Manzano, LLC

P.O. Box 1737

Roswell, New Mexico 88202-1737

(575) 623-1996

October 9, 2017

Oxy Y-1 5 Greenway Plaza Houston, TX 77046

Attention: India Isbell

RE: Well Proposal and AFE

Rag Mama 30-19 Fee #1H ("Well")

Surface Location: 25' FSL & 528' FEL of Section 30-T9S-R35E

Bottom Hole Location: 2310' FSL & 528' FEL of Section 19-T9S-R35E

Lea County, New Mexico

Dear India:

I have just received the approved compulsory pooling order from the NMOCD for the above referenced Rag Mama 30-19 Fee #1H well (see attached Order No. R-14476). As you may recall, as per our discussions, Oxy chose not to oppose Manzano at the compulsory pooling hearing before the NMOCD on 8/31/17 but maintained the option to either participate or work out some other arrangement with Manzano in regards to the proposed well.

One of the requirements within Order R-14476 is for Manzano to "furnish the Division and each known pooled working interest owner in the Unit an itemized schedule of estimated costs of drilling, completing and equipping the proposed well ("well costs")". In this case, Oxy is a pooled working interest owner. Oxy then has 30 days from your receipt of this letter and AFE in which to elect to participate in the drilling of the proposed well. Should you elect not to participate in the drilling of the well you shall be deemed as a "non-consenting working interest owner' and shall be subject to Manzano recouping its cost plus an additional 200% for the risk associated with the operations.

Please accept this letter and the attached "AFE" as our compliance with said requirement of Order No. R-14476. I have provided the NMOCD a copy of this letter and AFE.

Dependent on rig scheduling, Manzano intends to commence drilling operations on the proposed well sometime between October 15th and November 15th. We have already built, and are currently filling, the frac pit for this well.

Should you wish to participate in the drilling of the proposed well as to your proportionate working interest, please execute and return one copy of the attached AFE at your very earliest convenience.

India, I appreciate the assistance that you have provided on this matter. Should you have any questions or need anything from me please do not hesitate to contact me.

Sincerely,

MANZANO, LLC

Mike Hanagan, Manager

CC: NMOCD - Mr. Will Jones

MANZANO, LLC

Authority For Expenditure

			PAG	3E 1 of
OPERATOR	AFE #		DATE	
MANZANO, LLC	- -	4	10/9/2017	
WELL NAME AND NUMBER	FIELD OR PROS	PECT	m	
RAG MAMA 30 FEE #1H	JENKINS			
LOCATION	SECTION	TOWNSHIP	RANGE	
SL: 50'PSL & 528'FEL of SEC 30 - BHL: 2310'FSL & 528'FEL of SEC 19	19 & 30	9S	35E	
PROJECT DESCRIPTION AND LOCATION	COUNTY		STATE	
DRILL & COMPLETE 1.5 MILE LATERAL IN SAN ANDRES	LEA		NEW MEXICO	
w/7mm# frac & w/satellite battery (no pilot hole)	PROPOSED FOI	RMATION	PROPOSED DEPTH (tvd/md)	
	SAN AND	RES	4850TVD/12,000'MD	
COMMENTS:				

INTANGIBLES	Cost To	Completion	
	Casing Point	Costs	TOTAL
Footage	·		
Drilling on Day Work - BCP	\$181,250		\$181,250
Drilling on Day Work - ACP		\$21,750	\$21,750
Drilling Rig - Move In/Move Out & Rig Up/Rig Down	\$100,000		\$100,000
Completion Rig & Colled Tubing Unit		\$100,000	\$100,000
Survey, Permit, Damages, ROW & Legal	\$48,000	\$25,000	\$73,000
Road, Location, Pits, Fencing	\$80,000	\$110,000	\$190,000
Bits & Casing Tools	\$35,000		\$35,000
Rig Fuel	\$39,000	\$6,500	\$45,500
Mud and Chemicals	\$50,000		\$50,000
Drilling & Completion Water	\$35,000	\$160,000	\$195,000
Cementing and Cement Equipment	\$42,000	\$100,000	\$142,000
Mud Logging, Coring & DST's	\$15,000		\$15,000
Open Hole Logging			
Cased Hole Logging & Wireline Servicas		\$120,000	\$120,000
Equipment Rentals	\$155,000	\$200,000	\$355,000
Directional Services	\$150,000		\$150,000
Acidizing, Fracing & Stimulation		\$1,360,000	\$1,360,000
Tubular Inspection/Repair, Nipple Up	\$10,000	\$5,000	\$15,000
Casing Crews, Tools and Services	\$13,000	\$7,000	\$20,000
Labor & Installation		\$90,000	
Supervision	\$28,000	\$35,000	
Well Control Insurance	\$7,500		
Administrative Overhead	\$6,000	\$6,000	\$12,000
Production Testing & Flowback		\$10,000	\$10,000
Abandonment Expense	i		
Disposal of Fluids/Cuttings	\$90,000	\$15,000	
Miscellaneous Costs, Tax and Contingencies	\$25,181	\$77,385	\$102,566
TOTAL INTANGIBLES	\$1,109,931	\$2,448,635	\$3,293,066

