DATE IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.
2/28/05	—	WVJ		DHC-3713	pWVJ0506139459

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]

RECEIVED
FEB 28 2005
Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505

[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	Mary Corley	Sr. Regulatory Analyst	02/24/2005
Print or Type Name	Signature	Title	Date

corleyml@bp.com
e-mail Address

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87505

Form C-107A
Revised May 15,

APPLICATION TYPE
_X_ Single Well
___ Establish Pre-Approved

EXISTING WELLBORE
_X_ Yes ___ No

APPLICATION FOR DOWNHOLE ~~COMMINGLING~~ DHC-3413

BP America Production Company Operator — **P. O. Box 3092 Houston, TX 77253** Address

Jones A LS 2A Lease — **Unit O Section 11 T28N, R08W** Unit Letter-Section-Township-Range — **San Juan** County

OGRID No. **000778** Property Code **000759** API No. **30-045-23850** Lease Type: **X** Federal ___ State ___ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	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)	**2839' – 2943'**	**3198' - 3371**	**4387' – 5436'**
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_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_X_ 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 **02/24/2005**

TYPE OR PRINT NAME **Mary Corley** TELEPHONE NO. **(281) 366-4491**

Allocation Method
Jones A LS 2A

BP America Production Company request permission to complete the subject well into the Otero Chacra and tricommingle 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

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	[2] Pool Code	[3] Pool Name
30-045-23850	82329	Otero Chacra

[4] Property Code	[5] Property Name	[6] Well Number
000759	Jones A LS	2A

[7] OGRID No.	[8] Operator Name	[9] Elevation
000778	BP America Production Company	6252' GR

[10] Surface Location

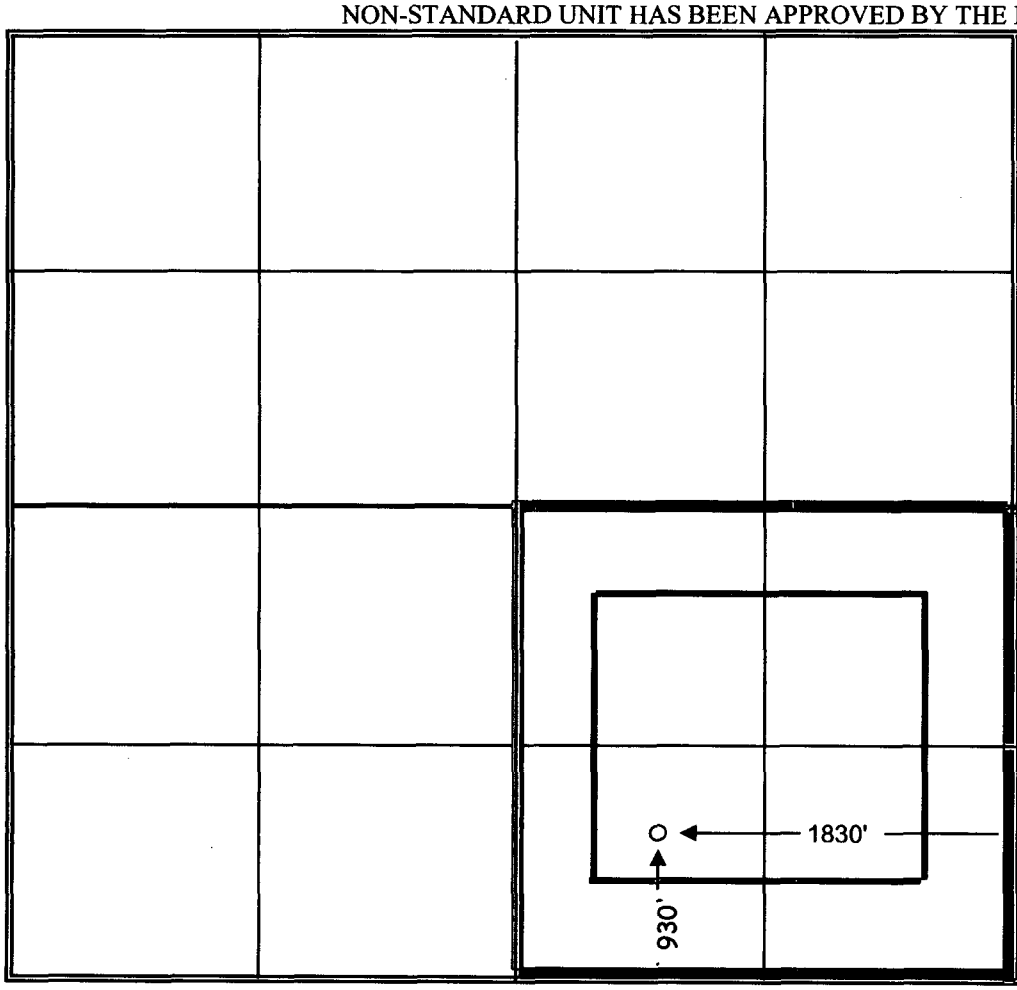
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	North/South	Feet from	East/West	County
O	11	28N	08W		930	South	1830	East	San Juan

