UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2006 MAY 12 AM 9 48

RECEIVED
070 FARMINGTON NM

1a. Type of Work
DRILL

5. Lease Number
NMSF-080430-B
Unit Reporting Number

1b. Type of Well
GAS

6. If Indian, All. or Tribe

2. Operator
BURLINGTON RESOURCES Oil & Gas Company

7. Unit Agreement Name
San Juan 28-6 Unit

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499

(505) 326-9700

8. Farm or Lease Name

9. Well Number
#159M

4. Location of Well
Surface: Unit F (SENW), 1480' FNL, 1295' FWL
Bottom: ~~Lot~~ / Unit D (NWNW), 715' FNL, 700' FWL

Latitude 36° 38.9971'N
Longitude 107° 30.6508'W

10. Field, Pool, Wildcat
Blanco Mesaverde/ Basin Dakota

11. Sec., Twn, Rge, Mer. (NMPM)
F Sec. 19, T28N, R6W

API # 30-039- 29915

14. Distance in Miles from Nearest Town
31 miles to Blanco, NM

12. County
Rio Arriba

13. State
NM

15. Distance from Proposed Location to Nearest Property or Lease Line
1295'

16. Acres in Lease

17. Acres Assigned to Well
MV 262.76 W2, DK 328.37
Sec. 18 S2NW 65.73; Sec. 18 SW/Sec. 19 NW 262.64

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
54' - San Juan 28-6 Unit #50A

19. Proposed Depth
8029'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
6643'GL

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: Amanda Sandoval
Regulatory Analyst

5-12-06
Date

JUN 2006

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE AFM

DATE 6/5/06

Archaeological Report attached
Threatened and Endangered Species Report attached

NOLOC184 FOR directional survey

NMOCD

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 OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 West Grand Avenue, Artesia, N.M. 88210

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

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

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 October 12, 2005

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

2006 MAY 12 AM 9 48

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039- 29915	71599 / 72319	Basin Dakota / Blanco Mesaverde

[4] Property Code	[5] Property Name	[6] Well Number
7462	SAN JUAN 28-6 UNIT	159M

[7] OGRID No.	[8] Operator Name	[9] Elevation
14538	BURLINGTON RESOURCES OIL AND GAS COMPANY LP	6643'

[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
F	19	28-N	6-W		1480'	NORTH	1295'	WEST	RIO ARRIBA

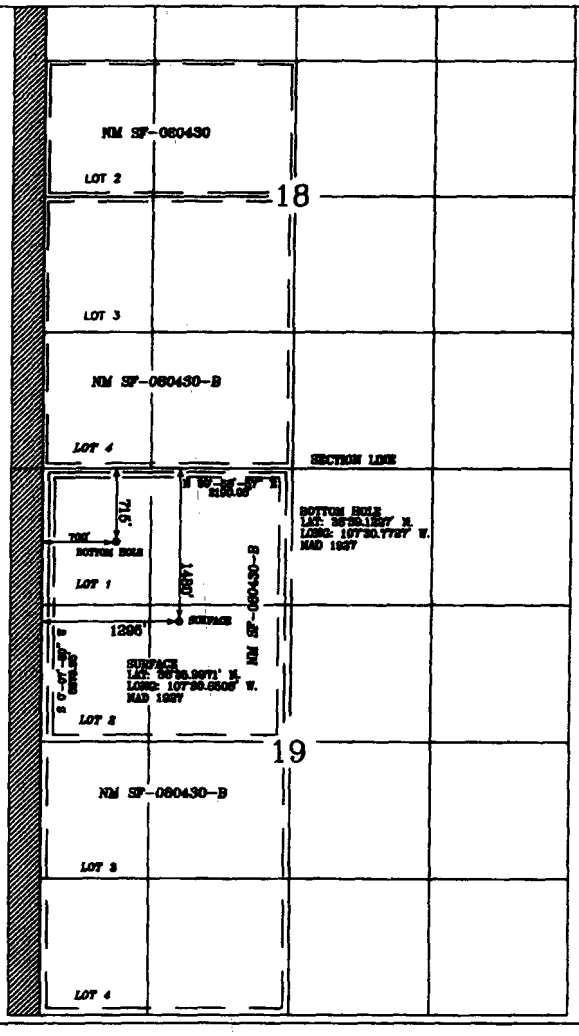
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	19	28-N	6-W	1	715'	NORTH	700'	WEST	RIO ARRIBA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
MV W2 262.76 ac, DK Sec. 18 197 ac E2 SW4 & lots 2,3,&4 Sec. 19 131.31 ac E2NW4 & lots 1&2			R2948-DK

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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Patsy Clugston
Signature

Patsy Clugston
Printed Name

[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.

