



April 27, 2011

Bureau of Land Management (3 copies)
Farmington Resource Area
Attn: Mr. Wayne Townsend
1235 La Plata Highway
Farmington, NM 87401

EXPLORATION & PRODUCTION
One Williams Center
P.O. Box 3102
Tulsa, OK 74101-3102
918/573-2000

State of New Mexico (2 copies)
Commissioner of Public Lands
Attn: Mr. Pete Martinez
P. O. Box 1148
Santa Fe, NM 87504-1148

State of New Mexico (2 copies)
Oil Conservation Division
Attn: Roy Johnson
1200 South St. Francis Drive
P. O. Box 2308
Santa Fe, New Mexico 87504-2308

Re: Rosa Unit I - Sec. 587
Initial Participating Area, Mancos formation
San Juan and Rio Arriba Counties, New Mexico

Ladies & Gentlemen:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement I – Section Number 587, dated January 6, 1948, Williams Production Company, LLC, as Unit Operator, hereby respectfully requests approval of the Initial Participating Area for the Mancos formation.

In accordance with Section 10 of the Rosa Unit Agreement, Williams Production Company, LLC as Rosa Unit Operator believes that the following unitized lands are reasonably proved to be productive of unitized substances in paying quantities from the Mancos formation (Geologic Inference):

(Initial Mancos Participating Area, Effective 10/6/2008)

T32N, R6W, Sections. 32-36
T31N, R6W, Sections 1-17
T31N, R6W, Sections 21-26
T31N, R5W, Sections 5-8
T31N, R5W, Sections 17-21
T31N, R5W, Sections 27-34

Total Participating Area Acres = 23,948.75 (Exhibit A)

Williams believes that Geologic Inference is justified based on extensive data gathering efforts in three areas, namely geology, seismic, and production.

Rosa Unit
Initial Participating Area
Mancos formation

Geology

The Cretaceous Mancos Shale is approximately 1,800' thick across Rosa and is located between the Mesaverde and Dakota formation, see Exhibit B. Zonal similarities within the Mancos Shale are identified through analysis of petrophysical properties from logs, see Exhibit C. The zonal similarities are designated as "clusters" and designated with an arbitrary color so that zonal similarities can be easily seen. Eight different cluster descriptions have been developed and are described in Exhibit D. To date, the olive and black/brown clusters have proven most productive, but testing is continuing on other clusters, in particular, the red/green and light blue (cyan).

Both whole and sidewall cores have been collected to improve the understanding of the Mancos Shale. Exhibit E shows the cored intervals in the Rosa Unit #166B in relation to the Black and Olive zones. X-ray diffraction was employed to evaluate mineralogy in the core data, which was used to further understand and identify the productive intervals in the Mancos Shale, see Exhibit F.

The identified clusters can be correlative across the Rosa Unit in drilled wells, which demonstrates geologic continuity across the Initial Participating Area, see Exhibits G, H, I, and J.

Seismic

During 2010, 3-D seismic data was acquired across most of the Initial Mancos Participating Area, see Exhibit K. No significant faulting was observed in the surveyed area. Further, correlated clusters from well logs can be seen across the seismic transverses, again demonstrating geologic continuity across the Initial Mancos Participating Area, see Exhibits L, M, N and O.

Production

Mancos wells within the designated area have been producing in varying quantities since the initial delivery date of October 6, 2008. Eight wells, see Exhibit P, with geographic diversity across the Initial Mancos Participating Area were evaluated for commerciality. These eight well locations are shown in Exhibit Q.

<u>Well</u>	<u>Location</u>
Rosa Unit #5C	SE/4 26-31N-6W
Rosa Unit #6C	SW/4 27-31N-5W
Rosa Unit #17C	SW/4 20-31N-5W
Rosa Unit #25C	SW/4 15-31N-6W
Rosa Unit #153C	NE/4 17-31N-5W
Rosa Unit #156D	NE/4 9-31N-6W
Rosa Unit #166B	NE/4 30-31N-5W
Rosa Unit #189	NE/4 21-31N-5W

While commerciality is demonstrated by these vertical wells, the recent completions of two horizontal Mancos wells indicate that EUR can be improved by more than 12 times. Creation of this Participating Area by Geologic Inference is justified based on geologic, seismic and production continuity demonstrated in the Exhibits. Furthermore, Geologic Inference significantly decreases the exploitation challenges required in horizontal drilling.

Attached hereto is the schedule for the Initial Mancos Participating Area. The schedule describes the Participating Area, shows the percentages of ownership in the tracts, and shows the percentages of unitized substances allocated to each unitized tract. Also included are maps (Exhibits R and S) reflecting the boundaries of the Rosa Unit and the proposed Initial Mancos Participating Area within the Unit. A total of 23,948.75 acres will be included in this Initial Mancos Participating Area.

If this proposed Participating Area as set forth herein meets with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy for our files.

Rosa Unit
Initial Participating Area
Mancos formation

Copies of this application are being sent to all Working Interest Owners. If you have any questions or need any additional information, please contact the undersigned at (918) 573-6181.

Sincerely,

A handwritten signature in cursive script, reading "Kristine Russell". The signature is written in dark ink and is positioned above the printed name and title.

Kristine Russell
Land Data Specialist

Cc: Working Interest Owners
Federal Land Management Team
MC File

Rosa Unit
Initial Participating Area
Mancos formation

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Commission

APPROVED _____ DATE _____
Assistant District Manager, Minerals
Bureau of Land Management
Subject to like approval by the Commissioner of Public Lands
And the Oil Conservation Commission

APPROVED _____ DATE _____
Commissioner of Public lands
Subject to like approval by the Area Oil & Gas Supervisor
And the Oil Conservation Commission

APPROVED *Ch Martinez* DATE 4/29/2011
Oil Conservation Commission
Subject to like approval by the Area Oil & Gas Supervisor
And the Commissioners of Public Lands

The foregoing are approvals for the Initial Participating Area in the Mancos formation of the Rosa Unit I - Sec. 587.

WORKING INTEREST OWNERS
ROSA UNIT

BP AMERICA PRODUCTION CO.
ATTN: DONNA JONES
P.O. BOX 3092
HOUSTON, TX 77253

SCHULTZ MANAGEMENT, LTD.
500 N. AKARD, SUITE 2940
DALLAS, TX 75201

MS. ELIZABETH T. CALLOWAY
P.O. BOX 191767
DALLAS, TX 75219-1767

FRED E. TURNER, LLC
4925 GREENVILLE AVE., SUITE 852
DALLAS, TX 75206-4079

J. GLENN TURNER, JR. LLC
4809 COLE AVE., SUITE 212
DALLAS, TX 75205

XTO ENERGY, INC.
ATTN: EDWIN S. RYAN, JR.
810 HOUSTON STREET, STE 2000
FORT WORTH, TX 76102-6298

MARY FRANCES TURNER, JR TRUST
ATTN: SHERI ANDERSON
TX1-2931
P O BOX 660197
DALLAS, TX 75266-0197

MR. JOHN TURNER
PO BOX 329
PORT ARANSAS, TX 78373

PATRICIA P. SCHIEFFER TRUST, BANK OF AMERICA, N.A. AGT
ATTN: BILL BLEDSOE
P.O. BOX 2546
FORT WORTH, TX 76113-2546

OMIMEX PETROLUEM, INC.
ATTN: CLARK P. STORMS
2001 BEACH ST., SUITE 810
FORT WORTH, TX 76103

MS. VICTORIA WEBB
806 CORDOVA
DALLAS, TX 75223

HENRIETTA E. SCHULTZ, TRUSTEE
500 NORTH AKARD, SUITE 2940
DALLAS, TX 75201

SACRAMENTO MUNICIPAL UTILITIES DISTRICT
ATTN: BARRY BRUNELLE
P. O. BOX 15830
SACRAMENTO, CA 95852-1830

CONOCOPHILLIPS COMPANY
ATTN: ROB HELTON
P. O. BOX 4289
FARMINGTON, NM 87499-4289

SCHEDULE 1
R THE MANC

[illegible]

SCHEDULE I
INITIAL PARTICIPATING AREA FOR THE MANCOS FORMATION ROSA UNIT AREA

[illegible]

SCHEDULE I

[illegible]

SCHEDULE 1

[illegible]

SCHEDULE

[illegible]

SCHEDULE I

[illegible]

SCHEDULE

[illegible]

SCHEDULE 1

E-289-43	T31N R6W	Sec 21: 71.56 acres out of the E/2NE1/4 Sec 16: 6.44 acres in the S/2S/2SE4SE1/4 of Sec 16 Also described as the W/2SE1/4 of the resurveyed tracts lying in Sec. 15, 16, 21 & 22	80.00	WORKING INTEREST BP America Production Co. ROYALTY ORRI	100.0000000%	85.0000000%	12.5000000%	2.5000000%	100.0000000%	0.334047%
E-289-50	T31N R6W	Sec 15: 6.41 acres out of S/2S/2SW1/4SW1/4 Sec 22: 71.59 acres in the W/2NW1/4 Also described as the E/2SE1/4 of the resurveyed tracts in Sec. 15, 16, 21 & 22	80.00	Tract 43 WORKING INTEREST ConocoPhillips ROYALTY ORRI	100.0000000%	82.5000000%	12.5000000%	5.0000000%	100.0000000%	0.334047%
E-504-15	T32N R6W	Sec 32: W/2	320.00	Tract 44 WORKING INTEREST ConocoPhillips ROYALTY ORRI	100.0000000%	84.5000000%	12.5000000%	3.0000000%	100.0000000%	1.336187%
E-504-19	T32N R6W	Sec 32: E/2	320.00	Tract 45 WORKING INTEREST Williams Production Co. LLC Fred E. Turner LLC Elizabeth T. Calloway J. Glenn Turner LLC John L. Turner Mary F. Turner, Jr. Trust ROYALTY ORRI	100.0000000%	32.8125000%	6.5625000%	6.5625000%	100.0000000%	1.336187%
Fee	T32N R6W	Sec 34: W/2NW1/4	80.00	Tract 46 WORKING INTEREST Williams Production Co. LLC ROYALTY ORRI	100.0000000%	86.5000000%	12.5000000%	1.0000000%	100.0000000%	0.334047%
E-346-30	T32N R6W	Sec 36: W/2	320.00	Tract 47 WORKING INTEREST Williams Production Co. LLC ROYALTY ORRI	100.0000000%	86.5000000%	12.5000000%	1.0000000%	100.0000000%	1.336187%

SCHEDULE I

E-346-33	132N ROW						1.36187%
	Sec 36: E/2	320.00	WORKING INTEREST				
			Fred E. Turner LLC	10.000000%	6.562500%		
			Elizabeth T. Calloway	10.000000%	6.562500%		
			J. Glenn Turner LLC	10.000000%	6.562500%		
			John L. Turner	10.000000%	6.562500%		
			Mary F. Turner, Jr. Trust	10.000000%	6.562500%		
			Williams G. Webb	5.000000%	3.281250%		
			Frank A. Shultz	45.000000%	29.531250%		
			ROYALTY		12.500000%		
			ORRI		21.875000%		
		170.01	23948.75	100.000000%	100.000000%	100.000000%	

UNIT AREA EXPANSION SCHEDULE

SCHEDULE INITIAL
INITIAL PARTICIPATING AREA FOR THE MANCOS FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of lands in Mancos Participating Areas

Township 31 North, Range 5 West, N.M.P.M.

Sections 5, 6, 7, 8, 17, 18, 19, 20, 21, 27, 28, 29, 30, 31, 32, 33, 34 ALL

Township 31 North, Range 6 West, N.M.P.M.

Sections 1, *2, *3, *4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, ALL
24, 25, 26 ALL

Township 32 North, Range 6 West, N.M.P.M.

Sections 32, *33, *34, 35, 36: ALL

Total number of acres in Participating Area:	24,118.76
Total number of acres not committed to Participating Area:	170.01
Total number of acres committed to Participating Area:	23,948.75

*Portions of this acreage not committed to unit.

Effective October 6, 2008

WILLIAMS PRODUCTION COMPANY, LLC
SUMMARY BY OWNER
ROSA UNIT MANCOS
INITIAL EXPANSION

owner	Working Interest
BP America Production Co.	0.291636876
Williams Production Co. LLC	0.616506137
XTO Energy	0.03640524
Fred E. Turner LLC	0.005077509
Elizabeth T. Calloway	0.005077509
J. Glenn Turner LLC	0.005077509
John L. Turner	0.005077509
Mary F. Turner, Jr. Trust	0.005077509
Onimex Petroleum, Inc.	0.006680933
ConocoPhillips	0.016702333
Williams G. Webb	0.000668093
Frank A. Shultz	0.00601284
	1.000000000

Exhibit A - Rosa Mancos Initial Participating Area

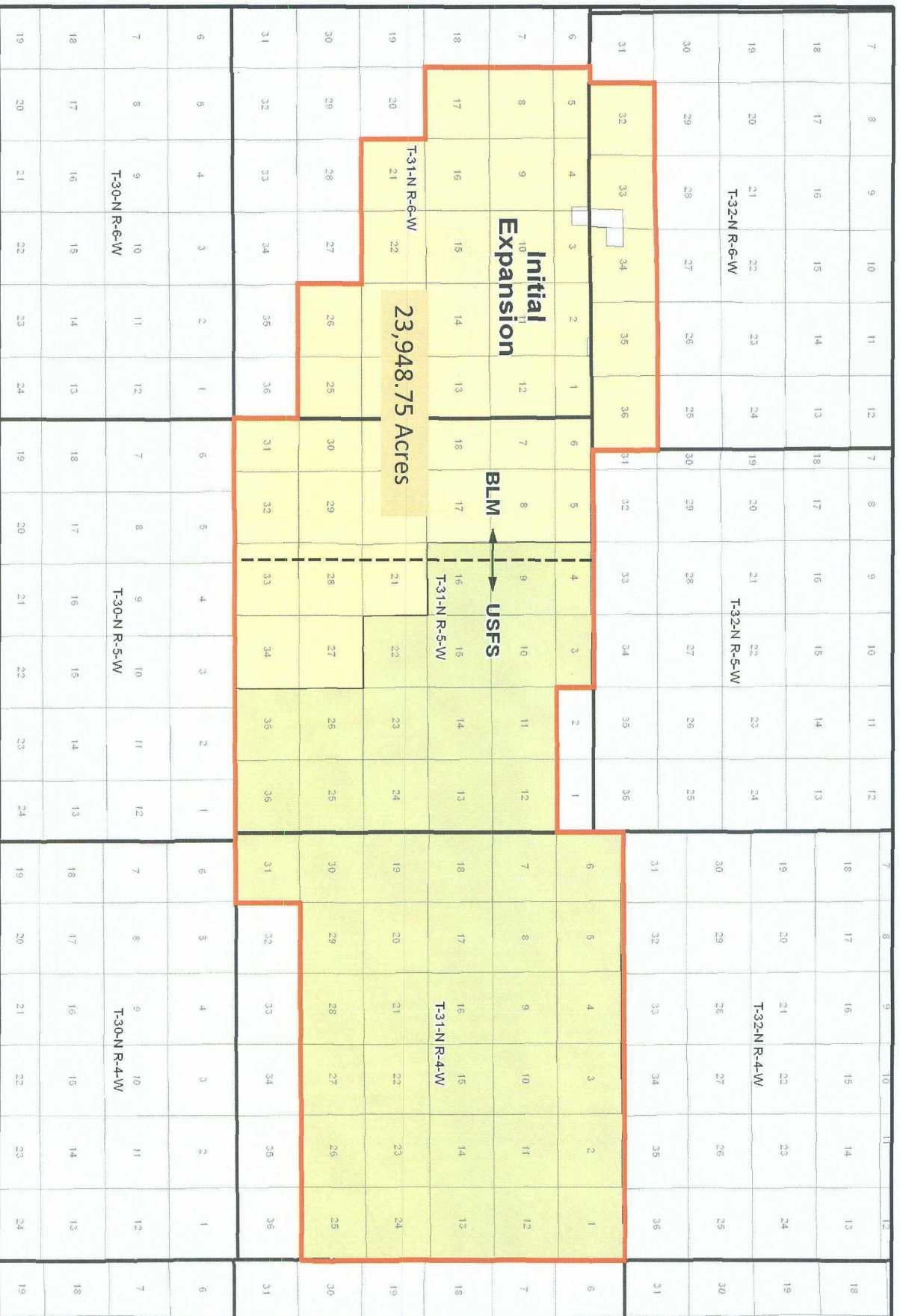


Exhibit B - San Juan Basin Stratigraphic Column

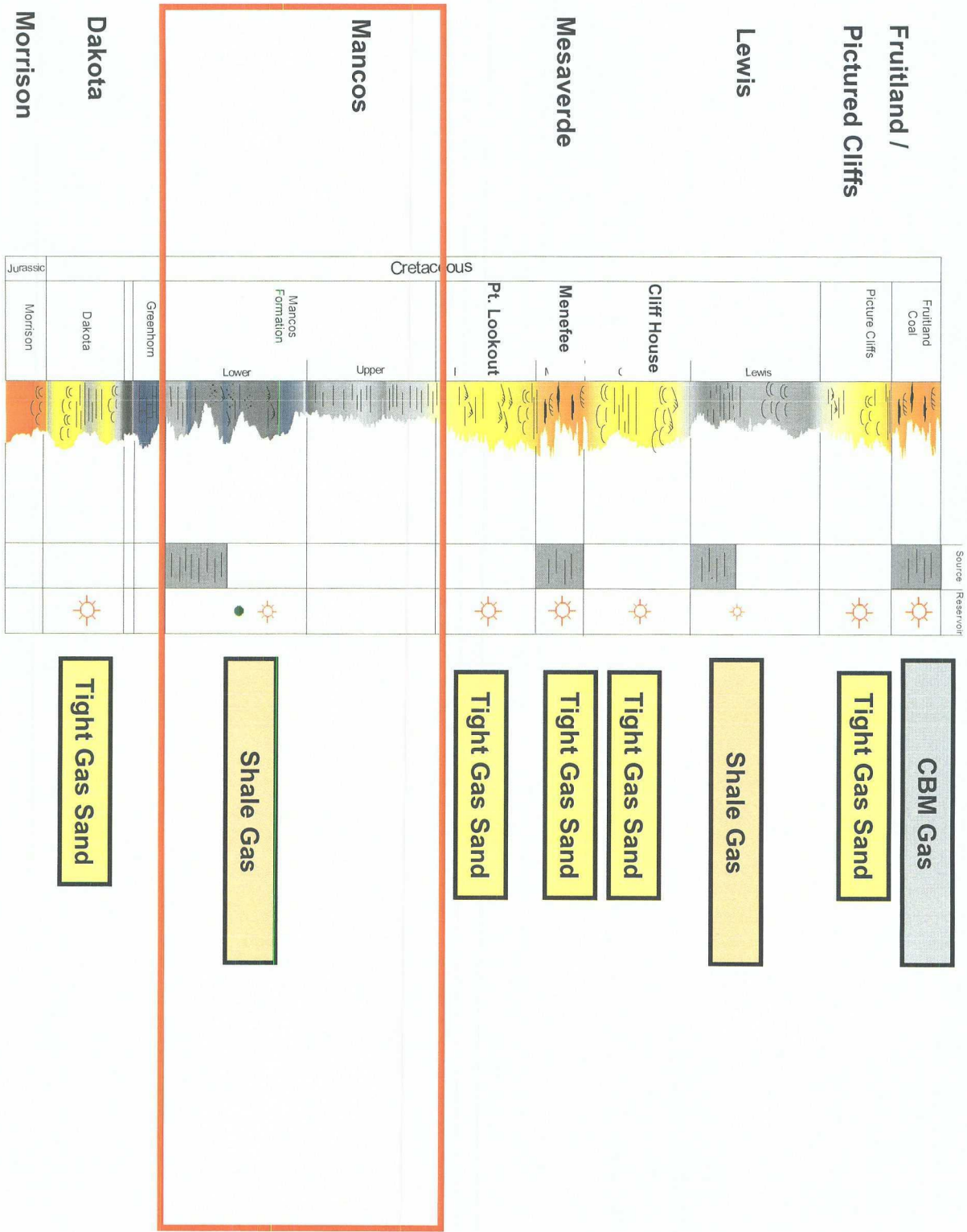
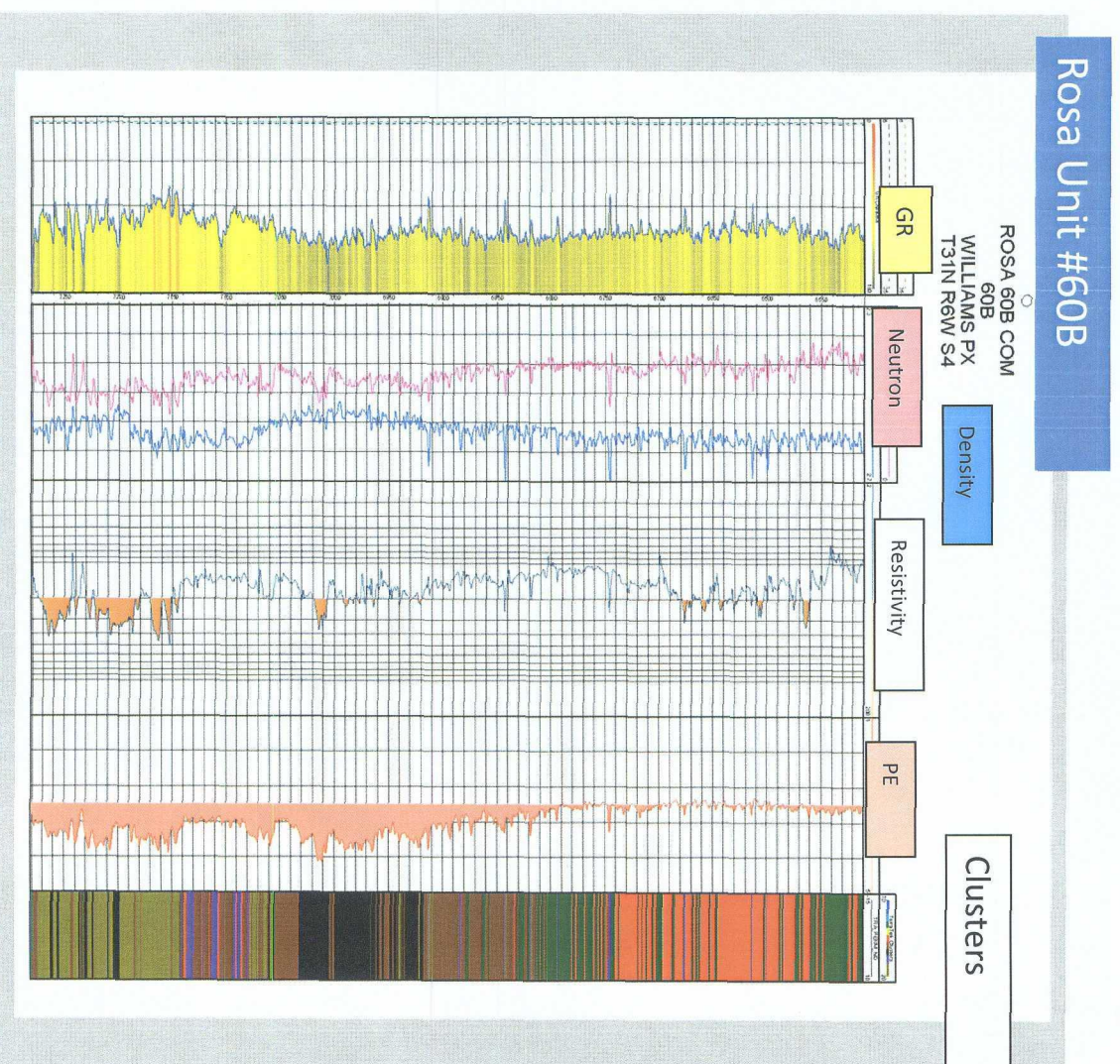


Exhibit C - Log Cluster Analysis



- Clusters are calculated from standard open-hole logs
- Clusters define depths where open-hole log character is similar
- Clusters are related to rock properties such as porosity, permeability, saturations, and mechanical strength
- Clusters can define relative reservoir and completion qualities in the shale
- Core program designed to adequately characterize cluster properties

Exhibit D - Cluster Characterization

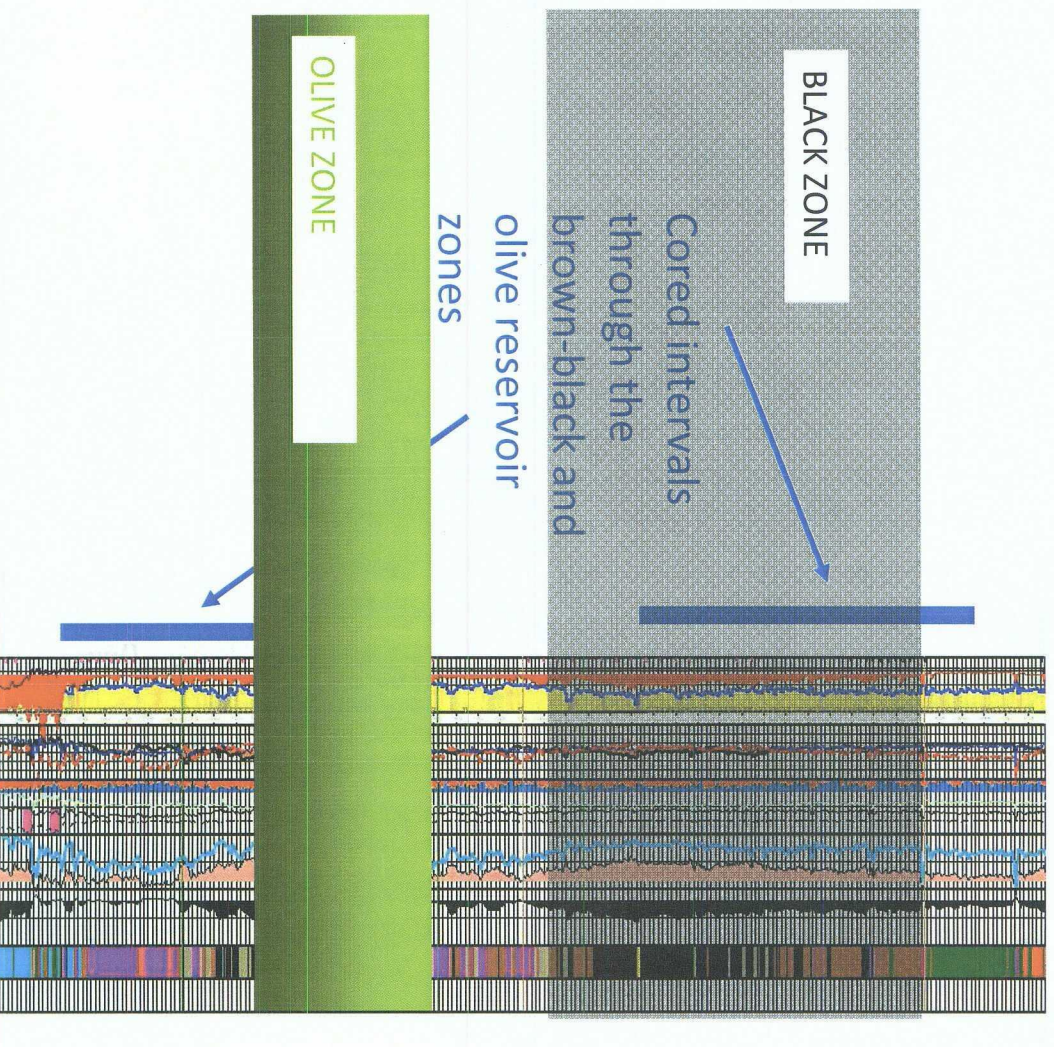
Material Property Cluster	Reservoir quality	Lithotype(s)	Descriptions
black	high	argillaceous mudstone	high TOC, pervasive fecal pellets, variable foram. laminae, present mainly in upper core
brown	high	laminated argillaceous or silty argillaceous mudstone	TOC 1-2%, pervasive fecal pellets; silty laminae, organics or silt define laminae
green	medium	laminated argillaceous or silty argillaceous mudstone	TOC about 1-1.5%; silt layers define lamination
light blue	medium	laminated argillaceous to calc/argil mudstone	argillaceous mudstone, some lamination, forams or mollusk layers, lower TOC, higher clay content
olive	medium to high	laminated calcareous mudstone	mainly laminated; abundant silt and microfossils; calcareous cement, pellets
olive Ddk	medium	fine-med sandstone (Dakota)	Dakota Formation, quartz rich laminated to bioturbated; tightly cemented
purple	low	bioturbated sandy argillaceous mudstone	sand and silt grains churned with mud; lower TOC; few samples laminated
red	low	calcareous and argillaceous mudstone	two samples only; abundant calcareous cement and microfossils

Best Mancos intervals
contain:

- ❖ Highest TOC
- ❖ Highest eff. poros.
- ❖ Highest gas-filled porosity
- ❖ Highest perm
- ❖ Highest gas satur.
- ❖ Highest amount of fecal pellets
- ❖ Highest brittleness
- ❖ Lowest clay content

Exhibit E - Log Character Correlated to Clusters

ROSA UNIT 166B



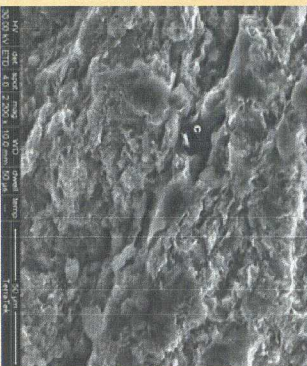
100 feet

Core samples selected based upon log clusters

Cored intervals tested all 8 clusters

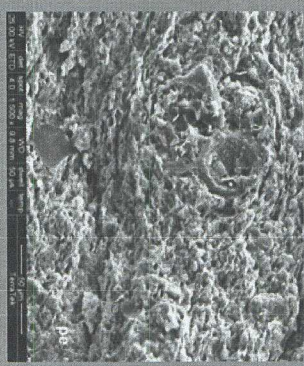
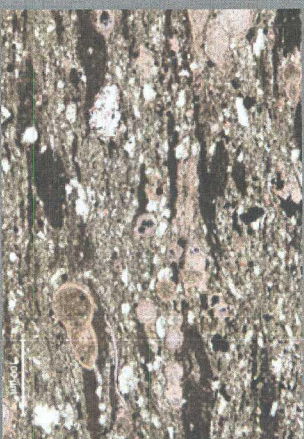
Exhibit F - Further Evaluation of Reservoir Quality

Brown Cluster in Lower Mancos (7119 ft)



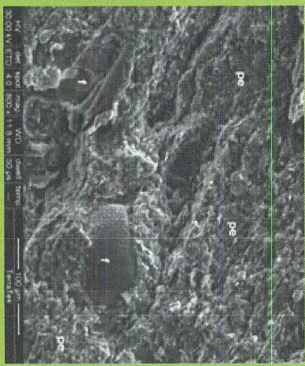
XRD	
Quartz/Feldspars/Pyrite	43
Carbonates	23
Total Non-Clay	66
Clays	34
Laminated Silty Argillaceous Mudstone	
TS: Alternating laminae of dispersed pellets and silt. Similar mineralogy to Brown above, but fewer pellets	
SEM: Clay-rich laminae with carbonaceous particle (c).	

Black Cluster in Upper Mancos Fall (6982.2 ft)



XRD	
Quartz/Feldspars/Pyrite	31
Carbonates	35
Total Non-Clay	66
Clays	34
Laminated Calcareous/Argillaceous Mudstone	
TS: Laminae consist of abundant silt-sized forams. Abundant flattened pellets	
SEM: Visible matrix microporosity with pellets (pe) a significant textural element	

Olive Cluster in Lower Mancos (7142 ft)



XRD	
Quartz/Feldspars/Pyrite	41
Carbonates	30
Total Non-Clay	71
Clays	29
Calcareous/Argillaceous Mudstone	
TS: Laminae consist mainly of forams and mollusc fragments. Fewer pellets than above	
SEM: Foram fragments (f) and pellets (pe) in coarser laminae.	

CLUSTER

CHARACTERIZATION

INVOLVES DATA

FROM:

➤ THIN SECTIONS

➤ SCANNING

ELECTRON

MICROSCOPY

➤ RESERVOIR

MEASUREMENTS

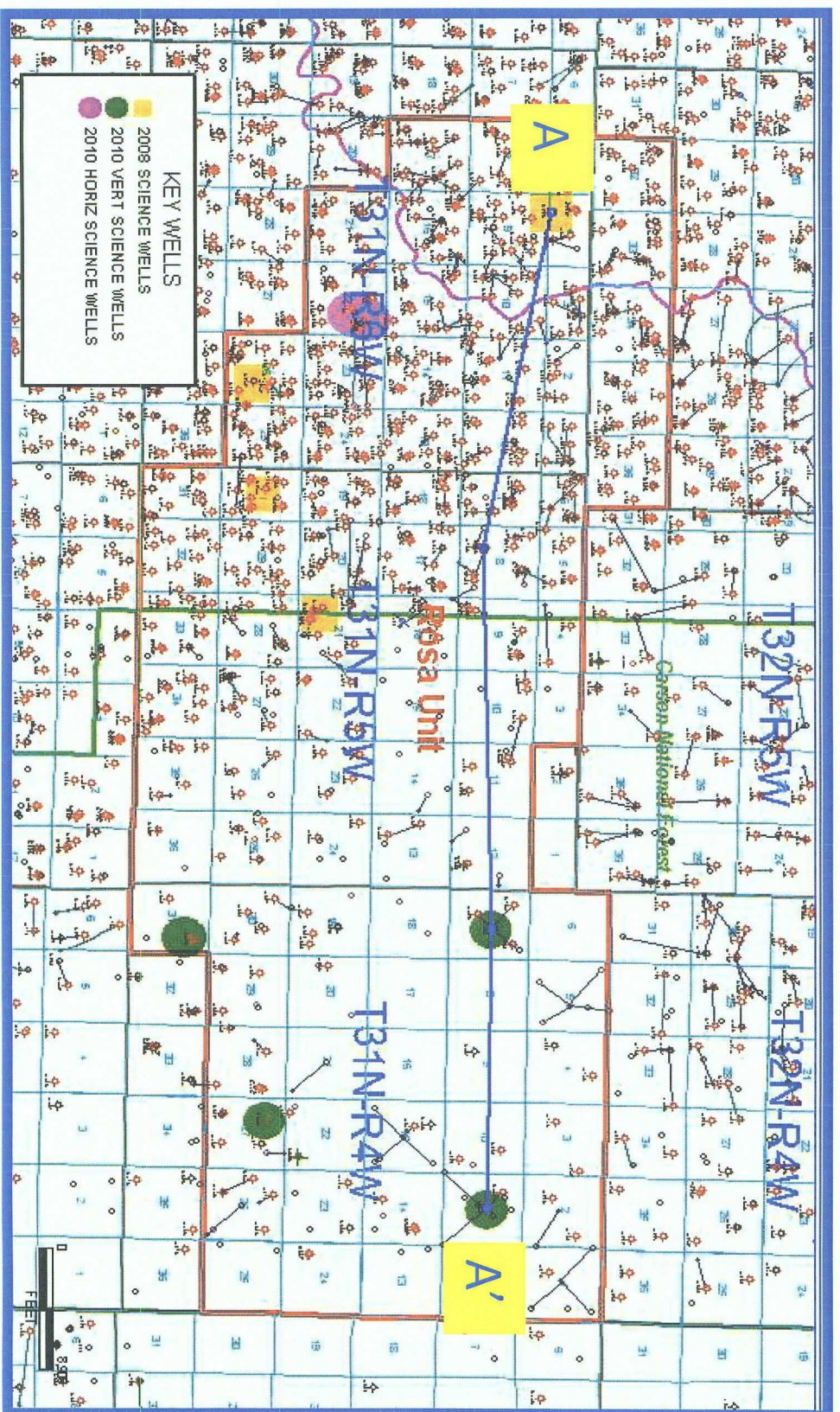
➤ MINERALOGY

FROM X-RAY

DIFFRACTION

➤ GEOCHEMISTRY

Exhibit G - Location of West to East Cross Section A-A'



A'



Exhibit I - Location of West to East Cross Section B-B'

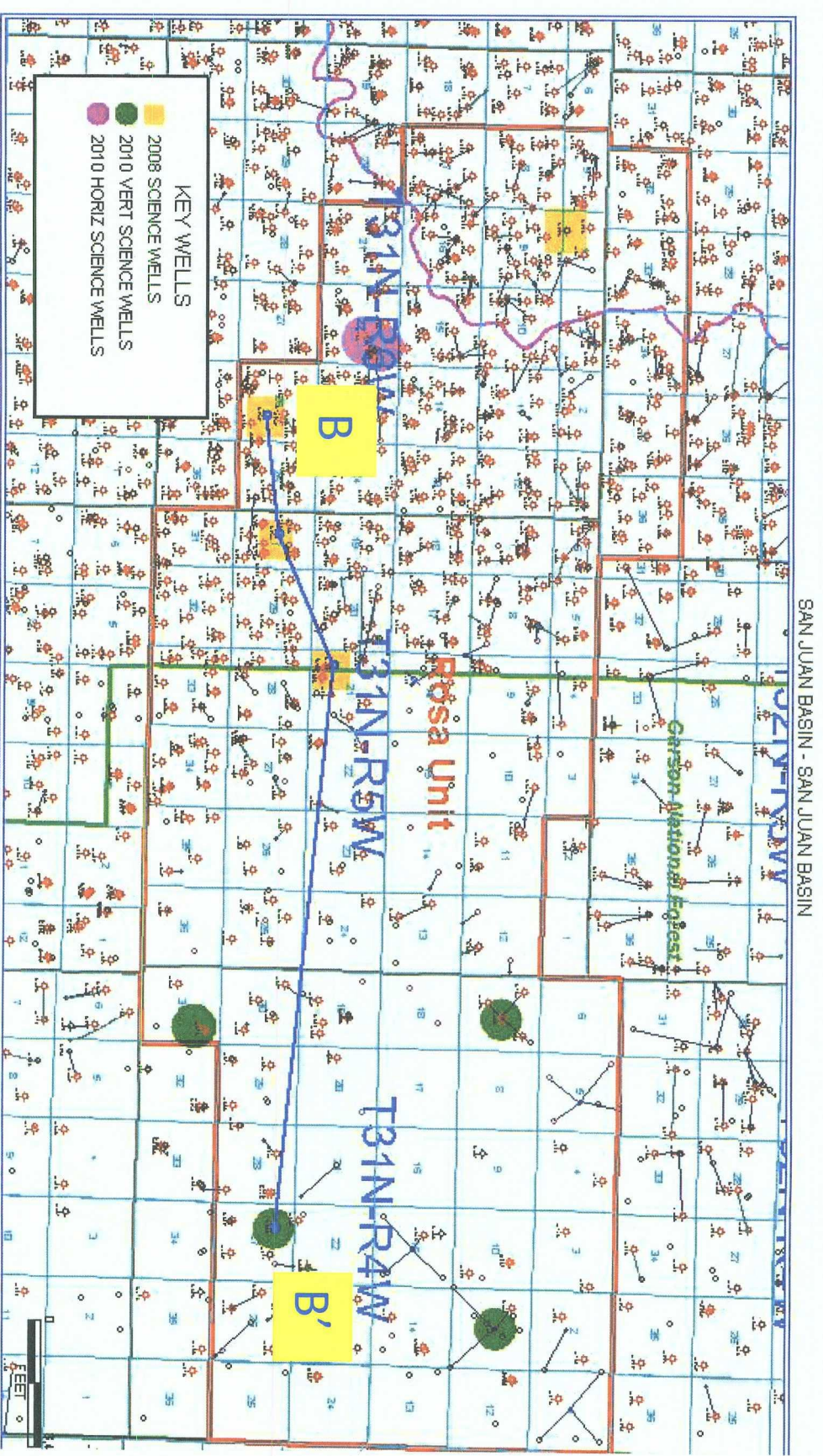
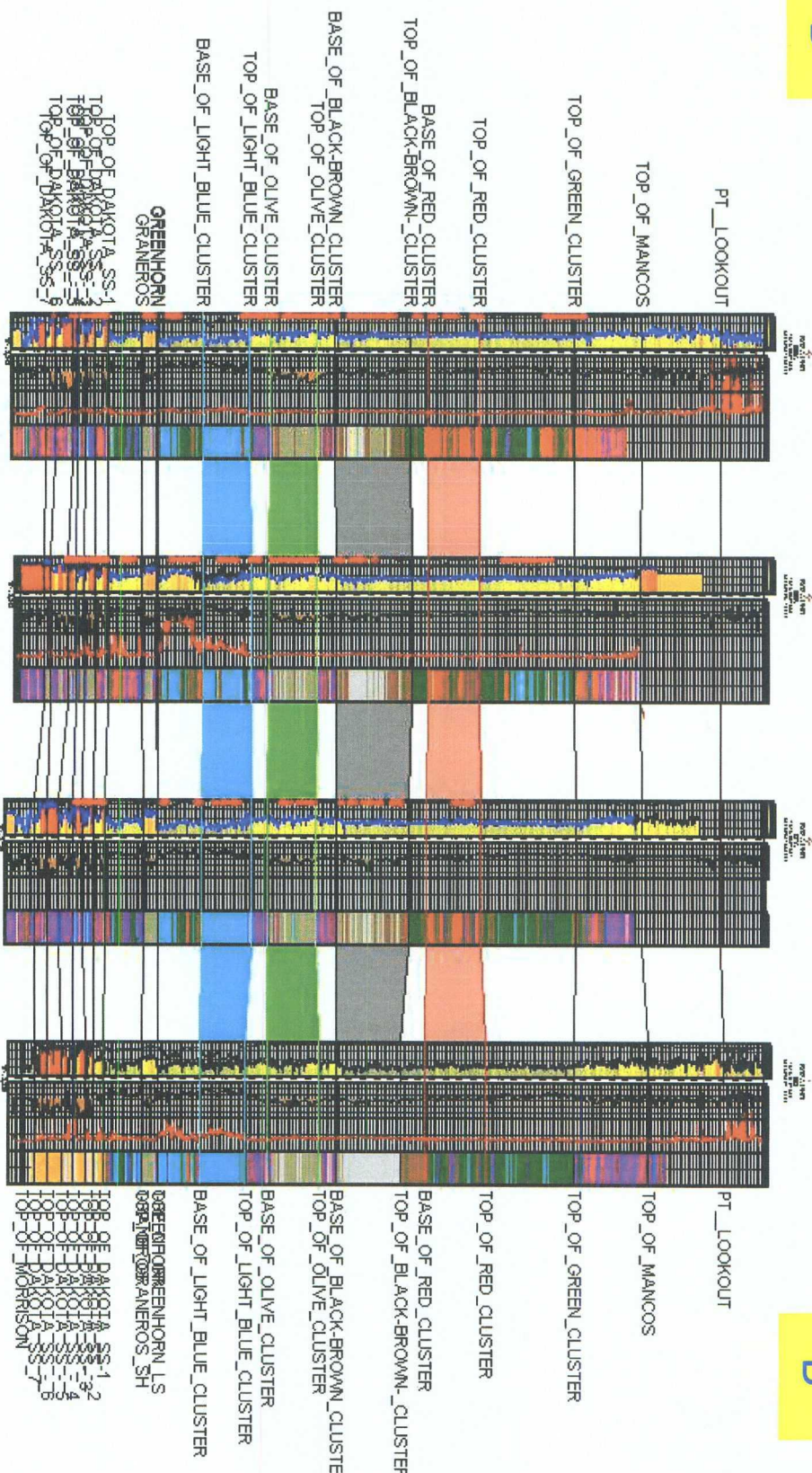


