

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 APR 25 AM 10 02

1a. Type of Work DRILL	5. Lease Number NMSF-077651 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP	7. Unit Agreement Name	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Richardson SRC 9. Well Number #100	
4. Location of Well Unit A (NENW), 885' FNL & 1050' FEL, Latitude 36° 53.3655'N Longitude 108° 04.7847'W	10. Field, Pool, Wildcat Basin FC/ Glades FS / Aztec PC 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 22, T31N, R12W API # 30-045- 3370.1	
14. Distance in Miles from Nearest Town	12. County San Juan	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 885'	17. Acres Assigned to Well FC - 297.04 E/2; FS & PC 145.96 NE/4	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease	
19. Proposed Depth 2986'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6324' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Patsy Olguin</u> Sr. Staff Specialist	<u>04/24/06</u> Date	

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

Archaeological Report attached

Threatened and Endangered Species Report attached

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.

DRILLING, REPAIR, DEEPEN, OR PLUG BACK
SUBJECT TO THE
"GENERAL"

This application is subject to the approval and
signature of the authorized person to 43 CFR 3160.3
and approval pursuant to 43 CFR 3103.4

NMOCDD

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045- 33721		*Pool Code 71629 / 77410/71280	*Pool Name Basin Fruitland Coal, Glades FS, Aztec PC
*Property Code 18610	*Property Name RICHARDSON SRC		*Well Number 100
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		*Elevation 6324'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot-Lin	Feet from the	North/South line	Feet from the	East/West line	County
A	22	31-N	12-W	1	885'	NORTH	1050'	EAST	SAN JUAN

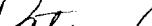
¹¹ Bottom Hole Location If Different From Surface

UL or lot no. A	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹³ Dedicated Acres FC 297.04 ac E2 FS/PC 145.96 ac NE4			¹² 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

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.


Signature
Patsy Clugston
Printed Name
Sr. Regulatory Specialist
Title
3/20/2006
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.

Date of Survey 12-30-06

Signature and Seal of Licensed Professional Surveyor: Carlen W. Russell

Certificate Number 15703

Office

Energy, Minerals and Natural Resources

May 27, 2004

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

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

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-045-23721

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

NMSF-077651

7. Lease Name or Unit Agreement Name

Richardson SRC

8. Well Number

#100

9. OGRID Number

14538

10. Pool name or Wildcat

Basin FC / Glades FS / Aztec PC

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

Oil Well ☐Gas Well ☒

Other

2. Name of Operator

BURLINGTON RESOURCES OIL & GAS COMPANY LP

3. Address of Operator

3401 E. 30TH STREET, FARMINGTON, NM 87402

4. Well Location

Unit Letter A : 885' feet from the North line and 1050' feet from the East lineSection 22 Township 31N Range 12W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

6324' GL

Pit or Below-grade Tank Application

☐ or Closure ☐

Pit type

New Drill

Depth to Groundwater

>100'

Distance from nearest fresh water well

>1000'

Distance from nearest surface water

>1000'

Pit Liner Thickness:

n/a

mil

Below-Grade Tank:

Volume

bbls;

Construction Material

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:PERFORM REMEDIAL WORK ☐TEMPORARILY ABANDON ☐PULL OR ALTER CASING ☐PLUG AND ABANDON ☐CHANGE PLANS ☐MULTIPLE COMPL ☐

OTHER:

New Drill

☒**SUBSEQUENT REPORT OF:**REMEDIAL WORK ☐COMMENCE DRILLING OPNS. ☐CASING/CEMENT JOB ☐ALTERING CASING ☐P AND A ☐

OTHER:

☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

New Drill, Unlined:

Burlington Resources proposes to construct a new drilling pit and an associated vent/flare pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and vent/flare pit will be an unlined pit as detailed in Burlington's Revised Drilling / Workover Pit Construction / Operation Procedures dated November 11, 2004 on file at the NMOCD office. A portion of the vent/flare pit will be designed to manage fluids, and that portion will be unlined, as per the risk ranking criteria. Burlington Resources anticipates closing these pits according to the Drilling / Workover Pit Closure Procedure dated August 2, 2004 on file at the NMOCD office.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE

TITLE

Sr. Regulatory Specialist

DATE

4/11/2006

Type or print name

Patsy Clugston

E-mail address:

pclugston@br-inc.com

Telephone No.

