

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Road, Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

HOBBS OCD

SEP 16 2011

RECEIVED

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address ConocoPhillips Company 3300 N "A" St Midland, TX 79705		² OGRID Number 217817
³ Property Code 009112 31118		⁴ API Number 30-025-01436
⁵ Property Name Leamex		⁶ Well No. 10
⁹ Proposed Pool 1 Maljamar; Grayburg-San Andres		¹⁰ Proposed Pool 2

7 Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	16	17S	33W E		2250	South	619	East	Lea

8 Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I									

Additional Well Information

¹¹ Work Type Code A P	¹² Well Type Code O	¹³ Cable/Rotary S-B-2148	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 4161'
¹⁶ Multiple	¹⁷ Proposed Depth 10,525'	¹⁸ Formation Maljamar; Grayburg	¹⁹ Contractor	²⁰ Spud Date 04/20/1961

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
conductor 17 1/4"	13 3/8"	48#	320'	375 sx	surface
12 1/4"	8 5/8"	24 & 32#	4549'	516 sx	2800'
7 7/8"	5 1/2"	17, 15, 17#	11158"	1129 sx	4250'
	2 3/8"	4.6#	4200'		

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

See attached
Permit Expires 2 Years From Approval
Date Unless Drilling Underway
Plugback

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed name: Rhonda Rogers

Title: Staff Regulatory Technician

E-mail Address: rogers@conocophillips.com

Date: 9/14/2011

Phone: (432)688-9174

OIL CONSERVATION DIVISION

Approved by:

Title: PETROLEUM ENGINEER

Approval Date: SEP 21 2011

Expiration Date:

Conditions of Approval Attached ☐

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised July 16, 2010
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-01436	² Pool Code 43329	³ Pool Name Maljamar; Grayburg-San Andres
⁴ Property Code 009112 31118	⁵ Property Name Leamex	⁶ Well Number 10
⁷ OGRID No. 217817	⁸ Operator Name ConocoPhillips Company	⁹ Elevation 4161'

¹⁰ Surface Location


UL or lot no. I	Section 16	Township 17S	Range 33E	Lot Idn	Feet from the 2250	North/South line South	Feet from the 619	East/West line East	County Lea
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. I	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16					17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  Signature Rhonda Rogers Printed Name rogerrs@conocophillips.com E-mail Address 09/14/2011 Date	
					18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 4-11-61 Date of Survey Signature and Seal of Professional Surveyor	
					Certificate Number	

NEW MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

Section A.

Date April 12, 1961

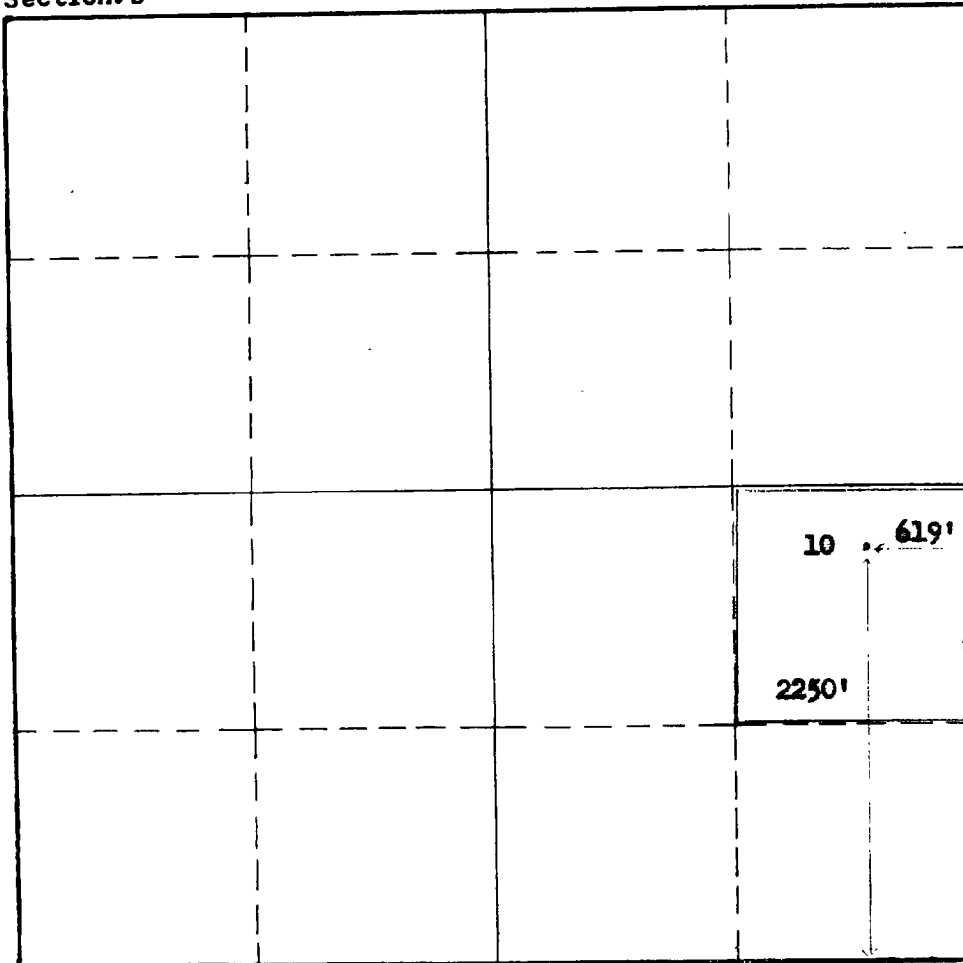
Operator Phillips Petroleum Company Lease Leasex
Well No. 10 Unit Letter I Section 16 Township 17-S Range 33-E NMPM
Located 2250 Feet From south Line, 619 Feet From east Line
County Lea G. L. Elevation (later) Dedicated Acreage 40 Acres
Name of Producing Formation Wolfcamp Pool Undesignated

