

DATE-IN 1/27/09	SUSPENSE	W. Jones ENGINEER	1/28/09 LOGGED IN	DHC 4150 TYPE	DKAA0902851442 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

RECEIVED
NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
2009 JAN 27 PM 1:11
1220 South St. Francis Drive, Santa Fe, NM 87505



30-045-32306
McCulley LS 5N
BP America P.C.
000778

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:

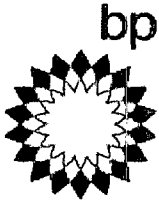
[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[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 _____
- [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.

Cherry Hlava	<i>Cherry Hlava</i>	Regulatory Analyst	01/23/2009
Print or Type Name	Signature	Title	Date
		hlavacl@bp.com	
		e-mail Address	



BP America Production Company

Cherry Hlava
Regulatory Analyst
501 Westlake Park Boulevard, Rm 19.110B
Houston, Texas 77079
281-366-4081

January 26, 2009

Will,

Anything you can do to expedite this Tri-mingling permit is greatly appreciated.

No notification is required.

Sincerely,

A handwritten signature in cursive script that reads "Cherry Hlava".

Cherry Hlava
Regulatory Analyst

District I
1625 N. French Drive, Hobbs, NM 88240

District II
1301 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

BP America Production Company
Operator

P.O. Box 3092 Houston, TX 77253
Address

DHE-4150

McCulley LS 5N Unit F Section 24 T28N R09W San Juan
Lease Well No. Unit Letter-Section-Township-Range County

OGRID No. 000778 Property Code 000854 API No. 30-045-32306 Lease Type: ☒ Federal State Fee

DATA ELEMENT	UPPER <input checked="" type="checkbox"/> ZONE	INTERMEDIATE <input checked="" type="checkbox"/> ZONE	LOWER <input checked="" type="checkbox"/> ZONE
Pool Name	Otero Chacra	Blanco Mesaverde	Basin Dakota
Pool Code	82329 <input checked="" type="checkbox"/>	72319 <input checked="" type="checkbox"/>	71599 <input checked="" type="checkbox"/>
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	To Be Determined	4245' - 4640'	6529' - 6746'
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
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)	435	565	560
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1289	1289	1289
Producing, Shut-In or New Zone	New Zone	Producing	Producing
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: Rates:	Date: Rates:	Date: Rates:
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 % %	Oil Gas % %	Oil Gas % %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes ☒ 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 ☒ No ☐

Will commingling decrease the value of production? Yes ☐ No ☒

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 ☐

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 Cherry Hlava TITLE Regulatory Analyst DATE 01/26/2009

TYPE OR PRINT NAME Cherry Hlava TELEPHONE NO. (281) 366-4081

E-MAIL ADDRESS hlavacl@bp.com

State of New Mexico
Energy, Minerals and Natural ResourcesOIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.

30-045-32306

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name
McCulley

8. Well Number 5N

9. OGRID Number

778

10. Pool name or Wildcat

Basin DK, Blanco MV & Otero Chacra

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

BP America Production Company

3. Address of Operator

P.O. Box 3092 Houston, Tx 77253-3092

4. Well Location

Unit Letter F : 2460 feet from the North line and 1740 feet from the West line
Section 24 Township 28N Range 9W NMPM County San Juan11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5896'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐TEMPORARILY ABANDON ☐ CHANGE PLANS ☐PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐COMMENCE DRILLING OPNS. ☐ P AND A ☐CASING/CEMENT JOB ☐

OTHER: Down Hole Tri-mingle



OTHER:



13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

BP America requests permission to complete the subject well into the Chacra (82329) formations and tri-commingle production downhole with the existing **Blanco Mesaverde (72319) & Basin Dakota (71599)****The Interest owners are identical between the MV, DK & CH therefore no notification required.**

Production is proposed to be allocated based on the subtraction method using the projected future decline for production from the MV & DK pools.

The BLM has been notified of the DHC via form 3160-5 for lease NM - 04208

Commingling Production Downhole in the subject well from the proposed pools will not reduce the value of the total remaining production.

Production is proposed to be based on a subtraction method, using the projected future decline for production from the DK & MV pools. This production shall serve as a base for production subtracted from the total production for the commingled well. The balance of the production will be attributed to the Chacra. Please see the decline for MV & DK attached.