TANGIBLES							Drilling	Completion	TOTAL
CASING	FOOTAGE	SIZE	WEIGHT	GRADE	_ c	OST/FT			
Conductor					S	-			
Surface	2400	8 5/8"	32#	J55	\$	19.50	\$46,800		\$46,800
Surface					\$	-]		
Intermediate					\$	• •]		
Intermediate					\$]		
Uner					\$	-]		
Production	12000	5 1/2"	20#	L80	\$	16.25		\$195,000	\$195,000
Production					\$	-			
Tubing	4200	2 7/8'	6.5#	J55	\$	5.00		\$21,000	\$21,000
Subsurface Equi	pment & Pumps								
Wellhead Equip	ment						\$3,000	\$17,000	\$20,000
Pumping Unit									
Flowlines								\$50,000	\$50,000
Tanks & Storage	9							İ	
Separation Equip	ment						ľ	\$40,000	\$40,000
Gas Sales Line &	& Equipment								
Electrical, Instru	mentation & Mo	nitoring					1	\$75,000	\$75,000
Valves, Connect	tions, Pumps & N	Aeters						\$30,000	\$30,000
	·			TOTAL TAN	GIBLES	3	\$49,800	\$428,000	\$477,800
				TOTAL WELL	L COST	rs	\$1,159,731	\$2,876,635	\$4,036,366
				ROUNDED F	ROJE	CT COST	\$1,160,000	\$2,877,000	\$4,037,000

0xy Y-1 WI-BCP 5,00000%				0xy Y-1 - DRY HOLE \$58,000	Oxy Y-1 - COMPLETED WELL COST \$201,850					
Oxy Y-1 WI-ACP				ожу Y-1 - completion cost \$143,850	BY: MIKE HANAGAN					
	JOINT INTEREST SHARE									
COMPANY NAME Signature			Signature			DATE				
Oxy Y-1 BY:			BY:							
COMPANY OWNERSHIP-%				COMPANY COST-DRY HOLE COST	COMPANY COST-COMPLETION COST					
WI-BCP	5.00%	WI-ACP	5.00%	\$58,000	\$143,850					

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION TO CONSIDER:

CASE NO. 15804 ORDER NO. R-14476

APPLICATION OF MANZANO LLC FOR A NON-STANDARD SPACING AND PRORATION UNIT, A NON-STANDARD PROJECT AREA, AND COMPULSORY POOLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on August 31, 2017, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 5th day of October, 2017, 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 the subject matter.
- (2) Manzano LLC (the "Applicant") seeks approval of a 240-acre non-standard oil spacing and proration unit and project area (the "Unit") for oil and gas production from the San Andres formation, Jenkins; San Andres Pool (Pool code 33950), comprising the E/2 E/2 of Section 30, Township 9 South, Range 35 East and the E/2 SE/4 of Section 19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico. Applicant further seeks an order pooling all uncommitted interests in the Unit for the San Andres formation.
- (3) The Unit will be dedicated to Applicant's Rag Mama 30 19 Fee Well No. 1H (the "proposed well"; API No. 30-025-Pending), a horizontal well to be drilled from a surface location 25 feet from the South line and 528 feet from the East line (Unit P) of Section 30, Township 9 South, Range 35 East, to a bottom-hole location 2310 feet from the South line and 528 feet from the East line (Unit I) of Section 19, Township 9 South, Range 35 East, NMPM. The location of the completed interval will be standard for this horizontal oil well within the Unit.

Division Rule 19.15.15.9(A) NMAC, which provides for 330-foot setbacks from the unit boundaries and standard 40-acre units each comprising a governmental quarter-quarter section. The proposed Unit and project area consists of six adjacent quarter-quarter sections oriented south to north.

