

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address Quest Cherokee, LLC, 6575 W. Loop South, Ste 455, Bellaire, TX 77401		OGRID Number 246804
Property Code 36688	Property Name West Bishop State	API Number 30 - 025-38503
Proposed Pool 1 Bishop Canyon, San Andres, West		Well No. 1
Proposed Pool 2		

Surface Location									
UL or lot no. C	Section 9	Township 18S	Range 38E	Lot Idn	Feet from the 990	North/South line North	Feet from the 2310	East/West line West	County Lea

Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Additional Well Information					
Work Type Code N	Well Type Code O	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3656'	
Multiple No	Proposed Depth 5200' 5100' per BG	Formation San Andres	Contractor Capstar Drilling	Date March 15, 2007	
Depth to Groundwater 68'		Distance from nearest fresh water well app 500'		Distance from nearest surface water > 1 mile	
Pit: Liner: Synthetic <input type="checkbox"/> 1/2" mils thick Clay <input type="checkbox"/> Pit Volume: bbls Drilling Method: Closed-Loop System <input checked="" type="checkbox"/> 25 mil liner will be placed under the closed loop system Fish Water <input checked="" type="checkbox"/> Brine <input checked="" type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>					

Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24	1820'	900 sx	Circulate
7 7/8"	5 1/2"	15.5	TD (5200')	450 sx	1500'

Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

We propose to drill a 12 1/4" hole to the top of the Anhydrite expected at 1800'. 8 5/8" 24# casing equipped with Cement guide shoe, float collar and centralizers will be run to TD and cemented with an adequate volume to circulate cement to surface. After WOC 18 hrs, a BOP will be nipped up and tested, we propose to drill a 7 7/8" hole to approximately 5200' and run logs. If the hole is determined to be dry, we will P&A to NMOCD standards. If the hole is deemed to be commercial we plan to run 5 1/2" casing equipped with a cement guide shoe, float collar and centralizers to TD and cement with adequate cement volume to bring TOC into 8 5/8" casing.

This well will be drilled with both fresh and salt water mud systems.

See attached BOP Diagram

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

R-12754

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OGD approved plan ☐.

Signature:

Bryan Simmons

Printed name: Bryan Simmons

Title: Manager, New Ventures

E-mail Address: bsimmons@grcp.net

Date: 2/21/07

Phone: 713 666 1200

OIL CONSERVATION DIVISION

Approved by:

Chris Williams
DISTRICT SUPERVISOR/GENERAL MANAGER

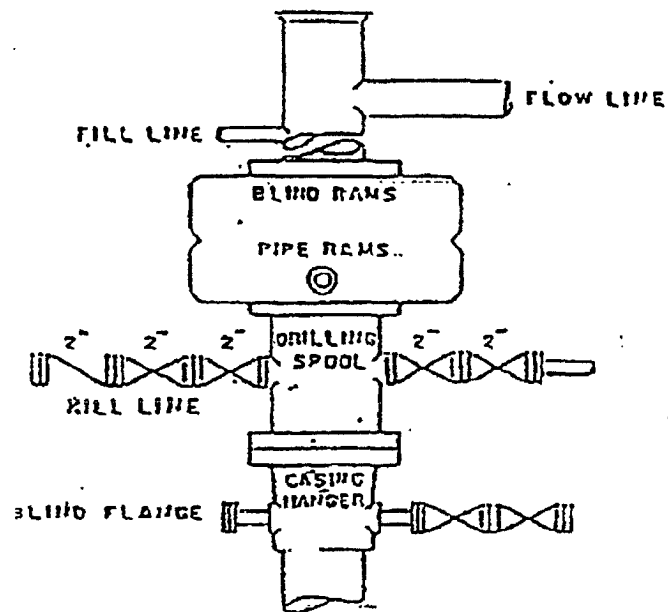
Approval Date:

AUG 23 2007

Expiration Date:

CONDITIONS OF APPROVAL; Operator to abide by Oil Conservation Rules and Regulation and R-12754 at all times.

