	Submit 3 Copies 10 Appropriate District - Office		of New Me			Form C-103
	<u>District I</u> 1625 N French Dr., Hobbs, NM 88240	Energy, Minera	als and Natur	al Resources	WELL API NO.	May 27, 2004
	District II	OIL CONSE	RVATION	DIVISION	30-045-24989	
	1301 W Grand Ave , Artesia, NM 88210 District III		uth St. Fran		5. Indicate Type of Leas	se FEE 🔲
	1000 Rio Brazos Rd, Aztec, NM 87410 District IV	Santa	Fe, NM 87	505	6. State Oil & Gas Leas	
	1220 S. St. Francis Dr., Santa Fe, NM 87505				1	EG 1 '08
	SUNDRY NOTION (DO NOT USE THIS FORM FOR PROPOS		EEPEN OR PLU		7. Lease Name or Unit	Agreement Name
	DIFFERENT RESERVOIR USE "APPLIC PROPOSALS.)	ATION FOR PERMIT" (F	ORM C-101) FC	R SUCH	Bolac	
	1. Type of Well: Oil Well	Gas Well 🛛 Other			8. Well Number DI	S1.3
	2. Name of Operator				9. OGRID Number	
_	BP America Production Company	Attn: Cherry Hia	va		778	not .
	3. Address of Operator P.O. Box 3092 Houston, TX 7725	3	,		10. Pool name or Wildo Basin DK Blanco MV	:at ' & O tero Chacra
L	4. Well Location		•			
	Unit Letter I : 1715	feet from the SOU'	TH line as	nd 1115 feet from	m the EAST line	
	Section 29	Township 28N	_	e 08W	NMPM San Juan	County
		11. Elevation (Show	whether DR,	RKB, RT, GR, etc.,		
Ī	^P it or Below-grade Tank Application 🗌 or	· Closure 🔲				
F	Pit typeDepth to Groundwa	terDistance from	nearest fresh w	ater well Dist	ance from nearest surface wat	er
L	Pit Liner Thickness: mil	Below-Grade Tank:	Volume	bbls; Co	nstruction Material	
	12. Check A	ppropriate Box to	Indicate N	ature of Notice,	Report or Other Data	
	NOTICE OF IN				SEQUENT REPOR	
	· · · · · · · · · · · · · · · · · · ·	PLUG AND ABAND		REMEDIAL WOR		RING CASING
	TEMPORARILY ABANDON DULL OR ALTER CASING	CHANGE PLANS MULTIPLE COMPL		COMMENCE DRI		
	_	moern de oon e	⊠	OTHER:		П
	OTHER: Tri-Mingling 13. Describe proposed or complete.	eted operations. (Cle			d give pertinent dates, incl	luding estimated date
	of starting any proposed wor or recompletion.					
	Currently above mentioned well is perit tis now BP's intent to Tri-mingle said					nas not been initiated.
	-			_		
	he Basin Dakota (71599) and the Blan he NMOCD order R-11363. The work					
<u>n</u>	otification is required. (Sent Certified	Return Receipt 01/10/	<u>(08).</u> Productio	n is proposed to be	allocated based on subtract	tion method using the
	rojected future decline for production ubtracted from the total production fo					
	uture production decline estimates for					
<u>T</u>	he BLM has been notified of the I	OHC via form 3160-:	5 for lease SF	- 080112. NMOC	CD Aztec has also been n	otified.
C	Commingling Production Downhol	e in the subject well	from the pro	posed pools will n	ot reduce the value of th	e total remaining
	roduction.	,	•	. ,	DHC3995	
ı	hereby certify that the information a	shove is true and com	nlete to the he	est of my knowledg	•	
	rade tank has been/will be constructed or c					
<u>S</u>	IGNATURE Cherry Hlavi	7 TITLE	Regulatory	Analyst	DATE	01/25/2008
Т	ype or print name Cherry Hl	ava E-mail addres	ss: hlavacl@b	p.com	Telephone No. 2	81-366-4081
	or State Use Only	A				
	PPROVED BY:		TITLE	Deputy Oil 8	R Gas Inspector _{DA}	TEFEB 0 6 2008
C	onditions of Approval (if any):			,	N	
			1		()	