- (5) Applicant appeared through counsel and presented the following land and geologic evidence:
 - (a) the San Andres formation in this area is suitable for development by horizontal drilling;
 - (b) the proposed orientation of the horizontal well from south to north is appropriate for the Unit;
 - (c) all quarter-quarter sections to be included in the Unit are expected to be productive in the San Andres formation, so that the Unit as requested will not impair correlative rights;
 - (d) there are four separately owned fee tracts within the proposed Unit;
 - (e) notice by certified mail was provided to all uncommitted interest owners in the proposed Unit whose interests were evidenced by a conveyance instrument, either of record or known to Applicant when the Application was filed, and to heirs known to Applicant of deceased persons who appear as owners in such instruments, and whose whereabouts could be ascertained by exercise of reasonable diligence; and
 - (f) those potentially affected parties whose whereabouts could not be ascertained were noticed by publication as provided in Rule 19.15.4.12.B NMAC.
 - (6) No other party appeared or otherwise opposed this application.

The Division concludes as follows:

- (7) The proposed non-standard unit should be approved to enable Applicant to drill a horizontal well that will efficiently produce the reserves underlying the Unit, thereby preventing waste and protecting correlative rights.
- (8) Two or more separately owned tracts are embraced within the Unit, and/or there are royalty interests and/or undivided interests in oil and gas minerals in one or more tracts included in the Unit that are separately owned.

Applicant has the right to drill and proposes to drill the proposed well to a common source of supply within the Unit at the proposed location.

- (10) There are interest owners in the Unit that have not agreed to pool their interests.
- (11) To avoid the drilling of unnecessary wells, protect correlative rights, prevent waste and afford to the owner of each interest in the Unit the opportunity to recover or receive without unnecessary expense a just and fair share of hydrocarbons, this application should be approved by pooling all uncommitted interests, whatever they may be, in the oil and gas within the Unit.
- (12) Manzano LLC (OGRID 231429) should be designated the operator of the proposed well and the Unit.
- (13) Any pooled working interest owner who does not pay its share of estimated well costs should have withheld from production its share of reasonable well costs plus an additional 200% thereof as a reasonable charge for the risk involved in drilling the proposed well.
- (14) Reasonable charges for supervision (combined fixed rates) should be fixed at \$7000 per month per well while drilling and \$700 per month per well while producing, provided that these rates should be adjusted annually pursuant to the overhead adjustment provision of the COPAS form titled "Accounting Procedure-Joint Operations."

IT IS THEREFORE ORDERED THAT:

- (1) Pursuant to the application of Manzano LLC, a 240-acre non-standard oil spacing and proration unit and project area (the "Unit") is hereby established for oil and gas production from the San Andres formation, Jenkins; San Andres Pool (Pool code 33950), comprising the E/2 E/2 of Section 30, Township 9 South, Range 35 East and the E/2 SE/4 of Section 19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico.
- (2) All uncommitted interests, whatever they may be, in the oil and gas in the San Andres formation underlying the Unit, are hereby pooled.
- (3) The Unit shall be dedicated to Applicant's Rag Mama 30 19 Fee Well No. 1H (the "proposed well"; API No. 30-025-Pending), a horizontal well to be drilled from a surface location 25 feet from the South line and 528 feet from the East line (Unit P) of Section 30, Township 9 South, Range 35 East, to a bottom-hole location 2310 feet from the South line and 528 feet from the East line (Unit I) of Section 19, Township 9 South, Range 35 East, NMPM. The location of the completed interval will be standard for this horizontal oil well within the Unit.

before October 31, 2018, and shall thereafter continue drilling the proposed well with due diligence to test the San Andres formation.

