District 1 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720			State of New Mexico										Revised	Form C-101 Revised August 1, 2011		
Phone: (575) 393- <u>District II</u> 811 S. First St., A	Energy Minerals and Natural Resources									,	Permit					
Phone: (575) 748- District III		Oil Conservation Division							HOB3S OCD			ļ				
1000 Rio Brazos I Phone: (505) 334-		1220 South St. Francis Dr. MAY 1 0 2013														
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462			Santa Fe, NM 87505							1 I V 2013						
Phone: (505) 476-	3460 Pax: (505	o) 476-3462										ł	RECE	IVED		
AP	PLICA	TION F	OR	PERMI' erator Name a	T TO	DRI	LL, RE	-EN	TER,	DEEP	EN	N, PLUGE	BAC	K, OR	ADD A	ZONE
CHEVRON U.S.A. IN	C.		Ор	erator name a	na Aaa	ress							00	4323	er	
MIDLAND, TEXAS	15 SMITH ROAD MIDLAND, TEXAS 79705									³ API Number 30-025-03106						
⁴ Prope	rty Code			-	_		Property N					° Well No.				
				STATE "AN"										6		
	Castion	Tourshin	1	Range			Surfac					Fast Fram	<u> </u>	/W Line		
OL - Lot O	UL - Lot Section Township O 7 18-S			Kange E	Lot Idn Feet fro		om	SOUT	N/S Line JTH 231		Feet From 310		EAST		County LEA	
							Pool Ir			n					1	
VACUUM; BO	NE SPRING	46195	\mathcal{N}	C-02	5 G	06	518	33	518		<u>3</u>	ne Sp	prij	y	9'	1930
9 Work	Туре		10	Well Type		Additi	ional W		nforn		¹² Le	ease Type			ound Level Ele	evation
RECOM	IPLETE	3		OIL			16 -		STATE			3972'				
¹⁴ Mu N	•		¹⁵ Proposed Depth 9025' BONE SP					¹⁸ Spud Date								
Depth to Groun	d water	~			_		fresh water						to nea	rest surface	water	
				19	Prop	osed	Casing	and	Cem	ent Pro	gra	am			λ.	
Туре	Type Hole Size Cas		Casing Size Casing Weight/ft			Setting Depth Sacks o			Sacks of	of Cement Estimated T		d TOC				
					NC		ANGE									
-																
								-				. <u> </u>				
				Casin	o/Ce	ment	Progra	⊥ m•∆	dditi	onal C		ments				
				Casin	ig/CC				uum			Expires 2	Vea	rs Froi	m Appr	oagi
				F	Propo	sed B	lowout	Prev	entic	on Prog	nit Kal	m Tinless	Brill	ing Un	derway	
	Туре		Working Pressure				t Prevention Program Unless				gback Manufacturer					
						+				41	-					
	_													<u> </u>		
I hereby certin of my knowle	-	-	given	above is true	and con	nplete to	the best					NSERVA			SION	
I further cer NMOCD gui	tify that th	e drilling pi														
OCD-approv)			u) alteri	liative	Appro	ved By:		_		/	/		
Printed name: DENISE PINKERTON						Title: Petrofeum Engifieer										
Title: REGULATORY SPECIALIST								P ved Dat		<u>m</u>] •/	·	ة Expirati	on Date:	/		
E-mail Address: leakejd@chevron.com										05]]	13			05/1	4/15
Date: 05/07/2013 Phone: 432-687-7375								Condit	ions of .	Approval A	ttac	hed				<u> </u>