CC: Aztec NMOC)

SJ Basin Well Work Procedure

Well Name: Bolack 1M - MV / DK dual well

Version: BLM

Date: January 21, 2008

Repair Type: Downhole Commingle Zones and PayAdd of Chacra

Objective:

- 1. Remove short string tubing (MV) and long string (DK) down to packer at 4800'w/coil tubing unit.
- 2. Run packer picker and mill out slips on packer at 4800' and recover packer, POH w/ rest of long string coil.
- 3. Clean out wellbore, set bridge plug over the MV perforations at 4490'-4718',
- 4. Perforate the Chacra and fracture stimulate down the casing,
- 5. Flow test Chacra for commingle allocation,
- 6. Drill out bridge plug and tri-mingle Chacra, MV and DK reland single string of tubing, and return to production.
- 1. POOH with 1-1/2" 1.523# coil tubing short tubing string set @ 4431'
- 2. POOH with long string (1-1/2", 1.43#, 1.31" I.D.) ~4800'
- 3. Mill slip elements on H.E.S. "BWB" packer (P/N 212 BWB 45100-A)
- 4. POOH w/ Packer and rest of long coil tubing string (1820' coil below packer)
- 5. C/O to PBTD
- 6. Set CBP at 4300'.
- 7. Perforate the Chacra (depth to be determined)
- 8. Fracture stimulate the Chacra down the casing
- 9. Clean out frac sand and flow test Chacra
- 10. Drill out CBP
- 11. TIH with 2-3/8" 4.7# J-55 tubing land @ 6700'
- 12. Return well to production.

Pertinent Information: Gas BTU content for this well is 1340 (MV production) and 1195 (DK); Venting and Flaring document needs to be followed if BTU content is above 950.

Reference:

NOP 7812-01 Normal Operating Procedure Under balanced Well Control Tripping Procedure.

NOP 7804-01 Normal Operating Procedure Wellbore Air Purge.

NOP 7803-01 Procedure for At Risk Well Locations.

NOP 7814 Procedure for Flowback Operations. •

Location: T28N-R8W-Sec29(I) API #: 30-045-24989

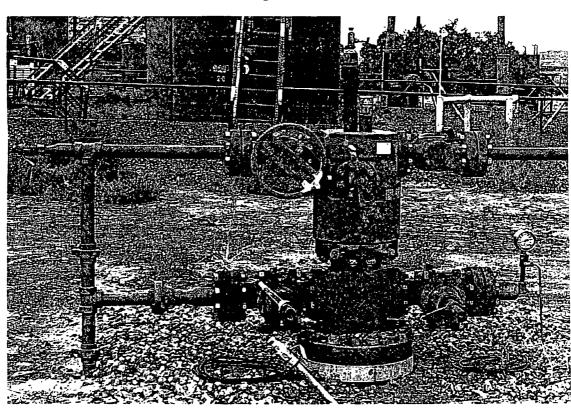
County: San Juan Flac Well: 97973602-MV / 97973601-DK

State: New Mexico Lease Flac: 698472

Horizon: Mesa Verde / Dakota Engr: Richard Pomrenke ph (281) 366 5023 mobile: (281) 455-8449

Procedure:

- 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. Prior to rig up a full history should be obtained for the coil tubing unit. This should include the remaining coil tubing fatigue life, the position of all welds, and the fluid exposure history, all items should be documented for the reel.



Existing Wellhead

4. RU slickline unit. Pressure test lubricator and equipment. RIH and set plug set in nipple) for isolation in each tubing string. Long string 1.18" nipple at 6634' and short string nipple at 4431'. May need to seek dual barrier dispensation as we have 1.5" Coil tubing in both long and short strings.

Control Charles of Reference on the Control of the

and read limite market

5. Check and record tubing, casing, and bradenhead pressures. Ensure production casing has double casing valves installed. Double valve all casing strings.

