

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2001 JUL 20 PM 1:31

1a. Type of Work DRILL	5. Lease Number SF-080668 Unit Reporting Number 891001054A
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 27-4 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 27-4 Unit 9. Well Number 100 70N
4. Location of Well 1025' FNL, 2170' FWL Latitude 36° 36.4, Longitude 107° 15.4	10. Field, Pool, Wildcat Blanco Mesaverde 11. Sec., Twn, Rge, Mer. (NMPM) C Sec. 4, T-27-N, R-4-W API # 30-039-26787
14. Distance in Miles from Nearest Town 18 miles from Gobernador	12. County Rio Arriba
15. Distance from Proposed Location to Nearest Property or Lease Line 1025'	13. State NM
16. Acres in Lease	17. Acres Assigned to Well 319.20 W/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1400'	
19. Proposed Depth 6646'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 7194' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u><i>Peggy Case</i></u> Regulatory/Compliance Supervisor	<u>7-11-01</u> Date

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

NMOCd

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

2002 SEP 26 PM 1:36

070 FARMINGTON, NM

1. Type of Well
GAS

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

1025' FNL, 2170' FWL, Sec.4, T-27-N, R-4-W, NMPM

5. Lease Number
NMSF-080668

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

San Juan 27-4 Unit

8. Well Name & Number

San Juan 27-4 U #70N

9. API Well No.

30-039-

10. Field and Pool

Blanco MV/Basin DK

11. County and State

Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

☒ Notice of Intent☐ Abandonment☒ Change of Plans☐ Subsequent Report☐ Recompletion☐ New Construction☐ Final Abandonment☐ Plugging Back☐ Non-Routine Fracturing☐ Casing Repair☐ Water Shut off☐ Altering Casing☐ Conversion to Injection☒ Other -

13. Describe Proposed or Completed Operations

It is intended to change the well name for the Application for Permit to Drill, Deepen or Plug Back to the San Juan 27-4 Unit #70N from the San Juan 27-4 Unit #18B. Also the well will be completed in the Dakota formation as well as the Mesaverde. Attached is a new C-102 plat, an Operations Plan, BOP diagram and site diagram. After completion the well will be down hole commingled. A down hole commingle application will be submitted.

14. I hereby certify that the foregoing is true and correct.

Signed Deann Case Title Regulatory Supervisor Date 8/6/02
no

(This space for Federal or State Office use)

APPROVED BY B. Mankins Title AFM Date 5-24-04
CONDITION OF APPROVAL, if any:

RECEIVED

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039- 26787		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 7452	*Property Name SAN JUAN 27-4 UNIT		*Well Number 70N
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 7194'

¹⁰ Surface Location

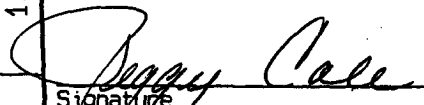
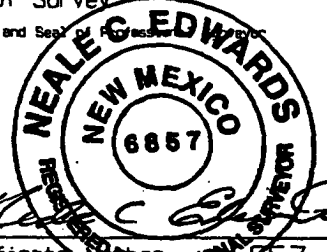
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	4	27N	4W		1025	NORTH	2170	WEST	RIO ARriba

¹¹ 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

¹² Dedicated Acres MV-W/319.2 DK-W/319.2	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

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 1306.80' LOT 4 2170' 1320.00' 2640.00'	LOT 3 1025' LAT: 36°36.4' N. LONG: 107°15.4' W. USA SF-080668 4	LOT 2 5280.00' Reissued to show addition of Dakota formation and well number from 18B 5274.06'	LOT 1 1306.80' 1320.00' 2640.00'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Peggy Cole Printed Name Regulatory Supervisor Title 9-25-02 Date
				¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this was plotted from field notes of actual surveys made or under my supervision, and that the same is true and correct to the best of my belief. DECEMBER 5, 2000 Date of Survey Signature and Seal of Professional Surveyor  Certificate Number 6857

