

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	RECEIVED JAN 2 2008 Bureau of Land Management Farmington Field Office	5. Lease Number USA SF - 080672 Unit Reporting Number NMNM-784084-MV
1b. Type of Well GAS		6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company, LP		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
		9. Well Number #22M
4. Location of Well Unit L (NWSW), 1735' FSL & 1030' FWL Unit N (SESW), 780' FSL & 1690' FWL Latitude 36.570692 N. Longitude 107.225986 W. Latitude 36.568066 N. Longitude 107.223726 W.		10. Field, Pool, Wildcat Blanco Mesaverde/Basin Dakota
		11. Sec., Twn, Rge, Mer. (NMPM) Sec. 14, T27N, R4W Sec. 14, T27N, R4W API # 30-045- 30-039-30450
14. Distance in Miles from Nearest Town 52 Miles/Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 780'		
16. Acres in Lease 2560.000		17. Acres Assigned to Well MV/DK 320.00 (W/2)
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 50' from San Juan 27-4 Unit 22B		
19. Proposed Depth 8224' TVD/TMD 8453.3'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6898' GL	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Jamie Goodwin</u> Jamie Goodwin (Regulatory Technician)		<u>12/31/07</u> Date

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY [Signature] TITLE AFM DATE 3/12/08

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 any statement or presentation as to any matter within its jurisdiction.

Example Master Plan Type 3

Bond Numbers NMB-000015 and NMB-000089

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

HOLD 0104 FOR

Directional survey & AS
drilled 2-10

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

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

MAR 20 2008

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

JAN 2 2008

Bureau of Land Management
Field Office

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-30450		*Pool Code 72319/71599	*Pool Name BLANCO MESAVERDE/BASIN DAKOTA
*Property Code 7452	*Property Name SAN JUAN 27-4 UNIT		*Well Number 22M
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		*Elevation 6898'

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
L	14	27-N	4-W		1735'	SOUTH	1030'	WEST	RIO ARRIBA

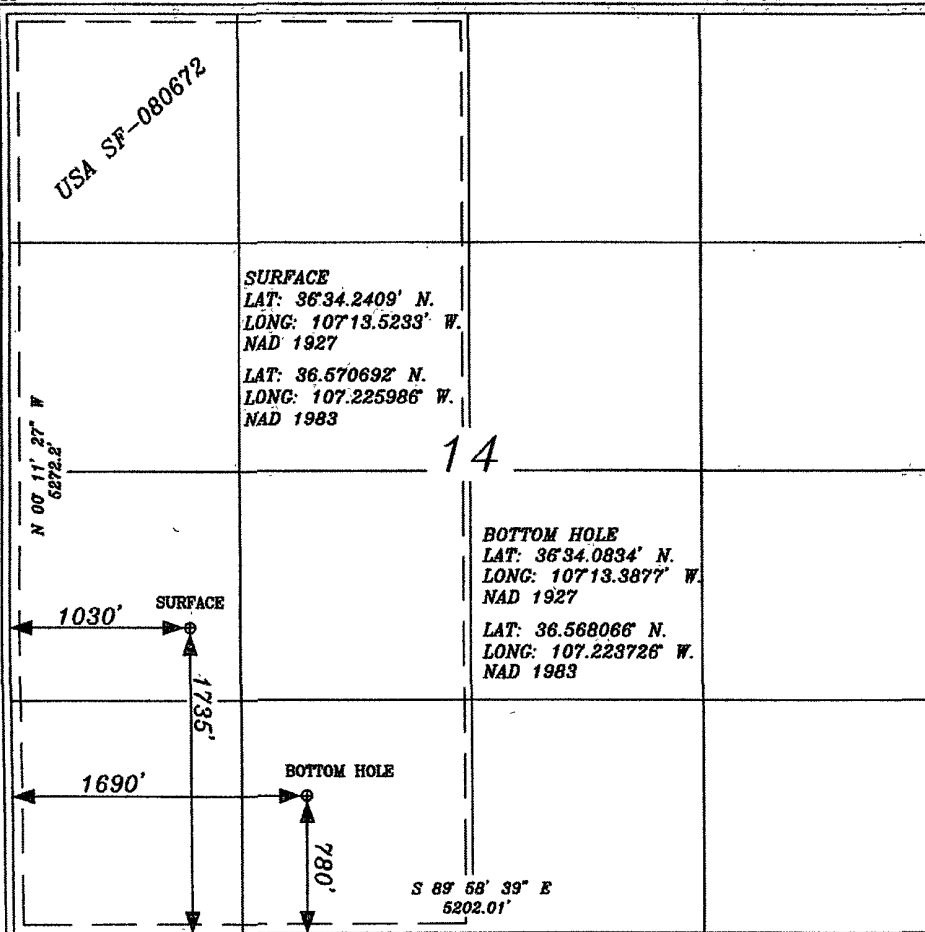
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	14	27-N	4-W		780'	SOUTH	1690'	WEST	RIO ARRIBA

¹² Dedicated Acres 320.00 W/2		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.	
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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

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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 this division.