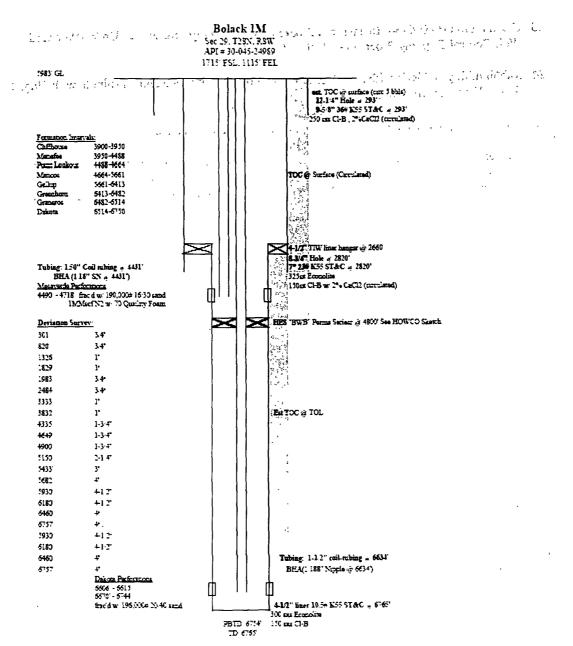
was the second of the way to the second of the

- 6. MIRU workover rig. LOTO all necessary equipment including but not limited to meter run, automation, separator, and water line.
- 7. Blow down well. Kill with 2% KCL water ONLY if necessary.
- 8. 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.
- 9. Nipple down Wellhead. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi low side and 1100psig high side maximum expected BHP of DK ~950psig. Monitor flowing casing pressure with gauge throughout workover.
- 10. Install stripping rubber, pull FMC coil tubing hanger connector for short string and shut pipe rams. Strip tubing hanger out of hole.
- 11. MI Coil Tubing unit. NU CT injector head use rig draw works to hold injector head.
- 12. POOH using the CTU with 1-1/2" 1.43# tubing short string currently set at 4432'.
- 13. Spool up long string using CTU 4800' length of coil above packer. Note: please refer to Halliburton Completion Guide dated January 3, 1995 Item 5HES "MSN Seal Units 2' long stung into HES "BWB" Perma-Series Permanent Production Packer.
- 14. RIH w/ 2 3/8" work string and mill control guide for milling out slip elements on 4-1/2" H.E.S "BWB" Perma-Series Packer set at 4800'.
- 15. Retrieve packer and spool up rest of 1-1/2" 1.43# coil below packer using coil tubing rig length of coil below packer is ~1820' and is currently landed @ 6634'. RD and move coil tubing rig off location.
- 16. RIH with bit and scraper for 4-1/2" casing. Check the distance between the top of the blind rams and the length of the bottomhole 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.
- 17. Run 4 1/2" bit and scaper to 4300'.
- 18. Set CBP at 4300', test 4 1/2" and 7" to 2500 psi.
- 19. Perforate the Chacra 3190'-3360' and Lewis 3510'-3660' using a 3 1/8" gun at 90 degree phasing
- 20. Fracture treat well in single stage as per detailed Schlumberger treatment procedure
- 21. Cleanout and flow well and run 8 hour test on Chacra and Lewis for allocation.

- 22. Drill CBP at 4300'
- 23. Cleanout to PBTD 6754' to ensure wellbore is clean and dry. Reference Under-Balanced Well Control Tripping Procedure. TOH w/ workstring.
- 24. Rabbit tubing and RIH with 2-3/8" production tubing. (With muleshoë, F-nipple with plug, 4 ft pup, X-nipple with plug).
- 25. Land 2-3/8" production tubing at ~6700'. Lock down tubing hanger.
- 26. 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 the surface. Check all casing string for pressure. The operations of removal of BOP's and installation of wellhead will be performed under a dispensation for one (1) barrier on the backside.
- 27. 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.
- 28. RU WL unit. Run gauge ring for 2-3/8" tubing. Broach out any tight spots noticed in WL trip. If tubing will not broach free and clean RD WL and pull tubing and replace bad joints. Pull plugs and set tubing stop for plunger. Communicate plunger equipment status to operations team personnel.
- 29. RD slickline unit.
- 30. Test well for air. Return well to production. RD and release all equipment. Remove all LOTO equipment.
- 31. Ensure all reports are loaded into DIMS. Print out summary of work and place in Wellfile. Discussion with production operations team about particulars of well when handing off the well file.