Exhibit J - West to East Cross Section A-A'

B



B'

DATUM: Top of Greenhorn Limestone

Exhibit K - 2010 Seismic Data Acquisition (48 sq. miles)



Exhibit L – South/North Seismic Traverse A-A'

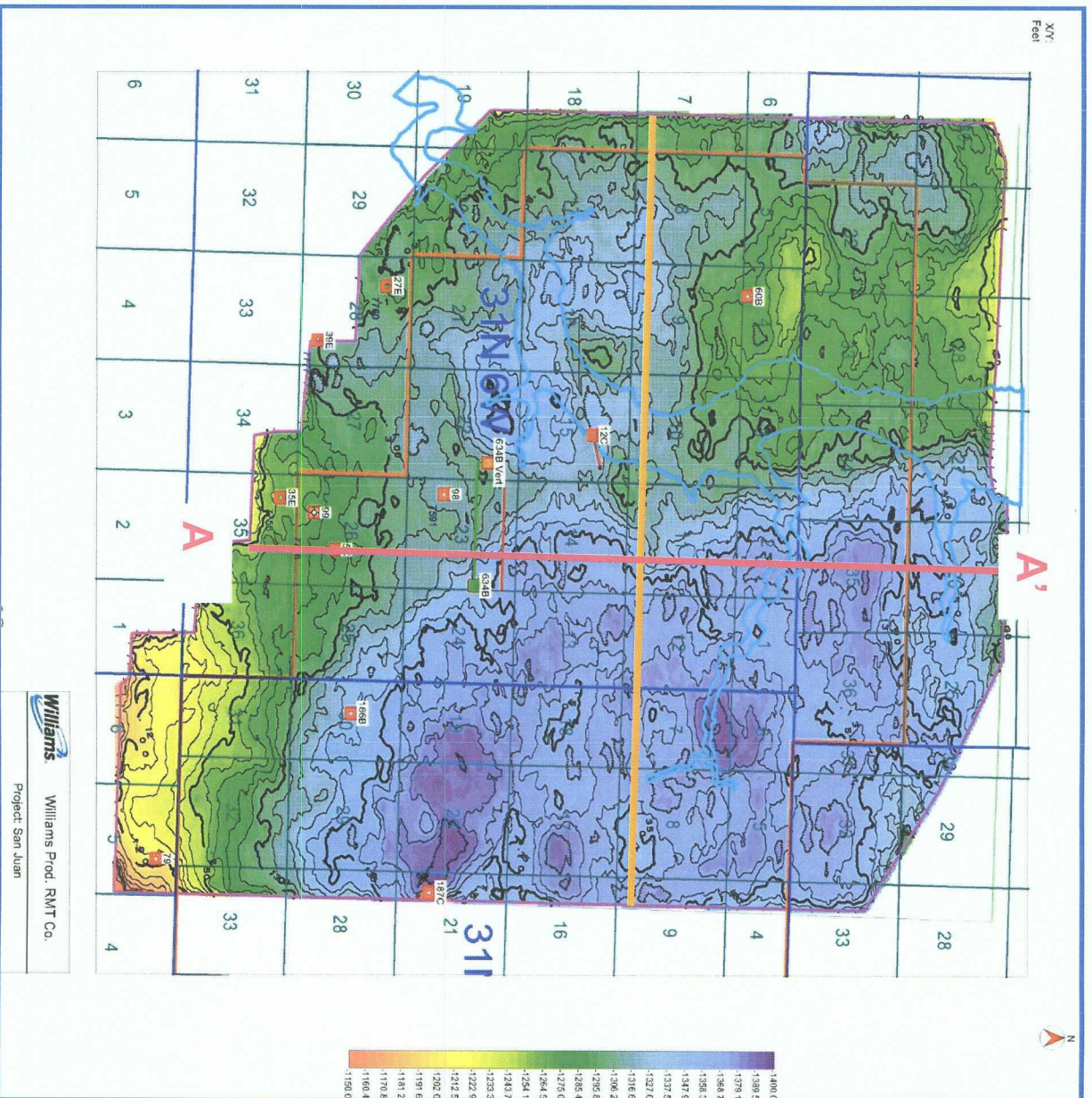
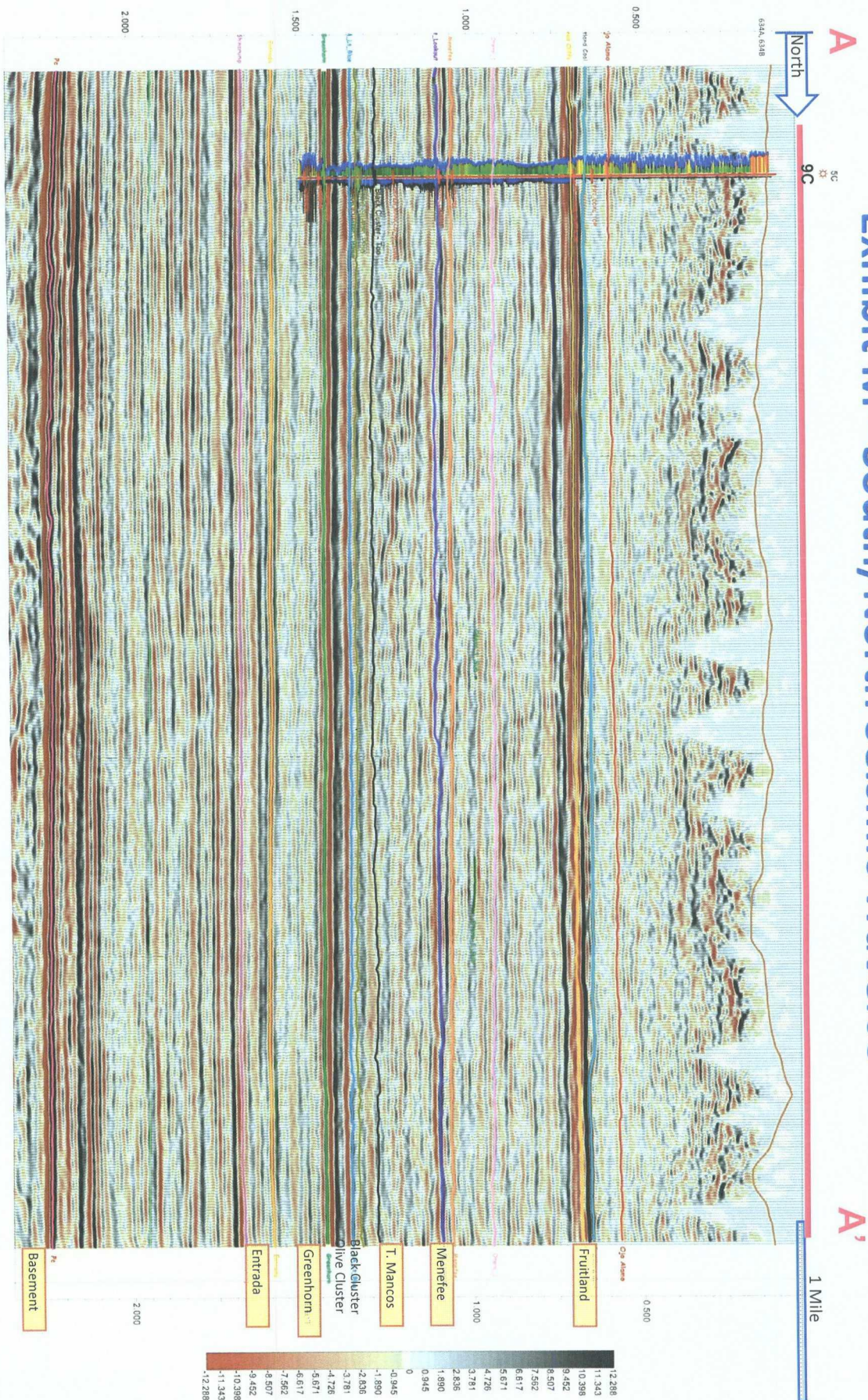


Exhibit M - South/North Seismic Traverse



- Mancoos Clusters: Geophysical Signature; Lateral Continuity
- 6.6 Mile-long South/North Traverse

~ 1.67:1
Horizontal
Compression



Williams Prod. RMT Co.

Project: San Juan

Exhibit N – West/East Seismic Traverse B-B'

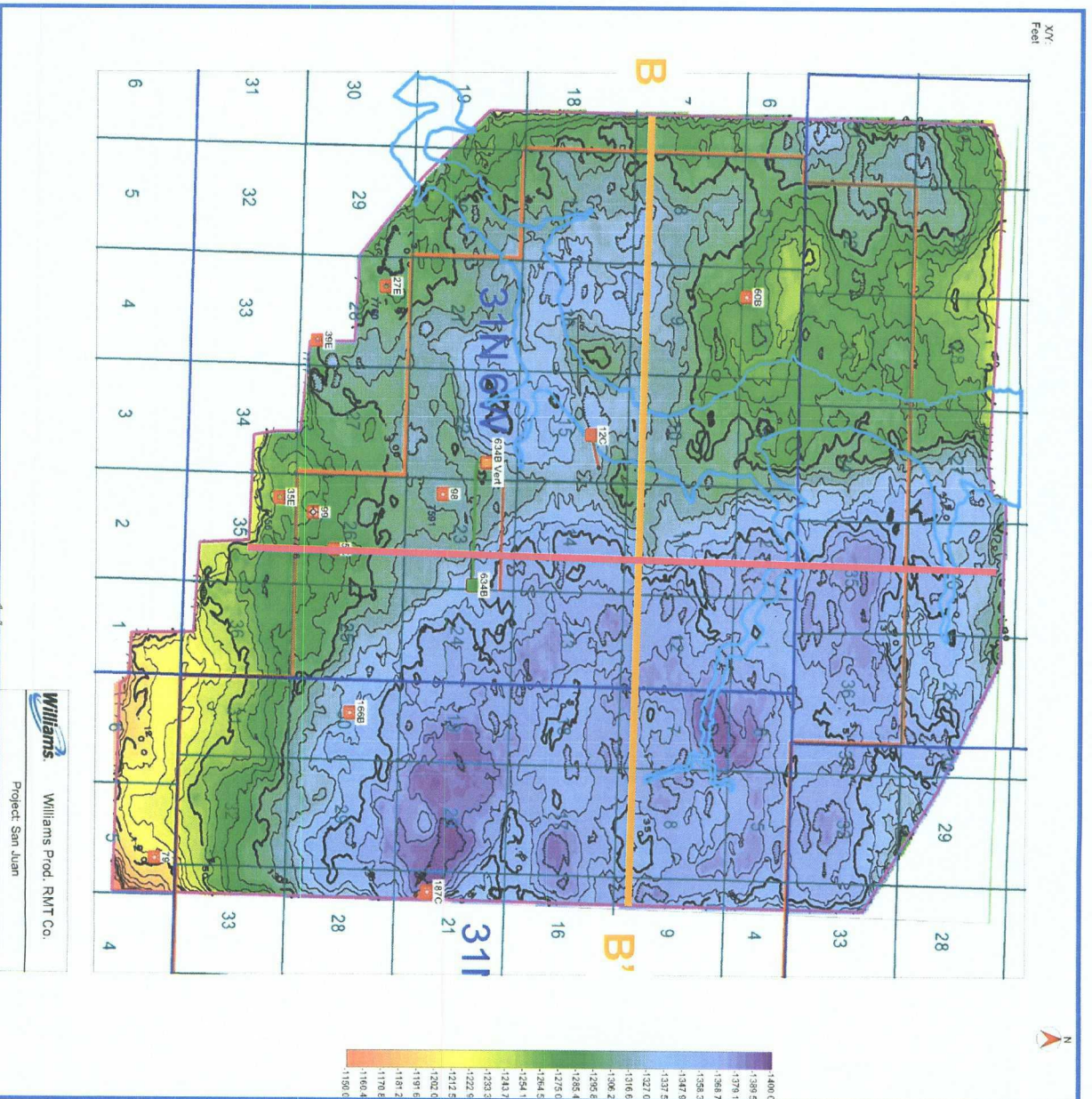
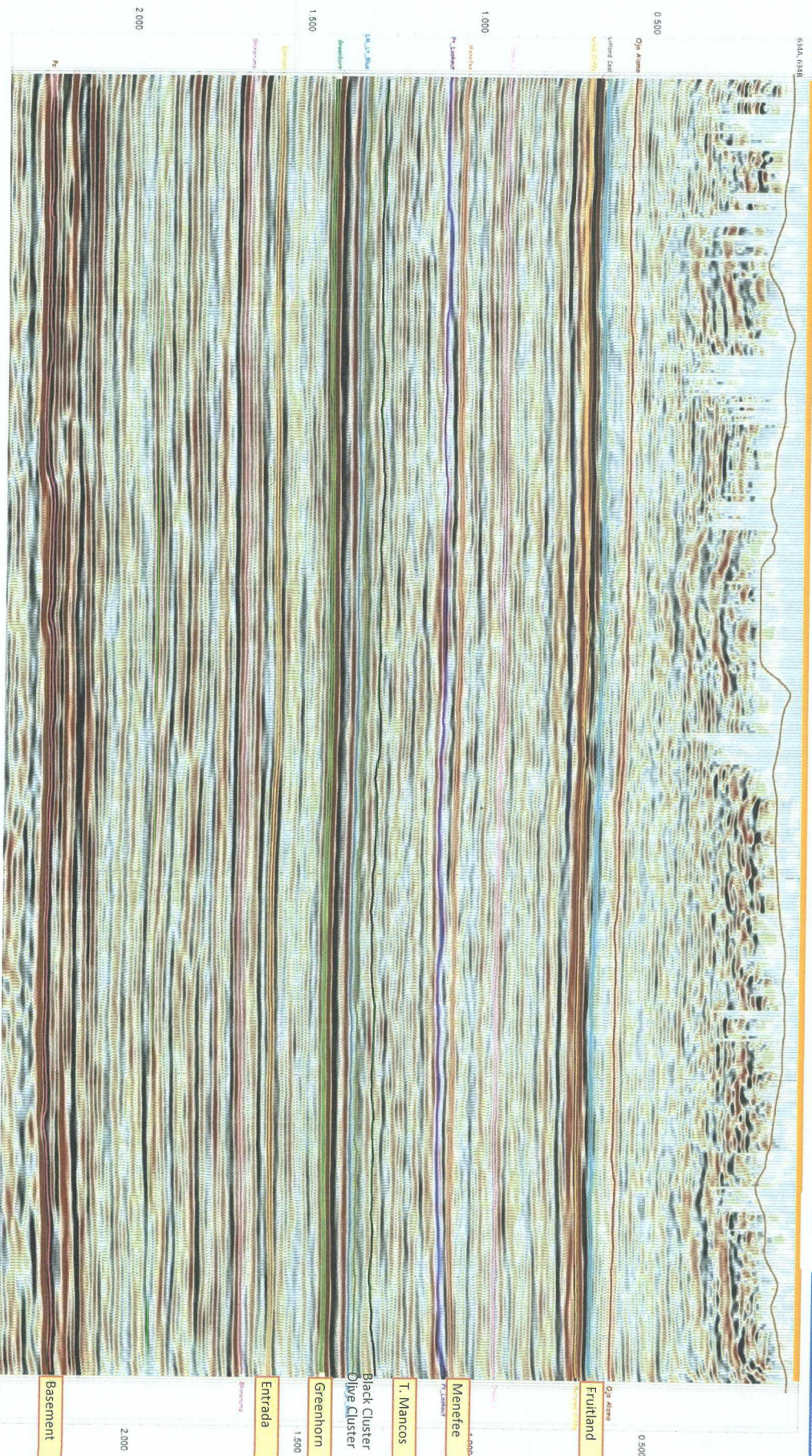


Exhibit O – West/East Seismic Traverse

East  B

B' 1 Mile



- Mancos Clusters: Geophysical Signature; Lateral Continuity
- 7.2 Mile-long East/West Traverse

~ 1.67:1
Horizontal
Compression



Williams Prod. RMT Co.

Project: San Juan



Exhibit P

EXPLORATION & PRODUCTION

One Williams Center
P.O. Box 3102
Tulsa, OK 74101-3102
918/573-2000

April 26, 2011

Bureau of Land Management (3 copies)
Farmington Resource Area
Attn: Mr. Wayne Townsend
1235 La Plata Highway
Farmington, NM 87401

State of New Mexico (2 copies)
Commissioner of Public Lands
Attn: Mr. Pete Martinez
P.O. Box 1148
Santa Fe, NM 87504-1138

State of New Mexico (2 copies)
Oil Conservation Division
Attn: Roy Johnson
1200 South St. Francis Drive
P.O. Box 2308
Santa Fe, NM 87504-2308

Re: Rosa Unit 1, Sec. No. 587
San Juan and Rio Arriba Counties, New Mexico
Notice of Completion on Commercial
Mancos formation

Gentlemen:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement 1 Sec. No. 587, Williams Production Company, LLC, as Unit Operator, Williams has determined that the following wells #5C, #6C, #17C, #25C, #153C, #156D, #166B, #189 are capable of producing unitized substances in paying quantities from the Mancos formation Rosa Unit.

WELLDATA

The Rosa Unit #5C Mancos Well (commercial) is located 1845 feet from the South Line and 1735 feet from the East Line, Section 26 Township 31 North, Range 5 West, N.M.P.M Rio Arriba County, New Mexico. This well was spud on June 11, 2008, and completed in the Mancos formation on November 24, 2008. The Mancos formation was completed with a pre-perforated liner between the following depths: 6155' to 7759'. This well has a 2.875" tubing string. This well was shut in with a SICP of 810 psig. On November 29, 2008 the well was tested and after flowing for 6 hours through a 16/64" choke on the 2.875" tubing, the well gauged 844 MCFD.

6155' – 7759'

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 22.10% and is therefore determined commercial.

The Rosa Unit #6C Mancos Well (commercial) is located 755 feet from the South Line and 880 feet from the West Line, Section 27 Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on September 7, 2008, and completed in the Mancos formation on July 2, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7735' to 8200'. This well has a 2.875" tubing string. This well was shut in with a SICP of 17 psig. On July 2, 2009 the well was tested and after flowing for 1 hour through a 2" choke on the 2.875" tubing, the well gauged 623 MCFD.

7735' – 8200'

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 9.13% and is therefore determined commercial.

The Rosa Unit #17C Mancos Well (commercial) is located 1940 feet from the South Line and 535 feet from the West Line, Section 20, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on June 10, 2009, and completed in the Mancos formation on August 29, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7372' to 7815'. This well has a 2.375" tubing string. This well was shut in with a SICP of 160 psig. On August 28, 2009 the well was tested and after flowing for 2 hours through a 1/2" choke on the 2.375" tubing, the well gauged 373 MCFD.

7372' – 7815'

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROS) of 15.68% and is therefore determined commercial.

WELL DATA

The Rosa Unit #25C Mancos Well (commercial) is located 1130 feet from the South Line and 1560 feet from the West Line, Section 15 Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on September 15, 2009, and completed in the Mancos formation on November 22, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 6960' to 7396'. This well has a 2.375" tubing string. This well was shut in with a SICP of 490 psig. On November 22, 2009 the well was tested and after flowing for 2 hours through a 2" choke on the 2.375" tubing, the well gauged 1086 MCFD.

6960' – 7396'

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 12.93% and is therefore determined commercial.

The Rosa Unit #153C Mancos Well (commercial) is located 1115 feet from the North Line and 1745 feet from the West Line, Section 17 Township 31 North, Range 5 West, N.M.P.M Rio Arriba County, New Mexico. This well was spud on October 2, 2008, and completed in the Mancos formation on June 19, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7140' to 7525'. This well has a 2.375" tubing string. This well was shut in with a SICP of 347 psig. On June 18, 2009 the well was tested and after flowing for 3 hours through a 16/64" choke on the 2.375" tubing, the well gauged 596 MCFD.

7140' – 7525'

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 12.90% and is therefore determined commercial.

The Rosa Unit #156D Mancos Well (commercial) is located 1075 feet from the North Line and 995 feet from the East Line, Section 9 Township 31 North, Range 6 West, N.M.P.M San Juan County, New Mexico. This well was spud on July 4, 2009, and completed in the Mancos formation on September 26, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7108' to 7700'. This well has a 2.375" tubing string. This well was shut in with a SICP of 550 psig. On September 25, 2009 the well was tested and after flowing for 3 hours through a 2" choke on the 2.375" tubing, the well gauged 1218 MCFD.

7108' – 7700'

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 21.50% and is therefore determined commercial.

WELL DATA

The Rosa Unit #166B Mancos Well (commercial) is located 2305 feet from the North Line and 2305 feet from the East Line, Section 30 Township 31 North, Range 5 West, N.M.P.M Rio Arriba County, New Mexico. This well was spud on April 13, 2008, and completed in the Mancos formation on October 31, 2008. The Mancos formation was completed with a pre-perforated liner between the following depths: 6290' to 7849'. This well has a 2.875" tubing string. This well was shut in with a SICP of 308 psig. On October 30, 2008 the well was tested and after flowing for 12 hours through a .5" choke on the 2.875" tubing, the well gauged 1240 MCFD.

6290' – 7849'

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 14.14% and is therefore determined commercial.

The Rosa Unit #189 Mancos Well (commercial) is located 1455 feet from the North Line and 1780 feet from the East Line, Section 21 Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on May 20, 2009, and completed in the Mancos formation on August 1, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7079' to 7515'. This well has a 2.375" tubing string. This well was shut in with a SICP of 0 psig. On July 21, 2009 the well was tested and after flowing for 1 hour through a 2" choke on the 2.375" tubing, the well gauged 131 MCFD.

7079' – 7515'

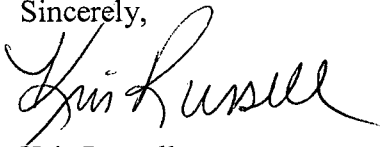
Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 12.56% and is therefore determined commercial.

If these determinations meet with your approval, please indicate such approval in the space provided and return an approved copy for our files.

The Well Data, Reserves and Economics are attached.

Copies of this letter are being resubmitted sent to the Rosa Unit working interest owners on the attached sheet.

Sincerely,

A handwritten signature in black ink, appearing to read "Kris Russell". The signature is fluid and cursive, with the first name "Kris" and last name "Russell" clearly distinguishable.

Kris Russell
Land Data Specialist
Williams Production Company, LLC
P.O. Box 3102
Tulsa, OK 74101
918/573-6181
kris.russell@williams.com

cc: Working Interest Owners
Federal Management Team

APPROVED _____ DATE _____

Assistant District Manager, Minerals
Bureau of Land Management
Subject to like approval by the
Commission of Public Lands
and the Oil Conservation Commission

APPROVED _____ DATE _____

Commissioner of Public Lands
Subject to like approval by the
Bureau of Land Management
and The Commissioner of Public Lands

APPROVED _____ DATE _____

Oil Conservation Commission
Subject to like approval by the
Bureau of Land Management
And The Commissioner of Public Lands

The foregoing is the approval of Notice of Completion of Commercial wells for the Rosa Unit #5C, #6C, #17C, #25C, #153C, #156D, #166B, #189, Mancos formation wells.

WORKING INTEREST OWNERS
ROSA UNIT

BP AMERICA PRODUCTION CO.
ATTN: DONNA JONES
P.O. Box 3092
HOUSTON, TX 77253

SCHULTZ MANAGEMENT, LTD.
500 N. AKARD, SUITE 2940
DALLAS, TX 75201

MS. ELIZABETH T. CALLOWAY
P.O. BOX 191767
DALLAS, TX 75219-1767

FRED E. TURNER, LLC
4925 GREENVILLE AVE., SUITE 852
DALLAS, TX 75206-4079

J. GLENN TURNER, JR. LLC
4809 COLE AVE.
SUITE 212
DALLAS, TX 75205

XTO ENERGY, INC.
ATTN: EDWIN S. RYAN, JR.
810 HOUSTON STREET, STE 2000
FORT WORTH, TX 76102-6298

MARY FRANCES TURNER, JR TRUST
ATTN: SHERI ANDERSON
TX1-2931
P O BOX 660197
DALLAS, TX 75266-0197

MR. JOHN TURNER
P.O. BOX 329
PORT ARANSAS, TX 78373

PATRICIA P. SCHIEFFER TRUST, BANK OF AMERICA, N.A. AGT
ATTN: BILL BLEDSON
P.O. BOX 2546
FORT WORTH, TX 76113-2546

OMIMEX PETROLUEM, INC.
ATTN: CLARK P. STORMS
2001 BEACH ST., SUITE 810
FORT WORTH, TX 76103

MS. VICTORIA WEBB
806 CORDOVA
DALLAS, TX 75223

HENRIETTA E. SCHULTZ, TRUSTEE
500 NORTH AKARD, SUITE 2940
DALLAS, TX 75201

SACRAMENTO MUNICIPAL UTILITIES DISTRICT
ATTN: BARRY BRUNELLE
P. O. BOX 15830
SACRAMENTO, CA 95852-1830

CONOCOPHILLIPS COMPANY
ATTN: CHIEF LANDMAN, SAN JUAN/ROCKIES
OR ROB HELTON OR LAND TECH
P.O. BOX 4289
FARMINGTON, NM 87499-4289

February 7, 2011

The Rosa Unit #5C Mancos Well (commercial) is located 1845 feet from the South Line and 1735 feet from the East Line, Section 26 Township 31 North, Range 5 West, N.M.P.M Rio Arriba County, New Mexico. This well was spud on June 11, 2008, and completed in the Mancos formation on November 24, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 6155' to 7759'. This well has a 2.875" tubing string. This well was shut in with a SICP of 810 psig. On November 29, 2008 the well was tested and after flowing for 6 hours through a 16/64" choke on the 2.875" tubing, the well gauged 844 MCFD.

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 22.10% and is therefore determined commercial.

Attached to this document are the following:

- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

Evaluating Engineer

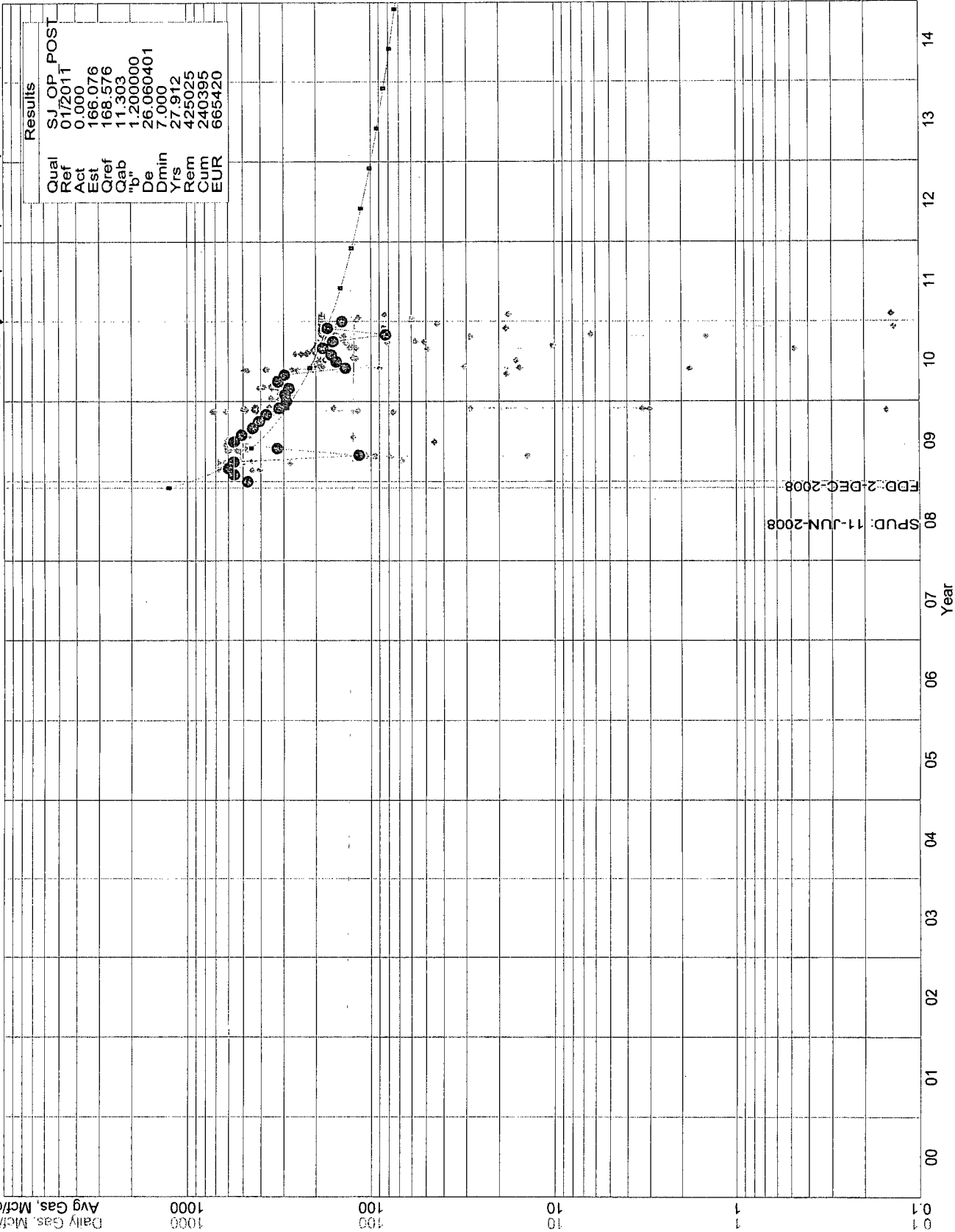
A handwritten signature in cursive script, reading "Marcia Brueggjenjohann", is written over a horizontal line.

Marcia Brueggjenjohann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit

ROSA UNIT#005C | 1PDP | MANCOS | J7PKN4IS1S | 62231551

SJB_AvgDay_Gas

Daily Gas, Mcf/day



Results

Qual	SJ_OP_POST
Ref	01/2011
Act	0.000
Est	166.076
Qref	168.576
Qab	11.303
"b"	1.200000
De	26.060401
Dmin	7.000
Yrs	27.912
Rem	425025
Cum	240395
EUR	665420

ROSA UNIT #005C | 1PDP | MANCOS | J7PKN4IS1S | 62231551
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE

LOSS NO

Production

CUMS 0.0 223.410	SJ_OP_POST
START 12/2008	SJ_OP_POST
GAS 1250 X M/D 7 EXP B/1.20 77	SJ_OP_POST
" X X M/D 30 YRS EXP 7	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.1 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T 2582 X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 12/2008 AD ESC INV	SJ_OP_POST
---	------------

Overlays

SIDFILE RI_TOTAL_BR	SJ_OP_POST
LOAD MP.GAS GAS 01/2008 12/2010 #	SJ_OP_POST

PropID: 25080 RSV CAT: 1PDP
 Well Name: ROSA UNIT #005C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 09:49:50
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

COMBINED INPUT DATA								INITIAL CALCULATED DATA				
KEYWORD & Ref. Code	Beginning, Ending Rates			Schedule Limit		Method & Value		Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate
400 START	12/2008											
401 GAS	1250.00	X	M/D	7.00	EXP	B/1.20	77.00	762.778	2/2020	77.0000	38021.	1340.
402 "	X	X	M/D	30.00	YRS	EXP	7.00	927.580	11/2038	7.0000	1340.	344.
500 PRI/GAS	01/2007	5.617	6.487	6.677	5.957	#/M			4/2007			
501 "	X	6.627	6.827	6.197	4.987	#/M			8/2007			
502 "	X	4.587	5.117	6.057	6.497	#/M			12/2007			
503 "	01/2008	6.377	7.277	8.087	8.277	#/M			4/2008			
504 "	X	9.427	9.846	11.356	7.637	#/M			8/2008			
505 "	X	6.427	4.267	2.837	4.627	#/M			12/2008			
506 "	01/2009	4.827	3.107	2.687	2.617	#/M			4/2009			
507 "	X	2.497	2.647	2.977	3.177	#/M			8/2009			
508 "	X	2.467	3.417	4.257	4.277	#/M			12/2009			
509 "	01/2010	5.72	5.31	4.66	3.77	#/M			4/2010			
510 "	X	3.87	3.69	4.28	4.08	#/M			8/2010			
511 "	X	3.47	4.126	5.75	5.75	#/M			12/2010			
512 "	5.75	X	\$/M	TO	LIFE	PC	0.00		11/2038		5.750	5.750
600 ATX	2.10	X	%	TO	LIFE	PC	0.00		11/2038		0.021	0.021
601 STX/GAS	3.75	X	%	TO	LIFE	PC	0.00		11/2038		0.037	0.037
602 OPC/T	2582.00	X	\$/M	TO	LIFE	PC	0.00		11/2038		2582.000	2582.000
705 LSE/WI	1.0000	D	FRAC	TO	LIFE	FLAT	0.00		11/2038		1.000	1.000
720 NET/OIL	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		11/2038		0.865	0.865
740 NET/GAS	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		11/2038		0.865	0.865
OVERLAYS	Beginning, Ending Rates			Schedule Limit		Method & Value		Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate
901 S 92	S/95	X	FRAC	TO	LIFE	DIV	146.00		11/2038			
903 S /89	0.49	X	FRAC	TO	LIFE	MUL	92.00		11/2038			
905 S /89	0.99	X	FRAC	TO	LIFE	MUL	89.00		11/2038			
907 S /196	S/196	X	FRAC	TO	LIFE	MINUS	89.00		11/2038			
909 S /88	0.06	X	FRAC	TO	LIFE	MUL	92.00		11/2038			
911 S /88	1.00	X	FRAC	TO	LIFE	MINUS	88.00		11/2038			
913 S /196	S/196	X	FRAC	TO	LIFE	MUL	88.00		11/2038			
914 GAS	01/2007	0	0	0	0	0	0	223.410	4/2008			
915 "	X	0	0	0	0	14593	17249	302.787	5/2009			
916 "	X	16746	15763	13699	12254	11554	9507	408.231	2/2010			
917 "	X	9970	8894	4263.47	4643.13	5102.3	5667.29	451.605	9/2010			
918 "	X	2569.28	#					454.174	10/2010			
INVESTMENTS	Tangible Intang Units			Invest. Point		Method & Value		Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 CAPITAL	165.61	555.72	M\$G	12/2008	AD	ESC INV		721.323	12/2008	0	721.3	0.0

MISCELLANEOUS DATA PARAMETERS

201 BTU 0.99
 202 WELLS 0.00
 203 CUMO, MB 0.00 CUMG, MMF 223.41 CUML, MB
 250 LOSS NO

PROJECT RUN SETTINGS

Base Date : 01/2007 Time Frames : 64*12
 P.W. Date : 01/2008 Primary PW% : 8.0 Discount Freq. : MID
 Report Date : 01/2008
 Qualifiers : Prod = SJ_OP_POST Price = SJ_OP_POST Cost = SJ_OP_POST Owner = BASE
 Title = BASE Misc = BASE Invest = SJ_OP_POST Overlay = SJ_OP_POST

PropID: 25080 RSV CAT: 1PDP
 Well Name: ROSA UNIT #005C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 09:49:50
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

R E S E R V E S A N D E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	---GROSS PRODUCTION---				---NET PRODUCTION---				-----PRICES-----		NO. OF WELLS	-----OPERATIONS, M\$-----		
	OIL,	MBBL	GAS,	MMCF	OIL,	MBBL	GAS,	MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000		14.593		0.000		12.623		0.00	3.718	1.0	0.000	46.938	46.938
12-2009	0.000		153.262		0.000		132.572		0.00	2.462	1.0	0.000	326.423	326.423
12-2010	0.000		73.490		0.000		63.569		0.00	3.726	1.0	0.000	236.845	236.845
12-2011	0.000		52.628		0.000		45.524		0.00	4.748	1.0	0.000	216.137	216.137
12-2012	0.000		40.617		0.000		35.133		0.00	4.748	1.0	0.000	166.807	166.807
12-2013	0.000		33.361		0.000		28.857		0.00	4.748	1.0	0.000	137.007	137.007
12-2014	0.000		28.460		0.000		24.618		0.00	4.748	1.0	0.000	116.881	116.881
12-2015	0.000		24.909		0.000		21.546		0.00	4.748	1.0	0.000	102.297	102.297
12-2016	0.000		22.207		0.000		19.209		0.00	4.748	1.0	0.000	91.200	91.200
12-2017	0.000		20.076		0.000		17.366		0.00	4.748	1.0	0.000	82.450	82.450
12-2018	0.000		18.349		0.000		15.872		0.00	4.748	1.0	0.000	75.357	75.357
12-2019	0.000		16.919		0.000		14.635		0.00	4.748	1.0	0.000	69.483	69.483
12-2020	0.000		15.705		0.000		13.584		0.00	4.748	1.0	0.000	64.496	64.496
12-2021	0.000		14.605		0.000		12.633		0.00	4.748	1.0	0.000	59.981	59.981
12-2022	0.000		13.583		0.000		11.749		0.00	4.748	1.0	0.000	55.782	55.782
12-2023	0.000		12.632		0.000		10.927		0.00	4.748	1.0	0.000	51.878	51.878
12-2024	0.000		11.748		0.000		10.162		0.00	4.748	1.0	0.000	48.246	48.246
12-2025	0.000		10.925		0.000		9.450		0.00	4.748	1.0	0.000	44.869	44.869
12-2026	0.000		10.161		0.000		8.789		0.00	4.748	1.0	0.000	41.728	41.728
12-2027	0.000		9.449		0.000		8.174		0.00	4.748	1.0	0.000	38.807	38.807
S TOT	0.000		597.677		0.000		516.991		0.00	4.011	1.0	0.000	2073.612	2073.612
AFTER	0.000		14.973		0.000		12.951		0.00	4.748	1.0	0.000	61.491	61.491
TOTAL	0.000		612.650		0.000		529.942		0.00	4.029	1.0	0.000	2135.103	2135.103