Sundry Notices and Reports on Wells

RECEIVED

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GAS

2. Name of Operator
BURLINGTON
RESOURCES OIL & GAS COMPANY LP

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M
1025' FNL, 2170' FWL, Sec. 4, T-27-N, R-4-W, NMPM

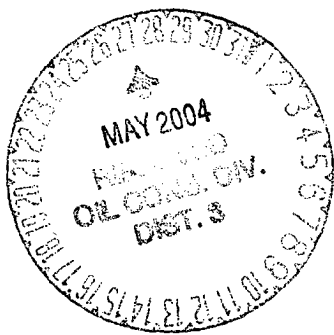
5. Lease Number
NMSF-080668
6. Indian, All. or
Tribe Name
070 Farmington, NM
7. Unit Agreement Name

San Juan 27-4 Unit
8. Well Name & Number
San Juan 27-4 U #70N
9. API Well No.
30-039-26787
10. Field and Pool
Blanco MV/Basin DK
11. County and State
Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission	Type of Action
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other -
	<input checked="" type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Conversion to Injection

13. Describe Proposed or Completed Operations
Attached is a new operations plan and multi-point surface use plan for the subject well.



14. I hereby certify that the foregoing is true and correct.
Signed [Signature] Title Regulatory Supervisor Date 7/14/03
no
(This space for Federal or State Office use)
APPROVED BY [Signature] Title AFM Date 5-24-04
CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #70N
1025' FNL, 2170' FWL, Section: 4, T-27-N, R-4-W
Rio Arriba County, New Mexico
Latitude 36° 36.4, Longitude 107° 15.4
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7194' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3481'	
Ojo Alamo	3481'	3676'	aquifer
Kirtland	3676'	3885'	gas
Fruitland	3885'	4121'	
Pictured Cliffs	4121'	4196'	gas
Lewis	4196'	4716'	gas
Intermediate TD	4296'		
Huerfanito Bentonite	4716'	5071'	gas
Chacra	5071'	5901'	gas
Cliff House	5901'	5956'	
Menefee	5956'	6246'	gas
Point Lookout	6246'	6836'	gas
Mancos	6836'	7456'	gas
Gallup	7456'	8236'	gas
Greenhorn	8236'	8301'	gas
Graneros	8301'	8356'	gas
Dakota	8356'	8546'	gas
Oak Canyon	8546'		
TD	8561'		

Logging Program:

Mud logs - none
Cased hole - CBL-CCL-GR - TD to surface
Open hole - none
Cores - none

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 120'	Spud	8.4-9.0	40-50	no control
120- 4296'	LSND	8.4-9.0	30-60	no control
4296- 8561'	Air/N2	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program (as listed, the equivalent, or better):

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 120'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 4296'	7"	20.0#	J-55
6 1/4"	0' - 8561'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 8561'

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #2).

Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #3). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead -

9 5/8" x 7" x 4 1/2" x 2 3/8" x 3000 psi tree assembly.

General -

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9 5/8" surface casing - cement with 27 sx Type III cement with 1/4# Celloflake/sx and 2% calcium chloride or equivalent slurry (38 cu.ft. of slurry). WOC 24 hours for pre-set holes or 8 hours for conventionally set holes before pressure testing or drilling out from under surface casing. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -

Lead w/397 sx Premium Lite cement with 3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sx Type III cmt w/1% calcium chloride, 0.25 pps Flocele, 0.2% fluid loss (970 cu.ft. of slurry, 50% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar 3585'. First stage: cement with w/116 sx Type III cmt w/1% calcium chloride, 0.25 pps Flocele, 0.2% fluid loss. Second stage: 379 sx Premium Lite cement with 3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (970 cu.ft., 50% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 3676'. Two turbolating centralizers at the base of the Ojo Alamo at 3676'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" production casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 294 sx 35/65 poz Type III cement w/0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 7 pps CSE, 6% gel (582 cu.ft.), (30% excess to cement 4 1/2" x 7" overlap. WOC a minimum of 18 hrs prior to completing.)