Richard W. Pomrenke

Senior Petroleum Engineer Capital Deployment Well Work San Juan South & North WL 19.113 281-366-5023 office 281 455 8449 cell



History: Completed as DK only well in 6/1985 MV payadd made dual well in 1994

updated 1 13 07 RWP

Coil Tubing Details.



HALLIBURTON COMPLETION GUIDE

COMPANY AMOCO Production Co. ATTENTION OF: Mr. Rudy Candelaria

WELL: Bolack #1E PERFORATIONS Mesa Verde: 4,288' - 4,718' Dakota Basin: 6,606' - 6,675'

Dakota Basin: 6,606' - 6,67!

CASING: 7" 23 lb/ft - K-55

LINER: 4 1/2" 10.5 lb/ft - K-55

TUBING: 1 1/2" 1.43 lb/ft Coil Tubing - Long String.
1 1/2" 1.523 lb/ft Coil Tubing - Short String.

DATE. January 3, 1995

LOCATION: San Juan County New Mexico

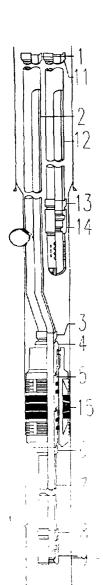
WT. On Pkr. - 1,500 lb - Long String

COMPLETION DATE: 12/30/94

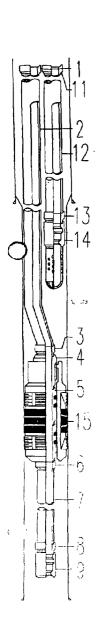
COMPLETED BY: Dale Gunn - H.E.S Farmington, New Mexico
H.E.S SERVICE LOCATION: Farmington, New Mexico - Phone (505)-325-3544

ITEM	DESCRIPTION	I.D.	О.Д.	LENGTH	DEPTH
		LONG ST	TRING		
	K. B. Elevation			10.00	0.00
1	FMC C/T Hanger Connector	1.317	2.25"~	0.67'	10.00
2	1 1/2" 1.43 lb/ft Coal Tubing	1.31"	1 50"	4,798.00'	10.67
3	H.E.S. 1 1/2" C/T Swivel Connector x 1 1/4" 'CS' pin	t.31"	3.00"	1.22'	4,808.67
4	H.E S. Straight Slot Locator with 1 1/4" 'CS' box	1 31"	2 92"	1 03'	4,809.89'
5	H E S. "MSN" Seal Units Qty Two (2)	131"	2 55"	2 00'	4,810 92'
6	H E S. Adapter 2 1/4-12 UN box x 1 1/2" C/T Connector	131'	2 50"	0 79	4,812 92
7	1/1/2" i 43lb/ft Coil Tubing	131,	1.50"	1,820 00	4,813.71
8	HES 11/2 CT Connector x 1 1/4" 'CS' pin	1 31"	2 25"	0 64	6,633 71
9	PETRO-TECH 'PT' 1 25" C/T Landing Nipple with W/L Re-Entry Guide	1 188"	1 927"	1 04'	6,634 35°
	-				

Bottom of Lang String Coil Tubing Assembly 6.635.39'







