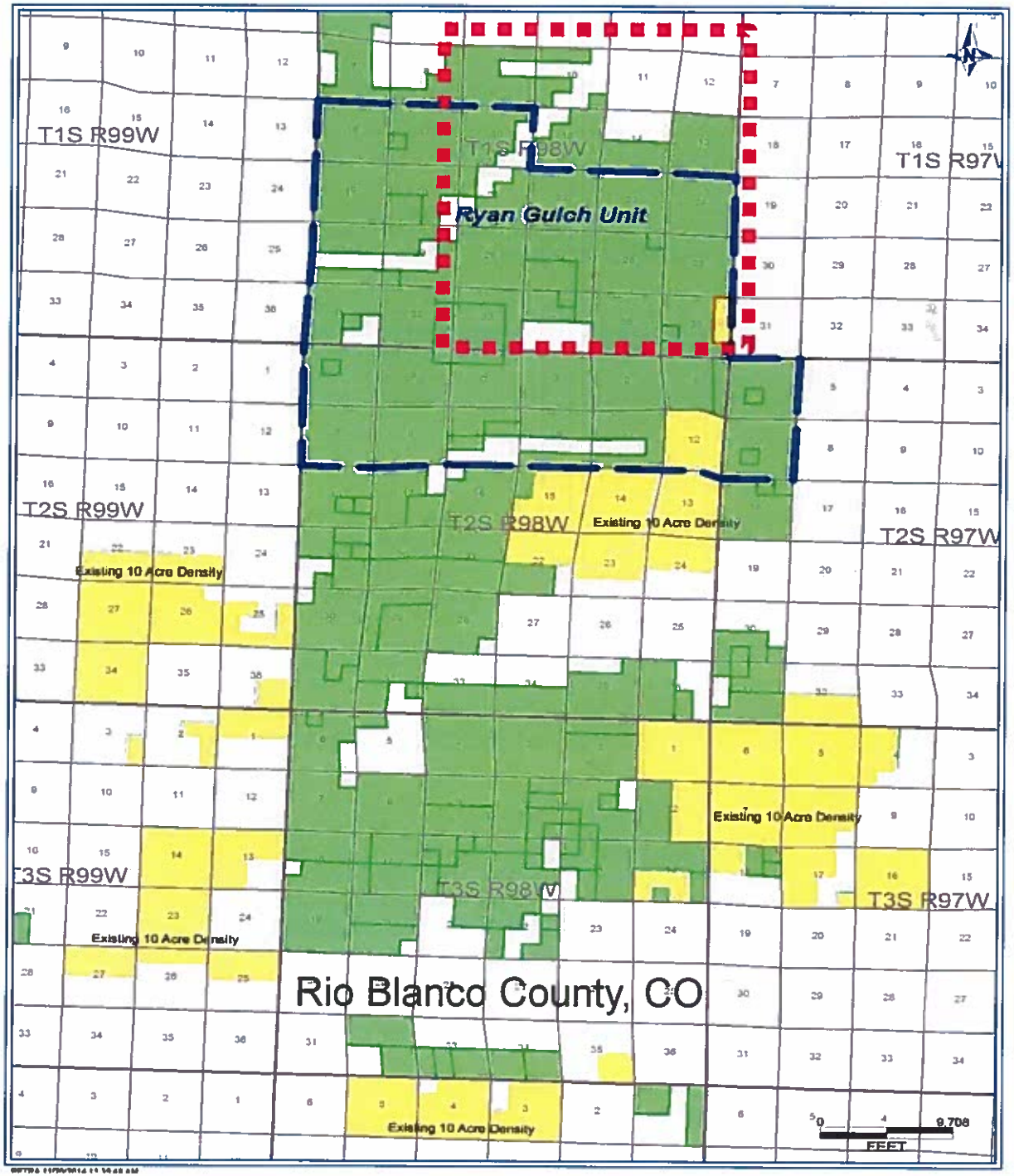
[SEAL]

SUSAN A BETHEA
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 19874002258
MY COMMISSION EXPIRES 10/22/2018

My commission expires: 10/22/18

Susan A Bethea

Notary Public



WPX Federal Leasehold

WPX Federal leasehold previously approved for 10-acre density. Orders 527-6, 527-9

WPX Operated Ryan Gulch Federal Unit

Area of detail for following map

Exhibit C-1

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WPXENERGY

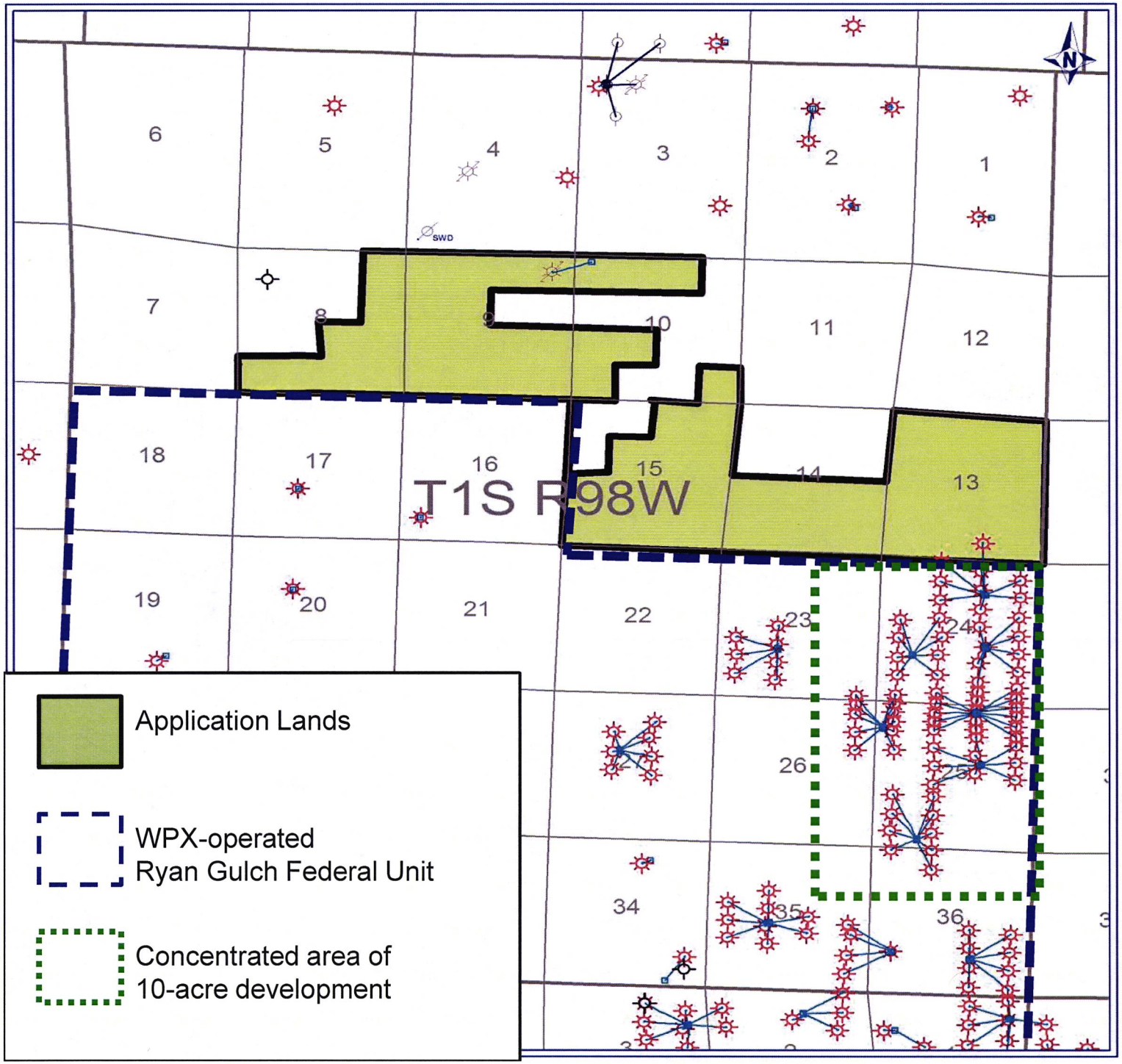

Exhibit C-2

Cause No. 527
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WPXENERGY

Exhibit C-3
Cause No. 527
Docket No. 1412-AW-29

MAXWELL G. FAITH, CPL

WPX Energy Rocky Mountain, LLC
1001 17th Street, Suite 1200
Denver, CO 80202
(303) 606-4058
maxwell.faith@WPXenergy.com

EXPERIENCE

Williams Production RMT Company/WPX Energy Rocky Mountain, LLC **Denver, CO**
Senior Landman **December 2007 - Present**
Responsible for all land related functions in assigned areas, provide land support to all disciplines of asset team for annual drilling program, including review of drilling title opinions, perform necessary curative; preparation and negotiation of joint operating agreements, farmout agreements, acreage trades/swaps with third parties, negotiation of lease terms and all other typical oil and gas land related agreements. Interaction with internal drilling operations and planning groups as well as interaction with outside third party operators and partners, organize and supervise efforts of outside lease brokers, contract Landmen and title attorneys.

Strata Oil & Gas Company, LLC **Denver, CO**
Independent Landman **May 2005 - December 2007**
Worked in numerous counties in Colorado, New Mexico, Washington and Wyoming performing cursory and curative title searches. Negotiated and prepared oil and gas leases and surface-use agreements for mineral and surface owners. Performed due diligence for client acquisitions. Prepared abstracts of title from county records for drilling title opinions.

Fitzsimmons, LLC **Gillette, WY**
Independent Landman **April 2004 - May 2005**
Worked in various counties in Colorado and Wyoming negotiating and preparing oil and gas leases and surface-use agreements for mineral and surface owners. Conducted research to secure title for leases in title companies and in county records.

E & G Energy **Shelby County, TX**
Independent Landman **February - March 2004**
Worked with lease and right-of-way brokers in Texas, processed title for mineral and property owners with oil and gas landmen.

Enterprise Leasing **Washington, DC**
Management Trainee **November 2002 - January 2004**
Involved in Management Training program focusing an all aspects of a managerial position. Responsible for daily operation of car rental branch, including contract underwriting, inside sales to customers and outside sales to local businesses, marketing to client accounts, and customer service.

EDUCATION

University of Colorado – Denver **Denver, CO**
Masters of Science – Global Energy Management **June 2010**

Tulane University **New Orleans, LA**
Bachelor of Arts in Communications **May 2002**
Minor in Business

PROFESSIONAL ASSOCIATIONS

American Association of Professional Landmen – Certified Professional Landman #71276
Denver Association of Petroleum Landmen

STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

Verified Statement of Renee M. Wild

In support of the request for Director approval of the Verified Application of WPX ENERGY RMT Company in Cause No. 527, DOCKET NO. 1412-AW-29, pursuant to Rule 511.b, Renee M. Wild, Geoscientist of WPX ENERGY RMT Company, upon oath, deposes and states as follows:

a. I am currently employed as a Geoscientist for WPX Energy RMT Company. I have been and am presently responsible for and have knowledge of the geologic characteristics of the Williams Fork and Iles Formations underlying the Application Lands.

b. I have not previously testified as an expert witness in petroleum geology matters before Hearing Officers of the COGCC. My resume outlines my years of experience working in the petroleum industry. Attached Exhibits B-1 through B-7 were either prepared or compiled by me. I have reviewed each of those exhibits, and to the best of my knowledge and belief, each of those exhibits is correct and accurate as of the date of this Verified Statement.

c. **Exhibit B-1**
Exhibit B-1 is a type log for the Mesaverde Group. The well in Exhibit B-1 is located in Section 13, Township 1S, Range 98W and is situated within the application lands. The well name is the Federal NRG 434-13-198.

The Mesaverde Group is Upper Cretaceous in age and consists of, from youngest to oldest, the Williams Fork, Iles, and Sego Formations. This application requests 10-acre spacing for all of these formations.

The Williams Fork Formation is comprised of sandstones, shales, and coals deposited in an upper to lower coastal plain setting. The lower 400 feet of the Williams Fork Formation is a coal bearing member commonly known as the Cameo Coal Interval. The sandstones in the Williams Fork Formation are fluvial in origin and were deposited in meandering to braided stream depositional environments.

Shown on this type log is the Top of Gas Saturation. This is the point below which sands that are perforated will produce essentially water-free

gas. The productive sandstones throughout the Williams Fork Formation are laterally discontinuous and naturally fractured, and have microdarcy permeability and porosities ranging from 6% to 10%. Gross productive interval ranges from 2000' to 3000'. Because of the tight nature of these sands, they will not produce economic volumes of gas unless they are fracture stimulated.

The Iles formation consists of three members; the Rollins Sandstone, and the Cozzette and Corcoran members.

The Rollins Sandstone was deposited in a shoreline environment and is laterally continuous except where faulted. This sandstone, which is about 100' thick, is generally not a target in the application lands due to its tendency to produce high volumes of water. However, where trapping conditions are suitable it can produce in isolated areas. Porosity ranges between 6% and 12% and permeability is in the microdarcy range.

The Cozzette Member is an interval of approximately 220' thick and consists of interbedded sandstones and shales with some thin coals and carbonaceous shales. The very top sandstone of the member appears to be of marine shoreline origin similar to the Rollins but much thinner. It is not usually targeted because like the Rollins it is prone to produce water. The remaining sandstones within the Cozzette Member *are* targets and are thought to have been deposited in lower coastal plain fluvial meandering streams with possible tidal influences. From observations of many electric logs in the application area, the sandstones appear to be discontinuous as would be expected from sandstones deposited in channel environments. Porosity ranges between 6% and 10% and permeability is in the microdarcy range.

The Corcoran Member is approximately 360' thick and consists of interbedded sandstones and shales with some thin coals and carbonaceous shales. The sandstones of this member are very similar to the fluvial, discontinuous sandstones of the overlying Cozzette Member.

