

UNITED STATES **OCD-ARTESIA**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No 1004-0137  
Expires March 31, 2007

**S**

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5 Lease Serial No.  
NM-0375257-A

6 If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE** - Other instructions on page 2

7 If Unit of CA/Agreement, Name and/or No

1 Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

**FEB 28 2008**

**OCD-ARTESIA**

8 Well Name and No.  
Avalon Hills 7 Fed Com 4

9 API Well No  
30-015-35583

3a. Address  
20 North Broadway  
OKC, OK 73102

3b Phone No (include area code)  
(405)-552-7802

10 Field and Pool or Exploratory Area  
Burton Flat; Morrow

4 Location of Well (Footage, Sec, T, R, M, or Survey Description)  
SESE 460' FSL & 360' FEL  
Sec 7-T21S-R27E Lot P

11 Country or Parish, State  
Eddy County, NM

**12 CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Downhole
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Comingle
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

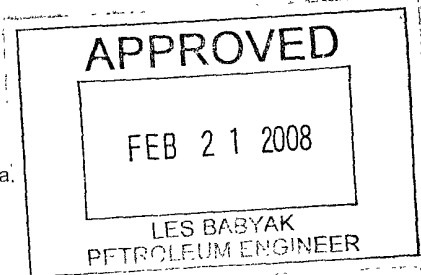
13 Describe Proposed or Completed Operation Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection )

Devon Energy Production Company, L.P. is applying with the New Mexico Oil Conservation Division to downhole-commingle the Burton Flat; Atoka (Gas); Pool code # 73106 (10,440' - 10,456') with the Burton Flat; Morrow East Gas; Pool code #73320 (11,211'-11,277'). The commingling will not reduce the value of the total production. Ownership in the zones is uniform. The proposed allocations are as follows:

Burton Flat, Atoka (Gas): Pool code # 73106 Gas 50% Oil 100%  
Burton Flat, Morrow East Gas Pool code #73320 Gas 50% Oil 0%

Current and proposed wellbore schematics are attached along with the allocation methods and supporting data.

**SUBJECT TO LIKE  
APPROVAL BY STATE**



14 I hereby certify that the foregoing is true and correct

Name (Printed/Typed)  
Stephanie A. Ysasaga

Title Sr. Staff Engineering Technician

Signature

Date 01/08/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO
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ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**  
**- Engineering Bureau -**  
 1220 South St. Francis Drive, Santa Fe, NM 87505



**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

**[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]**  
**[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]**  
**[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]**  
**[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]**  
**[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]**  
**[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]**

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

- [D] Other: Specify \_\_\_\_\_

**FILE COPY**

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or ☒ Does Not Apply

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO  
U S Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Stephanie A. Ysasaga  
 Print or Type Name

Signature

Sr. Staff Engineering Technician  
 Title

01/11/2008  
 Date

Stephanie.Ysasaga@dvsn.com  
 e-mail Address

**FILE COPY**

**APPLICATION FOR DOWHOLE COMMINGLING  
DEVON SUMMARY & INTENTIONS  
AVALON HILLS 7 FED COM 4**

State of New Mexico – Santa Fe  
Oil Conservation Division  
1220 S. St Francis Drive  
Santa Fe, New Mexico 87505

Well is currently completed in the Atoka zone. Well was spud 06/07/07. The Morrow initially produced 225 - 315 mcf/d for about 17 days with a FTP of 450 psig. Devon set a composite plug @ 11,180' on 12/18/07 to enable testing and stimulation of the Atoka. The Atoka is currently producing on the average 800 mcf/d with a FTP of 550 psig.

Current perforations are as follows:

- Burton Flat; Atoka (Gas): 10,440' - 10,456'
- Burton Flat; Morrow East Gas: 11,211' - 11,277'

Devon would like to project what we believe our allocation would be, versus fix an allocation based on past production. The gas allocation would be 50% to the Morrow and 50% to the Atoka. The oil allocation would be 0% to the Morrow and 100% to the Atoka. We are anticipating this will be acceptable.

All working, royalty and overriding royalty interests are identical in all commingled zones. All produced fluids from all commingled zones are compatible with each other. Commingling will not decrease the value of production.