DESCRIPTION	I.D.	O.D.	LENGTH	DEPTH
	SHOR1	STING		
K. B. Elevation			10.00'	0.00
FMC C/T Hanger Connector	1.31"	2.25"	0.67*	10.00
1 1/2" 1.523lb/ft Coil Tubing	g 1.31"	1.296"	4,420.00'	10.67*
H.E.S. 1 1/2" C/T Connector x 1 1/4" 'CS' pin	1.31"	2.25"	0.64'	4,430.67*
PETRO-TECH 'PT' 1 25" C/T Landing Nipple with Perforated Production Tube and Bull Nose Catcher on Bottom	1.188"	1 927"	2 02'	4,431 31'
,	Вошот о	f Short Strin	g Tubing Assembl	v 4,433.33'
H.E.S. "BWB" Perma-		3.79"	2.40'	4,800.00°
	K. B. Elevation FMC C/T Hanger Connector 1 1/2" 1.523lb/ft Coil Tubing H.E.S. 1 1/2" C/T Connector x 1 1/4" 'CS' pin PETRO-TECH 'PT' 1 25" C/T Landing Nipple with Perforated Production Tube and Bull Nose Catcher on Bottom H.E.S. "BWB" Perma- Series Permanent Production Packer for 4 1/2" 9.5 - 12.6 lb/ft Casing	K. B. Elevation FMC C/T Hanger Connector 1.31" 1 1/2" 1.523lb/ft Coil Tubing 1.31" H.E.S. 1 1/2" C/T Connector 1.31" x 1 1/4" 'CS' pin PETRO-TECH 'PT' 1 25" C/T Landing Nipple with Perforated Production Tube and Bull Nose Catcher on Bottom Battom of the Catcher of Production Packer for 4 1/2" 9.5 - 12.6 lb/ft Casing	SHORT STING K. B. Elevation FMC C/T Hanger Connector 1.31" 2.25" 1 1/2" 1.523lb/ft Coil Tubing 1.31" 1.296" H.E.S. 1 1/2" C/T Connector 1.31" 2.25" x 1 1/4" 'CS' pin PETRO-TECH 'PT' 1 25" 1.188" 1 927" C/T Landing Nipple with Perforated Production Tube and Bull Nose Catcher on Bottom Bottom of Short String H.E.S. "BWB" Perma- 2.55" 3.79" Series Permanent Production Packer for 4 1/2" 9.5 - 12.6 lb/ft Casing	SHORT STING K. B. Elevation 10.00' FMC C/T Hanger Connector 1.31" 2.25" 0.67' 1 1/2" 1.523lb/ft Coil Tubing 1.31" 1.296" 4,420.00' H.E.S. 1 1/2" C/T Connector 1.31" 2.25" 0.64' x 1 1/4" 'CS' pin PETRO-TECH 'PT' 1 25" 1.188" 1 927" 2 02' C/T Landing Nipple with Perforated Production Tube and Bull Nose Catcher on Bottom Bottom of Short String Tubing Assembly H.E.S. "BWB" Perma- 2.55" 3.79" 2.40' Series Permanent Production Packer for 4 1/2" 9.5 - 12.6 lb/ft Casing

Drawn by: Ray Chavers - Denver, CO

Form C-102 Permit 51714

<u>District I</u>
1625 N French Dr., Hobbs, NM 88240
Phone (505) 393-6161 Fax (505) 393-0720
<u>District II</u>

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	de 3 Pool Name					
30-045-24989	82329	OTERO CHACRA (GAS)					
4 Property Code	5 Pro	6 Well No					
323	BC	001M					
7 OGRID No 778	8 Ope BP AMERICA PRO	9 Elevation					

10. Surface Location

UL - Lot	Section	Township	Range	Lot ldn	Feet From	N/S Line	Feet From	E/W Line	County
[I	29	28N	08W		1715	S	1115	Е	SAN JUAN

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	ownship Range Lot Idn Feet From N		N/S Lır	ine Feet From E/W Line County			
12 Dedic	cated Acres	13 .	loint or Infill	1	4 Consolidation	Code		15 Order No.	
160	0.00								

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

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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: Charry Hlava Title: Regulatory Analy 57 Date: 1-7-08

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: Fred Kerr
Date of Survey: 8/8/1980
Certificate Number: 3950

STATE OF NEW MEXICO EHERSY NIO MINERALS UPPARTMENT

OIL CONSERVATION DIVISION

P O. BOX 2088

30 045-24989 SANTA FE, NEW MEXICO 87501

Form C-107 Revised 10-1-78

All distances must be from the cuter boundaries of the Section.

