District 1 1625 N. French Dr., Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Submit to appropriate District Office

Form C-101

Revised March 17, 1999

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505

State Lease - 6 Copies Fee Lease - 5 Copies

APPLI	CATIO	N FOR	PERMIT 1	ΓΟ DRI	LL. RE-E	ENTEF	R. DEI	EPEN.	, PLUGBAC			DED REPORT
		ī	Operator Name a	nd Address	, , , , , , , , , , , , , , , , , , , ,					OGRID Nu		A ZONE
	Con	oco Inc., 10 E	Desta Drive, Suite	649W, Mid	land, TX 79705	5			****	³ API Num	per 🔾	
Propert	ty Code				5 Property 1 State B-				30-025	~	Well No).
	τ	 			⁷ Surface I	Locatio	n				1-	·
UL or lot no.	Section	Township	Range	Lot 1d	n Feet f	from the	North/Se	outh line	Feet from the	East/West	line	County
J	19	185	37E			300		uth	1660	East		Lea
		1	Proposed B		1)iffere	nt From	m Surface			
UL or lot no.	Section	Township	Range	Lot Id	n Feet f	rom the	North/Se	outh line	Feet from the	East/West	line	County
	1	9 p	roposed Pool 1	1					10 Propo	sed Pool 2		
			Abo Wildcat*									
77	T 0 1		12		14 -							
	Type Code		12 Well Type Co O	de	13 Cab	ole/Rotary R		12	Lease Type Code S	15		Level Elevation 742'
l	ultiple		17 Proposed Dep 8250'	th		ormation Abo			19 Contractor			pud Date /1/00
			21 P	roposed	Casing ar	nd Cem	ent Pr	ogram				
Hole Si	ze	Casi	ng Size		weight/foot	1			Sacks of Ce	ment	Eat	imated TOC
12-1/-			, 8-5/8"	23#	······································	1	Setting Depth 1600'		771		Surface	
7-7/8	}"	J-55,	5-1/2"	1	7#		7950'		1314		Surface	
22 Describe	the propose	ed program.	If this application	is to DEEI	PEN or PLUG	BACK, gi	ve the da	ta on the	present productive	zone and pr	oposed 1	new productive
zone. De	scribe the b	olowout preve	ention program, i	fany. Use	additional shee	ets if neces	ssary.					
1. Well Loc	ation and A	creage Dedic	cation Plat (C-10)	2)								
_	Well Plan											
	g Program							pe ni	. Stalles 1	Year Fr	om A	.pproval
4. BOP/Ch	oke Diagrai	m ·						1 L M.	: 6: pilos 1 :s Umlass C	rilling ¹	Jnde	rway
²³ I hereby cert	ify that the	information g	given above is tru	ie and comp	olete to the		(OIL CO	ONSERVATI	ON DIV	ISIO	N
best of my kno	wledge and	belief.) /			A						
Signature:	JO (1	nn g	ghnson	<u> </u>		Approv	rea by:	Ú	AICINEL S. O. '' 	`ilio Flaurt		alitam R
Printed name:						Title:				-		
Title: Sr. Prope	erty Analys	t	T				al Date:		4 2000 E	cpiration Da	te:	
Date: 2/9/00			Phone:			I Conditi	one of A	nroval:				

Attached

915-686-5515

DISTRICT I 1026 N. Franck Dr., Hobbs, NK 80240 DISTRICT II 811 South First, Artesia, NM 86210

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brases Rd., Asteo, NM 67410

DISTRICT IV 2040 South Pachecs, Santa Fe, NM 87505

Dedicated Acres

40

Joint or Infill

Consolidation Code

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87505

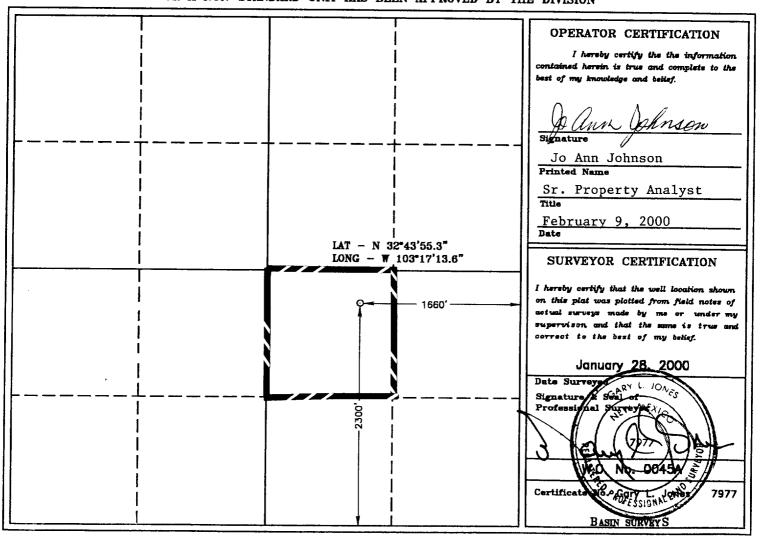
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-02.	Number S ~34	928		Pool Code	Go	od win . A	Pool Name			
253			Property Name Well STATE "B-19"							
05073	o.		Operator Name CONOCO INC.						tion 2'	
	Surface Location									
UL or lot No.	Section 19	Township 18 S	Range 37 E	Lot Idn	Feet from the 2300	North/South line	Feet from the	EAST	County	
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	