--END-- MO-YEAR	-----OPERATIONS, M\$-----					-----CAPITAL COSTS, M\$-----				8.0%		
	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW INV	TOTAL EQUITY INV	CASH FLOW BTAX, M\$	CUM. DISC BTAX, M\$		
12-2008	2.709	2.582	0.000	41.647	165.606	555.717	0.000	721.323	-679.675	-632.113		
12-2009	18.839	30.984	0.000	276.600	0.000	0.000	0.000	0.000	276.600	-385.670		
12-2010	13.669	30.984	0.000	192.192	0.000	0.000	0.000	0.000	192.192	-227.117		
12-2011	12.474	30.984	0.000	172.680	0.000	0.000	0.000	0.000	172.680	-95.213		
12-2012	9.627	30.984	0.000	126.196	0.000	0.000	0.000	0.000	126.196	-5.956		
12-2013	7.907	30.984	0.000	98.116	0.000	0.000	0.000	0.000	98.116	58.299		
12-2014	6.746	30.984	0.000	79.152	0.000	0.000	0.000	0.000	79.152	106.295		
12-2015	5.904	30.984	0.000	65.409	0.000	0.000	0.000	0.000	65.409	143.020		
12-2016	5.263	30.984	0.000	54.953	0.000	0.000	0.000	0.000	54.953	171.588		
12-2017	4.758	30.984	0.000	46.707	0.000	0.000	0.000	0.000	46.707	194.072		
12-2018	4.349	30.984	0.000	40.024	0.000	0.000	0.000	0.000	40.024	211.911		
12-2019	4.010	30.984	0.000	34.489	0.000	0.000	0.000	0.000	34.489	226.144		
12-2020	3.722	30.984	0.000	29.790	0.000	0.000	0.000	0.000	29.790	237.527		
12-2021	3.462	30.984	0.000	25.535	0.000	0.000	0.000	0.000	25.535	246.562		
12-2022	3.219	30.984	0.000	21.579	0.000	0.000	0.000	0.000	21.579	253.632		
12-2023	2.994	30.984	0.000	17.900	0.000	0.000	0.000	0.000	17.900	259.061		
12-2024	2.784	30.984	0.000	14.478	0.000	0.000	0.000	0.000	14.478	263.128		
12-2025	2.589	30.984	0.000	11.295	0.000	0.000	0.000	0.000	11.295	266.065		
12-2026	2.408	30.984	0.000	8.336	0.000	0.000	0.000	0.000	8.336	268.073		
12-2027	2.240	30.984	0.000	5.583	0.000	0.000	0.000	0.000	5.583	269.317		
S TOT	119.673	591.278	0.000	1362.661	165.606	555.717	0.000	721.323	641.338	269.317		
AFTER	3.549	54.222	0.000	3.720	0.000	0.000	0.000	0.000	3.720	270.076		
TOTAL	123.222	645.500	0.000	1366.381	165.606	555.717	0.000	721.323	645.058	270.076		

PropID: 25080 RSV CAT: 1PDP
 Well Name: ROSA UNIT #005C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 09:49:50
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

A F T E R T A X E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECIA-	DEPLETION	INTANG.	INTEREST	TAXABLE	TAX	TAXES	CASH FLOW	8.0%
MO-YEAR	CASH FLOW	TION		EXPENSED	PAID & CAP	INCOME	CREDIT	PAYABLE	ATAX	CUM. DISC
	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----
12-2008	41.647	23.665	0.000	555.717	0.000	-537.734	0.000	-188.207	-491.468	-451.011
12-2009	276.600	40.557	0.000	0.000	0.000	236.043	0.000	82.615	193.985	-278.176
12-2010	192.192	28.965	0.000	0.000	0.000	163.228	0.000	57.130	135.063	-166.753
12-2011	172.680	20.684	0.000	0.000	0.000	151.995	0.000	53.198	119.481	-75.485
12-2012	126.196	14.789	0.000	0.000	0.000	111.408	0.000	38.993	87.204	-13.808
12-2013	98.116	14.772	0.000	0.000	0.000	83.344	0.000	29.170	68.946	31.344
12-2014	79.152	14.789	0.000	0.000	0.000	64.363	0.000	22.527	56.625	65.681
12-2015	65.409	7.386	0.000	0.000	0.000	58.023	0.000	20.308	45.101	91.003
12-2016	54.953	0.000	0.000	0.000	0.000	54.953	0.000	19.233	35.719	109.572
12-2017	46.707	0.000	0.000	0.000	0.000	46.707	0.000	16.348	30.360	124.187
12-2018	40.024	0.000	0.000	0.000	0.000	40.024	0.000	14.008	26.016	135.782
12-2019	34.489	0.000	0.000	0.000	0.000	34.489	0.000	12.071	22.418	145.034
12-2020	29.790	0.000	0.000	0.000	0.000	29.790	0.000	10.426	19.363	152.433
12-2021	25.535	0.000	0.000	0.000	0.000	25.535	0.000	8.937	16.598	158.305
12-2022	21.579	0.000	0.000	0.000	0.000	21.579	0.000	7.553	14.026	162.901
12-2023	17.900	0.000	0.000	0.000	0.000	17.900	0.000	6.265	11.635	166.430
12-2024	14.478	0.000	0.000	0.000	0.000	14.478	0.000	5.067	9.411	169.073
12-2025	11.295	0.000	0.000	0.000	0.000	11.295	0.000	3.953	7.342	170.982
12-2026	8.336	0.000	0.000	0.000	0.000	8.336	0.000	2.918	5.418	172.287
12-2027	5.583	0.000	0.000	0.000	0.000	5.583	0.000	1.954	3.629	173.096
S TOT	1362.661	165.606	0.000	555.717	0.000	641.338	0.000	224.468	416.870	173.096
AFTER	3.720	0.000	0.000	0.000	0.000	3.720	0.000	1.302	2.418	173.589
TOTAL	1366.381	165.606	0.000	555.717	0.000	645.058	0.000	225.770	419.288	173.589

BTAX RATE OF RETURN (PCT)	22.10	ATAx RATE OF RETURN (PCT)	22.01
BTAX PAYOUT YEARS	4.30	ATAx PAY OUT YEARS	4.49
BTAX PAYOUT YEARS (DISC)	5.09	ATAx PAY OUT YEARS (DISC)	5.31
BTAX NET INCOME/INVEST	1.89	ATAx NET INCOME/INVEST	1.58
BTAX NET INCOME/INVEST(DISC)	1.40	ATAx NET INCOME/INVEST(DISC)	1.26
PRODUCTION START DATE	12/2008	PROJECT LIFE (YEARS)	21.75
		DISCOUNT - RATE (PCT)	8.00
INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	3.718
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.748
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.
CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMF)	223.410
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	612.650
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	836.060
INITIAL WI (PCT)	100.000	FINAL WI (PCT)	100.000
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	86.500	FINAL NET GAS (PCT)	86.500

PRESENT WORTH PROFILE AND			
--- RATE-OF-RETURN VS. BONUS TABLE ---			
P.W.	B.F.I.T.	A.F.I.T.	A.F.I.T.
FACTOR	WORTH	WORTH	BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	645.1	419.3	645.1
2.00	522.6	338.9	490.9
5.00	379.0	244.7	332.5
8.00	270.1	173.6	225.5
10.00	211.6	135.5	172.0
12.00	161.9	103.3	128.6
15.00	100.4	63.5	77.2
18.00	50.9	31.7	37.9
20.00	23.2	14.1	16.6
25.00	-32.1	-20.9	-24.2
30.00	-72.8	-46.1	-52.5
35.00	-103.2	-64.6	-72.6
40.00	-126.3	-78.3	-87.0
45.00	-144.0	-88.4	-97.4
50.00	-157.6	-95.9	-104.9

ROSA UNIT #5C
BLANCO MESAVERDE/BASIN MANCOS/BASIN DK

Location: 1845' FSL, 1735' FEL
 NW/4 SE/4 Section 26 (J), T31N, R6W
 Rio Arriba Co., NM
 Elevation: 6419' GR
 API: 30-039-30178

Spud Date 6-11-2008
 Completed 8-1-2008 (DK)
 11-23-2008 (MCS)
 ID'd: 8-5-2008 (DK)

Taps	Depth
Ojo Alamo	2490'
Kirtland	2596'
Pictured Cliffs	3240'
Cliff House	5406'
Point Lookout	5702'
Mancos	6258'
Dakota	7885'

Mesa Verde:
 To be completed at later date

Mancos:

6th stage: 6155'-6305' (45, 0.34" holes) Frac with 5100# 100 mesh BASF followed with 161,300# 40/70 BASF

5th stage: 6530'-6780' (48, 0.34" holes) Frac with 8800# 100 mesh BASF followed with 137,200# 40/70 BASF

4th stage: 6845'-7015' (69, 0.34" holes) Frac with 9380# 100 mesh white sand followed with 180,040# 40/70 white sand

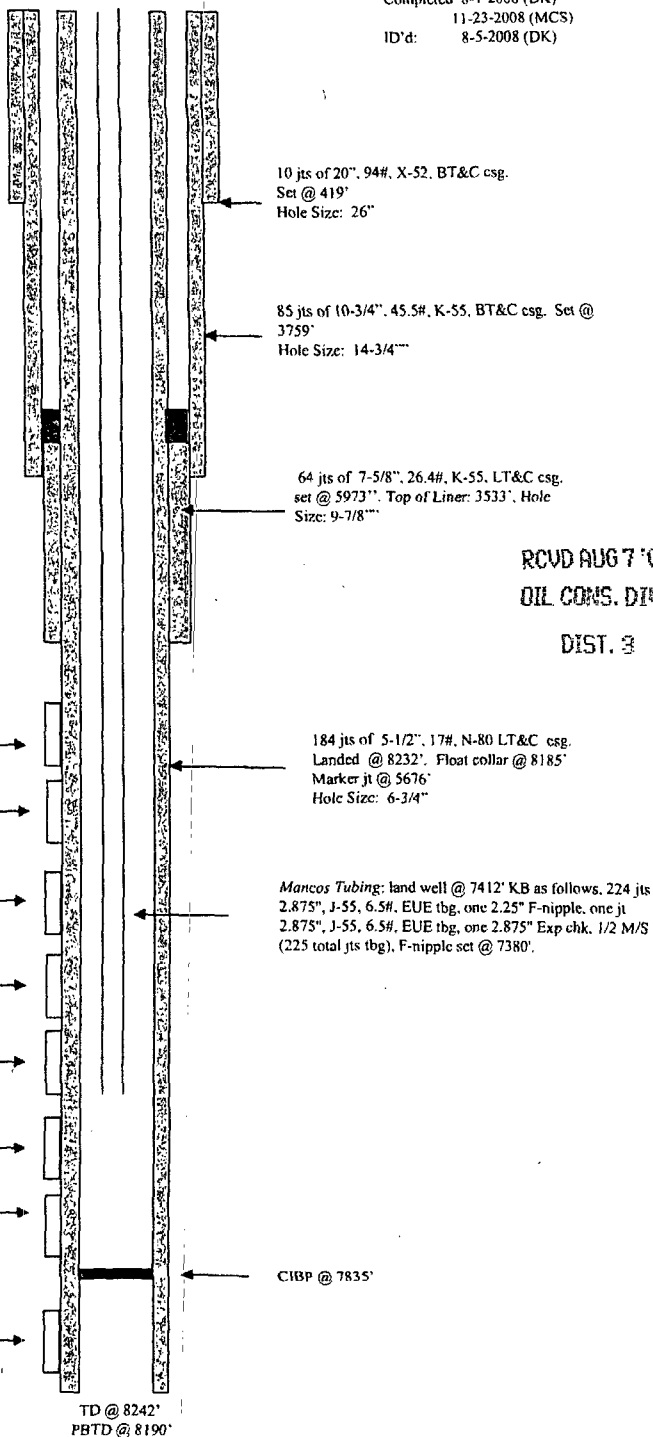
3rd stage: 7055'-7250' (60, 0.34" holes) Frac with 11,400# 100 mesh white sand followed with 134,000# 40/70 white sand

2nd stage: 7275'-7400' (57, 0.34" holes) Frac with 7,640# 100 mesh white sand followed with 117,654# 40/70 white sand

1st stage: 7625'-7675' (33, 0.34" holes) Frac with 7,760# 100 mesh white sand followed with 7,966# 40/70 white sand

Greenhorn: 7715'-7759' (30, 0.34" holes) Frac with 8,500# 100 white mesh sand followed with 89,020# 40/70 white sand

Dakota: 7887' - 8084' (57, 0.36" holes) Frac w/9900# LP108 14/40 followed w/3500# tempered LC 20/40



RCVD AUG 7 '09
 OIL CONS. DIV.
 DIST. 3

HOLE SIZE	CASING	CEMENT	VOLUME	CMT TOP
26"	20"	818 sx	1323 cu.ft.	Surface
14-3/4"	10-3/4"	2260 sx	4563 cu.ft.	Surface
9-7/8"	7-5/8"	400 sx	854 cu.ft.	3860' (CBL)
6-3/4"	5 1/2"	280 sx	638 cu.ft.	3500' (CBL)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

☒ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		² OGRID Number 120782
		³ Reason for Filing Code/ Effective Date TO CORRECT POOL
⁴ API Number 30-039-30178	⁵ Pool Name BASIN MANCOS	⁶ Pool Code 97232
⁷ Property Code 17033	⁸ Property Name ROSA UNIT	⁹ Well Number 5C

II. ¹⁰ Surface Location

UL or lot no. J	Section 26	Township 31N	Range 6W	Lot.Idn	Feet from the 1845	North/South Line SOUTH	Feet from the 1735	East/West line EAST	County RIO ARriba
---------------------------	----------------------	------------------------	--------------------	---------	------------------------------	----------------------------------	------------------------------	-------------------------------	-----------------------------

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
009018	GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	O
025244	WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	G

IV. Well Completion Data NOTE: CIBP set @ 7835' - Mesaverde to be completed at a later date

Pool Name changed from Laguna Seca Gallup to Basin Mancos Order #13063 effective 1/1/09

²¹ Spud Date 6-11-08	²² Ready Date 11-24-08	²³ TD 8242' MD	²⁴ PBTD 8190'	²⁵ Perforations 6155' - 7759'	²⁶ DHC, MC AZT-
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
26"	20", 94#, X-52	419'	818		
14-3/4"	10-3/4", 45.5#, K-55	3759'	2260		
9-7/8"	7-5/8", 26.4#, K-55	3533' - 5973'	400		
6-3/4"	5 1/8", 17#, N-80	8232'	280		
	2.875", 6.5#, J-55	7412'	NONE		

VI. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date 11-29-08	³⁴ Test Length 6.0 hrs	³⁵ Tbg. Pressure 810 psi	³⁶ Csg. Pressure n/a
³⁷ Choke Size 16/64"	³⁸ Oil	³⁹ Water	⁴⁰ Gas 844 mcf/d	⁴¹ Test Method Orifice	

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Heather Riley*

Printed name:
Heather Riley

Title:
Regulatory Specialist

E-mail Address:
Heather.riley@williams.com

Date:
8/5/09

Phone:
505-634-4222

OIL CONSERVATION DIVISION

Approved by:

- accepted for record -

Title:

Approval Date:

AUG 06 2009

RCVD AUG 6 '09

OIL CONS. DIV.

DIST. 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN
DUPLICATE

(See other instructions on
reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

CORRECTED WELL COMPLETION OR RECOMPLETION REPORT AND LOG*					
1a TYPE OF WELL: ☐ OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER					
b TYPE OF COMPLETION: NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ X DIFF RESVR ☐ OTHER					
2 NAME OF OPERATOR: WILLIAMS PRODUCTION COMPANY					
3 ADDRESS AND TELEPHONE NO: P.O. Box 640, Aztec, NM 87410 (505) 634-4208					
4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At Surface: 1845' FSL & 1735' FEL, sec 26, T31N, R6W At top production interval reported below: Same At total depth: Same					
5. LEASE DESIGNATION AND LEASE NO. NMSF-078771					
6 IF INDIAN, ALLOTTEE OR					
7 UNIT AGREEMENT NAME Rosa Unit					
8 FARM OR LEASE NAME, WELL NO Rosa Unit #5C					
9 API WELL NO. 30-039-30178					
10. FIELD AND POOL, OR WILDCAT Basin Mancos					
11 SEC., T., R., M., OR BLOCK AND SURVEY OR AREA NW/4 SE/4, Sec 26, T31N, R6W					
12 COUNTY OR Rio Arriba					
13 STATE New Mexico					
14 PERMIT NO					
DATE ISSUED					
15 DATE SPUDDED 6-11-08					
16 DATE T.D. REACHED 7-14-08					
17 DATE COMPLETED (READY TO PRODUCE) 11-24-08					
18 ELEVATIONS (OK, RKB, KT, GR, ETC)* 6419' GR					
19. ELEVATION CASINGHEAD					
20. TOTAL DEPTH, MD & TVD 8242' MD					
21. PLUG BACK T.D., MD & TVD 8190'					
22 IF MULTICOMP. HOW MANY 3					
23 INTERVALS DRILLED BY					
ROTARY TOOLS x					
CABLE TOOLS					
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* Basin Mancos 6155' - 7759' CIBP set @ 7835' to isolate Dakota * Mesaverde to be completed at later date					
25. WAS DIRECTIONAL SURVEY MADE YES					
26 TYPE ELECTRIC AND OTHER LOGS RUN Array Induction, Gamma Ray-Density-Neutron, Compensated Dual Neutron, Reservoir Tool, Cement Bond Log					
27 WAS WELL CORED No					
28. CASING REPORT (Report all strings set in well)					
Casing Size/Grade					
Weight, lb/ft					
Depth Set (MD)					
Hole Size					
Top of Cement, Cementing Record					
Amount Pulled					
29 LINER RECORD					
Size					
Top (MD)					
Bottom (MD)					
Sacks Cement*					
Screen (MD)					
Size					
Depth Set (MD)					
Packer Set (MD)					
30 TUBING RECORD					
Size					
Top (MD)					
Bottom (MD)					
Sacks Cement*					
Screen (MD)					
Size					
Depth Set (MD)					
Packer Set (MD)					
31 PERFORATION RECORD (Interval, size, and number)					
32 ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC					
Depth Interval (MD)					
Amount and Kind of Material Used					
6th stage: 6155'-6305' (45, 0.34" holes)					
5th stage: 6530'-6780' (48, 0.34" holes)					
4th stage: 6845' - 7015' Total of 69, 0.34" holes					
3rd stage: 7055' - 7250' Total of 60, 0.34" holes					
2nd stage: 7275' - 7400' Total of 57, 0.34" holes					
1st stage: 7625' - 7675' Total of 33, 0.34" holes					
Greenhorn: 7715' - 7759' Total of 30, 0.34" holes					
33. PRODUCTION This report is being corrected to change the pool name from Laguna Seca Gallup to Basin Mancos pursuant to Order #R-13063 effective 1/1/09.					
DATE OF FIRST PRODUCTION					
PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump)					
WELL STATUS (PRODUCING OR SI)					
SI - waiting on tie-in					
DATE OF TEST					
TESTED					
CHOKE SIZE					
PROD'N FOR TEST PERIOD					
OIL - BBL					
GAS - MCF					
WATER - BBL					
GAS-OIL RATIO					
FLOW T90 PRESS					
CASING PRESSURE					
CALCULATED 24-HOUR RATE					
OIL - BBL					
GAS - MCF					
WATER - BBL					
OIL GRAVITY-API (CORR)					
OIL CONS. DIV.					
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TO THE SOLD					
TEST WITNESSED BY: Buddy B...					
35. LIST OF ATTACHMENTS: SUMMARY OF POROUS ZONES, WELLBORE DIAGRAM					
36 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records					

SIGNED: Norma Riley TITLE: Regulatory Specialist DATE: 8/5/09

ACCEPTED FOR RECORD

AUG 06 2009

FARMINGTON FIELD OFFICE

NMOCD

37 SUMMARY OF POROUS ZONES (Show all important zones of porosity and contents thereof, core intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)

38 GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP		
					NAME	MEASURED DEPTH	TRUE VERTICAL DEPTH
				KIRTLAND		2596'	
				FRUITLAND COAL		2971'	
				PICTURED CLIFFS		3240'	
				CLIFFHOUSE		3556'	
				MENEFEE		5450'	
				POINT LOOKOUT		5702'	
				MANCOS		6258'	
				DAKOTA		7885'	

February 7, 2011

The Rosa Unit #6C Mancos Well (commercial) is located 755 feet from the South Line and 880 feet from the West Line, Section 27 Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on September 7, 2008, and completed in the Mancos formation on July 2, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7735' to 8200'. This well has a 2.875" tubing string. This well was shut in with a SICP of 17 psig. On July 2, 2009 the well was tested and after flowing for 1 hour through a 2" choke on the 2.875" tubing, the well gauged 623 MCFD.

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 9.13% and is therefore determined commercial.

Attached to this document are the following:

- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

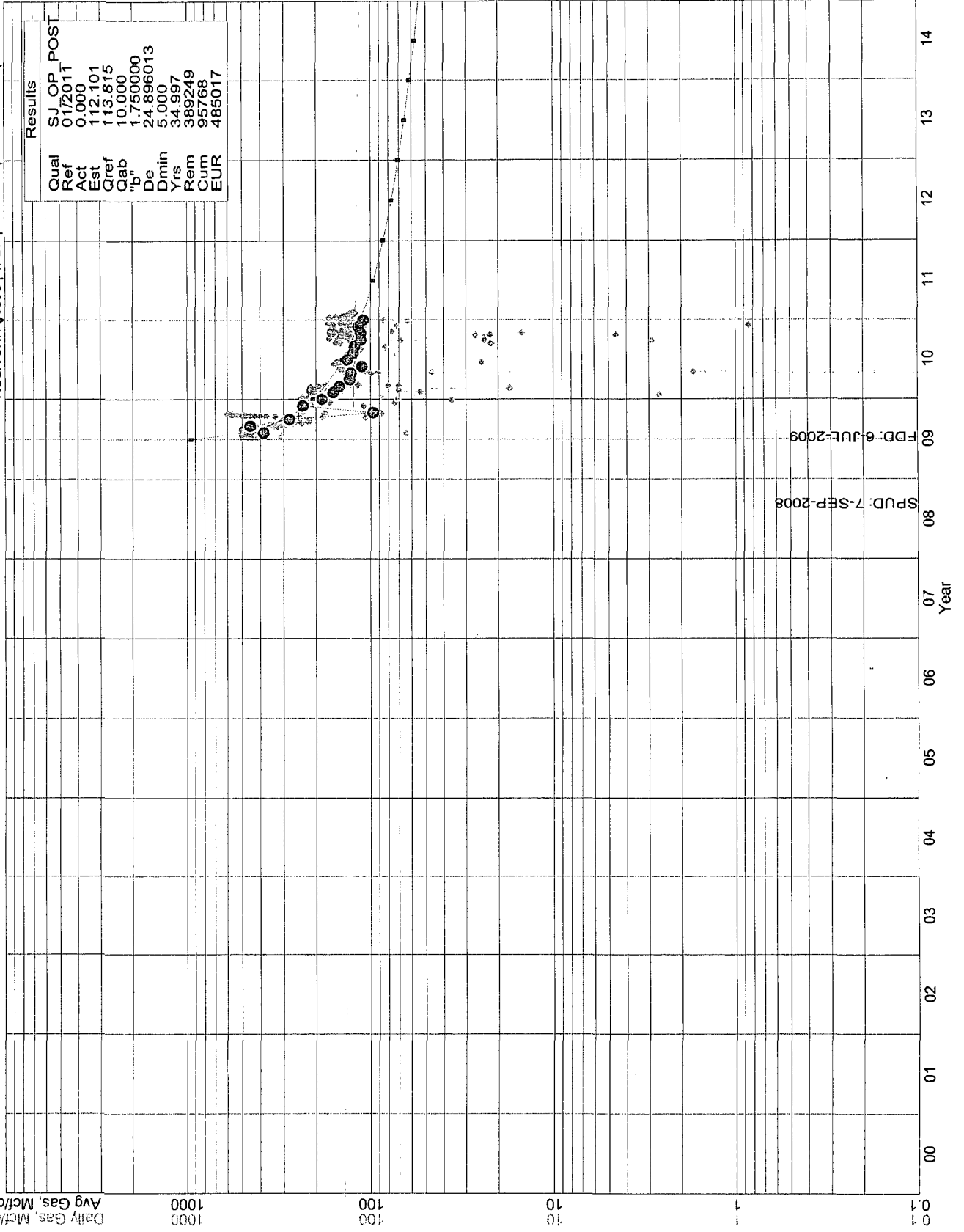
Evaluating Engineer

A handwritten signature in cursive script, reading "Marcia Brueggemann", is written over a horizontal line.

Marcia Brueggemann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit

Daily Gas, Mct/day
Avg Gas, Mct/day

ROSA UNITA 006C | 1PDP | MANCOS | J7PKN5RQ7G | 62245000



ROSA UNIT #006C | 1PDP | MANCOS | J7PKN5RQ7G | 62245000
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE

LOSS NO

Production

CUMS 0 0.000	SJ_OP_POST
START 07/2009	SJ_OP_POST
GAS 950 X M/D 5 EXP B/1.75 85	SJ_OP_POST
" X 10 M/D X YRS EXP 5	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.1 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T 1000 X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 07/2009 AD ESC INV	SJ_OP_POST
---	------------

Overlays

SIDFILE RI_TOTAL_BR	SJ_OP_POST
LOAD MP.GAS GAS 01/2009 12/2010 #	SJ_OP_POST

PropID: 25086 RSV CAT: 1PDP
 Well Name: ROSA UNIT #006C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 09:53:01
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

COMBINED INPUT DATA								INITIAL CALCULATED DATA			
KEYWORD & Ref. Code	Beginning	Ending Rates	Schedule Limit	Method & Value	Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate		
400 START	07/2009										
401 GAS	950.00	X M/D	5.00 EXP	B/1.75 85.00	317.642	7/2020	85.0000	28896.	1118.		
402 "	X	10.00 M/D	X YRS	EXP 5.00	508.104	12/2045	5.0000	1118.	303.		
500 PRI/GAS	01/2007	5.617 6.487 6.677 5.957 #/M				4/2007					
501 "	X	6.627 6.827 6.197 4.987 #/M				8/2007					
502 "	X	4.587 5.117 6.057 6.497 #/M				12/2007					
503 "	01/2008	6.377 7.277 8.087 8.277 #/M				4/2008					
504 "	X	9.427 9.846 11.356 7.637 #/M				8/2008					
505 "	X	6.427 4.267 2.837 4.627 #/M				12/2008					
506 "	01/2009	4.827 3.107 2.687 2.617 #/M				4/2009					
507 "	X	2.497 2.647 2.977 3.177 #/M				8/2009					
508 "	X	2.467 3.417 4.257 4.277 #/M				12/2009					
509 "	01/2010	5.72 5.31 4.66 3.77 #/M				4/2010					
510 "	X	3.87 3.69 4.28 4.08 #/M				8/2010					
511 "	X	3.47 4.126 5.75 5.75 #/M				12/2010					
512 "	5.75	X \$/M	TO LIFE	PC 0.00		12/2045		5.750	5.750		
600 ATX	2.10	X %	TO LIFE	PC 0.00		12/2045		0.021	0.021		
601 STX/GAS	3.75	X %	TO LIFE	PC 0.00		12/2045		0.037	0.037		
602 OPC/T	1000.00	X \$/M	TO LIFE	PC 0.00		12/2045		1000.000	1000.000		
705 LSE/WI	1.0000	D FRAC	TO LIFE	FLAT 0.00		12/2045		1.000	1.000		
720 NET/OIL	0.8650	D FRAC	TO LIFE	FLAT 0.00		12/2045		0.865	0.865		
740 NET/GAS	0.8650	D FRAC	TO LIFE	FLAT 0.00		12/2045		0.865	0.865		
OVERLAYS	Beginning	Ending Rates	Schedule Limit	Method & Value	Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate		
901 S 92	S/95	X FRAC	TO LIFE	DIV 146.00		12/2045					
903 S /89	0.49	X FRAC	TO LIFE	MUL 92.00		12/2045					
905 S /89	0.98	X FRAC	TO LIFE	MUL 89.00		12/2045					
907 S /196	S/196	X FRAC	TO LIFE	MINUS 89.00		12/2045					
909 S /88	0.06	X FRAC	TO LIFE	MUL 92.00		12/2045					
911 S /88	1.00	X FRAC	TO LIFE	MINUS 88.00		12/2045					
913 S /196	S/196	X FRAC	TO LIFE	MUL 88.00		12/2045					
914 GAS	01/2009	0 0.0 0 0 0 11849 14013 8348 2999.92 #			37.210	10/2009					
915 "	X	7051.09 5729.08 4957.26 4150.29 4028.19 3819.51 #			66.945	4/2010					
916 "	X	3446.55 4013.39 3848.37 3782.14 3374.64 3492.36 #			88.903	10/2010					
917 "	X	3489.48 #			92.392	11/2010					
INVESTMENTS	Tangible	Intang Units	Invest. Point	Method & Value	Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R		
800 CAPITAL	165.61	555.72 M\$G	07/2009 AD	ESC INV	721.323	7/2009	0	721.3	0.0		

MISCELLANEOUS DATA PARAMETERS

201 BTU 0.98
 202 WELLS 0.00 1.00
 203 CUMO, MB 0.00 CUMG, MMF 0.00 CUML, MB
 250 LOSS NO

PROJECT RUN SETTINGS

Base Date : 01/2007 Time Frames : 64*12
 P.W. Date : 01/2008 Primary PW% : 8.0 Discount Freq. : MID
 Report Date : 01/2008
 Qualifiers : Prod = SJ_OP_POST Price = SJ_OP_POST Cost = SJ_OP_POST Owner = BASE
 Title = BASE Misc = BASE Invest = SJ_OP_POST Overlay = SJ_OP_POST

PropID: 25086 RSV CAT: 1PDP
 Well Name: ROSA UNIT #006C
 Field: BASIN
 Cnty: RIO ARRIBA St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 09:53:01
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

RESERVES AND ECONOMICS

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	---GROSS PRODUCTION---				---NET PRODUCTION---				-----PRICES-----		NO. OF WELLS	-----OPERATIONS, M\$-----		
	OIL,	MBBL	GAS,	MMCF	OIL,	MBBL	GAS,	MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000		0.000		0.000		0.000		0.00	0.000	0.0	0.000	0.000	0.000
12-2009	0.000		49.990		0.000		43.241		0.00	2.488	1.0	0.000	107.591	107.591
12-2010	0.000		45.919		0.000		39.720		0.00	3.644	1.0	0.000	144.737	144.737
12-2011	0.000		35.697		0.000		30.877		0.00	4.715	1.0	0.000	145.573	145.573
12-2012	0.000		28.268		0.000		24.452		0.00	4.715	1.0	0.000	115.280	115.280
12-2013	0.000		23.983		0.000		20.745		0.00	4.715	1.0	0.000	97.803	97.803
12-2014	0.000		21.117		0.000		18.266		0.00	4.715	1.0	0.000	86.115	86.115
12-2015	0.000		19.032		0.000		16.463		0.00	4.715	1.0	0.000	77.614	77.614
12-2016	0.000		17.432		0.000		15.078		0.00	4.715	1.0	0.000	71.087	71.087
12-2017	0.000		16.154		0.000		13.973		0.00	4.715	1.0	0.000	65.878	65.878
12-2018	0.000		15.105		0.000		13.066		0.00	4.715	1.0	0.000	61.601	61.601
12-2019	0.000		14.225		0.000		12.305		0.00	4.715	1.0	0.000	58.010	58.010
12-2020	0.000		13.472		0.000		11.653		0.00	4.715	1.0	0.000	54.940	54.940
12-2021	0.000		12.796		0.000		11.069		0.00	4.715	1.0	0.000	52.184	52.184
12-2022	0.000		12.156		0.000		10.515		0.00	4.715	1.0	0.000	49.574	49.574
12-2023	0.000		11.549		0.000		9.990		0.00	4.715	1.0	0.000	47.096	47.096
12-2024	0.000		10.971		0.000		9.490		0.00	4.715	1.0	0.000	44.741	44.741
12-2025	0.000		10.423		0.000		9.016		0.00	4.715	1.0	0.000	42.504	42.504
12-2026	0.000		9.901		0.000		8.565		0.00	4.715	1.0	0.000	40.379	40.379
12-2027	0.000		9.406		0.000		8.137		0.00	4.715	1.0	0.000	38.360	38.360
S TOT	0.000		377.597		0.000		326.621		0.00	4.290	1.0	0.000	1401.065	1401.065
AFTER	0.000		107.731		0.000		93.187		0.00	4.715	1.0	0.000	439.332	439.332
TOTAL	0.000		485.327		0.000		419.808		0.00	4.384	1.0	0.000	1840.397	1840.397

--END--	-----OPERATIONS, M\$-----				-----CAPITAL COSTS, M\$-----						8.0%	
MO-YEAR	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW INV	TOTAL EQUITY INV	CASH BTAX,	FLOW M\$	CUM. BTAX,	DISC M\$
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000
12-2009	6.209	6.000	0.000	95.381	165.606	555.717	0.000	721.323	-625.941			-557.697
12-2010	8.353	12.000	0.000	124.384	0.000	0.000	0.000	0.000	124.384			-455.083
12-2011	8.401	12.000	0.000	125.171	0.000	0.000	0.000	0.000	125.171			-359.469
12-2012	6.653	12.000	0.000	96.627	0.000	0.000	0.000	0.000	96.627			-291.126
12-2013	5.644	12.000	0.000	80.159	0.000	0.000	0.000	0.000	80.159			-238.631
12-2014	4.970	12.000	0.000	69.145	0.000	0.000	0.000	0.000	69.145			-196.703
12-2015	4.479	12.000	0.000	61.135	0.000	0.000	0.000	0.000	61.135			-162.378
12-2016	4.103	12.000	0.000	54.984	0.000	0.000	0.000	0.000	54.984			-133.793
12-2017	3.802	12.000	0.000	50.076	0.000	0.000	0.000	0.000	50.076			-109.688
12-2018	3.555	12.000	0.000	46.046	0.000	0.000	0.000	0.000	46.046			-89.166
12-2019	3.348	12.000	0.000	42.662	0.000	0.000	0.000	0.000	42.662			-71.559
12-2020	3.171	12.000	0.000	39.769	0.000	0.000	0.000	0.000	39.769			-56.362
12-2021	3.012	12.000	0.000	37.172	0.000	0.000	0.000	0.000	37.172			-43.210
12-2022	2.861	12.000	0.000	34.713	0.000	0.000	0.000	0.000	34.713			-31.838
12-2023	2.718	12.000	0.000	32.378	0.000	0.000	0.000	0.000	32.378			-22.016
12-2024	2.582	12.000	0.000	30.159	0.000	0.000	0.000	0.000	30.159			-13.546
12-2025	2.453	12.000	0.000	28.051	0.000	0.000	0.000	0.000	28.051			-6.251
12-2026	2.330	12.000	0.000	26.048	0.000	0.000	0.000	0.000	26.048			0.022
12-2027	2.214	12.000	0.000	24.146	0.000	0.000	0.000	0.000	24.146			5.406
S TOT	80.859	222.000	0.000	1098.206	165.606	555.717	0.000	721.323	376.884			5.406
AFTER	25.355	216.000	0.000	197.977	0.000	0.000	0.000	0.000	197.977			33.371
TOTAL	106.214	438.000	0.000	1296.183	165.606	555.717	0.000	721.323	574.860			33.371

PropID: 25086 RSV CAT: 1PDP
 Well Name: ROSA UNIT #006C
 Field: BASIN
 Cnty: RIO ARRIBA St: NM
 Reservoir: MANCOS
 PostAudit:
 Operator: WPC

DATE : 02/07/2011
 TIME : 09:53:01
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

AFTER TAX ECONOMICS

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECIA-	DEPLETION	INTANG.	INTEREST	TAXABLE	TAX	TAXES	CASH FLOW	8.0%
MO-YEAR	CASH FLOW	TION	M\$-----	EXPENSED	PAID & CAP	INCOME	CREDIT	PAYABLE	ATAW	CUM. DISC
-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	95.381	23.665	0.000	555.717	0.000	-484.000	0.000	-169.400	-456.541	-406.766
12-2010	124.384	40.557	0.000	0.000	0.000	83.827	0.000	29.339	95.045	-328.356
12-2011	125.171	28.965	0.000	0.000	0.000	96.207	0.000	33.672	91.499	-258.464
12-2012	96.627	20.684	0.000	0.000	0.000	75.943	0.000	26.580	70.047	-208.921
12-2013	80.159	14.789	0.000	0.000	0.000	65.370	0.000	22.879	57.279	-171.409
12-2014	69.145	14.772	0.000	0.000	0.000	54.373	0.000	19.030	50.114	-141.021
12-2015	61.135	14.789	0.000	0.000	0.000	46.346	0.000	16.221	44.914	-115.803
12-2016	54.984	7.386	0.000	0.000	0.000	47.598	0.000	16.659	38.325	-95.879
12-2017	50.076	0.000	0.000	0.000	0.000	50.076	0.000	17.527	32.549	-80.211
12-2018	46.046	0.000	0.000	0.000	0.000	46.046	0.000	16.116	29.930	-66.871
12-2019	42.662	0.000	0.000	0.000	0.000	42.662	0.000	14.932	27.730	-55.427
12-2020	39.769	0.000	0.000	0.000	0.000	39.769	0.000	13.919	25.850	-45.549
12-2021	37.172	0.000	0.000	0.000	0.000	37.172	0.000	13.010	24.162	-37.000
12-2022	34.713	0.000	0.000	0.000	0.000	34.713	0.000	12.150	22.564	-29.608
12-2023	32.378	0.000	0.000	0.000	0.000	32.378	0.000	11.332	21.046	-23.224
12-2024	30.159	0.000	0.000	0.000	0.000	30.159	0.000	10.556	19.603	-17.718
12-2025	28.051	0.000	0.000	0.000	0.000	28.051	0.000	9.818	18.233	-12.976
12-2026	26.048	0.000	0.000	0.000	0.000	26.048	0.000	9.117	16.931	-8.899
12-2027	24.146	0.000	0.000	0.000	0.000	24.146	0.000	8.451	15.695	-5.400
S TOT	1098.206	165.606	0.000	555.717	0.000	376.884	0.000	131.909	244.974	-5.400
AFTER	197.977	0.000	0.000	0.000	0.000	197.977	0.000	69.292	128.685	12.778
TOTAL	1296.183	165.606	0.000	555.717	0.000	574.860	0.000	201.201	373.659	12.778

BTAX RATE OF RETURN (PCT)	9.13	ATAW RATE OF RETURN (PCT)	8.64
BTAX PAYOUT YEARS	9.29	ATAW PAY OUT YEARS	9.29
BTAX PAYOUT YEARS (DISC)	19.00	ATAW PAY OUT YEARS (DISC)	21.94
BTAX NET INCOME/INVEST	1.80	ATAW NET INCOME/INVEST	1.52
BTAX NET INCOME/INVEST (DISC)	1.05	ATAW NET INCOME/INVEST (DISC)	1.02
PRODUCTION START DATE	07/2009	PROJECT LIFE (YEARS)	38.00
		DISCOUNT - RATE (PCT)	8.00
INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	2.191
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.715
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.
CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMF)	0.000
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	485.327
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	485.327
INITIAL WI (PCT)	100.000	FINAL WI (PCT)	100.000
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	86.500	FINAL NET GAS (PCT)	86.500

PRESENT WORTH PROFILE AND			
--- RATE-OF-RETURN VS. BONUS TABLE ---			
P.W.	B.F.I.T.	A.F.I.T.	A.F.I.T.
FACTOR	WORTH	WORTH	BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	574.9	373.7	574.9
2.00	364.5	234.1	325.2
5.00	160.3	97.9	124.6
8.00	33.4	12.8	15.4
10.00	-25.4	-26.9	-31.8
12.00	-70.5	-57.4	-66.6
15.00	-120.0	-91.1	-103.5
18.00	-154.6	-114.8	-128.3
20.00	-171.9	-126.6	-140.4
25.00	-201.3	-146.9	-160.1
30.00	-217.7	-158.2	-170.4
35.00	-226.3	-164.2	-175.2
40.00	-230.0	-166.7	-176.6
45.00	-230.4	-166.9	-175.8
50.00	-228.7	-165.7	-173.6

ROSA UNIT #6C
BLANCO MV / BASIN MANCOS / BASIN DK

Surface Location:
 755' FSL and 880' FWL
 SW/4 SW/4 Sec 27 (M), T31N, R05W
 Rio Arriba, NM

Bottom Hole Location:
 1714' FSL and 2424' FWL
 NE/4 SW/4 Sec 27 (K), T31N, R05W
 Rio Arriba, NM

Elevation: 3782' GR
 API # 30-039-30181

Spud: 09/07/08
 DK Completed: 10/27/08
 MC Completed: 07/02/09
 MV Complete: 00/00/00
 1st Delivery: 11/08/08

Top	MD Depth	TVD Depth
Pictured Cliffs	4143'	3674'
Lewis	4420'	3949'
Cliffhouse Ss.	6322'	5851'
Mcnefee	6366'	5895'
Point Lookout	6567'	6096'
Mancos	7034'	6563'
Dakota	8782'	8310'

RCVD JUL 8 '09
OIL CONS. DIV.
DIST. 3

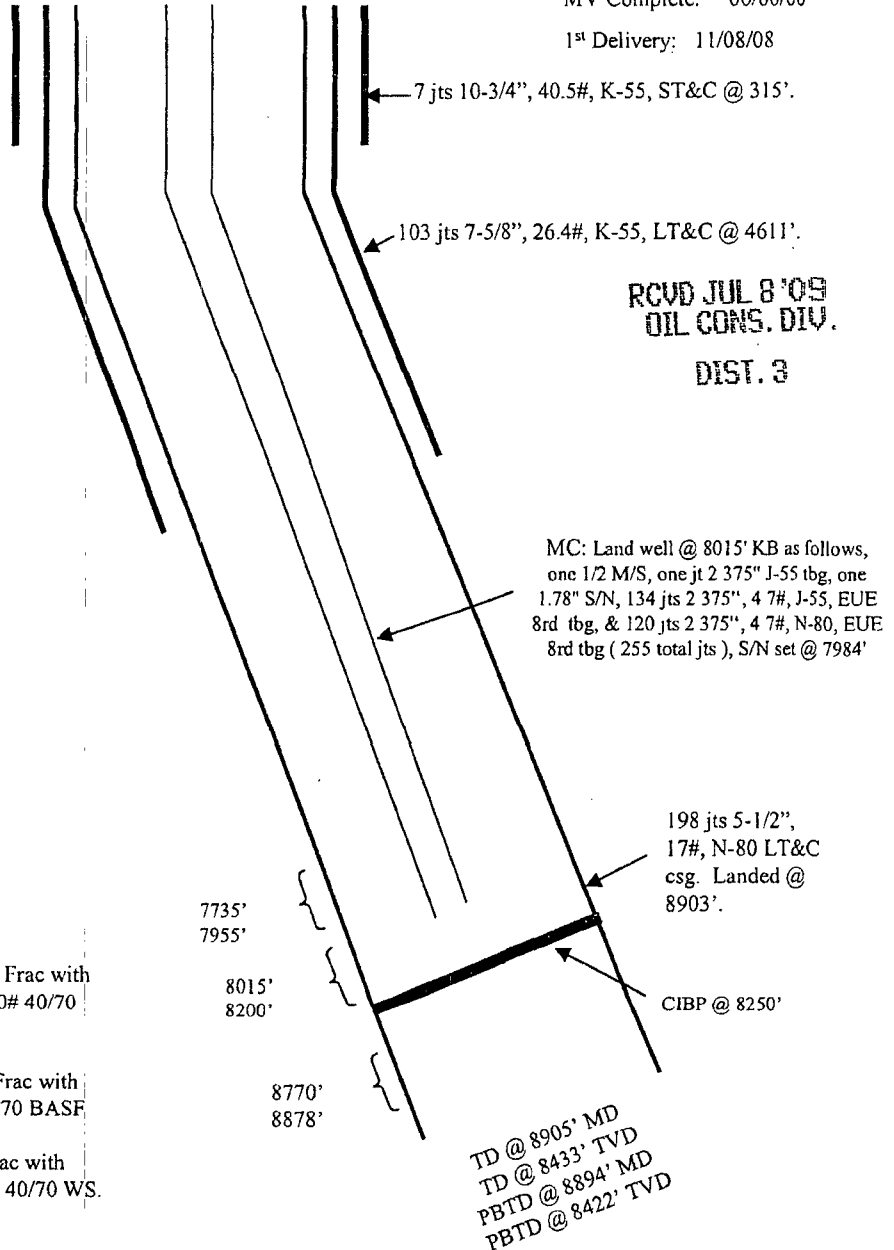
Stimulation:

NOTE: Mancos only flowing at this time

Mancos 2nd: 7735'-7955' (39, 0.34" holes) Frac with 5100# 100 mesh BASF follow with 187,400# 40/70 white ottowa sand

Mancos 1st: 8015'-8200' (39, 0.34" holes) Frac with 5100# white sand follow with 200,300# 40/70 BASF

Dakota: 8770' - 8878' (57, 0.34" holes) Frac with 7500# 100 mesh WS, follow with 118,400# 40/70 WS.