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes ☒ No ☐.
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes ☐ No ☐. If answer is "yes," Type of Consolidation _____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner

Land Description

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Phillips Petroleum Company
(Operator)

(Representative)

P.O. Box 2105, Hobbs, N.M.
Address

This is to certify that the well location shown on the plat in Section B was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed 4-11-61

W. E. Spry
Registered Professional
Engineer and/or Land Surveyor.

Certificate No. 674

(See instructions for completing this form on the reverse side)

PROCEDURE

1. Within 1 week to move-in of well service unit dump 1000 gal xylene down casing-tbg annulus. Pump back xylene to clean-up rods & tbg (estimated contact time: 4.1 hrs @ current surface displacement).
2. Spot 12 clean 500 bbl frac tanks. Load tanks w/ fresh water prior to frac date. Water to be biocide-treated by SLB.
3. MI & RU service unit (last well service: 09.2009...RTP). POOH w/ rods & pump. NU hydril BOP. POOH & LD prod tbg. The following is a well file source summary of current well configuration:

			Leamex-10 (API: 30-025-01436)
			2250 FSL & 619 FEL, 16 I-17S-33E
	Interval (RKB)		Elev.: 4174 KB; 4161 GL (KB - GL. 13 ft.)
	top	btm	
13-3/8", 48#, H-40	surf	320	04.20.61: Cmt w/ 375 sx. Cmt circ to surface
8-5/8", 32#, J-55	surf	65	05.02.61. Cmt w/ 516 sx TOC @ 2800 (temp survey)
8-5/8", 32#, H-40	65	2430	
8-5/8", 24#, J-55	2430	3586	
8-5/8", 32#, H-40	3586	4549	
5-1/2", 20#, N-80	surf	62	06.17.61: Cmt w/ 935 sx. TOC 4250 (temp survey)
5-1/2", 17#, J-55	62	644	
5-1/2", 15.5#, J-55	644	3936	
5-1/2", 14#, J-55	3936	4045	01.09.85 Slotted slip-jt w/ lead seal csg patch @ 4045
5-1/2", 14#, J-55	4045	6258	01.11.85. Cmt 5-1/2" x 8-5/8" annulus w/ 785 sx
5-1/2", 15.5#, J-55	6258	7528	Circ cmt to surf Close annulus Sq to 1000#.
5-1/2", 17#, J-55	7528	8235	
5-1/2", 17#, N-80	8235	10749	
5-1/2", 20#, N-80	10749	11158	
Wolfcamp Perforated Intervals			
	10532	10540	07.01.61: Perforate @ 2 spf
	10640	10648	07.01.61: Perforate @ 2 spf
	10690	10694	07.01.61. Perforate @ 2 spf
	10724	10742	07.01.61: Perforate @ 2 spf
	11050	11064	06.19.61 Perforate @ 2 spf
Remnants of CIBP	11070	11071	07.01.87: Knocked/pushed CIBP remnants to 11070
PBD	11071		
TD		11160	

4. RIH w/ 2-7/8" production tbg w/ 4-1/2" bit & 5-1/2", 20# csg scraper to 10525 (uppermost perforation: 10532). POOH.
5. RIH w/ 2-7/8" production tbg w/ CIBP. Set CIBP (5-1/2", 20#) @ 10450 (within 50-100 ft. of uppermost perforation @ 10532). Circulate well w/ inhibited biocide-treated fresh water (well capacity w/ tbg: 225 bbl). Close pipe-rams. Test csg (CIBP) @ 500# (bottom-hole test prs: 5025# @ CIBP).