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

Order No.



SECTION 19, TOWN HIP 18 SOUTH, RANGL 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

100' NORTH □ OFF SET 3743.2'

CONOCO INC. STATE "B-19" #3 ELEV. - 3742'

100' WEST OFF SET 3740.9' □

100' EAST

OFF SET
3742.4'

Lat-N 32°43'55.3" Long-W 103°17'13.6"

100' SOUTH
□ OFF SET
3742.8'

Proposed Lease Rd.

DIRECTIONS TO WELL LOCATION:

FROM JUNCTION US 62/180 AND CO. RD. 41, GO NORTH 1.5 MILE THROUGH GATE; THENCE EAST 3900 FEET; THENCE NORTH 4900 FEET TO A POINT WHICH LIES 100 FEET EAST OF PROPOSED WELL LOCATION.

Conoco Inc.

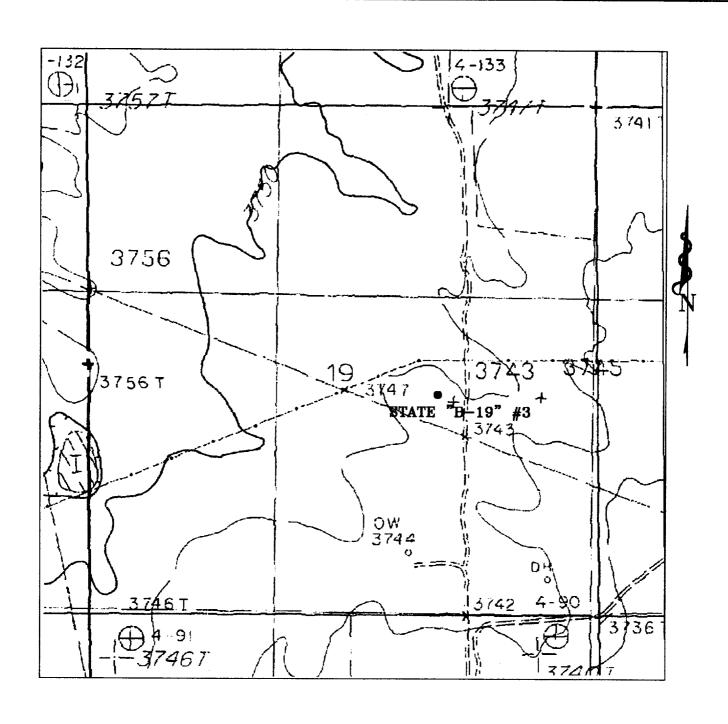
REF: STATE "B-19" No. 3 / Well Pad Topo

THE STATE "B-19" No. 3 LOCATED 2300' FROM THE SOUTH LINE AND 1660' FROM THE EAST LINE OF SECTION 19, TOWNSHIP 18 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 0045 Drawn By: K. GOAD

Date: 01—31—2000 | Disk: KJG #122 — 0045A.DWG | Survey Date: 01—28—2000 | Sheet 1 of 1 Sheets



STATE "B-19" #3 Located at 2300' FSL and 1660' FEL Section 19, Township 18 South, Range 37 East, N.M.P.M., Lea County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 — Office (505) 392-3074 — Fax basinsurveys.com

W.O. Number:	0045AA — KJG #122					
Survey Date:	01-28-2000					
Scale: 1" = 1000'						
Date: 01-31-	-2000					

CONOCO INC.

