

Production Sharing Agreements and Allocation Wells



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Production Company**

**30th Annual South Texas College of Law Houston
Institute for Attorneys and Landman**

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Under current drilling technology, longer and longer HZ wells being drilled, fraced and producing in tight shale formations

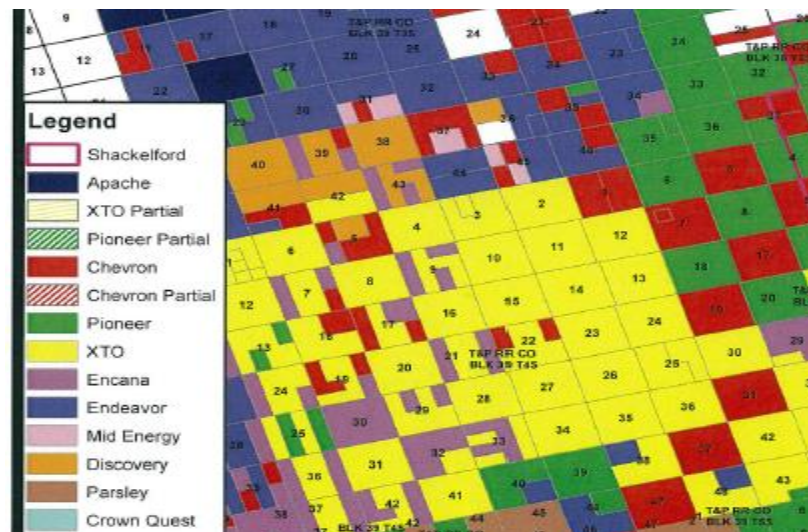


- For 50 years, Permian Basin drilled and produced with vertical wells
- Easy to do drilling straight down on your lease or mineral fee tract
- HZ drilling in Permian began few years ago and you know what happened next:
 - common early on 5,000' HZ wells – one mile in length “sideways” underground
 - one mile = length/width of 640 acre “governmental” section
 - drilling 7,500' laterals – 1 ½ miles “sideways” underground
 - moved to 10,000' laterals – two miles in length
 - Recently, Chevron received AFE & participating HZ well little over 13,000' in length – almost 2 ½ miles long “sideways” underground
 - Where will it end?

All “chopped up”



- Approximately 95% of Texas lands are privately owned
- Land and leasehold ownership in the Permian all chopped up:
 - Don’t have a million acre King Ranch oil & gas lease
 - Permian Basin was cut up and checker-boarded by legislation funding railroad development in the 1850’s -- been chopped and cut up ever since
 - Result is any given area has multiple mineral fee tracts and/or oil & gas leases you need to drill through for a two mile long HZ well