Hole Size	Casing	Cement	Volume	Top of Cmt
14-3/4"	10-3/4", 40.5#	250 sxs	347 cu.ft.	Surface
9-7/8"	7-5/8", 26.4#	825 sxs	1669 cu.ft.	Surface
6-3/4"	5-1/2", 17#	180 sxs	443 cu.ft.	5200' CBL

ROSA UNIT #6C
BLANCO MV / BASIN MANCOS / BASIN DK

Surface Location

755' FSL and 880' FWL
 SW/4 SW/4 Sec 27 (M), T31N, R05W
 Rio Arriba, NM

Bottom Hole Location

1714' FSL and 2424' FWL
 NE/4 SW/4 Sec 27 (K), T31N, R05W
 Rio Arriba, NM

Elevation: 3782' GR
 API # 30-039-30181

Spud 09/07/08

DK Completed: 10/27/08

MC Completed: 07/02/09

MV Complete: 00/00/00

1st Delivery: 11/08/08

Top	MD Depth	TVD Depth
Pictured Cliffs	4143'	3674'
Lewis	4420'	3949'
Cliffhouse Ss	6322'	5851'
Menefee	6366'	5895'
Point Lookout	6567'	6096'
Mancos	7034'	6563'
Dakota	8782'	8310'

RCVD JUL 13 '09
OIL CONS. DIV.
DIST. 3

MC: Land well @ 8015' KB as follows,
 one 1/2 M/S, one jt 2.375" J-55 tbg, one
 1.78" S/N, 134 jts 2.375", 4 7#, J-55, EUE
 8rd tbg, & 120 jts 2.375", 4.7#, N-80, EUE
 8rd tbg (255 total jts), S/N set @ 7984'

198 jts 5-1/2",
 17#, N-80 LT&C
 csg Landed @
 8903'.

CIBP @ 8250'

Stimulation:

NOTE: Mancos only flowing at this time

Mancos 2nd 7735'-7955' (39, 0.34" holes) Frac with
 5100# 100 mesh BASF follow with 187,400# 40/70
 white ottowa sand

Mancos 1st: 8015'-8200' (39, 0.34" holes) Frac with
 5100# white sand follow with 200,300# 40/70 BASF

Dakota: 8770' - 8878' (57, 0.34" holes) Frac with
 7500# 100 mesh WS, follow with 118,400# 40/70 WS.

Hole Size	Casing	Cement	Volume	Top of Cmt
14-3/4"	10-3/4", 40.5#	250 sxs	347 cu.ft.	Surface
9-7/8"	7-5/8", 26.4#	825 sxs	1669 cu.ft.	Surface
6-3/4"	5-1/2", 17#	180 sxs	443 cu.ft.	5200' CBL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		² OGRID Number 120782
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30-039-30181	⁵ Pool Name BASIN MANCOS 5/2	⁶ Pool Code 97232
⁷ Property Code 17033	⁸ Property Name ROSA UNIT	⁹ Well Number 6C

II. ¹⁰ Surface Location

UL or lot no. M	Section 27	Township 31N	Range 5W	Lot.Idn	Feet from the 755	North/South Line SOUTH	Feet from the 880	East/West line WEST	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	----------------------	------------------------------	----------------------	------------------------	----------------------

¹¹ Bottom Hole Location

UL or lot no. K	Section 27	Township 31N	Range 5W	Lot Idn	Feet from the 1714	North/South line SOUTH	Feet from the 2424	East/West line WEST	County Rio Arriba
¹² Lse Code J	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
009018	GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	O
025244	WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	G
RCVD JUL 8 '09		

Dakota isolated with CIBP @ 8250'

OIL CONS. DIV.
DIST. 3

IV. Well Completion Data NOTE: Mesaverde to be completed at a later date

²¹ Spud Date 9-7-08	²² Ready Date 7-2-09	²³ TD 3905' MD	²⁴ PBDT 8894' MD	²⁵ Perforations 7735' - 8200' MD	²⁶ DHC, MC AZT-
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
14-3/4"	10-3/4", 40.5#, K-55	315'	250 sx - surface		
9-7/8"	7-5/8", 26.4#, K-55	4611'	825 sx - surface		
6-3/4"	5 1/2", 17#, N-80	8903'	180 sx - 5200' (CBL)		
	2.875", 6.5#, J-55	8376'	NONE		

VI. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date 7-2-09	³⁴ Test Length 1.0 hrs	³⁵ Tbg. Pressure 0	³⁶ Csg. Pressure 17 oz
³⁷ Choke Size 2"	³⁸ Oil	³⁹ Water	⁴⁰ Gas 623 mcf/d		⁴¹ Test Method Pitot
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Larry Higgins</i>			7/13/09 OIL CONSERVATION DIVISION		
Printed name: Larry Higgins			Approved by: <i>Chuck P</i> 7-13-09		
Title: Drig COM			Title: SUPERVISOR DISTRICT #3		
E-mail Address: larry.higgins@williams.com			Approval Date: JUL 13 2009		
Date: 7-7-09		Phone: 505-634-4208	<i>Bern appl</i>		

In Lieu of
Form 3160-4
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN
DUPLICATE

(See other instructions on
reverse side)

FORM APPROVED
OMB NO 1004-0137
Expires: February 28, 1995

5 LEASE DESIGNATION AND LEASE NO
NMSF-078770

6 IF INDIAN, ALLOTTEE OR

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a TYPE OF WELL ☐ OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER

RECEIVED

b TYPE OF COMPLETION
☒ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER

2 NAME OF OPERATOR

WILLIAMS PRODUCTION COMPANY

3 ADDRESS AND TELEPHONE NO

P.O. Box 640, Aztec, NM 87410 (505) 634-4208

Bureau of Land Management

Farmington Field Office

4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At Surface: 755' FSL & 880' FWL, sec 27, T31N, R5W

At top production interval reported below: 1714' FSL & 2424' FWL, sec 27, T31N, R5W

At total depth. Same

7 UNIT AGREEMENT NAME

Rosa Unit

8 FARM OR LEASE NAME, WELL NO

Rosa Unit #6C

9 API WELL NO

30-039-30181-0051

10 FIELD AND POOL, OR WILDCAT

Basin Mancos

11 SEC, T, R, M, OR BLOCK AND
SURVEY OR AREA

Sec 27, T31N, R5W

14 PERMIT NO

DATE ISSUED

12 COUNTY OR

13 STATE

Rio Arriba

New Mexico

15 DATE
SPUDED
9-7-08

16 DATE T D
REACHED
9-28-08

17 DATE COMPLETED (READY TO PRODUCE)
7-2-09 Mancos
Completion

18 ELEVATIONS (DK, RKB, RT, GK, ETC)*
6782' GR

19 ELEVATION CASINGHEAD

RCVD JUL 13 '09

20 TOTAL DEPTH, MD & TVD
8905' MD / 8433' TVD

21 PLUG, BACK T D, MD & TVD
8894' MD / 8422' TVD

22 IF MULTICOMP,
HOW MANY
3*

23 INTERVALS
DRILLED BY

ROTARY TOOLS

CABLE TOOLS

24 PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)*

BASIN MANCOS 7735' - 8200' MD Dakota isolated with CIBP @ 8250' * Mesaverde to be completed at later date

25 WAS DIRECTIONAL SURVEY MADE

YES

DIS. 3

26 TYPE ELECTRIC AND OTHER LOGS RUN

RST and CBL

27 WAS WELL CORED

No

28 CASING REPORT (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
10-3/4", K-55	40 5#	315'	14-3/4"	250 SX - SURFACE	
7-5/8"	26 4#	4611'	9-7/8"	825 SX - SURFACE	
5-1/2", N-80	17 0#	8903'	6-3/4"	180 SX - 5200' (CBL)	

29 LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2.375", 4 7#, J-55 & N-80, EUE 8rd	8015'	none

31 PERFORATION RECORD (Interval, size, and number)

Mancos 2nd 7735'-7955' Total of 39, 0.34" holes

Mancos 1st 8015'-8200' Total of 39, 0.34" holes

32 ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7735' - 7955'	Fraced with 5100# 100 mesh BASF followed w/187,400# 40/70 white ottowa sand
8015' - 8200'	Fraced with 5100# 100 mesh white sand followed w/200,300# 40/70 BASF

33 PRODUCTION

DATE OF FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump)				WELL STATUS (PRODUCING OR SI)	
		Flowing				flowing	
DATE OF TEST	TESTED	CHOKE SIZE	PROD FOR TEST PERIOD	OIL - BBL	GAS - MCF	WATER - BBL	GAS-OIL RATIO
7-2-09	10 hr	2"					
FLOW TBG PRESS	CASING PRESSURE	CALCULATED 24-HOUR RATE			OIL - BBL	GAS - MCF	OIL GRAVITY-API (CORR.)
0	17 oz					623 mcf/d	

34 DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TO BE SOLD

NMCCD

TEST WITNESSED BY: Buddy Banks
ACCEPTED FOR RECORD

35 LIST OF ATTACHMENTS SUMMARY OF POROUS ZONES, WELLBORE DIAGRAM

36 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Larry H. Hagan

TITLE Drlg COM

DATE 7-7-09

7/16

JUL 09 2009

FARMINGTON FIELD OFFICE
BY: J. SANCHEZ

37 SUMMARY OF POROUS ZONES (Show all important zones of porosity and contents like conf. coal intervals, and all lith. items, tests, including depth interval tested, cushion used, lime tool open, flowing and shut-in pressures, and recoveries)

38 GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC	NAME	TOP	
					MEASURED DEPTH	TRUE VERTICAL DEPTH
				PICTURED CLIFFS	4143'	3674'
				LEWIS	4420'	3949'
				CLIFFHOUSE	6322'	5851'
				MENESEE	6366'	5895'
				POINT LOOKOUT	6567'	6096'
				MANCOS	7034'	6563'
				DAKOTA	8782'	8310'

February 11, 2011

The Rosa Unit #17C Mancos Well (commercial) is located 1940 feet from the South Line and 535 feet from the West Line, Section 20, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on June 10, 2009, and completed in the Mancos formation on August 29, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7372' to 7815'. This well has a 2.375" tubing string. This well was shut in with a SICP of 160 psig. On August 28, 2009 the well was tested and after flowing for 2 hours through a 1/2" choke on the 2.375" tubing, the well gauged 373 MCFD.

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 15.68 % and is therefore determined commercial.

Attached to this document are the following:

- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

Evaluating Engineer

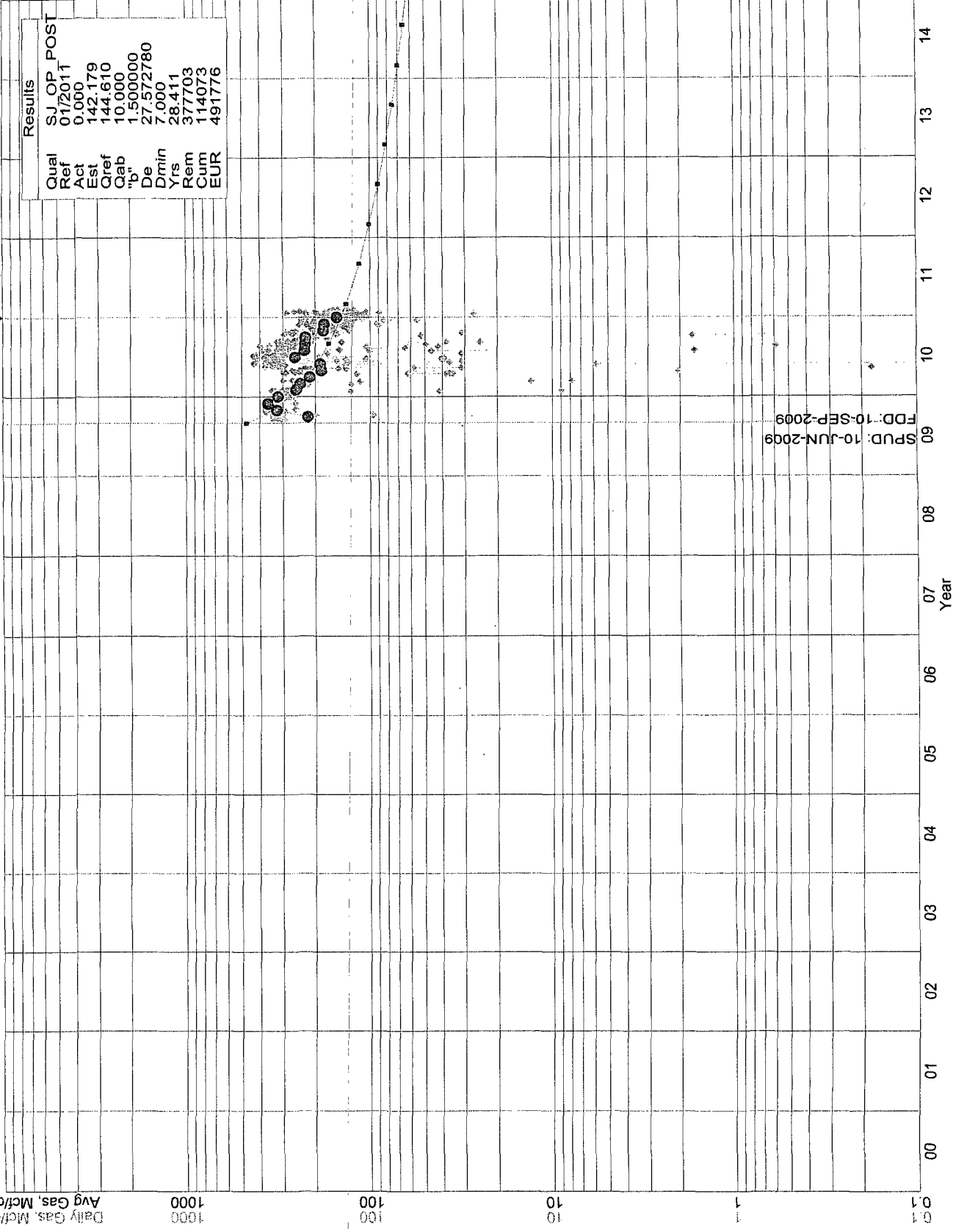


by K. Russell

Marcia Brueggemann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit

SJB_AvgDay_Gas

Avg Gas, Mcf/day



ROSA UNIT #017C | 1PDP | MANCOS | J7PKNMLTAS | 62246103
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE

LOSS NO

Production

CUMS 0 0	SJ_OP_POST
START 08/2009	SJ_OP_POST
GAS 600 X M/D 7 EXP H/1.5 97	SJ_OP_POST
" X 10 M/D X YRS EXP 7	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.2584 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T 1000 X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 09/2009 AD ESC INV	SJ_OP_POST
---	------------

Overlays

SIDFILE RI_TOTAL_BR	SJ_OP_POST
LOAD MP.GAS GAS 01/2007 12/2010 #	SJ_OP_POST

PropID: 25704 RSV CAT: 1PDP
 Well Name: ROSA UNIT #017C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 09:55:20
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

COMBINED INPUT DATA								INITIAL CALCULATED DATA			
KEYWORD & Ref. Code	Beginning, Ending Rates			Schedule Limit		Method & Value		Ultimate @ End Pt.	Init.Deff	Init. Rate	Final Rate
400 START	08/2009										
401 GAS	600.00	X	M/D	7.00	EXP	H/1.5	97.00	330.105	7/2018	70.5586	18250.
402 "	X	10.00	M/D	X	YRS	EXP	7.00	507.377	5/2039	7.0000	1375.
500 PRI/GAS	01/2007	5.617	6.487	6.677	5.957	#/M			4/2007		
501 "	X	6.627	6.827	6.197	4.987	#/M			8/2007		
502 "	X	4.587	5.117	6.057	6.497	#/M			12/2007		
503 "	01/2008	6.377	7.277	8.087	8.277	#/M			4/2008		
504 "	X	9.427	9.846	11.356	7.637	#/M			8/2008		
505 "	X	6.427	4.267	2.837	4.627	#/M			12/2008		
506 "	01/2009	4.827	3.107	2.687	2.617	#/M			4/2009		
507 "	X	2.497	2.647	2.977	3.177	#/M			8/2009		
508 "	X	2.467	3.417	4.257	4.277	#/M			12/2009		
509 "	01/2010	5.72	5.31	4.66	3.77	#/M			4/2010		
510 "	X	3.87	3.69	4.28	4.08	#/M			8/2010		
511 "	X	3.47	4.126	5.75	5.75	#/M			12/2010		
512 "	5.75	X	\$/M	TO	LIFE	PC	0.00		5/2039	5.750	5.750
600 ATX	2.26	X	%	TO	LIFE	PC	0.00		5/2039	0.023	0.023
601 STX/GAS	3.75	X	%	TO	LIFE	PC	0.00		5/2039	0.037	0.037
602 OPC/T	1000.00	X	\$/M	TO	LIFE	PC	0.00		5/2039	1000.000	1000.000
705 LSE/WI	1.0000	D	FRAC	TO	LIFE	FLAT	0.00		5/2039	1.000	1.000
720 NET/OIL	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		5/2039	0.865	0.865
740 NET/GAS	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		5/2039	0.865	0.865

OVERLAYS	Beginning, Ending Rates			Schedule Limit		Method & Value		Ultimate @ End Pt.	Init.Deff	Init. Rate	Final Rate
901 S 92	S/95	X	FRAC	TO	LIFE	DIV	146.00		5/2039		
903 S /89	0.49	X	FRAC	TO	LIFE	MUL	92.00		5/2039		
905 S /89	1.00	X	FRAC	TO	LIFE	MUL	89.00		5/2039		
907 S /196	S/196	X	FRAC	TO	LIFE	MINUS	89.00		5/2039		
909 S /88	0.06	X	FRAC	TO	LIFE	MUL	92.00		5/2039		
911 S /88	1.00	X	FRAC	TO	LIFE	MINUS	88.00		5/2039		
913 S /196	S/196	X	FRAC	TO	LIFE	MUL	88.00		5/2039		
914 GAS	01/2007	0	0	0	0	0	0	0	0	0	0
915 "	X	0	0	0	0	0	0	0	0	0	0
916 "	X	6575.64	9988.27	10822.77	9838.36	7845.35	6751.47		51.822	2/2010	
917 "	X	6631.34	5537.46	5801.42	7695.37	7060.53	7043.42		91.591	8/2010	
918 "	X	6796.21	5600.87	5361.92					109.350	11/2010	

INVESTMENTS	Tangible Intang Units		Invest. Point	Method & Value	Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 CAPITAL	165.61	555.72 M\$G	09/2009 AD	ESC INV	721.323	9/2009	0	721.3	721.3

MISCELLANEOUS DATA PARAMETERS

201 BTU	1.00				
202 WELLS	0.00	1.00			
203 CUMO, MB	0.00	CUMG, MMF	0.00	CUML, MB	
250 LOSS	NO				

PROJECT RUN SETTINGS

Base Date	: 01/2007	Time Frames	: 64*12		
P.W. Date	: 01/2008	Primary PW%	: 8.0	Discount Freq.	: MID
Report Date	: 01/2008				
Qualifiers	: Prod = SJ_OP_POST	Price = SJ_OP_POST	Cost = SJ_OP_POST	Owner = BASE	
	Title = BASE	Misc = BASE	Invest = SJ_OP_POST	Overlay = SJ_OP_POST	

PropID: 25704 RSV CAT: 1PDP
 Well Name: ROSA UNIT #017C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 09:55:20
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

RESERVES AND ECONOMICS

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	---GROSS PRODUCTION---				---NET PRODUCTION---				---PRICES---		NO. OF WELLS	---OPERATIONS, M\$---		
	OIL,	MBBL	GAS,	MMCF	OIL,	MBBL	GAS,	MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000		0.000		0.000		0.000		0.00	0.000	0.0	0.000	0.000	0.000
12-2009	0.000		37.225		0.000		32.200		0.00	2.921	1.0	0.000	94.068	94.068
12-2010	0.000		76.602		0.000		66.261		0.00	3.654	1.0	0.000	242.145	242.145
12-2011	0.000		44.533		0.000		38.521		0.00	4.803	1.0	0.000	185.018	185.018
12-2012	0.000		34.174		0.000		29.560		0.00	4.803	1.0	0.000	141.979	141.979
12-2013	0.000		28.314		0.000		24.491		0.00	4.803	1.0	0.000	117.632	117.632
12-2014	0.000		24.461		0.000		21.159		0.00	4.803	1.0	0.000	101.625	101.625
12-2015	0.000		21.700		0.000		18.771		0.00	4.803	1.0	0.000	90.155	90.155
12-2016	0.000		19.607		0.000		16.960		0.00	4.803	1.0	0.000	81.460	81.460
12-2017	0.000		17.956		0.000		15.532		0.00	4.803	1.0	0.000	74.599	74.599
12-2018	0.000		16.612		0.000		14.369		0.00	4.803	1.0	0.000	69.016	69.016
12-2019	0.000		15.445		0.000		13.360		0.00	4.803	1.0	0.000	64.168	64.168
12-2020	0.000		14.364		0.000		12.425		0.00	4.803	1.0	0.000	59.676	59.676
12-2021	0.000		13.358		0.000		11.555		0.00	4.803	1.0	0.000	55.499	55.499
12-2022	0.000		12.423		0.000		10.746		0.00	4.803	1.0	0.000	51.614	51.614
12-2023	0.000		11.554		0.000		9.994		0.00	4.803	1.0	0.000	48.001	48.001
12-2024	0.000		10.745		0.000		9.294		0.00	4.803	1.0	0.000	44.641	44.641
12-2025	0.000		9.993		0.000		8.644		0.00	4.803	1.0	0.000	41.516	41.516
12-2026	0.000		9.293		0.000		8.039		0.00	4.803	1.0	0.000	38.610	38.610
12-2027	0.000		8.643		0.000		7.476		0.00	4.803	1.0	0.000	35.907	35.907
S TOT	0.000		427.001		0.000		369.356		0.00	4.433	1.0	0.000	1637.329	1637.329
AFTER	0.000		64.681		0.000		55.949		0.00	4.803	1.0	0.000	268.725	268.725
TOTAL	0.000		491.682		0.000		425.305		0.00	4.482	1.0	0.000	1906.054	1906.054
--END-- MO-YEAR	---OPERATIONS, M\$---				---CAPITAL COSTS, M\$---								8.0%	
	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW INV	TOTAL EQUITY INV	CASH BTAX,	FLOW M\$	CUM. BTAX,	DISC M\$		
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
12-2009	5.572	5.000	0.000	83.495	165.606	555.717	0.000	721.323	-637.828		-560.096			
12-2010	14.344	12.000	0.000	215.801	0.000	0.000	0.000	0.000	215.801		-382.065			
12-2011	10.960	12.000	0.000	162.058	0.000	0.000	0.000	0.000	162.058		-258.275			
12-2012	8.410	12.000	0.000	121.568	0.000	0.000	0.000	0.000	121.568		-172.291			
12-2013	6.968	12.000	0.000	98.664	0.000	0.000	0.000	0.000	98.664		-107.677			
12-2014	6.020	12.000	0.000	83.605	0.000	0.000	0.000	0.000	83.605		-56.981			
12-2015	5.341	12.000	0.000	72.815	0.000	0.000	0.000	0.000	72.815		-16.098			
12-2016	4.825	12.000	0.000	64.634	0.000	0.000	0.000	0.000	64.634		17.504			
12-2017	4.419	12.000	0.000	58.180	0.000	0.000	0.000	0.000	58.180		45.510			
12-2018	4.088	12.000	0.000	52.928	0.000	0.000	0.000	0.000	52.928		69.100			
12-2019	3.801	12.000	0.000	48.367	0.000	0.000	0.000	0.000	48.367		89.061			
12-2020	3.535	12.000	0.000	44.141	0.000	0.000	0.000	0.000	44.141		105.928			
12-2021	3.288	12.000	0.000	40.211	0.000	0.000	0.000	0.000	40.211		120.156			
12-2022	3.057	12.000	0.000	36.556	0.000	0.000	0.000	0.000	36.556		132.132			
12-2023	2.843	12.000	0.000	33.157	0.000	0.000	0.000	0.000	33.157		142.190			
12-2024	2.644	12.000	0.000	29.996	0.000	0.000	0.000	0.000	29.996		150.615			
12-2025	2.459	12.000	0.000	27.057	0.000	0.000	0.000	0.000	27.057		157.651			
12-2026	2.287	12.000	0.000	24.323	0.000	0.000	0.000	0.000	24.323		163.508			
12-2027	2.127	12.000	0.000	21.780	0.000	0.000	0.000	0.000	21.780		168.365			
S TOT	96.991	221.000	0.000	1319.338	165.606	555.717	0.000	721.323	598.015		168.365			
AFTER	15.918	137.000	0.000	115.806	0.000	0.000	0.000	0.000	115.806		187.038			
TOTAL	112.909	358.000	0.000	1435.144	165.606	555.717	0.000	721.323	713.821		187.038			

PropID: 25704 RSV CAT: 1PDP
 Well Name: ROSA UNIT #017C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 09:55:20
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

AFTER TAX ECONOMICS

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECIA-	DEPLETION	INTANG.	INTEREST	TAXABLE	TAX	TAXES	CASH FLOW	8.0%
MO-YEAR	CASH FLOW	TION		EXPENSED	PAID & CAP	INCOME	CREDIT	PAYABLE	ATAX	CUM. DISC
-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	83.495	23.665	0.000	555.717	0.000	-495.886	0.000	-173.560	-464.267	-405.458
12-2010	215.801	40.557	0.000	0.000	0.000	175.244	0.000	61.336	154.466	-278.028
12-2011	162.058	28.965	0.000	0.000	0.000	133.094	0.000	46.583	115.475	-189.820
12-2012	121.568	20.684	0.000	0.000	0.000	100.884	0.000	35.309	86.259	-128.811
12-2013	98.664	14.789	0.000	0.000	0.000	83.875	0.000	29.356	69.307	-83.422
12-2014	83.605	14.772	0.000	0.000	0.000	68.833	0.000	24.092	59.514	-47.334
12-2015	72.815	14.789	0.000	0.000	0.000	58.026	0.000	20.309	52.506	-17.854
12-2016	64.634	7.386	0.000	0.000	0.000	57.248	0.000	20.037	44.597	5.331
12-2017	58.180	0.000	0.000	0.000	0.000	58.180	0.000	20.363	37.817	23.535
12-2018	52.928	0.000	0.000	0.000	0.000	52.928	0.000	18.525	34.403	38.869
12-2019	48.367	0.000	0.000	0.000	0.000	48.367	0.000	16.928	31.438	51.843
12-2020	44.141	0.000	0.000	0.000	0.000	44.141	0.000	15.449	28.692	62.807
12-2021	40.211	0.000	0.000	0.000	0.000	40.211	0.000	14.074	26.137	72.054
12-2022	36.556	0.000	0.000	0.000	0.000	36.556	0.000	12.795	23.762	79.839
12-2023	33.157	0.000	0.000	0.000	0.000	33.157	0.000	11.605	21.552	86.377
12-2024	29.996	0.000	0.000	0.000	0.000	29.996	0.000	10.499	19.498	91.853
12-2025	27.057	0.000	0.000	0.000	0.000	27.057	0.000	9.470	17.587	96.427
12-2026	24.323	0.000	0.000	0.000	0.000	24.323	0.000	8.513	15.810	100.234
12-2027	21.780	0.000	0.000	0.000	0.000	21.780	0.000	7.623	14.157	103.390
S TOT	1319.338	165.606	0.000	555.717	0.000	598.015	0.000	209.305	388.710	103.390
AFTER	115.806	0.000	0.000	0.000	0.000	115.806	0.000	40.532	75.274	115.528
TOTAL	1435.144	165.606	0.000	555.717	0.000	713.821	0.000	249.837	463.984	115.528

BTAX RATE OF RETURN (PCT)	15.68	ATAx RATE OF RETURN (PCT)	14.85
BTAX PAYOUT YEARS	6.48	ATAx PAY OUT YEARS	6.65
BTAX PAYOUT YEARS (DISC)	8.48	ATAx PAY OUT YEARS (DISC)	8.77
BTAX NET INCOME/INVEST	1.99	ATAx NET INCOME/INVEST	1.64
BTAX NET INCOME/INVEST(DISC)	1.29	ATAx NET INCOME/INVEST(DISC)	1.18

PRODUCTION START DATE	08/2009	PROJECT LIFE (YEARS)	31.42
		DISCOUNT - RATE (PCT)	8.00

INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	1.759
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.803
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.

CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMCF)	0.000
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	491.682
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	491.682

INITIAL WI (PCT)	100.000	FINAL WI (PCT)	100.000
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	86.500	FINAL NET GAS (PCT)	86.500

PRESENT WORTH PROFILE AND			
---- RATE-OF-RETURN VS. BONUS TABLE ----			
P.W.	B.F.I.T.	A.F.I.T.	A.F.I.T.
FACTOR	WORTH	WORTH	BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	713.8	464.0	713.8
2.00	521.6	337.1	476.2
5.00	321.1	204.4	266.3
8.00	187.0	115.5	143.0
10.00	121.6	72.1	87.1
12.00	69.5	37.6	44.5
15.00	10.0	-1.9	-2.2
18.00	-33.8	-30.9	-35.1
20.00	-56.6	-45.9	-51.7
25.00	-97.8	-73.0	-80.6
30.00	-123.8	-89.9	-97.9
35.00	-140.2	-100.4	-108.1
40.00	-150.4	-106.6	-113.8
45.00	-156.2	-110.0	-116.6
50.00	-159.1	-111.5	-117.5

ROSA UNIT #17C

BLANCO MV / BASIN MC / BASIN DK

Spud: 06/10/09

Completed: 08/29/09

1st Delivery: 0/0/00

Surface Location:

1940' FSL and 535' FWL
NW/4 SW/4 Sec 20 (L), T31N, R05W
Rio Arriba, NM

Bottom Hole Location:

2290' FSL and 2302' FWL
NE/4 SW/4 Sec 20 (K), T31N, R05W
Rio Arriba, NM

Elevation: 6341' GR

API # 30-039-30381

Top	MD Depth	TVD Depth
Pictured Cliffs	3743'	3215'
Lewis	4031'	3496'
Cliffhouse Ss.	5938'	5401'
Menefee	6000'	5463'
Point Lookout	6198'	5661'
Mancos	6736'	6195'
Graneros	8299'	7761'
Dakota	8433'	7895'

Upper MV: 5714'-6068' (54, 0.34" holes) Frac with
146,360# 20/40 mesh BASF

Lower MV: 6169-6601' (63, 0.34" holes) Frac with
42,648# 20/40 mesh BASF

Upper Mancos: 7372'-7556' (63, 0.34" holes) Frac with
4820# 100 mesh BASF followed w/125,153# 40/70 BASF

Lower Mancos: 7709'-7815' (54, 0.34" holes) Frac with
5191# 100 mesh BASF followed with 117,662# 40/70
BASF

Dakota: 8432'-8514' (63, 0.34" holes) Frac with 5010#
100 mesh BASF followed w/56,427# 40/70 BASF

7 jts 10-3/4", 40.5#, J-55, ST&C @ 310'.

112 jts 7-5/8", 26.4#, K-55, LT&C @ 4436'.

RCVD SEP 3 '09

OIL CONS. DIV.
DIST. 3

Land well as follows- 2-3/8" EUE half
muleshoe, 1 jt 2 3/8" 4.7# J-55 EUE 8rnd
tbg, 1 78" I.D. F-nipple, 134 jts 2-3/8" 4.7#
J-55 EUE 8rnd tbg and 130 jts 4.7# N-80
EUE 8rnd tbg. EOT @ 8453' - 1 78" I.D.
F-nipple @ 8431'

212 jts 5-1/2",
17#, N-80
LT&C csg. set
@ 8528'.

TD @ 8528' MD
TD @ 7990' TVD
PBD @ 8510' MD
PBD @ 7972' TVD

Hole Size	Casing	Cement	Volume	Top of Cmt
14-3/4"	10-3/4", 40.5#	290 sxs	521 cu.ft.	Surface
9-7/8"	7-5/8", 26.4#	745 sxs	1874 cu.ft.	Surface
6-3/4"	5-1/2", 17#	340 sxs	475 cu.ft.	4210' CBL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		² OGRID Number 120782
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30-039-30381	⁵ Pool Name BLANCO MESAVERDE	⁶ Pool Code 72319
⁷ Property Code 17033	⁸ Property Name ROSA UNIT	⁹ Well Number 17C

II. ¹⁰ Surface Location

UL or lot no. L	Section 20	Township 31N	Range 5W	Lot.Idn	Feet from the 1940	North/South Line SOUTH	Feet from the 535	East/West line WEST	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	-----------------------	------------------------------	----------------------	------------------------	----------------------

¹¹ Bottom Hole Location

UL or lot no. K	Section 20	Township 31N	Range 5W	Lot Idn	Feet from the 2290	North/South line SOUTH	Feet from the 2302	East/West line WEST	County Rio Arriba
¹² Lse Code P	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
009018	GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	O
025244	WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	G
		RCVD SEP 3 '09

IV. Well Completion Data NOTE: Commingled with MC & DK

²¹ Spud Date 6-10-09	²² Ready Date 8-29-09	²³ TD 8528' MD	²⁴ PBDT 8510' MD	²⁵ Perforations 5714' - 6601'	²⁶ DHC, MC AZT-3212
²⁷ Hole Size 14-3/4"	²⁸ Casing & Tubing Size 10-3/4", 40.5#, J J-55	²⁹ Depth Set 310'	³⁰ Sacks Cement 290 sx - surface		
9-7/8"	7-5/8", 26.4#, K-55	4436'	745 sx - surface		
6-3/4"	5 1/2", 17#, N-80	8528'	340 sx - 4210' (CBL)		
	2.375", 4.7#, J-55	8543'	NONE		

VI. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date 8-28-09	³⁴ Test Length 2 hr	³⁵ Tbg. Pressure 0	³⁶ Csg. Pressure 160 lb
³⁷ Choke Size 1/2"	³⁸ Oil	³⁹ Water	⁴⁰ Gas 373 mcf/d		⁴¹ Test Method Pitot

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:
Larry Higgins

Title:
Drig COM

E-mail Address:
larry.higgins@williams.com

Date: 9-2-09 Phone: 505-634-4208

9/2/09 OIL CONSERVATION DIVISION

Approved by:

Title:
SUPERVISOR DISTRICT # 3

Approval Date:
SEP 09 2009

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 July 17, 2008				
		1. WELL API NO. 30-039-30381		2. Type of Lease ☐ STATE ☒ FEE ☐ FED/INDIAN		3. State Oil & Gas Lease No.				
WELL COMPLETION OR RECOMPLETION REPORT AND LOG										
4. Reason for filing: X COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17 13.K NMAC)				5. Lease Name or Unit Agreement Name Rosa Unit						
				6. Well Number: RCVD SEP 3 '05 Rosa Unit #17C						
7. Type of Completion X NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER				OIL CONS. DIV.						
8. Name of Operator Williams Production Company, LLC				9. OGRID 120782 DIST. 3						
10. Address of Operator P.O. Box 640, Aztec, NM 87410				11. Pool name or Wildcat Basin Mancos						
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	L	20	31N	5W		1940	SOUTH	535	WEST	RIO ARRIBA
BH:	K	20	31N	5W		2290	SOUTH	2302	WEST	RIO ARRIBA
13 Date Spudded 6-10-09	14. Date T.D. Reached 6-29-09	15. Date Rig Released 7-5-09		16 Date Completed (Ready to Produce) 8-29-09		17 Elevations (DF and RKB, RT, GR, etc) 6341'				
18. Total Measured Depth of Well 8528' MD / 7990' TVD		19. Plug Back Measured Depth 8510' MD		20. Was Directional Survey Made? YES		21. Type Electric and Other Logs Run Array Induction, Compensated GR-Density-Neutron, Temp, Ultra Sonic Gas Detector				
22. Producing Interval(s), of this completion - Top, Bottom, Name Basin Mancos 7372'-7815'										
23 CASING RECORD (Report all strings set in well)										
CASING SIZE		WEIGHT LB./FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED
10-3/4"		40.5#		310'		14-3/4"		290 sxs - surface		
7-5/8"		26.4#		4436'		9-7/8"		745 sxs - surface		
5-1/2"		17#		8528'		6-3/4"		340 sxs - 4210' cbl		
24. LINER RECORD										
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN						
				2.375" 4.7# J-55						
25. TUBING RECORD										
SIZE	DEPTH SET	PACKER SET								
	8453'									
26 Perforation record (interval, size, and number)						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.				
<u>Upper Mancos:</u> 7372'-7556' (63, 0.34" holes) <u>Lower Mancos:</u> 7709'-7815' (54, 0.34" holes)						DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED		
						7372'-7556'		4820# 100 mesh - 125,153# 40/70		
						7709'-7815'		5191# 100 mesh - 117,662# 40/70		
28 PRODUCTION										
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)					Well Status (Prod. or Shut-in) Shut in - waiting on tie in			
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio			
8-28-09	2 hr	1/2"								
Flow Tubing Press. 0	Casing Pressure 160 lbs	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF 354 mcf/d	Water - Bbl.	Oil Gravity - API - (Corr.)				
29. Disposition of Gas (Sold, used for fuel, vented, etc.)								30. Test Witnessed By Weldon Higgins		
31. List Attachments										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit See pit permit										
33. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude					Longitude			NAD 1927 1983		

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Larry Higgins Printed Name Larry Higgins Title Drlg COM Date 9-2-09
E-mail Address larry.higgins@williams.com (505) 634-4208

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo 2942'	T. Penn A"
T. Salt	T. Strawn	T. Kirtland 3070'	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland 3497'	T. Penn. "C"
T. Yates	T. Miss	T. Lewis 4031'	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House 5938'	T. Leadville
T. Queen	T. Silurian	T. Menefee 6000'	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout 6198'	T. Elbert
T. San Andres	T. Simpson	T. Mancos 6736'	T. McCracken
T. Glorieta	T. McKee	T. Gallup 6974'	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn 8299'	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota 8433'	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to..... No. 3, from.....to.....
No. 2, from.....to..... No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
No. 2, from.....to.....feet.....
No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology
------	----	----------------------	-----------	------	----	----------------------	-----------

February 7, 2011

The Rosa Unit #25C Mancos Well (commercial) is located 1130 feet from the South Line and 1560 feet from the West Line, Section 15 Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on September 15, 2009, and completed in the Mancos formation on November 22, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 6960' to 7396'. This well has a 2.375" tubing string. This well was shut in with a SICP of 490 psig. On November 22, 2009 the well was tested and after flowing for 2 hours through a 2" choke on the 2.375" tubing, the well gauged 1086 MCFD.