PROPOSED WELL PLAN OUTLINE

WELL NAME

State B-19 No. 3 1,660' FEL & 2,300' FSL Sec 19 -T18S-R37E

Ground Level : Kelly Bushing:

3,743'

Depth MD 0	FORMATION TOPS	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING PROGRAM	FRAC GRAD	FORM, PRES. GRAD.	Mud Weight & Type	Days
		Possible Hole Enlargement & Sloughing		12-1/4"			Less than 8.3	8.4 - 9.5 Fresh	
1000									
	Top Salt @ 1,521'	Washouts in Salt Section			8-5/8", 23#, M-50 ST&C @ 0'-1,600' Circulate Cement			40	3
		Washington Court Country		7-7/8"	Circulate Cement			10 Brine	
2000							Less than 8.4		
	Base Salt @ 2,582' Yates @ 2,736'		H2S Monitor on @ 2,600'						
	7 Rivers @ 3,045'		Mud Loggers F/ 2,800' - TD						
3000	7 HIVERS @ 3,045						- - -		
	Queen @ 3,667'								
4000	Grayburg @ 4,066'								
	 San Andres @ 4,388	Lost Returns in San Andres							7
5000									
		·							
		Possible differential sticking							
6000	Glorietta @ 5,842	thru Glorietta & Paddock							
	 Blinebry Mkr @ 6,22 	1'							
	Tubb @ 7,101'								
,	Drinkard @ 7,151' Abo @ 7,342'		First Log Run: GR-CAL-DLL-MLL-Sonic						
	,		FDC-CNL-PE : TD to 2,800' Pull GR-CNL-Cal to Surf		5 1/2" 17 A# 15c				
	TD @ 7,950'		Second Log Run: FMI imaging log		5-1/2", 17.0#, J-55 LT&C f/0'-7,950' Circulate Cement			10 ppg Starch Gel	20
8000									

14	o	ι	е	٠

DATE

02-Feb-00

Bruce Wiley, Geologist

APPROVED

Yong Cho, Drilling Engineer

Jim Hubbard, Reservoir Engineer



Conoco State B-19 No. 3

Sec. 19-T18S-R37E Lea County, New Mexico January 25, 2000

Well Recommendation

Prepared for:

Mr. Yong Cho **Drilling Engineer**

Prepared by:

Rocky Chambers Region Engineer

Bus Phone: Mobile: Pager:

915/683-2781 915/557-1239

915/498-1605



PowerVision*

Service Point:

Hobbs

Bus Phone:

(505) 392-5556

Fax:

(505) 392-7307

Service Representatives:

Wayne Davis

Account Manager

Bus Phone: (915) 683-2781

Well Name:

State B-19 No. 3 Job Description: 8 5/8" Surface Casing

Date:

January 25, 2000



Proposal No: 180253010A

JOB AT A GLANCE

Depth (TVD) 1,600 ft

Depth (MD) 1,600 ft

Hole Size 12.25 in

Casing Size/Weight: 8 5/8 in, 24 lbs/ft

Pump Via Casing 8 5/8" O.D. (8.097" .I.D) 24 #

Total Mix Water Required 6,994 gals

Pre-flush

Mud Clean I 1,500 gals **Density** 8.4 ppg

Lead Slurry

LEAD SLURRY 564 sacks **Density** 12.7 ppg Yield 1.88 cf/sack

Tail Slurry

TAIL SLURRY 207 sacks Density 14.8 ppg Yield 1.34 cf/sack

Displacement

Water 99 bbls **Density** 8.4 ppg

Well Name:

State B-19 No. 3 Job Description: 8 5/8" Surface Casing

Date:

January 25, 2000



Proposal No: 180253010A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)				
(in)	MEASURED	TRUE VERTICAL			
12.250 HOLE	1,600	1,600			

SUSPENDED PIPES

DIAMETER (in)		WEIGHT	DEF	PTH(ft)
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
8.625	8.097	24	1,600	1,600

Float Collar set @

1,560 ft

Mud Density

8.40 ppg

Est. Static Temp.

90°F

Est. Circ. Temp.

86 ° F

VOLUME CALCULATIONS

1,280 ft	X	0.4127 cf/ft	with	100 % excess	=	1056.8 cf
320 ft	X	0.4127 cf/ft	with	100 % excess	=	264.1 cf

40 ft 0.3576 cf/ft

0 % excess with 14.3 cf (inside pipe)

TOTAL SLURRY VOLUME = 1335.3 cf

238 bbls

Well Name:

State B-19 No. 3 Job Description: 8 5/8" Surface Casing

Date:

January 25, 2000



Proposal No: 180253010A

FLUID SPECIFICATIONS

Amount of Mix Water (gps)

Amount of Mix Fluid (gps)

