<b>.</b>					ATS-C	7-137	6
Folm 3160-3 (April 2004)	2004) OCD-HUBBS						VED 1137 , 2007
	UNITED STATE DEPARTMENT OF THE BUREAU OF LAND MA	INTERI(			5. Lease Serial NMLC-0 03	No.	
ļ	APPLICATION FOR PERMIT TO				6. If Indian, All	otee or Trib	e Name
la. Type of work:		TER	UNO VIN	XOX	7 If Unit or CA Agreement, Name and No.		
<ul><li>1b. Type of Well:</li><li>2. Name of Operator</li></ul>	X Oil Well Gas Well Other	X	Single Zone Mul	tiple Zone	8. Lease Name a NORTH MONUM	nd Well No.	# 348
APACHE COR	PORATION (LANA WILLIA		· (U	73	9. API Well No. <b>30 · 025</b> .		
TULSA	SOUTH YALE SUITE 1500 A, OKLAHOMA 74136	918-	No. (include area code) 491–4980		10. Field and Pool, EUNICE MONU ANDRES	or Explorate MENT GR	ry BG/SAN
	Report location clearly and in accordance with an FSL & 1460' FWL SECTION To zone SAME <b>LEA COUNTY CO</b>	18 T19	S-R37E LEA CO	. NM	11. Sec., T. R. M. o SECTION 18		
14. Distance in miles an	zone SAME <b>LEA COUNTY CO</b> Id direction from nearest town or post office* ely 12 miles Southwest of F			<u>{</u>	12. County or Paris LEA CO.	h	13. State NM
<ol> <li>Distance from propo- location to nearest property or lease lin (Also to nearest drig</li> </ol>	e, ft. 140' . unit line, if any)	16. No. of	acres in lease 160	17. Spacin	pacing Unit dedicated to this well 40		
<ol> <li>Distance from propo to nearest well, drilli applied for, on this le</li> </ol>	sed location*19. Proposed Depth20. BIng, completed, 809'4225'BI			20. BLM/E BLM			
21. Elevations (Show w	hether DF, KDB, RT, GL, etc.) 3695' GL		imate date work will star APPROVED	ť*	23. Estimated durat	p= 123	456780
· · · · · · · · · · · · · · · · · · ·		24. Atta			15 09 ys	. ADo	
<ol> <li>Well plat certified by a</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (</li> </ol>	in accordance with the requirements of Onshore a registered surveyor. if the location is on National Forest System L ith the appropriate Forest Service Office).		<ol> <li>Bond to cover th Item 20 above).</li> <li>Operator certification</li> </ol>	e operation: tion pecific infor	s form:	2	
25. Signature	Tanica	Name Jo	(Printed/Typed) pe T. Janica			Date 12/01/	06
Spproved by (Signature)	/s/ Don Peterson	Name	(Printed/Typed)			MAR 1	4 2007
ACTING FIE	ELD MANAGER	Office	Office CARLSBAD FIELD OFFICE				
pplication approval does onduct operations thereon onditions of approval, if a	not warrant or certify that the applicant holds le any, are attached.	egal or equita	ble title to those rights	in the subjec	tleasAvppRovo	TT-FOR	licant to YEAR
ages any fange fictitious of	and Title 43 U.S.C. Section 1212, make it a crime fraudulent statements or representations as to an	e for any per ny matter wil	son knowingly and will hin its jurisdiction.	fully to make	e to any department of <b>PROVAL SU</b>	agency of t BJECT	he United TO
CONDITION	S OF APPROVAL			GEI AN	NERAL REQ D SPECIAL FACHED	UIREN	<b>MENTS</b>

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DISTRICT' I 1625 N. PRENCH DR., HOBBS, NM 88240

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DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III 