The Sego Formation consists of two intervals, the Upper Sego and Lower Sego Sandstones. The Upper Sego is approximately 240' thick, while the Lower Sego is about 150' thick. Like the Cozzette and Corcoran members, these sandstones are thought to have been deposited in a lower coastal plain environment with possible tidal influences. The predominant depositional environment is thought to be meandering streams. As in the Cozzette and Corcoran members, observations of electric logs suggest that these sandstones are discontinuous in nature. However, in some places within the application lands the sandstones in the Upper Sego can be quite thick. It is thought that these thick

sandstones represent amalgamated or stacked channel sands that have questionable reservoir continuity between adjacent sandstones. Porosity ranges between 6% to 10% and permeability is in the microdarcy range. In this area the Lower Sego sandstone is the oldest sandstone of the Mesaverde Group, and overlies the first marine shale tongue of the Mancos Group.

d. **Exhibit B-2**

Exhibit B-2 is an index map showing the location of two stratigraphic cross-sections in this application. Cross-section A-A' covers the application lands, and cross-section B-B' is a local cross-section of two wells approximately 699' apart.

e. **Exhibit B-3**

Exhibit B-3 is stratigraphic cross-section A-A' that runs through the application lands. This section includes two wells spaced 3.2 miles apart. This section shows that all of the formations under consideration for 10 acre spacing are present in this area. In addition, the numerous sands and variable nature of the channel sand development in the Williams Fork, Cameo, Cozzette, Corcoran, and Sego intervals is displayed. The wells are the NRG 41-9-198 and NRG 434-13-198.

f. **Exhibit B-4**

Exhibit B-4 is a photograph of the Williams Fork outcrop northeast of Grand Junction, near Cameo, Colorado, approximately 45 miles south of the application lands. The sediments visible in this outcrop are very similar to the lower portion of the productive Williams Fork section in the application lands area. In the bottom of the photograph, we can see the laterally continuous marine Rollins Sandstone which defines the base of the Williams Fork Formation. The reddish colored sediments just above the Rollins define the Cameo member and the middle and upper portions of the photograph show a significant section of the sands and shales of the remaining Williams Fork Formation. The primary purpose of this photograph is to show the discontinuous nature of the channel sands and their approximate dimensions. Two hypothetical 10-acre wells spaced 660ft apart are shown intersecting different sandstones separated by shales. A study of this particular outcrop was performed by Dr. Rex Cole of Mesa State. Dr. Cole and his students physically measured the widths of 137 of the sand bodies shown in this photograph and the results of their work are outlined in Exhibit B-5.

g. **Exhibit B-5**

Exhibit B-5 is shows the frequency of different Williams Fork sand body widths in outcrop and their cumulative frequency. The graph shows that 80% of the measured sand bodies have widths of less than 750 ft and

that over 60% of the sand bodies have widths less than 500 ft. The average width of the 137 sand bodies measured in the study is 682 ft. For reference, 10-acre density is equivalent to wells that are 660 feet apart. Again, this study shows that significant reserves would likely be bypassed with a well spacing larger than 10 acres.

h. **Exhibit B-6**

Exhibit B-6 is a sketch of a portion of the Williams Fork outcrop on the west side of Rifle Gap, on the eastern margin of the Piceance Basin. This diagram shows two sands in the same stratigraphic horizon with two hypothetical 10-acre wells, spaced 660 ft apart. This figure shows that nearby sand bodies in the same stratigraphic horizon are in fact, different sands.

i. **Exhibit B-7**

Exhibit B-7 is a stratigraphic cross-section of the Iles–Sego interval between two closely spaced wells (699' apart) shown in Exhibit B-2 as B to B'. The wells in Exhibit B-7 are located in Section 24, Township 1S, Range 98W and situated adjacent to application lands. The wells are named the Federal RGU 21-24-198 and RGU 421-24-198. The purpose of this exhibit is to demonstrate the limited continuity of most of the productive channel sands within this interval, especially of the thinner sands. Note also that the Rollins and uppermost Cozzette sandstones *are* continuous due to their marine origin. As noted above, these two continuous sands are not often completed due to high water cut. As in the Williams Fork-Cameo interval, this cross-section demonstrates that significant reserves would likely be bypassed with a well spacing larger than 10 acres.

j. **Summary**

The nature of the depositional environments and the associated limited extents of individual sand channel reservoirs within the Williams Fork, Iles, and Sego Formations justify 10-acre well density in order to minimize bypassed reserves.

Renee M. Wild

Subscribed to and sworn to before me this 20th day of November, 2014 by Renee M. Wild, Geoscientist for WPX Energy RMT Company.

My Commission expires: 12-06-2019

CINDY PALMER
Notary Public
State of Colorado

Notary Public

Address: 1001 17th St
Denver CO 80202

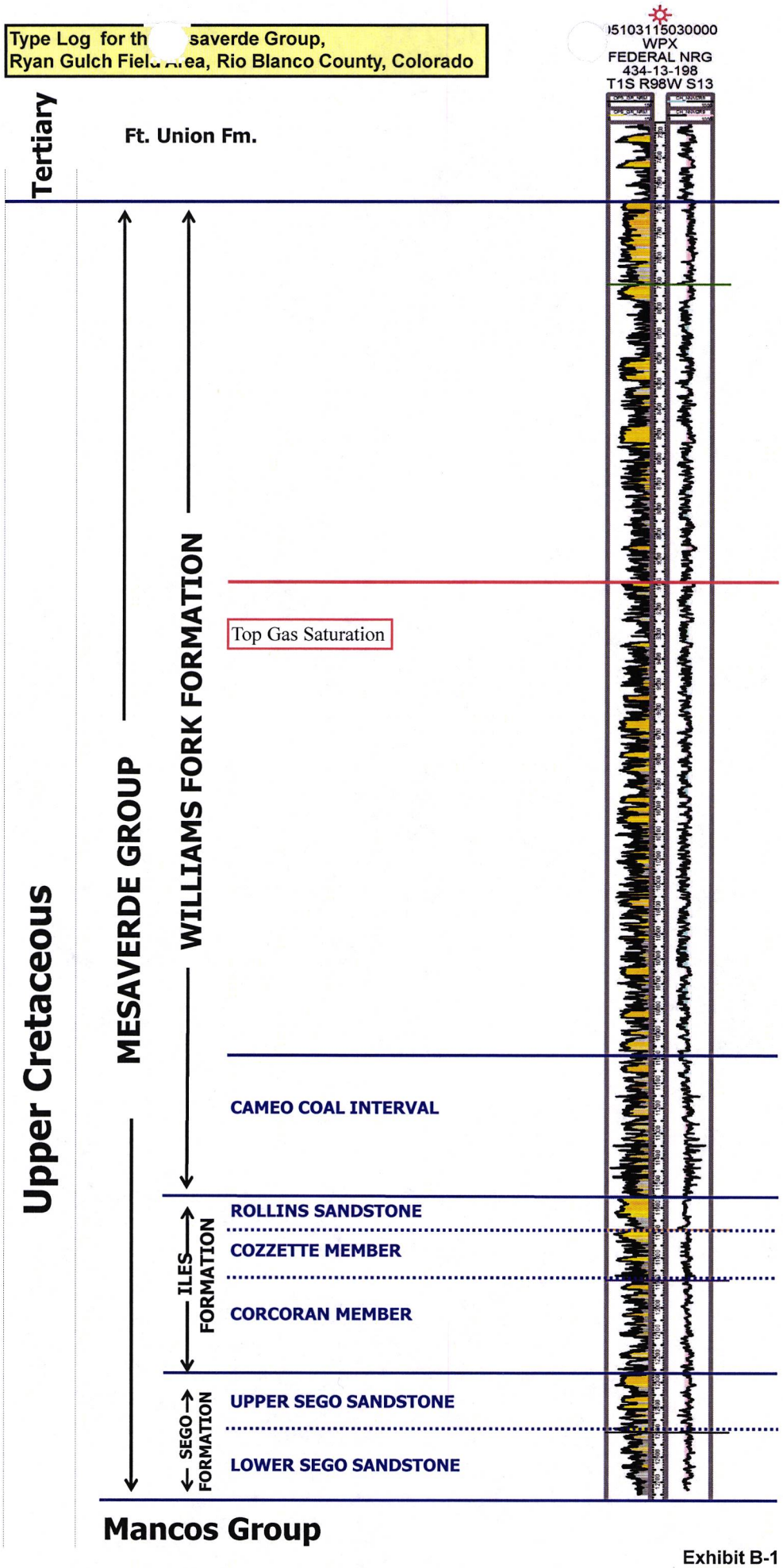
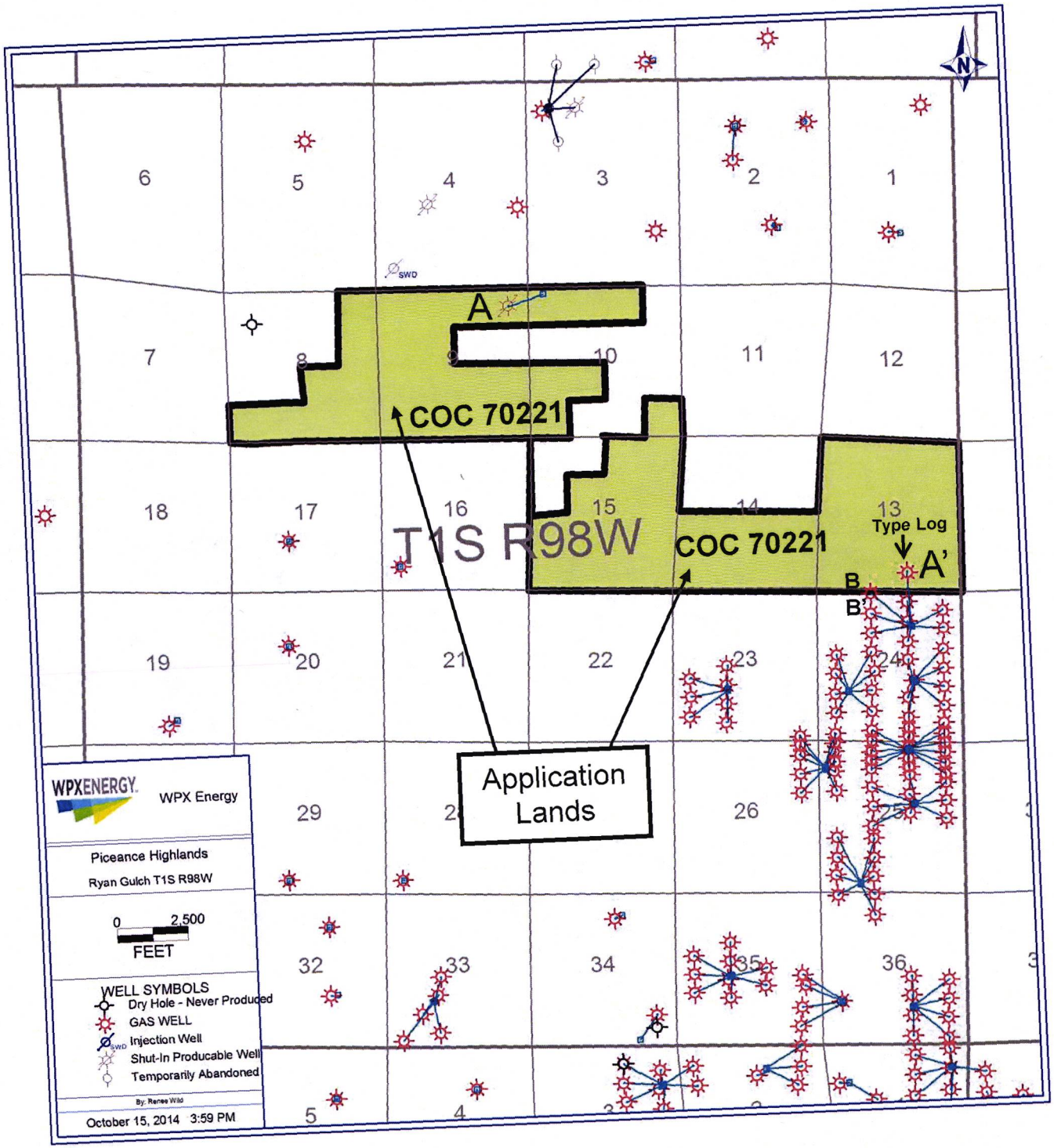


Exhibit B-1
Cause No. 527
Docket No. 1412-AW-29



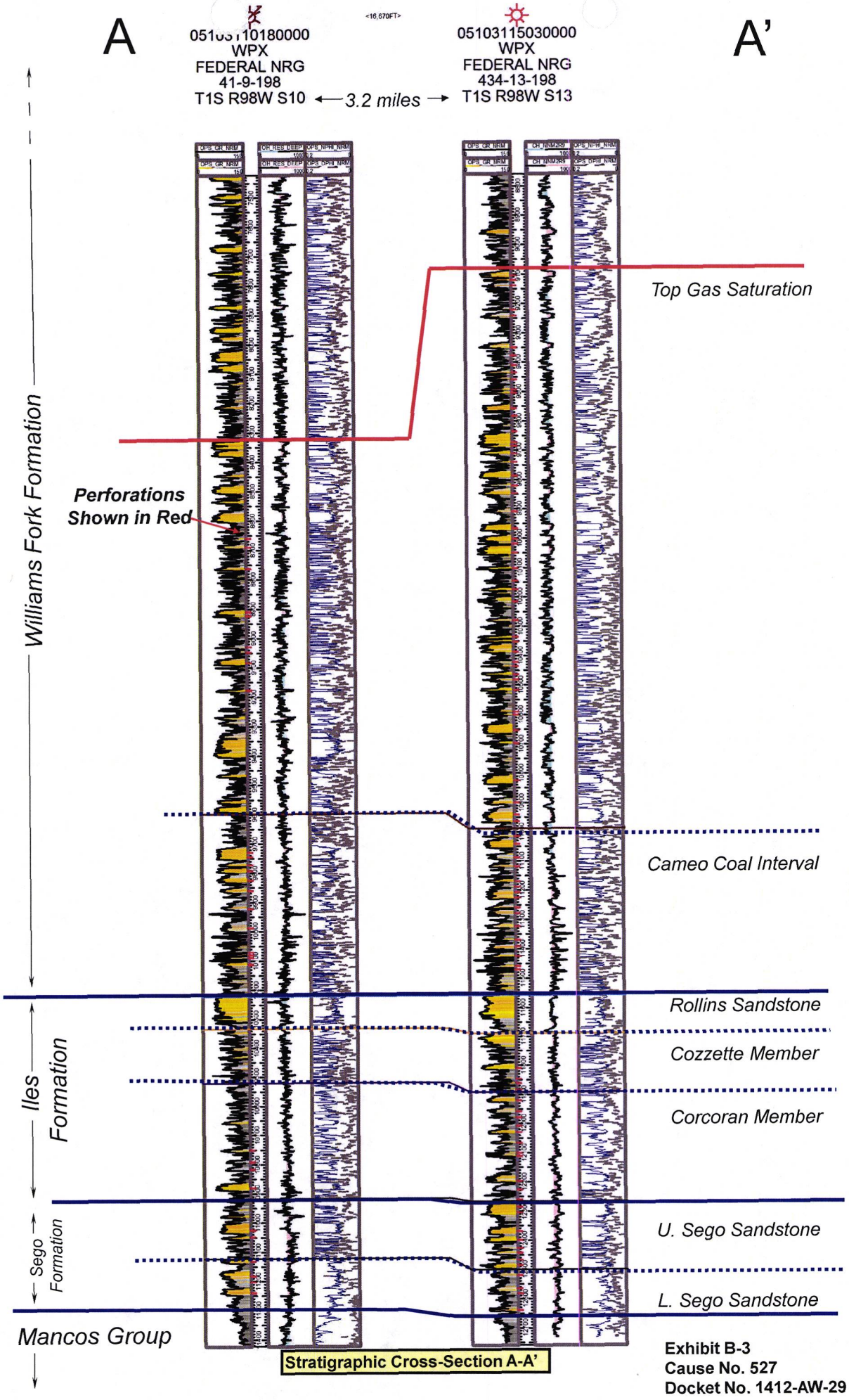
Application Lands Index Map

Application area:

Township 1 South, Range 98 West, 6th P.M

Lease USA COC 70221
Section 8: E½NE, S½S½,N½SE
Section 9: N½N½, S½NW, S½
Section 10: NWNE, N½NW, N½SW, SWSW, SESE
Section 13: Lots 9-24
Section 14: Lots 16-23
Section 15: Lots 1-13

Exhibit B-2
Cause No. 527
Docket No. 1412-AW-29

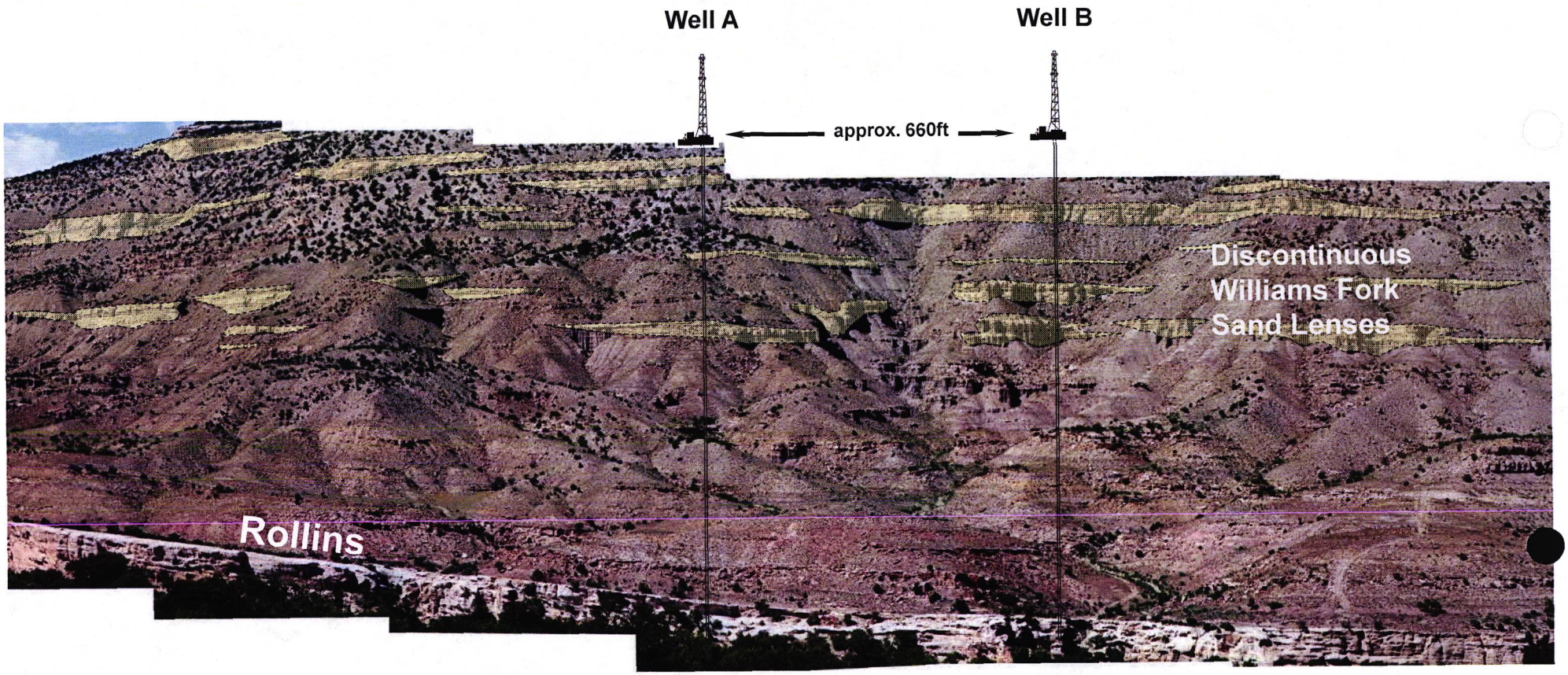


Stratigraphic Cross-Section A-A'

Exhibit B-3
Cause No. 527
Docket No. 1412-AW-29

Mesaverde Outcrop, Coal Canyon Near Cameo, Colorado

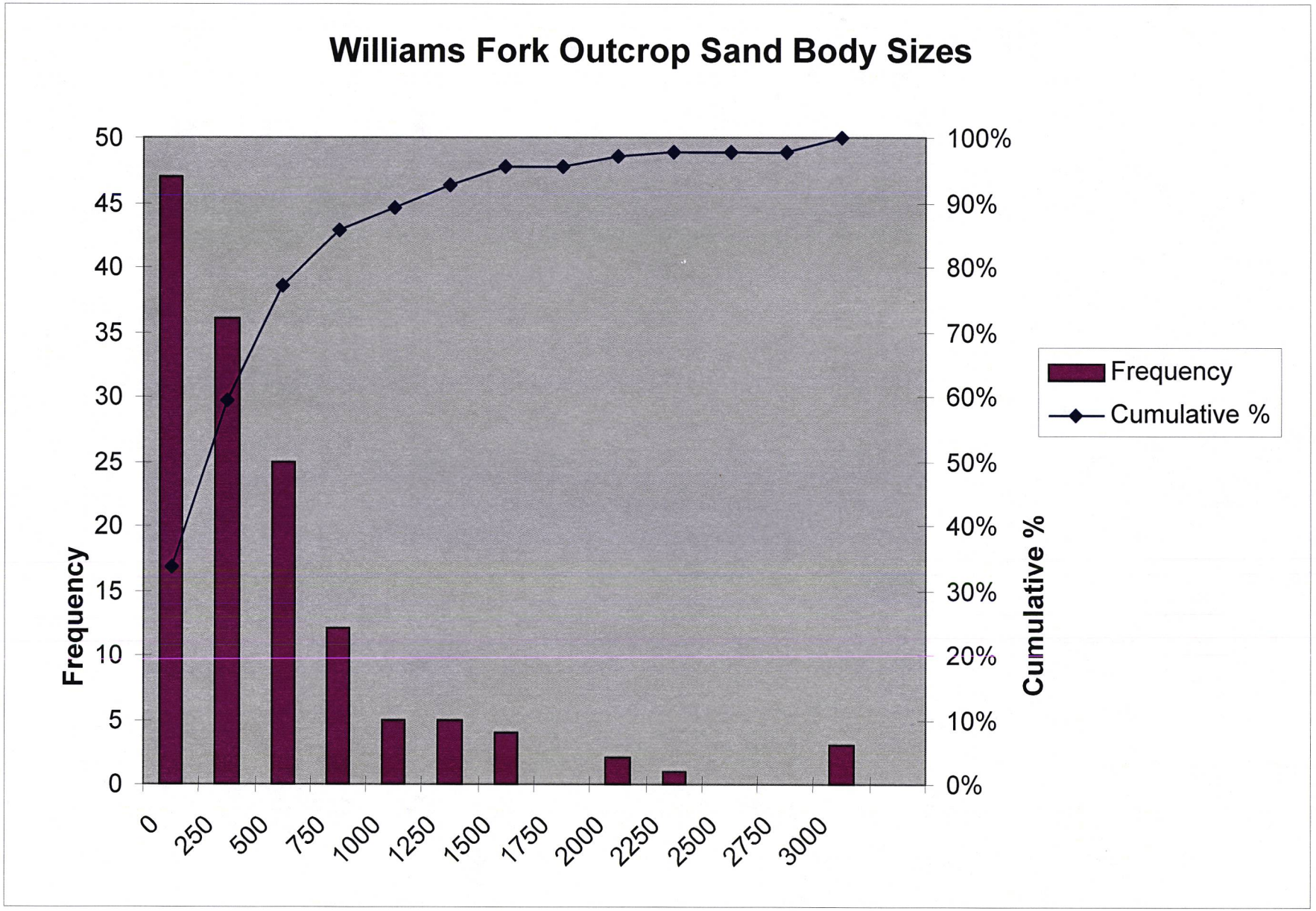
Williams Fork Sandstone Bodies With Hypothetical 10-acre wells



Approximately 45 miles south of 10 acre spacing application lands, very similar lower Williams Fork section to that in the application area.

Outcrop study of excellent exposures near Cameo, Colorado was undertaken to gather data on Williams Fork and Cameo sand body extents