MAY 2,0 2013

-

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u>

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 848-9720

District III 1000 Bio Brazas Bood, Arton N

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

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102

District Office

Revised August 1, 2011

OIL CONSERVATION DIVISION HOB3S OCD^{Submit one copy to appropriate}

1220 South St. Francis Dr.

Santa Fe, NM 87505

MAY **1 0** 2013 [

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number					518	ie				
30-025-03106			9193	Our	025606					
Code		6 V	⁶ Well Number							
				6						
No.		9	⁹ Elevation							
			3972'							
¹⁰ Surface Location										
Section	Township	Range Lot Idn		Feet from the	North/South line	Feet from the	East/West line	County		
7	18-S	35-E		990	SOUTH	2310	EAST	LEA		
"Bottom Hole Location If Different From Surface										
Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
s ¹³ Joint o	r Infill ¹⁴ C	Consolidation	Code ¹⁵ Order No.							
40 PLC-103-F										
	0-025-03106 Code No. Section 7 Section	0-025-03106 Code No. Section Township 7 18-S Section Township	Section Township Range 7 18-S 35-E II Bo Section Township Range 7 18-S 35-E II Bo Section Township Range	10-025-03106 Code No. Section Township Range Lot Idn 7 18-S 35-E "Bottom Ho Section Township Range Lot Idn	10-025-03106 Code Code STATE ". No. No. Section Township 7 18-S 35-E Bottom Hole Location If Section Township Range Lot Idn Feet from the 990 "Bottom Hole Location If Section Township Range Lot Idn Feet from the 990 Section Township Section Townsh	10-025-03106 46195 97930 UC DX GOb Code 5 Property Name STATE "AN" No. 8 Operator Name CHEVRON U.S.A. INC. 10-025-03106 8 Operator Name CHEVRON U.S.A. INC. 10-025-03106 10 Surface Location 10-025-03106 10 Feet from the 18-S North/South line SOUTH 11-02 11-02 11-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 12-02 13-02 12-02 12-02 13-02 12-02 12-02 13-02 12-02 12-02 13-02 14-02 12-02 13-02 14-02 12-02 13-02 14-02 12-02 13-02 14-02 12-02 13-02 14-02 12-02 13-02 14-02 12-02 13-02 14-02 12-02 14-02 12-02 12-02 14-02 12-02	10-025-03106 46195 97930 UC DX GOb VACUUM; BONE Code 5 Property Name STATE "AN" STATE "AN" No. * Operator Name CHEVRON U.S.A. INC. * '' Surface Location 7 18-S 35-E 990 SOUTH 2310 '' Bottom Hole Location If Different From Surface Section 7 18-S 25-E 990 SOUTH 2310 '' Bottom Hole Location If Different From Surface Section Township Range Lot Idn Feet from the North/South line Feet from the South Hole Location If Different From Surface Section Township Range Lot Idn Feet from the North/South line Feet from the Section Township Range Lot Idn Feet from the North/South line Feet from the Section Township Range Lot Idn Feet from the North/South line Feet from the South Consolidation Code 15 Order No.	10-025-03106 16195 97930 WCDX GOb VACUUM; BONE SPRING Code 5 Property Name STATE "AN" 6 V No. * Operator Name CHEVRON U.S.A. INC. 6 V V Surface Location 10 Surface Location 7 18-S 35-E 990 SOUTH 2310 EAST I Bottom Hole Location If Different From Surface Section Township Range Lot Idn Feet from the North/South line Feet from the EAST 35-E 990 SOUTH 2310 EAST I Bottom Hole Location If Different From Surface Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line Section Township I's 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.

16				¹⁷ 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 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.
				05-07-2013
				Signature Date
				DENISE PINKERTON REGULATORY SPECIALIST Printed Name
				leakejd@chevron.com E-mail Address
4				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.
		· · · · · · · · · · · · · · · · · · ·		Date of Survey
		1		Signature and Seal of Professional Surveyor:
	1	FG	2310' r	
		P		
		2		
		H.		Certificate Number

Description of work: Squeeze Perfs, DO CIBP, CO to 8,800'. 3 Stage Frac, RTP.

Pre-Work:

- 1. Check Wellhead connections for pressure ratings and condition. Change out if necessary.
- 2. Utilize the rig move check list.
- 3. Check anchors and verify that pull test has been completed in the last 24 months.
- 4. Ensure location of & distance to power lines is in accordance with MCA SWP. Complete and electrical variance and electrical variance RUMS if necessary.
- 5. Ensure that location is of adequate build and construction.
- 6. Ensure that elevators and other lifting equipment are inspected. Caliper all lifting equipment at the beginning of each day or when sizes change.
- 7. When NU anything over and open wellhead (EPA, etc.) ensure the hole is covered to avoid dropping anything downhole
- 8. For wells to be worked on or drilled in an H2S field/area, include the anticipated maximum amount of H2S that an individual could be exposed to along with the ROE calculations for 100 ppm and 500 ppm (attached).
- 9. If the possibility of trapped pressure exists, check for possible obstruction by:
 - Pumping through the fish/tubular this is not guaranteed with an old fish as the possibility of a hole above the obstruction could yield inconclusive results
 - Dummy run make a dummy run through the fish/tubular with sandline, slickline, eline or rods to verify no obstruction. Prior to making any dummy run contact RE and discuss.