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 12.93% and is therefore determined commercial.

Attached to this document are the following:

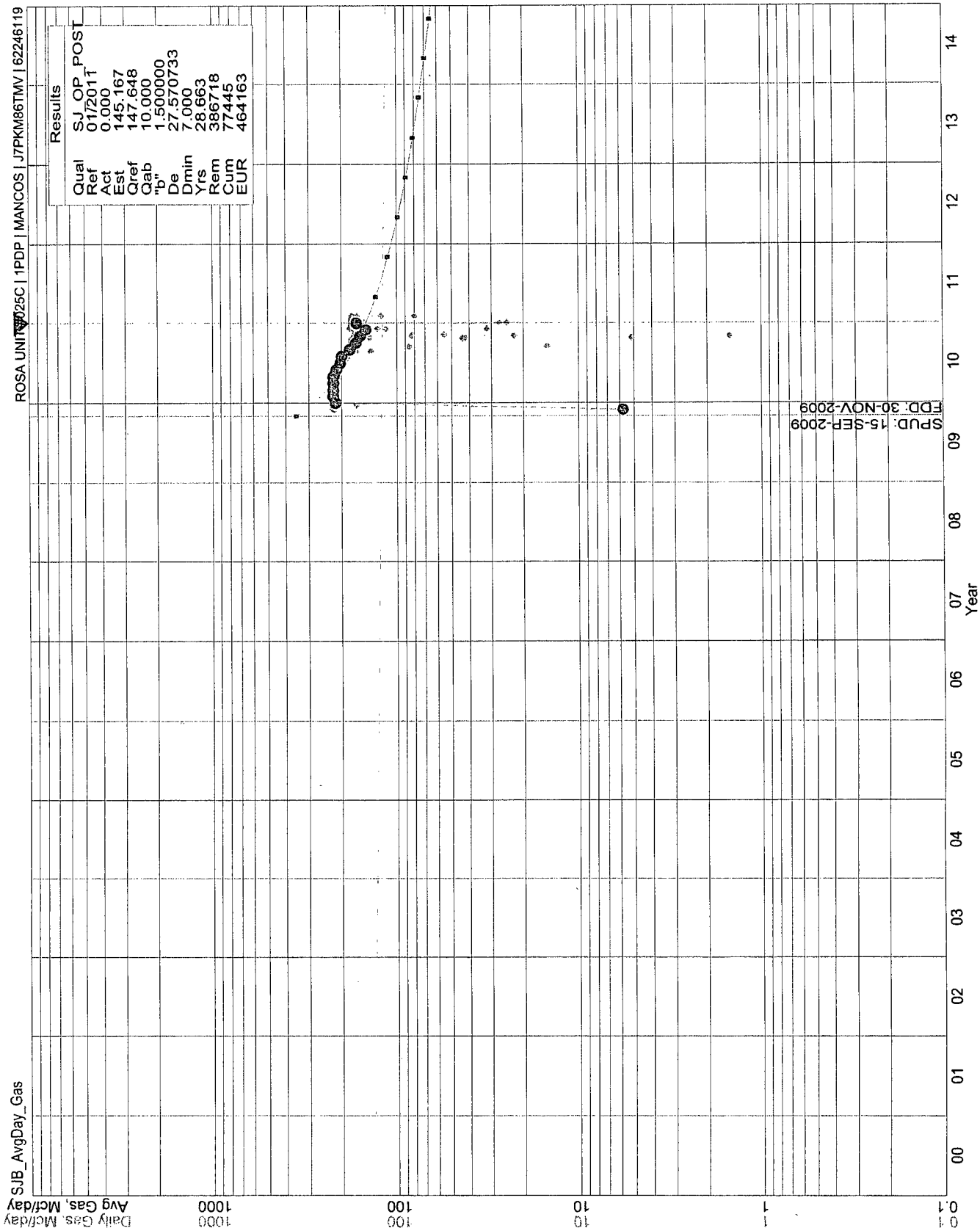
- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

Evaluating Engineer

A handwritten signature in black ink, reading "Marcia Brueggjenjohann", written over a horizontal line.

Marcia Brueggjenjohann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit

Results	
Qual	SJ_OP_POST
Ref	01/2011
Act	0.000
Est	145.167
Qref	147.648
Qab	10.000
"b"	1.500000
De	27.570733
Dmin	7.000
Yrs	28.663
Rem	386718
Cum	77445
EUR	464163



ROSA UNIT #025C | 1PDP | MANCOS | J7PKM86TMV | 62246119
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE

LOSS NO

Production

CUMS 0 0	SJ_OP_POST
START 11/2009	SJ_OP_POST
GAS 350 X M/D 7 EXP H/1.5 78	SJ_OP_POST
" X 10 M/D X YRS EXP 7	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.2584 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T 1000 X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 11/2009 AD ESC INV	SJ_OP_POST
---	------------

Overlays

SIDFILE RI_TOTAL_BR	SJ_OP_POST
LOAD MP.GAS GAS 01/2009 12/2010 #	SJ_OP_POST

PropID: 22449 RSV CAT: 1PDP
 Well Name: ROSA UNIT #025C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 10:15:37
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

KEYWORD & Ref. Code	COMBINED INPUT DATA							INITIAL CALCULATED DATA			
	Beginning	Ending	Rates	Schedule	Limit	Method & Value	Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate
400 START	11/2009										
401 GAS	350.00	X	M/D	7.00	EXP	H/1.5 78.00	295.867	7/2018	54.6201	10646.	1404.
402 "	X	10.00	M/D	X	YRS	EXP 7.00	477.795	8/2039	7.0000	1404.	304.
500 PRI/GAS	01/2007	5.617	6.487	6.677	5.957	#/M		4/2007			
501 "	X	6.627	6.827	6.197	4.987	#/M		8/2007			
502 "	X	4.587	5.117	6.057	6.497	#/M		12/2007			
503 "	01/2008	6.377	7.277	8.087	8.277	#/M		4/2008			
504 "	X	9.427	9.846	11.356	7.637	#/M		8/2008			
505 "	X	6.427	4.267	2.837	4.627	#/M		12/2008			
506 "	01/2009	4.827	3.107	2.687	2.617	#/M		4/2009			
507 "	X	2.497	2.647	2.977	3.177	#/M		8/2009			
508 "	X	2.467	3.417	4.257	4.277	#/M		12/2009			
509 "	01/2010	5.72	5.31	4.66	3.77	#/M		4/2010			
510 "	X	3.87	3.69	4.28	4.08	#/M		8/2010			
511 "	X	3.47	4.126	5.75	5.75	#/M		12/2010			
512 "	5.75	X	\$/M	TO	LIFE	PC 0.00		8/2039		5.750	5.750
600 ATX	2.26	X	%	TO	LIFE	PC 0.00		8/2039		0.023	0.023
601 STX/GAS	3.75	X	%	TO	LIFE	PC 0.00		8/2039		0.037	0.037
602 OPC/T	1000.00	X	\$/M	TO	LIFE	PC 0.00		8/2039		1000.000	1000.000
705 LSE/WI	0.8750	D	FRAC	TO	LIFE	FLAT 0.00		8/2039		0.875	0.875
720 NET/OIL	0.7569	D	FRAC	TO	LIFE	FLAT 0.00		8/2039		0.757	0.757
740 NET/GAS	0.7569	D	FRAC	TO	LIFE	FLAT 0.00		8/2039		0.757	0.757
OVERLAYS	Beginning	Ending	Rates	Schedule	Limit	Method & Value	Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate
901 S 92	S/95	X	FRAC	TO	LIFE	DIV 146.00		8/2039			
903 S /89	0.49	X	FRAC	TO	LIFE	MUL 92.00		8/2039			
905 S /89	1.00	X	FRAC	TO	LIFE	MUL 89.00		8/2039			
907 S /196	S/196	X	FRAC	TO	LIFE	MINUS 89.00		8/2039			
909 S /88	0.06	X	FRAC	TO	LIFE	MUL 92.00		8/2039			
911 S /88	1.00	X	FRAC	TO	LIFE	MINUS 88.00		8/2039			
913 S /196	S/196	X	FRAC	TO	LIFE	MUL 88.00		8/2039			
914 GAS	01/2009	0	0	0	0	0	171.68	6661.11	6877.56	#	13.710 1/2010
915 "	X	6196.76	6871.27	6648.9	6617.82	6097.23	6200.46	#			52.343 7/2010
916 "	X	5597.73	5014.24	4914.71	4429.64	#					72.299 11/2010

INVESTMENTS	Tangible	Intang	Units	Invest.	Point	Method & Value	Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 CAPITAL	165.61	555.72	M\$G	11/2009	AD	ESC INV	721.323	11/2009	0	721.3	0.0

MISCELLANEOUS DATA PARAMETERS

201 BTU	1.00				
202 WELLS	0.00	1.00			
203 CUMO, MB	0.00	CUMG, MMF	0.00	CUML, MB	
250 LOSS	NO				

PROJECT RUN SETTINGS

Base Date : 01/2007 Time Frames : 64*12
 P.W. Date : 01/2008 Primary PW% : 8.0 Discount Freq. : MID
 Report Date : 01/2008
 Qualifiers : Prod = SJ_OP_POST Price = SJ_OP_POST Cost = SJ_OP_POST Owner = BASE
 Title = BASE Misc = BASE Invest = SJ_OP_POST Overlay = SJ_OP_POST

PropID: 22449 RSV CAT: 1PDP
 Well Name: ROSA UNIT #025C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:15:37
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

R E S E R V E S A N D E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	---GROSS PRODUCTION---				---NET PRODUCTION---				-----PRICES-----		NO. OF WELLS	-----OPERATIONS, M\$-----		
	OIL,	MBBL	GAS,	MMCF	OIL,	MBBL	GAS,	MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000		0.000		0.000		0.000		0.00	0.000	0.0	0.000	0.000	0.000
12-2009	0.000		6.833		0.000		5.172		0.00	3.420	1.0	0.000	17.685	17.685
12-2010	0.000		70.037		0.000		53.009		0.00	3.640	1.0	0.000	192.957	192.957
12-2011	0.000		45.470		0.000		34.415		0.00	4.779	1.0	0.000	164.471	164.471
12-2012	0.000		34.893		0.000		26.410		0.00	4.779	1.0	0.000	126.214	126.214
12-2013	0.000		28.910		0.000		21.881		0.00	4.779	1.0	0.000	104.571	104.571
12-2014	0.000		24.976		0.000		18.904		0.00	4.779	1.0	0.000	90.343	90.343
12-2015	0.000		22.157		0.000		16.770		0.00	4.779	1.0	0.000	80.147	80.147
12-2016	0.000		20.020		0.000		15.153		0.00	4.779	1.0	0.000	72.416	72.416
12-2017	0.000		18.334		0.000		13.877		0.00	4.779	1.0	0.000	66.318	66.318
12-2018	0.000		16.962		0.000		12.838		0.00	4.779	1.0	0.000	61.355	61.355
12-2019	0.000		15.770		0.000		11.936		0.00	4.779	1.0	0.000	57.044	57.044
12-2020	0.000		14.666		0.000		11.101		0.00	4.779	1.0	0.000	53.051	53.051
12-2021	0.000		13.640		0.000		10.324		0.00	4.779	1.0	0.000	49.338	49.338
12-2022	0.000		12.685		0.000		9.601		0.00	4.779	1.0	0.000	45.884	45.884
12-2023	0.000		11.797		0.000		8.929		0.00	4.779	1.0	0.000	42.672	42.672
12-2024	0.000		10.971		0.000		8.304		0.00	4.779	1.0	0.000	39.685	39.685
12-2025	0.000		10.203		0.000		7.723		0.00	4.779	1.0	0.000	36.907	36.907
12-2026	0.000		9.489		0.000		7.182		0.00	4.779	1.0	0.000	34.324	34.324
12-2027	0.000		8.825		0.000		6.679		0.00	4.779	1.0	0.000	31.921	31.921
S TOT	0.000		396.639		0.000		300.206		0.00	4.555	1.0	0.000	1367.303	1367.303
AFTER	0.000		66.965		0.000		50.684		0.00	4.779	1.0	0.000	242.223	242.223
TOTAL	0.000		463.604		0.000		350.890		0.00	4.587	1.0	0.000	1609.526	1609.526

--END-- MO-YEAR	-----OPERATIONS, M\$-----					-----CAPITAL COSTS, M\$-----				8.0%		
	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW INV	TOTAL EQUITY INV	CASH BTAX, M\$	FLOW M\$	CUM. BTAX, M\$	DISC M\$
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	1.048	1.750	0.000	14.887	144.905	486.252	0.000	631.157	-616.270		-534.837	
12-2010	11.430	10.500	0.000	171.027	0.000	0.000	0.000	0.000	171.027		-393.744	
12-2011	9.743	10.500	0.000	144.228	0.000	0.000	0.000	0.000	144.228		-283.573	
12-2012	7.477	10.500	0.000	108.238	0.000	0.000	0.000	0.000	108.238		-207.019	
12-2013	6.195	10.500	0.000	87.877	0.000	0.000	0.000	0.000	87.877		-149.469	
12-2014	5.352	10.500	0.000	74.491	0.000	0.000	0.000	0.000	74.491		-104.299	
12-2015	4.748	10.500	0.000	64.899	0.000	0.000	0.000	0.000	64.899		-67.860	
12-2016	4.290	10.500	0.000	57.627	0.000	0.000	0.000	0.000	57.627		-37.902	
12-2017	3.928	10.500	0.000	51.889	0.000	0.000	0.000	0.000	51.889		-12.924	
12-2018	3.634	10.500	0.000	47.220	0.000	0.000	0.000	0.000	47.220		8.122	
12-2019	3.379	10.500	0.000	43.165	0.000	0.000	0.000	0.000	43.165		25.936	
12-2020	3.143	10.500	0.000	39.409	0.000	0.000	0.000	0.000	39.409		40.995	
12-2021	2.923	10.500	0.000	35.915	0.000	0.000	0.000	0.000	35.915		53.703	
12-2022	2.718	10.500	0.000	32.666	0.000	0.000	0.000	0.000	32.666		64.404	
12-2023	2.528	10.500	0.000	29.644	0.000	0.000	0.000	0.000	29.644		73.397	
12-2024	2.351	10.500	0.000	26.834	0.000	0.000	0.000	0.000	26.834		80.934	
12-2025	2.186	10.500	0.000	24.221	0.000	0.000	0.000	0.000	24.221		87.233	
12-2026	2.033	10.500	0.000	21.790	0.000	0.000	0.000	0.000	21.790		92.480	
12-2027	1.891	10.500	0.000	19.530	0.000	0.000	0.000	0.000	19.530		96.834	
S TOT	80.995	190.750	0.000	1095.558	144.905	486.252	0.000	631.157	464.401		96.834	
AFTER	14.349	122.500	0.000	105.374	0.000	0.000	0.000	0.000	105.374		113.753	
TOTAL	95.344	313.250	0.000	1200.932	144.905	486.252	0.000	631.157	569.775		113.753	

PropID: 22449 RSV CAT: 1PDP
 Well Name: ROSA UNIT #025C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:15:37
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

A F T E R T A X E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECIA-	DEPLETION	INTANG.	INTEREST	TAXABLE	TAX	TAXES	CASH FLOW	8.0%
MO-YEAR	CASH FLOW	TION		EXPENSED	PAID & CAP	INCOME	CREDIT	PAYABLE	ATA	CUM. DISC
-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	14.887	20.707	0.000	486.252	0.000	-492.072	0.000	-172.225	-444.045	-381.389
12-2010	171.027	35.487	0.000	0.000	0.000	135.540	0.000	47.439	123.588	-279.432
12-2011	144.228	25.344	0.000	0.000	0.000	118.885	0.000	41.610	102.619	-201.045
12-2012	108.238	18.099	0.000	0.000	0.000	90.139	0.000	31.549	76.689	-146.804
12-2013	87.877	12.940	0.000	0.000	0.000	74.937	0.000	26.228	61.649	-106.431
12-2014	74.491	12.926	0.000	0.000	0.000	61.566	0.000	21.548	52.943	-74.327
12-2015	64.899	12.940	0.000	0.000	0.000	51.959	0.000	18.186	46.713	-48.099
12-2016	57.627	6.463	0.000	0.000	0.000	51.164	0.000	17.907	39.719	-27.450
12-2017	51.889	0.000	0.000	0.000	0.000	51.889	0.000	18.161	33.728	-11.215
12-2018	47.220	0.000	0.000	0.000	0.000	47.220	0.000	16.527	30.693	2.465
12-2019	43.165	0.000	0.000	0.000	0.000	43.165	0.000	15.108	28.057	14.044
12-2020	39.409	0.000	0.000	0.000	0.000	39.409	0.000	13.793	25.616	23.833
12-2021	35.915	0.000	0.000	0.000	0.000	35.915	0.000	12.570	23.345	32.092
12-2022	32.666	0.000	0.000	0.000	0.000	32.666	0.000	11.433	21.233	39.048
12-2023	29.644	0.000	0.000	0.000	0.000	29.644	0.000	10.376	19.269	44.894
12-2024	26.834	0.000	0.000	0.000	0.000	26.834	0.000	9.392	17.442	49.793
12-2025	24.221	0.000	0.000	0.000	0.000	24.221	0.000	8.477	15.744	53.887
12-2026	21.790	0.000	0.000	0.000	0.000	21.790	0.000	7.627	14.164	57.298
12-2027	19.530	0.000	0.000	0.000	0.000	19.530	0.000	6.836	12.695	60.128
S TOT	1095.558	144.905	0.000	486.252	0.000	464.401	0.000	162.540	301.861	60.128
AFTER	105.374	0.000	0.000	0.000	0.000	105.374	0.000	36.881	68.493	71.125
TOTAL	1200.932	144.905	0.000	486.252	0.000	569.775	0.000	199.421	370.354	71.125

BTAX RATE OF RETURN (PCT)	12.93	ATA	12.63
BTAX PAYOUT YEARS	7.47	ATA	7.57
BTAX PAYOUT YEARS (DISC)	10.61	ATA	10.82
BTAX NET INCOME/INVEST	1.90	ATA	1.59
BTAX NET INCOME/INVEST (DISC)	1.21	ATA	1.13
PRODUCTION START DATE	11/2009	PROJECT LIFE (YEARS)	31.67
		DISCOUNT - RATE (PCT)	8.00
INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	3.402
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.779
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.
CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMF)	0.000
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	463.604
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	463.604
INITIAL WI (PCT)	87.500	FINAL WI (PCT)	87.500
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	75.688	FINAL NET GAS (PCT)	75.688

PRESENT WORTH PROFILE AND			
--- RATE-OF-RETURN VS. BONUS TABLE ---			
P.W.	B.F.I.T.	A.F.I.T.	A.F.I.T.
FACTOR	WORTH	WORTH	BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	569.8	370.4	569.8
2.00	401.8	260.1	365.4
5.00	228.2	146.2	188.6
8.00	113.8	71.1	87.0
10.00	58.6	35.0	41.7
12.00	15.2	6.7	7.8
15.00	-33.7	-25.2	-28.8
18.00	-68.8	-48.0	-53.8
20.00	-86.7	-59.5	-66.1
25.00	-118.1	-79.5	-86.6
30.00	-136.7	-91.0	-97.8
35.00	-147.3	-97.3	-103.4
40.00	-152.9	-100.3	-105.7
45.00	-155.1	-101.1	-105.9
50.00	-155.1	-100.5	-104.7

ROSA UNIT #025C

BLANCO MV / BASIN MC / BASIN DK

Spud: 09/15/09

Completed: 11/22/09

1st Delivery: 11/30/09

Surface Location:

1130' FSL and 1560' FWL
SE/4 SW/4 Sec 15 (N), T31N, R06W
Rio Arriba, NM

Bottom Hole Location:

834' FSL and 329' FWL
SW/4 SW/4 Sec 15 (M), T31N, R06W
Rio Arriba, NM

Elevation: 6154' GR

API # 30-039-30479

Top	MD Depth	TVD Depth
Lewis	3658'	3338'
Cliffhouse Ss.	5488'	5167'
Point Lookout	5779'	5458'
Mancos	6261'	5940'
Graneros	7901'	7580'
Dakota	8041'	7720'

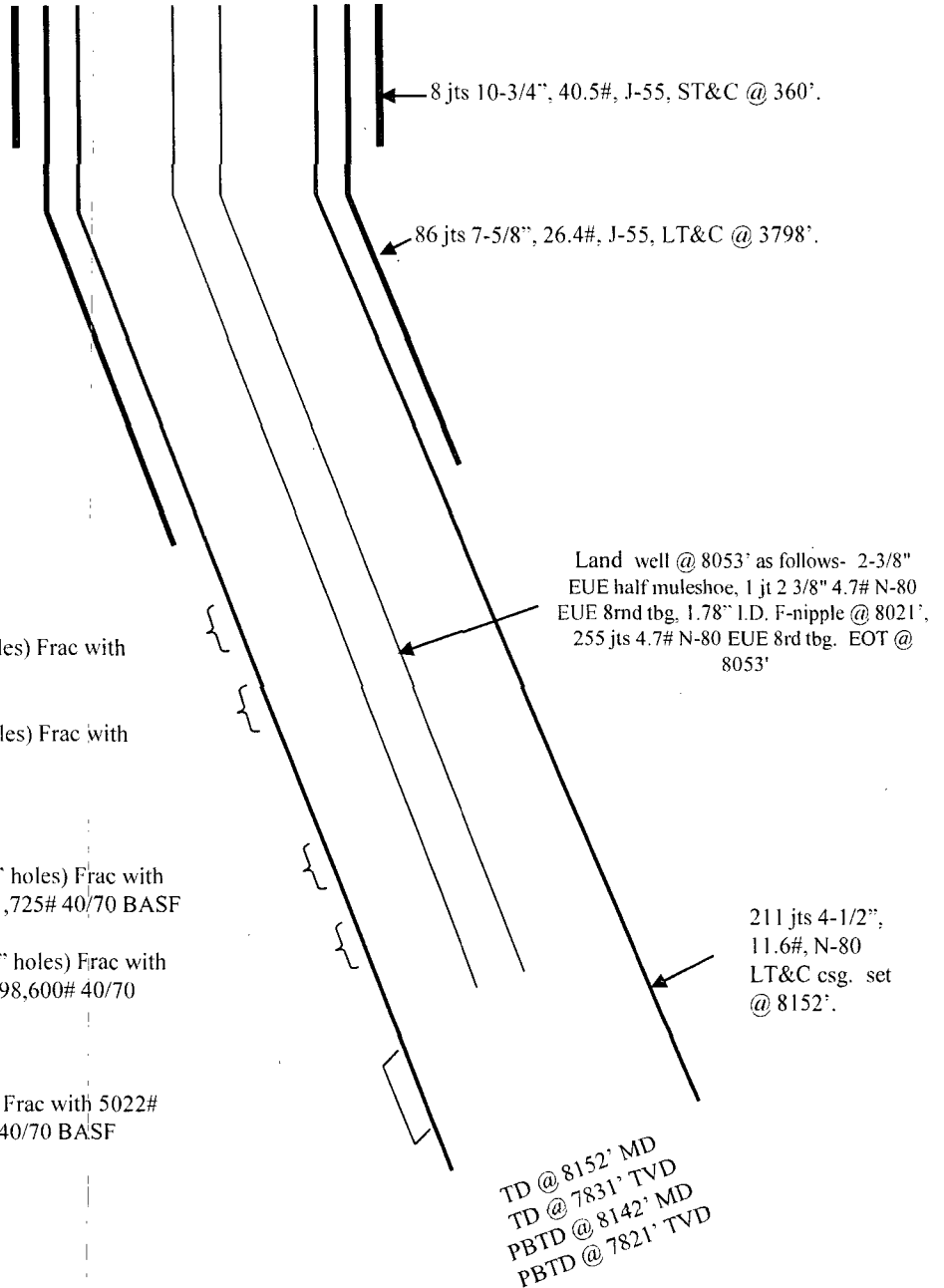
Upper MV: 5503'-5698' (50, 0.34" holes) Frac with
78,245# 20/40 mesh BASF

Lower MV: 5760'-6078' (53, 0.34" holes) Frac with
80,769# 20/40 mesh BASF

Upper Mancos: 6960'-7190' (72, 0.34" holes) Frac with
5160# 100 mesh BASF followed w/101,725# 40/70 BASF

Lower Mancos: 7260'-7396' (66, 0.34" holes) Frac with
5000# 100 mesh BASF followed with 98,600# 40/70
BASF

Dakota: 8041'-8137' (66, 0.34" holes) Frac with 5022#
100 mesh BASF followed w/121,715# 40/70 BASF



Hole Size	Casing	Cement	Volume	Top of Cnt
14-3/4"	10-3/4", 40.5#	290 sxs	521 cu.ft.	Surface
9-7/8"	7-5/8", 26.4#	580 sxs	1428 cu.ft.	Surface
6-3/4"	4-1/2", 11.6#	590 sxs	826 cu.ft.	3420' CBL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		OGRID Number 120782
		Reason for Filing Code/ Effective Date NW
API Number 30-039-30479	Pool Name BASIN MANCOS	Pool Code 97232
Property Code 17033	Property Name ROSA UNIT	Well Number 25C

II. Surface Location

UL or lot no. N	Section 15	Township 31N	Range 6W	Lot Idn	Feet from the 1130	North/South Line SOUTH	Feet from the 1560	East/West line WEST	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	-----------------------	------------------------------	-----------------------	------------------------	----------------------

Bottom Hole Location

UL or lot no. M	Section 15	Township 31N	Range 6W	Lot Idn	Feet from the 934	North/South line SOUTH	Feet from the 329	East/West line WEST	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	----------------------	---------------------------	----------------------	------------------------	----------------------

Lse Code	Producing Method Code	Gas Connection Date	C-129 Permit Number	C-129 Effective Date	C-129 Expiration Date
----------	--------------------------	------------------------	---------------------	----------------------	-----------------------

III. Oil and Gas Transporters

Transporter OGRID	Transporter Name and Address	O/G/W
009018	GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	O
025244	WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	G
	RCVD NOV 24 2009	

IV. Well Completion Data NOTE: Commingled with MV & DK

Spud Date 9-15-09	Ready Date 11-22-09	TD 8152' MD	PBTD 8142' MD	Perforations 6960' - 7396'	DHC, MC AZT-3271
Hole Size 14-3/4"	Casing & Tubing Size 10-3/4", 40.5#, J J-55	Depth Set 360'	Sacks Cement 290 sx - surface		
9-7/8"	7-5/8", 26.4#, J-55	3798'	580 sx - surface		
6-3/4"	4 1/2", 11.6#, N-80	8152'	590 sx - 3420' (CBL)		
	2.375", 4.7#, N-80	8053'	NONE		

VI. Well Test Data

Date New Oil	Gas Delivery Date	Test Date 11-22-09	Test Length 2 hr	Tbg. Pressure 0	Csg. Pressure 490 lb
Choke Size 1/2"	Oil	Water	Gas 1086 mcf/d		Test Method Choke

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name:
Larry Higgins

Title:
Dirg COM

E-mail Address:
larry.higgins@williams.com

Date:
11-23-09

Phone:
505-634-4208

11-24-09 OIL CONSERVATION DIVISION

Approved by:

Title: SUPERVISOR DISTRICT # 3

Approval Date: NOV 25 2009

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505				Form C-105 July 17, 2008									
		1. WELL API NO. 30-039-30479		2. Type of Lease ☐ STATE ☒ FEE ☐ FED/INDIAN		3. State Oil & Gas Lease No									
WELL COMPLETION OR RECOMPLETION REPORT AND LOG															
4. Reason for filing: ☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15 17.13 K NMAC)				5. Lease Name or Unit Agreement Name Rosa Unit 6. Well Number: RCVD NOV 24 '09 Rosa Unit #25C OIL CONS. DIV.											
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER				DIST. 3											
8. Name of Operator Williams Production Company, LLC				9. OGRID 120782											
10. Address of Operator P.O. Box 640, Aztec, NM 87410				11. Pool name or Wildcat Basin Mancos											
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County					
Surface:	N	15	31N	6W		1130	SOUTH	1560	WEST	RIO ARRIBA					
BH:	M	15	31N	6W		934	SOUTH	329	WEST	RIO ARRIBA					
13. Date Spudded 9-15-09	14. Date T D. Reached 9-28-09	15. Date Rig Released 9-30-09		16. Date Completed (Ready to Produce) 11-22-09		17. Elevations (DF and RKB, RT, GR, etc.) 6154'									
18. Total Measured Depth of Well 8152' MD / 7831' TVD		19. Plug Back Measured Depth 8142' MD		20. Was Directional Survey Made? YES		21. Type Electric and Other Logs Run Array Induction, Compensated GR-Density-Neutron, Ultra Sonic Gas Detector, CBL									
22. Producing Interval(s), of this completion - Top, Bottom, Name BASIN DAKOTA. 8041'-8137'															
23. CASING RECORD (Report all strings set in well)															
CASING SIZE		WEIGHT LB /FT.		DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED					
10-3/4"		40.5#		360'		14-3/4"		290 sxs - surface							
7-5/8"		26.4#		3798'		9-7/8"		580 sxs - surface							
4-1/2"		11.6#		8152'		6-3/4"		590 sxs - 3420' cbl							
24. LINER RECORD															
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN											
25. TUBING RECORD															
SIZE	DEPTH SET		PACKER SET												
2.375" 4.7#	8053'														
N-80															
26. Perforation record (interval, size, and number)						27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.									
<u>Upper MC:</u> Total of 72, 0 34" holes <u>Lower MC:</u> Total of 66, 0 34" holes						DEPTH INTERVAL					AMOUNT AND KIND MATERIAL USED				
						6960' - 7190'					5160# 100 mesh - 101,725# 40/70				
						7260' - 7396'					5000# 100 mesh - 98,600# 40/70				
28. To be commingled with Mesaverde and Dakota per AZT-3271 PRODUCTION															
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)						Well Status (Prod or Shut-in) Shut in - waiting on tie in							
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl	Gas - Oil Ratio								
11-22-09	2 hr	1/2"													
Flow Tubing Press. 0	Casing Pressure 490 lbs	Calculated 24-Hour Rate	Oil - Bbl	Gas - MCF 1086 mcf/d	Water - Bbl	Oil Gravity - API - (Corr)									
29. Disposition of Gas (Sold, used for fuel, vented, etc.)								30. Test Witnessed By Buddy Banks							
31. List Attachments															
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit See pit permit															
33. If an on-site burial was used at the well, report the exact location of the on-site burial.															
				Latitude 40		Longitude		NAD 1927 1983							

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature

Larry Higgins

Printed

Name Larry Higgins

Title Drlg COM

Date 11-23-09

E-mail Address larry.higgins@williams.com

(505) 634-4208

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo 2458'	T. Penn A"
T. Salt	T. Strawn	T. Kirtland 2578'	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland 3056'	T. Penn. "C"
T. Yates	T. Miss	T. Lewis 3658'	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House 5488'	T. Leadville
T. Queen	T. Silurian	T. Menefee 5539'	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout 5779'	T. Elbert
T. San Andres	T. Simpson	T. Mancos 6261'	T. McCracken
T. Glorieta	T. McKee	T. Gallup 6667'	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn 7901'	T. Granite
T. Blinbry	T. Gr. Wash	T. Dakota 8041'	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 3, from.....to.....

No. 2, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology	From	To	Thickness In Feet	Lithology
------	----	----------------------	-----------	------	----	----------------------	-----------

February 7, 2011

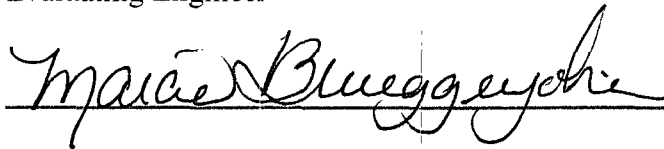
The Rosa Unit #153C Mancos Well (commercial) is located 1115 feet from the North Line and 1745 feet from the West Line, Section 17 Township 31 North, Range 5 West, N.M.P.M Rio Arriba County, New Mexico. This well was spud on October 2, 2008, and completed in the Mancos formation on June 19, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7140' to 7525'. This well has a 2.375" tubing string. This well was shut in with a SICP of 347 psig. On June 18, 2009 the well was tested and after flowing for 3 hours through a 16/64" choke on the 2.375" tubing, the well gauged 596 MCFD.

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 12.90% and is therefore determined commercial.

Attached to this document are the following:

- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

Evaluating Engineer

A handwritten signature in cursive script, reading "Marcia Brueggenjohann", is written over a horizontal line.

Marcia Brueggenjohann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit

SJB_AvgDay_Gas

Daily Gas, Mcf/day

Results	
Qual	SJ OP POST
Ref	01/2011
Act	0.000
Est	155.794
Qref	158.395
Qab	10.000
"b"	1.300000
De	27.739004
Dmin	5.000
Yrs	35.997
Rem	450066
Cum	100330
EUR	550397

1000

100

10

1

0.1

14

13

12

11

10

09

08

07

06

05

04

03

02

01

00

Year

FDD: 23-JUN-2009

SPUD: 2-OCT-2008

ROSA UNIT #153C | 1PDP | MANCOS || J7PKN5JP6W | 62243810
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE

LOSS NO

Production

CUMS 0.0 41.578	SJ_OP_POST
START 06/2009	SJ_OP_POST
GAS 625 X M/D 5.000000 EXP H/1.3 91	SJ_OP_POST
" X 10 M/D X YRS EXP 5.000000	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.1 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T 1000 X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 04/2009 AD ESC INV	SJ_OP_POST
---	------------

Overlays

SIDFILE RI_TOTAL_BR	SJ_OP_POST
LOAD MP.GAS GAS 01/2007 12/2010 #	SJ_OP_POST

PropID: 25085 RSV CAT: 1PDP
 Well Name: ROSA UNIT #153C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 10:29:42
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

KEYWORD & Ref. Code	COMBINED INPUT DATA							INITIAL CALCULATED DATA			
	Beginning	Ending	Rates	Schedule	Limit	Method & Value	Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate
400 START	06/2009										
401 GAS	625.00	X	M/D	5.00	EXP	H/1.3 91.00	493.295	1/2024	66.4134	19010.	985.
402 "	X	10.00	M/D	X	YRS	EXP 5.00	652.587	12/2046	5.0000	985.	304.
500 PRI/GAS	01/2007	5.617	6.487	6.677	5.957	#/M		4/2007			
501 "	X	6.627	6.827	6.197	4.987	#/M		8/2007			
502 "	X	4.587	5.117	6.057	6.497	#/M		12/2007			
503 "	01/2008	6.377	7.277	8.087	8.277	#/M		4/2008			
504 "	X	9.427	9.846	11.356	7.637	#/M		8/2008			
505 "	X	6.427	4.267	2.837	4.627	#/M		12/2008			
506 "	01/2009	4.827	3.107	2.687	2.617	#/M		4/2009			
507 "	X	2.497	2.647	2.977	3.177	#/M		8/2009			
508 "	X	2.467	3.417	4.257	4.277	#/M		12/2009			
509 "	01/2010	5.72	5.31	4.66	3.77	#/M		4/2010			
510 "	X	3.87	3.69	4.28	4.08	#/M		8/2010			
511 "	X	3.47	4.126	5.75	5.75	#/M		12/2010			
512 "	5.75	X	\$/M	TO	LIFE	PC 0.00		12/2046		5.750	5.750
600 ATX	2.10	X	%	TO	LIFE	PC 0.00		12/2046		0.021	0.021
601 STX/GAS	3.75	X	%	TO	LIFE	PC 0.00		12/2046		0.037	0.037
602 OPC/T	1000.00	X	\$/M	TO	LIFE	PC 0.00		12/2046		1000.000	1000.000
705 LSE/WI	1.0000	D	FRAC	TO	LIFE	FLAT 0.00		12/2046		1.000	1.000
720 NET/OIL	0.8650	D	FRAC	TO	LIFE	FLAT 0.00		12/2046		0.865	0.865
740 NET/GAS	0.8650	D	FRAC	TO	LIFE	FLAT 0.00		12/2046		0.865	0.865

OVERLAYS		Beginning	Ending	Rates	Schedule	Limit	Method & Value	Ultimate @	End Pt.	Init.Deff	Init. Rate	Final Rate
901 S	92	S/95	X	FRAC	TO	LIFE	DIV 146.00		12/2046			
903 S	/89	0.49	X	FRAC	TO	LIFE	MUL 92.00		12/2046			
905 S	/89	0.98	X	FRAC	TO	LIFE	MUL 89.00		12/2046			
907 S	/196	S/196	X	FRAC	TO	LIFE	MINUS 89.00		12/2046			
909 S	/88	0.06	X	FRAC	TO	LIFE	MUL 92.00		12/2046			
911 S	/88	1.00	X	FRAC	TO	LIFE	MINUS 88.00		12/2046			
913 S	/196	S/196	X	FRAC	TO	LIFE	MUL 88.00		12/2046			
914 GAS	01/2007	0	0	0	0	0	0	41.578	4/2008			
915 "	X	0	0	0	0	0	0	64.411	8/2009			
916 "	X	3990.82	5453.43	5095.27	4115.51	4387.09	4119.95	91.573	2/2010			
917 "	X	4420.02	4064.56	6064.3	5486.8	5496.7	5332.25	127.421	9/2010			
918 "	X	4998.95	4728.9	#				137.149	11/2010			

INVESTMENTS	Tangible	Intang	Units	Invest. Point	Method & Value	Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 CAPITAL	165.61	555.72	M\$G	04/2009 AD	ESC INV	721.323	4/2009	0	721.3	0.0

MISCELLANEOUS DATA PARAMETERS

201 BTU	0.98				
202 WELLS	0.00	1.00			
203 CUMO, MB	0.00	CUMG, MMF	41.58	CUML, MB	
250 LOSS	NO				

PROJECT RUN SETTINGS

Base Date	: 01/2007	Time Frames	: 64*12		
P.W. Date	: 01/2008	Primary PW%	: 8.0	Discount Freq.	: MID
Report Date	: 01/2008				
Qualifiers	: Prod = SJ_OP_POST	Price = SJ_OP_POST	Cost = SJ_OP_POST	Owner = BASE	
	Title = BASE	Misc = BASE	Invest = SJ_OP_POST	Overlay = SJ_OP_POST	

PropID: 25085 RSV CAT: 1PDP
 Well Name: ROSA UNIT #153C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:29:42
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