4-7-06
Date of Survey

Signature and Seal of Professional Surveyor:

NEW MEXICO 15703 LICENSED PROFESSIONAL SURVEYOR

Certificate Number 15703

Submit 3 Copies To Appropriate District Office
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

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30-039- 29915
5. Indicate Type of Lease STATE ☐ FEE ☐
6. State Oil & Gas Lease No. NMSF-080430-B

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.)

7. Lease Name or Unit Agreement Name: San Juan 28-6 Unit

1. Type of Well: Oil Well ☐ Gas Well ☒ Other
8. Well Number: #159M

2. Name of Operator: BURLINGTON RESOURCES OIL & GAS COMPANY LP
9. OGRID Number: 14538

3. Address of Operator: 3401 E. 30TH STREET, FARMINGTON, NM 87402
10. Pool name or Wildcat: Blanco Mesaverde/ Basin Dakota

4. Well Location
Unit Letter F : 1480 feet from the North line and 1295 feet from the West line
Section 19 Township 28N Rng 6W NMPM County Rio Arriba

11. Elevation (*Show whether DR, RKB, RT, GR, etc.*) 6643'

Pit or Below-grade Tank Application ☐ **or Closure** ☐

Pit type New **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:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
OTHER:		New Drill	☒	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 that 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 Amanda Sandoval TITLE Regulatory Analyst DATE 5/12/2006

Type or print name Amanda Sandoval E-mail address: asandoval@br-inc.com Telephone No. 505-326-9891

For State Use Only

APPPROVED BY _____ TITLE DEPUTY OIL & GAS INSPECTOR, DIST. ☐ DATE JUN 07 2006

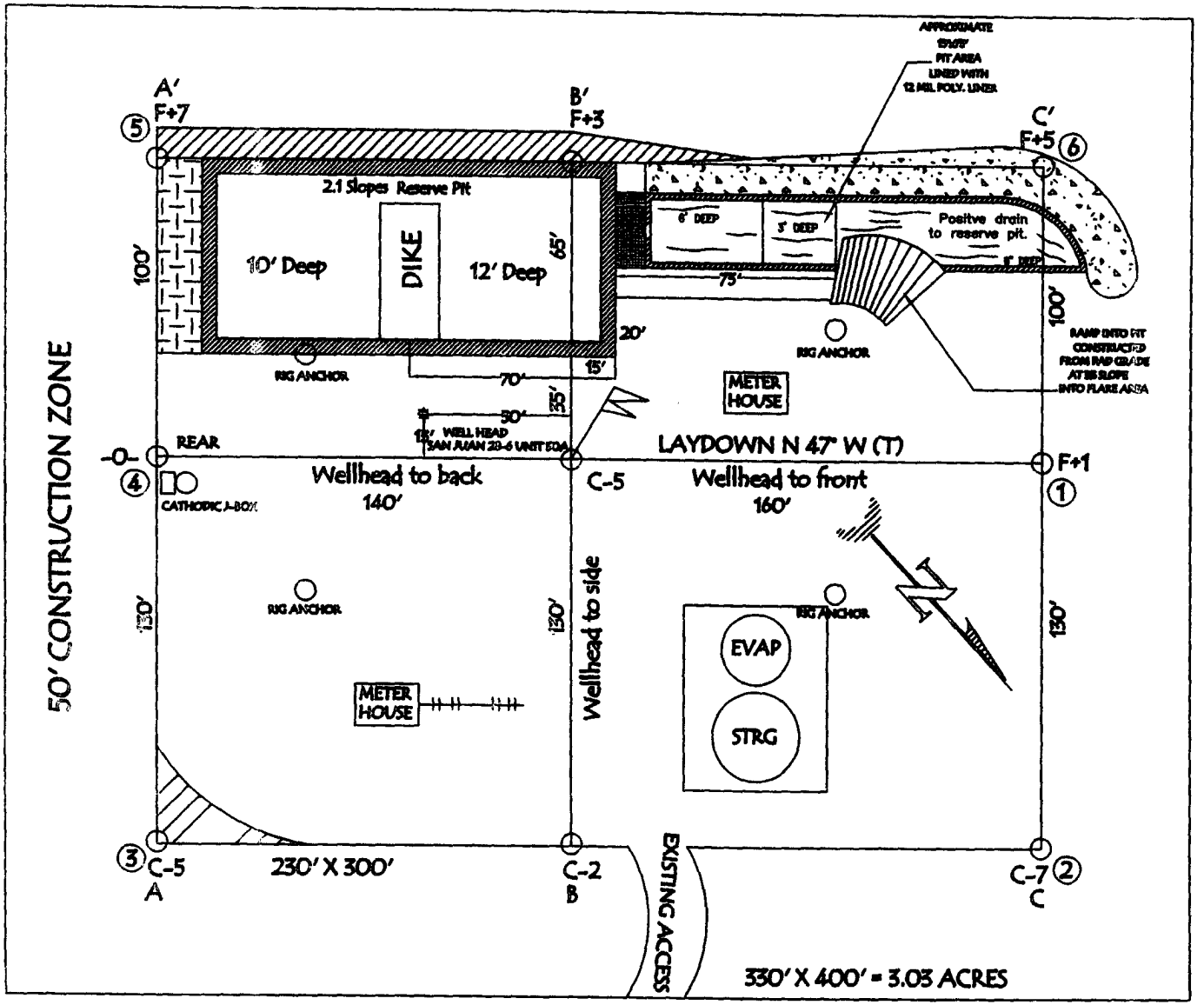
Conditions of Approval (if any):