BOP Diagram



5000 psi
Retul
discussed
8/24/07
w/ Vernon Dyer &
Richard Martin

Attachment to C-101

Quest Cherokee, LLC

Bishop Canyon #1

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 86240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 86210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87506

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-D25-38503	Pool Code 5790	Pool Name Bishop Canyon, San Andres, West
Property Code 36688	Property Name WEST BISHOP STATE	Well Number 1
OGRID No. 246804	Operator Name QUEST CHEROKEE, LLC	Elevation 3656'

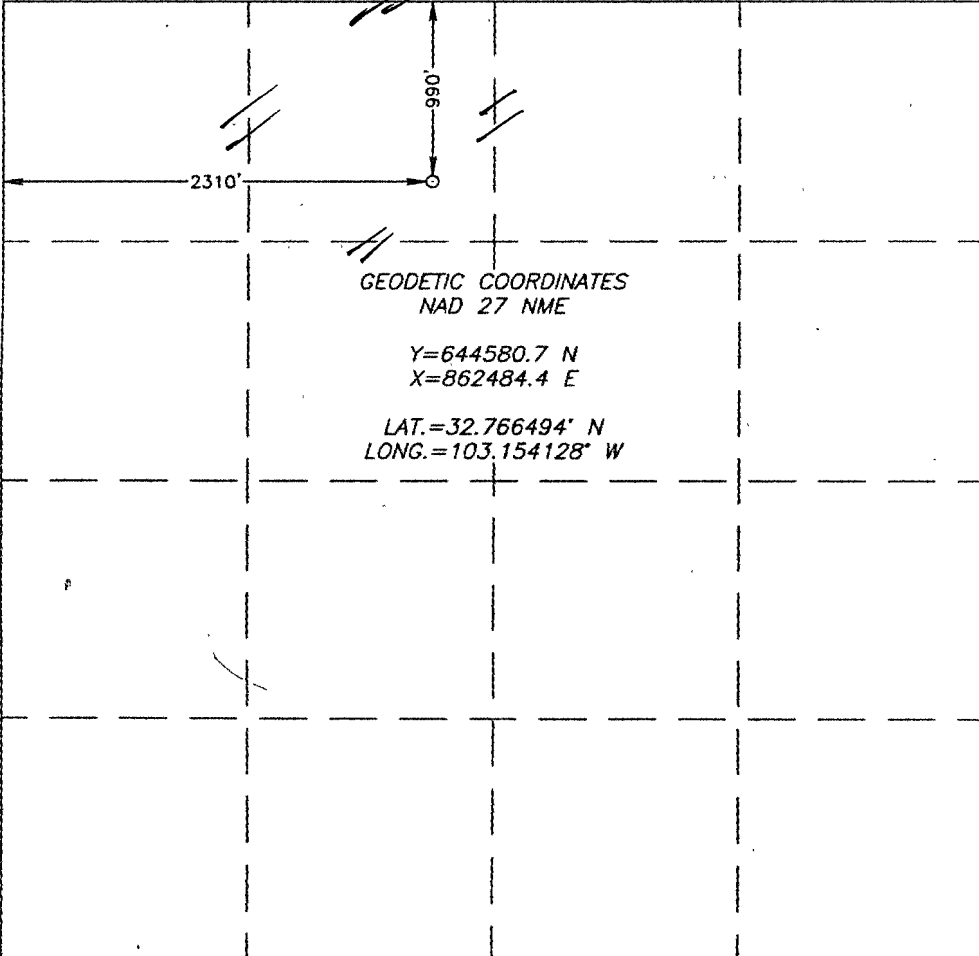
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	9	18-S	38-E		990	NORTH	2310	WEST	LEA

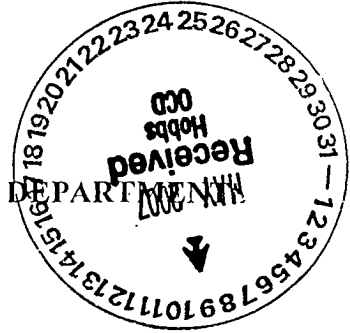
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40		Joint or Infill		Consolidation Code		Order No. R-12754			