Commingling Production Downhole in the subject well from the proposed pools will not reduce the value of the total remaining production.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Cherry Hlava TITLE Regulatory Analyst DATE 1/26/2009Type or print name Cherry Hlava E-mail address: hlavacl@bp.com PHONE: 281-366-4081**For State Use Only**

APPROVED BY: _____ TITLE _____ DATE _____

McCulley LS 5N
BLM Procedure
Sec 24, T28N, R9W
API #: 30-045-32306

Objective of Work:

The McCulley LS 5N is currently a down hole commingled well Dakota and Mesa Verde.

1. Complete well in Chacra and the casing frac at 50-60 bpm 200,000# sand.
2. Flow back and test Chacra and then clean out bridge plugs to Dakota perforations and Tri-mingle well, DK, Mesa Verde, and Chacra.

Simplified Work Procedure:

1. Check anchors. MIRU workover rig.
2. If necessary, kill with 2% KCL water. Nipple down WH. NU BOPs.
3. Tag for fill and tally OH with 2-3/8" production tubing currently set at 6700'. Visually inspect tubing while POOH.
4. TIH with bit and scraper for 4 1/2" casing to 4200'.
5. TIH set CIBP at 4000' and test casing to 3000 psi.
6. Perforate using 3-1/8" casing guns loaded with HEG charges Chacra
3000'-3200' 4 spf Final perforating depths to verified by geologist
7. RU frac equipment. Use Slick Water 2% KCL Water 200,000# sand 45Q-N2 foam in fracture stimulation.
8. Flow back frac.
9. TIH with tubing and notched collar. Cleanout fill to 4000'. Blow well dry.
10. Test Point Chacra for 8 hours.
11. Clean out well to PBTD 6773'
12. Run 2 3/8" completion tubing at 6700'
13. ND BOP's. NU WH. Test well for air. Return well to production. as down hole commingle Dakota, Mesa Verde and Chacra completion.

Prepared by:

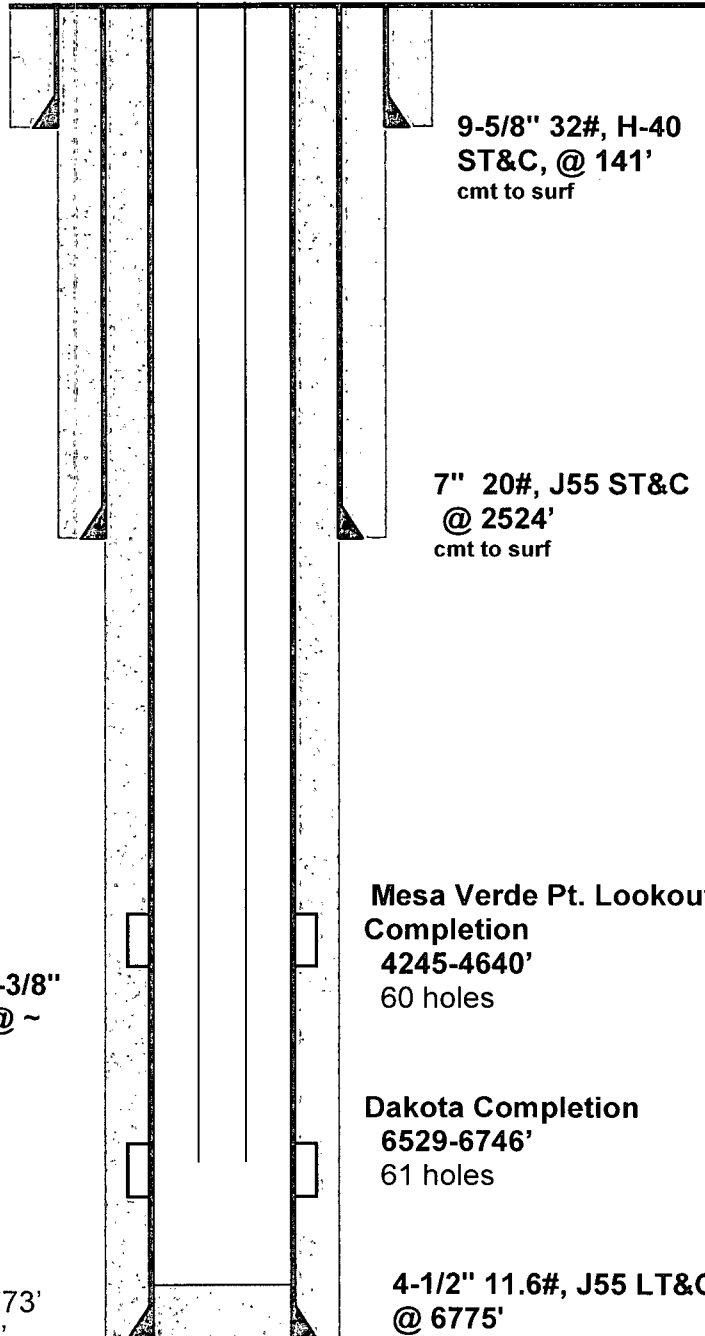
Richard W. Pomrenke

McCulley LS 5N

Sec. 24, T28N R 9W

API: 30-045-32306

GL: 5896'
KB: 5910'



9-5/8" 32#, H-40
ST&C, @ 141'
cmt to surf

7" 20#, J55 ST&C
@ 2524'
cmt to surf

Mesa Verde Pt. Lookout
Completion
4245-4640'
60 holes

Dakota Completion
6529-6746'
61 holes

4-1/2" 11.6#, J55 LT&C
@ 6775'
marker jts @ 6424' & 3487'

Tubing: 2-3/8"
4.7#, J55 @ ~
6700'

PBTD to 6773'
TD @ 6779'

Updated: 8/23/04 JLP/JMP

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(505) 393-6161 Fax:(505) 393-0720

District II

1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
Permit 83074

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-045-32306	2. Pool Code 82329	3. Pool Name OTERO CHACRA (GAS)
4. Property Code 854	5. Property Name MCCULLEY LS	6. Well No. SN
7. OGRID No. 778	8. Operator Name BP AMERICA PRODUCTION COMPANY	9. Elevation 5036

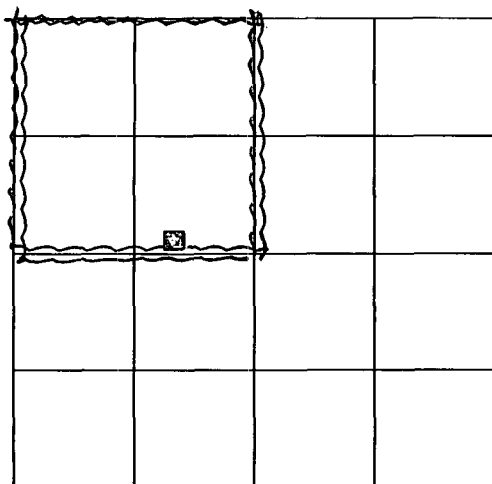
10. Surface Location

UL - Lot F	Section 24	Township 28N	Range 09W	Lot Idn	Feet From 2460	N/S Line N	Feet From 1740	E/W Line W	County SAN JUAN
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11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres -0.00/160		13. Joint or Infill		14. Consolidation Code		15. 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



OPERATOR CERTIFICATION

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(s) or has a right to drill this well at this 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.

E-Signed By: *Cherry Hlava*
Title: *Regulatory Analyst*
Date: *1-26-09*

SURVEYOR CERTIFICATION

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.

Surveyed By: **Gary Vann**
Date of Survey: **2/25/2004**
Certificate Number: **7016**

District I
PO Box 1980, Hobbs NM 88241-1980
District II
PO Drawer KK, Artesia, NM 87211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
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 71599, 72319	* Pool Name Basin Dakota; Blanco Mesaverde
* Property Code 000854	* Property Name McCulley LS		* Well Number # 5N
* OGRID No. 000778	* Operator Name BP AMERICA PRODUCTION COMPANY		* Elevation 5896