Cement float shoe on bottom with float collar spaced on top of float shoe.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Additional Information:

- The Mesaverde and Dakota formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

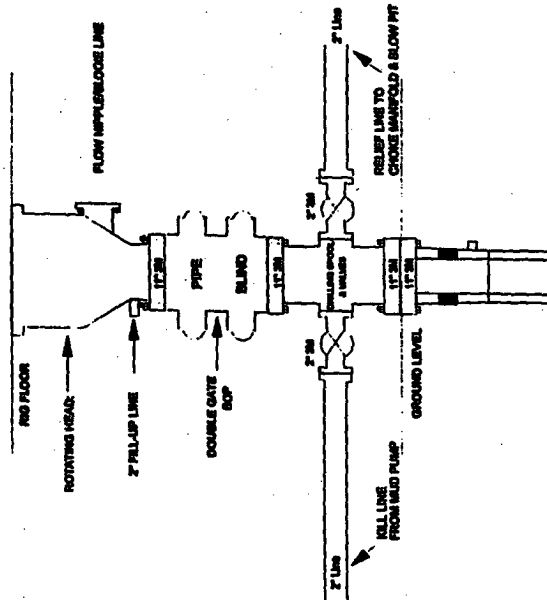
Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	2500 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The west half of Section 4 is dedicated to the Mesaverde and the Dakota in this well.
- This gas is dedicated.

Sean Corrigan
Drilling Engineer

August 14, 2003
Date

Burlington Resources

Drilling Rig 3000 psi System



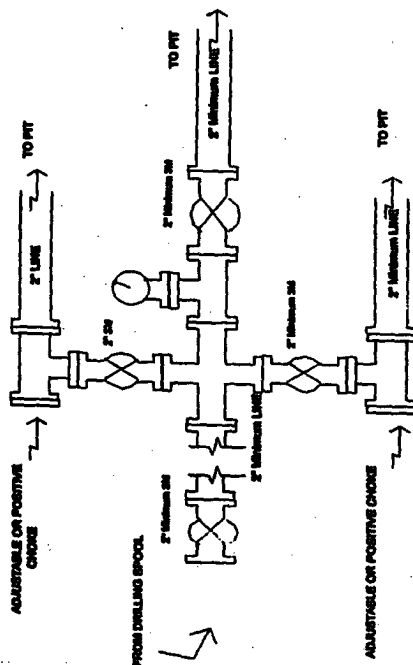
BOP Installation from Surface Casing Point to Total Depth, 11" Bore
10" Nominal, 3000 psi working pressure double gate BOP to be
equipped with blind rams and pipe rams. A 500 psi relieving head on top of
ram preventers. All BOP equipment is 3,000 psi working pressure

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig Choke Manifold Configuration 3000 psi System



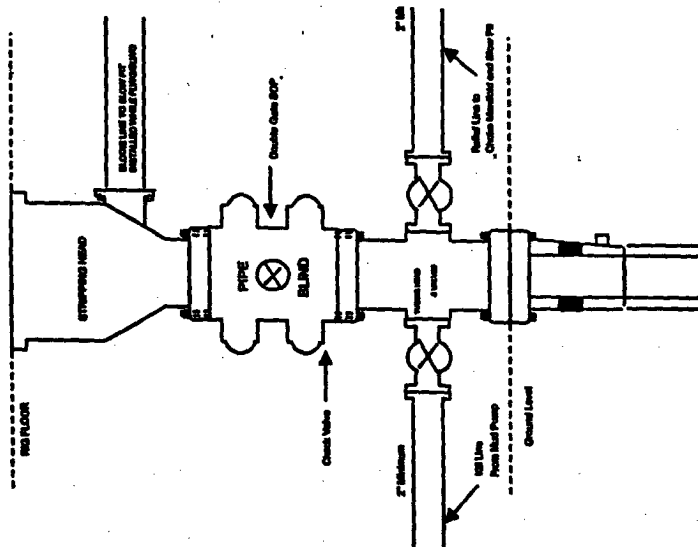
Choke manifold Installation from Surface Casing
Point to Total Depth, 3,000psi working pressure
equipment with two chokes.