Exhibit B-4
Cause No. 527
Docket No. 1412-AW-29

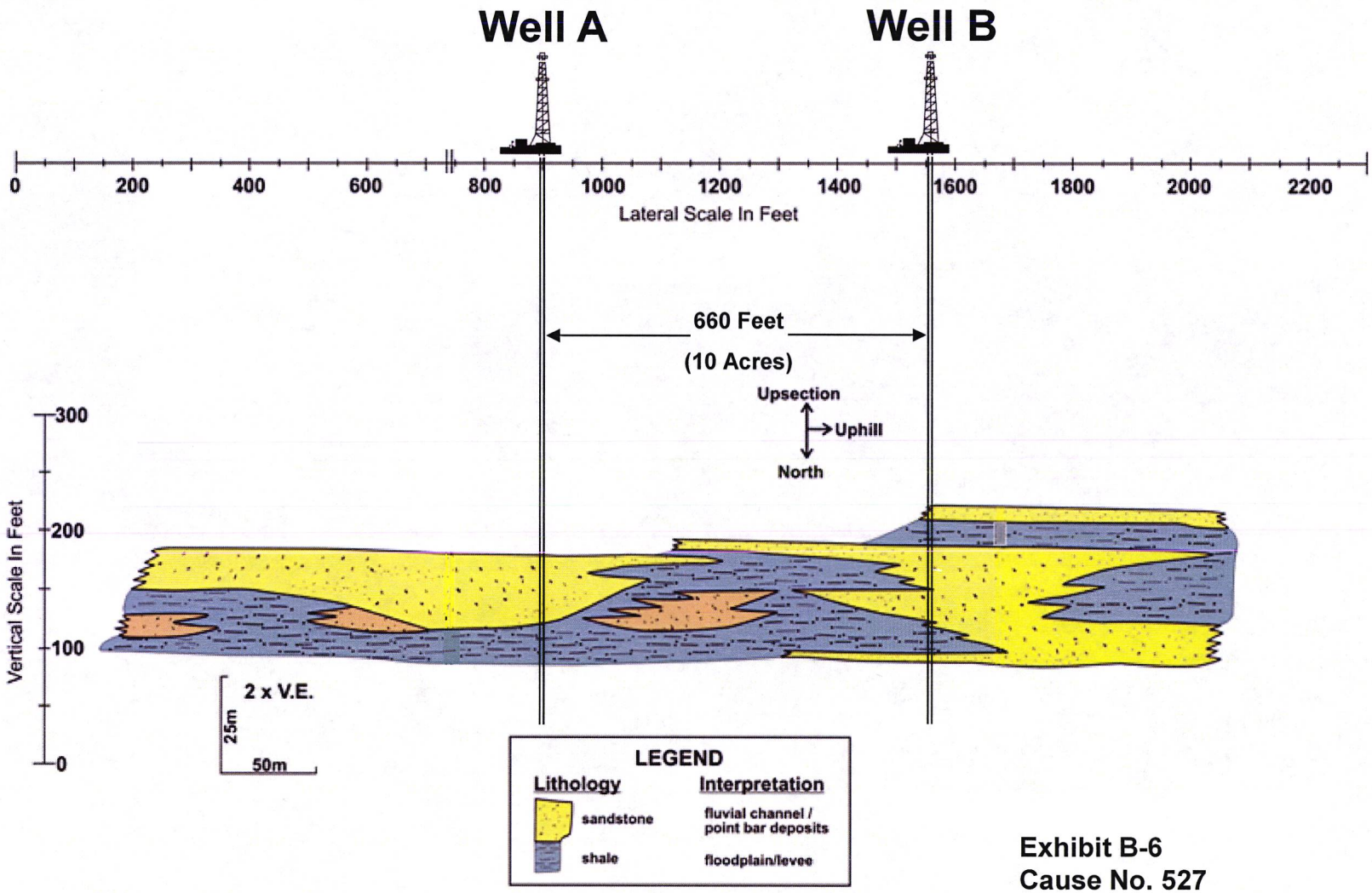


Average Extents of 137 Sand Bodies=682 ft

Exhibit B-5
Cause No. 527
Docket No. 1412-AW-29

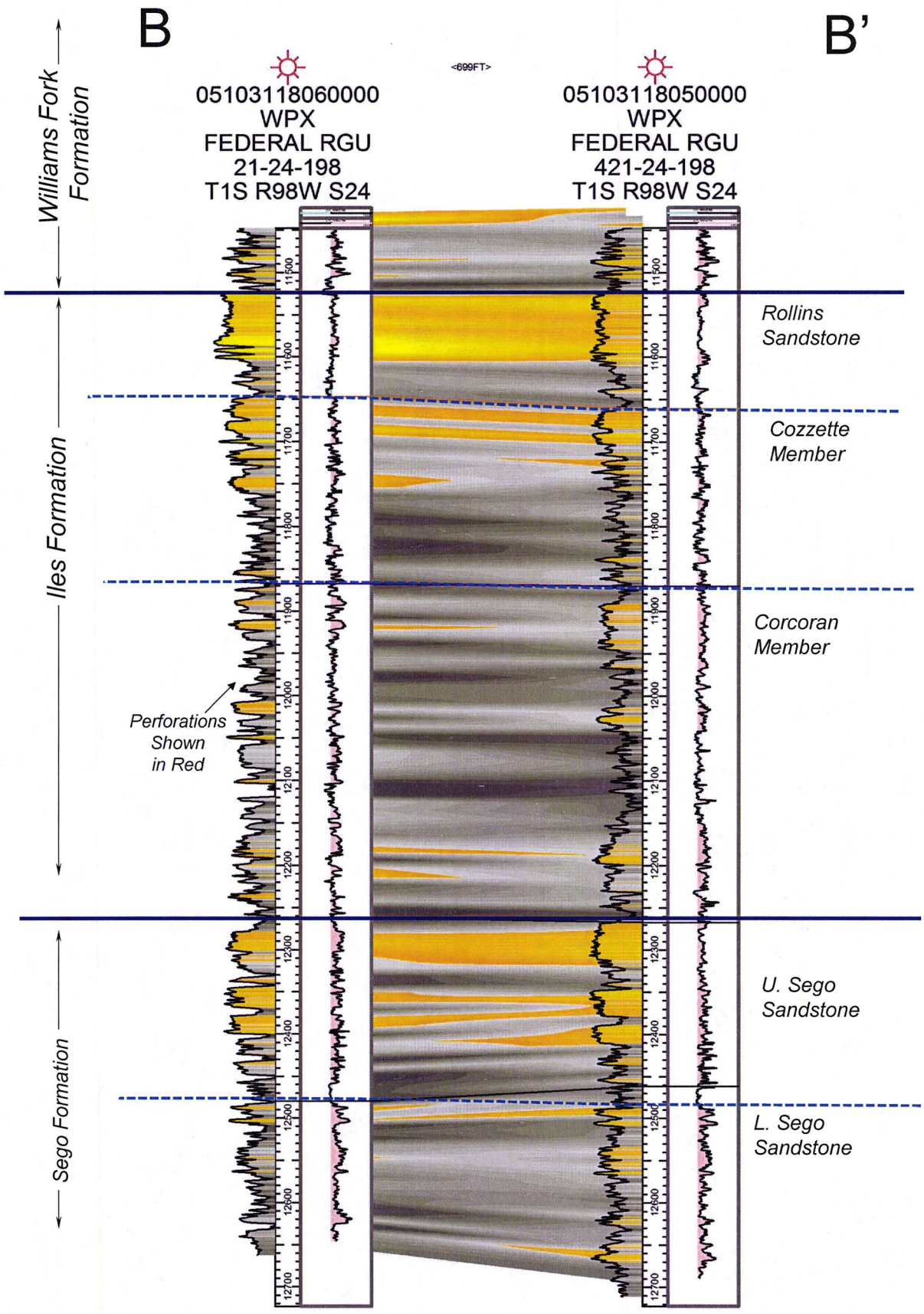
Williams Fork Sandstone Bodies With Hypothetical 10-Acre Wells

Eastern Margin of Piceance Basin - Mesaverde Outcrop at Rifle Gap (near Rifle, Colorado)



Outcrop of lens 8, west side of Rifle Gap, modified from Lorenz, 1982 (Pg. 28, Fig. 12).

Exhibit B-6
Cause No. 527
Docket No. 1412-AW-29



Stratigraphic Cross-Section B-B', Iles-Sego Only

Exhibit B-7
Cause No. 527
Docket No. 1412-AW-29

Renee M. Wild

WPX Energy Rocky Mountain LLC
1001 17th Street, Suite 1200
Denver, Colorado 80202
(303) 260-4551
renee.wild@wpxenergy.com

Professional Experience:

January 2012 to Current — WPX Energy Rocky Mountain LLC — Denver, Colorado
Geologist, Piceance Asset

- Responsible for all Mesaverde geologic operations in Williams-operated Ryan Gulch and Barcus Creek field areas in the northern Piceance Basin, Colorado.
- Duties require an understanding of the stratigraphy, structure, and reservoir qualities of the Williams Fork, Iles, and Sego Formations.
- Other duties include well planning, monitoring drilling wells and well logging, and the identification of pay intervals for well completions.

Nov. 2010 to Dec. 2011 — Williams Production RMT — Denver, Colorado
Geologist I, Piceance Asset

- Responsible for all Mesaverde geologic operations in Williams-operated Trail Ridge field area in the northern Piceance Basin, Colorado.
- Duties require an understanding of the stratigraphy, structure, and reservoir qualities of the Williams Fork, Iles, and Sego formations.
- Other duties include well planning, monitoring drilling wells and well logging, and the identification of pay intervals for well completions.
- Responsible for all Williams-non-operated joint interests operations in the Piceance Basin, Colorado

Sept. 2010 to Nov. 2010 — Williams Production RMT — Denver, Colorado
Contract Employee

- Regional cross section index and continued structural/stratigraphic interpretation of the Piceance Basin.

June 2010 to August 2010 — Williams Production RMT — Denver, Colorado
Geology Intern

- Project identified outcrop expression and extent of the "Big Kahuna" and subsurface expresssion.
- Participate in William's Company Intern field trip and final presentations

June 2009 to August 2009 — Cabot Oil and Gas — Denver, Colorado
Geology Intern

- Evaluate abandoned basin for recompletion potential using well data,

Cause No. 527
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core analysis, and seismic interpretation. Recommended locations for new development and lease interests.

Education:

University of Colorado — Boulder, Colorado
M.S. in Geology — 2010

Central Michigan University — Mount Pleasant, Michigan
B.S. in Geology — 2007

Professional Affiliations:

- American Association of Petroleum Geologists
- Rocky Mountain Association of Geologists
- Geological Society of America

Cause No. 527
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STATE OF COLORADO)
) ss.
CITY AND COUNTY OF DENVER)

Verified Statement of Samuel T. Burt

In support of the request for Director approval of the Verified Application of WPX Energy in Cause No. 527, DOCKET NO. 1412-AW-29, pursuant to Rule 511.b, Samuel T. Burt, Senior Petroleum Engineer of WPX Energy, upon oath, deposes and states as follows:

a. I am currently employed as a Senior Petroleum Engineer of WPX Energy. I have been and am presently responsible for and have knowledge of the land position related to Engineering.

b. Attached is a copy of my resume attached as Exhibit A-20. Attached Exhibits A-1 through A-20 were prepared by me or under my direction and control. I have reviewed each of those exhibits, and to the best of my knowledge and belief, each of those exhibits is correct and accurate as of the date of this Verified Statement.

c. Exhibit A-1

Two 160 acre tract areas in Grand Valley and Rulison fields were drilled on 10-acre density as the first pilot areas in 2001-2002. These areas were chosen due to the staggered development on 40-acre and 20-acre density and the high cumulative production of gas. This area would have the highest likelihood of any observed depletion within each field. 8 producing wells existed and 8 new 10-acre wells were drilled in each 160-acre pilot. A total of 219 individual sand bodies were tested within the 16 new 10-acre wells which were composed of bottom hole pressure build ups and injection falloff testing. 14 fracturing treatments on 4 wells were monitored from adjacent well bores using microseismic instrumentation which provided a created fracture geometry and direction of the treatments. In addition, 4 production logs and 4 formation micro imager (FMI) logs were run on those same wells.

d. Exhibit A-2

From the FMI log, natural fracture and drilling induced fracture direction can be obtained (1st and 2nd row of rose plots). Also from the microseismic monitoring of the fracture treatments, a fracture direction can be measured (3rd row of rose plots). Both forms of independent measurement agree and confirm the fracture orientation within each pilot area. This measurement will become very important to the optimization of the bottom hole well placement in 10-acre density development.

e. Exhibit A-3

Each 160-acre pilot area is shown with full 10-acre development. The 10-acre wells were drilled with no consideration of fracture orientation. Note the two wells (GM 443-33, RWF 434-20) in each field that are on direct orientation (based off of microseismic and FMI data) with the older parent wells. These two "orientation wells" were the poorer performers of the 10-acre pilot wells and measured more depletion. All other 10-acre wells, including those as close as 300-ft from the parent well but off fracture orientation, performed at field average.

f. Exhibit A-4

This is a geological log representation of one of the Rulison 10-acre pilot wells that had every completed sand body individually tested for reservoir pressure. This was done on 8 total wells. Each sand was perforated (pink dots) and tested prior to performing the fracturing treatment (black line connecting the perforations) – this was repeated for each frac interval. Most of the pressure measurements (blue numbers) fall within the natural progression of increasing reservoir pressure with depth. Three sands (red numbers) showed some partial depletion and didn't fall within the other tests.

g. Exhibit A-5

This is a geological log representation of another Rulison 10-acre pilot well in which one sand per frac interval was tested with a bottom hole pressure build-up and also a injection fall-off test. This was done on 8 total wells. Both testing methods were performed on the same sand to validate the injection fall-off testing analysis which was performed on majority of the sands in the pilot. Each sand tested was chosen to be the most correlative to offset producing wells and had the highest likelihood of depletion in the well bore. All the pressure tests in this well were shown to be near virgin reservoir pressure.

h. Exhibit A-6

The table represents a summary of the pressure testing that has been performed in the Grand Valley field pilot area. 95 tests were completed on the new 10-acre pilot wells. 78 of the 95 tests (82%) were measured and shown to have no depletion (virgin pressure or more than 85% of virgin pressure). If you eliminate the "orientation wells" pressure tests, due to the fact that wells would not be placed on direct orientation in the future, the percentage of no depletion sands increase to 88%. This illustrates that majority of the sand bodies completed within 10-acre wells have no or limited depletion.

i. Exhibit A-7

The table represents a summary of the pressure testing that has been performed in the Rulison field pilot area. 124 tests were completed on the new 10-acre pilot wells. 109 of the 124 tests (88%) were measured and shown to have no depletion (virgin pressure or more than 85% of virgin pressure). If you eliminate the "orientation wells" pressure tests, due to the fact that wells would not be placed on direct orientation in the future, the percentage of no depletion sands increase to 94%. This illustrates that majority of the sand bodies completed within 10-acre wells have no or limited depletion.

j. Exhibit A-8

Minimal depletion was measured throughout the sixteen 10-acre pilot wells. More depletion was observed when wells are on exact fracture orientation with older parent wells. Pressure test results confirm the geological model. Even with some pressure reduction, 10-acre density wells will produce substantial incremental gas reserves.

k. Exhibit A-9

This graph displays monthly production of the four wells discussed from the previous exhibit. The production is plotted against time in months and the volume of gas per month in mcf. Each well depicts a typical hyperbolic production decline for a tight gas sand reservoir from the Piceance basin. Another way to see the effect of depletion or the presence of shared reservoirs is to note a production change or decline curve deviation of the existing developed well (GM 43-1, GM 247-1) when the new production is brought on by the 10-acre wells (GM 344-1, GM 543-1). As shown, the decline curve of the 40-acre and 20-acre wells does not deviate from their existing decline when the 10-acre wells are placed on production. A change is still not evident even after 2 years. This illustrates that very little if any pressure communication, between wells, exists on 10-acre density development.

l. Exhibit A-10

This graph represents average monthly production of all wells within the Grand Valley field that are normalized back to the same first production day. The production data is broken out into 40-acre (red line), 20-acre (blue line), and newer 10-acre wells (green line). Note that the new 10-acre wells (135 wells) are better performers than the older 40-acre parent wells and as good as the 20-acre development wells.

m. Exhibit A-11

This exhibit builds on the graph shown in Exhibit A-11 by comparing the original 10-acre pilot in the Grand Valley Field with and adjacent and recent 10-acre development. This graph illustrates that when bottom-hole locations are placed optimally (via the new 10-acre development in Section 3), 10-acre wells will perform optimally.