- (5) In the event the operator does not commence drilling the proposed well on or before October 31, 2018, Ordering Paragraphs (1) and (2) shall be of no effect, unless the operator obtains a time extension from the Division Director for good cause demonstrated by satisfactory evidence.
- (6) Should the proposed well not be drilled and completed within 120 days after commencement thereof, then Ordering Paragraphs (1) and (2) shall be of no further effect, and the Unit and project area created by this order shall terminate, unless operator appears before the Division Director and obtains an extension of the time for completion of the proposed well for good cause shown by satisfactory evidence. If the proposed well is not completed in all of the standard spacing units included in the proposed project area (or Unit) then the operator shall apply to the Division for an amendment to this order to contract the Unit so that it includes only those standard spacing units in which the well is completed.
- (7) Upon final plugging and abandonment of the proposed well and any other well drilled on the Unit pursuant to Division Rule 19.15.13.9 NMAC, the pooled Unit shall terminate, unless this Order has been amended to authorize further operations.
- (8) Manzano LLC (OGRID 231429) is hereby designated the operator of the well and the Unit.
- (9) After pooling, uncommitted working interest owners are referred to as pooled working interest owners. ("Pooled working interest owners" are owners of working interests in the Unit, including unleased mineral interests, who are not parties to an operating agreement governing the Unit.) After the effective date of this order, the operator shall furnish the Division and each known pooled working interest owner in the Unit an itemized schedule of estimated costs of drilling, completing and equipping the proposed well ("well costs").
- (10) Within 30 days from the date the schedule of estimated well costs is furnished, any pooled working interest owner shall have the right to pay its share of estimated well costs to the operator in lieu of paying its share of reasonable well costs out of production as hereinafter provided, and any such owner who pays its share of estimated well costs as provided above shall remain liable for operating costs but shall not be liable for risk charges. Pooled working interest owners who elect not to pay their share of estimated well costs as provided in this paragraph shall thereafter be referred to as "non-consenting working interest owners."
- (11) The operator shall furnish the Division and each known pooled working interest owner (including non-consenting working interest owners) an itemized schedule of actual well costs within 90 days following completion of the proposed well. If no

objected, within 45 days following receipt of the schedule, the actual well costs shall be deemed to be the reasonable well costs. If there is an objection to actual well costs within the 45-day period, the Division will determine reasonable well costs after public notice and hearing.

- (12) Within 60 days following determination of reasonable well costs, any pooled working interest owner who has paid its share of estimated costs in advance as provided above shall pay to the operator its share of the amount that reasonable well costs exceed estimated well costs and shall receive from the operator the amount, if any, that the estimated well costs it has paid exceed its share of reasonable well costs.
- (13) The operator is hereby authorized to withhold the following costs and charges from each non-consenting owner's share of production from each well:
 - (a) The proportionate share of reasonable well costs attributable to such interest; and
 - (b) As a charge for the risk involved in drilling the well, 200% of the above costs.
- (14) The operator shall distribute the costs and charges withheld from production, proportionately, to the parties who advanced the well costs.
- at \$7000 per month per well while drilling and \$700 per month per well while producing, provided that these rates may, at the election of the operator, be adjusted annually pursuant to the overhead adjustment provisions of the COPAS form titled "Accounting Procedure-Joint Operations." The operator is authorized to withhold from production the proportionate share of both the supervision charges and the actual expenditures required for operating the well(s), not more than what are reasonable, attributable to each pooled working interest owner.
- (16) Except as provided above, all proceeds from production from the proposed well that are not disbursed for any reason shall be held for the account of the person or persons entitled thereto pursuant to the Oil and Gas Proceeds Payment Act (NMSA 1978 Sections 70-10-1 through 70-10-6, as amended). If not disbursed, such proceeds shall be turned over to the appropriate authority as and when required by the Uniform Unclaimed Property Act (NMSA 1978 Sections 7-8A-1 through 7-8A-31, as amended).
- (17) Any unleased mineral interest shall be considered a seven-eighths (7/8) working interest and a one-eighth (1/8) royalty interest for allocating costs and charges under this Order. Any well costs or charges that are to be paid out of production shall be withheld only from the working interests' share of production, and no costs or charges shall be withheld from production attributable to royalty interests.

agreement after entry of this order, this order shall thereafter be of no further effect.

(19) The operator of the well and the Unit shall notify the Division in writing of the subsequent voluntary agreement of parties subject to the compulsory pooling provisions of this order.

(20) 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.

