



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 04-0295771

THE APPLICATION OF LEWIS PETRO PROPERTIES, INC. FOR THE DESIGNATION OF THE SECOND ESCONDIDO FORMATION IN THE OWEN (OLMOS) FIELD AS A TIGHT GAS FORMATION, WEBB COUNTY, TEXAS

HEARD BY: Paul Dubois – Technical Examiner
Ryan Larson – Director

HEARING DATE: August 18, 2015

CONFERENCE DATE: September 15, 2015

APPEARANCES:

REPRESENTING:

APPLICANT

Sandra Buch
Rick Torres
Nevada Smith
Kelly Beck

Lewis Petro Properties, Inc.

OBSERVER

Lori Walters

Laredo Energy

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Pursuant to Statewide Rule 101 (16 Tex. Admin. Code §3.101) Lewis Petro Properties, Inc. ("Lewis") seeks a tight formation area designation for a portion of the Second Escondido Formation in the Owen (Olmos) Field in Webb County, Texas. Rule 101 specifies the procedure by which an operator can obtain Commission certification that natural gas from a particular gas well qualifies as high-cost gas under the Texas Tax Code §201.057(a)(2)(A) and that such gas is exempt from or eligible for a reduction of the

severance tax imposed by the Texas Tax Code §201. The proposed area covers 116,709 acres, and adjoins several other tight formation areas previously established for the Second Escondido Formation. The proposed area effectively extends the existing tight formation areas southwest to the Rio Grande River. The application was not protested. The Examiners recommend Lewis' application be granted.

APPLICABLE LAW

Statewide Rule 101 specifies the procedure by which an operator can obtain a Railroad Commission of Texas certification that natural gas from a particular gas well qualifies as high-cost natural gas under the Texas Tax Code and that such gas is eligible for a reduction of the severance tax. One of the categories of high-cost gas is gas that is produced from a designated tight formation area. In this application, Lewis seeks to designate a portion of the Second Escondido Formation in the Owen (Olmos) Field as a tight formation area. To obtain this designation pursuant to Statewide Rule 101(f)(3)(B), Lewis must provide specific evidence required by the Rule and demonstrate the following:

- (i) The in situ permeability throughout the proposed formation or specific portion thereof is 0.1 millidarcies ("md") or less, as determined by geometric mean or median analysis of available data from all wells that either have been tested or are completed in the proposed formation within the requested area;
- (ii) The pre-stimulation stabilized production rate against atmospheric pressure at the wellhead, as determined by a geometric mean or median analysis of available data from all wells within the requested area that either have been tested and/or are completed in the proposed formation or specific portion thereof, does not exceed the production rate specified in the rule;
- (iii) No well drilled into the formation is expected to produce, without stimulation, more than five barrels of crude oil per day; and
- (iv) The requested designated area does not extend beyond a two and one-half mile radius drawn from any data point well.

The Commission has, on occasion and after a hearing on the request, approved tight formation area designations that meet all of the criteria above except Rule 101(f)(3)(B)(iv). In those cases, the applicants have demonstrated that the subject formation was broadly continuous across a large area—in some cases across one or several counties—and that the available data is representative of the entire requested formation area and sufficiently demonstrates that the entire requested formation area meets requirements of Rule 101(f)(3)(B)(i) through (iii). Such is the case in the present matter.

DISCUSSION OF EVIDENCE

Portions of the Second Escondido Formation in the Owen (Olmos) Field in Webb County, Texas, have been designated as tight gas formation areas pursuant to Statewide Rule 101(f). The following dockets established tight gas formations in the subject area:

- Docket No. 04-0200599, effective December 21, 1992;
- Docket No. 04-0207816, effective March 14, 1995;
- Docket No. 04-0221138, effective March 9, 1999;
- Docket No. 04-0259194, effective November 12, 2008;
- Docket No. 04-0270235, effective May 9, 2011;
- Docket No. 04-0271945, effective October 11, 2011; and
- Docket No. 04-0275334, effective June 12, 2012.