Hierarchy of Drilling Across Tract Lines in Texas



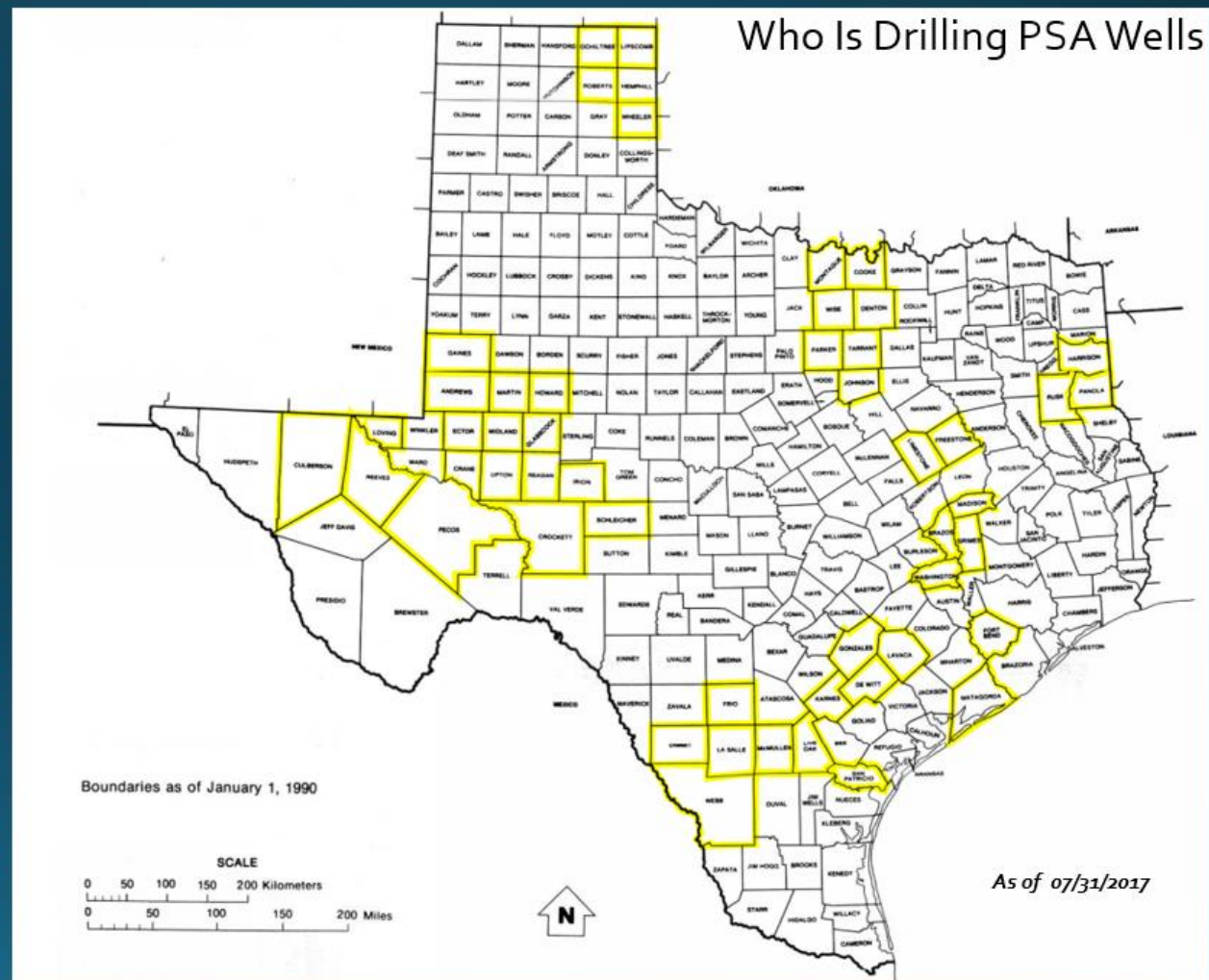
- **Pooling** – unit created under OGL pooling clause or declaration. Been around for a hundred years and usually done on surface acreage basis; certainty of legal rights under many court opinions – least uncertainty of legal risk, but subject to bad faith pooling claims.
- **Production Sharing Agreement (“PSA”) wells** – at least 65% WI/RI in each penetrated tract sign PSA, a contract that “blesses” drilling between tracts and specifies how production will be shared (allocated) between each tract. While no case law, parties have the right to contract, and contracts entered into at arms-length and free of fraud in the inducement are enforced by the courts (“freedom of contract”) – thus low uncertainty of legal risk
- **Allocation wells** – well drilled between tracts with no RIO agreement; operator determines how production will be shared. No guiding case, statutory or regulatory law on point; only RRC practice, *Klotzman* RRC case, and thousands of allocation wells being drilled statewide
 - Promotes conservation by precluding drilling separate wells (economic waste)
 - Prevents waste of HCN’s – loss of reserves in “dead zone” between tracts
 - Is the implied covenant to manage and administer the lease implicated? See Smith and Weaver, Texas Law of Oil & Gas at §5.4[A] discussing duty to seek administrative action such as SWR 37 well spacing exceptions
 - Of the three, most uncertainty of legal risk due to no law on point in Texas

Who is Drilling PSA Wells?

(Thanks to Brian Sullivan of McElroy, Sullivan, Miller, Weber & Olmstead, L.L.P.)