[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	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
146.19			

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

Mary Corley Mary Corley

Signature

Mary Corley

Printed Name

Sr. Regulatory Analyst

Title

2/24/2005

Date

[18] 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.

8/13/1979

Date of Survey

Signature and Seal of Professional Surveyor:

Fred B Kerr 3950

Certificate Number

Jones A LS 2A Future Production Decline Estimate

Mesaverde Daily Rates

2/24/2005

Month	Gas Volume
Jan-2004	**206**
Feb-2004	**211**
Mar-2004	**207**
Apr-2004	**203**
May-2004	**198**
Jun-2004	**175**
Jul-2004	**204**
Aug-2004	**197**
Sep-2004	**190**
Oct-2004	**196**
Nov-2004	**182**
Dec-2004	**183**
Jan-2005	**197**
Feb-2005	197
Mar-2005	197
Apr-2005	196
May-2005	196
Jun-2005	196
Jul-2005	195
Aug-2005	195
Sep-2005	195
Oct-2005	194
Nov-2005	194
Dec-2005	194
Jan-2006	193
Feb-2006	193
Mar-2006	193
Apr-2006	192
May-2006	192
Jun-2006	192
Jul-2006	191
Aug-2006	191
Sep-2006	191
Oct-2006	190
Nov-2006	190
Dec-2006	190

ln(Qf/Qi) =	-dt
Qf=	196
Qi=	198
rate=	196
time=	6
dt=	-0.010152371
decline=	-0.001692062

Month	Gas Volume
Jan-2007	189
Feb-2007	189
Mar-2007	189
Apr-2007	188
May-2007	188
Jun-2007	188
Jul-2007	187
Aug-2007	187
Sep-2007	187
Oct-2007	187
Nov-2007	186
Dec-2007	186
Jan-2008	186
Feb-2008	185
Mar-2008	185
Apr-2008	185
May-2008	184
Jul-2008	184
Aug-2008	184
Sep-2008	183
Oct-2008	183
Nov-2008	183
Dec-2008	182
Jan-2009	182
Feb-2009	182
Mar-2009	182
Apr-2009	181
May-2009	181
Jun-2009	181
Jul-2009	180
Aug-2009	180
Sep-2009	180
Oct-2009	179
Nov-2009	179
Dec-2009	179
Jan-2010	178

Month	Gas Volume
Feb-2010	178
Mar-2010	178
Apr-2010	178
May-2010	177
Jun-2010	177
Jul-2010	177
Aug-2010	176
Sep-2010	176
Oct-2010	176
Nov-2010	175
Dec-2010	175
Jan-2011	175
Feb-2011	175
Mar-2011	174
Apr-2011	174
May-2011	174
Jun-2011	173
Jul-2011	173
Aug-2011	173
Sep-2011	173
Oct-2011	172
Nov-2011	172
Dec-2011	172
Jan-2012	171
Feb-2012	171
Mar-2012	171
Apr-2012	171
May-2012	170
Jun-2012	170
Jul-2012	170
Aug-2012	169
Sep-2012	169
Oct-2012	169
Nov-2012	169
Dec-2012	168
Jan-2013	168