Attached for your full review:

- Administrative Application Checklist
- Form 3160-5: NOI – Downhole Commingling
- Form C-107A: Application for Downhole Commingling
- Gas BTU's: Atoka & Morrow Zones
- Letter verifying uniform interests in Atoka & Morrow zones
- C-102's: Atoka & Morrow
- Current schematic
- Proposed downhole commingling Atoka & Morrow zones schematic
- Daily production for Morrow & Atoka zones
- Completion papers filed with BLM for Morrow zone
- Completion papers filed with the BLM for Atoka zone

Signed: 

Printed Name: Stephanie A. Ysasaga  
Title: Sr. Staff Engineering Technician  
Date: January 16<sup>th</sup>, 2008

District I  
1625 N French Drive Hobbs NM 88240  
District II  
1501 W Grand Avenue Artesia NM 88210  
District III  
1000 Rio Brazos Road Aztec NM 87410  
District IV  
1220 S St Francis Dr Santa Fe NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

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

APPLICATION TYPE  
Single Well  
Establish Pre-Approved Pools  
EXISTING WELLBORE  
Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

DEVON ENERGY PRODUCTION CO., LP 20 NORTH BROADWAY OKC, OK 73102-8260  
Operator Address

Avalon Hills 7 Fed Com 4 Unit P Sec 7-T21S- R27E Eddy  
Lease Well No Unit Letter-Section-Township-Range County

OGRID No. 6137 Property Code API No. 30-015-35583 Lease Type. Federal X State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Burton Flat, Atoka (Gas)		Burton Flat, Morrow East Gas
Pool Code	73106		73320
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	10,440' – 10,456'		11,211' - 11,277'
Method of Production (Flowing or Artificial Lift)	FL		FL
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)	Gas BTU 1115		Gas BTU 1009
Producing, Shut-In or New Zone	Producing		Under Composite Plug as of 12/18/07
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	Date: 01/19/08 Rates: 0 oil/624 mcf/23 wtr	Date: Rates:	Date: 12/17/07 Rates: 0 oil/62 mcf/0 wtr
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas 100% 50%	Oil Gas % %	Oil Gas 0% 50%

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes X No  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes No  
Are all produced fluids from all commingled zones compatible with each other? Yes X No  
Will commingling decrease the value of production? Yes No X  
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes No X  
NMOCD Reference Case No. applicable to this well

Attachments:  
C-102 for each zone to be commingled showing its spacing unit and acreage dedication  
Production curve for each zone for at least one year (If not available, attach explanation.)  
For zones with no production history, estimated production rates and supporting data.  
Data to support allocation method or formula.  
Notification list of working, royalty and overriding royalty interests for uncommon interest cases.  
Any additional statements, data or documents required to support commingling

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools  
List of all operators within the proposed Pre-Approved Pools  
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application  
Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.  
SIGNATURE Stephanie A. Ysasaga TITLE Sr. Staff Engineering Technician DATE 01/16/2008  
TYPE OR PRINT NAME Stephanie A. Ysasaga TELEPHONE NO. (405)-552-7802  
E-MAIL ADDRESS Stephanie.Ysasaga@dvn.com



Devon Energy Corporation  
20 North Broadway  
Oklahoma City, Oklahoma 73102-8260  
Fax 405-552-8113

January 11, 2008

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Re: Downhole Commingling  
Avalon Hills 7 Fed Com #4  
S/2 Section 7-T21S-R27E  
Eddy County, New Mexico

Gentlemen:

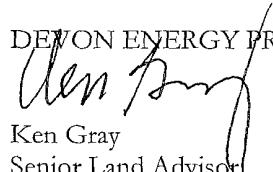
I have reviewed the files of Devon Energy Production Company, L.P. regarding the ownership of the referenced well and find that the ownership of the working interest, royalty and overriding royalty interest are uniform with respect to Devon's request to downhole commingle the following pools/intervals:

Burton Flat; Atoka (Gas) Pool Code: 73106 Perforations @ 10,440' - 10,456'  
Burton Flat; Morrow East (Gas) Pool Code: 73320 Perforations @ 11,211' - 11,277'

If there are any questions or if additional information is required feel free to call me at (405) 552-4633.