In these prior dockets, the available permeability data established a geometric mean value of 0.016 md, which meets the rule requirement of less than 0.1 md. The proposed area is a 116,709 acre extension of the combined areas included in the dockets above. The proposed area extends the combined area to the southwest to the Rio Grande River.

The Second Escondido Formation is about 200 feet to 250 feet thick in the proposed area. The type log for the subject well is the Santa Elena Well No. 6H (API No. 42-479-42645). In this well, the Second Escondido Formation is a sand interval that extends from a depth of 6,510 feet to 6,705 feet. The Second Escondido Formation is continuous across the proposed area.

The top of the correlative interval for the Owen (Olmos) Field is 5,050 feet. However, in the proposed area the top of the Second Escondido Formation is shallowest at a depth of about 4,200 feet. Pursuant to Statewide Rule 101(f)(3)(B)(ii), the maximum allowable unstimulated production rate for a field interval whose top is from 4,000 feet to 4,500 feet may not exceed 122 thousand cubic feet (MCF) of gas per day. Lewis used the Darcy equation for steady state radial flow of gas to calculate the stabilized unstimulated flow rate for the seven wells to have a geometric mean of 0.6 MCF gas per day. In addition, Lewis provided data from two vertical wells that were subject to small stimulation treatments. In these two wells, the maximum flow rates never exceeded 81 MCF gas per day, below the maximum of 122 MCF established in the Rule. Lewis' representatives testified that no well drilled into the formation is expected to produce, without stimulation, more than five barrels of crude oil per day.

Lewis provided permeability and flow rate data for seven wells within the proposed area. The permeability data was based on 282 core samples from the seven wells and indicated a geometric mean permeability of 0.0013 md. Pursuant to Statewide Rule 101(f)(3)(B)(I), the in situ permeability throughout the proposed formation must be 0.1 md or less.

Statewide Rule 101(f)(3)(B)(iv) requires that the proposed designated area does not extend beyond a two and one-half mile radius drawn from any data point well. That is, one data point well can represent a circular area of 12,566 acres. In this matter, Lewis proposed seven data point wells for permeability and flow rate data, and an additional two wells demonstrating flow rate data. The data point wells are not evenly spaced across the proposed area such that all of the proposed area is within 2.5 miles of a data point well. The Examiners take note of the following:

- The proposed area consists of 116,709 acres, which, at a minimum would require 10 data point wells for full coverage.
- Lewis has provided seven wells for permeability and flow rate data, plus two data point wells demonstrating flow rate. These wells are generally but not necessarily evenly located across the proposed area.
- Lewis' analysis of well logs, geologic structure and cross-sections extending beyond the proposed tight formation area demonstrate that the Second Escondido Formation is continuous and geologically consistent across the area.
- The permeability data, in particular, was based on extensive core sample testing (282 samples) from the seven wells in the proposed tight formation area.

The Examiners conclude that Lewis has met its burden of proof under Statewide Rule 101 and the proposed area should be designated by the Commission as a tight formation area. A map of the proposed area and a list of the surveys included in this area are attached.

FINDINGS OF FACT

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
2. All parties entitled to notice were notified of the amended application and given 21 days to file a protest. No protests were filed.

3. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
4. The Second Escondido Formation is about 200 feet to 250 feet thick in the proposed area.
 - a. The type log for the subject well is the Santa Elena Well No. 6H (API No. 42-479-42645). In this well, the Second Escondido Formation is a sand interval that extends from a depth of 6,510 feet to 6,705 feet.
 - b. The Second Escondido Formation is continuous across the proposed area.
5. In the proposed area the top of the Second Escondido Formation is shallowest at a depth of about 4,200 feet. Pursuant to Statewide Rule 101(f)(3)(B)(ii), the maximum allowable unstimulated production rate for a field interval whose top is from 4,000 feet to 4,500 feet may not exceed 122 thousand cubic feet (MCF) of gas per day.
 - a. The geometric mean unstimulated gas flow rate in seven data point wells is 0.6 MCF gas per day.
 - b. Two vertical wells that were subject to small stimulation treatments have demonstrated maximum flow rates that never exceeded 81 MCF gas per day.
6. The geometric mean permeability of 282 core samples from the seven data point wells was 0.0013 md, which is less than 0.1 md as required by Statewide Rule 101(f)(3)(B)(i).
7. No well drilled into the formation is expected to produce, without stimulation, more than five barrels of crude oil per day.
8. The requested area extends beyond a two and one-half mile radius drawn from any data point well; the evidence in the record demonstrates that the available data is more than sufficient to establish that the requested area meets the permeability and flow rate requirements of the Rule.