Jones A LS 2A Future Production Decline Estimate
Mesaverde Daily Rates

Month	Gas Volume
Feb-2013	168
Mar-2013	167
Apr-2013	167
May-2013	167
Jun-2013	167
Jul-2013	166
Aug-2013	166
Sep-2013	166
Oct-2013	165
Nov-2013	165
Dec-2013	165
Jan-2014	165
Feb-2014	164
Mar-2014	164
Apr-2014	164
May-2014	163
Jun-2014	163
Jul-2014	163
Aug-2014	163
Sep-2014	162
Oct-2014	162
Nov-2014	162
Dec-2014	162
Jan-2015	161
Feb-2015	161
Mar-2015	161
Apr-2015	160
May-2015	160
Jun-2015	160
Jul-2015	160
Aug-2015	159
Sep-2015	159
Oct-2015	159
Nov-2015	159
Dec-2015	158
Jan-2016	158

Month	Gas Volume
Feb-2016	158
Mar-2016	157
Apr-2016	157
May-2016	157
Jun-2016	157
Jul-2016	156
Aug-2016	156
Sep-2016	156
Oct-2016	156
Nov-2016	155
Dec-2016	155
Jan-2017	155
Feb-2017	155
Mar-2017	154
Apr-2017	154
May-2017	154
Jun-2017	154
Jul-2017	153
Aug-2017	153
Sep-2017	153
Oct-2017	152
Nov-2017	152
Dec-2017	152
Jan-2018	152
Feb-2018	151
Mar-2018	151
Apr-2018	151
May-2018	151
Jun-2018	150
Jul-2018	150
Aug-2018	150
Sep-2018	150
Oct-2018	149
Nov-2018	149
Dec-2018	149
Jan-2019	149

Jones A LS 2A Future Production Decline Estimate

Pictured Cliffs

Daily Rates

Month	Gas Volume
Jan-2004	**54**
Feb-2004	**53**
Mar-2004	**50**
Apr-2004	**48**
May-2004	**48**
Jun-2004	**36**
Jul-2004	**45**
Aug-2004	**53**
Sep-2004	**52**
Oct-2004	**56**
Nov-2004	**44**
Dec-2004	**35**
Jan-2005	**34**
Feb-2005	33
Mar-2005	33
Apr-2005	32
May-2005	32
Jun-2005	31
Jul-2005	31
Aug-2005	31
Sep-2005	30
Oct-2005	30
Nov-2005	30
Dec-2005	29
Jan-2006	29
Feb-2006	29
Mar-2006	28
Apr-2006	28
May-2006	27
Jun-2006	27
Jul-2006	27
Aug-2006	26
Sep-2006	26
Oct-2006	26
Nov-2006	25
Dec-2006	25

ln(Qf/Qi) = -dt

Qf=	44
Qi=	48
rate=	44
time=	7
dt=	-0.087011377
decline=	-0.012430197

Month	Gas Volume
Jan-2007	25
Feb-2007	25
Mar-2007	24
Apr-2007	24
May-2007	24
Jun-2007	23
Jul-2007	23
Aug-2007	23
Sep-2007	23
Oct-2007	22
Nov-2007	22
Dec-2007	22
Jan-2008	21
Feb-2008	21
Mar-2008	21
Apr-2008	21
May-2008	20
Jul-2008	20
Aug-2008	20
Sep-2008	20
Oct-2008	19
Nov-2008	19
Dec-2008	19
Jan-2009	19
Feb-2009	18
Mar-2009	18
Apr-2009	18
May-2009	18
Jun-2009	18
Jul-2009	17
Aug-2009	17
Sep-2009	17
Oct-2009	17
Nov-2009	16
Dec-2009	16
Jan-2010	16

Month	Gas Volume
Feb-2010	16
Mar-2010	16
Apr-2010	16
May-2010	15
Jun-2010	15
Jul-2010	15
Aug-2010	15
Sep-2010	15
Oct-2010	14
Nov-2010	14
Dec-2010	14
Jan-2011	14
Feb-2011	14
Mar-2011	14
Apr-2011	13
May-2011	13
Jun-2011	13
Jul-2011	13
Aug-2011	13
Sep-2011	13
Oct-2011	12
Nov-2011	12
Dec-2011	12
Jan-2012	12
Feb-2012	12
Mar-2012	12
Apr-2012	12
May-2012	11
Jun-2012	11
Jul-2012	11
Aug-2012	11
Sep-2012	11
Oct-2012	11
Nov-2012	11
Dec-2012	10
Jan-2013	10

