

BP America Production Company

Cherry Hlava
Regulatory Analyst

501 Westlake Park Boulevard, Rm 19.178
Houston, Texas 77079

April 25, 2006

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
P.O. Box 6429
Santa Fe, NM 87505

2006 APR 26 PM 1 31

Wil,

This is the Tri-mingle that Mary Corley sent March 5 but never was received by your office.

There is a rig scheduled to move on around May 22.

Should you see a problem please call me.

Sincerely,

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

Cherry Hlava
Regulatory Analyst
281-366-4081

DATE IN 4/26/06	SUSPENSE	ENGINEER WILL JONES	LOGGED IN 7/26/05	TYPE DHC	APP NO. PTD50611654182
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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 _____
- [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.

Mary Corley
 Print or Type Name

Cherry Hlava
 Signature

Sr. Regulatory Analyst 03/14/2006
 Title Date
corleym1@bp.com
 e-mail Address

2006 APR 26 PM 1 31

District I
1625 N. French Drive, Hobbs, NM 88240
2000
District II
811 South First Street, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
Pools
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15,

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505

APPLICATION TYPE
☒ Single Well
☐ Establish Pre-Approved

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE
☒ Yes ☐ No

BP America Production Company P. O. Box 3092 Houston, TX 77253

Operator Warren A LS 1 Unit K Section 24 T28N, R09W San Juan
Lease Well No. Unit Letter-Section-Township-Range County
OGRID No. 000778 Property Code 001210 API No. 30-045-07142 Lease Type: ☒ Federal ☐ State ☐ Fee

DATA ELEMENT	UPPER ZONE UNDES.	INTERMEDIATE ZONE UNDES.	LOWER ZONE
Pool Name	Blanco PC South	Otero Chacra	Blanco Mesaverde
Pool Code	72439	82329	72319
Top & Bottom of Pay Section (Perforated or Open-Hole Interval)	2118' – 2170'	TBD	4346' – 4488'
Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
Bottomhole Pressure	425	430	570
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1240	1210	1240
Producing, Shut-In or New Zone	Producing	New Zone	Producing
Date and Oil/Gas/Water Rates of Last Production.	Date: Rates:	Date: Rates:	Date: Rates:
Fixed Allocation Percentage	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 Mary Corley TITLE Sr. Regulatory Analyst DATE 03/05/2006
TYPE OR PRINT NAME Mary Corley TELEPHONE NO. (281) 366-4491

Allocation Method
Warren A LS 1

BP America Production Company request permission to complete the subject well into the Otero Chacra and tri-commingle production downhole with the existing South Blanco Pictured Cliffs and Blanco Mesaverde Pools as per the attached procedure.

The interest owners are identical between these three Pools, therefore, no additional notification is required prior to downhole commingling approval.

Production is proposed to be allocated based on the subtraction method using the projected future decline for production from the Pictured Cliffs and Mesaverde 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. Attached are the future production decline estimates for the Pictured Cliffs & Mesaverde Pools.

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

Application has also been submitted to BLM on Form 3160-5, Federal Lease No. SF – 077123

Pre Approved Pools:

Blanco-Mesaverde (72319) & South Blanco Pictured Cliffs (72439) Pools

Blanco-Mesaverde (72319) & Otero-Chacra (82329) Pools

South Blanco Pictured Cliffs (72439) & Otero-Chacra (82329) Pools

Warren A LS 1 API #: 30-045-07142
Complete into the Chacra and downhole tri-mingle PC, Chacra, and Mesaverde
March 14, 2006

