NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -2040 South Pacheco, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION COVERSHEET

ONS

THIS	COVERSHEET IS M	ANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATION WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
Applic	ation Acronym	5 ;
	[DHC-Downh [PC-Pool	[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication] ole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [FX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
•	[EOR-Qualifi	ed Enhanced Oll Recovery Certification] [PPR-Positive Production Response]
[1]	TYPE OF AF [A]	PLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Directional Drilling LOCATION - Check Those Which Apply for [A] LOCATION - Spacing Unit - Directional Drilling LOCATION - Spacing Unit - Direction - Direction - Direction - Dir
	Check [B]	One Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
[2]	NOTIFICAT	ION REQUIRED TO: - Check Those Which Apply, or Does Not Apply
	[A]	☐ Working, Royalty or Overriding Royalty Interest Owners
	[B]	Offset Operators, Leaseholders or Surface Owner
	[C]	☐ Application is One Which Requires Published Legal Notice
	[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
	[E]	☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
	[F]	☐ Waivers are Attached
[3]	INFORMAT	ION / DATA SUBMITTED IS COMPLETE - Certification
		, or personnel under my supervision, have read and complied with all applicable Rull Conservation Division. Further, I assert that the attached application for adminis

iles and strative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity. Print or Type Name Date

BURLINGTON RESOURCES

SAN JUAN DIVISION

Sent Federal Express

Ms. Lori Wrotenbery, Director New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Re:

San Juan 27-5 Unit #114M

1335'FNL, 1130'FWL Section 17, T-27-N, R-5-W, Rio Arriba County, NM

30-039-not assigned

Dear Ms. Wrotenbery:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Blanco Mesa Verde and Basin Dakota pools. This application for the referenced location is for topographic and archaeological reasons, and especially at the request of the landowner.

Production from the Blanco_Mesa_Verde_pool_is_to_be_included in a 320.41 acre gas spacing and proration unit comprising of the west half (W/2) of Section 17 which is currently dedicated to the San Juan 27-5 Unit #3 (30-039-07038) located at 990'FSL, 990'FWL of Section 17. Production from the Basin Dakota is to be included in a standard 311.82 acre gas spacing and proration unit comprising of the north half (N/2) of Section 17 which is currently dedicated to the San Juan 27-5 Unit #114 (30-039-20238) located at 990'FNL, 800'FEL of Section 17.

The following attachments are for your review:

- 1. Application for Permit to Drill.
- 2. Completed C-102 at referenced location.
- 3. Offset operators/owners plat.
- 4. 7.5 minute topographic map, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Staabued

Sincerely,

Peggy Bradfield

Regulatory/Compliance Administrator

XC:

NMOCD - Aztec District Office

Bureau of Land Management - Farmington District Office

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. Type of Work 5. Lease Number DRILL SF-079392 Unit Reporting Number 8910009500- Dk 891000950A-MV Type of Well 6. If Indian, All, or Tribe 1b. GAS 2. Operator 7. Unit Agreement Name BURLINGTON RESOURCES Oil & Gas Company San Juan 27-5 Unit 3. 8. Farm or Lease Name Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 San Juan 27-5 Unit 9. Well Number (505) 326-9700 114M 10. Field, Pool, Wildcat **Location of Well** 4. 1335'FNL, 1130'FWL Blanco MV/Basin Dk 11. Sec., Twn, Rge, Mer. (NMPM) Latitude 36° 34.7, Longitude 107° 23.3 Sec 17, T-27-N, R-5-W API # 30-039-14. Distance in Miles from Nearest Town 12. County 13. State 7 miles to Gobernador NM RA 15. Distance from Proposed Location to Nearest Property or Lease Line 1130' 16. Acres in Lease 17. Acres Assigned to Well 320.41 311.82 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 1130' **Proposed Depth** 19. 20. Rotary or Cable Tools 7815 Rotary 21. Elevations (DF, FT, GR, Etc.) 22. Approx. Date Work will Start 6590'GR 23. **Proposed Casing and Cementing Program** See Operations Plan attached had huld 24. Authorized by: Regulatory/Compliance Administrator

Archaeological Report to be submitted

PERMIT NO.