Jones A LS 2A Future Production Decline Estimate

Pictured Cliffs

Daily Rates

Month	Gas Volume
Feb-2013	10
Mar-2013	10
Apr-2013	10
May-2013	10
Jun-2013	10
Jul-2013	10
Aug-2013	9
Sep-2013	9
Oct-2013	9
Nov-2013	9
Dec-2013	9
Jan-2014	9
Feb-2014	9
Mar-2014	9
Apr-2014	9
May-2014	8
Jun-2014	8
Jul-2014	8
Aug-2014	8
Sep-2014	8
Oct-2014	8
Nov-2014	8
Dec-2014	8
Jan-2015	8
Feb-2015	8
Mar-2015	7
Apr-2015	7
May-2015	7
Jun-2015	7
Jul-2015	7
Aug-2015	7
Sep-2015	7
Oct-2015	7
Nov-2015	7
Dec-2015	7
Jan-2016	7

Month	Gas Volume
Feb-2016	6
Mar-2016	6
Apr-2016	6
May-2016	6
Jun-2016	6
Jul-2016	6
Aug-2016	6
Sep-2016	6
Oct-2016	6
Nov-2016	6
Dec-2016	6
Jan-2017	6
Feb-2017	6
Mar-2017	6
Apr-2017	5
May-2017	5
Jun-2017	5
Jul-2017	5
Aug-2017	5
Sep-2017	5
Oct-2017	5
Nov-2017	5
Dec-2017	5
Jan-2018	5
Feb-2018	5
Mar-2018	5
Apr-2018	5
May-2018	5
Jun-2018	5
Jul-2018	5
Aug-2018	4
Sep-2018	4
Oct-2018	4
Nov-2018	4
Dec-2018	4
Jan-2019	4

Jones A LS 2 A API #: 30-045-23850
Complete into the Chacra & DHC with Mesaverde & Pictured Cliffs
February 4, 2005

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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.

10. TOH and LD 1-1/4" production tubing currently set at 2926'. Using approved "Under Balance Well Control Tripping Procedure".

11. TOH w/ packer and 2-3/8" production tubing currently set at 5397'. 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 bind rams. RIH to PBTD at 5,471'. POOH.

13. Set bridge plug at 4,300'. Fill casing w/ 2%KCl and test to 2,500 psi w/ rig pumps.

14. RU E-line equipment. Pressure test lubricator and equipment. Log well w/ CBL from PBTD to TOL. If TOC is below Chacra, contact engineer to discuss need for remedial cement squeeze.

15. TIH w/ workstring and blow well dry.

16. 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.

17. RIH with 3-1/8" casing guns w/lubricator. Perforate Chacra formation w/ 4 SPF.

18. RIH w/ 3-1/2" by 2-7/8" frac string and packer. Set packer at 3,300'.

19. 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.

20. Flowback frac immediately. Flow well through choke manifold on ¼", ½" and ¾" 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.

21. 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 4,300'. **Perform well test on Chacra for regulatory and document well test in DIMS.**

22. Cleanout fill and BP set at 4,300'. Cleanout to PBTD at 5,471'. Blow well dry.

23. Rabbit tubing and RIH with 2-3/8" production tubing (with muleshoe, F-nipple with plug, 4 ft pup, X-nipple with plug).

24. Land 2-3/8" production tubing at +/-5,385'. Lock down hanger.

25. 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.**

26. 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.

27. 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.