Operator				Lease				Well No.			
TENNECO OI	L CC	MPANY		BOLACK				1M.			
Unit Letter	Sect		Township		Range '	County	_				
Actual Footage Loc	gilon	29	28N			San	Juan				
1715		_	uth line and	7	1115 feet	from the	East	line			
Ground Level Elev.		Producing For		Pool	100.	nour the		Dedicated Acreage:			
5901		Dakota		3	Basin Dakota			320 Acres			
			ed to the subject we					ne plat below.			
interest an	interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling.etc? Yes No If answer is "yes;" type of consolidation										
this form if No allowab	If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization,										
torced-pool sion.	ing,	or otherwise)	or until a non-standard	i unit	t, eliminating such	interest	s, has been	approved by the Commis-			
_		1						CERTIFICATION			
		 - - 			i ⊙		tained her	certify that the information con- rein is true and complete to the y knowledge and belief, M. Mushler			
	_	+ I			-		Senior Position	Production Analyst			
		1					Company	o Oil Company			
	i.	 					March 3	3, 1981			
<u></u>		Sec		774	1			-			
+		NM035	549 22		SF 080 11 1115		shown on notes of a under my Is true o	certify that the well location this plat was plotted from field actual surveys made by me or supervision, and that the same nd correct to the best of my and belief.			
	_	 	i		1 1 2	=======================================	VARAGE	18 LANGED			
			<u> </u>	,	171		and friends	1 6 1 5 1			
0 230 440 9	0 12	20 1650 1810	2310 2640 2000	10	BOO 1000 BOO	•	Certification	B. KERR. IS.			

* District | Diffux 1980, Hubbs, NST 88241-1980

10 Drawer DD, Artesia, NAS 88211-0719

District III

1000 Rh Heums Rd., Artec. NM 87410 District IV

PO Bux 2083, Santa Fc. NAt 87504-2088

State of New Mexico Correct & Natural Resources Department

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

Form C-102

| Form C-102
| Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

		•							LI MILLIDED KEFOK			
		WE	ELL LO	CATIO	N AND A	CR	EAGE DEDI	CA	TION PLAT 30-045-24989			
	API Numb	<r< td=""><td></td><td>Pool Cou</td><td>de</td><td></td><td></td><td></td><td>1 Paul Nuine</td></r<>		Pool Cou	de				1 Paul Nuine			
30-	045	- 2498	9 7	2319	1	B	Vanco	N	Messuerde			
* Property	Cade				1 Prupo	crty i	Cume		· Well Yumher			
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OGRID	No.	7			' Opera	tue i	fame		Elevation			
0007	78	\wedge	ont	co P	roduci	(0	J. Com	101	and a can			
							Location	- (Thile in 1E -			
UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	•	North/South line	F	et from th			
	29	28N	8W		1715	1	FSL	١	115 Ching will be			
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UL or lot po.	Section	Township	Range	Lot Ida	Feet from the	•	Nurth/South line	Fe	ri from			
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" Dedicated Acr	Joint	or Infill 14 (Consolidatio	a Code " (Order Na.							
320	1 7											
NO ALLOV	VABLE V	WILL BE A	SSIGNE	D TO TH	IS COMPLE	TIO	N UNTIL ALL	INT	ERESTS HAVE BEEN CONSOLIDATED			
		OR A	TZ-HOH	ANDARQ	UNIT HAS	BE	EN APPROVED	ΒY	THE DIVISION			
16							~		17 OPERATOR CERTIFICATION			
.	I			1					I hereby certify that the information contained herein is			
	Ī								true and complete to the best of my knowledge and belief			
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	ļ		بالمرا	1100	41				Date			
						-			18SURVEYOR CERTIFICATION			
							•	Í	Thereby certify that the well location shown on this plat			
				1				,	was plotted from field notes of actual surveys made by me			
							1115	`\	or under my supervision, and that the same is true and correct to the best of my belief.			
İ					•			1				
				,			,		Date of Survey			
 				1		\perp	L,		Signature and Seal of Professional Surveyor:			
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Bolack 1M	Γ	l	T		<u> </u>			
Dakota Formation		t	 					
API # 30-045-24989		<u> </u>						
711 1 # 30 043-24303			<u> </u>					
								