APPROVED BY

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.

TITLE ____

APPROVAL DATE

DATE _____

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

District II PO Drawer ID, Antesia, NM 88211-0719

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

District I/ FD Box 2088. Santa Fe, NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

OTL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2023

Form Revised February 2 Instructions

Submit to Appropriate District

State Lease - -Fee Lease - 3

AMENDED RE

WELL LOCATION AND ACREAGE DEDICATION PLAT 30-039-72319/71599 Blanco Mesaverde/Basin Dakota Property Code Well Numbe Property Name SAN JUAN 27-5 UNIT 7454 114M OGRID No. Elevation *Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY 6590 14538 10 Surface Location Ju or lot ro. Section Feet from the North/South line CWNSh 1D Lot Ido East/West line Feet from the R 17 NORTH 27N 5W 1335 1130 WEST ARR 11 Bottom Hole Location If Different From Surface July por lot no Section Lot Idn Feet from the North/South line Feet from the MV-W/320.41 Joint or Infill ; 4 Consolidation Code DK-N/311.82 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 2691.48 2673.00 OPERATOR CERTIFICA I hereby certify that the information contained true and complete to the best of my knowledge a 11 335 B NMSF-079392 1130 35.35 14 36.47 Peggy Bradfield Regulatory Adminstra 6-16 Cate SURVEYOR CERTIFICAT Thereby centify that the well location shown on was clotted from field notes of actual surveys mor under my supervision and that the same is the connect to the best of my belief. NMSF-079392 -PRT Date of M Centificate Number 2656.50

2785.86

OPERATIONS PLAN

Well Name: San Juan 27-5 Unit #114M

Location: 1335'FNL, 1130'FWL Sec 17, T-27-N, R-5-W

Rio Arriba County, NM

Latitude 36° 34.7, Longitude 107° 23.3

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6590'GL

Formation Tops:	Top	Bottom	<u>Contents</u>
Surface	San Jose	2794'	
Ojo Alamo	2794'	2879'	aquifer
Kirtland	2879′	3074′	
Fruitland	3074'	3385'	gas
Pictured Cliffs	3385'	3535'	gas
Lewis	3535'	3911'	gas
Intermediate TD	3635'		
Huerfanito Bentonite	3911'	3948'	gas
Chacra	3948'	5034′	
Massive Cliff House	5034'	5160'	gas
Menefee	5160'	5550′	gas
Massive Point Lookout	5550′	5664'	gas
Lower Point Lookout	5664′	5764'	
Mancos Shale	5764′	6526′	
Gallup	6526′	7465′	gas
Greenhorn	7465'	7550'	gas
Dakota	7550′		gas
TD (4 1/2"liner)	7815′		

Logging Program:

Cased hole - CBL - TD to 200' above TOC, GR/CNL across MV/Dk

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-3635'	LSND	8.4-9.0	30-60	no control
3635-7815'	Gas	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>Csq.Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3635'	7"	20.0#	J-55
6 1/4"	3535' - 7815'	4 1/2"	10.5#	J~55

Tubing Program:

0' - 7815' 2 3/8" 4.70# EUE

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 #3).

Completion Operations -

 $7\ 1/16$ " 2000 psi double gate BOP stack (Reference Figure #2). 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 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 163 sx Class "B" cement with 1/4# flocele/sx and 2% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. 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/294 sx Class "B" w/3% metasilicate, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride, 2% gel, 1/2# flocele/sx, 10# gilsonite/sx (956 cu.ft. of slurry, 75% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

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 2879'. Two turbolating centralizers at the base of the Ojo Alamo at 2879'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. with 462 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (615 cu.ft., 40% excess to cement 4 $1/2" \times 7"$ overlap). WOC a minimum of 18 hrs prior to completing.

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

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. Instead, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" CIBP will be set above the last fracturing job to cut and pull the 4 1/2" casing above the 7" casing shoe. The 4 1/2" bridge plug will then be milled and tubing will be run for completion.

Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while qas/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
- 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 Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal 800 psi Pictured Cliffs 800 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 is dedicated to the Mesa Verde and the north half is dedicated to the Dakota in this well.
- This gas is dedicated.

Drilling Engineer $\frac{b-18-98}{Date}$



Multi-Point Surface Use Plan

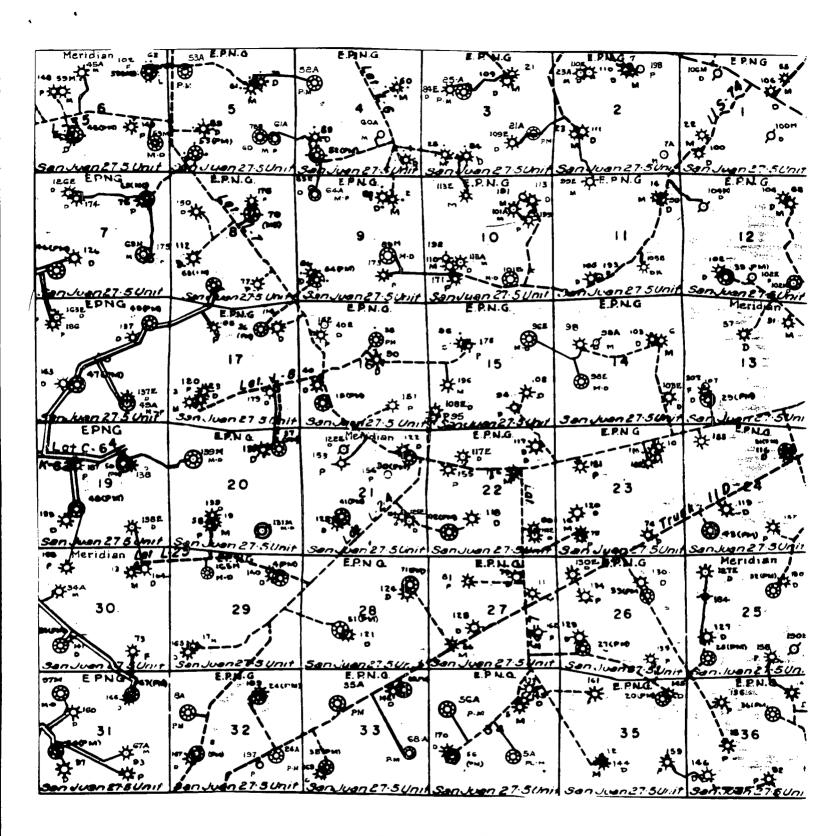
- 1. Existing Roads Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
- 2. Planned Access Road Refer to Map No. 1. None required.
- 3. Location of Existing Wells Refer to Map No. 1A.
- 4. Location of Existing and/or Proposed Facilities if Well is Productive
 - a. On the Well Pad Refer to Plat No. 1, anticipated production facilities plat.
 - b. Off the Well Pad Anticipated pipeline facilities as shown on the attached plat from Williams Field Service.
- 5. Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained from 44 Crossing Water Hole located NE Section 18, T-27-N, R-4-W, New Mexico.
- 6. Source of Construction Materials If construction materials are required for the proposed project, such materials will be obtained from a commercial quarry.
- 7. Methods of Handling Waste Materials All garbage and trash materials will be removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying waste materials into the watershed. Reserve pits will be lined as needed with either 12 mil bio-degradable plastic liner or a bentonite liner. All earthen pits will be so constructed as to prevent leakage from occurring; no earthen pit will be located on natural drainage. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if so generated.
- 8. Ancillary Facilities None anticipated.
- 9. Wellsite Layout Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent standing liquids in the blow pit.

- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.
- 11. Surface Ownership Nick Candelaria
- 12. Other Information Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- 13. Operator's Representative and Certification Burlington Resources Oil & Gas Company Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan, are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Burlington Resources Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Regulatory/Compliance Administrator Date

pb

BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 27-5 UNIT #114M 1335' FNL & 1130' FWL, SECTION 17, T27N, R5W, N.M.P.M. RIO ARRIBA COUNTY, NEW MEXICO APD MAP #I NO NEW CONSTRUCTION SWNW SECTION IT, T27N, R5W c6331 == oGas Well EXISTING ME ROW. 5 x 6509



MERIDIAN OIL INC.
Pipeline Map
T-27-N, R-05-W
Rio Arriba County, New Mexico
San Juan 27-5 Unit #114M
Map 1A

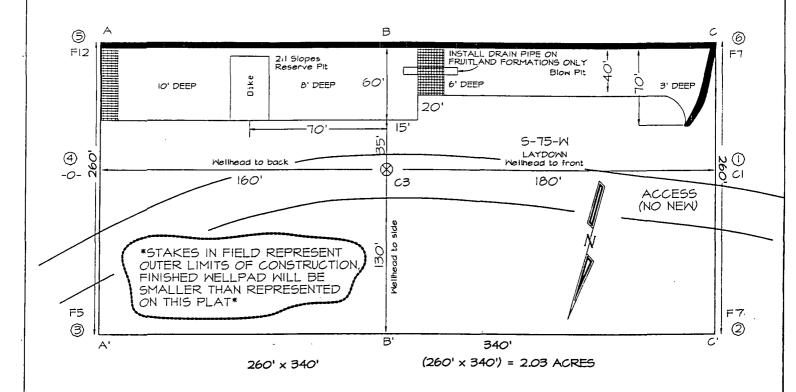
PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY

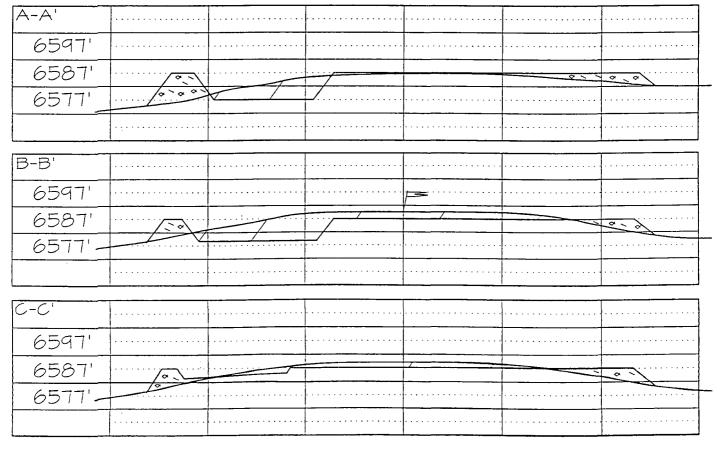
SAN JUAN 27-5 UNIT #114M, 1335' FNL & 1130' FWL

SECTION 17, T27N, R5W, NMPM, SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 6590' DATE: APRIL 21, 1998



Reserve Pit Dike: to be 8' above Deep side (overflow - 3' wide and 1' above shallow side). Blow Pit: overflow pipe halfway between top and bottom and to extend over plastic liner and into blow pit.



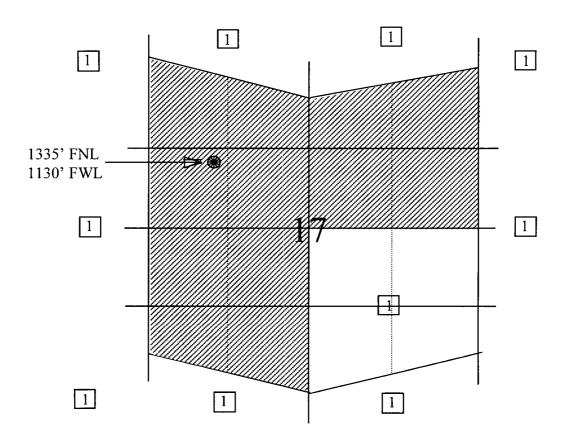
Note: Contractor should call One–Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 27-5 Unit #114M OFFSET OPERATOR \ OWNER PLAT Non Standard Location

Mesaverde (W/2) / Dakota (N/2) Formations Well

Township 27 North, Range 5 West



1) Burlington Resources