Therefore, reservoir depletion and performance can be optimized if development occurs on 10-acre density from the onset with optimally placed bottom-hole locations.

n. Exhibit A-12

This graph represents average monthly production of all wells within the Rulison field that are normalized back to the same first production day. The production data is broken out into 40-acre (red line), 20-acre (blue line), and newer 10-acre wells (green line). Note that the new 10-acre wells (104 wells) are better performers than the older 40-acre parent wells and as good as the 20-acre development wells. Again these 3 production graphs confirm the success and need of 10-acre density development to maximize gas in place recovery.

o. Exhibit A-13

This graph represents average monthly production of all wells within the Parachute field that are normalized back to the same first production day. The production data is broken out into 40-acre (red line), 20-acre (blue line), and newer 10-acre wells (green line). Note that the new 10-acre wells (123 wells) are better performers than the older 40-acre parent wells and as good as the 20-acre development wells.

p. Exhibit A-14 and A-15

This exhibit shows multiple Gas-In-Place (GIP) calculations for different independent research reports and from internal WPX Energy analysis. An analysis was performed at the time of the 10-acre pilots which is noted by the "2002 WPX Energy Analysis" values. An average GIP for a given 640-acre section was calculated for each of WPX Energy's three fields. The bottom portion of the exhibit shows the gas recovery factors based on the calculated GIP and using the average estimated ultimate recovery (EUR) for each field. Going from 40-acre to 20-acre to 10-acre development improves the average recovery factors from 19% to 79%. Limiting development to 20-acre density would leave over 60% of the GIP in the reservoir.

q. Exhibit A-16 and A-17

With early 10-acre density drilling approved development, we can take advantage of one rig move to a location to develop wells within reach which means less rig moves and re-disturbance of pads. This also will lessen the likelihood for well problems during drilling operations; stuck pipe, sidetracking, and well control issues due to possible pressure variations between individual sand bodies. Early 10-acre approval will also increase the fracture stimulation effectiveness of all targeted pay sands which can be compromised if differing pressured sands are encountered during completions. Approval will allow the ability to

optimally place bottom hole locations that will in turn minimize well interference and maximize ultimate recovery of gas-in-place. Community and environmental benefits would also be realized also with lessening operational time per well location and reduce prolonged road traffic.

r. Exhibit A-18

To summarize the data and results reviewed thus far, 10-acre development is the optimal development from a geologic, reservoir, production, and environmental standpoint.

s. Exhibit A-19

This exhibit states WPX Energy's intent to commingle the Williams Fork, Iles and Sego formations in a single wellbore on 10-acre density. The exhibit explains the reasoning behind commingling and states the fact that it is the most economic method of development.

t. Exhibit A-20

This exhibit illustrates recent FMI data taken at the Ryan Gulch Field. The results are very similar to those shown in Exhibit A-2. From the FMI log, natural fracture and drilling induced fracture direction can be obtained. This measurement will become very important to the optimization of the bottom hole well placement in 10-acre density development.

u. Exhibit A-21

Attached is a copy of my resume.

It is my expert opinion that to maximize the ultimate recovery of gas in place in Williams Fork Formation underlying the Application Lands, ten (10) acre density drilling should be permitted and that by granting the Verified Application the waste of leaving recoverable Williams Fork gas in place will be avoided and that correlative rights will be protected.

Samuel T. Burt

Subscribed to and sworn to before me this 20th day of November, 2014 by Samuel T. Burt, Senior Petroleum Engineer of WPX Energy.

My Commission expires: 12-06-2019

CINDY PALMER
Notary Public
State of Colorado

Notary Public

Address: 1001 17th St
Denver CO 80202

10-Acre Pilot Summary

	Grand Valley	Rulison	Total
Acres:	160	160	320
Existing Wells: (20-Acre Well Density)	8	8	16
Wells Drilled: (10-Acre Well Density)	8	8	16
Pressure Tests: (Individual Sands)	96	125	221
Microseismic Monitored Hydraulic Fracs:	6	8	14

Other Tests: 4 Production Logs, 7 RFT tests, 4 FMI logs

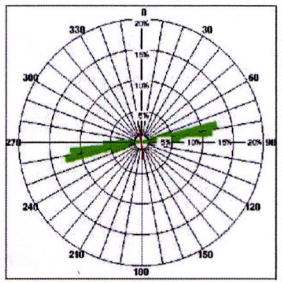
WPXENERGY

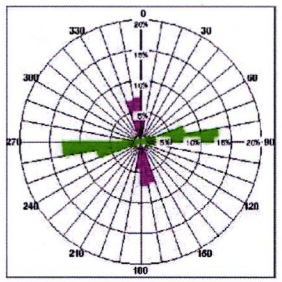
Exhibit A-1
Cause No. 527
Docket No. 1412-AW-29

FMI and Microseismic Results

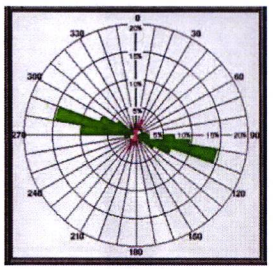
Grand Valley

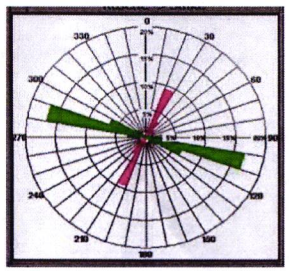
Rulison

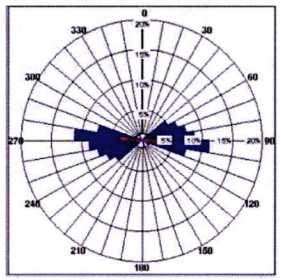


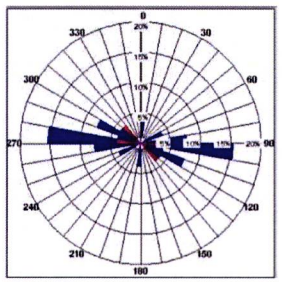


Drilling Induced Fractures

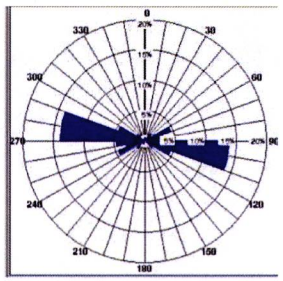


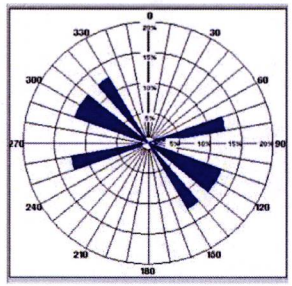


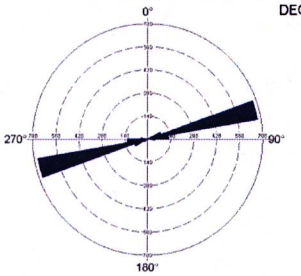


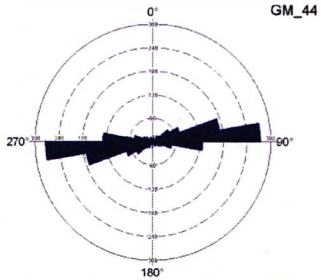


Natural Fractures

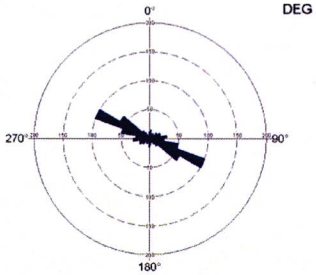


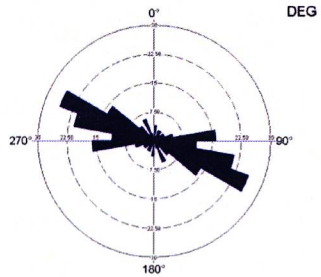






Hydraulic Fractures





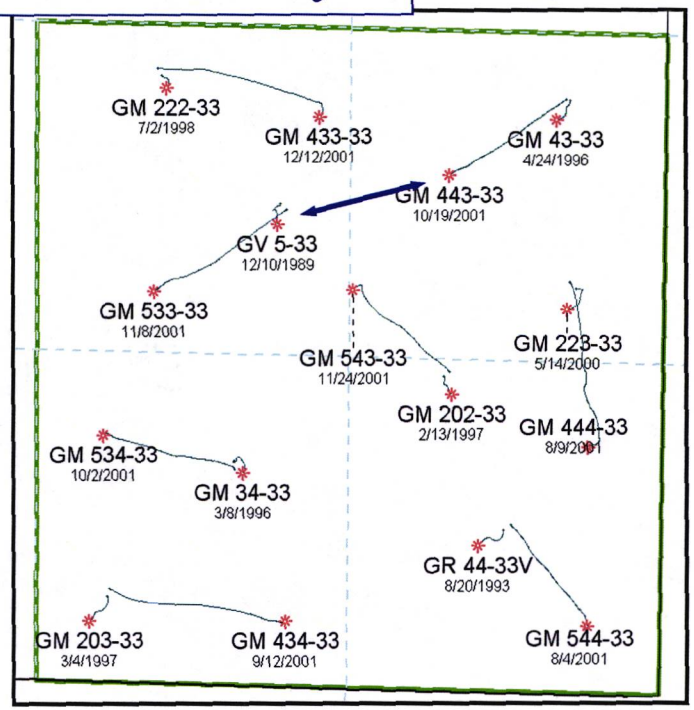
FMI and Microseismic confirm both hydraulic and natural fracture orientations are approximately the same

WPXENERGY℠

Exhibit A-2
Cause No. 527
Docket No. 1412-AW-29

Orientation is Critical

Grand Valley



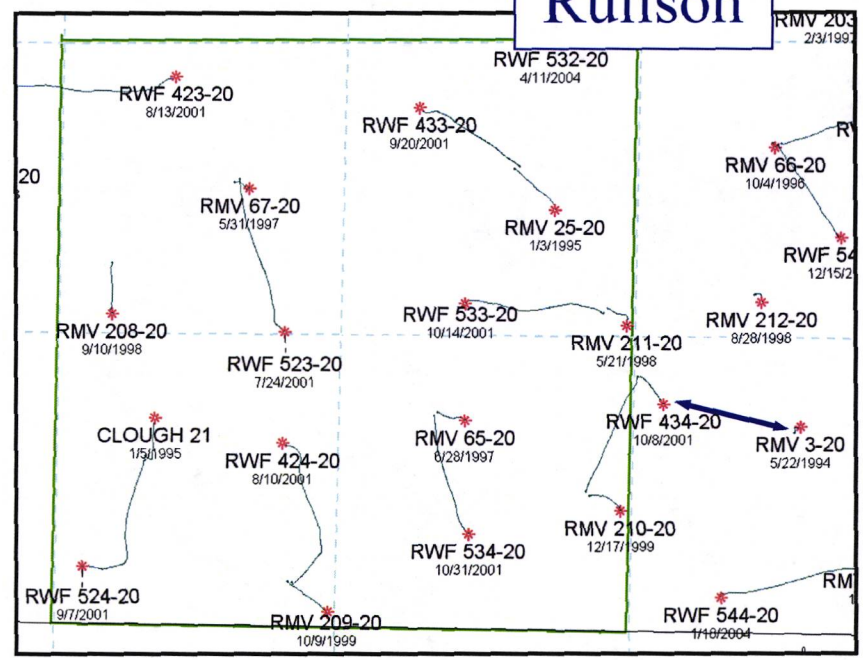
- 10-acre wells were drilled with no consideration of fracture orientation.
- Two wells in each pilot were on direct fracture orientation to a parent well ("Orientation wells"):

  GM 443-33

  RWF 434-20

- Those 2 wells on exact orientation were poorer performers and measured more depletion
- All other 10-Acre wells (including those as close as 300 feet off orientation) performed at field average

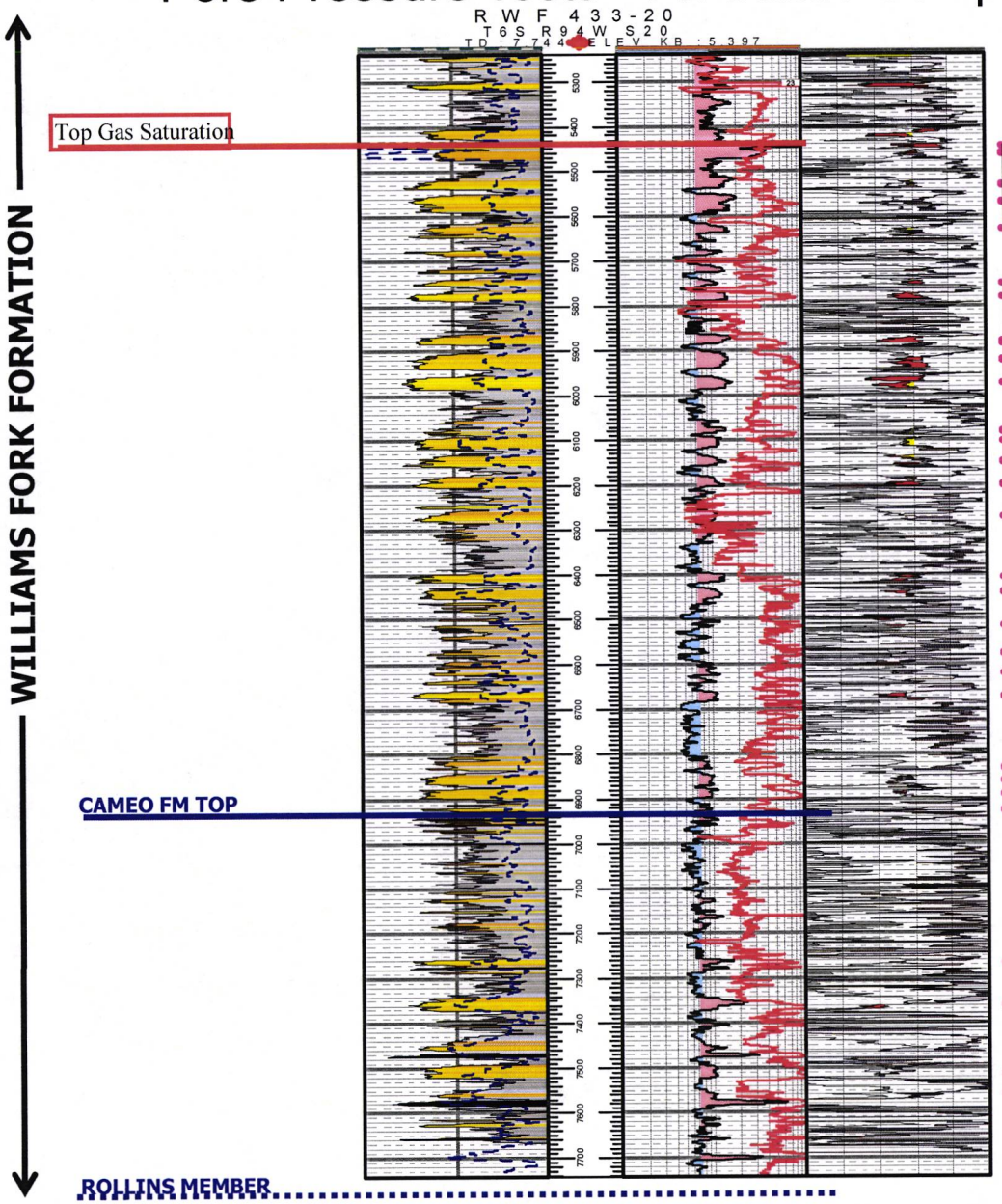
Rulison



WPXENERGY

Exhibit A-3
Cause No. 527
Docket No. 1412-AW-29

Pore Pressure Tests – All Sands Completed



Reservoir Pressure Results
(Every sand tested that was completed)