If unable to verify that there is no obstruction above the connection to be broken, or if there is an obstruction:

• Hot Tap at the connection to check for pressure and bleed off

Observe and watch for signs / indicators of pressure as connection is being broken. Use mud bucket (with seals removed) and clear all non-essential personnel from the floor.

Procedure:

- 1. Rig up pulling unit. Check wellhead pressure, and kill well as necessary.
- ND wellhead. NU 5,000 psi BOP with 2-7/8" pipe rams over blinds with hydrill on top. RIH with 1 joint of 2-7/8"tubing and 5-1/2" packer. Set packer. Test BOP to 250 psi low / 500 psi high.
- 3. TIH with (6) 3-1/8" DC's on 2-7/8" L-80 work string w/ 4-3/4" MTB to 4,355' and DO cement and CIBP (CIBP @ 4,370'). Clean out to +/- 4,700'.
- 4. TOH with MTB.
- 5. RIH 5-1/2" packer on 2-7/8" work string. Set packer at 4,390'.

1

6. Establish injection into perfs located @ 4,425 – 4,670'. Attempt to determine injection rate, injection pressure, total injection volume, and pressure bleed off response from perfs. Notify RE of results and a squeeze will be designed based on this information.

- 7. TIH with 4-3/4" MTB and (6) 3-1/8" DC's on 2-7/8" L-80 work string.
- 8. Rig up reverse unit. Drill out cement retainer & squeeze cement. Close BOP and test squeeze to 1,000 psi.
- 9. Continue to RIH to 5,030' and DO cement and CIBP (CIBP @ 5,050').
- 10. Continue to RIH to 8,715' and DO cement and CIBP (CIBP @ 8,750' capped w/ 35' of cement).
- 11. Clean out to 8,800' and reverse circulate clean. Circulate 4% KCL water.

Use 4% KCL anytime fluids are going to be on the Bonespring formation

- 12. Rig up wireline truck & lubricator. Run gauge ring to 8,800'. RIH with CIBP to 8,795' and set. Dump bail 35' of cement on top.
- 13. Tie into Schlumberger's GR–Sonic log dated 9/17/1962 for correlation and run a GR-CNL-RAL from PBTD to 4800'. Scott Ingram (ES, cell: 432-238-3479) will be on location for log to modify perf selection as necessary. Send logs to Ryan Warmke and RE for review.
- 14. Rig up full lubricator, test lubricator to 1,000 psi on catwalk. RIH with Baker's 4" EHC Predator XP (or equivalent charge from another vender). Perforate the 5-1/2" casing with 3 JSPF (90 degree phasing) as follows:
 - 8,593 98' (15 holes)
 - 8,662 67' (15 holes)
 - 8,721 26' (15 holes)
- 15. POOH with perforating gun.
- 16. Rig down wireline truck. Prepare to Frac.
- 17. Close blind rams and change pipe rams from 2-7/8" to 3-1/2". Test rams to 250 psi low / 1,000 psi high.
- 18. TIH with 5-1/2" treating packer on 3-1/2" L-80 workstring and set at 8,500'. Test tubing to 8,000 psi below slips while RIH.
- 19. Install 10K frac valve on top of BOP and tie 3-1/2" to frac valve with nubbin.
- 20. Test frac valve to 8,000 psi.
- 21. Rig down pulling unit. (Rig to return to prep for 2nd stage after the well has been bled down from the flow back)
- 22. Move in 8 frac tanks and set on location. Fill with 4% KCL.
- 23. Frac the 2ND Bone Spring interval (8,593'-8,726') per the attached Baker Frac Design. Treat via 3-1/2" tubing at 35 bpm with an anticipated wellhead treating pressure of 7,228 psi.
 - a. Load and pressure backside to 500 psi. Set pop-off at 600 psi.