505-326-9518

For State Use Only

APPROVED BY

TITLE

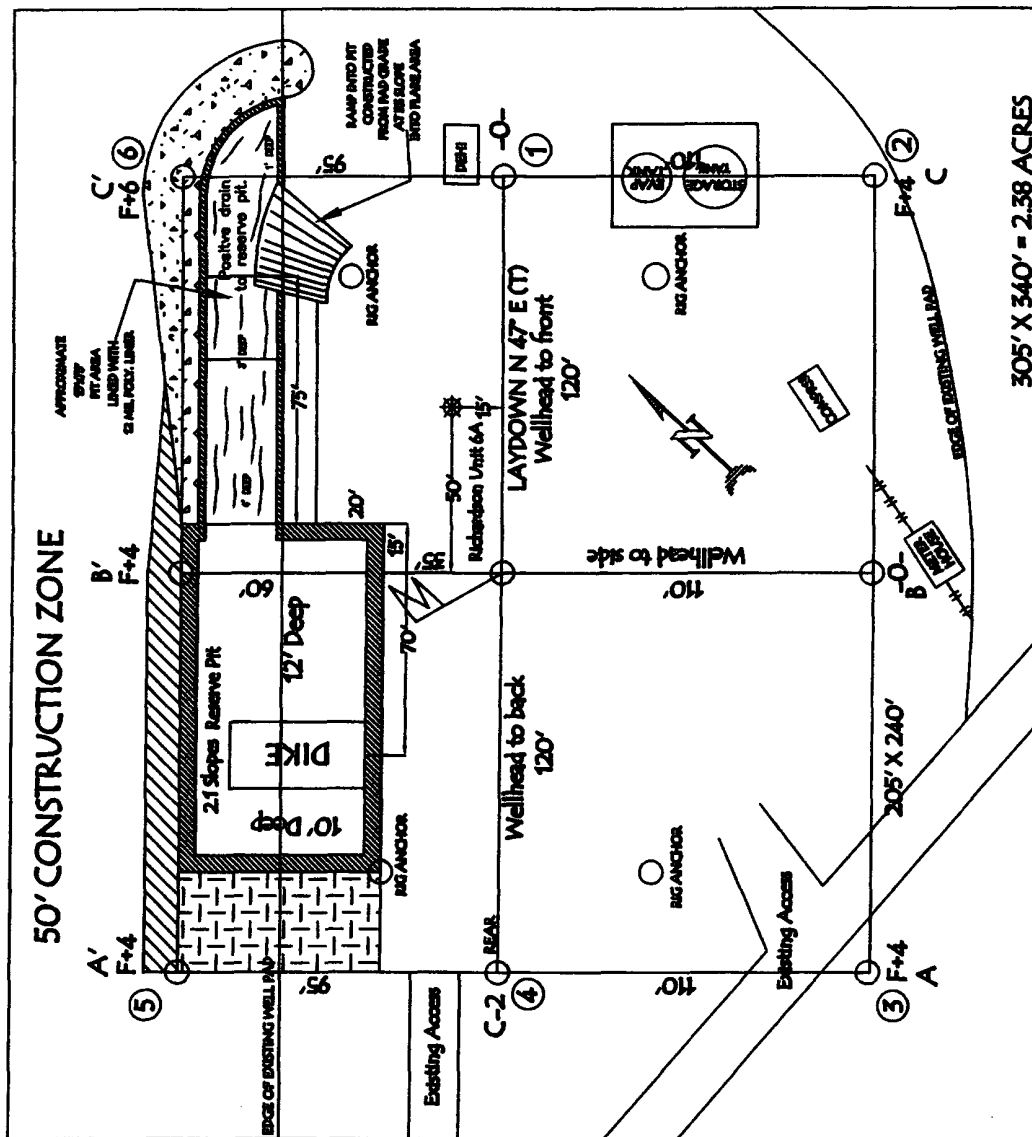
DEPUTY OIL & GAS INSPECTOR, DIST. IV

DATE

JUN 05 2006

Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP
RICHARDSON SRC #100, 885' FNL & 1050' FEL
SECTION 22, T-31-N, R-12-W, NMPM, SAN JUAN COUNTY, NM
GROUND ELEVATION: 6324', DATE: MARCH 1, 2006



RESERVE PIT DIKE, TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).

NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED
PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

LATITUDE: 36° 53.3655'N LONGITUDE: 108° 04.7847'W NAD27

OPERATIONS PLAN

Well Name: Richardson SRC #100
Location: Unit A (NENE), 885' FNL & 1050' FEL, Section 22, T31N, R12W
San Juan County, New Mexico
Latitude 36° 53.3655'N Longitude 108° 04.7847' W
Formation: Basin Fruitland Coal / Fruitland Sands & Pictured Cliffs
Elevation: 6324' GR

Formation:	Top	Bottom	Contents
Ojo Alamo	1013'	1066'	aquifer
Kirtland	1066'	2336'	gas
T/Fruitland	2336'		gas
Pictured Cliffs	2786'		
Total Depth	2986'		

Logging Program: None

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis. Fluid Loss</u>
0- 120'	Spud/Air/Air Mist	8.4-8.9	40-50 no control
120-2986'	Non-dispersed	8.4-9.5	30-60 no control

Casing Program:

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
8 $\frac{3}{4}$ "	0 - 120'	7"	20.0#	J-55
6 $\frac{1}{4}$ "	0 - 2986'	4 1/2"	10.5#	J/K-55

Tubing Program:

0 - 2986'	2 3/8"	4.7#	J-55
-----------	--------	------	------

Float Equipment: 7" surface casing - guide shoe. Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - float shoe and float collar on bottom. Centralizers run every third joint above shoe to the base of the Ojo Alamo @ 1066'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1066'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 7" x 4 1/2" x 2 3/8" x 11" 2000 psi xmas tree assembly.

April 11, 2006

Cementing:

7" surface casing ^{1.161}Pre-Set Drilled - Cement with Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.28 cu ft per sack yield. (Bring cement to surface). Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.

7" surface casing - Cement with 42 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (54 cu ft of slurry @ 1.28 yield). 200% excess, bring cement to surface. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

WOC until cement establishes 250 psi compressive strength prior to NU of BOPE.

4 1/2" production casing - Cement with 157 sx (335 cu ft of slurry @ 2.13 yield) Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack celloflake, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks (124 cu ft of slurry @ 1.38 yield) Type III cmt with 1% calcium chloride, 1/4#/sack Celloflake and 0.2% FL-52. Total of 459 cf - 50% excess to circulate to surface.

BOP and tests:

Surface to TD - 11" 2000 psi (minimum double gate BOP stack (Reference Figure #1 and #2). Prior to drilling out surface casing, test ^{BOPE}rams to 600 psi/30 min.

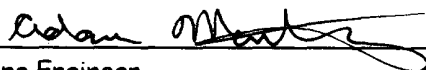
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 1500 psi/30 min.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

Additional information:

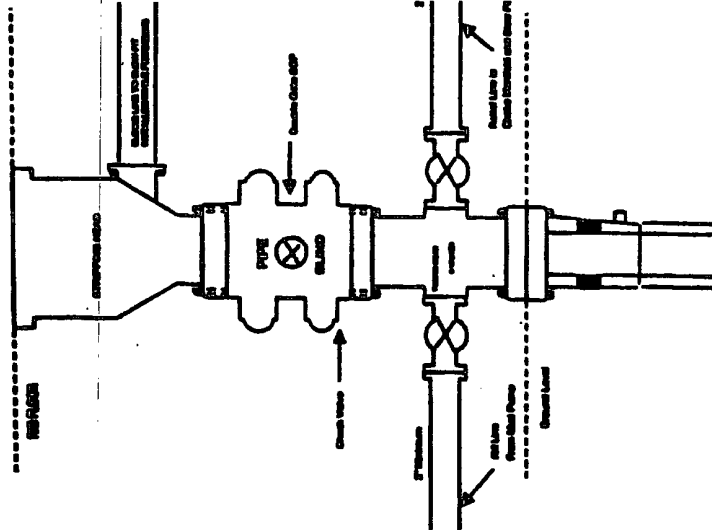
- * The Fruitland Coal, Fruitland Sands and Pictured formations will be completed.
- * Anticipated pore pressure for the Fruitland Coal is 600 - 700 psi.
- * This gas is dedicated.
- * The East half of the section is dedicated to the FC, and the NE/4 of the section is dedicated to the FS & PC for this well.
- * New casing will be utilized.
- * Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.