Yours very truly,

DEVON ENERGY PRODUCTION COMPANY, L.P.

  
Ken Gray  
Senior Land Advisor

Kg/  
Enclosure

DISTRICT I  
1626 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Arleta, 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 Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 73280	Pool Name BURTON FLAT; MORROW
Property Code	Property Name AVALON HILLS "7" FED COM	Well Number 4
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3211'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	7	21 S	27 E		460	SOUTH	360	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	7	21S	27E		960	SOUTH	685	EAST	EDDY
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>[Signature]</i> Date: 03/20/07</p> <p>Printed Name: STEPHANIE A. YSASAGA</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date Surveyed: MARCH 07 2007</p> <p>Signature: <i>[Signature]</i> Professional Surveyor</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
--	--

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 Department

Form C-102  
Revised October 12, 2005

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name BURTON FLAT; ATOKA GAS
Property Code	Property Name AVALON HILLS "7" FED COM	Well Number 4
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3211'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	7	21 S	27 E		460	SOUTH	360	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	7	21S	27E		960	SOUTH	685	EAST	EDDY
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>Project Area</p> <p>Producing Area</p> <p>SURFACE LOCATION Lat - N32°29'19.2" Long - W104°13'18.3" (NAD-83)</p> <p>BHL</p> <p>SL</p> <p>685'</p> <p>3215.7'</p> <p>360'</p> <p>460'</p> <p>3210.3'</p> <p>3221.3'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: [Signature] Date: 03/20/07</p> <p>Printed Name: STEPHANIE A. YSASAGA</p>
	<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>Date: MARCH 07 2007</p> <p>Signature: [Signature] Professional Surveyor</p> <p>17845</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>

# AVALON HILLS 7 FEDERAL COM 4 - MORROW PRODUCTION

Completion Name	Date	Actual Oil Production	Actual Gas Production	Actual Water Production	Choke	Tubing Pressure
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/1/2007	0	250	6	17	560
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/2/2007	0	242	5	17	540
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/3/2007	0	246	5	17	540
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/4/2007	0	241	8	17	550
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/5/2007	0	242	6	17	550
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/6/2007	0	243	11	17	550
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/7/2007	0	241	6	17	550
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/8/2007	0	226	5	17	550
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/9/2007	0	244	6	17	540
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/10/2007	0	284	7	17	500
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/11/2007	0	317	8	17	500
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/12/2007	0	235	6	17	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/13/2007	0	234	6	17	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/14/2007	0	231	6	17	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/15/2007	0	233	11	17	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/16/2007	0	250	4	17	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/17/2007	0	62.17	0	17	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/18/2007	0	0	0	17	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/19/2007	0	0	0	15	450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/20/2007	0	0	0	15	1450
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/21/2007	0	0	0	15	1350
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/22/2007	0	0	0	17	1300
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/23/2007	0	0	0	17	1300
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/24/2007	0	0	0	17	1300
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/25/2007	0	0	0	17	1240
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/26/2007	0	0	0	17	1180
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/27/2007	0	0	0	17	1000
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/28/2007	0	0	0	17	1150
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/29/2007	0	0	0	17	1000
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/30/2007	0	0	0	17	940
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	12/31/2007	0	0	0	17	900
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/1/2008	0	0	0	17	860
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/2/2008	0	0	0	17	820
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/3/2008	0	0	0	17	800
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/4/2008	0	0	0	17	800
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/5/2008	0	0	0	17	800
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/6/2008	0	0	0	17	740
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/7/2008	0	0	0	17	600



**AVALON HILLS 7 FEDERAL COM 4 - MORROW PRODUCTION**

Completion Name	Date	Actual Oil Production	Actual Gas Production	Actual Water Production	Choke	Tubing Pressure
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/8/2008	0	0	0	17	650
AVALON HILLS 7 FEDERAL COM 4 (MORROW)	1/9/2008	0	0	0	17	650