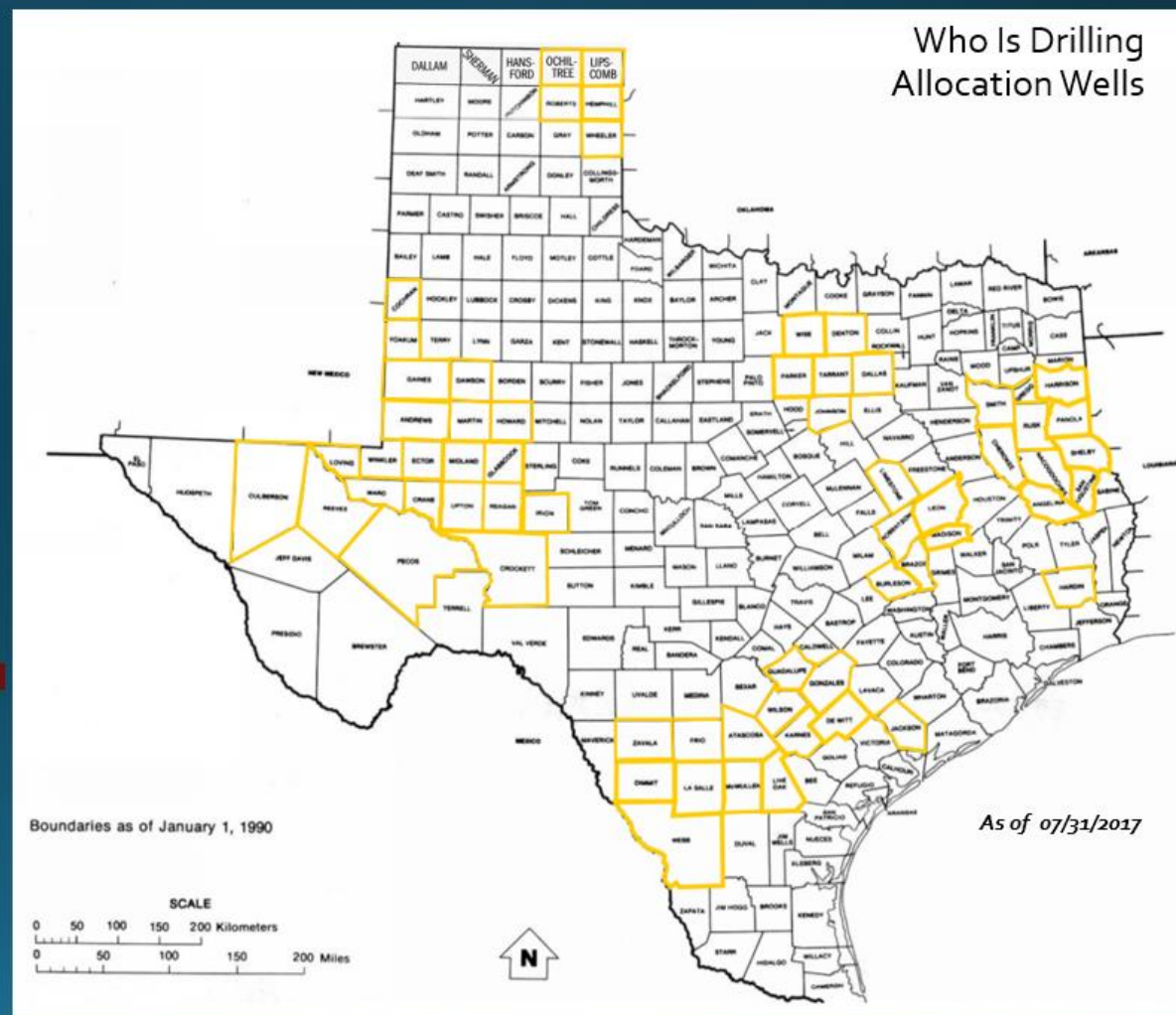
Operator	Permits	Operator	Permits
Anadarko	59	Lario Oil & Gas	3
Apache	41	Le Norman	2
BHP	31	Lewis	3
Bold Op	10	Linn	4
BP America Prod	7	Marathon Oil	19
Brammer	1	Matador Production	7
Burlington	18	MDC Texas Energy	1
Callon	32	Memorial Prod Op	54
CCI	7	Mewbourne	2
Centennial	3	Murphy	9
Chesapeake	98	Navidad	1
Chevron USA	2	Newfield	3
Cimarex	9	NFR	4
Cinnabar	4	Oxy USA	47
Classic	6	Parsley Energy	31
CML	1	Patriot	17
COG	5	Penn Virginia	11
Covey	1	Petroquest	4
Crownquest	7	Pioneer	31
Devon	630	QEP	1
Diamondback	4	Quicksilver	2
Discovery	8	Resolute	19
El Paso E&P	1	RKI	6
Elk Meadows	3	Sabalo Expl	3
Encana	2	Sabine O&G	11
Energen	100	Samson	4
Enervest	55	Silverback	2
EOG	30	SM Energy	98
Escondido	1	Statoil	27
Fidelity	2	Talisman	5
Foreland Op	2	Teakwood	2
Forest	2	Texakoma	1
Goodrich	2	Texas American Res	4
Hawkwood	3	Titan	1
Hat Creek	1	Unit Petro	6
High Sky Prtns	10	Vantage	96
Highmount Expl	2	WBH	19
Hunt Oil	62	XTO	8
Jilpetco	1		
Laredo Petro	5		
Grand Total		1836	