BURLINGTON RESOURCES OIL & GAS COMPANY LP

SAN JUAN 28-6 UNIT #159M, 1480' FNL & 1295' FWL

SECTION 19, T-28- N, R-6-W, NMPM, RIO ARRIBA COUNTY, NM

GROUND ELEVATION: 6643', DATE: DECEMBER 29, 2005



LATITUDE: 36° 38.9971'N LONGITUDE: 107° 30.6508'W NAD27

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

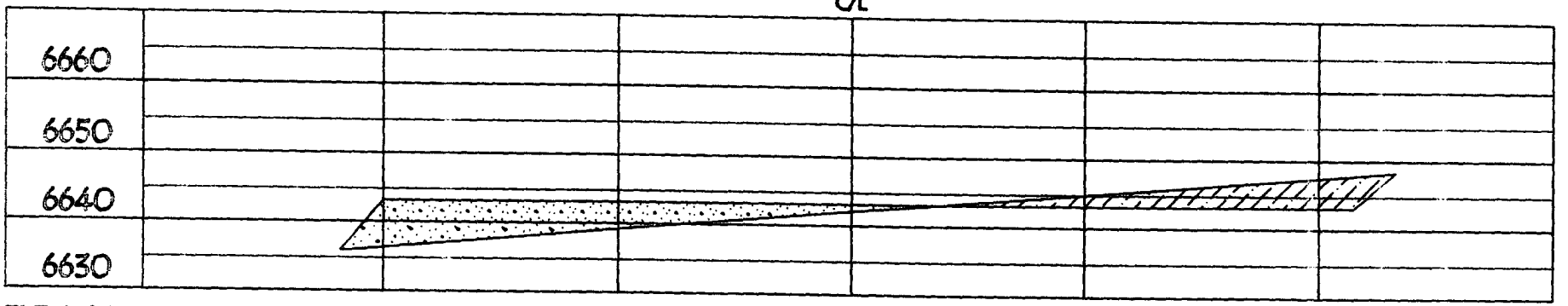
NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.

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.