Cap CIBP @ 10450 w/ 25 sx Class H cmt:

Mix & pump 25 sx Class H (5.9 bbl)
 Displace cmt w/ 58.9 bbl fresh water.
 Pull EOT to 9800 ft. (top of cmt: 10197). SD minimum 4 hr.
 RIH & tag cmt. POOH.

POOH & LD 2-7/8" production tbg.

6. RU SLB.

RIH w/ wire-line CIBP. Set CIBP-2 @ 4700 (5-1/2", 14#, J-55 section: 3936-6258).

Run gamma ray/neutron/collar log over interval: 3000-4700 (CIBP). Correlate log to Schlumberger GR/N log of 06.15.61 (San Andres top: 4466)

NU lubricator & test @ 500#.

Perforate following Grayburg intervals @ 60-degree phasing w/ 3-3/8", HSD PowerJet 3406, HMX, 22.8 gm. (EHD: 0.37 in.; Penetration: 37 in.):

Interval	Feet	SPF	Perforations
4290-4295	5	1	6
4300-4305	5	1	6
4310-4315	5	1	6
4320-4325	5	1	6
4330-4335	5	1	6
4350-4355	5	1	6
4360-4365	5	1	6
4370-4375	5	1	6
4380-4385	5	1	6
4390-4395	5	1	6
4410-4415	5	1	6
4420-4425	5	1	6
4430-4435	5	1	6
4440-4445	5	1	6
4450-4455	5	1	6
Total	75		90

- 7 PU & RIH w/ 2-3/8", 4.7#, J-55 work string w/ PKR & RBP. Test tbg below slips @ 4500# while RIH (2-3/8", 4.7#, J-55 Internal Yield Prs: 7700#).

Acidize perforated intervals w/ total of 108 bbl (4536 gal) 15% NE Fe HCl:

Perforated Interval 4410-4455: Acidize w/ 36 bbl 15% NEFE HCl

Set RBP @ 4500 (below lowermost perforation @ 4455).

Pull EOT to 4455. Pump 17 bbl 15% NEFE HCl. SD & allow well to equalize.

Set PKR 4405 (between perforations. 4395-4410)

Pump remaining 19 bbl 15% NEFE HCl. Flush w/ 20 bbl fresh water.

(Anticipated treating prs: 3000# @ 3 BPM)

Record ISIP, SITP(5 min), SITP(10 min) & SITP(15 min)

Perforated Interval 4350-4395: Acidize w/ 36 bbl 15% NEFE HCl

Set RBP @ 4405 (between perforations: 4395-4410).

Pull EOT to 4395. Pump 17 bbl 15% NEFE HCl. SD & allow well to equalize.

Set PKR @ 4340 (between perforations: 4335-4350).

Breakdown w/ water

Pump remaining 19 bbl 15% NEFE HCl. Flush w/ 20 bbl fresh water.

Record ISIP, SITP(5 min), SITP(10 min) & SITP(15 min).

NOTE:

If unable to break down 4350-4395 @ 4000# , reset PKR @ 4275 (above uppermost perforation @ 4290) and combine treatments for 4350-4395 & following 4290-4335.

Perforated Interval 4290-4335: Acidize w/ 36 bbl 15% NEFE HCl

Set RBP @ 4340 (between perforations: 4335-4350).

Pull EOT to 4335. Pump 17 bbl 15% NEFE HCl. SD & allow well to equalize.

Set PKR @ 4275 (above uppermost perforation @ 4290).

Pump remaining 19 bbl 15% NEFE HCl. Flush w/ 20 bbl fresh water.

(Anticipated treating prs: 3000# @ 3 BPM)

Record ISIP, SITP(5 min), SITP(10 min) & SITP(15 min).

POOH w/ tbg, PKR & RBP.

8. PU & RIH w/ 3-1/2", 9.3#, N-80 tbg w/ PKR (5-1/2", 17#). Test tbg @ 8500# while RIH (3-1/2", 9.3#, N-80 Internal Yield Prs: 10,160#).