1. Perform pre-rig site inspection. Check for: size of location, Gas Taps, other wells, other operators, running equipment, wetlands, wash (dikes req.), H2S, barriers needed for equipment, Landowner issues, location of pits (buried lines in pits), Raptor nesting, critical location, check anchors. Check ID wellhead, if earth pit is required have One Call made 48 hours prior to digging.
2. Perform second site visit after lines are marked to ensure all lines clear marked pit locations. Planning and Scheduling to ready location for rig.
3. RU slickline unit or wireline unit. Pressure test lubricator and equipment. RIH and set **two** barriers (CIBP, tbg collar stop w/plug, or plug set in nipple) for isolation in tubing strings.
4. Check and record tubing, casing, and bradenhead pressures. Ensure production casing has double casing valves installed. Double valve all casing strings.
5. MIRU workover rig. LO/TO all necessary equipment including but not limited to: meter run, Automation, Separators and water lines.
6. Blow down well. Kill with 2% KCL water ONLY if necessary.
7. Check all casing strings to ensure no pressure exist on any annulus. **The operations of removal of wellhead and installation of BOP's will be performed under a dispensation for one (1) barrier on the backside.**
8. Nipple down Wellhead. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi above BHP. Monitor flowing casing pressure with gauge (with casing flowing to blow tank) throughout workover.
9. Install stripping rubber, pull tubing hanger up above pipe rams, shut-in pipe rams, remove stripping rubber. Strip tubing hanger OOH. Re-install stripping rubber.
10. TOH and LD 1-1/4" EUE production tubing currently set at 2190'. Using approved "Under Balance Well Control Tripping Procedure".
11. TOH w/ packer and 2-3/8" production tubing currently set at 4505'. Using approved "Under Balance Well Control Tripping Procedure".
12. TIH w/ scraper for 4-1/2". Check the distance between the top of the blind rams and the length of the bottom hole assembly that is being run. If the BHA is too long then the well has to be top killed and monitored prior to opening blind rams. RIH to PBTD at 4,519'. POOH.
13. TIH w/ scraper for 7". Check the distance between the top of the blind rams and the length of the bottom hole assembly that is being run. If the BHA is too long then the well has to be top killed and monitored prior to opening blind rams. RIH to TOL at 3,587'. POOH.

14. Set bridge plug at 4,300'. Fill casing w/ 2%KCl from the bottom to PC (2170').
15. RU E-line equipment. Pressure test lubricator and equipment. Log well w/ CBL from 4,300' to 2000'. Contact Jesse Gracia after determining TOC to discuss packer placement or remedial cement squeeze.
16. TIH w/ workstring and blow well dry in order to perforate underbalanced.
17. Prepare for explosive operations. Follow Schlumberger Explosive SOP including radio silence, suspension of welding operations, and isolation of electrical devices from the work area. Perform Pre-job Safety Meeting to review JSA and procedures. Meeting should address the VDR (vehicle data recorder) System that Bp people have installed on their vehicles. They must be shut off at the 300 foot sign by hitting 00 and then the enter button, and then wait for about 5 minutes for the unit to turn off. When the green light goes out, call the control center at 326-9475. This number is on a pickup list in the Optimizer room and should be your first point of contact followed by the front desk then the weekend pager. Verify the unit is not transmitting. You then can drive to location and park, but do not to exceed 10 Miles/hr. Note: 20 MPH will turn unit back on. If someone has On Star on their vehicle they cannot enter closer than 300 foot. On Star cannot be turned off. PLEASE take special caution. This is in conjunction with all cell phones, pagers, radios and any electronic devise that transmits a signal.
18. RIH with 3-3/8" casing guns w/lubricator and necessary weight bars above perforating guns. Perforate Menefee formation. (60 Holes Total)

2 SPF:

19. RIH w/ 3-1/2" by 2-7/8" tapered string and packer. Set packer at +/-3900'.
20. Install and monitor production casing and treating pressure during entire job in frac van via pressure transducers on production casing and treating line. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger schedule. Maintain surface pressures less than 5,000 psi during frac job. Flush frac with foam. Fill out GWSI scorecard.
21. Set bridge plug at 3900'
22. RIH with 3-3/8" casing guns w/lubricator and necessary weight bars above perforating guns. Perforate Chacra formation. (60 Holes Total)

2 SPF:

23. RIH w/ 3 1/2" frac string and packer. Set packer at +/- 2,220'
24. Install and monitor production casing and treating pressure during entire job in frac van via pressure transducers on production casing and treating line. Spearhead 500 gal 15% HCL, establish injection rate, and proceed with fracture stimulation according to Schlumberger

schedule. Maintain surface pressures less than 5,000 psi during frac job. Flush frac with foam. Fill out GWSI scorecard.