Estimated Pumping Time - 70 BC (HH:MM)

Pre-flush

1,500.0 gals Mud Clean I @ 8.4 ppg

FLUID	VOLUME CU-FT		VOLUME FACTOR	<u>A</u>	MOUNT AND TYPE OF CEMENT
Lead Slurry	1057	1	1.88	C by	64 sacks (35:65) Poz (Fly Ash):Class C ement + 2% bwoc Calcium Chloride + 0.25% voc Cello Flake + 0.005 gps FP-6L + 6% bwoc entonite + 96.5% Fresh Water
Tail Slurry	278	1	1.34	C	77 sacks Class C Cement + 2% bwoc Calcium nloride + 0.005 gps FP-6L + 56.3% Fresh ater
Displacement				99 pp	.4 bbls Water + 56.3% Fresh Water @ 8.4
CEMENT PROPERTIE	s				
				URRY IO. 1	' SLURRY NO. 2
Slurry Weight (ppg) Slurry Yield (cf/sack)				2.70 1.88	14.80 1.34

10.07

10.08

5:00

6.35

6.35

2:20

Well Name:

State B-19 No. 3

Job Description: 5-1/2" Production Casing

Date:

January 25, 2000

B

Proposal No: 180253010A

JOB AT A GLANCE

Depth (TVD) 7,950 ft

Depth (MD) 7,950 ft

Hole Size 7.875 in

Casing Size/Weight: 5 1/2 in, 17 lbs/ft

Pump Via Casing 5 1/2" O.D. (4.892" .I.D) 17 #

Total Mix Water Required 11,644 gals

Pre-flush

Mud Clean I1,500 galsDensity8.4 ppg

Lead Slurry

LEAD SLURRY916 sacksDensity12.7 ppgYield1.85 cf/sack

Tail Slurry

TAIL SLURRY 398 sacks
Density 14.8 ppg
Yield 1.34 cf/sack

Displacement

Water 184 bbls
Density 8.4 ppg

Well Name:

State B-19 No. 3

Job Description: 5-1/2" Production Casing

Date:

January 25, 2000



Proposal No: 180253010A

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)				
(in)	MEASURED	TRUE VERTICAL			
8.097 CASING	1,600	1,600			
7.875 HOLE	7,950	7,950			

SUSPENDED PIPES

DIAMETER (in)		WEIGHT	WEIGHT DEPTH(ft)			
O.D.	1.D.	(lbs/ft)	MEASURED	TRUE VERTICAL		
5.500	4.892	17	7,950	7,950		

Float Collar set @

7,910 ft

Mud Density

10.00 ppg

Mud Type

Water Based

Est. Static Temp.

128 ° F

Est. Circ. Temp.

121 ° F

VOLUME CALCULATIONS

1,600 ft	Х	0.1926 cf/ft	with	0 % excess	=	308.2 cf
4,000 ft	×	0.1733 cf/ft	with	100 % excess	=	1386.0 cf
2,350 ft	X	0.1733 cf/ft	with	30 % excess	=	530.0 cf
40 ft	×	0.1305 cf/ft	with	0 % excess	=	5.2 cf (inside pipe)

TOTAL SLURRY VOLUME = 2229.4 cf

= 397 bbls

Well Name:

State B-19 No. 3

Job Description: 5-1/2" Production Casing

Date:

January 25, 2000



Proposal No: 180253010A

FLUID SPECIFICATIONS

Pre-flush

1,500.0 gals Mud Clean I @ 8.4 ppg

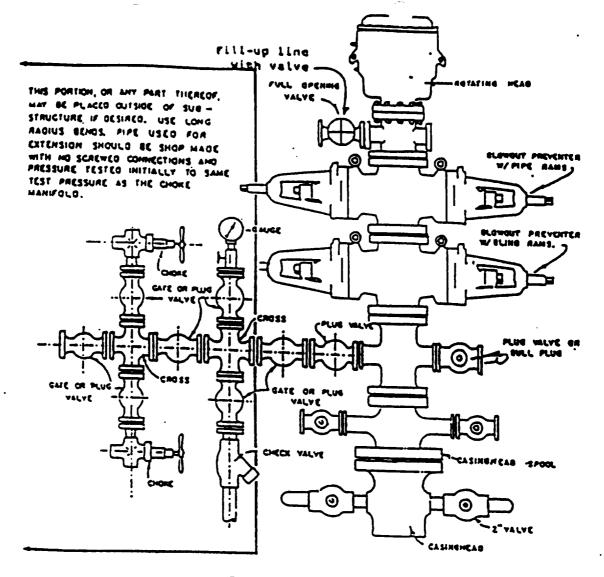
FLUID	VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	1694	1	1.85	= 916 sacks (35:65) Poz (Fly Ash):Class C Cement + 0.25% bwoc Cello Flake + 0.005 gps FP-6L + 6% bwoc Bentonite + 95.7% Fresh Water
Tail Slurry	535	1	1.34	= 398 sacks Class C Cement + 1% bwoc BA-58 + 0.9% bwoc FL-50 + 0.5% bwoc CD-32 + 0.005 gps FP-6L + 0.2% bwoc Sodium Metasilicate + 55.7% Fresh Water
Displacement				183.9 bbls Water + 55.7% Fresh Water @ 8.4 ppg