## AVALON HILLS 7 FEDERAL COM 4 - ATOKA PRODUCTION

Completion Name	Date	Actual Oil Production	Actual Gas Production	Actual Water Production	Choke	Tubing Pressure
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/1/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/2/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/3/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/4/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/5/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/6/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/7/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/8/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/9/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/10/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/11/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/12/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/13/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/14/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/15/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/16/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/17/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/18/2007	0	0	0	0	0
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/19/2007	0	287.5	3	15	600
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/20/2007	0	173	0	15	1450
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/21/2007	0	756	6	15	1350
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/22/2007	10.363	1565	0	17	1300
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/23/2007	10.362	1564	6	17	1300
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/24/2007	18.135	1583	11	17	1300
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/25/2007	0	1704	9	17	1240
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/26/2007	7.772	1805	5	17	1180
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/27/2007	5.181	1792	6	17	1000
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/28/2007	5.182	1676	6	17	1150
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/29/2007	10.363	1705	10	17	1000
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/30/2007	25.906	1671	6	17	940
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	12/31/2007	25.907	1610	6	17	900
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/1/2008	25.907	1511	35	17	860
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/2/2008	20.725	1337	36	17	860
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/3/2008	2.591	1341	8	17	860
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/4/2008	0	1254	19	17	860
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/5/2008	0	1142	11	17	860
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/6/2008	5.181	978	30	17	740

# AVALON HILLS 7 FEDERAL COM 4 - ATOKA PRODUCTION

Completion Name	Date	Actual Oil Production	Actual Gas Production	Actual Water Production	Choke	Tubing Pressure
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/7/2008	0	928	19	17	600
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/8/2008	0	525	20	17	650
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/9/2008	2.591	961	5	17	600
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/10/2008	2.59	1049	17	17	600
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/11/2008	2.591	842	9	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/12/2008	0	572	16	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/13/2008	0	734	17	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/14/2008	0	874	44	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/15/2008	0	289	19	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/16/2008	0	319	29	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/17/2008	0	483	11	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/18/2008	0	826	19	17	500
AVALON HILLS 7 FEDERAL COM 4 (ATOKA)	1/19/2008	0	624	23	17	500

**Ysasaga, Stephanie**

**From:** Pittman, Jack  
**Sent:** Monday, January 14, 2008 10:01 AM  
**To:** Ysasaga, Stephanie  
**Subject:** RE: Avalon Hills 7 Fed Com 4: DHC Atoka & Morrow Zones Application  
**Attachments:** Delta 12 M Fee 2 Morrow.tif; Delta 12M Fee #2 Atoka.tif

Stephanie,

These should give you what you need for the BTU's and I'm going to catch a new sample on the Avalon Hill 7 Fed #4, its been so up and down due to workover we have not caught one yet I will get it to you asap.

Thank you,

**Jack W. Pittman**  
**Field Measurement Coordinator**  
**Devon Energy**  
Artesia, New Mexico  
Office: (505)748-0186  
Cell: (505)513-1740

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**From:** Ysasaga, Stephanie  
**Sent:** Friday, January 11, 2008 1:38 PM  
**To:** Pittman, Jack  
**Subject:** Avalon Hills 7 Fed Com 4: DHC Atoka & Morrow Zones Application

Hi Jack,

Long time no hear of right??? I need to see if I can Gas BTU's for the Atoka & Morrow and backup for the gas test for the above. Thanks... ☺

*Stephanie A. Ysasaga*  
Sr. Staff Engineering Technician  
(405)-552-7802 Phone (405)-721-7689 Cell  
(405)-552-8113 Fax  
Corporate Tower 03.056  
Stephanie.Ysasaga@devon.com

# Varian Star Chromatography Workstation

## Natural Gas Analysis Report

C

Run File	C:\STAR\DATA\DEVON06_9;54;08 AM_10-17-07_.RUN		
Method	C:\Star\BTUC6+.mth		
Operator	Precision Gas Meas	Analysis Date	10/17/07
Station #	88533080	Company	DEVON ENERGY
Lease	DELTA 12 M FEE 2 MORROW	Pulled Data	10/16/07 PRESS 550 TEMP 90
Producer	DEVON ENERGY	Water (lbs)	