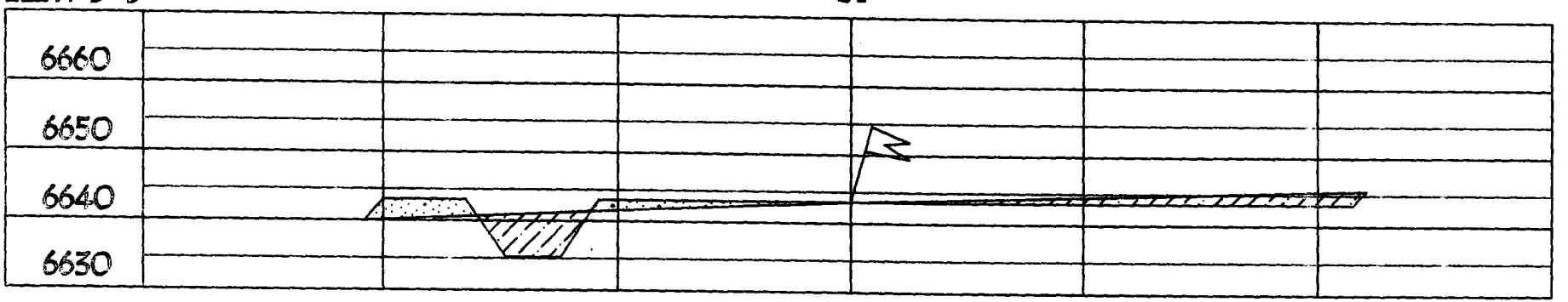
BURLINGTON RESOURCES OIL & GAS COMPANY LP

SAN JUAN 28-6 UNIT #159M, 1480' FNL & 1295' FWL
SECTION 19, T-28- N, R-6-W, NMPM, RIO ARRIBA COUNTY, NM
GROUND ELEVATION: 6643', DATE: DECEMBER 29, 2005

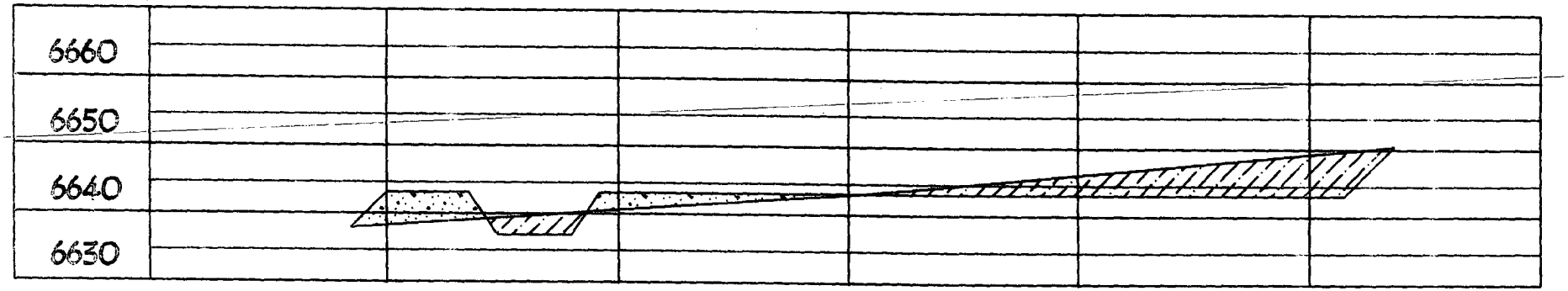
ELEV. A'-A



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 PIPLINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

SAN JUAN 28-6 UNIT 159M OPERATIONS PLAN

Well Name: SAN JUAN 28-6 UNIT 159M

Objective: Blanco Mesa Verde/Basin Dakota

Location: Rio Arriba NM

Elevation: 6643'

Surface Coordinates/Footages
T - 28 N R - 6 W Sec.: 19
1480' FNL 1295' FWL
Latitude: 36° 38.9971' N
Longitude: 107° 30.6508' W

Bottom Hole Coordinates/Footages
T - 28 N R - 6 W Sec.: 19
715' FNL 700' FWL
Latitude: 36° 39.1227' N
Longitude: 107° 30.7727' W

Formation	Top (TMD)	Top (TVD)	Contents
Surface	San Jose	San Jose	
Ojo Alamo	2724'	2603'	aquifer
Kirtland	2817'	2690'	gas
Fruitland	3268'	3113'	gas
Pictured Cliffs	3569'	3408'	gas
Lewis	3713'	3551'	gas
Huerfanito Bentonite	4155'	3993'	gas
Chacra	4515'	4353'	gas
Upper Cliff House	5115'	4953'	gas
Massive Cliff House	5223'	5061'	gas
Menefee	5327'	5165'	gas
Massive Point Lookout	5750'	5588'	gas
Mancos Shale	6254'	6092'	gas
Upper Gallup	6976'	6814'	gas
Greenhorn	7711'	7549'	gas
Graneros	7771'	7609'	gas
Two Wells	7830'	7668'	gas
Upper Cubero	7919'	7757'	gas
Lower Cubero	7957'	7795'	gas
Encinal	8029'	7867'	gas
Total Depth:	***8029'***	***7867'***	gas