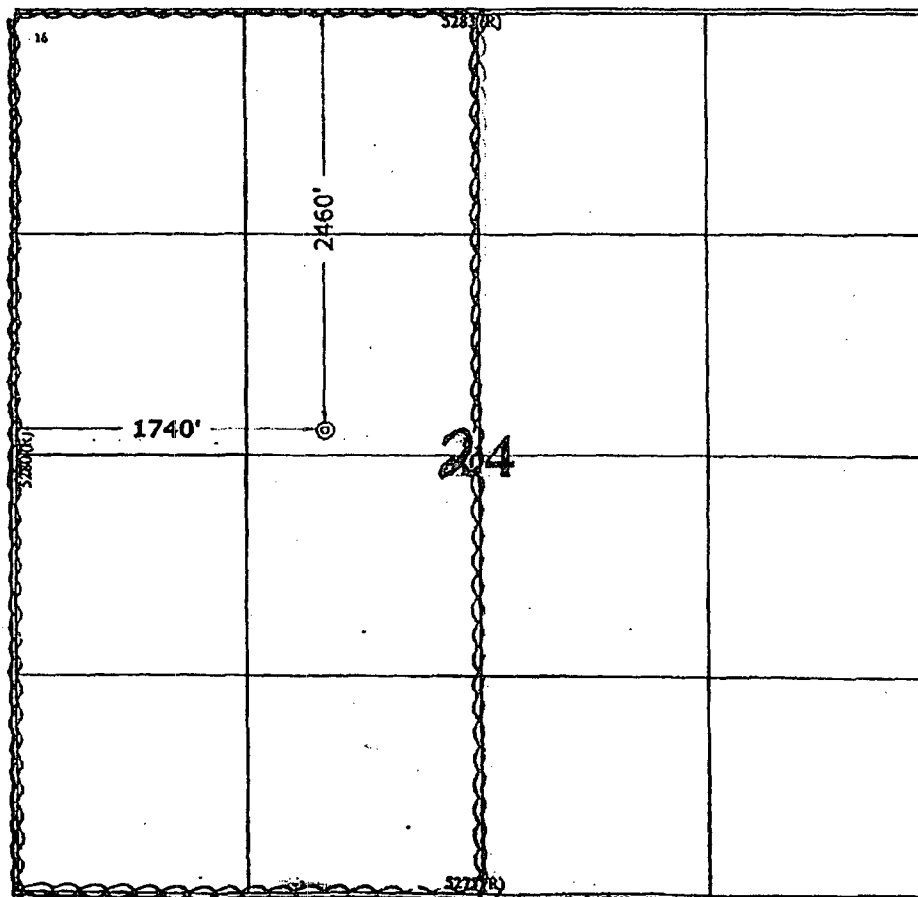
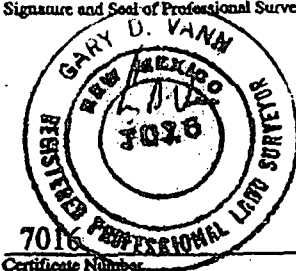
10 Surface Location

UL or Lot No.	Section	Township	Range	Lot Ida	Foot from the	North/South line	Foot from the	East/West line	County
F	24	28 N	9 W		2460	NORTH	1740	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

* UL or lot no.	Section	Township	Range	Lot Ida	Foot from the	North/South line	Foot from the	East/West line	County
12 Dedicated Acres 320		13 Joint or Infill		14 Consolidation Code		15 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>16</p>	<p>17</p>
	<p>18 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Cherry Hlava</u> Signature <u>Cherry Hlava</u> Printed Name <u>Regulatory Analyst</u> Title <u>3-26-04</u> Date</p> <p>19 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><u>February 25, 2004</u> Date of Survey Signature and Seal of Professional Surveyor <u>GARY D. VANN</u>  7016 Certificate Number</p>	

(R) GLO Record

McCulley LS 5N												
Dakota Formation												
API #	3004532306											
Starting 10/04 thru 10/32												
Hyperbolic Decline n = 0.3												
Qi =	61.3	mcf/d	1-Oct-2008									
Qf =	4.0	mcf/d										
D =	15.75%	per year										