25. Flowback frac immediately. Flow well through choke manifold on 1/4", 1/2" and 3/4" chokes increasing drawdown until well dies or stabilizes. This is to aid in reducing sand flowback. Recommend 8 hours of flow for each choke size.
26. TOH w/ frac string and packer.
27. Rig up air package/unit, pressure test all lines (Testing procedure to be supplied from air company), TIH with tubing and bit for 4-1/2" casing. Cleanout fill to top of BP set at 3,900'.
28. RIH w/ frac string and packer. Set packer at +/-2200' and **perform 4-6hr flow test on Chacra and document in DIMS. Contact Mary (281-366-4491) after DIMS input is complete.**
29. TOH w/ frac string and packer.
30. TIH w/ tubing and bit for 4-1/2" casing. Drill through BP set at 3,900'. Drill through BP set at 4,300'. Cleanout to PBSD at 4,519'. Blow well dry.
31. Rabbit tubing and RIH with 2-3/8" production tubing (with muleshoe, F-nipple with plug, 4 ft pup, X-nipple with plug).
32. Land 2-3/8" production tubing at +/-4,430'. Lock down hanger.
33. Pressure test tubing to 500 psi with air unit, make sure tubing spool valves are open. Care should be taken during pressure testing of the tubing due to potential problem caused if tubing parts close to surface or above the hanger. Check all casing string for pressure. **The operations of removal of wellhead and installation of BOP's will be performed under a dispensation for one (1) barrier on the backside.**
34. ND BOP's. NU Wellhead. During Master valve placement ensure the top of hanger has spacer nipple in place to bottom of bonnet flange so plunger equipment will not hang up through tree. Pressure test Wellhead.
35. RU WL unit. Run gauge ring for 2-3/8" tubing. Pull plugs and set tubing stop for plunger. Communicate plunger equipment status to IC room personnel.
36. RD slickline unit.
37. Test well for air. Return well to production and downhole tri-mingle PC, Chacra and Mesaverde.

Warren A LS 1

Sec 25, T28N, R9W

API # 30-045-07142

GR: 5869'

History:

Completed OH MV 4/52

Ran 5 1/2" liner in 3/60

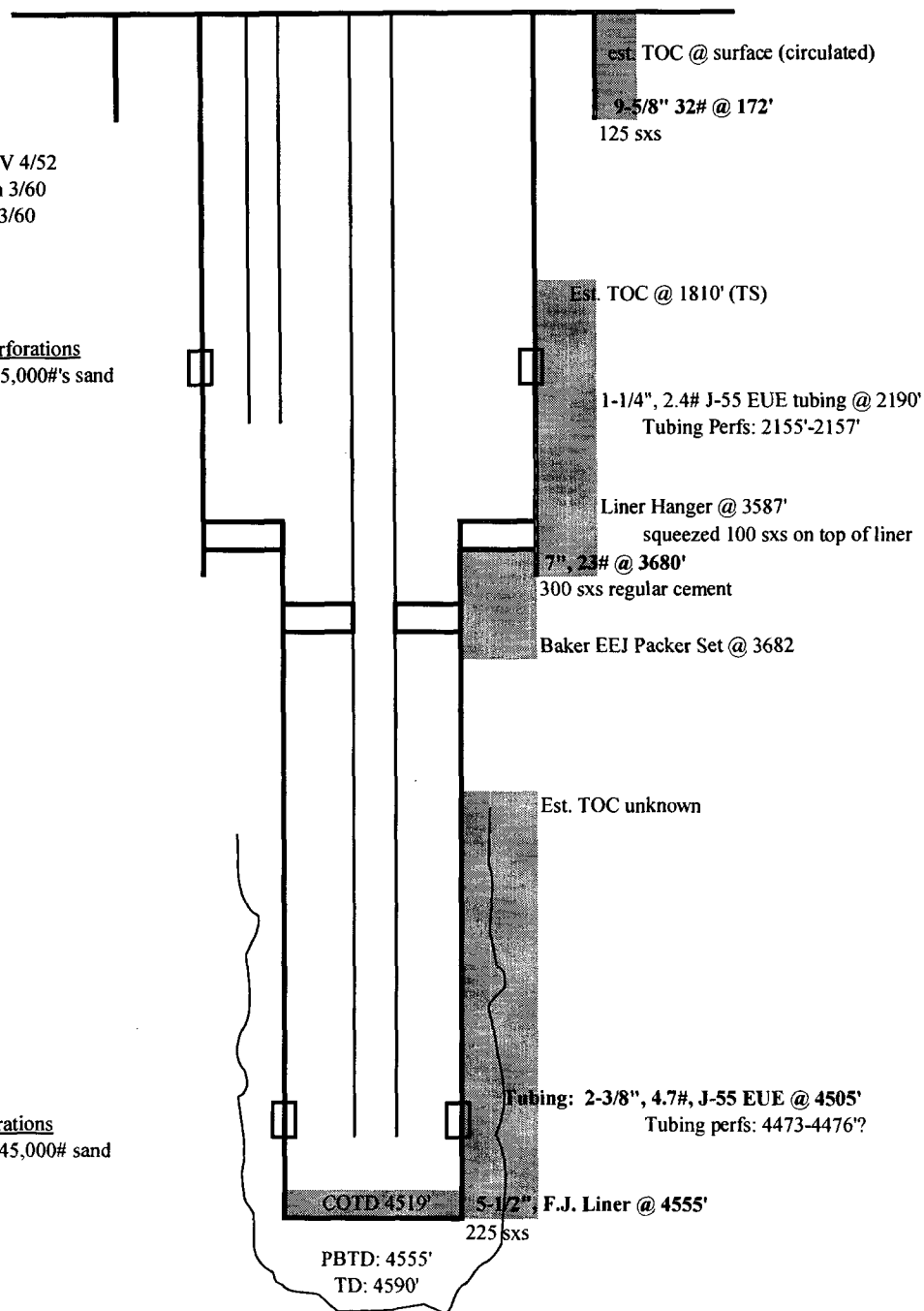
Completed PC in 3/60

Pictured Cliffs Perforations

2118' - 2170' w/ 35,000#'s sand

Mesaverde Perforations

4346' - 4488' w/ 45,000# sand



updated: 3/10/06 JG

Comments:

Rubber tubing joints 2104' - 2134' & 2141'-2171'

Class B tubing below packer

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

District II
811 South First, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised August 15, 2000

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-07142		² Pool Code 82329	³ Pool Name Otero Chacra
⁴ Property Code 001210	⁵ Property Name Warren A LS		⁶ Well Number 1
⁷ OGRID No. 000778	⁸ Operator Name BP America Production Company		⁹ Elevation 5869' GR

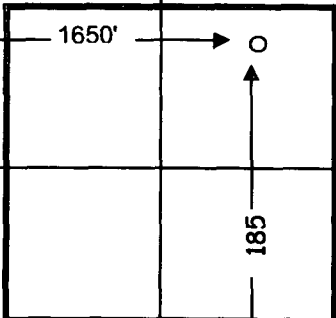
¹⁰ Surface Location

UL or lot no. Unit K	Section 25	Township 28N	Range 09W	Lot Idn	Feet from 1850	North/South South	Feet from 1650	East/West West	County San Juan
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from	North/South	Feet	East/West	County
¹² Dedicated Acres 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

	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>			
	Signature Mary Corley			
	Printed Name Sr. Regulatory Analyst			
	Title 3/15/2006			
Date				
¹⁸ SURVEYOR CERTIFICATION <i>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.</i>				
On File				
Date of Survey				
Signature and Seal of Professional Surveyor:				
Certificate Number				

Warren A LS 1 Future Production Decline Estimate

Pictured Cliffs Daily Rates

4/25/2006

Month	Gas Volume
Jan-2004	37
Feb-2004	28
Mar-2004	37
Apr-2004	27
May-2004	36
Jun-2004	14
Jul-2004	15
Aug-2004	18
Sep-2004	20
Oct-2004	77
Nov-2004	76
Dec-2004	61
Jan-2005	51
Feb-2005	45
Mar-2005	45
Apr-2005	45
May-2005	44
Jun-2005	44
Jul-2005	44
Aug-2005	44
Sep-2005	43
Oct-2005	43
Nov-2005	43
Dec-2005	43
Jan-2006	42
Feb-2006	42
Mar-2006	42
Apr-2006	42
May-2006	41
Jun-2006	41
Jul-2006	41
Aug-2006	41
Sep-2006	41
Oct-2006	40
Nov-2006	40
Dec-2006	40