Who is Drilling Allocation Wells?

(Thanks to Brian Sullivan of McElroy, Sullivan, Miller, Weber & Olmstead, L.L.P.)

4P Energy Texas	2	GMX	11	RKI Expl Prod	16
Ajax	1	Goodrich	1	RP Operating	8
American Energy PB	13	Guidon Energy	12	RSP	65
Amerdev LLC	3	Halcon	48	Sabalo Expl	5
Apache	15	Hannathon Petro	1	Sabalo Operating	2
Approach Op	8	Hat Creek	1	Sabine O&G	5
Athlon	73	Henry Resources	27	Samson	12
Beacon E&P	1	Hughes, Dan A.	2	Sea Eagle Ford	3
BHP BILLITON	21	JPM	3	Shell Western	15
Blackbrush	2	KJ Energy	2	Sheridan	17
Bold Op LLC	11	Laredo Petro	258	Silver Creek	2
BP America Prod	12	Laredo Petro -		Silverback	2
Brammer Eng	1	Dallas	18	SM Energy	16
Breitbart Op LP	36	Lario	7	Statoil Texas	12
Burlington	5	Legacy	43	Steward Energy	4
Cabot	50	Le Norman	1	Summit	26
Callon Petro	25	Lewis Petro	29	Swift Energy	35
Carizzo	22	Linn	2	Tana Expl	1
CCI East Texas	6	Manti Tarka	3	Tanos	32
Centennial	14	Marathon	5	Tecolote Energy	9
Chesapeake	4	Matador	10	Texas Amer Res	1
Chevron	23	McCutchin Petro	1	Texas Petro Inv	3
Cimarex	11	MD America	78	Three Rivers Op	7
Clasac	5	Mewborne	1	Trail Ridge	11
COG	48	Murphy	6	Unit Petroleum	15
Covey Park Res	1	New Gulf	2	Valence Operating	4
Crimson	4	Newark E&P	4	Verado	2
Crownquest	25	Obenco	1	W & T Offshore	1
DE Operating	15	Occidental	17	Wildhorse	5
Devon	133	Oxy USA	38	XTO	180
Diamondback	97	Oxy USA WTP	37	Grand Total	3350
Discovery	20	Pacesetter	2		
Eagle Ridge	1	Paloma	12		
El Paso E&P	1	Parsley	216		
Elk Meadows Res	1	Patriot	3		
Encana	244	Pcore	1		
Endsavor	28	Permian Resources	3		
Energex	128	Petroquest	1		
Energy & Expl. Ptnrs	2	Pioneer	507		
Enervest	32	PMO	4		
EOG	80	QEP Energy	79		
EP Energy	2	Reliance	1		
Escondido	8	Remnant Energy	1		
ETX	2	Ring	23		
Exco	23				
EXL	12				
FDL	1				
Forset	31				
Forge	21				
Frostwood Energy	3				
GHA Barnett	7				