- 2,516 psi – No Depletion
- 2,520 psi – No Depletion
- 2,522 psi – No Depletion
- 2,580 psi – No Depletion
- 2,597 psi – No Depletion
- 3,226 psi – No Depletion
- 3,297 psi – No Depletion
- 3,336 psi – No Depletion
- 2,931 psi – No Depletion
- 3,428 psi – No Depletion
- 1,987 psi – Partial Depletion
- 1,566 psi – Partial Depletion
- 3,242 psi – No Depletion
- 3,263 psi – No Depletion
- 2,793 psi – Partial Depletion
- 3,232 psi – No Depletion
- 3,020 psi – No Depletion
- 3,531 psi – No Depletion
- Bad Test
- 4,104 psi – No Depletion
- 4,050 psi – No Depletion
- 4,123 psi – No Depletion
- 4,141 psi – No Depletion
- 4,534 psi – No Depletion
- 4,788 psi – No Depletion
- 4,813 psi – No Depletion
- 5,110 psi – No Depletion
- 5,234 psi – No Depletion
- 4,905 psi – No Depletion

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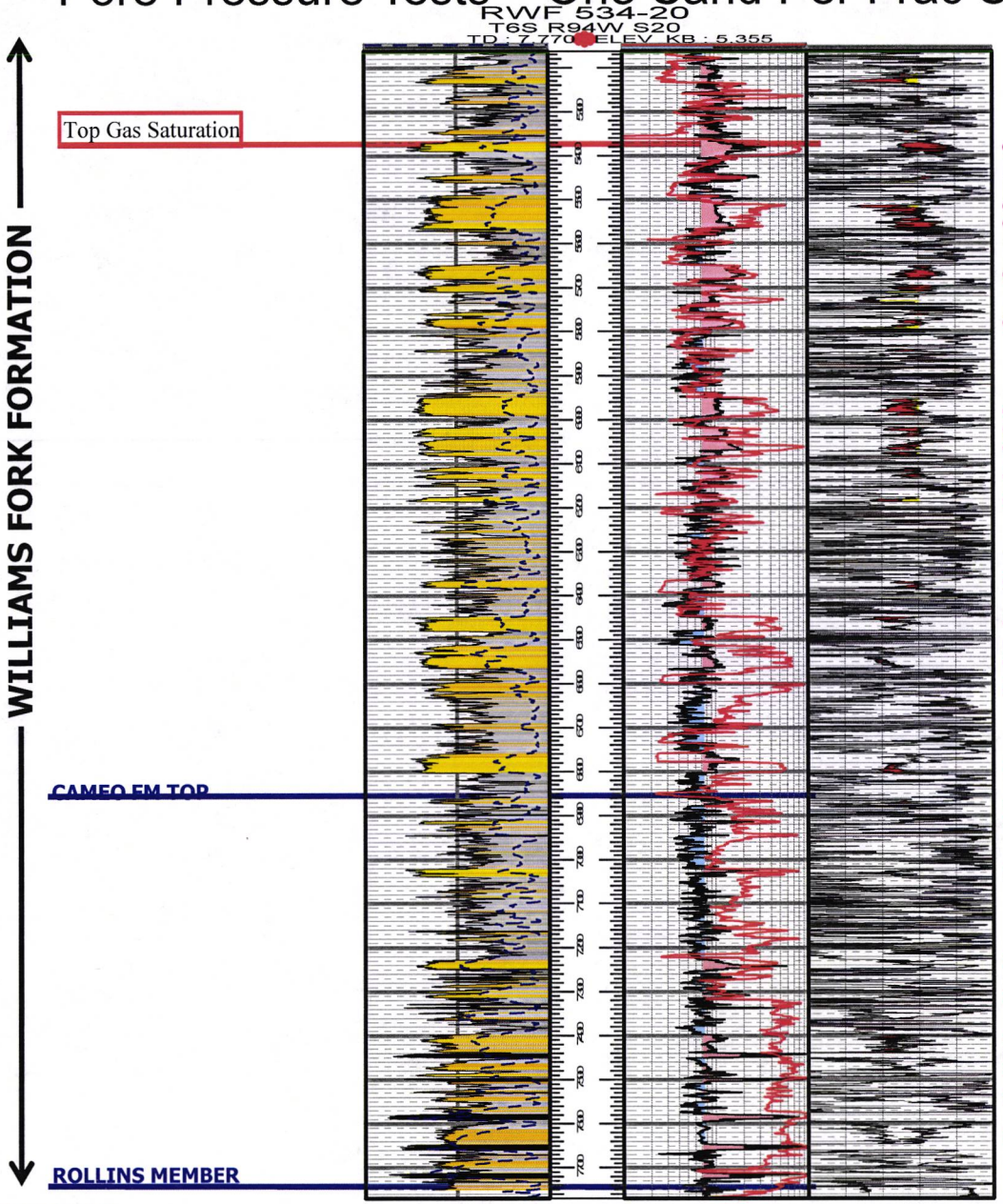
Exhibit A-4
Cause No. 527
Docket No. 1412-AW-29

Pore Pressure Tests – One Sand Per Frac Stage



Reservoir Pressure Results
(One sand per frac interval
– sand chosen to be most correlative to offset wells)

- 3,195 psi – No Depletion
- 3,443 psi – No Depletion
- 3,745 psi – No Depletion
- 4,152 psi – No Depletion
- 4,771 psi – No Depletion

WPXENERGY

Exhibit A-5
Cause No. 527
Docket No. 1412-AW-29

Grand Valley Pressure Testing Summary

Type of Test	# of Tests Performed	No Depletion Results	Partially Depleted Results
40-acre Pilot Pressure Tests	6	6 100%	0 0%
20-acre Pilot Pressure Tests	7	6 86%	1 14%
10-acre Pilot Total Pressure Tests	96	71 74%	25 26%
10-acre Pilot Pressure Tests (without "Orientation" Well)	76	59 78%	17 22%

No Depletion: Virgin reservoir pressure or slightly less than virgin reservoir pressure (gas is not being effectively produced from offset wells)

Partially Depleted: Less than 85% of virgin reservoir pressure (gas from some sand bodies is being produced from offset wells)

WPXENERGY

Exhibit A-6
Cause No. 527
Docket No. 1412-AW-29

Rulison Pressure Testing Summary

Type of Test	# of Tests Performed	No Depletion Results	Partially Depleted Results
MWX/M-site Pressure Tests	7	7 100%	0 0%
20-acre Pilot Pressure Tests	7	7 100%	0 0%
10-acre Pilot Total Pressure Tests	125	104 83%	21 17%
10-acre Pilot Pressure Tests (without "Orientation" Well)	99	90 90%	9 9%

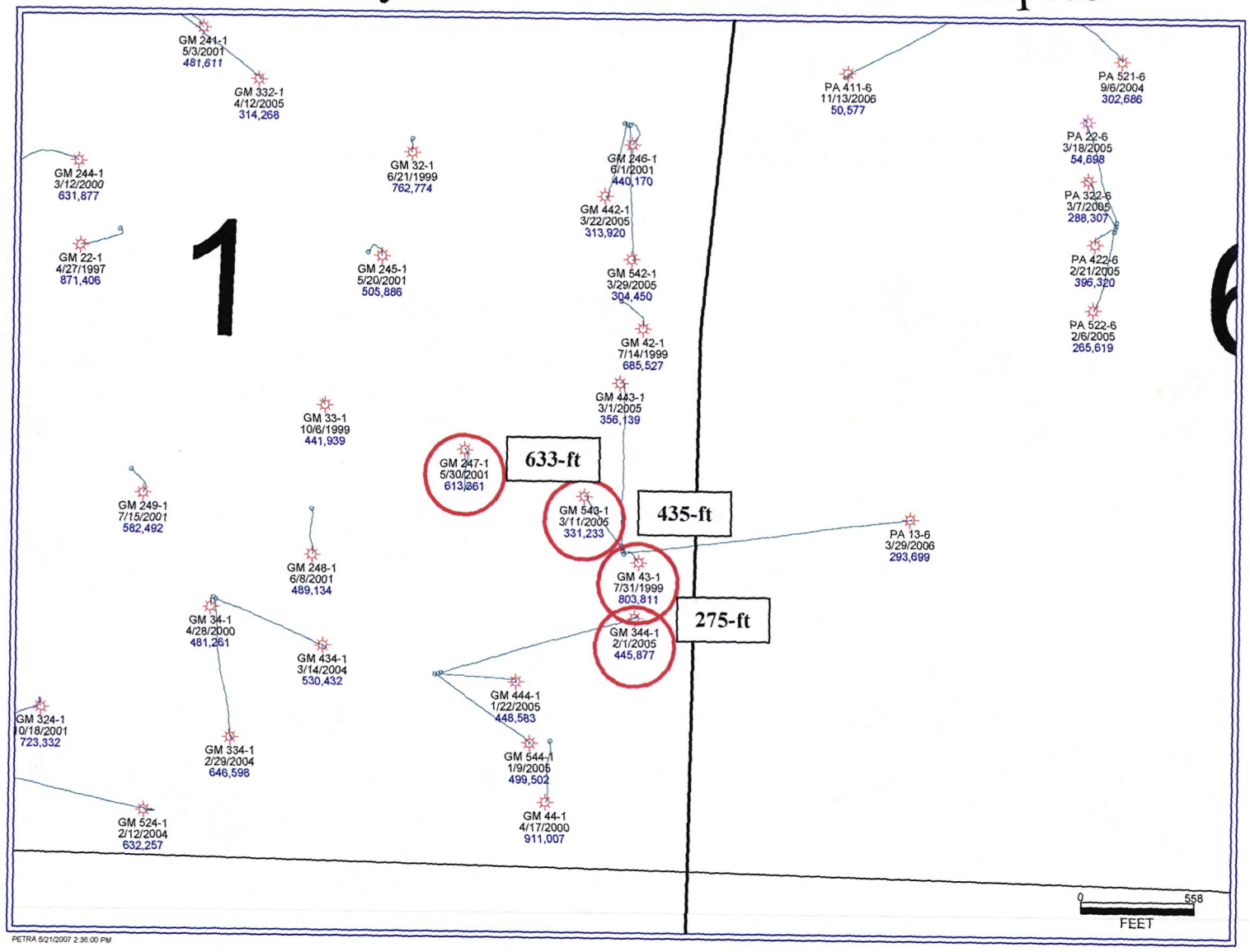
No Depletion: Virgin reservoir pressure or slightly less than virgin reservoir pressure (gas is not being effectively produced from offset wells)

Partially Depleted: Less than 85% of virgin reservoir pressure (gas from some sand bodies is being produced from offset wells)

WPXENERGY

Exhibit A-7
Cause No. 527
Docket No. 1412-AW-29

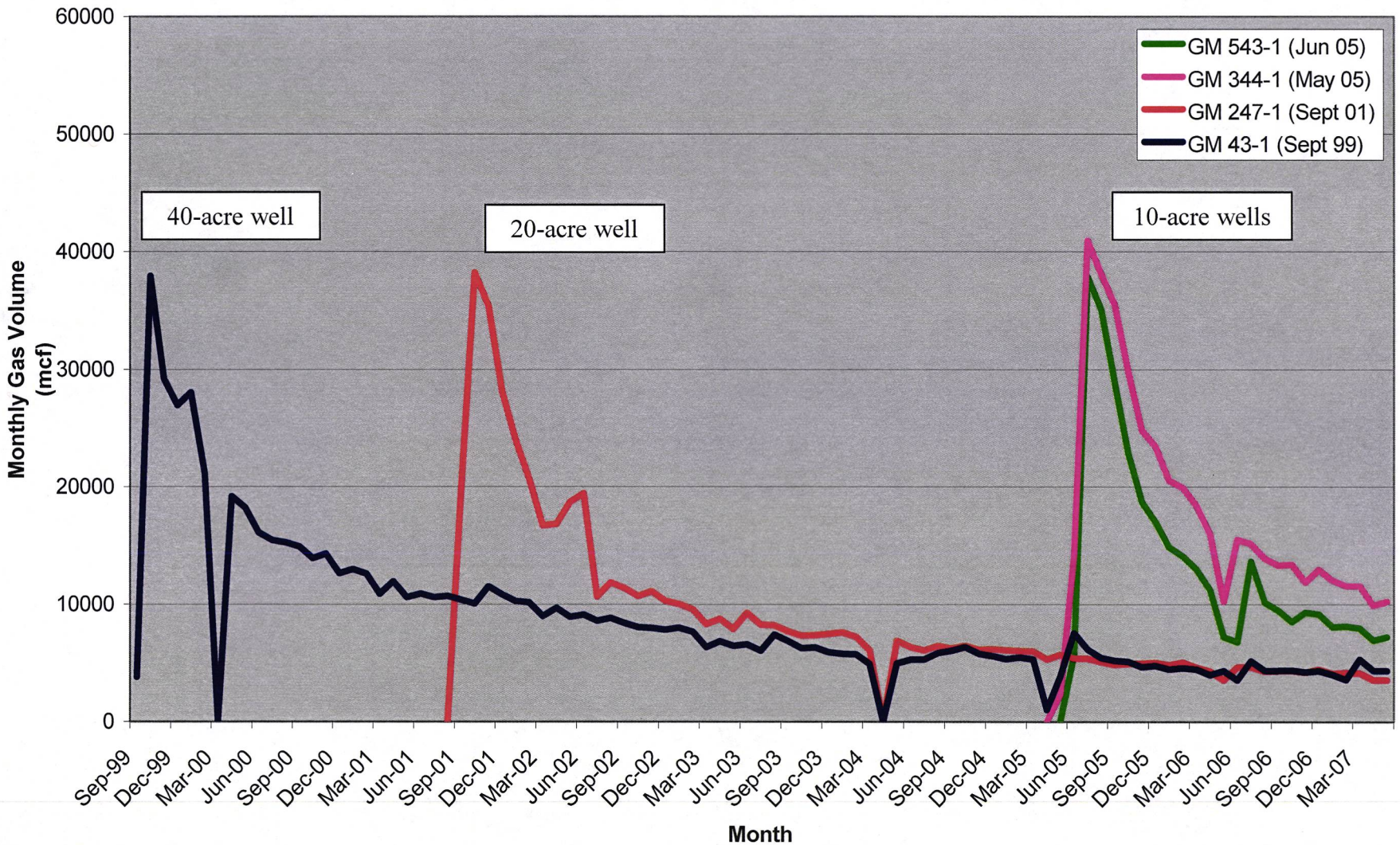
Grand Valley Field – 10-acre Offset Examples