<u>Component</u>	<u>Mole %</u>	<u>GPM</u>
H2S	0.000	0.0000
nitrogen	0.317	0.0000
methane	95.886	0.0000
propane	0.376	0.1037
i-butane	0.052	0.0170
n-butane	0.061	0.0194
carbon dioxide	1.210	0.0000
i-pentane	0.025	0.0091
n-pentane	0.015	0.0053
ethane	1.970	0.5268
hexane+	0.088	0.0377
<b>Totals</b>	100.0000	0.7191

Relative Density from Composition 0.5872

Lab Density Test Value

BTUs @ 14.73 Saturated 1,009

BTUs @ 14.73 Dry 1,027

Compressibility 0.99785

10/17/07

# Varian Star Chromatography Workstation

## Natural Gas Analysis Report

Run File	C:\STAR\DATA\DEVON12_10;14;03 AM_4-17-06_.RUN		
Method	C:\Star\BTUC6+.mth		
Operator	JD	Analysis Date	4/17/06
Station #	885-33-059	Company	DEVON ENERGY
Lease	DELTA M12 FEE 2 ATOKA	Pulled Data	04/13/06 PRESS 446 TEMP 82
Producer	DEVON ENERGY	Water (lbs)	

Component	Mole %	GPM
H2S	0.000	0.0000
nitrogen	0.804	0.0000
methane	92.463	0.0000
propane	1.113	0.3066
i-butane	0.319	0.1045
n-butane	0.317	0.1000
carbon dioxide	0.404	0.0000
i-pentane	0.159	0.0584
n-pentane	0.088	0.0319
ethane	4.069	1.0881
hexane+	0.264	0.1136
Totals	100.0000	1.8030

Relative Density from Composition 0.6153

Lab Density Test Value

BTUs @ 14.73 Saturated 1,064

BTUs @ 14.73 Dry 1,083

Compressibility 0.99757

EFM

4/17/06

**Ysasaga, Stephanie**

**From:** Potter, Tracy

**Sent:** Thursday, January 17, 2008 9:31 AM

**To:** Ysasaga, Stephanie


**Subject:** Avalon Hills 7 Fed. #4

**Attachments:** Avalon Hills 7 Fed. #4.tif

If you have any questions, please let me know.

Thank you,

Tracy Potter for Mr. Jack Pittman

  
Avalon Hills 7 Fed.  
#4.tif (27...



## Laboratory Services, Inc.

2609 West Marland  
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

C

FOR: Devon Energy  
Attention: Jack Pittman  
P.O. Box 250  
Artesia, New Mexico 88211-0250

SAMPLE: Sta. # 885-12-097  
IDENTIFICATION Avalon Hills 7 Fed. #4  
COMPANY: Devon Energy  
LEASE:  
PLANT:

SAMPLE DATA: DATE SAMPLED 1/14/08  
ANALYSIS DATE 1/15/08  
PRESSURE - PSIG 453  
SAMPLE TEMP. °F 98.6  
ATMOS. TEMP. °F 64

REMARKS H2S = 1 PPM

GAS (XX) LIQUID ( )  
SAMPLED BY: Rob  
ANALYSIS BY: Vicki McDaniel

Pressure Base: 14.65  
Vol. 1,090 MCF/Day

## COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.743	
Carbon Dioxide (CO2)	0.546	
Methane (C1)	88.972	
Ethane (C2)	5.329	1.422
Propane (C3)	2.035	0.559
I-Butane (IC4)	0.459	0.150
N-Butane (NC4)	0.580	0.182
I-Pentane (IC5)	0.233	0.085
N-Pentane (NC5)	0.199	0.072
Hexane Plus (C6+)	0.904	0.392
	100.000	2.862

BTU/CU.FT. - DRY 1138  
AT 14.650 DRY 1135  
AT 14.650 WET 1115  
AT 14.73 DRY 1141  
AT 14.73 WET 1121

MOLECULAR WT 18.9710

SPECIFIC GRAVITY -  
CALCULATED 0.653  
MEASURED