Set PKR @ 4100 (below csg patch @ 4045 & between csg collars....refer to cased-hole log).

Test 3-1/2" x 5-1/2" annulus & PKR @ 500#.

9. RU SLB. Set treating line pop-off to release @ 8500#.
Set pump trips @ 8000#.
Install spring-operated relief valve on csg-tbg annulus. Pre-set @ 500#.
Load 3-1/2" x 5-1/2" annulus. Note annulus fill volume. Place 200# on csg.
Test surface lines @ 9000#.

Frac 4290-4455 down 3-1/2", 9.3#, N-80 tbg w/ 205,000 gal YF120ST & 250,000# 20/40 Premium White sand & 45,000# 20/40 Super LC. Mark flush @ 1#. Flush w/ 1600 gal WF110

(capacity to uppermost perforation: 1692 gal; 40.3 bbl). Anticipated treating rate: 30 BPM @ 4800#

	Fluid	Proppant	Clean Vol		Proppant		Slurry Vol		Pump Time @ 30 BPM	
			gal	bbl	ppg	lbs	gal	bbl	min	cum min
Pad	YF120ST		65000	1547.6	0.00	0	65000	1547.6	51.6	51.6
Stage	YF120ST	20/40 Premium White	5000	119.0	0.25	1250	5057	120.4	4.0	55.6
Stage	YF120ST	20/40 Premium White	5000	119.0	0.50	2500	5113	121.7	4.1	59.7
Stage	YF120ST	20/40 Premium White	5000	119.0	0.75	3750	5170	123.1	4.1	63.8
Stage	YF120ST	20/40 Premium White	5000	119.0	1.00	5000	5227	124.4	4.1	67.9
Stage	YF120ST	20/40 Premium White	10000	238.1	1.25	12500	10566	251.6	8.4	76.3
Stage	YF120ST	20/40 Premium White	10000	238.1	1.50	15000	10680	254.3	8.5	84.8
Stage	YF120ST	20/40 Premium White	10000	238.1	1.75	17500	10793	257.0	8.6	93.3
Stage	YF120ST	20/40 Premium White	10000	238.1	2.00	20000	10906	259.7	8.7	102.0
Stage	YF120ST	20/40 Premium White	15000	357.1	2.25	33750	16529	393.5	13.1	115.1
Stage	YF120ST	20/40 Premium White	15000	357.1	2.50	37500	16699	397.6	13.3	128.4
Stage	YF120ST	20/40 Premium White	15000	357.1	2.75	41250	16869	401.6	13.4	141.8
Stage	YF120ST	20/40 Premium White	20000	476.2	3.00	60000	22718	540.9	18.0	159.8
Stage	RCP YF120ST	20/40 Super LC	15000	357.1	3.00	45000	17039	405.7	13.5	173.3
Flush	WF110		1600	38.1	0	0	1600	38.1	1.3	174.6
			206600	4919.0		295000	219964	5237.2		

Report ISIP, SITP(5 min), SITP(10 min) & SITP(15 min). RD SLB. SDON.

10. SION to allow resin-coated sand to cure. Flow back well until dead. POOH w/ 3-1/2", 9.3#, N-80 frac string & PKR.
11. RIH w/ 2-3/8", 4.7#, J-55 tbg w/ 4-1/2" bit & 5-1/2", 20# csg scraper. Tag for fill (lowermost perforation: 4455; CIBP 4900). POOH & LD 2-3/8", J-55 work string, bit & scraper.
12. Well is surface equipped w/ C456-365-120. Operate w/ existing 106" stroke @ current 7.2 SPM. Downhole equip w/ 1-1/2" pump as per PROPOSED design in WellView. Anticipated surface production @100% runtime: 200 BPD. Estimated post-frac load volume 5,000 bbl.

	Capacity		Internal Diam. in		Internal Yield (Burst) psi	
	bbl / ft	gal /ft	nom.	drift	100%	80%
2-3/8", 4.7#, J-55	0.00387	0.1624	1.995	1.901	7700	6160
3-1/2", 9.3#, N-80	0.0087	0.3652	2.992	2.867	10160	8128
5-1/2", 14#, J-55	0.0244	1.0249	5.012	4.887	4270	3416
2-3/8" x 5-1/2", 14#	0.0189	0.7948				
3-1/2" x 5-1/2", 14#	0.0125	0.5251				
3-1/2" x 5-1/2", 15.5#	0.0119	0.4999				
3-1/2" x 5-12", 17#	0.0113	0.4766				