- 24. Rig down frac equipment. Shut in well over night to allow the gel to break and to allow the resin coated sand to set in place.
- 25. Open up well the next morning and flow back load unit well dies.
- 26. Rig up pulling unit.
- 27. Kill well if necessary. ND frac valve. Test BOP against frac packer. Test pipe rams to 250 psi low/ 1,000 psi high.
- 28. Release packer and TOH and stand back 3-1/2" workstring.
- 29. Rig up wireline truck & lubricator. Tie into Schlumberger's GR–Sonic log dated 9/17/1962 for correlation and set a composite BP @ 8,400'.
- 30. Dump 10' of cement on top of CBP.
- 31. Rig up full lubricator, test lubricator to 1,000 psi on catwalk. RIH Baker's with 4" EHC Predator XP (or equivalent charge from another vender). Perforate the 5-1/2" casing with 3 JSPF (90 degree phasing) as follows:
 - 8,206 10' (12 holes)
 - 8,266 –70' (12 holes)
 - 8,296 8,300' (12 holes)
 - 8,329 33' (12 holes)
- 32. POOH with perforating gun.
- 33. Rig down wireline truck. Prepare to Frac.
- 34. Test rams to 250 psi low / 1,000 psi high.
- 35. TIH with 5-1/2" treating packer on 3-1/2" L-80 workstring and set at 8,150'. Test tubing to 8,000 psi below slips while RIH.
- 36. Install 10K frac valve on top of BOP and tie 3-1/2" to frac valve with nubbin.
- 37. Test frac valve to 8,000 psi.
- 38. Rig down pulling unit. (Rig to return to prep for 3rd stage after the well has been bled down from the flow back)

The following frac design may be modified based upon the results of the 1st frac

- 39. Frac the 2ND Bone Spring interval (8,206'-8,333') per the attached Baker Frac Design. Treat via 3-1/2" tubing at 35 bpm with an anticipated wellhead treating pressure of 7,228 psi (Same design as 1st stage unless modified design was sent out).
 - a. Load and pressure backside to 500 psi. Set pop-off at 600 psi.
- 40. Rig down frac equipment. Shut in well over night to allow the gel to break and to allow the resin coated sand to set in place.
- 41. Open up well the next morning and flow back load unit well dies.
- 42. Rig up pulling unit.

- 43. Kill well if necessary. ND frac valve. Test BOP against frac packer. Test pipe rams to 250 psi low/ 1,000 psi high.
- 44. Release packer and TOH and stand back 3-1/2" workstring.
- 45. Rig up wireline truck & lubricator. Tie into Schlumberger's GR–Sonic log dated 9/17/1962 for correlation and set a composite BP @ 8,150'.
- 46. Dump 10' of cement on top of CBP.
- 47. Rig up full lubricator, test lubricator to 1,000 psi on catwalk. RIH Baker's with 4" EHC Predator XP (or equivalent charge from another vender). Perforate the 5-1/2" casing with 3 JSPF (90 degree phasing) as follows:
 - 7,976 80' (12 holes)
 - 8,004 –08' (12 holes)
 - 8,066 8,070' (12 holes)
 - 8,098 102' (12 holes)
- 48. POOH with perforating gun.
- 49. Rig down wireline truck. Prepare to Frac.
- 50. Test rams to 250 psi low / 1,000 psi high.
- 51. TIH with 5-1/2" treating packer on 3-1/2" L-80 workstring and set at 7,900'. Test tubing to 8,000 psi below slips while RIH.
- 52. Install 10K frac valve on top of BOP and tie 3-1/2" to frac valve with nubbin.
- 53. Test frac valve to 8,000 psi.
- 54. Rig down pulling unit. (Rig to return to run production equipment after the well has been bled down from the flow back)

<u>The following frac design may be modified based upon the results of</u> <u>the 1st frac</u>

- 55. Frac the 2ND Bone Spring interval (7,976'-8,102') per the attached Baker Frac Design. Treat via 3-1/2" tubing at 35 bpm with an anticipated wellhead treating pressure of 7,228 psi (Same design as 1st stage unless modified design was sent out).
 - a. Load and pressure backside to 500 psi. Set pop-off at 600 psi.
- 56. Rig down frac equipment. Shut in well over night to allow the gel to break and to allow the resin coated sand to set in place.
- 57. Open up well the next morning and flow back load unit well dies.
- 58. Rig up pulling unit.
- 59. Kill well if necessary. ND frac valve. Test BOP against frac packer. Test pipe rams to 250 psi low/ 1,000 psi high.
- 60. Release packer and TOH laying down 3-1/2" workstring.