No reported case law in Texas federal or state courts discussing PSA or allocation wells

- A few cases on “production sharing agreements” with foreign governments (concessions), but those N/A

No Texas statute or regulation addressing either but RRC guidance provides instructions on how to obtain drilling permits for both:

- <http://www.rrc.state.tx.us/search-result?q=production+sharing+agreement>
- PSA authority statement (K right to drill & produce all tracts; if >65% WI and MIO signed, permit as PSA well); Acreage Allocation (plat, PSA-12 Code Sheet, P-16 data sheet)

Klotzman RRC Final Order



RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

OIL AND GAS DOCKET
NO. 02-0278952

APPLICATION OF EOG RESOURCES,
INC. FOR ITS KLOTZMAN
LEASE(ALLOCATION) WELL NO. 1H,
(STATUS NO. 744730), EAGLEVILLE
(EAGLEFORD-2) FIELD, DEWITT
COUNTY, AS AN ALLOCATION WELL
DRILLED ON ACREAGE ASSIGNED
FROM TWO LEASES.

FINAL ORDER

The Commission hereby adopts the following Substitute Finding of Fact:

Substitute Finding of Fact:

4. EOG is the operator of and owns 100% of the working interest rights to the Eagleville (Eagleford-2) Field under the Georgia Dubose-Glassell 516.569-acre Lease and the Georgia Dubose-Pierce 304.97-acre Lease and there are no unleased interests within 330 feet of any point on the proposed wellbore.

The Commission hereby adopts the following Substitute Conclusions of Law:

Substitute Conclusions of Law:

3. EOG Resources, Inc. has a sufficient good faith claim to drill its proposed Klotzman (Allocation) Well No. 1H on an 80-acre drilling unit composed of 40 acres from the Georgia Dubose-Glassell 516.569-acre lease and 40 acres from the Georgia Dubose-Pierce 304.97-acre lease.

Klotzman RRC Final Order



Oil & Gas Docket No. 02-0278952
Final Order

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4. A Statewide Rule 37 lease line spacing exception for the well may be granted administratively pursuant to 16 Tex. Admin. Code §3.37(h)(2)(B) as EOG Resources, Inc. is its own offset.

Done this 24th day of September, 2013.

RAILROAD COMMISSION OF TEXAS


CHAIRMAN BARRY T. SMITHERMAN


COMMISSIONER DAVID PORTER


COMMISSIONER CHRISTI CRADDICK

ATTEST:


SECRETARY



Texas Administrative Code

TITLE 16

ECONOMIC REGULATION

PART 1

RAILROAD COMMISSION OF TEXAS

CHAPTER 3

OIL AND GAS DIVISION

RULE §3.37

Statewide Spacing Rule

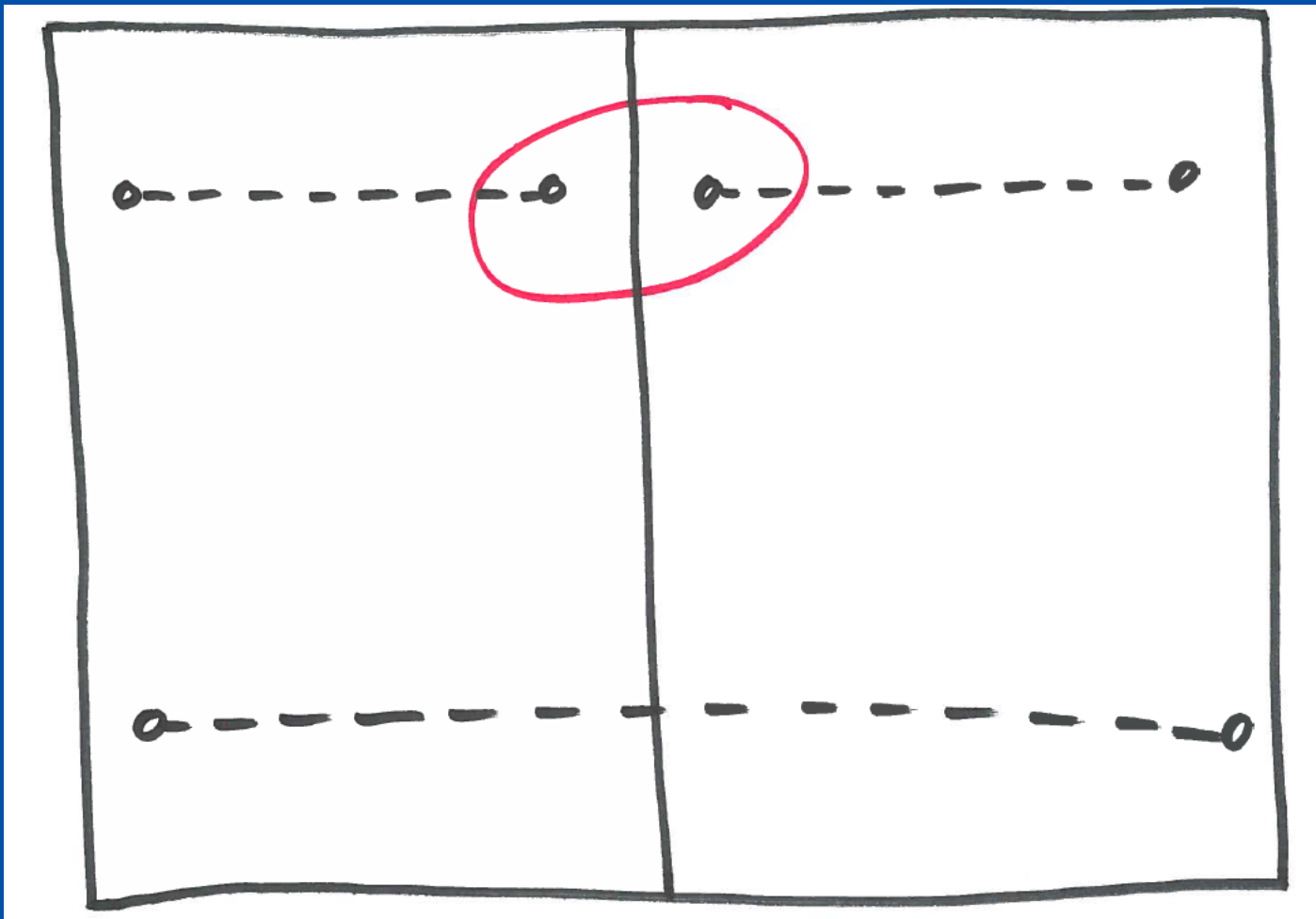
(h) Exceptions to Rule 37.

(2) The director of the Oil and Gas Division or a delegate of the director may issue an exception permit for drilling, deepening, or additional completion, recompletion, or reentry in an existing well bore if:

(A) a notice of at least 10 days has been given, and no protest has been made to the application; or

(B) written waivers of objection are received from all persons to whom notice would be given pursuant to subsection (a)(2) of this section.

Klotzman – Commissioner Porter's Drawing



**BEFORE THE
RAILROAD COMMISSION OF TEXAS**

**OIL & GAS DOCKET NO. 08-0305330
APPLICATION OF DEVON ENERGY PRODUCTION CO., L.P.
TO DRILL, RECOMPLETE OR RE-ENTER
NI HELPED 120 (ALLOC) WELL, WELL NO. 6H,
PHANTOM (WOLFCAMP) FIELD
WARD COUNTY, TEXAS**

**FILED WITH THE HEARINGS DIVISION
OFFICE OF DOCKET SERVICES**

FILED
2017 JUL -6 PM 3:56
DOCKET SERVICES
RAILROAD COMMISSION
OF TEXAS

**COMPLAINT
BY
MONROE PROPERTIES, INC., SRO LAND & MINERALS, L.P., AND THE LEE
M. STRATTON LIVING TRUST, MARY ELIZABETH STRATTON, TRUSTEE**

Monroe Properties, Inc., SRO Land & Minerals, L.P., and the Lee M Stratton Living Trust, Mary Elizabeth Stratton, Trustee (“Complainants”) file this complaint to complain of and protest the above-referenced permit application filed by Devon Energy Production Co., L.P. (“Devon”).