R E S E R V E S A N D E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	---GROSS PRODUCTION---				---NET PRODUCTION---				---PRICES---		NO. OF WELLS	-----OPERATIONS, M\$-----		
	OIL,	MBBL	GAS,	MMCF	OIL,	MBBL	GAS,	MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000		0.000		0.000		0.000		0.00	0.000	0.0	0.000	0.000	0.000
12-2009	0.000		41.488		0.000		35.887		0.00	2.449	1.0	0.000	87.899	87.899
12-2010	0.000		58.984		0.000		51.021		0.00	3.571	1.0	0.000	182.181	182.181
12-2011	0.000		48.802		0.000		42.213		0.00	4.712	1.0	0.000	198.890	198.890
12-2012	0.000		37.153		0.000		32.137		0.00	4.712	1.0	0.000	151.415	151.415
12-2013	0.000		30.412		0.000		26.307		0.00	4.712	1.0	0.000	123.945	123.945
12-2014	0.000		25.956		0.000		22.452		0.00	4.712	1.0	0.000	105.784	105.784
12-2015	0.000		22.765		0.000		19.692		0.00	4.712	1.0	0.000	92.778	92.778
12-2016	0.000		20.353		0.000		17.606		0.00	4.712	1.0	0.000	82.949	82.949
12-2017	0.000		18.459		0.000		15.967		0.00	4.712	1.0	0.000	75.228	75.228
12-2018	0.000		16.927		0.000		14.642		0.00	4.712	1.0	0.000	68.984	68.984
12-2019	0.000		15.659		0.000		13.545		0.00	4.712	1.0	0.000	63.816	63.816
12-2020	0.000		14.590		0.000		12.620		0.00	4.712	1.0	0.000	59.461	59.461
12-2021	0.000		13.675		0.000		11.829		0.00	4.712	1.0	0.000	55.734	55.734
12-2022	0.000		12.883		0.000		11.144		0.00	4.712	1.0	0.000	52.504	52.504
12-2023	0.000		12.189		0.000		10.543		0.00	4.712	1.0	0.000	49.674	49.674
12-2024	0.000		11.570		0.000		10.008		0.00	4.712	1.0	0.000	47.154	47.154
12-2025	0.000		10.992		0.000		9.508		0.00	4.712	1.0	0.000	44.796	44.796
12-2026	0.000		10.442		0.000		9.032		0.00	4.712	1.0	0.000	42.556	42.556
12-2027	0.000		9.920		0.000		8.581		0.00	4.712	1.0	0.000	40.428	40.428
S TOT	0.000		433.218		0.000		374.734		0.00	4.340	1.0	0.000	1626.177	1626.177
AFTER	0.000		117.356		0.000		101.513		0.00	4.712	1.0	0.000	478.280	478.280
TOTAL	0.000		550.574		0.000		476.247		0.00	4.419	1.0	0.000	2104.458	2104.458

	-OPERATIONS, M\$-				-CAPITAL COSTS, M\$-						8.0%	
--END-- MO-YEAR	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW	TOTAL EQUITY INV	CASH BTAX,	FLOW M\$	CUM. BTAX,	DISC M\$
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000
12-2009	5.073	7.000	0.000	75.826	165.606	555.717	0.000	721.323	-645.497		-587.605	
12-2010	10.514	12.000	0.000	159.667	0.000	0.000	0.000	0.000	159.667		-455.884	
12-2011	11.478	12.000	0.000	175.411	0.000	0.000	0.000	0.000	175.411		-321.893	
12-2012	8.739	12.000	0.000	130.677	0.000	0.000	0.000	0.000	130.677		-229.468	
12-2013	7.153	12.000	0.000	104.792	0.000	0.000	0.000	0.000	104.792		-160.841	
12-2014	6.105	12.000	0.000	87.679	0.000	0.000	0.000	0.000	87.679		-107.674	
12-2015	5.354	12.000	0.000	75.424	0.000	0.000	0.000	0.000	75.424		-65.326	
12-2016	4.787	12.000	0.000	66.162	0.000	0.000	0.000	0.000	66.162		-30.930	
12-2017	4.342	12.000	0.000	58.887	0.000	0.000	0.000	0.000	58.887		-2.584	
12-2018	3.981	12.000	0.000	53.003	0.000	0.000	0.000	0.000	53.003		21.039	
12-2019	3.683	12.000	0.000	48.133	0.000	0.000	0.000	0.000	48.133		40.904	
12-2020	3.432	12.000	0.000	44.029	0.000	0.000	0.000	0.000	44.029		57.728	
12-2021	3.217	12.000	0.000	40.517	0.000	0.000	0.000	0.000	40.517		72.064	
12-2022	3.030	12.000	0.000	37.474	0.000	0.000	0.000	0.000	37.474		84.341	
12-2023	2.867	12.000	0.000	34.808	0.000	0.000	0.000	0.000	34.808		94.899	
12-2024	2.721	12.000	0.000	32.432	0.000	0.000	0.000	0.000	32.432		104.009	
12-2025	2.585	12.000	0.000	30.211	0.000	0.000	0.000	0.000	30.211		111.866	
12-2026	2.456	12.000	0.000	28.100	0.000	0.000	0.000	0.000	28.100		118.632	
12-2027	2.333	12.000	0.000	26.095	0.000	0.000	0.000	0.000	26.095		124.450	
S TOT	93.851	223.000	0.000	1309.327	165.606	555.717	0.000	721.323	588.004		124.450	
AFTER	27.603	228.000	0.000	222.678	0.000	0.000	0.000	0.000	222.678		155.399	
TOTAL	121.453	451.000	0.000	1532.004	165.606	555.717	0.000	721.323	810.681		155.399	

PropID: 25085 RSV CAT: 1PDP
 Well Name: ROSA UNIT #153C
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:29:42
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

A F T E R T A X E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECIA-	DEPLETION	INTANG.	INTEREST	TAXABLE	TAX	TAXES	CASH FLOW	8.0%
MO-YEAR	CASH FLOW	TION		EXPENSED	PAID & CAP	INCOME	CREDIT	PAYABLE	ATA	DISC
-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	75.826	23.665	0.000	555.717	0.000	-503.556	0.000	-176.245	-469.253	-430.576
12-2010	159.667	40.557	0.000	0.000	0.000	119.110	0.000	41.689	117.979	-333.247
12-2011	175.411	28.965	0.000	0.000	0.000	146.447	0.000	51.256	124.155	-238.409
12-2012	130.677	20.684	0.000	0.000	0.000	109.992	0.000	38.497	92.179	-173.212
12-2013	104.792	14.789	0.000	0.000	0.000	90.003	0.000	31.501	73.291	-125.215
12-2014	87.679	14.772	0.000	0.000	0.000	72.907	0.000	25.518	62.162	-87.521
12-2015	75.424	14.789	0.000	0.000	0.000	60.635	0.000	21.222	54.201	-57.089
12-2016	66.162	7.386	0.000	0.000	0.000	58.776	0.000	20.572	45.590	-33.388
12-2017	58.887	0.000	0.000	0.000	0.000	58.887	0.000	20.610	38.276	-14.963
12-2018	53.003	0.000	0.000	0.000	0.000	53.003	0.000	18.551	34.452	0.392
12-2019	48.133	0.000	0.000	0.000	0.000	48.133	0.000	16.847	31.287	13.304
12-2020	44.029	0.000	0.000	0.000	0.000	44.029	0.000	15.410	28.619	24.240
12-2021	40.517	0.000	0.000	0.000	0.000	40.517	0.000	14.181	26.336	33.558
12-2022	37.474	0.000	0.000	0.000	0.000	37.474	0.000	13.116	24.358	41.538
12-2023	34.808	0.000	0.000	0.000	0.000	34.808	0.000	12.183	22.625	48.401
12-2024	32.432	0.000	0.000	0.000	0.000	32.432	0.000	11.351	21.081	54.322
12-2025	30.211	0.000	0.000	0.000	0.000	30.211	0.000	10.574	19.637	59.429
12-2026	28.100	0.000	0.000	0.000	0.000	28.100	0.000	9.835	18.265	63.828
12-2027	26.095	0.000	0.000	0.000	0.000	26.095	0.000	9.133	16.962	67.610
S TOT	1309.327	165.606	0.000	555.717	0.000	588.004	0.000	205.801	382.202	67.610
AFTER	222.678	0.000	0.000	0.000	0.000	222.678	0.000	77.937	144.740	87.726
TOTAL	1532.004	165.606	0.000	555.717	0.000	810.681	0.000	283.738	526.943	87.726

BTAX RATE OF RETURN (PCT)	12.90	ATA RATE OF RETURN (PCT)	11.78
BTAX PAYOUT YEARS	6.85	ATA PAY OUT YEARS	6.99
BTAX PAYOUT YEARS (DISC)	10.11	ATA PAY OUT YEARS (DISC)	10.97
BTAX NET INCOME/INVEST	2.12	ATA NET INCOME/INVEST	1.73
BTAX NET INCOME/INVEST (DISC)	1.24	ATA NET INCOME/INVEST (DISC)	1.13

PRESENT WORTH PROFILE AND			
---- RATE-OF-RETURN VS. BONUS TABLE ----			
P.W.	B.F.I.T.	A.F.I.T.	A.F.I.T.
FACTOR	WORTH	WORTH	BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	810.7	526.9	810.7
2.00	560.8	360.5	501.7
5.00	313.6	194.8	248.4
8.00	155.4	87.7	106.3
10.00	79.8	36.2	42.9
12.00	20.4	-4.5	-5.2
15.00	-47.3	-51.1	-58.2
18.00	-97.0	-85.6	-95.8
20.00	-122.9	-103.7	-115.1
25.00	-170.3	-137.1	-149.5
30.00	-200.8	-158.8	-171.0
35.00	-220.6	-173.0	-184.5
40.00	-233.2	-182.2	-192.8
45.00	-241.0	-187.9	-197.6
50.00	-245.4	-191.2	-200.0

PRODUCTION START DATE	06/2009	PROJECT LIFE (YEARS)	39.00
		DISCOUNT - RATE (PCT)	8.00
INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	1.889
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.712
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.
CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMF)	41.578
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	550.574
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	592.152
INITIAL WI (PCT)	100.000	FINAL WI (PCT)	100.000
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	86.500	FINAL NET GAS (PCT)	86.500

ROSA UNIT #153C

BLANCO MV/BASIN MANCOS/BASIN DK

Surface Location:

1115' FNL and 1745' FWL
NW/4 NW/4 Sec 17 (C), T31N, R05W
Rio Arriba, NM

Bottom Hole Location:

1676' FNL and 2222' FEL
SW/4 NE/4 Sec 17 (G), T31N, R05W
Rio Arriba, NM

Elevation. 6208' GR

API # 30-039-30197

Spud: 10/02/08

DK Completed: 11/20/08

MC Completed: 06/19/09

1st Delivery: 0/0/00

Top	MD Depth	TVD Depth
Pictured Cliffs	3431'	3085'
Lewis	3730'	3379'
Cliffhouse Ss.	5611'	5260'
Menefee	5656'	5305'
Point Lookout	5886'	5535'
Mancos	6334'	5983'
Dakota	8115'	7762'

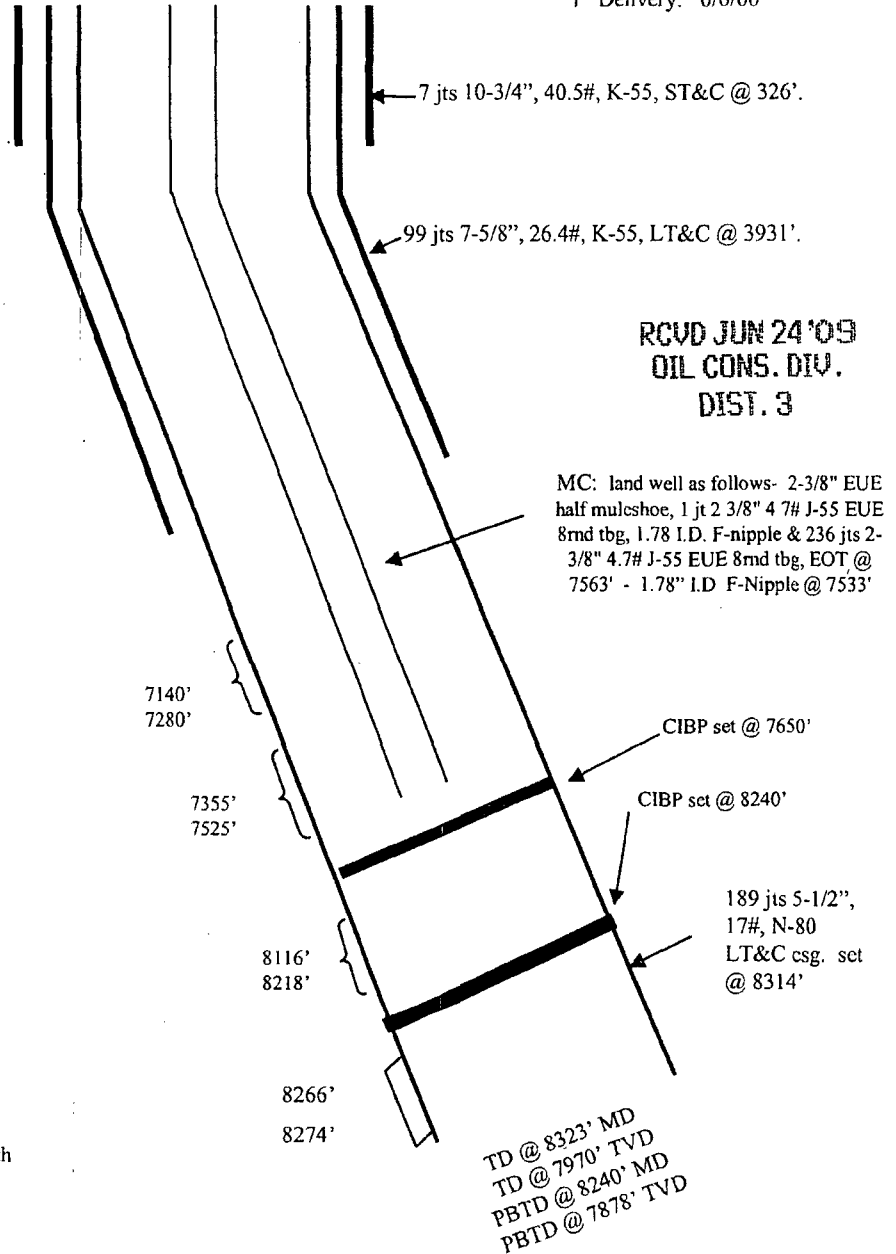
Stimulation:

**NOTE: Mancos and Dakota only
completed at this time**

Mancos 2nd: 7140'-7280' (30, .34" holes)
Frac with 5140# 100 mesh, follow with
201,100# 40/70 Ottawa sand

Mancos 1st: 7355'-7525' (39 .34" holes)
Frac with 5000# 100 mesh BASF, follow
with 188,200# 40/70 mesh BASF

Dakota: 8116' - 8218' (51, 0.34" holes)
Frac with 8000# 100 mesh WS, follow with
116,500# 40/70 WS.



Hole Size	Casing	Cement	Volume	Top of Cmt
14-3/4"	10-3/4", 40.5#	250 sxs	345 cu.ft.	Surface
9-7/8"	7-5/8", 26.4#	750 sxs	1511 cu.ft.	Surface
6-3/4"	5-1/2", 17#	195 sxs	442 cu.ft.	6750' CBL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		OGRID Number 120782
		Reason for Filing Code/ Effective Date NW R/C
API Number 30-039-30197	Pool Name BASIN MANCOS NSL-5 701-A	Pool Code 97232
Property Code 17033	Property Name ROSA UNIT	Well Number 153C

II. Surface Location

UL or lot no. C	Section 17	Township 31N	Range 5W	Lot.Idn	Feet from the 1115	North/South Line NORTH	Feet from the 1745	East/West line WEST	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	-----------------------	------------------------------	-----------------------	------------------------	----------------------

Bottom Hole Location

UL or lot no. G	Section 17	Township 31N	Range 5W	Lot Idn	Feet from the 1676	North/South line NORTH	Feet from the 2222	East/West line EAST	County Rio Arriba
Lse Code	Producing Method Code	Gas Connection Date	C-129 Permit Number	C-129 Effective Date	C-129 Expiration Date				

III. Oil and Gas Transporters

Transporter OGRID	Transporter Name and Address	O/G/W
009018	GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	O
025244	WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	G
		RCVD JUN 24 '09

OIL CONS. DIV.

IV. Well Completion Data

NOTE: Mesaverde to be completed at a later date - CIBP @ 7650' 3

Spud Date 10-2-08	Ready Date 6-19-2009	TD 8323' MD	PBTD 8240' MD	Perforations 7140' - 7525'	DHC, MC AZT-
Hole Size 14-3/4"	Casing & Tubing Size 10-3/4", 40.5#, K-55	Depth Set 326'	Sacks Cement 250 sx - surface		
9-7/8"	7-5/8", 26.4#, K-55	3931'	750 sx - surface		
6-3/4"	5 1/2", 17#, N-80	8314'	195 sx - 6750' (CBL)		
	2.375", 4.7#, J-55	7563'	NONE		
(CIBP @ 7650' to isolate Dakota)					

VI. Well Test Data

Date New Oil	Gas Delivery Date	Test Date 6-18-08 09	Test Length 1 hrs	Tbg. Pressure 0	Csg. Pressure 347 psi
Choke Size 16/64"	Oil	Water	Gas 596 mcf/d		Test Method pitot
I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: Larry Higgins			OIL CONSERVATION DIVISION 4/25/09 Approved by: Kelly G. Roberts Title: DEPUTY OIL & GAS INSPECTOR, DIST. 4 Approval Date: JUL 01 2009		
Printed name: Larry Higgins					
Title: Dirg COM					
E-mail Address: larry.higgins@williams.com					
Date: 6-23-09	Phone: 505-634-4208		Bum approval		

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
(SUBMIT IN
DUPLICATE)

JUN (See other instructions on
reverse side) 2009

FORM APPROVED
OMB NO 1004-0137
Expires: February 28, 1995

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Bureau of Land Management
Field Office

1a. TYPE OF WELL	☐ OIL WELL	☒ GAS WELL	☐ DRY	☐ OTHER
b. TYPE OF COMPLETION	☒ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER			
2. NAME OF OPERATOR	WILLIAMS PRODUCTION COMPANY			
3. ADDRESS AND TELEPHONE NO	P O. Box 640, Aztec, NM 87410 (505) 634-4208			
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*	At Surface 1115' FNL & 1745' FWL, sec 17, T31N, R5W At top production interval reported below 1676' FNL & 2222' FEL, sec 17, T31N, R5W At total depth Same			
5. LEASE DESIGNATION AND LEASE NO	NMSF-078769			
6. IF INDIAN, ALLOTTEE OR				
7. UNIT AGREEMENT NAME	Rosa Unit			
8. FARM OR LEASE NAME, WELL NO	Rosa Unit #153C			
9. API WELL NO	30-039-30197-0052			
10. FIELD AND POOL, OR WILDCAT	Basin Mancos			
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA	Sec 17, T31N, R5W			
12. COUNTY OR	Rio Arriba		13. STATE	New Mexico
14. PERMIT NO	DATE ISSUED		15. DATE SPUED	10-2-08
16. DATE T.D. REACHED	10-25-08		17. DATE COMPLETED (READY TO PRODUCE)	6-19-09
18. ELEVATIONS (DK, RKB, RT, GR, ETC)*	6208' GR		19. ELEVATION CASINGHEAD	RCVD JUN 25 '09
20. TOTAL DEPTH, MD & TVD	8323' MD / 7970' TVD		21. PLUG BACK T.D., MD & TVD	8240' MD / 7878' TVD
22. IF MULTICOMP, HOW MANY	3*		23. INTERVALS DRILLED BY	ROTARY TOOLS
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)*	Basin Mancos: 7140' - 7525' MD		* Mesaverde to be completed at later date	
25. WAS DIRECTIONAL SURVEY MADE	YES		DIST 3	
26. TYPE ELECTRIC AND OTHER LOGS RUN	Array Induction, Gamma Ray-Density-Neutron, Compensated Dual Neutron and CBL		27. WAS WELL CORED	
				No

28. CASING REPORT (Report all strings set in well)					
CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
10-3/4", K-55	40.5#	326'	14-3/4"	250 SX - SURFACE	
7-5/8", K-55	26.4#	3931'	9-7/8"	750 SX - SURFACE	
5-1/2", N-80	17.0#	8314'	6-3/4"	195 SX - 6750' (CBL)	
29. LINER RECORD					
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD
					SIZE
					DEPTH SET (MD)
					PACKER SET (MD)
					2 3/5", 4 7#, J-55, EUE 8rd
31. PERFORATION RECORD (Interval, size, and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC		
			DEPTH INTERVAL (MD)		
			AMOUNT AND KIND OF MATERIAL USED		
Mancos 2nd: 7140' - 7280'. Total of 30, 0 3/4" holes			7140'-7280'		
Mancos 1st: 7355' - 7525'. Total of 39, 0 3/4" holes			7355'-7525'		
			Fraced with 5140# 100 mesh followed with 201,100# 40/70 ottawa sand		
			Fraced with 5000# 100 mesh BASF followed with 188,200# 40/70 mesh BASF		

33. PRODUCTION	
DATE OF FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping size and type of pump)
	Flowing
WELL STATUS (PRODUCING OR SI)	SI - waiting on tie-in
DATE OF TEST	TESTED
6-18-09	1 hr
CHOKE SIZE	PROD'N FOR TEST PERIOD
16/64"	
OIL - BBL	GAS - MCF
WATER - BBL	GAS-OIL RATIO
FLOW TBG PRESS	CASING PRESSURE
0	347#.
CALCULATED 24-HOUR RATE	OIL - BBL
GAS - MCF	WATER - BBL
596 mcf/d ✓	
OIL GRAVITY-API (CORR)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc) TO BE SOLD	35. LIST OF ATTACHMENTS
	SUMMARY OF POROUS ZONES, WELLBORE DIAGRAM NSL-5701-A

36. I hereby certify that the foregoing and attached information is complete and correct as determined by me.	SIGNED
	Correy Higgins

NMOCD

3-02

ACCEPTED FOR RECORD

JUN 24 2009

FARMINGTON FIELD OFFICE
BY: J. SANDRA

37 SUMMARY OF POROUS ZONES (Show all important zones of porosity and contents thereof, core intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)

38 GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC	NAME	TOP	
					NAME	MEASURED DEPTH
				PICTURED CLIFFS	3431'	3085'
				LEWIS	3730'	3379'
				CLIFFHOUSE	5611'	5260'
				MENEFEE	5656'	5305'
				POINT LOOKOUT	5886'	5535'
				MANCOS	6334'	5983'
				DAKOTA	8115'	7762'

February 11, 2011

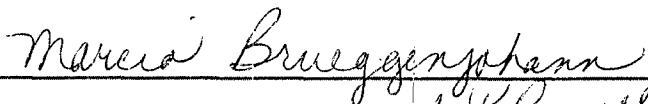
The Rosa Unit #156D Mancos Well (commercial) is located 1075 feet from the North Line and 995 feet from the East Line, Section 9 Township 31 North, Range 6 West, N.M.P.M San Juan County, New Mexico. This well was spud on July 4, 2009, and completed in the Mancos formation on September 26, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7108' to 7610'. This well has a 2.375" tubing string. This well was shut in with a SICP of 550 psig. On September 25, 2009 the well was tested and after flowing for 3 hours through a 2" choke on the 2.375" tubing, the well gauged 1218 MCFD.

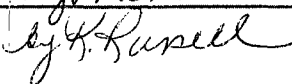
Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 21.50% and is therefore determined commercial.

Attached to this document are the following:

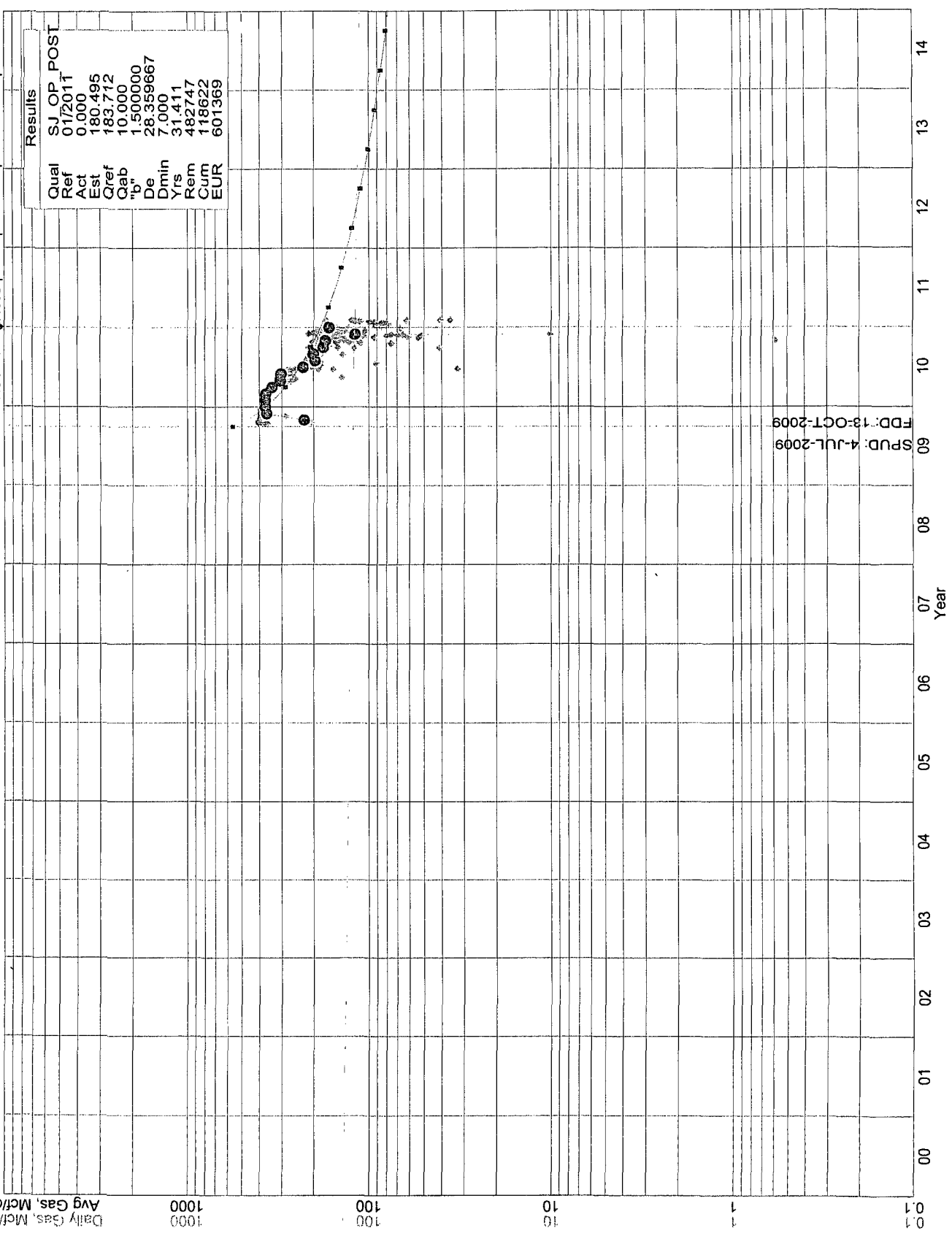
- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

Evaluating Engineer





Marcia Brueggjenjohann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit



SPUD: 4-JUL-2009
FDD: 13-OCT-2009

ROSA UNIT #156D | 1PDP | MANCOS | JAL9AC1PB3 | 62263909
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE

LOSS NO

Production

CUMS 0 0	SJ_OP_POST
START 09/2009	SJ_OP_POST
GAS 700 X M/D 7 EXP H/1.5 96	SJ_OP_POST
" X 10 M/D X YRS EXP 7	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.2584 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T 1000 X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 07/2009 AD ESC INV	SJ_OP_POST
---	------------

Overlays

SIDFILE RI_TOTAL_BR	SJ_OP_POST
LOAD MP.GAS GAS 01/2009 12/2010 #	SJ_OP_POST

PropID: RSV CAT: 1PDP
 Well Name: ROSA UNIT #156D
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 10:42:05
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

COMBINED INPUT DATA								INITIAL CALCULATED DATA				
KEYWORD & Ref. Code	Beginning, Ending Rates			Schedule Limit	Method & Value			Ultimate @	End Pt.	Init. Deff	Init. Rate	Final Rate

400 START	09/2009											
401 GAS	700.00	X	M/D	7.00	EXP	H/1.5	96.00	403.620	8/2018	69.1227	21292.	1697.
402 "	X	10.00	M/D	X	YRS	EXP	7.00	634.115	5/2042	7.0000	1697.	303.
500 PRI/GAS	01/2007	5.617	6.487	6.677	5.957	#/M			4/2007			
501 "	X	6.627	6.827	6.197	4.987	#/M			8/2007			
502 "	X	4.587	5.117	6.057	6.497	#/M			12/2007			
503 "	01/2008	6.377	7.277	8.087	8.277	#/M			4/2008			
504 "	X	9.427	9.846	11.356	7.637	#/M			8/2008			
505 "	X	6.427	4.267	2.837	4.627	#/M			12/2008			
506 "	01/2009	4.827	3.107	2.687	2.617	#/M			4/2009			
507 "	X	2.497	2.647	2.977	3.177	#/M			8/2009			
508 "	X	2.467	3.417	4.257	4.277	#/M			12/2009			
509 "	01/2010	5.72	5.31	4.66	3.77	#/M			4/2010			
510 "	X	3.87	3.69	4.28	4.08	#/M			8/2010			
511 "	X	3.47	4.126	5.75	5.75	#/M			12/2010			
512 "	5.75	X	\$/M	TO	LIFE	PC	0.00		5/2042		5.750	5.750
600 ATX	2.26	X	%	TO	LIFE	PC	0.00		5/2042		0.023	0.023
601 STX/GAS	3.75	X	%	TO	LIFE	PC	0.00		5/2042		0.037	0.037
602 OPC/T	1000.00	X	\$/M	TO	LIFE	PC	0.00		5/2042		1000.000	1000.000
705 LSE/WI	1.0000	D	FRAC	TO	LIFE	FLAT	0.00		5/2042		1.000	1.000
720 NET/OIL	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		5/2042		0.865	0.865
740 NET/GAS	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		5/2042		0.865	0.865

OVERLAYS	Beginning, Ending Rates			Schedule Limit	Method & Value			Ultimate @	End Pt.	Init. Deff	Init. Rate	Final Rate
901 S 92	S/95	X	FRAC	TO	LIFE	DIV	146.00		5/2042			
903 S /89	0.49	X	FRAC	TO	LIFE	MUL	92.00		5/2042			
905 S /89	0.99	X	FRAC	TO	LIFE	MUL	89.00		5/2042			
907 S /196	S/196	X	FRAC	TO	LIFE	MINUS	89.00		5/2042			
909 S /88	0.06	X	FRAC	TO	LIFE	MUL	92.00		5/2042			
911 S /88	1.00	X	FRAC	TO	LIFE	MINUS	88.00		5/2042			
913 S /196	S/196	X	FRAC	TO	LIFE	MUL	88.00		5/2042			

914 GAS	01/2009	0	0	0	0	0	0	0	6989.67	10922.03	11470	#	29.382	12/2009
915 "	X	11468.52	10346.68	10549.07	9161.2	9383.2	6835.03	#	87.125	6/2010				
916 "	X	6056.37	6204.06	5284.44	5311.44	3550.77	#	113.532	11/2010					

INVESTMENTS	Tangible	Intang	Units	Invest. Point	Method & Value		Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 CAPITAL	165.61	555.72	M\$G	07/2009 AD	ESC	INV	721.323	7/2009	0	721.3	0.0

MISCELLANEOUS DATA PARAMETERS

201 BTU	0.99				
202 WELLS	0.00	1.00			
203 CUMO, MB	0.00	CUMG, MMF	0.00	CUML, MB	
250 LOSS	NO				

PROJECT RUN SETTINGS

Base Date	: 01/2007	Time Frames	: 64*12		
P.W. Date	: 01/2008	Primary PW%	: 8.0	Discount Freq.	: MID
Report Date	: 01/2008				
Qualifiers	: Prod = SJ_OP_POST	Price = SJ_OP_POST	Cost = SJ_OP_POST	Owner = BASE	
	Title = BASE	Misc = BASE	Invest = SJ_OP_POST	Overlay = SJ_OP_POST	

PropID: RSV CAT: LPDP
 Well Name: ROSA UNIT #156D
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:42:05
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

R E S E R V E S A N D E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	----GROSS PRODUCTION----				---NET PRODUCTION---				-----PRICES-----		NO. OF WELLS	-----OPERATIONS, M\$-----		
	OIL,	MBBL	GAS,	MMCF	OIL,	MBBL	GAS,	MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000		0.000		0.000		0.000		0.00	0.000	0.0	0.000	0.000	0.000
12-2009	0.000		29.382		0.000		25.415		0.00	3.204	1.0	0.000	81.437	81.437
12-2010	0.000		89.843		0.000		77.714		0.00	3.665	1.0	0.000	284.858	284.858
12-2011	0.000		56.233		0.000		48.642		0.00	4.749	1.0	0.000	231.007	231.007
12-2012	0.000		42.832		0.000		37.050		0.00	4.749	1.0	0.000	175.955	175.955
12-2013	0.000		35.357		0.000		30.584		0.00	4.749	1.0	0.000	145.249	145.249
12-2014	0.000		30.480		0.000		26.365		0.00	4.749	1.0	0.000	125.211	125.211
12-2015	0.000		27.000		0.000		23.355		0.00	4.749	1.0	0.000	110.918	110.918
12-2016	0.000		24.371		0.000		21.081		0.00	4.749	1.0	0.000	100.115	100.115
12-2017	0.000		22.301		0.000		19.290		0.00	4.749	1.0	0.000	91.612	91.612
12-2018	0.000		20.620		0.000		17.836		0.00	4.749	1.0	0.000	84.708	84.708
12-2019	0.000		19.169		0.000		16.582		0.00	4.749	1.0	0.000	78.749	78.749
12-2020	0.000		17.828		0.000		15.421		0.00	4.749	1.0	0.000	73.236	73.236
12-2021	0.000		16.580		0.000		14.341		0.00	4.749	1.0	0.000	68.110	68.110
12-2022	0.000		15.419		0.000		13.337		0.00	4.749	1.0	0.000	63.342	63.342
12-2023	0.000		14.340		0.000		12.404		0.00	4.749	1.0	0.000	58.908	58.908
12-2024	0.000		13.336		0.000		11.536		0.00	4.749	1.0	0.000	54.784	54.784
12-2025	0.000		12.402		0.000		10.728		0.00	4.749	1.0	0.000	50.950	50.950
12-2026	0.000		11.534		0.000		9.977		0.00	4.749	1.0	0.000	47.383	47.383
12-2027	0.000		10.727		0.000		9.279		0.00	4.749	1.0	0.000	44.066	44.066
S TOT	0.000		509.753		0.000		440.936		0.00	4.469	1.0	0.000	1970.599	1970.599
AFTER	0.000		92.455		0.000		79.973		0.00	4.749	1.0	0.000	379.806	379.806
TOTAL	0.000		602.208		0.000		520.910		0.00	4.512	1.0	0.000	2350.405	2350.405

--END-- MO-YEAR	-----OPERATIONS, M\$-----				-----CAPITAL COSTS, M\$-----				8.0%	
	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW INV	TOTAL EQUITY INV	CASH FLOW BTAX, M\$	CUM. DISC BTAX, M\$
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	4.824	4.000	0.000	72.613	165.606	555.717	0.000	721.323	-648.710	-577.983
12-2010	16.874	12.000	0.000	255.984	0.000	0.000	0.000	0.000	255.984	-366.802
12-2011	13.684	12.000	0.000	205.323	0.000	0.000	0.000	0.000	205.323	-209.963
12-2012	10.423	12.000	0.000	153.532	0.000	0.000	0.000	0.000	153.532	-101.373
12-2013	8.604	12.000	0.000	124.645	0.000	0.000	0.000	0.000	124.645	-19.744
12-2014	7.417	12.000	0.000	105.794	0.000	0.000	0.000	0.000	105.794	44.408
12-2015	6.570	12.000	0.000	92.347	0.000	0.000	0.000	0.000	92.347	96.257
12-2016	5.931	12.000	0.000	82.185	0.000	0.000	0.000	0.000	82.185	138.983
12-2017	5.427	12.000	0.000	74.185	0.000	0.000	0.000	0.000	74.185	174.693
12-2018	5.018	12.000	0.000	67.690	0.000	0.000	0.000	0.000	67.690	204.863
12-2019	4.665	12.000	0.000	62.084	0.000	0.000	0.000	0.000	62.084	230.485
12-2020	4.338	12.000	0.000	56.898	0.000	0.000	0.000	0.000	56.898	252.227
12-2021	4.035	12.000	0.000	52.075	0.000	0.000	0.000	0.000	52.075	270.652
12-2022	3.752	12.000	0.000	47.590	0.000	0.000	0.000	0.000	47.590	286.243
12-2023	3.490	12.000	0.000	43.419	0.000	0.000	0.000	0.000	43.419	299.413
12-2024	3.245	12.000	0.000	39.539	0.000	0.000	0.000	0.000	39.539	310.519
12-2025	3.018	12.000	0.000	35.931	0.000	0.000	0.000	0.000	35.931	319.863
12-2026	2.807	12.000	0.000	32.576	0.000	0.000	0.000	0.000	32.576	327.708
12-2027	2.610	12.000	0.000	29.456	0.000	0.000	0.000	0.000	29.456	334.275
S TOT	116.733	220.000	0.000	1633.866	165.606	555.717	0.000	721.323	912.543	334.275
AFTER	22.499	173.000	0.000	184.308	0.000	0.000	0.000	0.000	184.308	362.529
TOTAL	139.231	393.000	0.000	1818.173	165.606	555.717	0.000	721.323	1096.851	362.529

PropID: RSV CAT: LPDP
 Well Name: ROSA UNIT #156D
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:42:05
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

AFTER TAX ECONOMICS

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECIATION	DEPLETION	INTANG. EXPENSED	INTEREST PAID & CAP	TAXABLE INCOME	TAX CREDIT	TAXES PAYABLE	CASH FLOW ATAX	8.0% CUM. DISC ATAX
MO-YEAR	CASH FLOW	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	72.613	23.665	0.000	555.717	0.000	-506.769	0.000	-177.369	-471.341	-419.952
12-2010	255.984	40.557	0.000	0.000	0.000	215.427	0.000	75.399	180.585	-270.974
12-2011	205.323	28.965	0.000	0.000	0.000	176.359	0.000	61.726	143.598	-161.285
12-2012	153.532	20.684	0.000	0.000	0.000	132.848	0.000	46.497	107.035	-85.581
12-2013	124.645	14.789	0.000	0.000	0.000	109.856	0.000	38.450	86.195	-29.132
12-2014	105.794	14.772	0.000	0.000	0.000	91.022	0.000	31.858	73.936	15.702
12-2015	92.347	14.789	0.000	0.000	0.000	77.559	0.000	27.146	65.202	52.310
12-2016	82.185	7.386	0.000	0.000	0.000	74.799	0.000	26.180	56.005	81.426
12-2017	74.185	0.000	0.000	0.000	0.000	74.185	0.000	25.965	48.220	104.637
12-2018	67.690	0.000	0.000	0.000	0.000	67.690	0.000	23.691	43.998	124.248
12-2019	62.084	0.000	0.000	0.000	0.000	62.084	0.000	21.729	40.354	140.902
12-2020	56.898	0.000	0.000	0.000	0.000	56.898	0.000	19.914	36.984	155.034
12-2021	52.075	0.000	0.000	0.000	0.000	52.075	0.000	18.226	33.849	167.010
12-2022	47.590	0.000	0.000	0.000	0.000	47.590	0.000	16.656	30.933	177.144
12-2023	43.419	0.000	0.000	0.000	0.000	43.419	0.000	15.196	28.222	185.705
12-2024	39.539	0.000	0.000	0.000	0.000	39.539	0.000	13.839	25.700	192.924
12-2025	35.931	0.000	0.000	0.000	0.000	35.931	0.000	12.576	23.355	198.998
12-2026	32.576	0.000	0.000	0.000	0.000	32.576	0.000	11.402	21.175	204.097
12-2027	29.456	0.000	0.000	0.000	0.000	29.456	0.000	10.310	19.146	208.366
S TOT	1633.866	165.606	0.000	555.717	0.000	912.543	0.000	319.390	593.153	208.366
AFTER	184.308	0.000	0.000	0.000	0.000	184.308	0.000	64.508	119.800	226.730
TOTAL	1818.173	165.606	0.000	555.717	0.000	1096.851	0.000	383.898	712.953	226.730