Figure #2

4-20-01

BURLINGTON RESOURCES

Completion/Workover Rig BOP Configuration 3,000 psi System



Minimum BOP Installation for all Completion/Workover
Operations. 7-1/16" bore, 3000 psi minimum working
pressure double gate BOP to be equipped with blind and
pipe rams. A stripping head to be installed on the top of
the BOP. All BOP equipment is 3000 psi working
pressure or greater excluding 600 psi stripping head.

Figure #3

4-20-01

**BURLINGTON RESOURCES OIL & GAS COMPANY
SAN JUAN 27-4 UNIT #18B, 1025' FNL & 2170' FWL
SECTION 4, T27N, R4W, NMPM, RIO ARriba COUNTY, NM
GROUND ELEVATION: 7194' DATE: DECEMBER 5, 2000**

CONSTRUCTION ZONE

Reserve Pit 2:1 Slopes
10' DEEP

Dike
8' DEEP

Blow Pit 3' DEEP

INSTALL DRAIN PIPE ON FRUITLAND FORMATIONS ONLY

6' DEEP

20'

40'

70'

5-74-E
LAYDOWN
Wellhead to front

Wellhead to back

140'

160'

Wellhead to side

130'

ACCESS
900' (0-8%)

225' X 300'

(325' x 400') = 2.98 ACRES

WASH

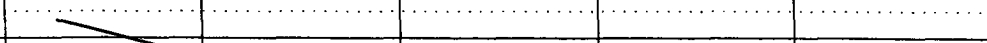
WASH

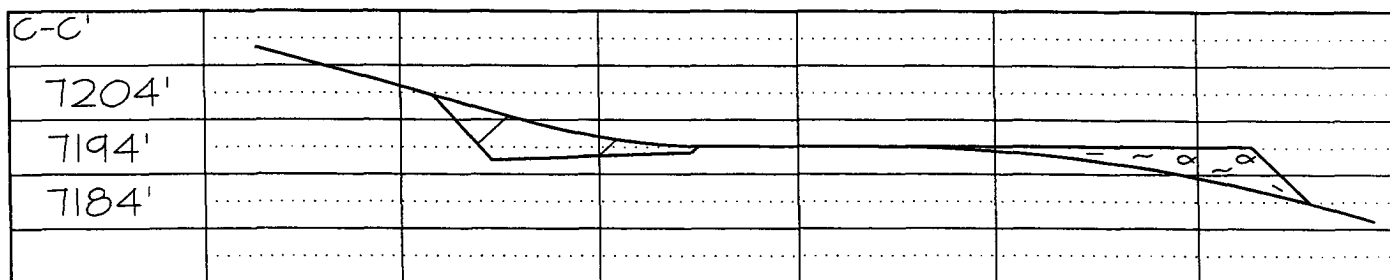
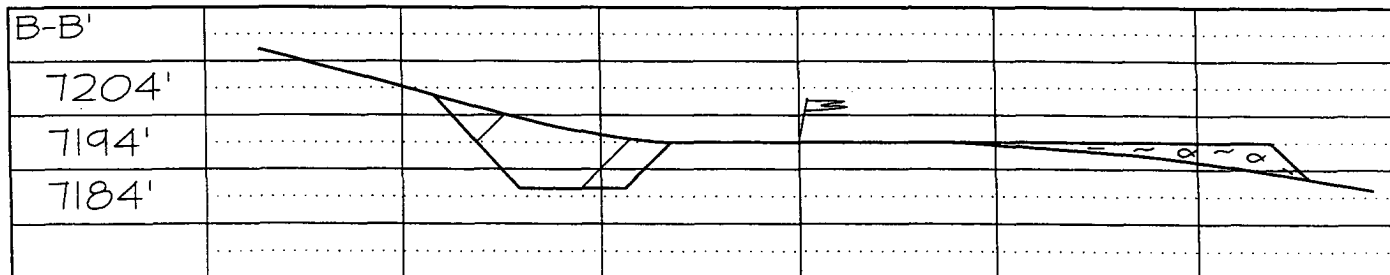
WASH

N

A B C

F E D

A-A'										
7204'										
7194'										
7184'										



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables. Call and/or access road at least two (2) working days prior to construction.