CONCLUSIONS OF LAW

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051
2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 3.101(g)(3)
3. The proposed Second Escondido Formation in the Owen (Olmos) Field is a tight gas formation area. 16 Tex. Admin. Code § 3.101(f)

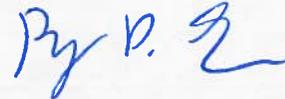
RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend the Commission enter an order granting the application of Lewis Petro Properties, Inc., to designate 116,709 acres in the Second Escondido Formation, Owen (Olmos) Field, in Webb County, Texas, as a tight gas formation area.

Respectfully submitted,

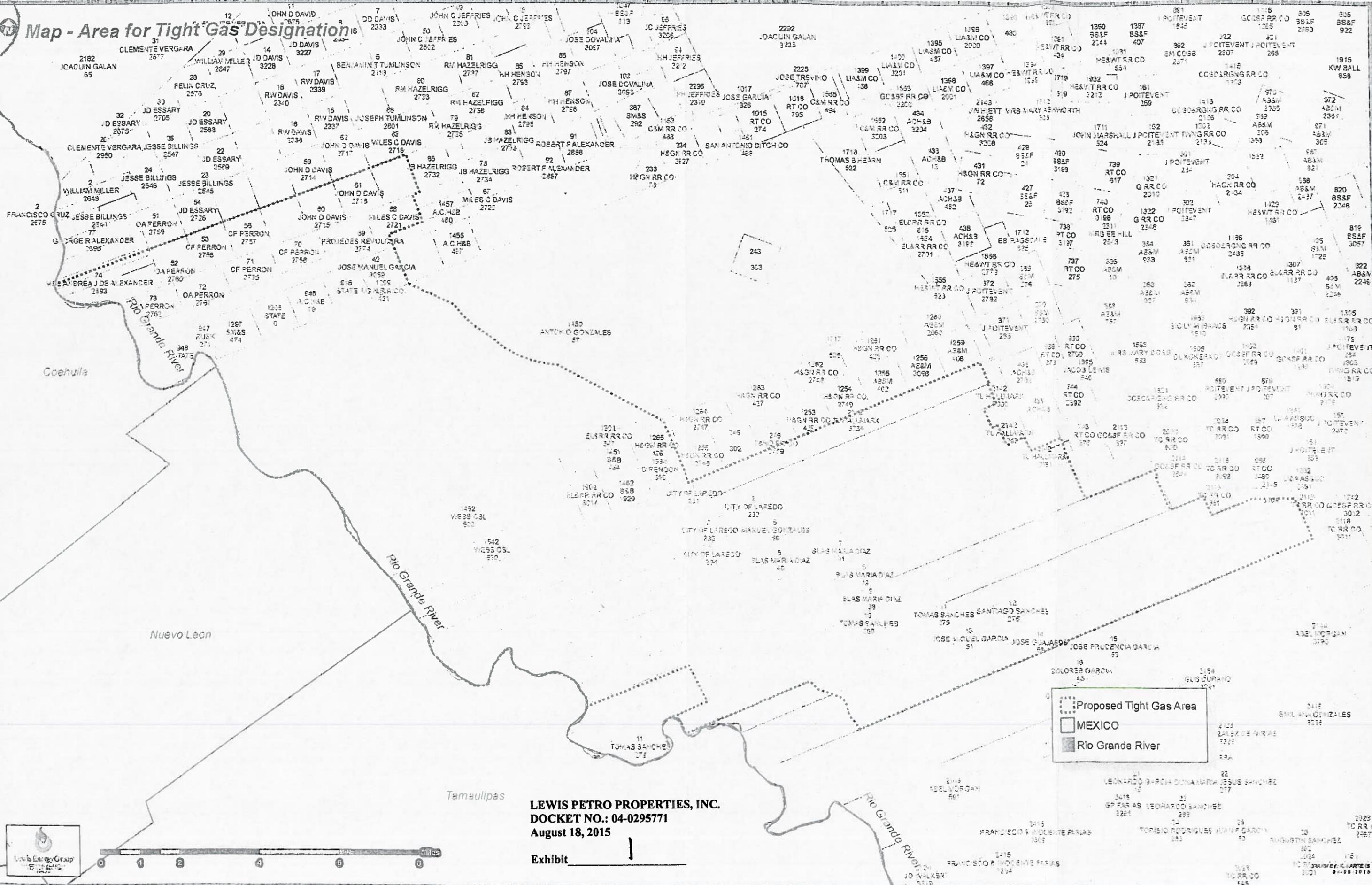


Paul Dubois
Technical Examiner



Ryan Larson
Director

Map - Area for Tight Gas Designation



Proposed Tight Gas Area
 MEXICO
 Rio Grande River

LEWIS PETRO PROPERTIES, INC.
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Exhibit 1



SURVEYS INCLUDED IN APPLICATION AREA

WEBB COUNTY

SECT	SURVEY	ABSTRACT
9	BLAS MARIA DIAZ	38
8	BLAS MARIA DIAZ	39
7	BLAS MARIA DIAZ	41
1542	WEBB CSL	530
1462	WEBB CSL	502
69	PROJEDES REVOLCARA	2774
58	PROJEDES REVOLCARA	2777
55	PROJEDES REVOLCARA	2775
14	JOSE GUAJARDO	56
1965	GREGORIO LERMA	556
1902	EL&RR RR CO	3014
1901	EL&RR RR CO	547
66	JOSEPH TUMLINSON	2801
15	JOSE PRUDENCIA GARCIA	53
13	JOSE MIGUEL GARCIA	51
6	BLAS MARIA DIAZ	40