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

	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>B. Simmons</u> Date: <u>5/10/07</u> Printed Name: <u>BRYAN SIMMONS</u>
	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. DECEMBER 12, 2006 Date Surveyed: _____ AR Signature & Seal of Professional Surveyor: _____ Signature: <u>Gary Eidson</u> Date: <u>12/29/06</u> 06.11.1859 Certificate No. GARY EIDSON 12041

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 13870
ORDER NO. R-12754

APPLICATION OF QUEST CHEROKEE, LLC FOR APPROVAL OF AN
APPLICATION FOR PERMIT TO DRILL, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on February 15, 2007, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3rd day of May, 2007, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Quest Cherokee, LLC ("Quest") seeks approval of a Division Form C-101 (Application for Permit to Drill, Re-Enter, Deepen, Plugback or Add a Zone ("APD")) for its State 9-4 Well No. 1, which is proposed to be drilled at a standard oil well location 990 feet from the North line and 2310 feet from the West line (Unit C) of Section 9, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico, to test the San Andres formation, Undesignated West Bishop Canyon-San Andres Pool (Oil - 05790). The NE/4 NW/4 of Section 9 is to be dedicated to the well forming a standard 40-acre oil spacing and proration unit for this pool.
- (3) Barbara A. Cox, Steve Cox, Lee Roberson and Tom Duncan, ("The Cox Group") all surface owners at or in the vicinity of Quest's proposed well, appeared at the hearing in opposition to the application.
- (4) At the hearing, Quest testified that the advertisement for this case

incorrectly stated the name of its proposed well. Quest's evidence shows the name of the proposed well to be the West Bishop State Well No. 1, hereinafter referred to as the "subject well" or "proposed well".

(5) The evidence and testimony presented demonstrates that prior to Quest filing an APD for the proposed well, the Hobbs District office of the Division ("Hobbs OCD") received a letter of objection to the proposed well dated December 1, 2006, from Mr. Michael Newell, legal counsel for the opponents in this case. The Hobbs OCD subsequently advised Quest that the APD for the proposed well would not be approved at the district level, and that the application would require a hearing before a Division examiner.

(6) Quest presented evidence that demonstrates that:

- (a) the proposed well is located on the northern edge of the city of Hobbs, New Mexico. While the well is not located within the city limits of Hobbs, it is located in a populated area containing houses, schools and businesses;
- (b) the NW/4 of Section 9 is contained within State of New Mexico Lease No. VA-3080. This lease was obtained by Upland Corporation on February 1, 2004. The acreage was subsequently assigned to Chesapeake Exploration Limited Partnership ("Chesapeake") and then to Tierra Oil Company, LLC ("Tierra"). Quest has purchased the right to develop this lease from Tierra. Pursuant to the term assignment from Chesapeake to Tierra, Quest is obligated, unless an additional extension of time is obtained, to commence drilling the proposed well by May 1, 2007;
- (c) the proposed well is situated in empty pastureland that is bordered on the north and west by family residences. The closest residence appears to be approximately 600 feet northwest of the proposed well; and
- (d) the surface of the land on which the proposed well is located is owned by Barbara A. Cox.

(7) Prior to Quest obtaining the rights to develop the NW/4 of Section 9, Tierra conducted an investigation into the surface issues at the proposed well site. As evidence in support of its application, Quest presented the following additional evidence obtained by Tierra:

- (a) Tierra contacted the Hobbs City Engineer's office and verified that the drill site for the proposed well is not located within the city limits of Hobbs, nor within any extra territorial jurisdiction controlled by the city of Hobbs;
- (b) Tierra contacted the Lea County Manager and verified that there are no county regulations applicable to the acreage at the drill site;
- (c) Tierra verified with the New Mexico State Land Office that there are no special lease stipulations that would govern development at the proposed well site; and
- (d) Tierra stated that a portion of the surface fee acreage within the NE/4 NW/4 of Section 9 may be within a housing subdivision known as the Country Living Estates Subdivision No. 2. The covenants for this subdivision state that the land is to be used for residential purposes, and that no noxious or offensive trade or activity is to occur on the land. However, the covenants do not specifically restrict oil and gas activity, which, in any event, would not be binding on the reserved mineral interest of the State of New Mexico.