#### State of New Mexico

Energy, Minerals and Natural Resources Department

# OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

1000 Rio Brazos R	d., Aztec, N	ME 87410								
DISTRICT IV 1220 S. ST. FRANCIS DI		NDF 87505	WELL LO	CATION	AND AG	CREA	AGE DEDICAT	ION PLAT		ED REPORT
API 1	Number			Pool Code				Pool Name		
30-025-	. 3811	+2	230	000		EU	NICE MONUMEN	T-GRAYBURG,	SAN ANDRES	
Property C	ode				Propert	-			Well Nur	
302708		ļ			NMG				348	
OGRID No	•			AP	<sup>Operato</sup> ACHE CO				Elevation 369	
873		<u> </u>			Surface					
UL or lot No.	Section	Township	Range	Lot Idn	Feet from		North/South line	Feet from the	East/West line	County
N	18	19-S	37-Е		1310	)	SOUTH	1460	WEST	LEA
			Bottom	Hole Lo	cation If	Diffe	erent From Sur	face	· • · · · · · · · · · · · · · · · · · ·	
UL or lot No.	Section	Township	Range	Lot Idn	Feet from	the	North/South line	Feet from the	East/West line	County
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40										
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	t i			1				organization e	and belief, and thei ither owns a working ineral interest in th	interest
								including the	proposed bottom hole to drill this well at	e location
	1					- F		location pursu owner of such	ant to a contract wi mineral or working	ith an interest,
								or to a volunt compulsory po	ary pooling agreement oling order heretofor	nt or a
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LOT 3	I	Gł	EODETIC CO	 DORDINAT	ES	1		1 Acreby	DR CERTINGAT Received certify with the wel plat way posted fro i surrebende by n	l location
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		-1310				1			06.13.1015	
								Certificate N	O. GARY EIDSON	12641
LOT 4	Ĺ							1000 CO	RONALD J. EIDSO	N 3239

DISTRICT I 1625 N. (PRENCE DR., HOBBS, NM 88240

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

#### State of New Mexico

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# OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 220 s. st. prancis i	DR., SANTA FE,	NM 87505	WELL LO	OCATION	AND ACREA	AGE DEDICATI	ON PLAT	C AMEND	ED REPO
API	Number			Pool Code			Pool Name		*••
Property	Code		<u> </u>		Property Nam			Well Nun	
					NMGSAU			348	
OGRID No	0.			APA	<sup>Operator Nan</sup> ACHE CORPO			Elevation 369	
	······	A			Surface Loc	ation		<b>-</b>	
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	18	19-S	37-E		1310	SOUTH	1460	WEST	LEA
			Bottom	Hole Lo	cation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	s Joint o	or Infill Co	nsolidation	Code Or	der No.				
NO ALLO	WABLE W	VILL BE AS	SSIGNED	TO THIS	COMPLETION U	UNTIL ALL INTER	RESTS HAVE BE	EN CONSOLIDA	ATED
		ORAN	ION-STAN	IDARD UN	NIT HAS BEEN	APPROVED BY	THE DIVISION		
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	1			1	I		organization ei	and belief, and that ther owns a working	t this interest
							or unleased mi	ineral interest in th proposed bottom hol	e land
				l			or has a right	to drill this well at	this .
	1			F	1		owner of such	ent to a contract wi mineral or working	ith an interest,
							or to a volunt	ry pooling agreeme bling order heretofor	nt or a
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	i			1	1		shown on this	certify that the well plat was plotted fro	m field
NMGSA #	02-12						under my supe	<b>surveys</b> made by n rvision, and that th	e same is
•		NMGSA #	02-11				true and correc	et to the best of my	r belief.
-									
		20 <sup>0</sup>		I	; ]		ма	Y 09, 2006	
							Date Surveye	d REVISION DATE:	06/13/0
		— →	<u> </u>	·	!		Signature &	Seal of	M
	2						Professional	Surveyor	
	-986-1	B.B.		1	1				
				l				6.13.1015	
NMGSA #02	-13	NMGSA #	02-14						
	1						Certificate No	RONALD J. EIDSON	12641 N 3239
	l.			L					

## APACHE CORPORATION

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NORTH MONUMENT GB/SA UNIT # 348UNIT "N"SECTION 18T19S-R37ELEA CO. NM

- 1. Drill 11" hole to 400'. Run and set 400' of 8 5/8" 24# J-55 ST&C casing. Cement with 300 Sx. of Class "C" cement + 1/2# Flocele/Sx, + 2% CaCl, circulate cement to surface.
- 2. Drill 7 7/8" hole to 4225'. Run and set 4225' of 5½" 17# J-55 ST&C casing. Cement with 850 Sx. of Class "C" cement + additives, circulate cement to surface.