- 61. Close blind rams and change pipe rams from 3-1/2" to 2-7/8". Test rams to 250 psi low / 1,000 psi high. Test annular to 250 psi low / 1,000 psi high. Bleed off pressure. POOH and lay down test packer.
- 62. RIH with 2-7/8" workstring and 4-3/4" MTB.
- 63. Drill out cement and CBP @ 8,150' & 8,400' using 4% KCL.
- 64. Continue to CO to PBTD of 8,735' using 4% KCL. If circulation is not obtained, RU Foam Air Unit (See attached procedure).
- 65. POOH and laydown 2-7/8" workstring and 4-3/4" bit.
- 66. RIH with 2-7/8" production tubing and set SN @ 8,700' and tubing anchor at 7,840'.
- 67. ND BOP. NU wellhead.
- 68. RIH with pump and rods.

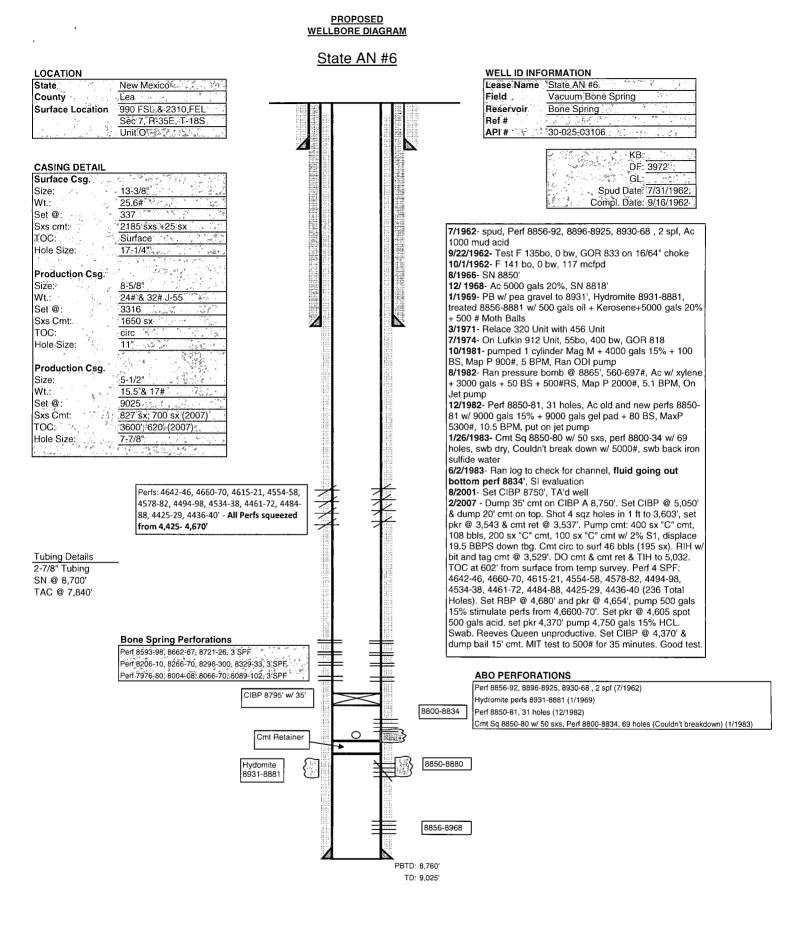
1" N-97 Rods – 104 Rods (2,600') 1" N-97 Rods – 1 Rod Sub (15') (2,615' total feet of 1" N-97 Rods) 7/8" N-97 Rods – 232 Rods (5,800') 7/8" N-97 Rods – 1 Rod Sub (10') (5,810' total feet of 7/8" N-97 Rods) 1-1/2" K-Bars – 11 sinker bars (275') 1-3/4" Insert Pump

- 69. Rig down pulling unit.
- 70. Place well on production and test.