Logging Program: Cased Hole: CBL-GR
Open Hole: None

Mud Program:

Interval (TMD)	Type	Weight (ppg)	Vis. (s/qt)	Fluid Loss (cc/30min)
0' - 320'	Spud	8.4-9.0	40-50	No control
320' - 3813'	Non-dispersed	8.4-9.0	30-60	Less than 8
3813' - 8029'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

Casing program:

Interval (TMD)	Hole Size	Casing Size	Weight	Grade
0' - 320'	12 1/4"	9 5/8"	32.3#	H-40
320' - 3813'	8 3/4"	7"	23.0#	L-80
3813' - 8029'	6 1/4"	4 1/2"	11.6#	L-80

Tubing program:

Interval (TMD)	Hole Size	Casing Size	Weight	Grade
0' - 8029'	Cased	2 3/8"	4.7#	J-55

Wellhead Equipment
9 5/8" x 7" X 4 1/2" x 2 3/8" – 11" (2000 psi) wellhead assembly

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

Surface
Drill to surface casing point of 320' and set 9.625" casing.

Intermediate
Mud drill to kick off point of 400'. At this point the well will be directionally drilled by building 3 degrees per 100' with an azimuth of 321.79 degrees. The end of the build will be at a TVD of 1077', a TMD of 1092', a reach of 124', and an inclination of 20.76 degrees. This angle and azimuth will be held to a TVD of 2974', a TMD of 3121', and a reach of 843'. At this point the well will be drilled with a drop of 3 degrees per 100'. The end of the drop will be at a TVD of 3651', a TMD of 3813', a reach of 967', and an angle of 0.0 degrees. 7" casing will be set at this point.

Production
From the shoe of the intermediate string, the well will be drilled vertically with an air hammer to a TVD of 7867' (TMD of 8029'). 4.5" casing will be set at this point.

Cementing
9.625" surface casing conventionally drilled: **200%** excess cement to bring cement to surface.
Run 301 cu.ft. (235 sks) Type III cement with 3% CaCl2 and 1/4 pps celloflake (1.28 sks/ cu.ft.). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60° F prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

7" intermediate casing: **50%** excess cement to bring cement to surface.
Lead with 736 cu.ft. (346 sks) Premium Lite w/ 3% CaCl2, 0.25 pps Cello-Flake, 5 pps LCM-1, 0.4% FL-52 and 0.4% SMS (2.13 sks/ft3). Tail with 124 ft3 (90 sks) Type III cmt. w/ 1% CaCl2, 0.25 pps Cello-Flake and 0.2% FL-52 (1.38 sks/ft3). If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC.