#### APPLICATION TO DRILL

APACHE CORPORATION NORTH MONUMENT G/SA UNIT # 348 UNIT "N" SECTION 18 T19S-R37E LEA CO. NM

In response to questions asked under Section II of Bulletin NTL-6, the following information on the above will is provided for your information.

- 1. LOCATION: 1310' FSL & 1460' FWL SECTION 18 T19S-R37E
- 2. ELEVATION ABOVE SEA LEVEL: 3695' GL
- 3. GEOLOGIC NAME OF SURFACE FORMATION: Quaternery Aeolian Deposits.
- 4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
- 5. PROPOSED DRILLING DEPTH: 4225'
- 6. ESTIMATED TOPS OF GELOOGICAL MARKERS:

Rustler Annyarite	1267	Queen	3379.
Yates	2618'	Grayburg	3713'
Grayburg	3713'	San Andres	4022'

22201

7. POSSIBLE MINERAL BEARING FORMATION:

Grayburg	0 <u>i</u> 1
San Andres	011

8. CASING PROGRAM:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
	ce	A				
11"	0-400'	8 5/8"	24#	8-R	ST&C	J-55
7 7/8"	0-4225'	511	17#	8-R	ST&C	J-55

#### APPLICATION TO DRILL

APACHE CORPORATION NORTH MONUMENT G/SA UNIT # 348 UNIT "N" SECTION 18 T19S-R37E LEA CO. NM

#### 9. CEMENTING & SETTING DEPTH:

(200'

1700 Drill 11" hole to 400'. Run and set 400' of 8 5/8" 24# Surface 8 5/8" J-55 ST&C casing. Cement with 400 Sx. of Class "C" cement + 1# Flocele/Sx, + 2% CaCl, circulate cement to surface.

53"

Production Drill 7 7/8" hole to 4225'. Run and set 4225' of  $5\frac{1}{2}$ " 17# J-55 ST&C casing. Cement with 850 Sx. of Class "C" cement + additives, circulate cement to surface.

- 10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 Series 2000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nippled up on the 9 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected in this well.
- 11. PROPOSED MUD CIRCULATING SYSTEM:

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DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
1300° COR 0-400'	3.4-8.7	29-36	NC	Fresh water add paper to control seepage.
400-4225 <b>'</b>	10.0-10.2	29-38	NC	Brine water add paper to control seepage. use high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

#### APPLICATION TO DRILL

APACHE CORPORATION NORTH MONUMENT G/SA UNIT # 348 UNIT "N" SECTION 18 T19S-R37E LEA CO. NM

# 12. LOGGING, CORING, & TESTING PROGRAM:

- A. Open hole logs: Run Dual Laterolog, CNL, LDT, Gamma Ray and Caliper from Td back to 2500'±. Run Gamma Ray, Neutron from 2500'± back to surface.
- B. Run Sequentail formation tester over selected intervals.
- C. Rig up mud logger up on the hole at 3200'± and remain on hole to TD
- D. No cores or DST's are planned at this time

## 13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of  $H^2S$  in this area. If  $H^2S$  is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP <u>300-1200</u> PSI, and Estimated BHT <u>160±°</u>.

# 14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take <u>10</u> days. If production casing is run then an additional <u>30</u> days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

## 15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The <u>San Andres Grbg</u>formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as an Oil well.

- 1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of  $H_2S$
  - B. Physical effects and hazzards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing areas.
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
- 2. H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3. Windsock and/or wind streamers
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
  - C. There should be a windsock at entrance to location.
- 4. Condition Flags and Signs
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H<sub>2</sub>S present in dangerous concentration. Only emergency personnel admitted to location.
- 5. Well control equipment
  - A. See exhibit "E" & "E-1"

6. Communication

- A. While working under masks chalkboards will be used for communication.
- B. Hand signals will be used where chalk board is inappropriate.
- C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
- 7. Drillstem Testing
  - A. Exhausts will be watered.
  - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
  - C. If the location is near to a dwelling a closed DST will be performed.

8. Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.

13-A

9. If H<sub>2</sub>S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H<sub>2</sub>S scavengers if necessary.



ARRANGEMENT SRRA

SERIES 900

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APACHE CORPORATION NORTH MONUMENT G/SA UNIT # 348 UNIT "N" SECTION 18 T19S-R37E LEA CO. NM