RRW 12/14/2012

<u>Contacts:</u> Remedial Engineer – Larry Birkelbach Production Engineer – Ryan Warmke ALCR – Danny Acosta D&C Ops Manager – Boyd Schaneman D&C Supt. – Heath Lynch OS – Nick Moschetti Baker Hughes Rep – Doug Lunsford Baker Hughes Rep (Frac) – Kellyn Gavin

(432-687-7650 / Cell: 432-208-4772) (432-687-7452 / Cell: 281-460-9143) (Cell: 575-631-9033) (432-687-7402 / Cell: 432-238-3667) (432-687-7857 / Cell: 281-685-6188) (Cell: 432-631-0646) (432-570-1050 / Cell: 432-559-0396) (432-687-7467 / Cell:432-202-1336)



UPDATED BY: Ryan Warmke DATE: 5/6/2013

Submit I Copy	To Appropriate District	Form C-103						
District 1 - (575		Revised August 1, 2011 WELL API NO.						
District II - (57)		30-025-03106						
811 S. First St., District III - (50	Artesia,'NM 88210 05) 334-6178	5. Indicate Type of Lease STATE 🔀 FEE						
1000 Rio Brazo District IV - (50	s Rd., Aztec, NM 87410	6. State Oil & Gas Lease No.						
	icis Dr., Santa Fe, NM	4		E-7653				
87303	SUNDRY NOTI	CES AND REPORTS ON V	VELLS	7. Lease Name or Unit Agreement Name				
	THIS FORM FOR PROPO ESERVOIR. USE "APPLIC	State AN						
PROPOSALS.)	I	8. Well Number 6						
1. Type of V 2. Name of		Gas Well Other		9. OGRID Number				
CHEVRON	U.S.A. INC.			· · · · · · · · · · · · · · · · · · ·				
3. Address of 15 SMITH	of Operator ROAD; MIDLAND,	TX 79705		10. Pool name or Wildcat 46195 - Vacuum Bone Spring				
4. Well Loc								
		feet from the South lin	e and 2310' feet from	n the East line				
	tion 7 Town	nship 18S Range 35		EA County				
3.		5.E	her DR, RKB, RT, GR, etc					
Lonin in marine		3972' DF						
	12. Check /	Appropriate Box to Indi	cate Nature of Notice	Report or Other Data				
				•				
	NOTICE OF IN REMEDIAL WORK	_						
PULL OR AL		MULTIPLE COMPL [CASING/CEMEN					
DOWNHOLE			Amend PLC-	103-E PLC- (D3-F				
OTHER:		. [Bone Spring Production to the Abo Battery				
13. Desc	ribe proposed or comp	leted operations. (Clearly st	ate all pertinent details, a	nd give pertinent dates, including estimated date				
	arting any proposed we osed completion or rec		NMAC. For Multiple Co	ompletions: Attach wellbore diagram of				
			proval to amend Commi	ingle Order PLC-E, to add the Bone Spring				
production	to the Abo Reef Cons	olidated Battery, located in	Unit B, Section 7, T188	5, R35E, Lea County, New Mexico.				
				te the well in the Bone Spring Sands. We will Bone Spring Sands across the gross interval				
				0', 8590'-8600', 8660'-70', & 8720'-30', then				
frac stim. T	ie into Schlumberger	's GR-Sonic log (9/17/62) fe	or correlation & run a C	R-CNL-RAL f/PBTD TO 4800'. The Queen				
perfs f/4425	5'-4670' will be squeez	red. Revit	wied by	3/1/13				
		rest in all the wells in the b	attery and the royalty d	wner, the State of New Mexico, Commissioner				
of Public L	ands, has been notifie	ed. Please see the attachment	s for detailed well locatio	on and information.				
I hereby	certify that the information	ation above is true and comp	lete to the best of my kno	wledge and belief.				
		Recomm	end App	>rova(
Spud Date:	7/31/62	Rig Rel	lease Date:	9/23/62				
I hereby certi	fu that the information	above is true and complete t	to the hest of my knowled	Ine and balief				
I hereby certi		above is the and complete i	to the best of my knowled	ige and benef.				
		~//						
SIGNATURI	- arolyn	1 Harris TITLE	Petro Eng Tech Assis	tantDATE2/13/2013				
Type or print	name <u>Carolyn Hay</u>	vnie E-mail address:	chay@chevron.com	PHONE: <u>432-687-7261</u>				
For State Us		0 -						
-APPROVED	BY Ami	For TITLE	1. Questan	DATE 3/1/13				
	f Approval (n any):		- My areas					

MAY 2.0 2013