McCulley LS 5N									
MesaVerde Formation									
API #	3004532306								
Starting 10/04 thru 3/25									
Hyperbolic Decline n = 0.3									
Qi =	94.0	mcf/d	1-Jan-2007						
Qf =	11.2	mcf/d							
D =	16.18%	per year							
Starting 4/25 thru 12/36									
Exponential Decline									
Qi =	11.2	mcf/d							
Qf =	5.5	mcf/d							
D =	9.00%	per year							
Date	Gas Rate	Gas Volume	Date	Gas Rate	Gas Volume	Date	Gas Rate	Gas Volume	
	mcf/d	MMSCF		mcf/d	MMSCF		mcf/d	MMSCF	
Oct-08	93.14	2.89	Oct-11	56.50	1.75	Oct-14	36.51	1.13	
Nov-08	91.75	2.75	Nov-11	55.78	1.67	Nov-14	36.10	1.08	
Dec-08	90.39	2.80	Dec-11	55.06	1.71	Dec-14	35.69	1.11	
Jan-09	89.27	2.77	Jan-12	54.20	1.68	Jan-15	35.28	1.09	
Feb-09	88.00	2.46	Feb-12	53.52	1.55	Feb-15	34.90	0.98	
Mar-09	86.74	2.69	Mar-12	52.85	1.64	Mar-15	34.52	1.07	
Apr-09	85.47	2.56	Apr-12	52.19	1.57	Apr-15	34.14	1.02	
May-09	84.23	2.61	May-12	51.53	1.60	May-15	33.76	1.05	
Jun-09	83.01	2.49	Jun-12	50.89	1.53	Jun-15	33.39	1.00	
Jul-09	81.81	2.54	Jul-12	50.25	1.56	Jul-15	33.02	1.02	
Aug-09	80.61	2.50	Aug-12	49.62	1.54	Aug-15	32.65	1.01	
Sep-09	79.46	2.38	Sep-12	49.00	1.47	Sep-15	32.29	0.97	
Oct-09	78.32	2.43	Oct-12	48.40	1.50	Oct-15	31.94	0.99	
Nov-09	77.21	2.32	Nov-12	47.80	1.43	Nov-15	31.59	0.95	
Dec-09	76.12	2.36	Dec-12	47.22	1.46	Dec-15	31.25	0.97	
Jan-10	75.03	2.33	Jan-13	46.76	1.45	Jan-16	30.83	0.96	
Feb-10	74.01	2.07	Feb-13	46.21	1.29	Feb-16	30.50	0.88	
Mar-10	73.01	2.26	Mar-13	45.67	1.42	Mar-16	30.18	0.94	
Apr-10	72.00	2.16	Apr-13	45.12	1.35	Apr-16	29.86	0.90	
May-10	71.00	2.20	May-13	44.57	1.38	May-16	29.54	0.92	
Jun-10	70.02	2.10	Jun-13	44.04	1.32	Jun-16	29.23	0.88	
Jul-10	69.06	2.14	Jul-13	43.51	1.35	Jul-16	28.92	0.90	
Aug-10	68.10	2.11	Aug-13	42.98	1.33	Aug-16	28.61	0.89	
Sep-10	67.17	2.02	Sep-13	42.47	1.27	Sep-16	28.31	0.85	
Oct-10	66.26	2.05	Oct-13	41.97	1.30	Oct-16	28.01	0.87	
Nov-10	65.36	1.96	Nov-13	41.47	1.24	Nov-16	27.72	0.83	
Dec-10	64.48	2.00	Dec-13	40.99	1.27	Dec-16	27.43	0.85	
Jan-11	63.61	1.97	Jan-14	40.50	1.26	Jan-17	27.21	0.84	
Feb-11	62.79	1.76	Feb-14	40.04	1.12	Feb-17	26.94	0.75	
Mar-11	61.98	1.92	Mar-14	39.59	1.23	Mar-17	26.67	0.83	
Apr-11	61.16	1.84	Apr-14	39.13	1.17	Apr-17	26.40	0.79	
May-11	60.35	1.87	May-14	38.68	1.20	May-17	26.13	0.81	
Jun-11	59.56	1.79	Jun-14	38.23	1.15	Jun-17	25.86	0.78	
Jul-11	58.78	1.82	Jul-14	37.80	1.17	Jul-17	25.59	0.79	
Aug-11	58.00	1.80	Aug-14	37.36	1.16	Aug-17	25.33	0.79	
Sep-11	57.24	1.72	Sep-14	36.93	1.11	Sep-17	25.07	0.75	