5	MANUEL GONZALES	58
2142	TL HALLMARK	3234
2142	TL HALLMARK	3000
2142	TL HALLMARK	3247
68	MILES C DAVIS	2721
67	MILES C DAVIS	2720
2115	TC RR CO	661
75	MRS ANDREA J DE ALEXANDER	3178
75	MRS ANDREA J DE ALEXANDER	2694
74	MRS ANDREA J DE ALEXANDER	2693
64	MILES C DAVIS	2719
54	JD ESSARY	2726
10	TOMAS SANCHES	280
1259	AB&M	406
73	OA PERRON	2762
72	OA PERRON	2761
51	OA PERRON	2759
3	CITY OF LAREDO	233
2	CITY OF LAREDO	232
1	CITY OF LAREDO	231
62	JOHN D DAVIS	2717
61	JOHN D DAVIS	2716

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Exhibit

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60	JOHN D DAVIS	2715
1964	D RENDON	558
1256	AB&M	3098
12	SANTIAGO SANCHES	278
1861	ANTONIO LERMA	542
1450	ANTONIO GONZALES	57
1253	H&GN RR CO	429
1452	B&B	1929
1451	B&B	484
1266	H&GN RR CO	2746
71	CF PERRON	2755
56	CF PERRON	2757
53	CF PERRON	2756
4	CITY OF LAREDO	234
2325	DB GRACY	2909
1254	H&GN RR CO	2749
1265	H&GN RR CO	426
63	MILES C DAVIS	2718
65	JB HAZELRIGG	2732
49	JOSE MANUEL GARCIA	3059
57	PROJEDES REVOLCARA	2776
52	OA PERRON	2760
59	JOHN D DAVIS	2714
70	CF PERRON	2758
2142	TL HALLMARK	2661
2281	TRINIDAD JIMENES	730
11	TOMAS SANCHES	279
1255	AB&M	402
743	RT CO	276
948	STATE	
947	RUSK	271
1297	SM&S	474
1298	STATE	0
945	A.C.H&B	19
946	STATE	
1299	I.G.N.R.R.CO.	431
1457	A.C.H&B	480
49	JOSE MANUEL GARCIA	3059
1299	JOSE M. GARCIA	3059