(8) Quest has attempted to negotiate with Barbara A. Cox regarding surface use issues at the proposed well site, but has been unsuccessful in these efforts.

(9) The proposed West Bishop State Well No. 1 is Quest's attempt to re-establish production within the West Bishop Canyon-San Andres Pool. There are currently no active wells producing from this pool.

(10) The proposed West Bishop State Well No. 1 is a northwest step-out from wells within Section 9 that previously produced from the West Bishop Canyon-San Andres Pool. Quest's geologic interpretation shows that there is a thickening of the San Andres pay zone within the NW/4 of Section 9.

(11) The West Bishop Canyon-San Andres Pool has been substantially depleted by production. Consequently, Quest does not expect to encounter abnormal pressures during the drilling of the well.

(12) Quest's evidence further shows that directionally drilling the proposed well from a different surface location would add substantial drilling costs and would likely render the drilling of the well uneconomic.

(13) Quest stated in its testimony that it is willing to do whatever the Division deems necessary in order to protect the health and safety of the residents and the public in this area from any potential hazards associated with drilling and producing the proposed West Bishop State Well No. 1.

(14) The Cox Group presented evidence to support its opposition to the drilling of the West Bishop State Well No. 1. Much of the data cited in its testimony was obtained from a publication entitled "Oil and Gas at Your Door? A Landowners Guide to Oil and Gas Development." This publication was developed by the Oil & Gas Accountability Project, Durango, Colorado. The specific complaints are described as follows:

- (a) **The well is located in close proximity to houses, a school and a retirement home.** The proposed well is located approximately 567 feet from the nearest residence, approximately 1439 feet from an elementary school, and approximately 2055 feet from a retirement home;
- (b) **Noise levels.** The Cox Group contends that noise levels during drilling and production operations at the proposed well will be excessive. In support of this contention, it cited a study conducted in La Plata County, Colorado that demonstrates that various oil and gas activities emit noise levels in the range of 50-88 DBA's (A-Weighted Decibel). Further evidence was presented to show that the State of Colorado has promulgated noise control regulations for oil and gas development in residential areas that limit noise levels to 50-55 DBA's at a distance of 350 feet from the source;
- (c) **Property values.** The Cox Group contends that their property values will decline as a result of the drilling of the West Bishop State Well No. 1. In support of this contention, it cited a study conducted in La Plata County, Colorado which shows that despite an overall increase in housing values between 1990 and 2000, the selling price for properties that had an oil or gas well on them was 22% less than a similar property without a well on site;

- (d) Health and safety concerns related to the discharge of Hydrogen Sulfide (H₂S) and Volatile Organic Compounds (VOC's). The Cox Group is concerned that H₂S and VOC's will be discharged to the atmosphere from production facilities at or near the well site. Discharges of this nature may endanger the health and safety of the residents and the public in the vicinity of the well or the production facility;
- (e) Health, environmental and safety concerns related to the use of various chemical additives used in drilling and production operations. The Cox Group is concerned that the use of chemicals and/or additives used in drilling and production operations will pose a threat to the surface and subsurface environment and pose safety and health hazards to the residents and the public in the vicinity of the proposed well;
- (f) The use of earthen pits for drilling and/or production operations may pose a threat to groundwater in the vicinity of the proposed well. The Cox Group is concerned that the use of earthen pits for drilling and/or production operations may endanger ground water; and
- (g) The possibility of a well blowout during drilling operations poses a significant threat to the health and safety of the residents and the public in the vicinity of the proposed well.

(15) Barbara A. Cox ("Mrs. Cox"), the surface owner at the proposed well site, testified at the hearing via conference phone from Hobbs, New Mexico. Mrs. Cox stated in her testimony that she is opposed to the drilling of the West Bishop State Well No. 1, even if the Division imposes additional requirements to protect the health and safety of the residents and the public.