SEA

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

DAVID R. CATANACH

Director

MANZANO, LLC

Authority For Expenditure

PAGE 1 of 1

OPERATOR MANZANO, LLC						AFE# DATE 10/9/2017					
WELL NAME AND NUMBER				.		FIELD	OR PROSPE	ст	m		
RAG MAMA 30 FEE #1H						JENKINS SECTION TOWNSHIP			BANCE		
SL: 50'FSL & 528'FEL of SEC 30 - BHL: 2310'FSL & 528'FEL of SEC 19 PROJECT DESCRIPTION AND LOCATION						19 &	& 30	9S	RANGE 35E		
PROJECT DESCRIPTION AND LOCATION DRILL & COMPLETE 1.5 MILE LATERAL IN SAN ANDRES						COUNTY			NEW MEXICO		
	n# frac & w/s						OSED FORM	MATION	PROPOSED DEPTH (Ivd)	/md)	
ļ							ANDR	ES	4850TVD/12,000'I	MD	
COMMENT	S:										
			INTAN	GIBLES				Cost To	Completion		
								Casing Point	Costs	TOTAL	
	Footage							#101.2E0		6101.050	
	Drilling on Day W Drilling on Day W							\$181,250	\$21,750	\$181,250 \$21,750	
	Drilling Rig - Mov		9. Dia Lin/Dia I	Journ				\$100,000	\$21,730	\$100,000	
	Completion Rig &			Juwn				\$100,000	\$100,000	\$100,000	
	Survey, Permit, Da		=					\$48,000	\$25,000	\$73,000	
	Road, Location, P	- ·	. Logui					\$80,000	\$110,000	\$190,000	
	Bits & Casing Tool	=						\$35,000	4110,000	\$35,000	
	Rig Fuel							\$39,000	\$6,500	\$45,500	
	Mud and Chemica	ls						\$50,000	ŕ	\$50,000	
	Drilling & Completi	on Water						\$35,000	\$160,000	\$195,000	
	Cementing and C	ement Equipm	ent					\$42,000	\$100,000	\$142,000	
	Mud Logging, Cori	ng & DST's						\$15,000		\$15,000	
	Open Hole Loggin	g									
	Cased Hole Loggir	ng & Wireline Se	ervices						\$120,000	\$120,000	
	Equipment Rentals	3						\$155,000	\$200,000	\$355,000	
ŀ	Directional Service							\$150,000		\$150,000	
	Acidizing, Fracing								\$1,360,000	\$1,360,000	
ŀ	Tubular Inspection		- ·					\$10,000	\$5,000	\$15,000	
1	Casing Crews, To		es					\$13,000	\$7,000	\$20,000	
	Labor & Installation	n						\$28,000	\$90,000 \$35,000		
	Well Control Insu	ranaa						\$28,000	\$33,000		
1	Administrative Ove							\$6,000	\$6,000	\$12,000	
l	Production Testin							40,000	\$10,000	\$10,000	
l	Abandonment Ex	_							4,0,000	\$10,000	
	Disposal of Fluids	•						\$90,000	\$15,000		
	Miscellaneous Co	sts, Tax and C	ontingencies					\$25,181	\$77,385	\$102,566	
				TOTAL	INTANGIBLES			\$1,109,931	\$2,448,635	\$3,293,066	
-			TANC	BLES				Drilling	Completion	TOTAL	
	CASING	FOOTAGE	SIZE	WEIGHT	GRADE	-	OST/FT				
	Conductor	2400	8 5/8"	32#	J55	\$	10.50	646 000		046,000	
	Surface Surface	2400	0 5/0	32#	355	\$	19.50	\$46,800		\$46,800	
	Intermediate					\$		-	,		
	Intermediate					\$	-	1	1		
ļ	Liner		•			\$	-	1			
ł	Production	12000	5 1/2"	20#	L80	\$	16.25		\$195,000	\$195,000	
	Production					\$	-				
]	Tubing	4200	2 7/8'	6.5#	J55	\$	5.00	1	\$21,000	\$21,000	
	Subsurface Equip	•									
	Wellhead Equipm	nent						\$3,000	\$17,000	\$20,000	
	Pumping Unit Flowlines								\$50,000	\$50,000	
	Tanks & Storage								450,000	\$50,000	
1	Separation Equipr	nent							\$40,000	\$40,000	
1	Gas Sales Line &							,			
ſ	Electrical, Instrun	nentation & Mo	onitoring						\$75,000	\$75,000	
	Valves, Connection	ons, Pumps &	Meters						\$30,000	\$30,000	
1					TOTAL TANG			\$49,800	\$428,000	\$477,800	
Ì					TOTAL WELL			\$1,159,731	\$2,876,635	\$4,036,366	
				1	ROJE	CT COST	\$1,160,000	\$2,877,000	\$4,037,000		
Оху Ү-1				Oxy Y-1 - DRY I	-	Oxy Y-1 - COMPLETED WELL COST					
WI-BCP	P 5.00000% \$58,000								\$201,850		
Оху Ү-1				Oxy Y-1 - COM	PLETION COST			BY:			
WI-ACP	ACP 5.00000% \$143,85							MIKE HANAGAN			
				JOINT INT	EREST SHA	\RE					
СОМРА	NY NAME		Signature						DATE		
Οχγ Υ-1			BY:						<u></u>	·	
COMPANY	OWNERSHIP-%			COMPANY COS	ST-DRY HOLE CO	ST		COMPANY COST-COM			
	MI-BCP 5.00% WI-ACP 5.00% \$58,000							\$143,850			