## 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. 10924 Order No. R-10076

APPLICATION OF GECKO, INC. FOR DIRECTIONAL DRILLING AND UNORTHODOX OIL WELL SURFACE AND BOTTOMHOLE LOCATIONS, LEA COUNTY, NEW MEXICO.

# ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 3, 1994, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 10th day of March, 1994, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, GECKO, Inc., seeks authorization to re-enter its Gecko State "35" Well No. 1 located at an unorthodox surface location 434 feet from the North line and 1762 feet from the East line (Unit B) of Section 35, Township 16 South, Range 37 East, NMPM, establish a kick off point and deviate the wellbore in a southerly direction to a total vertical depth of approximately 11,750 feet at the base of the Strawn formation at a point within a 100 foot radius of a targeted bottomhole location 934 feet from the North line and 1762 feet from the East line (Unit B) of Section 35.

- (3) The applicant proposes to dedicate the N/2 NE/4 of Section 35 to the above-described well in the Casey-Strawn Pool forming a standard 80-acre oil spacing and proration unit for said pool.
- (4) The subject well is located within one mile of the outer boundary of the Casey-Strawn Pool which is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-4992, as amended, which require standard 80-acre spacing and proration units with wells to be located within 150 feet of the center of a governmental quarter-quarter section or lot.
- (5) Both the surface and proposed bottomhole locations of the aforesaid Gecko State "35" Well No. 1 are unorthodox within the Casey-Strawn Pool.
- (6) The Gecko State "35" Well No. 1 was originally drilled to a total depth of approximately 11,806 feet at an unapproved unorthodox location (as described above) during November, 1993. Testimony by the applicant indicates that the wellbore penetrated an "algal mound" within the Strawn formation but in an area which did not contain reservoir quality pay. Further testimony indicates that the well is currently plugged and abandoned.
- (7) The applicant has analyzed sidewall core data obtained during the drilling of the aforesaid Gecko State "35" Well No. 1 as well as seismic and other geologic data and has determined that the subject well, if directionally drilled to the proposed bottomhole location, should penetrate the "algal mound" within an area of hydrocarbon bearing reservoir rock.
- (8) The geologic evidence presented by the applicant indicates that the targeted "algal mound" within the Strawn formation is small in size and limited to a portion of the W/2 NE/4 of Section 35.
- (9) The applicant's geologic evidence indicates that the proposed unorthodox bottomhole location is necessary in order to penetrate the "algal mound" within the Strawn formation in a productive area.

- (10) The affected offset acreage, being the SW/4 NE/4 of Section 35, is owned and controlled by the applicant.
- (11) No other offset operator and/or interest owner appeared at the hearing in opposition to the application.
- (12) Approval of the proposed directional drilling and unorthodox bottomhole location will afford the applicant the opportunity to produce its just and equitable share of the oil in the affected pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.
- (13) The applicant should be required to determine the subsurface location of the kick off point in the wellbore prior to directional drilling and should be required to conduct a directional survey during or upon completion of directional drilling operations in order to determine the bottomhole location.
- (14) The applicant should be required to submit copies of the directional surveys conducted on the subject well to the Santa Fe and Hobbs offices of the Division.
- (15) The applicant should notify the supervisor of the Hobbs district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the subject well in order that these operations may be witnessed.

#### IT IS THEREFORE ORDERED THAT:

(1) The applicant, GECKO, Inc., is hereby authorized to re-enter its Gecko State "35" Well No. 1 located at an unorthodox surface location 434 feet from the North line and 1762 feet from the East line (Unit B) of Section 35, Township 16 South, Range 37 East, NMPM, establish a kick off point and deviate the wellbore in a southerly direction to a total vertical depth of approximately 11,750 feet at the base of the Strawn formation at a point within a 100 foot radius of a targeted unorthodox bottomhole location 934 feet from the North line and 1762 feet from the East line (Unit B) of Section 35.

- (2) The N/2 NE/4 of Section 35 shall be dedicated to the above-described well in the Casey-Strawn Pool forming a standard 80-acre oil spacing and proration unit for said pool.
- (3) The applicant shall determine the subsurface location of the kick off point in the wellbore prior to directional drilling and shall conduct a directional survey during or upon completion of directional drilling operations in order to determine the bottomhole location.
- (4) The applicant shall submit copies of the directional surveys conducted on the subject well to the Santa Fe and Hobbs offices of the Division.
- (5) The applicant shall notify the supervisor of the Hobbs district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the subject well in order that these operations may be witnessed.
- (6) Subsequent to completing directional drilling operations, the applicant shall submit a Division Form C-102 (Acreage Dedication Plat) to the Hobbs office of the Division showing the surface and bottomhole location of the Gecko State "35" Well No. 1.
- (7) Jurisdiction of this cause 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

SEAL