Drilling Engineer

4/13/2006
Date

BURLINGTON RESOURCES

Completion/Workover Rig
BOP Configuration
2,000 psi System

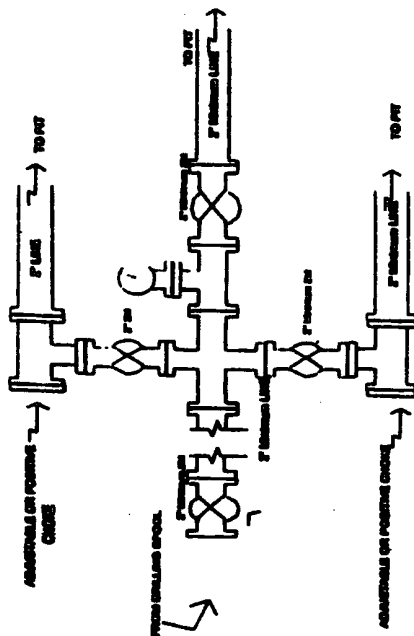


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi stripping head.

Figure #2

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System

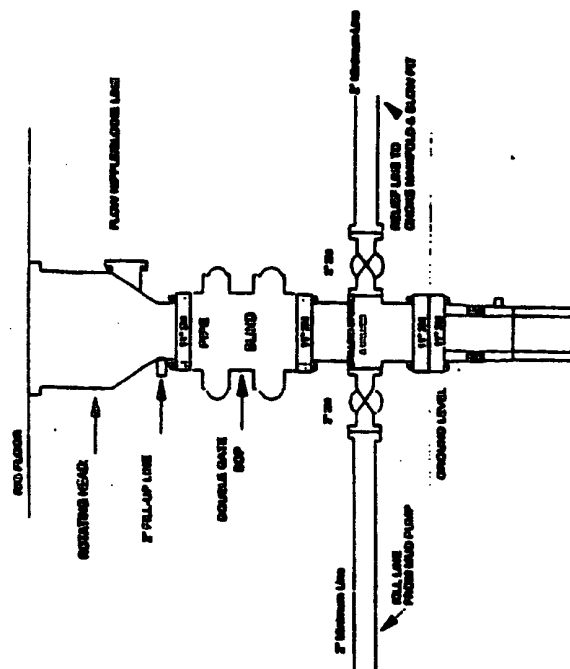


Choke manifold Installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

Burlington Resources

Drilling Rig
2000 psi System

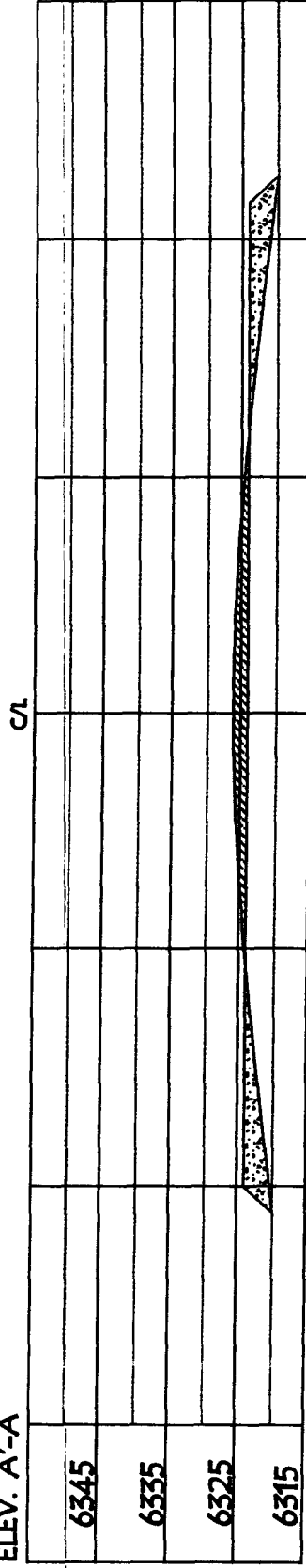


BOP Installation from Surface Casing Point to Total Depth. 11" Bore 2000 psi minimum working pressure double gate BOP to be equipped with 2000 psi minimum working pressure stripping head on top of ram pressure. All BOP equipment is 2,000 psi working pressure.