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.70	14.80
Slurry Yield (cf/sack)	1.85	1.34
Amount of Mix Water (gps)	9.98	6.28
Amount of Mix Fluid (gps)	9.99	6.29
Estimated Pumping Time - 70 BC (HH:MM)	2:49	1:49
Free Water (mls) @ ° F @ 90 ° angle	0.9	

RHEOLOGIES

FLUID		TEMP	600	300	200	_100	6	3
Lead Slurry		°F	153	141	136	130	50	38
Tail Slurry	@	80 ° F	150	102	85	68	43	35

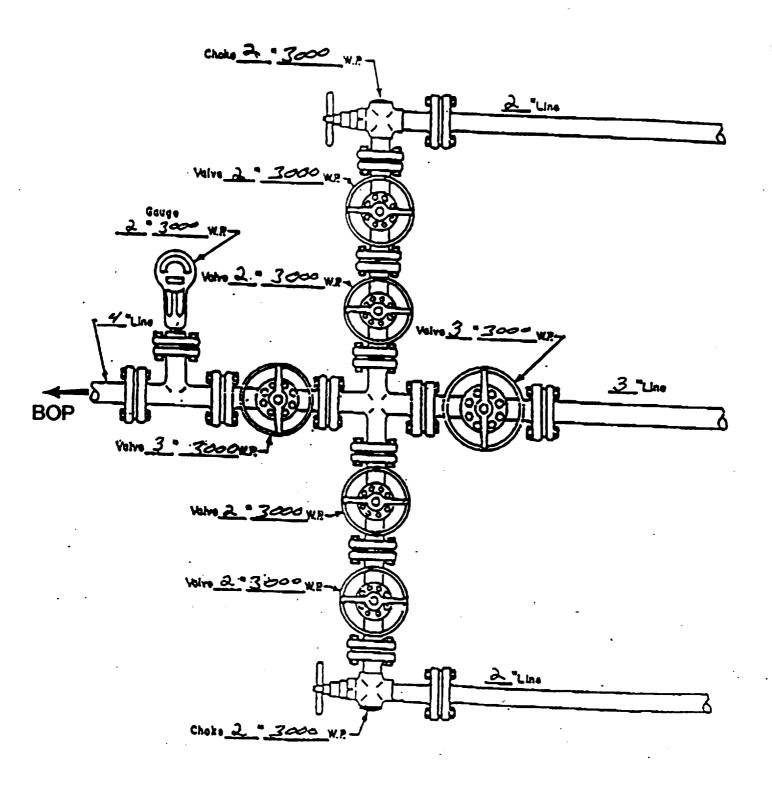


BLOWOUT PREVENTER HOOKUP

Drilling contractors used in the San Juan Basing supply 3000 psi equipment, but cannot provide annular preventors because of substructure limitations. Maximum anticipated surface pressures for this well will not exceed the working pressure of the proposed BOP system. Please see the attached BOP diagram details 2000 psi equipment according to Onshore Order No. 2 even though the equipment will test to 3000 psi. The 2000 psi system allows deletion of the annular preventor and fulfills your requirements (note diagram No. 1). In addition, the following equipment will comprise the 2000 psi system:

- Two rams with one blind and one pipe ram. 1.
- 2. Kill line (2 inch maximum).
- One kill line valve. 3.
- 4. One choke line valve.
- Two chokes (reference diagram No. 1). 5.
- 6. Upper kelly cock valve with handle.
- 7. Safety valve and subs to fit all drill strings in use. 8.
- Two-inch minimum choke line. 9.
- Pressure gauge on choke manifold. 10. Fill-up line above the upper most preventor.
- Rotating head. 11.

CHOKE MANIFOLD DIFTSRAM



MANIFOLD ∴3000 ¥W.P

区 Manuel

☐ Hydraulic