(16) The Cox Group further contends that the application should be denied based upon Quest's failure to comply with Division rules and procedures, including:

- (a) Quest's failure to register with the Division;

- (b) Quest's failure to file Division Forms C-101 and C-102 (Well Location and Acreage Dedication Plat) with the Hobbs OCD; and
- (c) Quest's notice of hearing incorrectly described the location of the West Bishop State Well No. 1 as being five miles north-northwest of Hobbs, New Mexico.

(17) Mr. Cliff Burch, Superintendent of the Hobbs Municipal Schools, sent a letter to the Division dated February 13, 2007. In his letter, Mr. Burch expressed concern that the West Bishop State Well No. 1, being in close proximity to the College Lane Elementary School, will pose a threat to the health and safety of the students attending that school.

(18) The position of the Cox Group is that the application of Quest should be denied. In the alternative, however, the Cox Group requests that in the event the application is approved, Quest should be required to take measures to protect the health and safety of the residents and the public, among them: i) the well and/or production facilities should be fenced; ii) pipelines should be employed to transport production or waste out of the area so as to minimize truck and transport traffic; iii) no flaring of gas or waste should be allowed; iv) the location should be constructed with a lightning suppression grid system; v) a vapor recovery system should be utilized; and vi) a closed loop drilling technology should be utilized.

(19) The evidence presented demonstrates that Quest's notice of hearing in this case is sufficient, and that the other procedural issues raised by the Cox Group are not grounds for dismissal or denial of this application.

(20) The evidence and testimony presented in this case demonstrates that Quest, by virtue of obtaining certain operating rights from Tierra, has the right to develop the oil and gas reserves underlying the NW/4 of Section 9.

(21) The geologic evidence presented by Quest is sufficient to justify the drilling of the West Bishop State Well No. 1 at the proposed location.

(22) "Correlative Rights" is defined by the New Mexico Oil and Gas Act [NMSA 1978, Section 70-2-33.H], in part, as "the opportunity afforded, as far as it is practicable to do so, to the owner of each property in a pool to produce without waste his just and equitable share of the oil or gas, or both, in the pool".

(23) In order to protect correlative rights, Quest should be authorized to drill its West Bishop State Well No. 1 at the proposed location in Section 9.

(24) The rights of a surface owner do not constitute "correlative rights" within the above definition.

(25) The Cox Group presented sufficient evidence to demonstrate that due to the proximity of the West Bishop State Well No. 1 to houses, schools and other facilities, Quest should be required to take special precautions during drilling and production operations.

(26) The New Mexico Oil and Gas Act [NMSA 1978, Section 70-2-12.B] authorizes the Division to “prevent fires”, “to require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties” and “to regulate the disposition of nondomestic wastes resulting from oil and gas production”.

(27) Quest presented little, if any, engineering evidence relating to its proposed drilling and production operations. Consequently, there is insufficient evidence to impose specific requirements at this time.

(28) The Hobbs OCD routinely approves, oversees and controls drilling and production operations within the city of Hobbs. Consequently, the Hobbs OCD should be the lead entity to determine the measures to be taken by Quest in order to protect the health and safety of the residents and the public at the vicinity of the well and production facilities, and in order to protect the surface and subsurface environment from contamination. The issues to be addressed by the Hobbs OCD should include, but are not necessarily limited to:

- (a) blowout Prevention;
- (b) possible use of closed loop drilling technology;
- (c) fencing of the well and production facilities;
- (d) the flaring or venting of H₂S and VOC's;
- (e) pipelines and/or production facilities; and
- (f) lightning protection

(29) Approval of the application, subject to certain provisions and restrictions relating to drilling and production operations, will afford the applicant the opportunity to produce its just and equitable share of the oil and gas reserves underlying the NE/4 NW/4 of Section 9, will allow the recovery of oil and gas reserves underlying the NE/4 NW/4 of Section 9 that may otherwise not be recovered, thereby preventing waste, and will protect the health and safety of the residents and the public in the vicinity of the well and production facilities.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Quest Cherokee, LLC is hereby authorized to drill its West Bishop State Well No. 1 at a standard oil well location 990 feet from the North line and 2310 feet from the West line (Unit C) of Section 9, Township 18 South, Range 38 East, NMPM, Lea County, New Mexico, to test the San Andres formation, Undesignated West Bishop Canyon-San Andres Pool (Oil – 05790). The NE/4 NW/4 of Section 9 shall be

dedicated to the well forming a standard 40-acre oil spacing and proration unit for this pool.