WPXENERGY

Exhibit A-8
Cause No. 527
Docket No. 1412-AW-29

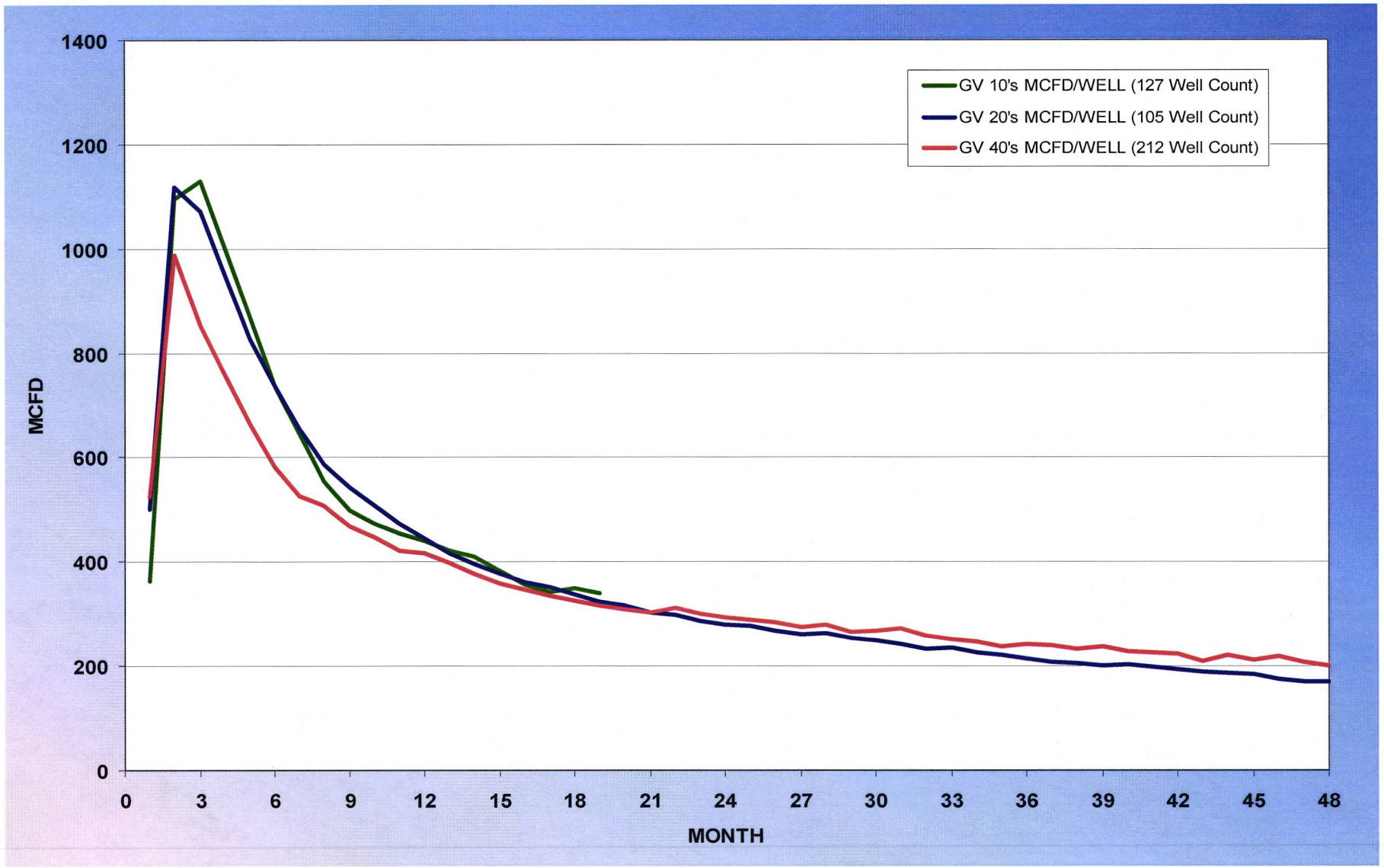
Grand Valley Field 4-well Example (Sec 1-7S-96W)
10-acre Offsetting Production



WPXENERGY

Exhibit A-9
Cause No. 527
Docket No. 1412-AW-29

Grand Valley Field Average Monthly Production Comparison

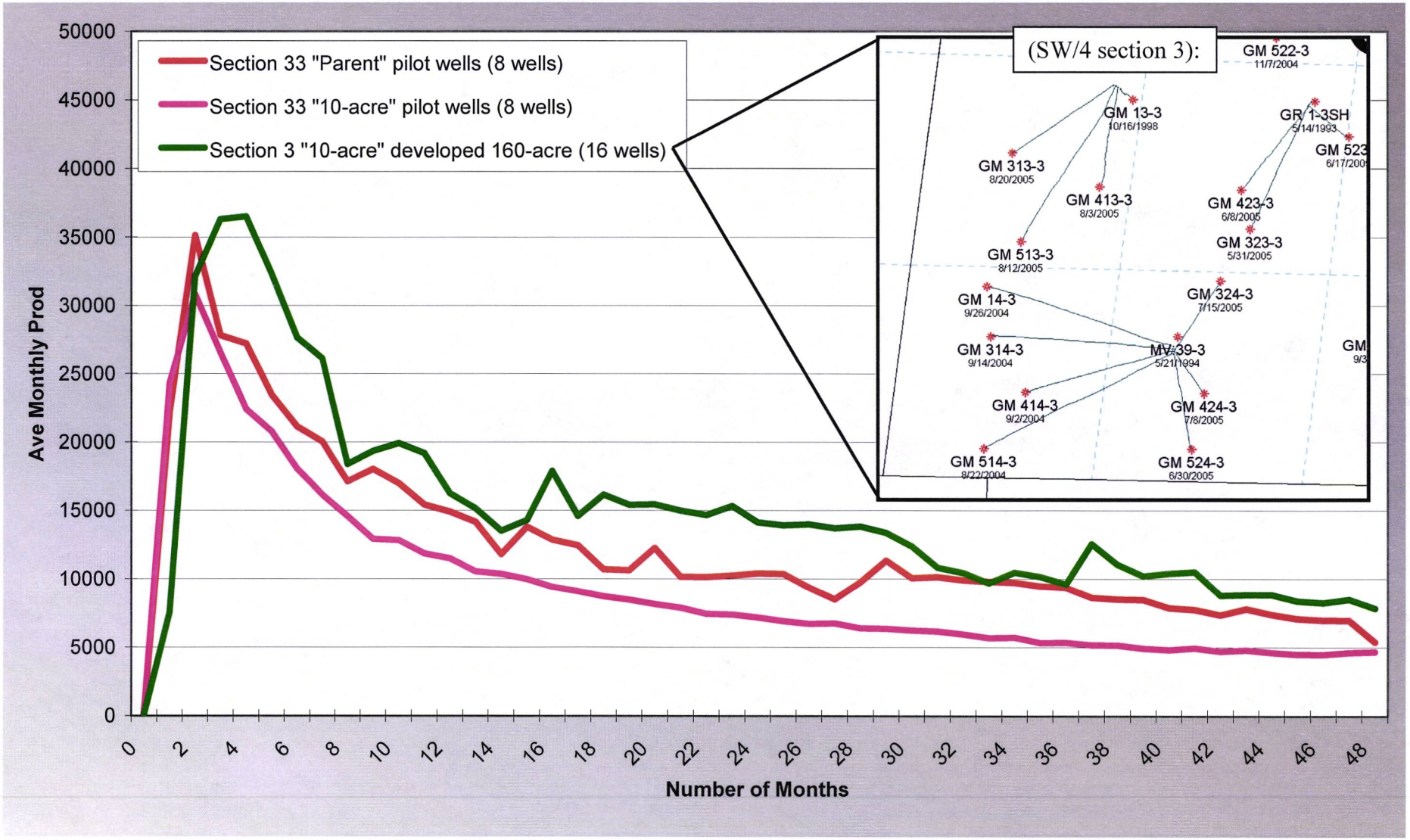


WPXENERGY

Exhibit A-10
Cause No. 527
Docket No. 1412-AW-29

Adjacent 160-acre in Grand Valley Field

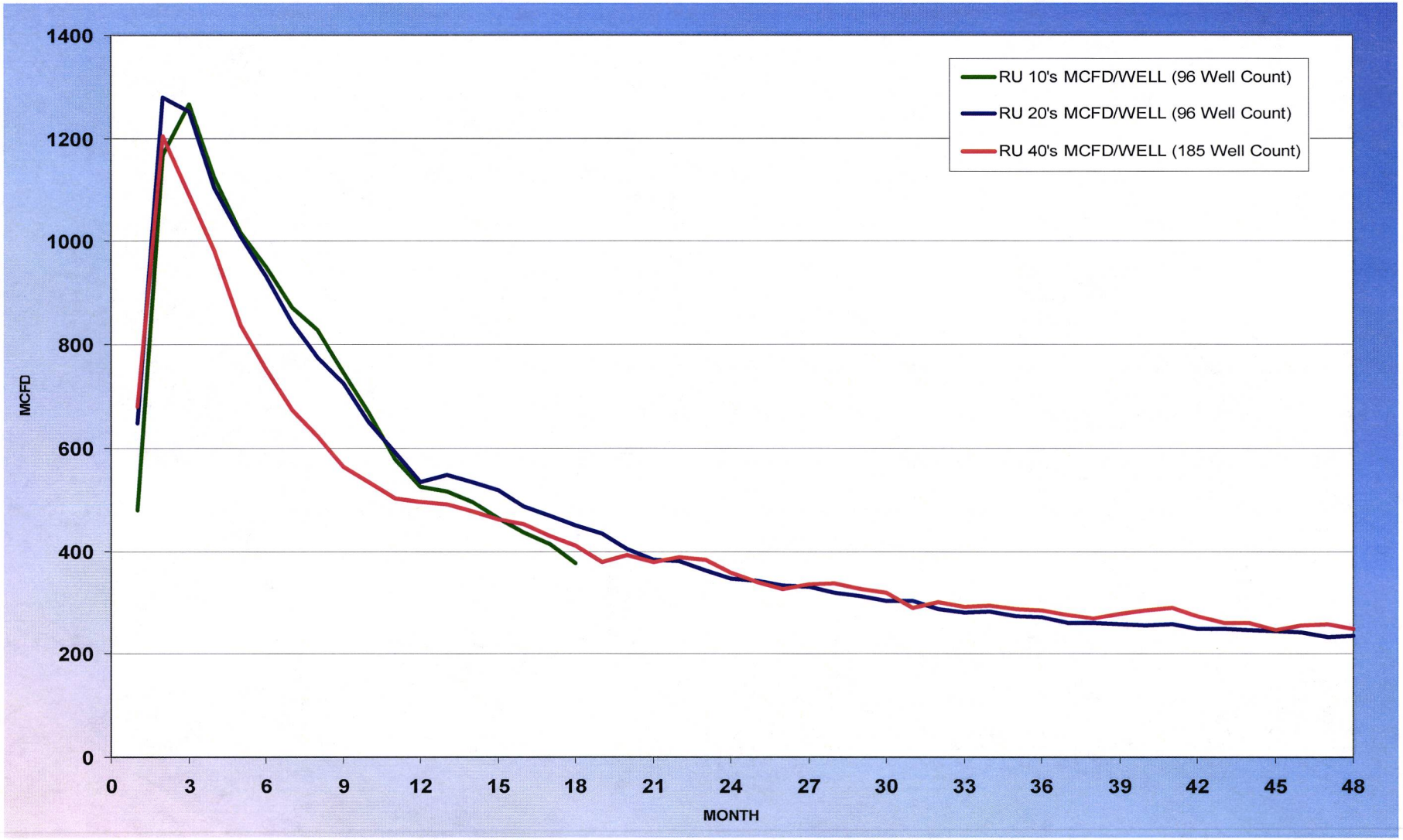
Average Monthly Production with "Optimal" Well Placement



