

**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. 15523  
ORDER NO. R-14217**

**APPLICATION OF NEMO FUND I, LLC FOR APPROVAL OF THE MOE STATE  
SAN ANDRES UNIT, LEA COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing on August 4, 2016 at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 27<sup>th</sup> day of September, 2016, 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, Nemo Fund I, LLC ("Nemo Fund", OGRID 310809) seeks approval of its Moe State San Andres Exploratory Unit for oil and gas in the Unitized Interval underlying the following described 2,241.16 acres, more or less, of State and fee lands located in Lea County, New Mexico:

**Township 10 South, Range 36 East, NMPM**

Section 12:	W/2, W/2 E/2
Sections 13 and 14:	All
Section 23:	All
Section 24:	E/2, E/2 W/2
Sections 25 and 26:	All
Section 27:	S/2
Section 34:	All

Section 35:	E/2, NE/4 NW/4, NW/4 SW/4, S/2 SW/4
Section 36:	All

(3) The Unitized Interval is the San Andres formation, the correlative interval of which is identified between the logged depths of 4665 feet and 5645 feet in the Dual Spaced Neutron/Gamma Ray log formulated by Halliburton on the Muddy Waters State Com Well No. 1 (API 30-025-39011) located in (Unit N) of Section 1, Township 10 South, Range 36 East, NMPM, Lea County, New Mexico.

(4) The Applicant appeared at the hearing through legal counsel and presented testimony as follows:

(a) The proposed Moe San Andres State Unit comprises eight separately owned tracts. Seven of those tracts (2081.16 acres), are in the State Trust and are administered by the Commissioner of Public Lands of the State of New Mexico ("State Land Office" or "SLO"). All of the SLO leases are held by Nemo Fund I, LLC.

(b) The remaining tract is privately owned (160 acres) and held by Santa Fe Energy Resources, Inc.

(c) The Commissioner of Public Lands has given preliminary approval and the Unit Agreement will be effective upon final approval of the Commissioner.

(d) Nemo Fund is proposing three Units in the same area with common borders at the request of the SLO, the two additional Units being the subject of companion Cases Nos. 15522 and 15524. There are no pending lease expirations, the Units are proposed in order to have centralized facilities and to exploit a resource that is heterogeneous, allowing adequate drilling to locate the better pay intervals and for all owners to share.

(e) The prospective San Andres formation is expected to be laterally continuous and present throughout these proposed Units.

(f) The type well for all three Units is located near, but not within any of the Units, and this was acceptable to the SLO. The Unit is not limited to horizontal wells and currently no wells within the proposed Unit area produce from the San Andres formation.

(g) The Units are being formed in order to drill and complete the San Andres formation with horizontal wells. Horizontal wells are being proposed because of lateral pay quality variation within the same dolomite lens. The analogous Sawyer San Andres Pool production was presented as examples of lateral pay quality variation. Within that pool, many vertical wells have very low recovery, but a few have much better.

(h) The horizontal wells are expected to have 10 to 20 percent oil cut, with the water disposed of through permitted disposal wells in the Devonian formation. Nemo Fund expects to drill four horizontal wells per section.

(i) Division records show three active San Andres disposal wells in the area of these three Units. Nemo is not expecting these to affect the proposed horizontal wells because of the lateral heterogeneity, low permeability, and lack of fracturing in the San Andres dolomite.

(j) The first wells are planned as north to south or south to north, although the drilling direction may be modified for future drilling. The core recently obtained through the San Andres in this area did not show expected fracturing or indicate preferred orientation of stress.

(k) The Unit agreement covers the entire San Andres formation or roughly 1000 feet, but the initial planned target is in the 60-foot thick dolomite which begins 300 feet down from the top of the formation. The first 300 feet consists of Anhydrite which is relatively impermeable. There may be multiple targets within the dolomite for horizontal drilling.

(l) Pursuant to the Unit Agreement, the initial well within the Unit must be commenced within 60 days of the effective date of the Unit Agreement.

The Division concludes the following:

(5) No other party appeared at the hearing or otherwise opposed this application.

(6) These proposed San Andres Units and the Sawyer San Andres Pool may be an extension of the Slaughter trend from West Texas. The Slaughter field has well documented reservoir heterogeneity both in production and numerous reservoir studies.

(7) The San Andres formation in these proposed Units may now be economical for drilling and production using modern horizontal drilling and completion techniques. All of the proposed unit acreage appears prospective for recovery of oil and gas from the target formation under the concept proposed by the Applicant.

(8) The proposed Unit will prevent waste and protect correlative rights.

(9) The application should be approved.

**IT IS THEREFORE ORDERED THAT:**

(1) The Moe State San Andres Exploratory Unit Agreement executed by Nemo Fund I, LLC is hereby approved for oil and gas in the Unitized Interval underlying the

following described 2,241.16 acres, more or less, of State and fee lands located in Lea County, New Mexico:

**Township 10 South, Range 36 East, NMPM**

Section 12:	W/2, W/2 E/2
Sections 13 and 14:	All
Section 23:	All
Section 24:	E/2, E/2 W/2
Sections 25 and 26:	All
Section 27:	S/2
Section 34:	All
Section 35:	E/2, NE/4 NW/4, NW/4 SW/4, S/2 SW/4
Section 36:	All

(2) The Unitized Interval is the San Andres formation, the correlative interval of which is identified between the logged depths of 4665 feet and 5645 feet in the Dual Spaced Neutron/Gamma Ray log formulated by Halliburton on the Muddy Waters State Com Well No. 1 (API 30-025-39011) located in Unit N of Section 1, Township 10 South, Range 36 East, NMPM, Lea County, New Mexico.

(3) The plan contained in the Moe State San Andres Exploratory Unit Agreement for the development and operation of the above-described unit area is hereby approved in principle; provided, however, notwithstanding any of the provisions contained in the unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation that is now, or may hereafter be, vested in the Division to supervise and control operations for the unit and production of oil and gas therefrom.

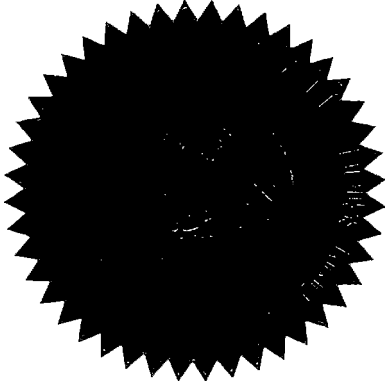
(4) The unit operator shall file with the Division an executed original or executed counterpart of the unit agreement within 30 days of the effective date thereof; in the event of subsequent joinder by any other party, or expansion or contraction of the unit area, the unit operator shall file with the Division, within 30 days thereafter, copies of the unit agreement reflecting the subscription of those interests having joined or ratified.

(5) Copies of all expansions or contractions of the unit area shall be submitted to the Division Director.

(6) This order shall become effective upon the final approval of the unit agreement by the Commissioner of Public Lands. This order shall terminate upon the termination of the unit agreement. The last unit operator shall notify the Division immediately in writing of such termination.

(7) Jurisdiction of this case is 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

*David R. Catanach*

DAVID R. CATANACH  
Director