Claims in Monroe Properties' RRC Complaint



Devon lacks authority under the terms of its lease to drill an allocation well

Devon has not pooled the three tracts the well crosses; the lease grants Devon very limited rights to pool; the lessors have not agreed to pooling

Devon's proposal to allocation production is unsettled – if oil well, by % of perforated lateral under each tract; if gas well, amongst all royalty owners in the two HBP gas units penetrated by the well – complaint distinguishes *Klotzman* case which did not involve a well that “crosses two existing pooled units”

No RRC rule authorizes granting drilling permit from HZ well that crosses lease or unit lines in the absence of pooling authority or MIO agreement

The well violates SWR 26 on commingling

From the same law firm that represented *Klotzman* and the recently-settled *Casey v. MD America Energy* suit (278th District Court, Madison County, Texas) – among other things, petition claimed allocation wells breached OGL's and constituted a trespass, supporting actual and exemplary damages

Analogous Case Law



- *Cockrell v. Texas Gulf Sulphur Co.*, 299 S.W.2d 672, 675 (Tex. 1956) – greatest possible estate granted rule – allows lessee to drill anywhere on lease, including border to border, unless expressly prohibited by the lease
- *Humble v. West*, 508 S.W.2d 812, 818-9 (Tex. 1974) – burden of proof is on commingler of native and injected (stored) gas into partially-depleted reservoir to prove each party's share with "reasonable certainty" by expert testimony, and the act of commingling did not obligate the commingler to pay royalties on all gas under confusion of goods theory absent such evidence
- *Browning Oil Co. v. Luecke*, 38 S.W.3d 625, 647 (Tex. App. – Austin 2000, pet. denied) – each party in a HZ well entitled to its share of production attributed to each individual tract with "reasonable probability" and not 8/8ths undiluted royalty
- *Springer Ranch v Jones*, 421 S.W.3d 273, 285-6 (Tex. App. – San Antonio 2013, no writ) – expert's opinion that production from multiple tracts allocated on basis of HZ well's distance between first and last take points within the correlative interval reasonable (see 16 Tex. Admin. Code §3.86 for definitions)
- *Magnolia Petroleum Co. v. Railroad Comm'n of Texas*, 170 S.W.2d 189 (Tex. 1943) – "reasonably satisfactory showing of good-faith claim of ownership in the property" (lease) is what is required to obtain drilling permit (followed in *Klotzman /EOG* case by RRC for allocation well permit; COL# 3 in 9/24/13 Final Order)

Analogous Texas Statutes and Regulations



- Tex. Nat. Res. Code §85.046(c): RRC may permit wellbore commingling from different reservoirs, and surface commingling of oil and gas from two or more tracts of land, if RRC finds commingling prevents waste, promotes conservation or protects correlative rights. Amount of production attributable to each tract shall be determined in a manner consistent with this title.
- 16 Tex. Admin. Code §3.10 (wellbore commingling of production from different strata) and surface commingling under §3.26 (oil) and §3.27 (gas) allowed to prevent waste, promote conservation or protect correlative rights where method of allocating production shown to “accurately attribute to each interest its fair share of aggregated production”
- 16 Tex. Admin. Code §3.86 defines, in a HZ well:
 - Correlative interval – depth interval designated by field rules or new field designation
 - Take point – any point in HZ well where oil or gas can be produced from CI
 - First take point – take point in HZ well nearest to point where well penetrates top of CI
 - Last take point – take point in HZ well nearest terminus (end of well)
 - Nonperforation zone (NPZ) – portion of HZ well designated as containing no take points

One of the Highest Legal Authorities (all due respect to Professor Kulander)



- Ernest E. Smith's 3/11/2015 letter to Rep. Thomas Craddick:
Under SWR Rules 10 (commingling within a wellbore between different strata), 26 (surface commingling of oil) and 27 (surface commingling of gas), as authorized by Tex. Nat. Res. Code §85.046(c), the RRC has been measuring and allocating production “for decades” and that practice is “substantially similar” to allocating production between tracts in a HZ allocation well
- Ernest E. Smith's 3/31/2015 letter to Rep. Thomas Craddick and Senator Troy Fraser:
“H.B. No. 1552 (the proposed allocation well bill in Texas’ last legislative session) does not create or cause pooling, forced or otherwise.”
“In *Browning*, a horizontal well was drilled across multiple adjoining leases, but the *Browning* court held that such a horizontal well is legally equivalent to drilling a separate well on each of the adjoining leases.”