$\ln(Q_f/Q_i) = -dt$
 $Q_f = 36$
 $Q_i = 37$
 $rate = 36$
 $time = 5$
 $dt = -0.027398974$
 $decline = -0.005479795$

Month	Gas Volume
Jan-2007	40
Feb-2007	39
Mar-2007	39
Apr-2007	39
May-2007	39
Jun-2007	39
Jul-2007	38
Aug-2007	38
Sep-2007	38
Oct-2007	38
Nov-2007	38
Dec-2007	37
Jan-2008	37
Feb-2008	37
Mar-2008	37
Apr-2008	37
May-2008	36
Jun-2008	36
Jul-2008	36
Aug-2008	36
Sep-2008	36
Oct-2008	36
Nov-2008	35
Dec-2008	35
Jan-2009	35
Feb-2009	35
Mar-2009	35
Apr-2009	34
May-2009	34
Jun-2009	34
Jul-2009	34
Aug-2009	34
Sep-2009	33
Oct-2009	33
Nov-2009	33
Dec-2009	33
Jan-2010	33

Month	Gas Volume
Feb-2010	33
Mar-2010	32
Apr-2010	32
May-2010	32
Jun-2010	32
Jul-2010	32
Aug-2010	32
Sep-2010	31
Oct-2010	31
Nov-2010	31
Dec-2010	31
Jan-2011	31
Feb-2011	30
Mar-2011	30
Apr-2011	30
May-2011	30
Jun-2011	30
Jul-2011	30
Aug-2011	30
Sep-2011	29
Oct-2011	29
Nov-2011	29
Dec-2011	29
Jan-2012	29
Feb-2012	29
Mar-2012	28
Apr-2012	28
May-2012	28
Jun-2012	28
Jul-2012	28
Aug-2012	28
Sep-2012	27
Oct-2012	27
Nov-2012	27
Dec-2012	27
Jan-2013	27

Warren A LS 1 Future Production Decline Estimate

Pictured Cliffs Daily Rates

4/25/2006

Month	Gas Volume
Feb-2013	27
Mar-2013	27
Apr-2013	26
May-2013	26
Jun-2013	26
Jul-2013	26
Aug-2013	26
Sep-2013	26
Oct-2013	26
Nov-2013	25
Dec-2013	25
Jan-2014	25
Feb-2014	25
Mar-2014	25
Apr-2014	25
May-2014	25
Jun-2014	24
Jul-2014	24
Aug-2014	24
Sep-2014	24
Oct-2014	24
Nov-2014	24
Dec-2014	24
Jan-2015	24
Feb-2015	23
Mar-2015	23
Apr-2015	23
May-2015	23
Jun-2015	23
Jul-2015	23
Aug-2015	23
Sep-2015	23
Oct-2015	22
Nov-2015	22
Dec-2015	22
Jan-2016	22

Month	Gas Volume
Feb-2016	22
Mar-2016	22
Apr-2016	22
May-2016	22
Jun-2016	21
Jul-2016	21
Aug-2016	21
Sep-2016	21
Oct-2016	21
Nov-2016	21
Dec-2016	21
Jan-2017	21
Feb-2017	21
Mar-2017	20
Apr-2017	20
May-2017	20
Jun-2017	20
Jul-2017	20
Aug-2017	20
Sep-2017	20
Oct-2017	20
Nov-2017	20
Dec-2017	19
Jan-2018	19
Feb-2018	19
Mar-2018	19
Apr-2018	19
May-2018	19
Jun-2018	19
Jul-2018	19
Aug-2018	19
Sep-2018	19
Oct-2018	18
Nov-2018	18
Dec-2018	18
Jan-2019	18