BTAX RATE OF RETURN (PCT)	21.50	ATAx RATE OF RETURN (PCT)	19.75
BTAX PAYOUT YEARS	5.27	ATAx PAY OUT YEARS	5.47
BTAX PAYOUT YEARS (DISC)	6.31	ATAx PAY OUT YEARS (DISC)	6.65
BTAX NET INCOME/INVEST	2.52	ATAx NET INCOME/INVEST	1.99
BTAX NET INCOME/INVEST (DISC)	1.56	ATAx NET INCOME/INVEST (DISC)	1.35
PRODUCTION START DATE	09/2009	PROJECT LIFE (YEARS)	34.42
		DISCOUNT - RATE (PCT)	8.00
INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	2.610
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.749
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.
CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMF)	0.000
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	602.208
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	602.208
INITIAL WI (PCT)	100.000	FINAL WI (PCT)	100.000
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	86.500	FINAL NET GAS (PCT)	86.500

PRESENT WORTH PROFILE AND --- RATE-OF-RETURN VS. BONUS TABLE ---			
P.W. FACTOR	B.F.I.T. WORTH	A.F.I.T. WORTH	A.F.I.T. BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	1096.9	713.0	1096.9
2.00	827.1	534.8	751.6
5.00	548.3	350.2	452.5
8.00	362.5	226.7	278.2
10.00	271.5	166.1	198.8
12.00	198.8	117.6	138.1
15.00	114.7	61.4	70.5
18.00	51.9	19.4	21.9
20.00	18.6	-2.8	-3.1
25.00	-43.3	-44.2	-48.5
30.00	-84.7	-71.7	-77.5
35.00	-112.7	-90.3	-96.6
40.00	-131.9	-102.9	-109.2
45.00	-145.0	-111.4	-117.4
50.00	-153.7	-116.9	-122.5

ROSA UNIT #156D

BLANCO MV / BASIN MC / BASIN DK

Spud: 07/04/09

Completed: 09/26/09

1st Delivery: 10/13/09

Surface Location:

1075' FNL and 995' FEL

NE/4 NE/4 Sec 9 (A), T31N, R06W

San Juan, NM

Bottom Hole Location:

1809' FNL and 1859' FEL

SW/4 NE/4 Sec 9 (G), T31N, R06W

San Juan, NM

Elevation: 6447' GR

API # 30-045-34981

Top	MD Depth	TVD Depth
Pictured Cliffs	3455'	3250'
Lewis	3739'	3532'
Cliffhouse Ss.	5657'	5449'
Menefee	5707'	5499'
Point Lookout	5940'	5732'
Mancos	6469'	6261'
Dakota	8171'	7963'

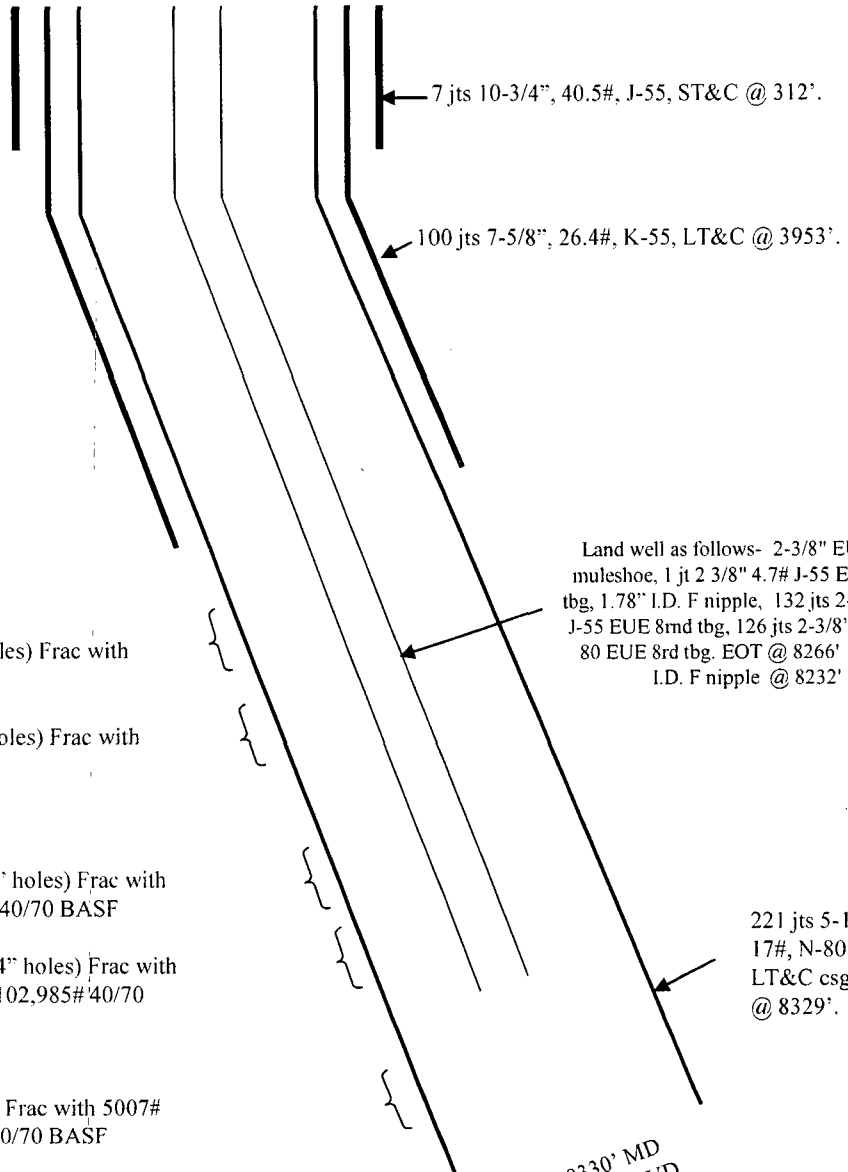
Upper MV: 5670'-5898' (54, 0.34" holes) Frac with 78,706# 20/40 mesh BASF

Lower MV: 5918'-6194'' (64, 0.34" holes) Frac with 78,472# 20/40 mesh BASF

Upper Mancos: 7108'-7338' (72, 0.34" holes) Frac with 5037# 100 mesh followed w/106,179# 40/70 BASF

Lower Mancos: 7413'-7610'' (72, 0.34" holes) Frac with 5011# 100 mesh BASF followed with 102,985# 40/70 BASF

Dakota: 8172'-8300' (93, 0.34" holes) Frac with 5007# 100 mesh BASF followed w/81,618# 40/70 BASF



TD @ 8330' MD
TD @ 8122' TVD
PBTD @ 8322' MD
PBTD @ 8114' TVD

Hole Size	Casing	Cement	Volume	Top of Cnt
14-3/4"	10-3/4", 40.5#	290 sxs	521 cu.ft.	Surface
9-7/8"	7-5/8", 26.4#	665 sxs	1650 cu.ft.	Surface
6-3/4"	5-1/2", 17#	360 sxs	504 cu.ft.	3685' CBL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		² OGRID Number 120782
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30-045-34981	⁵ Pool Name BASIN MANCOS	⁶ Pool Code 97232
⁷ Property Code 17033	⁸ Property Name ROSA UNIT	⁹ Well Number 156D

II. ¹⁰ Surface Location

UL or lot no. A	Section 9	Township 31N	Range 6W	Lot.Idn	Feet from the 1075	North/South Line NORTH	Feet from the 995	East/West line EAST	County SAN JUAN
--------------------	--------------	-----------------	-------------	---------	-----------------------	------------------------------	----------------------	------------------------	--------------------

¹¹ Bottom Hole Location

UL or lot no G	Section 9	Township 31N	Range 6W	Lot Idn	Feet from the 1809	North/South line NORTH	Feet from the 1859	East/West line EAST	County SAN JUAN
¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
009018	GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	O
025244	WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	G
		RCVD SEP 29 '03

IV. Well Completion Data NOTE: Commingled with Mesaverde & Dakota

OIL CONS. DIV.

DIST 3

²¹ Spud Date 7-4-09	²² Ready Date 9-26-09	²³ TD 8330' MD	²⁴ PBDT 8114' MD	²⁵ Perforations 7108' - 7610'	²⁶ DHC, MC AZT-3225
²⁷ Hole Size 14-3/4"	²⁸ Casing & Tubing Size 10-3/4", 40.5#, J J-55	²⁹ Depth Set 312'	³⁰ Sacks Cement 290 sx - surface		
9-7/8"	7-5/8", 26.4#, K-55	3953'	665 sx - surface		
6-3/4"	5 1/2", 17#, N-80	8329'	360 sx - 3685' (CBL)		
	2.375", 4.7#, J-55	8266'	NONE		

VI. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date 9-25-09	³⁴ Test Length 3 hrs	³⁵ Tbg. Pressure 0	³⁶ Csg. Pressure 550 lb
³⁷ Choke Size 2"	³⁸ Oil	³⁹ Water	⁴⁰ Gas 1218 mcf/d		⁴¹ Test Method Pitot
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Larry Higgins</i>			10/7/09 OIL CONSERVATION DIVISION		
Printed name: Larry Higgins			Approved by: <i>Chuck [unclear]</i> 10-8-09		
Title: Drig COM			Title: SUPERVISOR DISTRICT # 3		
E-mail Address: larry.higgins@williams.com			Approval Date: OCT 08 2009		
Date: 9-28-09		Phone: 505-634-4208			

Pum april

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN
DUPLICATE

FORM APPROVED
OMB NO 1004-0137
Expires: February 28, 1995

SEP 28 2009

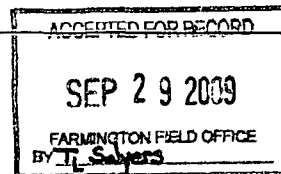
(See other instructions on
reverse side)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: ☐ OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER		7. UNIT AGREEMENT NAME Rosa Unit	
b. TYPE OF COMPLETION: ☒ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF RESVR ☐ OTHER		Report to lease	
2. NAME OF OPERATOR WILLIAMS PRODUCTION COMPANY		8. FARM OR LEASE NAME, WELL NO. Rosa Unit #156D	
3. ADDRESS AND TELEPHONE NO P.O. Box 640, Aztec, NM 87410 (505) 634-4208		9. API WELL NO 30-045-34981-0062	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At Surface: 1075' FNL & 995' FEL, sec 9, T31N, R6W At top production interval reported below: 1809' FNL & 1859' FEL, sec 9, T31N, R6W At total depth: Same		10. FIELD AND POOL, OR WILDCAT Basin Mancos	
11. SEC, T, R, M, OR BLOCK AND SURVEY OR AREA Sec 9, T31N, R6W		12. COUNTY OR STATE San Juan New Mexico	
15. DATE SPUNDED 7-4-09	16. DATE T.D. REACHED 7-16-09	17. DATE COMPLETED (READY TO PRODUCE) 9-26-09	18. ELEVATIONS (DK, RKB, RT, GR, ETC)* 6447' GR
20. TOTAL DEPTH, MD & TVD 8330' MD / 8122' TVD	21. PLUG, BACK T.D., MD & TVD 8322' MD / 8114' TVD	22. IF MULTICOMP, HOW MANY 3*	23. INTERVALS DRILLED BY
24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* BASIN MANCOS: 7108'-7610' MD Commingled with Mesaverde and Dakota per AZT-3225		25. WAS DIRECTIONAL SURVEY MADE YES	
26. TYPE ELECTRIC AND OTHER LOGS RUN Array Induction, Compensated Gamma Ray-Density-Neutron, Temperature, Ultra Sonic Gas Detector and CBL.		27. WAS WELL CORED No	
28. CASING REPORT (Report all strings set in well)			
CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE
10-3/4", J-55	40.5#	312'	14-3/4"
7-5/8", K-55	26.4#	3953'	9-7/8"
5-1/2", N-80	17.0#	8329'	6-3/4"
29. LINER RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*
30. TUBING RECORD		31. PERFORATION RECORD (Interval, size, and number)	
SIZE	DEPTH SET (MD)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC	
2.375", 4.7#, J-55 & N-80 EUE 8rd	8266'	DEPTH INTERVAL (MD)	
		AMOUNT AND KIND OF MATERIAL USED	
		7108'-7338'	
		Fraced with 5037# 100 mesh BASF followed with 106,179# 40/70 mesh BASF	
		7413'-7610'	
		Fraced with 5011# 100 mesh BASF followed with 102,985# 40/70 mesh BASF	
33. PRODUCTION			
DATE OF FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump)	
		Flowing	
WELL STATUS (PRODUCING OR SI)		SI - waiting on tie-in	
DATE OF TEST	TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD
9-25-09	3 hr	1/2"	
FLOW TBG PRESS	CASING PRESSURE	CALCULATED 24-HOUR RATE	
0	550 lb		
OIL - BBL		GAS - MCF	
		1218 mcf/d	
WATER - BBL		OIL GRAVITY-API (CORR.)	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TO BE SOLD			
TEST WITNESSED BY Craig Ward			
35. LIST OF ATTACHMENTS SUMMARY OF POROUS ZONES, WELLBORE DIAGRAM, Directional EOW report			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records			

SIGNED Larry Higgins TITLE Drilg COM DATE 9-28-09

NMOCD 86



37 SUMMARY OF POROUS ZONES (Show all important zones of porosity and contents thereof, cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)

38 GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC	NAME	TOP	
					NAME	MEASURED DEPTH
				PICTURED CLIFFS	3455'	3250'
				LEWIS	3739'	3532'
				CLIFFHOUSE	5657'	5449'
				MENEFEE	5707'	5499'
				POINT LOOKOUT	5940'	5732'
				MANCOS	6469'	6261'
				DAKOTA	8171'	7963'

February 7, 2011

The Rosa Unit #166B Mancos Well (commercial) is located 2305 feet from the North Line and 2305 feet from the East Line, Section 30 Township 31 North, Range 5 West, N.M.P.M Rio Arriba County, New Mexico. This well was spud on April 13, 2008, and completed in the Mancos formation on October 31, 2008. The Mancos formation was completed with a pre-perforated liner between the following depths: 6290' to 7849'. This well has a 2.875" tubing string. This well was shut in with a SICP of 308 psig. On October 30, 2008 the well was tested and after flowing for 12 hours through a .5" choke on the 2.875" tubing, the well gauged 1240 MCFD.

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 14.14% and is therefore determined commercial.

Attached to this document are the following:

- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

Evaluating Engineer

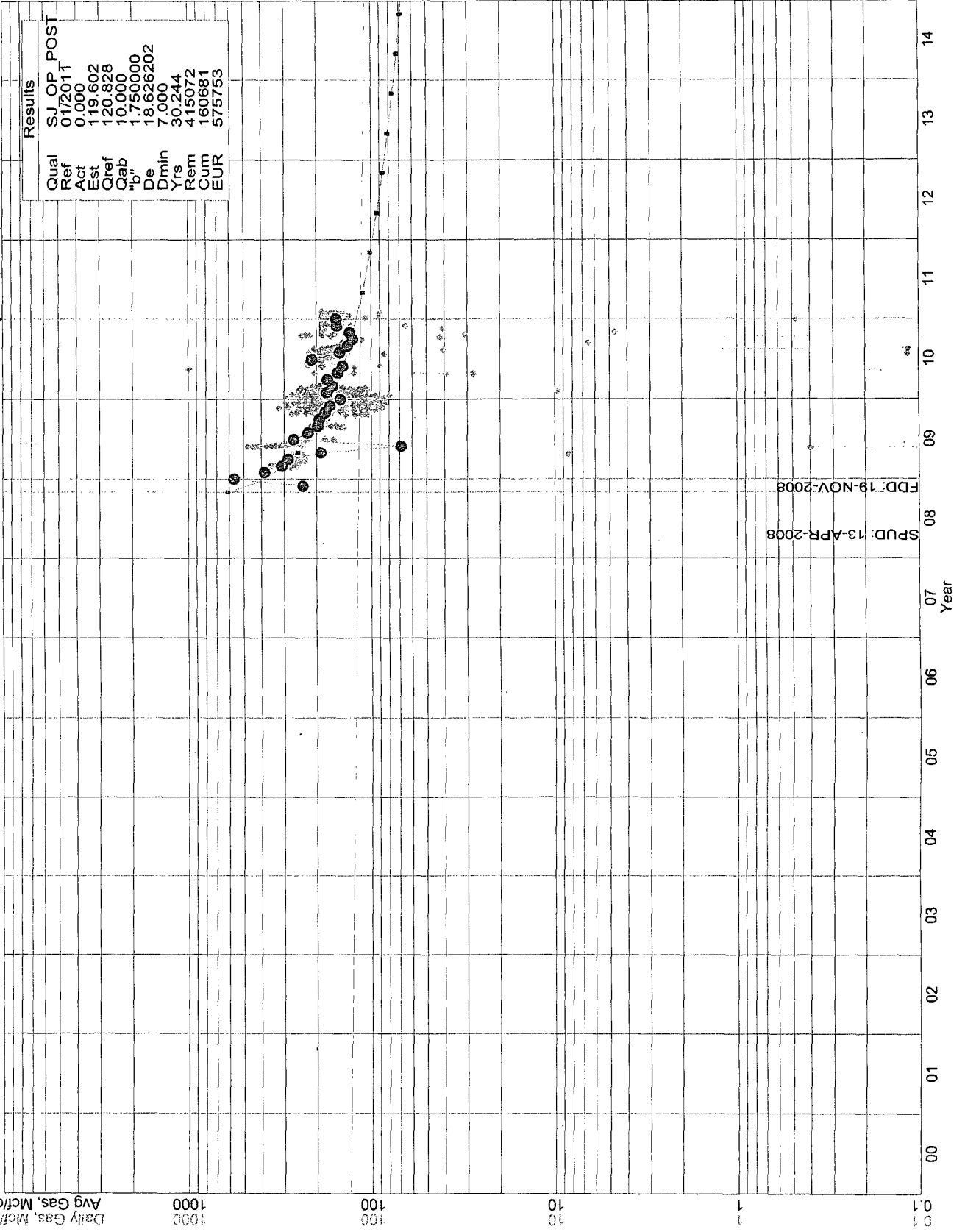
A handwritten signature in cursive script, reading "Marcia Brueggenjohann", is written over a horizontal line.

Marcia Brueggenjohann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit

SJB_AvgDay_Gas

Daily Gas, Mcf/day
Avg Gas, Mcf/day

Results	
Qual	SJ_OP_POST
Ref	01/2011
Act	0.000
Est	119.602
Qref	120.828
Qab	10.000
"b"	1.750000
De	18.626202
Dmin	7.000
Yrs	30.244
Rem	415072
Cum	160681
EUR	575753



ROSA UNIT #166B | 1PDP | MANCOS | J7PKN4ET3C | 62231548
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE
<u>LOSS NO</u>	

Production

START 10/2008	SJ_OP_POST
GAS 1050 X M/D 7 EXP B/1.75 82	SJ_OP_POST
" X 10 M/D X YRS EXP 7	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.1 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T 1626 X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 12/2008 AD ESC INV	SJ_OP_POST
---	------------

Overlays

LOAD MP.GAS GAS 01/2007 12/2010 #	SJ_OP_POST
SIDFILE RI_TOTAL_BR	SJ_OP_POST

PropID: 25082 RSV CAT: 1PDP
 Well Name: ROSA UNIT #166B
 Field: BASIN
 Cnty: RIO ARRIBA St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 10:44:58
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

KEYWORD & Ref. Code	COMBINED INPUT DATA							INITIAL CALCULATED DATA			
	Beginning	Ending	Rates	Schedule	Limit	Method & Value	Ultimate @ End Pt.	Init.Deff	Init. Rate	Final Rate	
400 START	10/2008										
401 GAS	1050.00	X	M/D	7.00	EXP	B/1.75 82.00	354.752 7/2016	82.0000	31938.	1819.	
402 "	X	10.00	M/D	X	YRS	EXP 7.00	605.276 3/2041	7.0000	1819.	304.	
500 PRI/GAS	01/2007	5.617	6.487	6.677	5.957	#/M					4/2007
501 "	X	6.627	6.827	6.197	4.987	#/M					8/2007
502 "	X	4.587	5.117	6.057	6.497	#/M					12/2007
503 "	01/2008	6.377	7.277	8.087	8.277	#/M					4/2008
504 "	X	9.427	9.846	11.356	7.637	#/M					8/2008
505 "	X	6.427	4.267	2.837	4.627	#/M					12/2008
506 "	01/2009	4.827	3.107	2.687	2.617	#/M					4/2009
507 "	X	2.497	2.647	2.977	3.177	#/M					8/2009
508 "	X	2.467	3.417	4.257	4.277	#/M					12/2009
509 "	01/2010	5.72	5.31	4.66	3.77	#/M					4/2010
510 "	X	3.87	3.69	4.28	4.08	#/M					8/2010
511 "	X	3.47	4.126	5.75	5.75	#/M					12/2010
512 "		5.75	X	\$/M	TO	LIFE PC 0.00	3/2041		5.750	5.750	
600 ATX	2.10	X	%	TO	LIFE	PC 0.00	3/2041		0.021	0.021	
601 STX/GAS	3.75	X	%	TO	LIFE	PC 0.00	3/2041		0.037	0.037	
602 OPC/T	1626.00	X	\$/M	TO	LIFE	PC 0.00	3/2041		1626.000	1626.000	
705 LSE/WI	1.0000	D	FRAC	TO	LIFE	FLAT 0.00	3/2041		1.000	1.000	
720 NET/OIL	0.8650	D	FRAC	TO	LIFE	FLAT 0.00	3/2041		0.865	0.865	
740 NET/GAS	0.8650	D	FRAC	TO	LIFE	FLAT 0.00	3/2041		0.865	0.865	
OVERLAYS	Beginning	Ending	Rates	Schedule	Limit	Method & Value	Ultimate @ End Pt.	Init.Deff	Init. Rate	Final Rate	
900 GAS	01/2007	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	#				0.000 4/2008				
901 "	X	0 0 0 0 0 0 7079	17485 11943 8649 8861 5668 2127 #				61.812 5/2009				
902 "	X	7958 6893 6097 5790 5556 5059 4579 5433 4594 5399 #					119.170 3/2010				
903 "	X	4588 4443.28 6330.7 4617.53 4185.98 3797.91 4082.21 #					151.216 10/2010				
904 "	X	4636.84 #					155.852 11/2010				
906 S /92	S/95	X	FRAC	TO	LIFE	DIV 146.00	3/2041				
908 S /89	0.49	X	FRAC	TO	LIFE	MUL 92.00	3/2041				
910 S /89	1.00	X	FRAC	TO	LIFE	MUL 89.00	3/2041				
912 S /196	S/196	X	FRAC	TO	LIFE	MINUS 89.00	3/2041				
914 S /88	0.06	X	FRAC	TO	LIFE	MUL 92.00	3/2041				
916 S /88	1.00	X	FRAC	TO	LIFE	MINUS 88.00	3/2041				
918 S /196	S/196	X	FRAC	TO	LIFE	MUL 88.00	3/2041				
INVESTMENTS	Tangible	Intang	Units	Invest.	Point	Method & Value	Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 CAPITAL	165.61	555.72	M\$G	12/2008	AD	ESC INV	721.323	12/2008	0	721.3	1442.6

MISCELLANEOUS DATA PARAMETERS

201 BTU 1.00
 202 WELLS 0.00 1.00
 250 LOSS NO

PROJECT RUN SETTINGS

Base Date : 01/2007 Time Frames : 64*12
 P.W. Date : 01/2008 Primary PW% : 8.0 Discount Freq. : MID
 Report Date : 01/2008
 Qualifiers : Prod = SJ_OP_POST Price = SJ_OP_POST Cost = SJ_OP_POST Owner = BASE
 Title = BASE Misc = BASE Invest = SJ_OP_POST Overlay = SJ_OP_POST

PropID: 25082 RSV CAT: 1PDP
 Well Name: ROSA UNIT #166B
 Field: BASIN
 Cnty: RIO ARRIBA St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:44:58
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

R E S E R V E S A N D E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	---GROSS PRODUCTION---			---NET PRODUCTION---			-----PRICES-----		NO. OF WELLS	-----OPERATIONS, M\$-----		
	OIL,	MBBL	GAS, MMCF	OIL,	MBBL	GAS, MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000		24.564	0.000		21.248	0.00	3.282	1.0	0.000	69.739	69.739
12-2009	0.000		79.180	0.000		68.491	0.00	2.560	1.0	0.000	175.329	175.329
12-2010	0.000		55.822	0.000		48.286	0.00	3.678	1.0	0.000	177.621	177.621
12-2011	0.000		39.608	0.000		34.261	0.00	4.801	1.0	0.000	164.494	164.494
12-2012	0.000		33.196	0.000		28.715	0.00	4.801	1.0	0.000	137.865	137.865
12-2013	0.000		29.022	0.000		25.104	0.00	4.801	1.0	0.000	120.528	120.528
12-2014	0.000		26.035	0.000		22.520	0.00	4.801	1.0	0.000	108.124	108.124
12-2015	0.000		23.766	0.000		20.558	0.00	4.801	1.0	0.000	98.703	98.703
12-2016	0.000		21.968	0.000		19.002	0.00	4.801	1.0	0.000	91.234	91.234
12-2017	0.000		20.424	0.000		17.667	0.00	4.801	1.0	0.000	84.822	84.822
12-2018	0.000		18.994	0.000		16.430	0.00	4.801	1.0	0.000	78.884	78.884
12-2019	0.000		17.665	0.000		15.280	0.00	4.801	1.0	0.000	73.362	73.362
12-2020	0.000		16.428	0.000		14.210	0.00	4.801	1.0	0.000	68.227	68.227
12-2021	0.000		15.278	0.000		13.216	0.00	4.801	1.0	0.000	63.451	63.451
12-2022	0.000		14.209	0.000		12.291	0.00	4.801	1.0	0.000	59.009	59.009
12-2023	0.000		13.214	0.000		11.430	0.00	4.801	1.0	0.000	54.879	54.879
12-2024	0.000		12.289	0.000		10.630	0.00	4.801	1.0	0.000	51.037	51.037
12-2025	0.000		11.429	0.000		9.886	0.00	4.801	1.0	0.000	47.465	47.465
12-2026	0.000		10.629	0.000		9.194	0.00	4.801	1.0	0.000	44.142	44.142
12-2027	0.000		9.885	0.000		8.550	0.00	4.801	1.0	0.000	41.052	41.052
S TOT	0.000		493.606	0.000		426.970	0.00	4.239	1.0	0.000	1809.966	1809.966
AFTER	0.000		62.569	0.000		54.122	0.00	4.801	1.0	0.000	259.849	259.849
TOTAL	0.000		556.175	0.000		481.091	0.00	4.302	1.0	0.000	2069.815	2069.815

--END-- MO-YEAR	-----OPERATIONS, M\$-----				-----CAPITAL COSTS, M\$-----				CASH FLOW BTAX, M\$	8.0% CUM. DISC BTAX, M\$	
	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW INV	TOTAL EQUITY INV			
12-2008	4.025	4.878	0.000	60.836	165.606	555.717	0.000	721.323	-660.487	-613.649	
12-2009	10.119	19.512	0.000	145.698	0.000	0.000	0.000	0.000	145.698	-483.836	
12-2010	10.251	19.512	0.000	147.858	0.000	0.000	0.000	0.000	147.858	-361.857	
12-2011	9.493	19.512	0.000	135.488	0.000	0.000	0.000	0.000	135.488	-258.362	
12-2012	7.957	19.512	0.000	110.397	0.000	0.000	0.000	0.000	110.397	-180.280	
12-2013	6.956	19.512	0.000	94.060	0.000	0.000	0.000	0.000	94.060	-118.681	
12-2014	6.240	19.512	0.000	82.371	0.000	0.000	0.000	0.000	82.371	-68.732	
12-2015	5.696	19.512	0.000	73.494	0.000	0.000	0.000	0.000	73.494	-27.468	
12-2016	5.265	19.512	0.000	66.457	0.000	0.000	0.000	0.000	66.457	7.081	
12-2017	4.895	19.512	0.000	60.414	0.000	0.000	0.000	0.000	60.414	36.162	
12-2018	4.553	19.512	0.000	54.819	0.000	0.000	0.000	0.000	54.819	60.596	
12-2019	4.234	19.512	0.000	49.616	0.000	0.000	0.000	0.000	49.616	81.072	
12-2020	3.938	19.512	0.000	44.777	0.000	0.000	0.000	0.000	44.777	98.182	
12-2021	3.662	19.512	0.000	40.277	0.000	0.000	0.000	0.000	40.277	112.433	
12-2022	3.406	19.512	0.000	36.092	0.000	0.000	0.000	0.000	36.092	124.257	
12-2023	3.167	19.512	0.000	32.200	0.000	0.000	0.000	0.000	32.200	134.025	
12-2024	2.945	19.512	0.000	28.580	0.000	0.000	0.000	0.000	28.580	142.052	
12-2025	2.739	19.512	0.000	25.213	0.000	0.000	0.000	0.000	25.213	148.609	
12-2026	2.548	19.512	0.000	22.083	0.000	0.000	0.000	0.000	22.083	153.927	
12-2027	2.369	19.512	0.000	19.171	0.000	0.000	0.000	0.000	19.171	158.201	
S TOT	104.458	375.606	0.000	1329.902	165.606	555.717	0.000	721.323	608.580	158.201	
AFTER	14.997	173.982	0.000	70.871	0.000	0.000	0.000	0.000	70.871	170.578	
TOTAL	119.454	549.588	0.000	1400.773	165.606	555.717	0.000	721.323	679.450	170.578	

PropID: 25082 RSV CAT: 1PDP
 Well Name: ROSA UNIT #166B
 Field: BASIN
 Cnty: RIO ARRIBA St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 10:44:58
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

A F T E R T A X E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECI-	DEPLETION	INTANG.	INTEREST	TAXABLE	TAX	TAXES	CASH FLOW	8.0%
MO-YEAR	CASH FLOW	TION		EXPENSED	PAID & CAP	INCOME	CREDIT	PAYABLE	ATAW	CUM. DISC
-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----
12-2008	60.836	23.665	0.000	555.717	0.000	-518.546	0.000	-181.491	-478.996	-439.009
12-2009	145.698	40.557	0.000	0.000	0.000	105.141	0.000	36.800	108.899	-341.983
12-2010	147.858	28.965	0.000	0.000	0.000	118.894	0.000	41.613	106.245	-254.334
12-2011	135.488	20.684	0.000	0.000	0.000	114.804	0.000	40.181	95.307	-181.532
12-2012	110.397	14.789	0.000	0.000	0.000	95.608	0.000	33.463	76.934	-127.118
12-2013	94.060	14.772	0.000	0.000	0.000	79.288	0.000	27.751	66.309	-83.693
12-2014	82.371	14.789	0.000	0.000	0.000	67.583	0.000	23.654	58.717	-48.087
12-2015	73.494	7.386	0.000	0.000	0.000	66.108	0.000	23.138	50.356	-19.814
12-2016	66.457	0.000	0.000	0.000	0.000	66.457	0.000	23.260	43.197	2.643
12-2017	60.414	0.000	0.000	0.000	0.000	60.414	0.000	21.145	39.269	21.546
12-2018	54.819	0.000	0.000	0.000	0.000	54.819	0.000	19.187	35.633	37.427
12-2019	49.616	0.000	0.000	0.000	0.000	49.616	0.000	17.366	32.251	50.737
12-2020	44.777	0.000	0.000	0.000	0.000	44.777	0.000	15.672	29.105	61.859
12-2021	40.277	0.000	0.000	0.000	0.000	40.277	0.000	14.097	26.180	71.122
12-2022	36.092	0.000	0.000	0.000	0.000	36.092	0.000	12.632	23.460	78.807
12-2023	32.200	0.000	0.000	0.000	0.000	32.200	0.000	11.270	20.930	85.156
12-2024	28.580	0.000	0.000	0.000	0.000	28.580	0.000	10.003	18.577	90.374
12-2025	25.213	0.000	0.000	0.000	0.000	25.213	0.000	8.825	16.389	94.636
12-2026	22.083	0.000	0.000	0.000	0.000	22.083	0.000	7.729	14.354	98.092
12-2027	19.171	0.000	0.000	0.000	0.000	19.171	0.000	6.710	12.461	100.871
S TOT	1329.902	165.606	0.000	555.717	0.000	608.580	0.000	213.003	395.577	100.871
AFTER	70.871	0.000	0.000	0.000	0.000	70.871	0.000	24.805	46.066	108.916
TOTAL	1400.773	165.606	0.000	555.717	0.000	679.450	0.000	237.808	441.643	108.916

BTAX RATE OF RETURN (PCT)	14.14	ATAW RATE OF RETURN (PCT)	14.01
BTAX PAYOUT YEARS	6.33	ATAW PAY OUT YEARS	6.43
BTAX PAYOUT YEARS (DISC)	8.80	ATAW PAY OUT YEARS (DISC)	8.88
BTAX NET INCOME/INVEST	1.94	ATAW NET INCOME/INVEST	1.61
BTAX NET INCOME/INVEST (DISC)	1.25	ATAW NET INCOME/INVEST (DISC)	1.16
PRODUCTION START DATE	10/2008	PROJECT LIFE (YEARS)	28.92
		DISCOUNT - RATE (PCT)	8.00
INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	2.101
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.801
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.
CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMF)	0.000
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	556.175
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	556.175
INITIAL WI (PCT)	100.000	FINAL WI (PCT)	100.000
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	86.500	FINAL NET GAS (PCT)	86.500

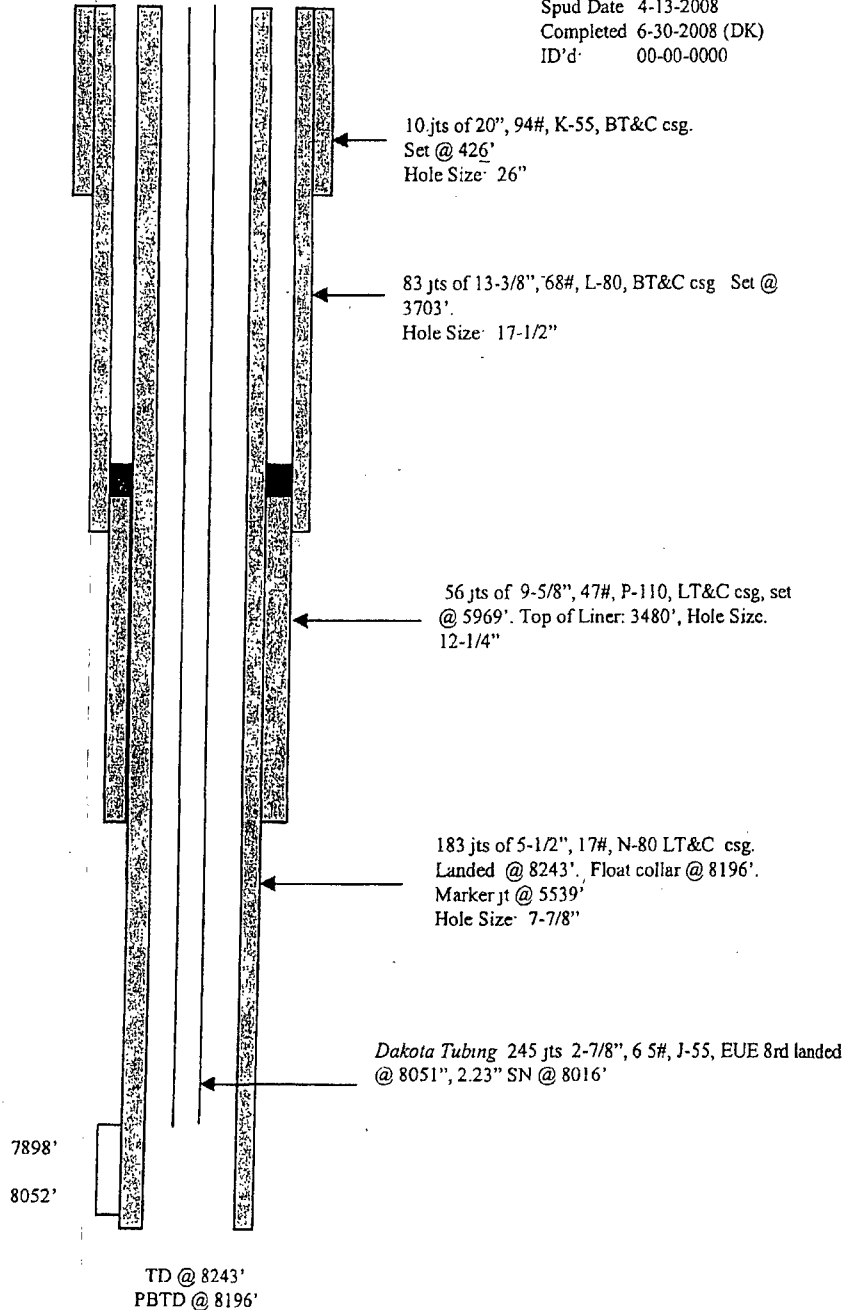
PRESENT WORTH PROFILE AND			
---- RATE-OF-RETURN VS. BONUS TABLE ----			
P.W.	B.F.I.T.	A.F.I.T.	A.F.I.T.
FACTOR	WORTH	WORTH	BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	679.5	441.6	679.5
2.00	500.3	324.4	461.0
5.00	306.0	197.3	259.7
8.00	170.6	108.9	136.5
10.00	102.3	64.4	78.8
12.00	46.7	28.4	34.1
15.00	-18.8	-14.0	-16.4
18.00	-68.5	-45.9	-53.0
20.00	-95.2	-62.9	-71.9
25.00	-145.7	-94.7	-106.2
30.00	-179.9	-115.7	-128.1
35.00	-203.6	-129.8	-142.2
40.00	-220.1	-139.2	-151.1
45.00	-231.5	-145.3	-156.6
50.00	-239.3	-149.0	-159.7

ROSA UNIT #166B
BLANCO MESAVERDE/BASIN MANCOS/BASIN DK

Location: 2305' FNL, 2305' FEL
 SW/4 NE/4 Section 30 (G), T31N, R5W
 Rio Arriba Co., NM
Elevation: 6385' GR
API: 30-039-29841

Spud Date 4-13-2008
Completed 6-30-2008 (DK)
ID'd: 00-00-0000

<i>Tops</i>	<i>Depth</i>
Ojo Alamo	2498'
Kirtland	2632'
Pictured Cliffs	3228'
Cliff House	5432'
Point Lookout	5680'
Mancos	6140'
Dakota	7898'



Mesa Verde:
 To be completed at later date

Mancos:
 To be completed at later date

Dakota: 7898' - 8052' (81, 0 37" holes)
 Frac w/10,727# LP108 14/40 followed
 w/3470# tempered LC 20/40.