WPXENERGY

Exhibit A-11
Cause No. 527
Docket No. 1412-AW-29

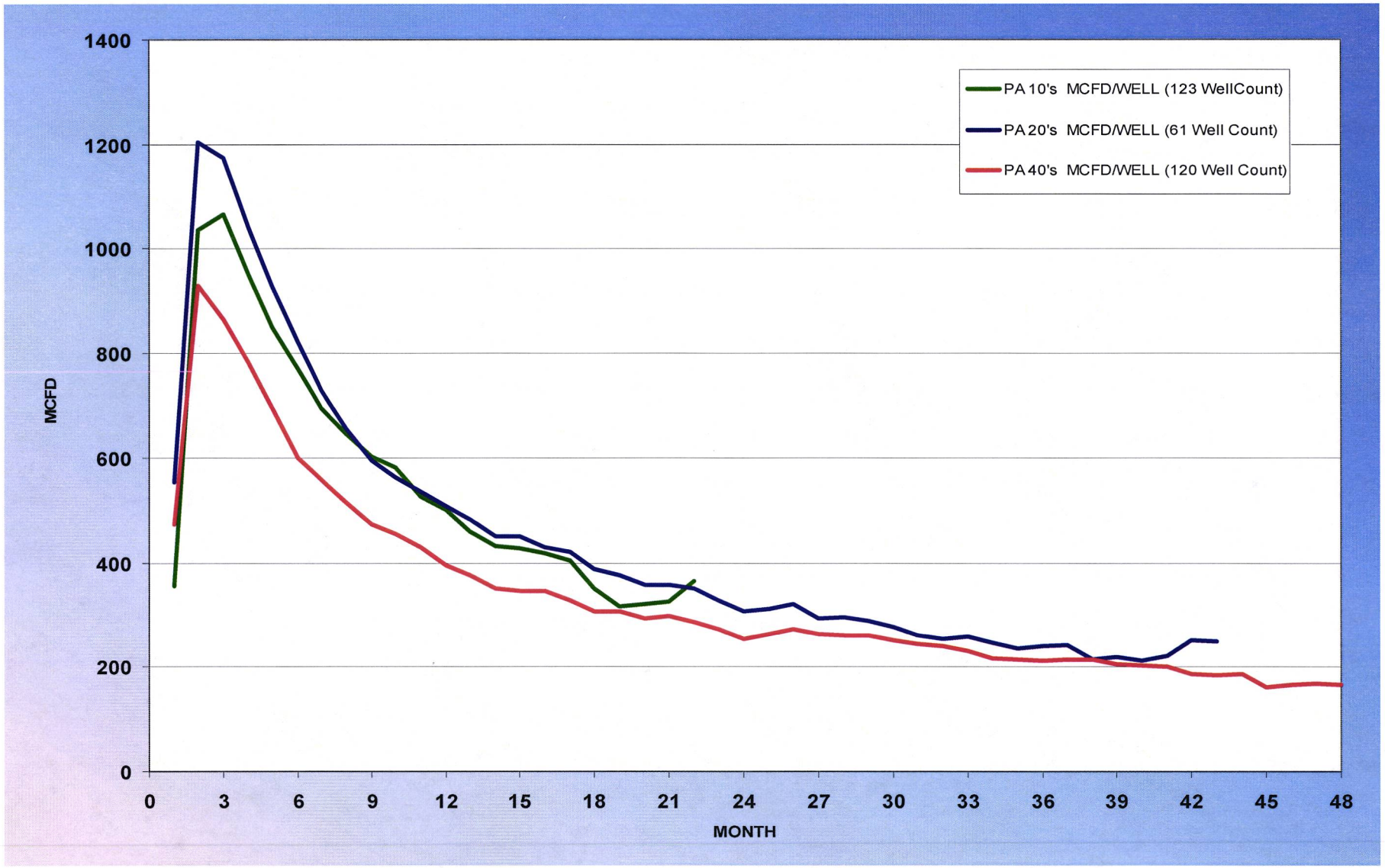
Rulison Field Average Monthly Production Comparison



WPXENERGY

Exhibit A-12
Cause No. 527
Docket No. 1412-AW-29

Parachute Field Average Monthly Production Comparison



WPXENERGY

Exhibit A-13
Cause No. 527
Docket No. 1412-AW-29

Summary of Gas-In-Place Estimates and Recoverable Gas Estimates

GAS IN PLACE PER 640 ACRES-WILLIAMS FORK

USGS 1987 Report	110.9 BCF	} Independent Research Reports
MWX Project - Rulison	120.9 BCF	
GRI 1999 Report	70 – 170 BCF	

Barrett 1995 GIP Analysis	87.0 BCF	Grand Valley/Parachute
Barrett 93 Well Survey	122.0 BCF	Rulison

Grand Valley 2002 WXP Energy Analysis	105.0 BCF
Parachute 2002 WXP Energy Analysis	120.0 BCF
Rulison 2002 WXP Energy Analysis	135.0 BCF

RECOVERY FACTORS AT DIFFERENT WELL DENSITIES

Well Density	Grand Valley @ 1.20 BCF/Well	Parachute @ 1.35 BCF/Well	Rulison @ 1.55 BCF/Well
640 Acres	1%	1%	1%
320 Acres	2%	2%	2%
160 Acres	5%	5%	5%
80 Acres	9%	9%	9%
40 Acres	18%	18%	18%
20 Acres	37%	36%	37%
10 Acres*	73%	72%	73%

* Application Density

WPXENERGY

Exhibit A-14
Cause No. 527
Docket No. 1412-AW-29

Summary of Gas-In-Place Estimates and Recoverable Gas Estimates (cont.)

10-acre Pilot Area Recovery

Gas in Place vs Recovery in 160 Acre Pilot area –Williams Fork

Grand Valley 26.25 BCF per 160-acre (from 2002 analysis)

Rulison 33.75 BCF per 160-acre (from 2002 analysis)

Grand Valley (SE/4 section 33):

EUR from Parent Wells (20-Acre Density):

11.3 BCF (43% Recovery)

EUR from 10-Acre Wells (10-Acre Density):

7.7 BCF + 11.3 BCF = 19.0 BCF (73% Recovery)

Rulison (E/2 SW, W/2 SE section 20):

EUR from Parent Wells (20-Acre Density):

12.1 BCF (36% Recovery)

EUR from 10-Acre Wells (10-Acre Density):

9.2 BCF + 12.1 BCF = 21.3 BCF (64% Recovery)

WPXENERGY

Exhibit A-15
Cause No. 527
Docket No. 1412-AW-29

Benefits of Early 10-acre Density Drilling
Approved Development

Drilling

- Take advantage of one rig move to a location to develop 10-acre wells within reach. Less $$'s for rig moves and re-disturbance of pads.
- Lessening the likelihood for well problems during drilling operations; stuck pipe, sidetracking, well control issues due to possible pressure variations between individual sand bodies.

Completions

- Increase the fracture stimulation effectiveness of all targeted pay sands which can be compromised if differing pressured sands are encountered during completions.
- Cost effective to complete multiple wells on one pad at the same time.

WPXENERGY

Exhibit A-16
Cause No. 527
Docket No. 1412-AW-29

Benefits of Early 10-acre Density Drilling Approved Development

Reservoir

- Ability to optimally place bottom hole locations that will in turn minimize well interference and maximize ultimate recovery of gas-in-place.

Community

- Lessens the assured return and re-disturbance of a well pad over and over for 40, 20, and 10-acre development.
- Would lessen operational time per well location and reduce prolonged road traffic.

WPXENERGY

Exhibit A-17
Cause No. 527
Docket No. 1412-AW-29

Engineering Summary

- Pressure testing and production analysis confirms geological model
- Unique opportunity to analyze an area with staggered time development (40's, 20's, and 10's)
- Bottom hole well placement very important to minimize interference
- Proven new gas recoveries on 10-acre development
- Minimize community impact – one time development

WPXENERGY

Exhibit A-18
Cause No. 527
Docket No. 1412-AW-29

Commingling Williams Fork with Iles and Sego

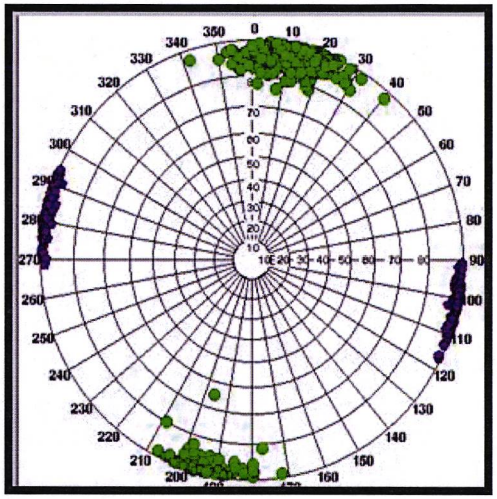
- It is our intent to drill wells, in which WPX Energy has deep rights, to the Iles and Sego formations. WPX Energy has already adopted the practice of commingling the Iles and Sego formations with the Williams Fork formation in the Piceance Basin. The results have been successful and WPX Energy believes that commingling these different horizons in a single wellbore is the most economic and efficient method.
- The economics which are shown in the attached exhibits show that drilling a stand alone Iles and Sego well is uneconomic. The incremental cost to drill and complete the Iles and Sego in a commingled Williams Fork wellbore is the most economic and efficient development scenario.
- The Iles and Sego formations are stimulated similarly to the Williams Fork during completion. Discontinuous sand bodies are present and limited entry hydraulic fracture design is implemented. Hydraulic fracture simulators have shown that fracture half lengths during a typical treatment are not propagating more than 600 feet.

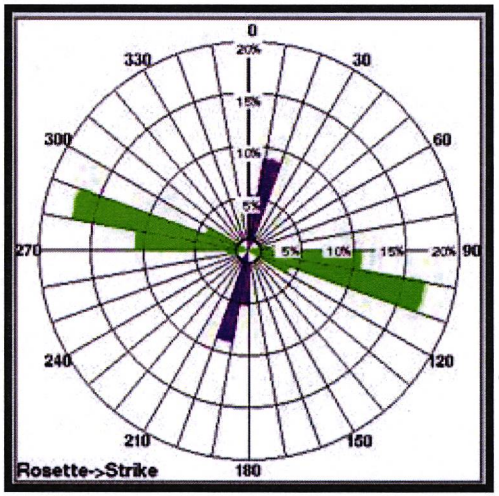
WPXENERGY

Exhibit A-19
Cause No. 527
Docket No. 1412-AW-29

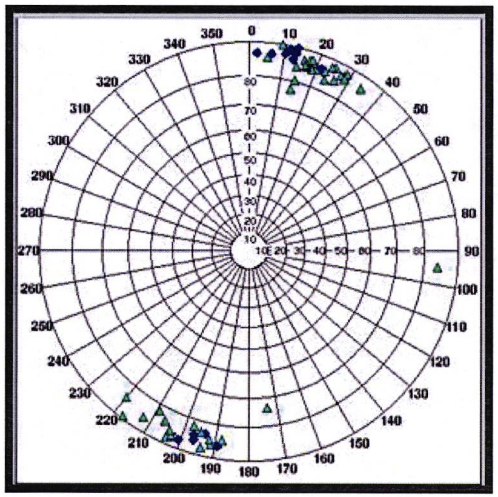
Ryan Gulch FMI Results

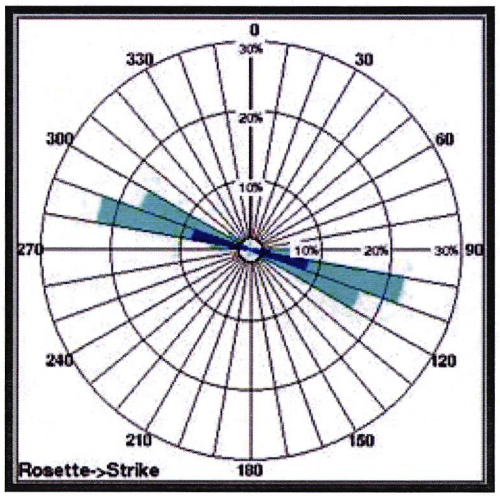
Drilling Induced Fractures





Natural Formation Fractures





WPXENERGY

Exhibit A-20
Cause No. 527
Docket No. 1412-AW-29

1001 17th Street, Ste 1200
Denver, CO 80202

Phone: (303) 260 - 4527
e-mail: Samuel burt@wpxenergy com

Samuel "Tyler" Burt

Experience

09/2011 – Present WPX Energy Denver, CO

Senior Petroleum Engineer

- Manage completion operations in Rulison and Ryan Gulch Fields of the Piceance Basin,
- Meet production and EUR targets through first sales and use of new technology,
- Control capital spend by optimizing fracture stimulation designs,
- Interpret open and cased-hole logs, as well as cement bond logs,
- Review vendor services and performance to improve efficiency,
- Effectively communicate with field personnel regarding daily operations,
- Collaborate across disciplines (Engineering, Geology, and Ops) to solve problems,
- Communicate with regulatory agencies to maintain compliance,
- Mentor Completions summer interns and new engineers, and
- Head up frac chemical reporting to FracFocus for the asset.

07/2006 – 08/2011 FMC Technologies, Inc. Denver, CO / Williston, ND

Frac Specialist / Base Mgr / Sales Representative

- 2.5 years in the field (Williston Basin)
- Served as company sole regional frac specialist,
- Awarded FMC Chairman's Award as part of fracturing business team,
- Analyzed and forecast future frac equipment rental market for Rocky Mt Region,
- Served as Surface Wellhead Base Mgr for Williston Basin startup facility,
- Managed safety processes,
- Coordinated service callouts and inventory management,
- Served as Northern Rockies Sales Representative,
- Helped to increase Williston revenue from $264K 2007 to $3.69MM in 2009,
- Decreased Williston base distribution costs from 160% of sales to 17%,
- Created and presented internal and external PowerPoint presentations, and
- Promoted positive image in community through participation in community and industry events

Cause No. 527
Docket No. 1412-AW-29

03/2001 – 06/2006 Halliburton Energy Services North Sea / Rock Springs, WY

Stimulation Engineer / Technical Professional

- Contributed to over 525 frac jobs, and mentored 5 new frac engineers,
- Modeled stimulations with FracPro PT and GOHFER,
- DFIT and step-rate analysis, as well as real-time pressure matching,
- Designed and executed various fracturing fluid systems (gel, water, CO2, and N2),
- Gave technical interpretation of fluid quality and pressure response,
- Proppant stimulation and matrix acidizing in both vertical and horizontal wellbores,
- Worked autonomously on technical issues,
- Maintained and ran Skandi Fjord stimulation vessel QA/QC lab and processes,
- Collaborated with Operations Mgr's to solve problems,
- Provided crew supervision on job locations,
- Forecast job chemical and proppant inventory requirements,
- Prepared post-job reports for customers, and
- Performed a North Sea well kill.

Education

09/1996–12/2000 Montana Tech of the University of Montana Butte, MT

Bachelor of Science, General Engineering (Mechanical Option) with a 3.28/4.00 graduating GPA, and passed the Engineer in Training (EIT) examination.

Other Training

Safety training - Halliburton, BP, Shell, and FMC; Halliburton training - Intro to Stim Design, Proppant Stim Design, Diagnostic Pumping 1, Formation Evaluation, GOHFER, Log Analysis, and Stim2001; FMC's Leadership Training Modules I & II; other - 7 Habits of Highly Effective People, Dealing With Unacceptable Employee Behavior, Defensive Driving, and Eagle Scout experience (BSA).

Interests

Family, my faith, hunting and fishing, sports and fitness, world travel, and music.

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