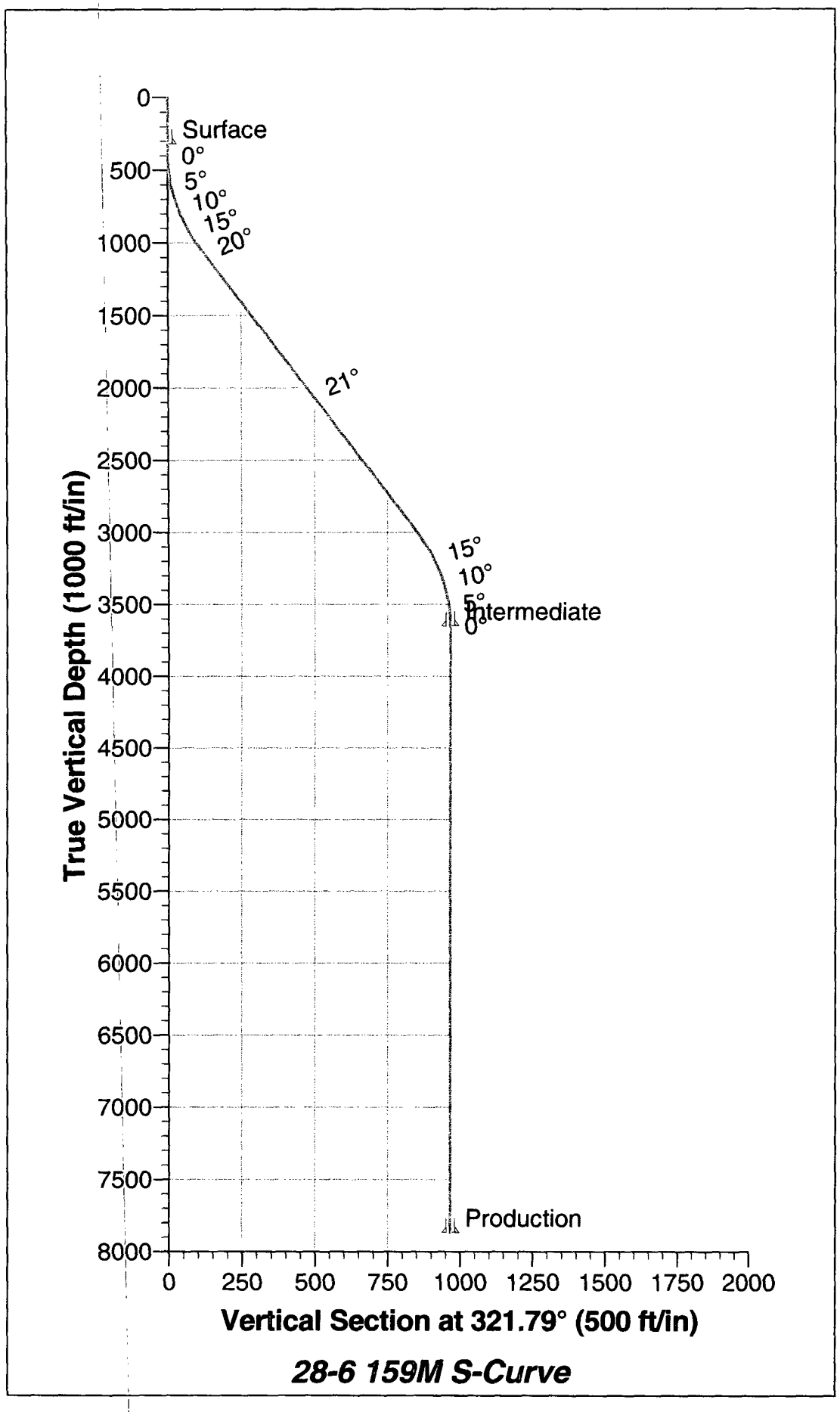
4.5" production casing: **30%** excess cement to achieve 100' overlap with intermediate casing.
Run 574 cu.ft. (290 sks) Premium Lite HS FM + 0.25pps Cello-Flake, 0.3% CD-32, 6.25pps LCM-1, 1% FL-52 (1.98 sks/ft3.)

BOP and Tests
Surface to Total Depth – 11", 2000 psi double gate BOP stack (Reference Figure #1).
Surface to Total Depth – choke manifold (Reference Figure #2).
Prior to drilling out surface casing, test BOPE and casing to 600 psi for 30 minutes.
Pipe rams will be actuated at least once each day and blind rams will be actuated once each trip to test proper functioning. A Kelly cock valve and drill string safety valves to fit each drill string will be maintained and available on the rig floor.
BOPE tests will be performed using an appropriately sized test plug and test pump and will be recorded using calibrated test gauges and a properly calibrated strip or chart recorder. The test will be recorded in the driller's log and will include a low pressure test requirement of 250 psig held for five minutes and a high pressure test requirement held for ten minutes as described in Onshore Order No. 2 or otherwise noted in the APD. A successful BOPE test using a test plug is considered when no pressure drop occurs over the duration of the test. Test gauges and recorders must be of the proper range and resolution commensurate with the authorized test pressure. Where the intermediate casing strings are used, only one BOPE test will be necessary contingent upon the test being conducted to the highest approved test pressure to which BOPE will be exposed. Casing pressure tests must be held for 30 minutes with no more than 10 percent pressure drop during the duration of the test.