HOLE SIZE	CASING	CEMENT	VOLUME	CMT TOP
26"	20"	739 sx	1172 cu.ft.	Surface
17-1/2"	13-3/8"	2000 sx	4022 cu.ft.	Surface
12-1/4"	9-5/8"	540	1155 cu.ft.	3480' (CBL)
7-7/8"	5 1/2"	850 sx	1860 cu.ft.	3200' (CBL)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised June 10, 2003

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		² OGRID Number 120782
		³ Reason for Filing Code/ Effective Date R/C
⁴ API Number 30-039-29841	⁵ Pool Name BASIN MANCOS NSL-5681-A	⁶ Pool Code 97232
⁷ Property Code 17033	⁸ Property Name ROSA UNIT	⁹ Well Number 166B

II. ¹⁰ Surface Location

¹¹ Ul or lot no. G	¹² Section 30	¹³ Township 31N	¹⁴ Range 5W	¹⁵ Lot Idn	¹⁶ Feet from the 2305	¹⁷ North/South Line NORTH	¹⁸ Feet from the 2305	¹⁹ East/West line EAST	²⁰ County RIO ARRIBA
----------------------------------	-----------------------------	-------------------------------	---------------------------	-----------------------	-------------------------------------	--	-------------------------------------	--------------------------------------	------------------------------------

¹¹ Bottom Hole Location

²¹ Ul or lot no.	²² Section	²³ Township	²⁴ Range	²⁵ Lot Idn	²⁶ Feet from the	²⁷ North/South line	²⁸ Feet from the	²⁹ East/West line	³⁰ County
³¹ Lse Code	³² Producing Method Code	³³ Gas Connection Date	³⁴ C-129 Permit Number	³⁵ C-129 Effective Date	³⁶ C-129 Expiration Date				

III. Oil and Gas Transporters

³⁷ Transporter OGRID 009018	³⁸ Transporter Name and Address GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	³⁹ O/G/W O
⁴⁰ 025244	⁴¹ WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	⁴² G
	RCVD NOV 6 '08	

IV. Well Completion Data NOTE: CIPB @ 7870' - Mesaverde to be completed at a later date.

⁴³ Spud Date 4-13-08	⁴⁴ Ready Date 10-31-08	⁴⁵ TD 8243' MD	⁴⁶ PBDT 8196'	⁴⁷ Perforations 6290' - 7849'	⁴⁸ DHC, MC
⁴⁹ Hole Size 26"	⁵⁰ Casing & Tubing Size 20", 94#, K-55	⁵¹ Depth Set 426'	⁵² Sacks Cement 739		
⁵³ 17-1/2"	⁵⁴ 13-3/8", 68#, L-80	⁵⁵ 3703'	⁵⁶ 2000		
⁵⁷ 12-1/4"	⁵⁸ 9 5/8", 47#, P-110	⁵⁹ 3480' - 5969'	⁶⁰ 540		
⁶¹ 7-7/8"	⁶² 5 1/4", 17#, N-80	⁶³ 8243'	⁶⁴ 850		
	⁶⁵ 2.875", 6.5#, J-55	⁶⁶ 7609'	⁶⁷ NONE AT THIS TIME		

VI. Well Test Data

⁶⁸ Date New Oil	⁶⁹ Gas Delivery Date	⁷⁰ Test Date 10-30-08	⁷¹ Test Length 12.0 hrs	⁷² Tbg. Pressure	⁷³ Csg. Pressure 308 psi
⁷⁴ Choke Size .5"	⁷⁵ Oil	⁷⁶ Water	⁷⁷ Gas 1240 mcf/d		⁷⁸ Test Method Orifice

⁷⁹ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Larry Higgins</i>		⁸⁰ 11/13/08 OIL CONSERVATION DIVISION
Printed name: Larry Higgins		Approved by: <i>Charles</i> 11-13-08
Title: Drig COM		Title: SUPERVISOR DISTRICT # 3
E-mail Address: larry.higgins@williams.com		Approval Date: NOV 13 2008
Date: 11-5-08	Phone: 505-634-4208	<i>RCM approval</i>

80

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN
DUPLICATE

FORM APPROVED
OMB NO 1004-0137
Expires: February 28, 1995

(See other instructions on
reverse side)

5. LEASE DESIGNATION AND LEASE NO
NMSF-078764

6 IF INDIAN ALLOTTEE OR

WELL COMPLETION OR RECOMPLETION REPORT AND LOG NOV 05 2008

1a	TYPE OF WELL	OIL WELL	☒ GAS WELL	DRY	OTHER	7. UNIT AGREEMENT NAME Rosa Unit		
b	TYPE OF COMPLETION	NEW WELL	WORKOVER	DEEPEN	PLUG BACK	☒ DIFF REFSVR.	OTHER	Report to lease
2	NAME OF OPERATOR WILLIAMS PRODUCTION COMPANY						8 FARM OR LEASE NAME, WELL NO Rosa Unit #166B	
3	ADDRESS AND TELEPHONE NO P.O. Box 640, Aztec, NM 87410 (505) 634-4208						9 API WELL NO 30-039-29841-0002	
4.	LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At Surface: 2305' FNL & 2305' FEL, sec 30, T31N, R5W At top production interval reported below At total depth						10. FIELD AND POOL, OR WILDCAT BASIN MANCOS	
						11. SEC, T, R, M, OR BLOCK AND SURVEY OR AREA SW/4 NE/4, Sec 30, T31N, R5W		
						12 COUNTY OR Rio Arriba	13 STATE New Mexico	
15 DATE SPUNDED 4-13-08	16 DATE T.D. REACHED 6-6-08	17 DATE COMPLETED (READY TO PRODUCE) 10-31-08	18 ELEVATIONS (DK, RKB, RT, GR, ETC)* 6385' GR		19 ELEVATION CASINGHEAD			
20 TOTAL DEPTH, MD & TVD 8243' MD		21 PLUG, BACK T.D. MD & TVD 8196'	22 IF MULTICOMP. HOW MANY 3*	23 INTERVALS DRILLED BY	ROTARY TOOLS X	CABLE TOOLS		
24 PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* BASIN MANCOS 6290' - 7849' CIBP set @ 7870' to isolate DK - * Mesaverde to be completed at later date						25 WAS DIRECTIONAL SURVEY MADE YES		
26 TYPE ELECTRIC AND OTHER LOGS RUN						27 WAS WELL CORED Yes		

28 CASING REPORT (Report all strings set in well)					
CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT FULLED
20", K-55	94#	426'	26"	739 SX - SURFACE	
13-3/8", L-80	68#	3703'	17-1/2"	2000 SX - SURFACE	
5-1/2", N-80	17.0#	8243'	7-7/8"	850 SX - 3200' (CBL)	

29 LINER RECORD				30 TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
9-5/8", P-110, 47#	3480'	5969'	540 sx TOC - 3480' (CBL)		2.875", 6 3/8", J-55, EUE 8rd	7609'	none

31 PERFORATION RECORD (Interval, size, and number)		32 ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC	
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED		
7796'-7849'	Frac w/7720# 100 mesh WS then 25,177# 40/70 WS		
7553'-7672'	Frac w/ 7500# 100 mesh WS then 45,000# 40/70 WS		
7425'-7500'	Frac w/8000# 100 mesh WS then 6000# 40/70 WS		
7345'-7385'	Frac w/8000# 100 mesh WS then 107,224 40/70 WS		
7140'-7310'	Frac w/ 8000# 100 mesh WS then 94,000# 40/70 WS		
6923'-7075'	Frac w/ 8200# 100 mesh WS then 113,076# 40/70 WS		
6290'-6470'	Frac w/7506# 100 mesh WS then 121,496# 40/70 WS		

33 PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump)				WELL STATUS (PRODUCING OR SI)	
DATE OF FIRST PRODUCTION		Flowing				SI - waiting on tie-in	
DATE OF TEST	TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL - BBL	GAS - MCF	WATER - BBL	GAS-OIL RATIO
10-30-08	12 0 hr	.5"					
FLOW TGB PRESS	CASING PRESSURE	CALCULATED 24-HOUR RATE		OIL - BBL	GAS - MCF	WATER - BBL	OIL GRAVITY-API (CORR)
	308 PSI				1240 MCFD		

34 DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TO BBL SOLD TEST WITNESSED BY Al Rector

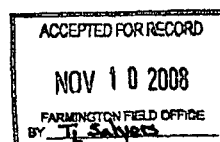
35 LIST OF ATTACHMENTS SUMMARY OF POROUS ZONES, WELLBORE DIAGRAM

36 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Larry Higgins TITLE Drilling COM DATE 11-5-08

RCVD NOV 13 '08

OIL CONS. DIV.
DIST. 3



NMOCD

38 GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					NAME	MEASURED DEPTH
				KIRTLAND	2632'	
				FRUITLAND COAL	2972'	
				PICTURED CLIFFS	3228'	
				CLIFFHOUSE	5432'	
				MENEFEE	5474'	
				POINT LOOKOUT	5680'	
				MANCOS	6140'	
				DAKOTA	7898'	

February 7, 2011

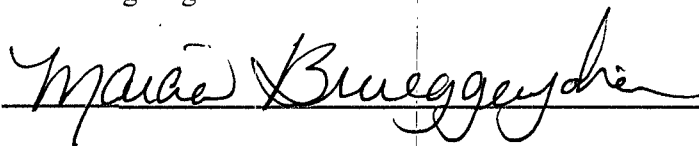
The Rosa Unit #189 Mancos Well (commercial) is located 1455 feet from the North Line and 1780 feet from the East Line, Section 21 Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spud on May 20, 2009, and completed in the Mancos formation on August 1, 2009. The Mancos formation was completed with a pre-perforated liner between the following depths: 7079' to 7515'. This well has a 2.375" tubing string. This well was shut in with a SICP of 0 psig. On July 21, 2009 the well was tested and after flowing for 1 hour through a 2" choke on the 2.375" tubing, the well gauged 131 MCFD.

Based on the historic and projected production, the lease operating expenses, and the gas price, this well is expected to have a Before Tax Rate of Return (BTAXROR) of 12.56% and is therefore determined commercial.

Attached to this document are the following:

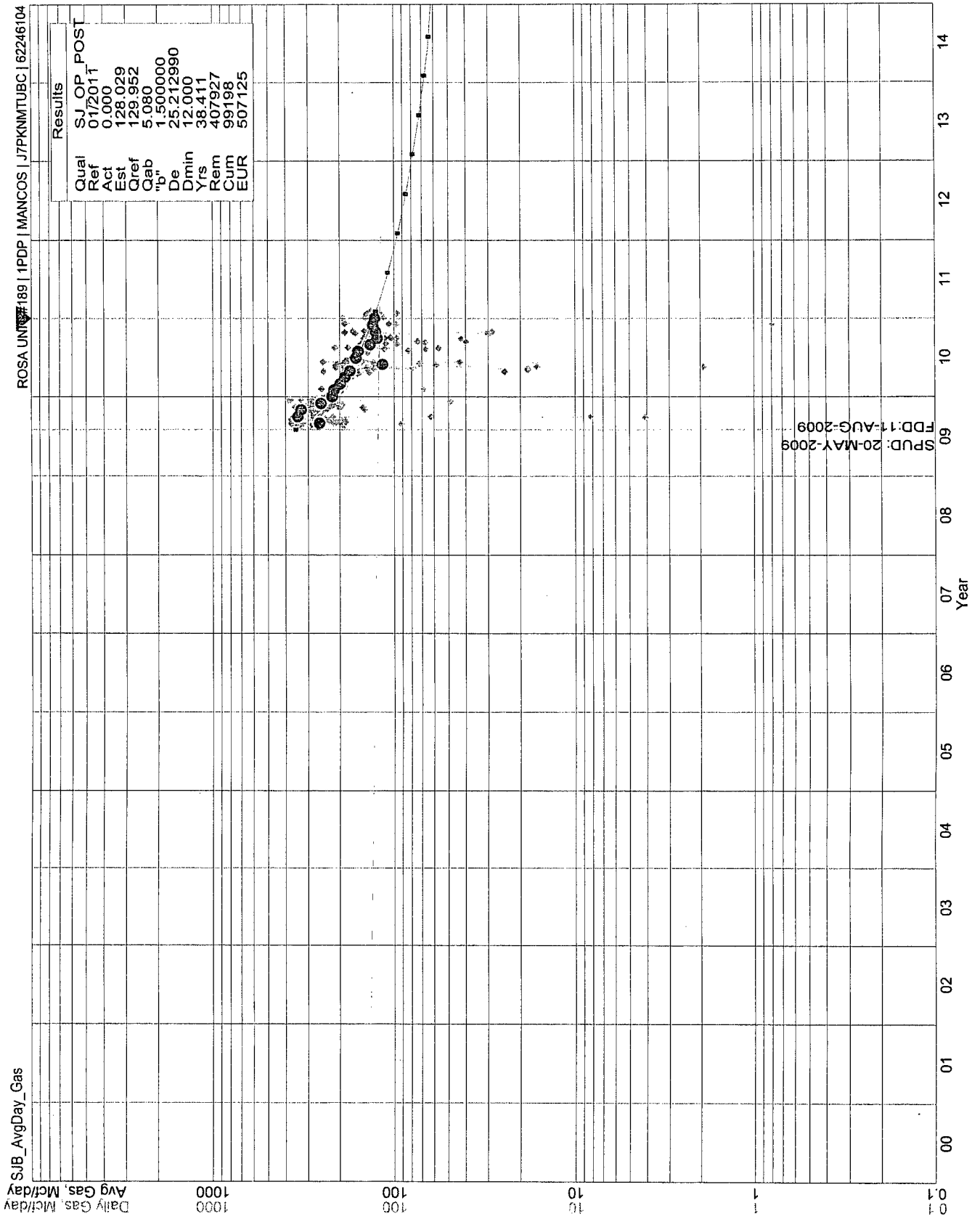
- ARIES economic model output including gas price assumptions
- Historic production plot with forecast
- Well-bore schematic
- State of NM Form C-104
- BLM Form 1004-0137 (Well Completion Report)

Evaluating Engineer

A handwritten signature in black ink, reading "Marcia Brueggjenjohann", is written over a horizontal line.

Marcia Brueggjenjohann
Manager, Reservoir Engineering
Williams Exploration and Production, San Juan Basin Unit

Results	
Qual	SJ OP POST
Ref	01/2011
Act	0.000
Est	128.029
Qref	129.952
Qab	5.080
"b"	1.500000
De	25.212990
Dmin	12.000
Yrs	38.411
Rem	407927
Cum	99198
EUR	507125



ROSA UNIT #189 | 1PDP | MANCOS | J7PKNMTUBC | 62246104
Filtered by Scenario: SJB-OP-PostAudit

Titles

PROPID: @M.PROPID RSV CAT: @M.RESERVE_CATEGORY	BASE
WELL NAME: @M.WELL_NAME	BASE
FIELD: @M.FIELD	BASE
CNTY: @M.BHL_COUNTY ST: @M.STATE	BASE
RESERVOIR: @M.RESERVOIR	BASE
OPERATOR: @M.OPERATOR	BASE

Miscellaneous

BTU @M.BTU	BASE
WELLS 0 1	BASE

LOSS NO

Production

CUMS 0 0	SJ_OP_POST
START 08/2009	SJ_OP_POST
GAS 350 X M/D 12 EXP H/1.5 80	SJ_OP_POST
" X X M/D 35 IYR EXP 7	SJ_OP_POST

Prices

SIDFILE SJB_JCM_07ACT_COMMERCIAL	SJ_OP_POST
----------------------------------	------------

Expenses

ATX 2.2584 X % TO LIFE PC 0	SJ_OP_POST
STX/GAS 3.75 X % TO LIFE PC 0	SJ_OP_POST
OPC/T @M.LIFTING_COST X \$/M TO LIFE PC 0	SJ_OP_POST

Ownership

NET @M.WI @M.NRI @M.NRI FRAC	BASE
------------------------------	------

Investments

CAPITAL 165.6062 555.7166 M\$G 08/2009 AD ESC INV	SJ_OP_POST
---	------------

Overlays

SIDFILE RI_TOTAL_BR	SJ_OP_POST
LOAD MP.GAS GAS 01/2007 12/2010 #	SJ_OP_POST

PropID: 25705 RSV CAT: 1PDP
 Well Name: ROSA UNIT #189
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 Operator: WPC

Date: 02/07/2011
 Time: 11:18:20
 DBS: SJB
 Settings: SETDATA_JCM
 Scenario: SJB-OP-PostAudit

COMBINED INPUT DATA								INITIAL CALCULATED DATA			
KEYWORD & Ref. Code	Beginning, Ending Rates			Schedule Limit		Method & Value		Ultimate @ End Pt.	Init.Deff	Init. Rate	Final Rate
400 START	08/2009										
401 GAS	350.00	X	M/D	12.00	EXP	H/1.5	80.00	211.325	5/2014	55.8960	10646.
402 "	X	X	M/D	35.00	IYR	EXP	7.00	509.707	5/2049	7.0000	1959.
500 PRI/GAS	01/2007	5.617	6.487	6.677	5.957	#/M			4/2007		
501 "	X	6.627	6.827	6.197	4.987	#/M			8/2007		
502 "	X	4.587	5.117	6.057	6.497	#/M			12/2007		
503 "	01/2008	6.377	7.277	8.087	8.277	#/M			4/2008		
504 "	X	9.427	9.846	11.356	7.637	#/M			8/2008		
505 "	X	6.427	4.267	2.837	4.627	#/M			12/2008		
506 "	01/2009	4.827	3.107	2.687	2.617	#/M			4/2009		
507 "	X	2.497	2.647	2.977	3.177	#/M			8/2009		
508 "	X	2.467	3.417	4.257	4.277	#/M			12/2009		
509 "	01/2010	5.72	5.31	4.66	3.77	#/M			4/2010		
510 "	X	3.87	3.69	4.28	4.08	#/M			8/2010		
511 "	X	3.47	4.126	5.75	5.75	#/M			12/2010		
512 "	5.75	X	\$/M	TO	LIFE	PC	0.00		5/2049	5.750	5.750
600 ATX	2.26	X	%	TO	LIFE	PC	0.00		5/2049	0.023	0.023
601 STX/GAS	3.75	X	%	TO	LIFE	PC	0.00		5/2049	0.037	0.037
602 OPC/T	886.00	X	\$/M	TO	LIFE	PC	0.00		5/2049	886.000	886.000
705 LSE/WI	1.0000	D	FRAC	TO	LIFE	FLAT	0.00		5/2049	1.000	1.000
720 NET/OIL	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		5/2049	0.865	0.865
740 NET/GAS	0.8650	D	FRAC	TO	LIFE	FLAT	0.00		5/2049	0.865	0.865

OVERLAYS	Beginning, Ending Rates			Schedule Limit		Method & Value		Ultimate @ End Pt.	Init.Deff	Init. Rate	Final Rate
901 S 92	S/95	X	FRAC	TO	LIFE	DIV	146.00		5/2049		
903 S /89	0.49	X	FRAC	TO	LIFE	MUL	92.00		5/2049		
905 S /89	0.98	X	FRAC	TO	LIFE	MUL	89.00		5/2049		
907 S /196	S/196	X	FRAC	TO	LIFE	MINUS	89.00		5/2049		
909 S /88	0.06	X	FRAC	TO	LIFE	MUL	92.00		5/2049		
911 S /88	1.00	X	FRAC	TO	LIFE	MINUS	88.00		5/2049		
913 S /196	S/196	X	FRAC	TO	LIFE	MUL	88.00		5/2049		
914 GAS	01/2007	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	#					0.000	4/2008		
915 "	X	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	#					8.003	8/2009		
916 "	X	10239.84	10144.8	7609.44	6808.32	6667.2	5577.6	55.050	2/2010		
917 "	X	5811.84	5260.8	3587.85	4882.08	4900.56	4199.16	83.693	8/2010		
918 "	X	3711.54	3913.14	3919.44	#			95.237	11/2010		

INVESTMENTS	Tangible Intang Units		Invest. Point	Method & Value		Total T&I	Month	Risk Inv.	Tot. T&I&R	Esc. T&I&R
800 CAPITAL	165.61	555.72 M\$G	08/2009 AD	ESC	INV	721.323	8/2009	0	721.3	0.0

MISCELLANEOUS DATA PARAMETERS

201 BTU 0.98
 202 WELLS 0.00 1.00
 203 CUMO, MB 0.00 CUMG, MMF 0.00 CUML, MB
 250 LOSS NO

PROJECT RUN SETTINGS

Base Date : 01/2007 Time Frames : 64*12
 P.W. Date : 01/2008 Primary PW% : 8.0 Discount Freq. : MID
 Report Date : 01/2008
 Qualifiers : Prod = SJ_OP_POST Price = SJ_OP_POST Cost = SJ_OP_POST Owner = BASE
 Title = BASE Misc = BASE Invest = SJ_OP_POST Overlay = SJ_OP_POST

PropID: 25705 RSV CAT: 1PDP
 Well Name: ROSA UNIT #189
 Field: BASIN
 Cnty: RIO ARRIBA St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 11:18:20
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

R E S E R V E S A N D E C O N O M I C S

EFFECTIVE DATE: 01/2008

--END-- MO-YEAR	---GROSS PRODUCTION---				---NET PRODUCTION---				---PRICES---		NO. OF WELLS	---OPERATIONS, M\$---		
	OIL, MMBBL	GAS, MMCF	MMCF	MMCF	OIL, MMBBL	GAS, MMCF	MMCF	MMCF	OIL \$/B	GAS \$/M		OIL REVENUE	GAS REVENUE	TOTAL REVENUE
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.0	0.000	0.000	0.000
12-2009	0.000	42.805	0.000	0.000	0.000	37.027	0.00	2.609	1.0	0.000	1.0	0.000	96.593	96.593
12-2010	0.000	56.445	0.000	0.000	0.000	48.825	0.00	3.669	1.0	0.000	1.0	0.000	179.160	179.160
12-2011	0.000	40.732	0.000	0.000	0.000	35.233	0.00	4.723	1.0	0.000	1.0	0.000	166.420	166.420
12-2012	0.000	31.962	0.000	0.000	0.000	27.647	0.00	4.723	1.0	0.000	1.0	0.000	130.589	130.589
12-2013	0.000	26.784	0.000	0.000	0.000	23.168	0.00	4.723	1.0	0.000	1.0	0.000	109.432	109.432
12-2014	0.000	23.493	0.000	0.000	0.000	20.321	0.00	4.723	1.0	0.000	1.0	0.000	95.985	95.985
12-2015	0.000	21.735	0.000	0.000	0.000	18.801	0.00	4.723	1.0	0.000	1.0	0.000	88.804	88.804
12-2016	0.000	20.214	0.000	0.000	0.000	17.485	0.00	4.723	1.0	0.000	1.0	0.000	82.588	82.588
12-2017	0.000	18.799	0.000	0.000	0.000	16.261	0.00	4.723	1.0	0.000	1.0	0.000	76.806	76.806
12-2018	0.000	17.483	0.000	0.000	0.000	15.123	0.00	4.723	1.0	0.000	1.0	0.000	71.430	71.430
12-2019	0.000	16.259	0.000	0.000	0.000	14.064	0.00	4.723	1.0	0.000	1.0	0.000	66.430	66.430
12-2020	0.000	15.121	0.000	0.000	0.000	13.080	0.00	4.723	1.0	0.000	1.0	0.000	61.780	61.780
12-2021	0.000	14.062	0.000	0.000	0.000	12.164	0.00	4.723	1.0	0.000	1.0	0.000	57.455	57.455
12-2022	0.000	13.078	0.000	0.000	0.000	11.313	0.00	4.723	1.0	0.000	1.0	0.000	53.433	53.433
12-2023	0.000	12.163	0.000	0.000	0.000	10.521	0.00	4.723	1.0	0.000	1.0	0.000	49.693	49.693
12-2024	0.000	11.311	0.000	0.000	0.000	9.784	0.00	4.723	1.0	0.000	1.0	0.000	46.214	46.214
12-2025	0.000	10.519	0.000	0.000	0.000	9.099	0.00	4.723	1.0	0.000	1.0	0.000	42.979	42.979
12-2026	0.000	9.783	0.000	0.000	0.000	8.462	0.00	4.723	1.0	0.000	1.0	0.000	39.971	39.971
12-2027	0.000	9.098	0.000	0.000	0.000	7.870	0.00	4.723	1.0	0.000	1.0	0.000	37.173	37.173
S TOT	0.000	411.849	0.000	0.000	0.000	356.249	0.00	4.359	1.0	0.000	1.0	0.000	1552.936	1552.936
AFTER	0.000	82.797	0.000	0.000	0.000	71.620	0.00	4.723	1.0	0.000	1.0	0.000	338.285	338.285
TOTAL	0.000	494.646	0.000	0.000	0.000	427.869	0.00	4.420	1.0	0.000	1.0	0.000	1891.221	1891.221

--END-- MO-YEAR	---OPERATIONS, M\$---				---CAPITAL COSTS, M\$---				8.0%			
	SEV + ADV TAXES	NET OPER EXPENSES	INTEREST+ PRINCIPAL	OPERATION CASH FLOW	TANGIBLE INV.	INTANG. INV.	TOTAL BORROW INV	TOTAL EQUITY INV	CASH BTAX, M\$	FLOW M\$	CUM. BTAX, M\$	DISC M\$
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	5.722	4.430	0.000	86.441	165.606	555.717	0.000	721.323	-634.881	-561.553	-431.277	-319.806
12-2010	10.613	10.632	0.000	157.915	0.000	0.000	0.000	0.000	157.915	-319.806	-240.434	-179.976
12-2011	9.858	10.632	0.000	145.930	0.000	0.000	0.000	0.000	145.930	-240.434	-131.668	-90.731
12-2012	7.736	10.632	0.000	112.221	0.000	0.000	0.000	0.000	112.221	-131.668	-90.731	-55.866
12-2013	6.482	10.632	0.000	92.317	0.000	0.000	0.000	0.000	92.317	-90.731	-55.866	-26.202
12-2014	5.686	10.632	0.000	79.667	0.000	0.000	0.000	0.000	79.667	-55.866	-26.202	-0.990
12-2015	5.260	10.632	0.000	72.911	0.000	0.000	0.000	0.000	72.911	-26.202	-0.990	20.413
12-2016	4.892	10.632	0.000	67.063	0.000	0.000	0.000	0.000	67.063	-0.990	20.413	38.560
12-2017	4.550	10.632	0.000	61.625	0.000	0.000	0.000	0.000	61.625	38.560	53.922	66.907
12-2018	4.231	10.632	0.000	56.567	0.000	0.000	0.000	0.000	56.567	66.907	77.863	87.088
12-2019	3.935	10.632	0.000	51.863	0.000	0.000	0.000	0.000	51.863	87.088	94.839	101.334
12-2020	3.660	10.632	0.000	47.488	0.000	0.000	0.000	0.000	47.488	101.334	106.760	129.702
12-2021	3.403	10.632	0.000	43.420	0.000	0.000	0.000	0.000	43.420	129.702	1414.158	165.606
12-2022	3.165	10.632	0.000	39.636	0.000	0.000	0.000	0.000	39.636	1414.158	165.606	555.717
12-2023	2.944	10.632	0.000	36.117	0.000	0.000	0.000	0.000	36.117	165.606	555.717	0.000
12-2024	2.738	10.632	0.000	32.845	0.000	0.000	0.000	0.000	32.845	555.717	0.000	0.000
12-2025	2.546	10.632	0.000	29.801	0.000	0.000	0.000	0.000	29.801	0.000	0.000	0.000
12-2026	2.368	10.632	0.000	26.971	0.000	0.000	0.000	0.000	26.971	0.000	0.000	0.000
12-2027	2.202	10.632	0.000	24.339	0.000	0.000	0.000	0.000	24.339	0.000	0.000	0.000
S TOT	91.991	195.806	0.000	1265.138	165.606	555.717	0.000	721.323	543.816	106.760	129.702	1414.158
AFTER	20.039	169.226	0.000	149.020	0.000	0.000	0.000	0.000	149.020	129.702	1414.158	165.606
TOTAL	112.030	365.032	0.000	1414.158	165.606	555.717	0.000	721.323	692.836	129.702	1414.158	165.606

PropID: 25705 RSV CAT: 1PDP
 Well Name: ROSA UNIT #189
 Field: BASIN
 Cnty: RIO ARriba St: NM
 Reservoir: MANCOS
 PostAudit
 Operator: WPC

DATE : 02/07/2011
 TIME : 11:18:20
 DBS : SJB
 SETTINGS : SETDATA_JCM
 SCENARIO : SJB-OP-

AFTER TAX ECONOMICS

EFFECTIVE DATE: 01/2008

--END--	TAXABLE	DEPRECIATION	DEPLETION	INTANG.	INTEREST	TAXABLE	TAX	TAXES	CASH FLOW	8.0% CUM. DISC
MO-YEAR	CASH FLOW			EXPENSED	PAID & CAP	INCOME	CREDIT	PAYABLE	ATAK	ATAK
-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----	M\$-----
12-2008	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12-2009	86.441	23.665	0.000	555.717	0.000	-492.940	0.000	-172.529	-462.352	-407.835
12-2010	157.915	40.557	0.000	0.000	0.000	117.358	0.000	41.075	116.840	-311.445
12-2011	145.930	28.965	0.000	0.000	0.000	116.966	0.000	40.938	104.992	-231.245
12-2012	112.221	20.684	0.000	0.000	0.000	91.537	0.000	32.038	80.183	-174.533
12-2013	92.317	14.789	0.000	0.000	0.000	77.529	0.000	27.135	65.182	-131.845
12-2014	79.667	14.772	0.000	0.000	0.000	64.895	0.000	22.713	56.954	-97.309
12-2015	72.911	14.789	0.000	0.000	0.000	58.123	0.000	20.343	52.568	-67.794
12-2016	67.063	7.386	0.000	0.000	0.000	59.677	0.000	20.887	46.176	-43.788
12-2017	61.625	0.000	0.000	0.000	0.000	61.625	0.000	21.569	40.056	-24.507
12-2018	56.567	0.000	0.000	0.000	0.000	56.567	0.000	19.798	36.768	-8.119
12-2019	51.863	0.000	0.000	0.000	0.000	51.863	0.000	18.152	33.711	5.793
12-2020	47.488	0.000	0.000	0.000	0.000	47.488	0.000	16.621	30.867	17.588
12-2021	43.420	0.000	0.000	0.000	0.000	43.420	0.000	15.197	28.223	27.574
12-2022	39.636	0.000	0.000	0.000	0.000	39.636	0.000	13.873	25.763	36.014
12-2023	36.117	0.000	0.000	0.000	0.000	36.117	0.000	12.641	23.476	43.136
12-2024	32.845	0.000	0.000	0.000	0.000	32.845	0.000	11.496	21.349	49.132
12-2025	29.801	0.000	0.000	0.000	0.000	29.801	0.000	10.431	19.371	54.170
12-2026	26.971	0.000	0.000	0.000	0.000	26.971	0.000	9.440	17.531	58.391
12-2027	24.339	0.000	0.000	0.000	0.000	24.339	0.000	8.519	15.820	61.919
S TOT	1265.138	165.606	0.000	555.717	0.000	543.816	0.000	190.335	353.480	61.919
AFTER	149.020	0.000	0.000	0.000	0.000	149.020	0.000	52.157	96.863	76.831
TOTAL	1414.158	165.606	0.000	555.717	0.000	692.836	0.000	242.492	450.343	76.831

BTAX RATE OF RETURN (PCT)	12.56	ATAK RATE OF RETURN (PCT)	11.86
BTAX PAYOUT YEARS	7.64	ATAK PAY OUT YEARS	7.73
BTAX PAYOUT YEARS (DISC)	11.05	ATAK PAY OUT YEARS (DISC)	11.58
BTAX NET INCOME/INVEST	1.96	ATAK NET INCOME/INVEST	1.62
BTAX NET INCOME/INVEST(DISC)	1.20	ATAK NET INCOME/INVEST(DISC)	1.12
PRODUCTION START DATE	08/2009	PROJECT LIFE (YEARS)	35.92
		DISCOUNT - RATE (PCT)	8.00
INITIAL OIL PRICE (\$/B)	0.000	INITIAL GAS PRICE (\$/M)	2.377
MAXIMUM OIL PRICE (\$/B)	0.000	MAXIMUM GAS PRICE (\$/M)	4.723
GROSS OIL WELLS	0.	GROSS GAS WELLS	1.
CUMULATIVE OIL (MBBL)	0.000	CUMULATIVE GAS (MMF)	0.000
REMAINING OIL (MBBL)	0.000	REMAINING GAS (MMCF)	494.646
ULTIMATE OIL (MBBL)	0.000	ULTIMATE GAS (MMCF)	494.646
INITIAL WI (PCT)	100.000	FINAL WI (PCT)	100.000
INITIAL NET OIL (PCT)	0.000	FINAL NET OIL (PCT)	0.000
INITIAL NET GAS (PCT)	86.500	FINAL NET GAS (PCT)	86.500

PRESENT WORTH PROFILE AND			
--- RATE-OF-RETURN VS. BONUS TABLE ---			
P.W.	B.F.I.T.	A.F.I.T.	A.F.I.T.
FACTOR	WORTH	WORTH	BONUS
%-----	M\$-----	M\$-----	M\$-----
0.00	692.8	450.3	692.8
2.00	482.7	311.4	436.3
5.00	268.9	169.5	218.2
8.00	129.7	76.8	93.9
10.00	63.1	32.4	38.6
12.00	10.9	-2.5	-2.9
15.00	-47.8	-41.8	-47.8
18.00	-90.0	-70.1	-78.8
20.00	-111.5	-84.5	-94.2
25.00	-149.5	-109.9	-120.3
30.00	-172.3	-125.0	-135.1
35.00	-185.7	-133.8	-143.1
40.00	-193.1	-138.5	-147.0
45.00	-196.5	-140.5	-148.1
50.00	-197.2	-140.6	-147.5

ROSA UNIT #189
BLANCO MV / BASIN MANCOS / BASIN DK

Spud Date 5-20-09
 Completed 8-1-09
 1st Delivered 00-00-00 MV
 00-00-00 MC
 00-00-00DK

Location: 1455' FNL & 1780' FEL
 SW/4 NE/4 Section 21 (G), T31N, R05W
 Rio Arriba Co., NM

Elevation: 6589' GR
API #: 30-039-30186

<u>Tops</u>	<u>Depth</u>
Kirtland	2836'
Pictured Cliffs	3432'
Cliff House	5684'
Menefee	5727'
Point Lookout	5929'
Mancos	6327'
Dakota	8148'

CH/MEN: 5460'-5777' (57, 0.34 holes) Frac w/5063#
 20/40 BASF followed w/ 76,803# 20/40 BASF

PT/LO: 5898'-6282' (64, 0.34 holes) Frac w/5044#
 20/40 BASF followed w/ 75,317# 20/40 BASF

Uppr Mancos: 7079'-7300' (69, 0.34 holes) Frac
 w/4511# 100 mesh followed w/ 120,560# 40/70 BASF

Lwr Mancos: 7375'-7515' (45, 0.34 holes) Frac w/5590#
 100 mesh followed w/ 78,870# 40/70 BASF

Dakota: 8148'-8244' (63, 0.34 holes) Frac w/ 6484# 100
 mesh BASF followed with 73,279# 40/70 mesh BASF

7 jts of 10 3/4", 40.5#, J-55, ST&C csg. Set @ 312'.

94 jts of 7-5/8", 26.4#, K-55, LT&C csg. Set @ 3928'.

RCVD AUG 4 '09

OIL CONS. DIV.

DIST. 3

Tubing: 252 jts 2-3/8", J-55, 4.7#, EUE tbg,
 one 1.78" F- Nipple, one jt 2-3/8"
 J-55, 6.5#, EUE tbg, one 2.3/8" Exp Chk - 1/2
 M/S. EOT - 8213'

5460' - 5777'

5898' - 6282'

7079' - 7300'

7375' - 7515'

8148' - 8244'

215 jts of 5-1/2", 17#, N-80, LT&C csg. Set @ 8264'.

TD @ 8268'
 PBTD @ 8259'

HOLE SIZE	CASING	CEMENT	CU. FT.	CMT TOP
14 3/4"	10 3/4", 40.5#	290 sxs	521 cu.ft.	surface
9 7/8"	7 5/8", 26.4#	630 sxs	1561 cu.ft.	surface
6 3/4"	5 1/2", 17#	375 sxs	517 cu.ft.	3550' - CBL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-104
Revised June 10, 2003

Submit to Appropriate District Office
5 Copies

☒ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT *Volam*

¹ Operator name and Address WILLIAMS PRODUCTION COMPANY P.O. Box 640 Aztec, NM 87410		² OGRID Number 120782
		³ Reason for Filing Code/ Effective Date NW
⁴ API Number 30-039-30186	⁵ Pool Name BASIN MANCOS	⁶ Pool Code 97232
⁷ Property Code 17033	⁸ Property Name ROSA UNIT	⁹ Well Number 189

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot.Idn	Feet from the	North/South Line	Feet from the	East/West line	County
G	21	31N	5W		1455	NORTH	1780	EAST	Rio Arriba

¹¹ Bottom Hole Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Lse Code	¹³ Producing Method Code	¹⁴ Gas Connection Date	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
009018	GIANT REFINING P O BOX 12999 SCOTTSDALE AZ 85267	O
025244	WILLIAMS FIELD SERVICES P O BOX 645 TULSA OK 74102	G

IV. Well Completion Data

²¹ Spud Date 5-20-09	²² Ready Date 8-1-09	²³ TD 8268' MD	²⁴ PBTD 8259' MD	²⁵ Perforations 7079' - 7515'	²⁶ DHC, MC AZT-3192
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement	
14-3/4"	10-3/4", 40.5#, J J-55	312'		290 sx - surface	
9-7/8"	7-5/8", 26.4#, K-55	3928'		630 sx - surface	
6-3/4"	5 1/2", 17#, N-80	8264'		375 sx - 3550' (CBL)	
	2.375", 4.7#, J-55	8213'		NONE	

VI. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date 7/21/09	³⁴ Test Length 1 hrs	³⁵ Tbg. Pressure 0	³⁶ Csg. Pressure 0
³⁷ Choke Size 2"	³⁸ Oil	³⁹ Water	⁴⁰ Gas 131 mcf/d	⁴¹ Test Method Pitot	
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Heather Riley</i>			OIL CONSERVATION DIVISION		
Printed name: Heather Riley			Approved by: <i>Charles Pen</i> 8-27-09		
Title: Regulatory Specialist			Title: SUPERVISOR DISTRICT # 3		
E-mail Address: Heather.riley@williams.com			Approval Date: AUG 27 2009		
Date: 8/25/09	Phone: 505-634-4222				

RCVD AUG 26 '09
OIL CONS. DIV.
DIST. 3

FARMINGTON FIELD OFFICE
BY

37 SUMMARY OF POROUS ZONES (Show all important zones of porosity and contents thereof, cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries)					38 GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP		TRUE VERTICAL DEPTH
					NAME	MEASURED DEPTH	
					PICTURED CLIFFS	3432'	
					CLIFFHOUSE	5684'	
					MENEFE	5727'	
					POINT LOOKOUT	5929'	
					MANCOS	6327'	
					DAKOTA	8148'	

Exhibit Q – Locations of Commerciality Determinations

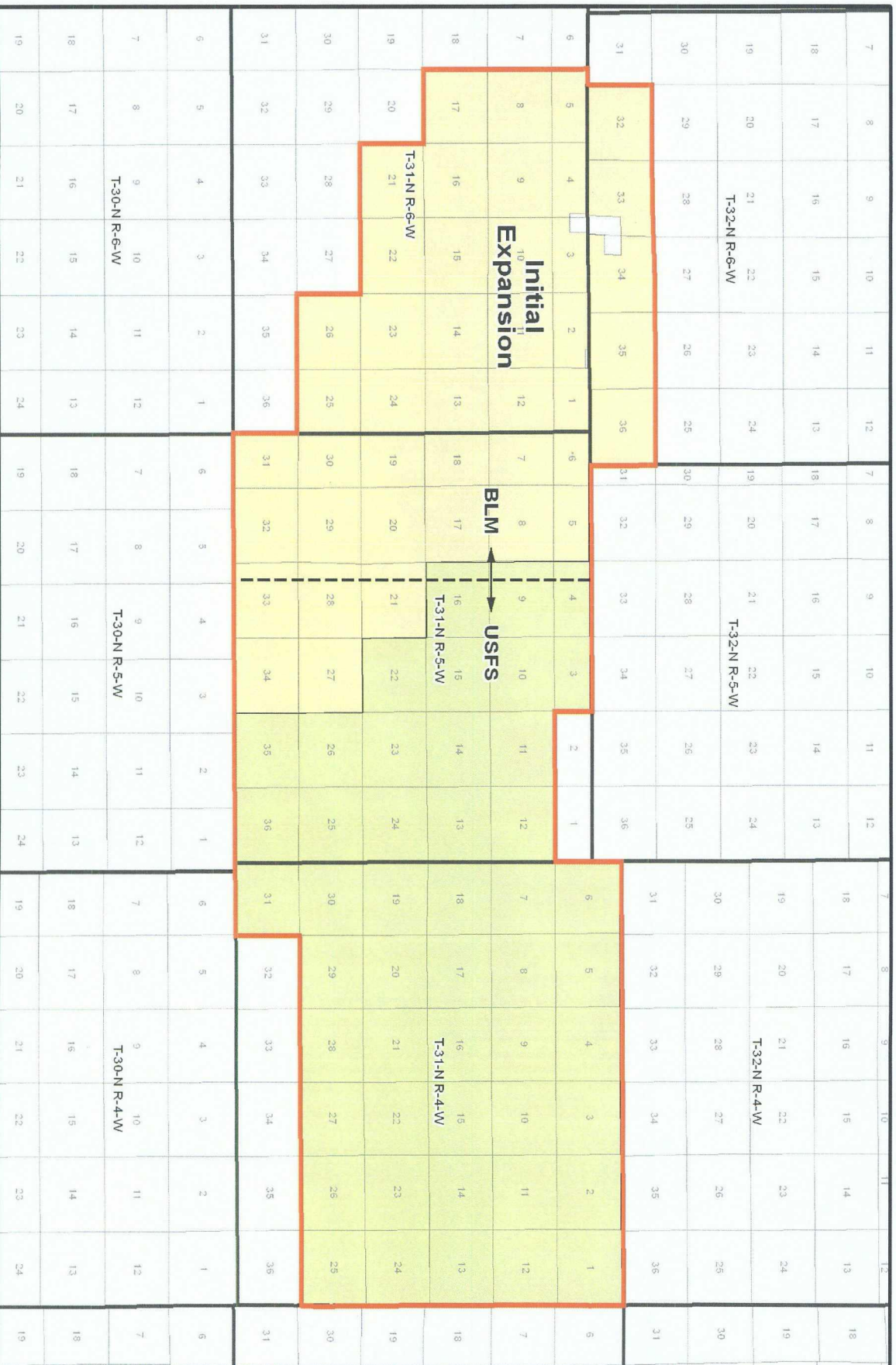


Exhibit R – Initial Mancos Participating Area



Exhibit S – Initial Mancos Participating Area