A Couple of Other States' Approaches to Allocation Wells



- Pennsylvania S.B. 259 (2013); now at 58 P.S. §34.1 (2016):

“Where an operator has the right to develop multiple contiguous leases separately, the operator may develop those leases jointly by horizontal drilling unless expressly prohibited by a lease. In determining the royalty where multiple contiguous leases are developed, in the absence of an agreement by all affected royalty owners, the production shall be allocated to each lease in such proportion as the operator reasonably determines to be attributable to each lease.”
- Oklahoma S.B. 78 (2011); now at 52 Okl. St. §87.8 (2015):

The OCC “is authorized to allow multiunit horizontal wells in order to prevent waste and protect correlative rights of the owners of oil and gas rights ... and shall further require the allocation of the commingled production and proceeds from the completion interval of a multiunit horizontal well, with any allocation to be in a manner that will prevent waste and protect the correlative rights of the owners of the oil and gas rights in each of the affected units which the well actually penetrates within the completion interval.”

H.B. 1552/S.B. 919 (Texas 84th Leg. Session 2015)

Sought to amend Tex. Nat. Res. Code §85.046 by adding new subsection (d)



Unless expressly prohibited by a lease, deed, or other contract, an operator or lessee with the right to drill an oil or gas well on or produce or develop oil or gas from each tract independently may, under a permit issued by the commission, drill, operate, and produce oil or gas from an oil or gas well that traverses multiple tracts in order to prevent waste, promote conservation, or protect correlative rights. If there is not an agreement with one or more of the affected owners of royalty or mineral interests in the tracts traversed by the well regarding the manner in which production from the well shall be allocated among the tracts, the operator or lessee shall allocate to each tract its share of the aggregated production from the well as determined by the operator or lessee with reasonable probability. The operator or lessee must send written notice of its method of production allocation among the tracts, and the resulting allocation factor for each of the tracts, to each affected royalty or mineral interest owner at the owner's last known address.

H.B. 1552/S.B. 919 (84th Tex. Leg. 2015) and beyond



- The Bill died in committee after the Texas General Land Office and The University of Texas Lands issued a negative fiscal impact note of \$490 million on 4/6/2015
- Subsequently, industry and trade associations worked with GLO and UL on acceptable revisions to the bill and reached consensus
- Pertinent changes:
 - Express allocation formula – first to last take point in correlative interval, less any NPZ's, shared between each tract; alternative formula for lease line wells using surface acreage in uniform rectangle around well
 - Maximum acreage assigned to well's proration unit:
 - 160 acres up to 5,000' HZ well
 - Then use formula 0.032 acres/feet of well's HZ drainhole FTP-LTP, plus 10% tolerance (320 acres for 10,000' HZ well)
- Too late to introduce bill in 85th Legislature. Stay tuned for possible new allocation well bill in 2019

In the Meantime ...



- Pool or drill PSA wells after obtaining PSA's – what method should be used to determine allocation of production among the tracts/units?
 - First to last take point in correlative interval (*Springer Ranch*)
 - Same, but less any portion of the HZ well deemed by the RRC to be a no-perf zone (NPZ) and/or deemed non-productive in the sole good faith opinion of the operator
 - Surface acreage approach (660' rectangle around wellbore in producing field interval) for lease line or unit line wells
- Many operators drilling AW's with no push-back whatsoever, but many MIO's amending their lease forms to preclude allocation wells
- Allocation wells are a valuable tool to develop oil & gas reserves to the benefit of all affected parties