Additional Information:
- No gas dedication.
- New casing will be utilized.
- Pipe movement (reciprocation) will be done if hole conditions permit.
- No abnormal pressure zones are expected.
- BHP is expected to be 2000 psi.

Drilling Engineer

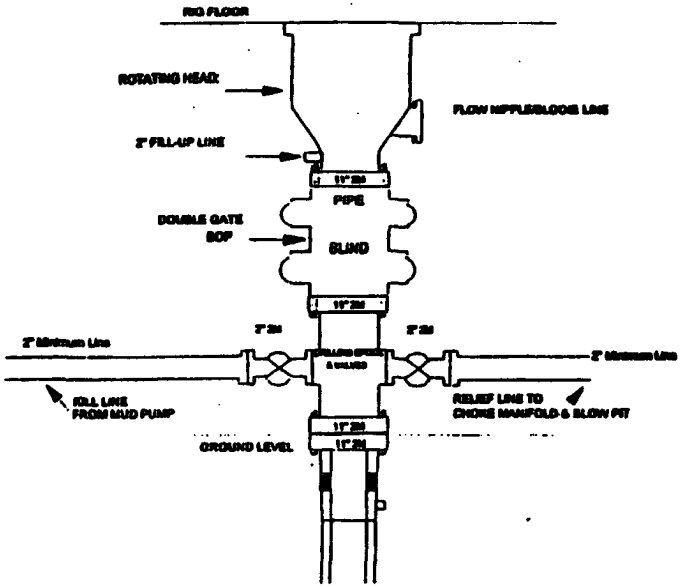
5/11/06
Date



28-6 159M S-Curve

Burlington Resources

Drilling Rig
2000 psi System



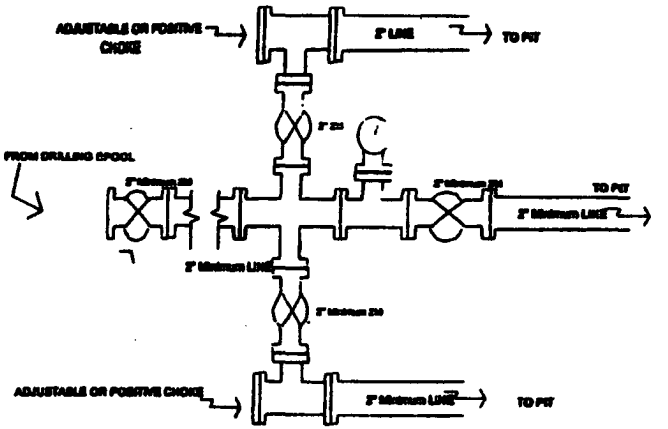
BOP installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi rotating head on top of ram preventers. All BOP equipment is 2,000 psi working pressure

Figure #1

4-20-01

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System

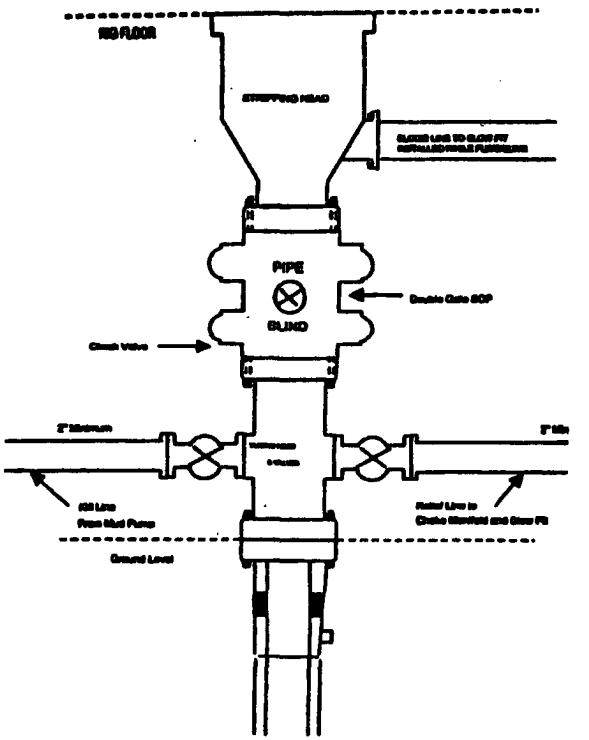


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

BURLINGTON RESOURCES

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

4-20-01