Warren A LS 1 Future Production Decline Estimate

Mesaverde Daily Rates

Month	Gas Volume
Jan-2004	43
Feb-2004	42
Mar-2004	42
Apr-2004	34
May-2004	42
Jun-2004	40
Jul-2004	42
Aug-2004	40
Sep-2004	36
Oct-2004	33
Nov-2004	37
Dec-2004	31
Jan-2005	30
Feb-2005	35
Mar-2005	35
Apr-2005	34
May-2005	34
Jun-2005	34
Jul-2005	34
Aug-2005	33
Sep-2005	33
Oct-2005	33
Nov-2005	33
Dec-2005	32
Jan-2006	32
Feb-2006	32
Mar-2006	31
Apr-2006	31
May-2006	31
Jun-2006	31
Jul-2006	30
Aug-2006	30
Sep-2006	30
Oct-2006	30
Nov-2006	30
Dec-2006	29

$$\ln(Q_i/Q_j) = -dt$$

$$Q_i = 40$$

$$Q_j = 42$$

$$\text{rate} = 40$$

$$\text{time} = 6$$

$$dt = -0.048790164$$

$$\text{decline} = -0.008131694$$

Month	Gas Volume
Jan-2007	29
Feb-2007	29
Mar-2007	29
Apr-2007	28
May-2007	28
Jun-2007	28
Jul-2007	28
Aug-2007	27
Sep-2007	27
Oct-2007	27
Nov-2007	27
Dec-2007	27
Jan-2008	26
Feb-2008	26
Mar-2008	26
Apr-2008	26
May-2008	25
Jun-2008	25
Jul-2008	25
Aug-2008	25
Sep-2008	25
Oct-2008	25
Nov-2008	24
Dec-2008	24
Jan-2009	24
Feb-2009	24
Mar-2009	24
Apr-2009	23
May-2009	23
Jun-2009	23
Jul-2009	23
Aug-2009	23
Sep-2009	23
Oct-2009	22
Nov-2009	22
Dec-2009	22
Jan-2010	22

Month	Gas Volume
Feb-2010	22
Mar-2010	21
Apr-2010	21
May-2010	21
Jun-2010	21
Jul-2010	21
Aug-2010	21
Sep-2010	20
Oct-2010	20
Nov-2010	20
Dec-2010	20
Jan-2011	20
Feb-2011	20
Mar-2011	19
Apr-2011	19
May-2011	19
Jun-2011	19
Jul-2011	19
Aug-2011	19
Sep-2011	19
Oct-2011	18
Nov-2011	18
Dec-2011	18
Jan-2012	18
Feb-2012	18
Mar-2012	18
Apr-2012	18
May-2012	17
Jun-2012	17
Jul-2012	17
Aug-2012	17
Sep-2012	17
Oct-2012	17
Nov-2012	17
Dec-2012	16
Jan-2013	16

Warren A LS 1 Future Production Decline Estimate

Mesaverde Daily Rates

4/25/2006

Month	Gas Volume
Feb-2013	16
Mar-2013	16
Apr-2013	16
May-2013	16
Jun-2013	16
Jul-2013	16
Aug-2013	15
Sep-2013	15
Oct-2013	15
Nov-2013	15
Dec-2013	15
Jan-2014	15
Feb-2014	15
Mar-2014	15
Apr-2014	14
May-2014	14
Jun-2014	14
Jul-2014	14
Aug-2014	14
Sep-2014	14
Oct-2014	14
Nov-2014	14
Dec-2014	14
Jan-2015	13
Feb-2015	13
Mar-2015	13
Apr-2015	13
May-2015	13
Jun-2015	13
Jul-2015	13
Aug-2015	13
Sep-2015	13
Oct-2015	12
Nov-2015	12
Dec-2015	12
Jan-2016	12

Month	Gas Volume
Feb-2016	12
Mar-2016	12
Apr-2016	12
May-2016	12
Jun-2016	12
Jul-2016	12
Aug-2016	11
Sep-2016	11
Oct-2016	11
Nov-2016	11
Dec-2016	11
Jan-2017	11
Feb-2017	11
Mar-2017	11
Apr-2017	11
May-2017	11
Jun-2017	11
Jul-2017	11
Aug-2017	10
Sep-2017	10
Oct-2017	10
Nov-2017	10
Dec-2017	10
Jan-2018	10
Feb-2018	10
Mar-2018	10
Apr-2018	10
May-2018	10
Jun-2018	10
Jul-2018	10
Aug-2018	9
Sep-2018	9
Oct-2018	9
Nov-2018	9
Dec-2018	9
Jan-2019	9