Starting 2/96 thru 5/09								
Exponential Decline								
Qi = 29.7 mcfd		1-Jun-2007						
Qf = 26.9 mcfd		1-3u11-2007						
D = 4.78% per year								
D = 4.76% per year		<u> </u>						
Starting 6/09 thru 2/27		<u> </u>						······································
Exponential Decline								
Qi = 26.9 mcfd							 	
Qf = 5.1 mcfd						-		
D = 9.00% per year		<u> </u>	<u> </u>			·····		
	Gas	Gas	<u> </u>	Gas	Gas		Gas	Gas
ľ		1	,) :		}	
)	Rate			Rate		5-4-	Rate	Volume
Date	mcf/d			mcf/d	*****	Date	mcf/d	MMSCF
Jan-07	29.65	0.92		26.59		Jan-12	20.94	0.65
Feb-07	31.43	0.88		26.37		Feb-12	20.78	0.60
Mar-07	29.19	, 0.91	Sep-09	26.17	0.79	Mar-12	20.62	0.64
Apr-07	27.87	0.84		25.96		Apr-12	20.45	0.61
May-07	26.94	0.84		25.76		May-12		0.63
Jun-07	29.61	0.89		25.56		Jun-12		0.60
Jul-07	29.49	0 91	Jan-10	25.35		Jul-12		0.62
Aug-07	29.37	0 91		25.16		Aug-12	19.82	0.61
Sep-07	29 25	0.88		24.97	0 77	Sep-12		0 59
Oct-07	29.13	0 90	Apr-10	24.77	0.74	Oct-12	19.51	0.61
Nov-07	29.01	0.87	May-10	24.58	0.76	Nov-12	19.36	0 58
Dec-07	28.89	0.90	Jun-10	24.39	0.73	Dec-12	19.21	0.60
Jan-08	28.69	0.89		24.19		Jan-13		0.59
Feb-08	28.58	0.83		24.00	0.74	Feb-13	18.96 18.82	0 53 0.58
Mar-08	28.46					Mar-13		
Apr-08	28 35	0.85		23.63		Apr-13		0.56 0.57
May-08 Jun-08	28.23	0.88		23.44		May-13		
	28.12	0.84		23.26		Jun-13		0.55
Jul-08 Aug-08	28.00 27 89	0 87		23.07		Jul-13		0.57
Sep-08	27.77	0.86	Feb-11	22.90 22.72	0.64 0.70	Aug-13		0.56 0.54
Sep-08 Oct-08	27.66	0 83 0 86				Sep-13		0.55
Nov-08	27.55	0.83	Apr-11	22 54 22.37	0.68 0.69	Oct-13 Nov-13		0.53
Dec-08	27 43	0.83	May-11 Jun-11	22.37		Dec-13		0.53
Jan-09	27.39	0.85	Jul-11	22.19	0.68	Jan-14		0 54
Feb-09	27.29	0.65		21 84	0.68	Feb-14		0.48
			Aug-11					
Mar-09	27.18	0 84	Sep-11	21.67	0.65	Mar-14		0 53
Apr-09	27.07	0.81	Oct-11	21 50		Apr-14		0.51
May-09	26.96	0 84	Nov-11	21.33		May-14		0 52
Jun-09	26 80	0.80	Dec-11	21.16	0.66	Jun-14	16 72	0 50
							<u> </u>	