(2) Prior to commencing drilling and production operations, the applicant shall consult with the Hobbs OCD in order to determine the measures to be taken to protect the health and safety of the residents and the public at the vicinity of the well and production facilities, and in order to protect the surface and subsurface environment from contamination. The issues to be addressed by the Hobbs OCD shall include, but are not necessarily limited to:

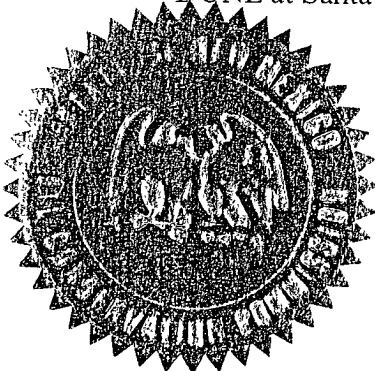
- (a) blowout prevention;
- (b) possible use of closed loop drilling technology;
- (c) fencing of the well and production facilities;
- (d) the flaring or venting of H₂S and VOC's;
- (e) pipelines and/or production facilities; and
- (f) lightning protection.

(3) The Hobbs OCD shall issue a conditional APD approval setting forth the specific conditions it deems appropriate, and shall cause copies of the APD to be delivered to counsel who have appeared in this case.

(4) Quest shall not commence drilling operations until five business days after the issuance of the APD approval specifying applicable conditions, and shall conduct all operations in compliance with such conditions.

(5) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



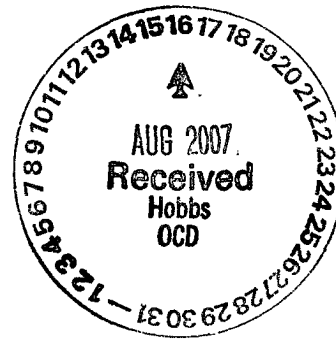
SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.
Director

Quest Cherokee, LLC

9520 North May Avenue, Suite 300
Oklahoma City, OK 73120



Chris Williams
NMOCD
1625 N. French Drive
Hobbs, New Mexico 88240

August 16, 2007

Re: Quest Cherokee, LLC
West Bishop State #1
Section 9, T18S, R38E
990' FNL & 2310' FWL
Lea County, NM

Mr. Williams:

Quest Cherokee, LLC plans to drill the subject well to a depth of approximately 5100' in order to test the San Andres formation. This well is located in a residential just northeast of Hobbs, New Mexico. Quest plans to begin drilling the subject well in the first half of September 2007.

In order to minimize the impact on nearby residences Quest plans to employ special equipment and practices not normally used on wells located in more urban settings. Such equipment and practices will include:

The use of noise reducing mufflers on rig, pump and power plant engines.

The use of a closed loop system equipped with gas knock out equipment. The use of the closed loop system will allow the elimination of drilling pits which may create long term soil alteration. The use of the gas knock out equipment will allow any free gas knocked out of the system to be flared.

Quest is currently contacting residents in the neighborhood and offering to put them up in local hotels so that they can be away from any possible commotion caused by the drilling operations.

Quest will employ state of the art H2S monitoring equipment on location and has an H2S contingency plan prepared by Calloway Safety. All personnel will be trained to detect and safely deal with any H2S emissions in an unlikely case. In addition to the H2S equipment a qualified H2S safety consultant will be on location 24 hours a day from the time surface casing is set to the time the well is cased or plugged.

Quest plans to drill 24 hours a day until TD is reached. It is estimated that the drilling operations will take a week to 10 days. After drilling, completion activities will be conducted within daylight hours.

If you have any questions or comments, please call me at 505 626 7660.

Yours truly,

A handwritten signature in black ink, appearing to be "Phelps White", written over a horizontal line.

Phelps White
Consultant