28. RD slickline unit.

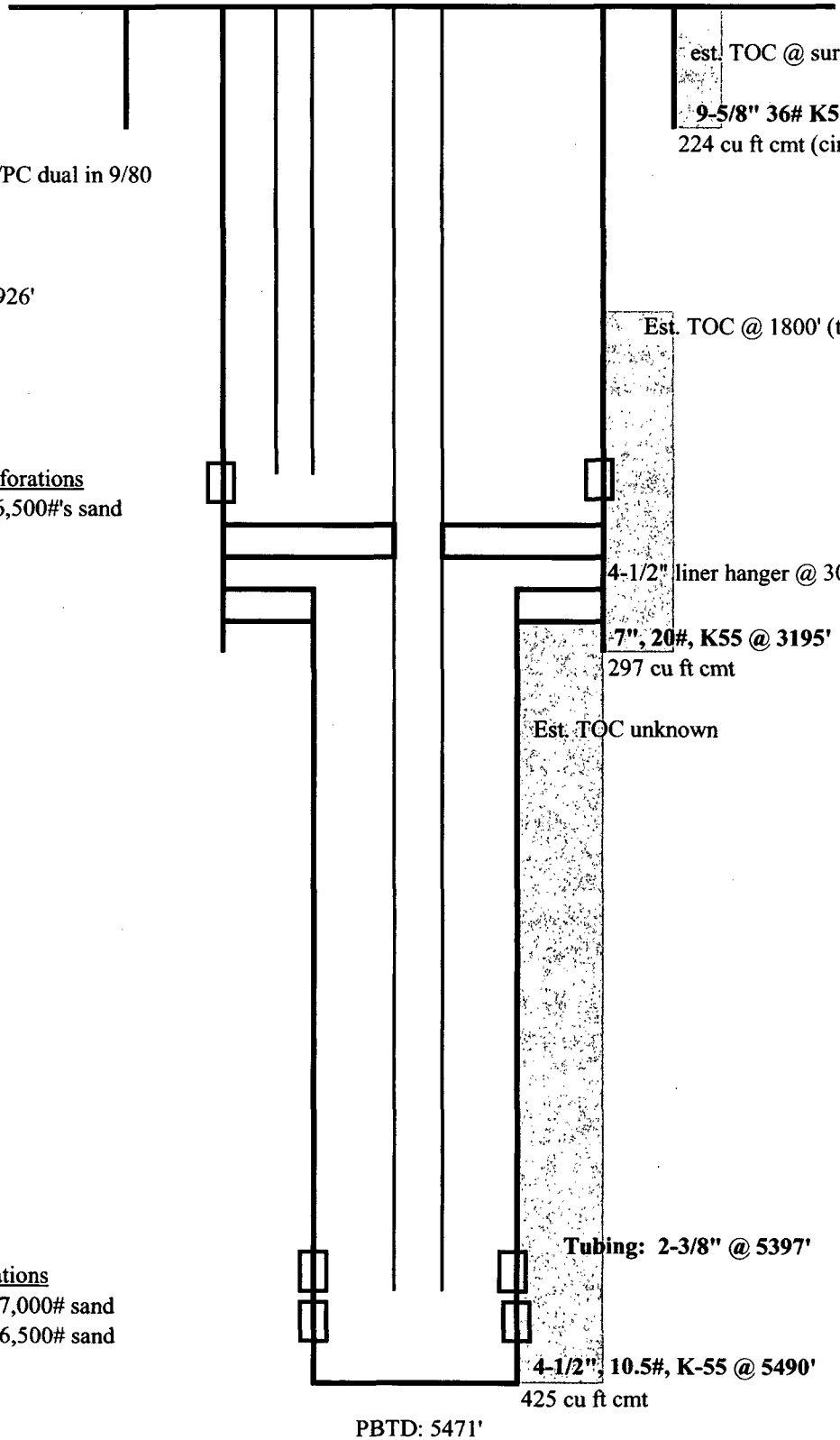
29. Test well for air. Return well to production and downhole tri-mingle PC, Chacra and Mesaverde.

Jones A LS #2A

Sec 11, T28N, R8W

API # 30-045-23850

GL: 6252'



History:
Completed as MV/PC dual in 9/80

1-1/4" tubing @ 2926'

Pictured Cliffs Perforations
2839' - 2943' w/ 66,500#'s sand

Mesaverde Perforations
4387' - 5000' w/ 77,000# sand
5062' - 5436' w/ 66,500# sand

PBTD: 5471'
TD: 5490'

updated: 2/2/05 CFR