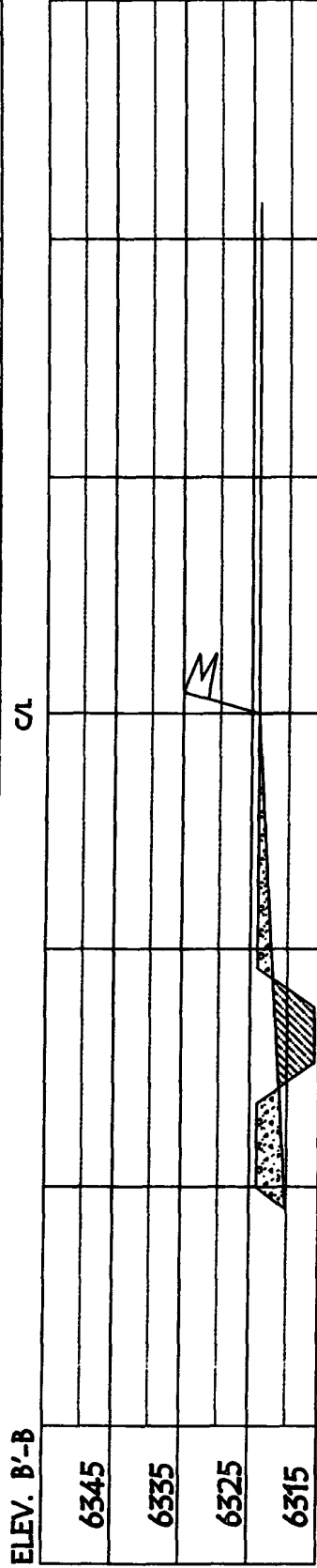
Figure #1

BURLINGTON RESOURCES OIL & GAS COMPANY LP
 RICHARDSON SRC 100, 885' FNL & 1050' FEL
 SECTION 22, T-31-N, R-12-W, NMPM, SAN JUAN COUNTY, NM
 GROUND ELEVATION: 6324', DATE: MARCH 1, 2006

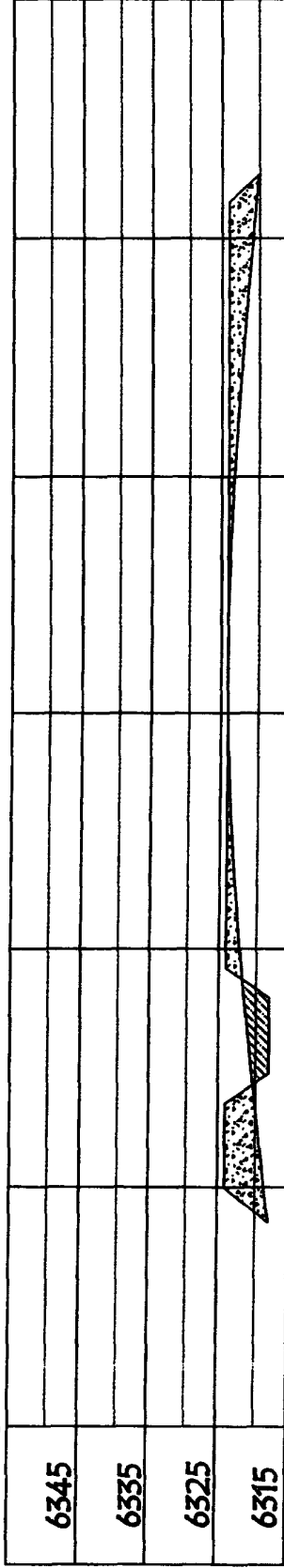
ELEV. A'-A



ELEV. B'-B



ELEV. C'-C



NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
 CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED
 PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.