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Bolack 1M						— т			
MesaVerde Formation				 					
API # 30-045-24989							+		
AF1# 30-043-24303									-
Starting 2/96 thru 5/09									
Exponential Decline									
Qi = 57.534 mcfd		1-Jun-2007							
Qf = 52.9781 mcfd									1
D = 4.041% per yr		<u> </u>							
									···-
Starting 6/09 thru 2/27									
Exponential Decline									
Qi = 53.0 mcfd									
Qf = 10.0 mcfd	î.								
D = 9.00% per year									
	Gas	Gas		Gas	Gas		Gas	Gas	
	Rate	Volume		Rate	Volume	ľ	Rate	Volume	
Date	mcf/d	MMSCF	Date	mcf/d	MMSCF	Date	mcf/d	MMSCF	
Jan-07	83.36	2.58	Oct-09	51.16	1.59	Jul-12	39 37	1.22	
Feb-07	71.04	1.99	Nov-09	50.76	1.52	Aug-12	39.06	1.21	
Mar-07	63.61	1.97	Dec-09	50.36	1.56	Sep-12	38.75	1.16	
Apr-07	60.33	1.81	Jan-10	49.96	1.55	Oct-12	38.45	1.19	
May-07	26.29	0.82	Feb-10	49.58	1.39	Nov-12	38.15	1.14	
Jun-07	57.48	1.72	Mar-10	49.21	1.53	Dec-12	37.85	1.17	
Jul-07	57.28	1.78	Apr-10	48.82	1.47	Jan-13	37.65	1.17	
Aug-07	57.08	1.77	May-10	48.44	1.50	Feb-13	37,36	1.05	
Sep-07	56.88	1.71	Jun-10	48.06	1.44	Mar-13	37.08	1.15	
Oct-07	56 69	1.76	Jul-10	47.68	1.48	Apr-13	36.79	1.10	
Nov-07	56.49	1.70	Aug-10	47.30	1.47	May-13	36.50	1.13	
Dec-07	56.30	1.75	Sep-10	46.93	1.41	Jun-13	36.21	1.09	
Jan-08	55.95	1.73	Oct-10	46.56	1.44	Jul-13	35 93	1.11	
Feb-08	55.76	1.62	Nov-10	46.19	1 39	Aug-13	35.64	1.11	
Mar-08	55.57	1.72	Dec-10	45.83	1.42	Sep-13	35.36	1.06	
Apr-08	55 38	1.66	Jan-11	45.47	1.41	Oct-13	35 09	1.09	
May-08		1.71	Feb-11		1.26	Nov-13	34.81	1.04	
Jun-08	55.00	1.65	Mar-11	44 78	1.39	Dec-13	34.54	1.07	
Jul-08	54 81	1.70	Apr-11	44.43	1.33	Jan-14	34 26	1 06	
Aug-08	54.62	1 69	May-11	44.08	1.37	Feb-14	34.00	0.95	
Sep-08	54.43	1.63	Jun-11	43.73	1.31	Mar-14	33.74	1 05	
Oct-08	54.25	1.68	Jul-11	43 39	1.35	Apr-14	33.48	1.00	
Nov-08	54.06	1.62	Aug-11	43 04	1.33 1.28	May-14	33.22 32.96	1.03 0.99	
Dec-08 Jan-09	53.87 53.83	1.67 1.67	Sep-11 Oct-11	42.70 42.37	1.20	Jun-14 Jul-14	32 70	1 01	
Feb-09	53.65	1.50	Nov-11	42 04	1.26	Aug-14	32.44	1.01	
Mar-09	53.48	1.50	Dec-11	41.71	1.29	Sep-14	32.44	0 97	
Apr-09	53.40	1.60	Jan-12	41.71	1.28	Oct-14	31.93	0.99	
May-09	53 29	1.65	Feb-12	40.94	1.19	Nov-14	31.68	0.95	
Jun-09	52 81	1.58	Mar-12	40.94	1.19	Dec-14	31.43	0.93	
Jul-09	52 40	1.62	Apr-12	40.31	1.21	Jan-15	31.43	0.97	
Aug-09	51.98	1.62	May-12	39 99	1.24	Feb-15	30.94	0.97	
Sep-09	51.57	1.55	Jun-12	39.68	1.19	Mar-15	30.71	0 95	
	01.07	1.00	0411 12	00.00	1.131	11101 101	30.71	- 000	

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