Jamie Goodwin
Signature
Printed Name
Jamie Goodwin 10/31/2007

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.

11-8-07
Date of Survey

Signature and Seal of Professional Surveyor:

Glen 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.

30-039- 30450

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

Federal Lease #SF-080672

7. Lease Name or Unit Agreement Name

San Juan 27-4 Unit

8. Well Number

22M

9. OGRID Number

14538

10. Pool name or Wildcat

Blanco Mesa Verde/Basin Dakota

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 L : 1735' feet from the South line and 1030' feet from the West line
Section 14 Township 27N Rng 4W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5938'

Pit or Below-grade Tank Application

☐ or Closure ☐Pit type New Drill Depth to Groundwater <50 Distance from nearest fresh water well>1000 Distance from nearest surface water

Pit Liner Thickness:

12

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 ☐PLUG AND ABANDON ☐TEMPORARILY ABANDON ☐CHANGE PLANS ☐PULL OR ALTER CASING ☐MULTIPLE COMPL ☐

OTHER:

New Drill ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ALTERING CASING ☐COMMENCE DRILLING OPNS. ☐P AND A ☐CASING/CEMENT JOB ☐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, Lined:

Burlington Resources proposes to construct a new drilling pit, an associated vent/flare pit and a pre-set mud pit (if required). Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and pre-set mud pit will be lined pits 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 lined 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 Regulatory Technician DATE _____Type or print name Jamie Goodwin E-mail address: goodwil@conocophillips.com Telephone No. 505-326-9784

For State Use Only

APPROVED BY [Signature] TITLE Deputy Oil & Gas Inspector, DATE MAR 20 2008
Conditions of Approval (if any): District #3

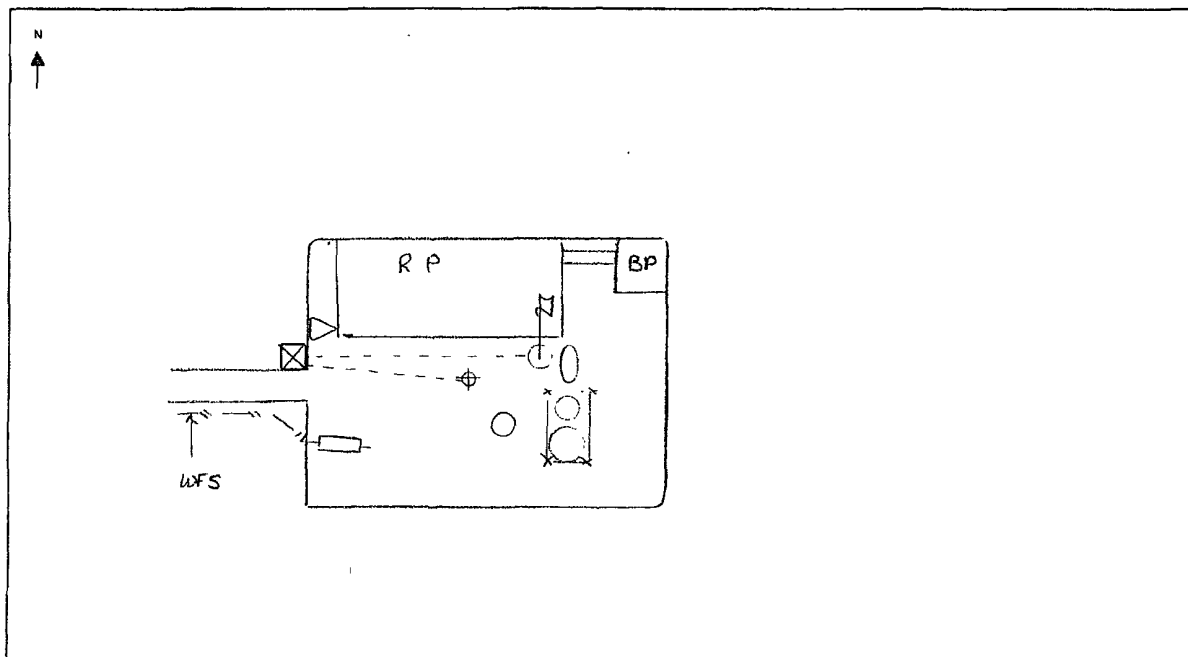


TECHNICAL SERVICES
A CORROSION COMPANY

CATHODIC PROTECTION PLAN FOR NEW WELLS

WELL NAME SJ 27-4 #22 Bm LEGALS L-14-27-4 COUNTY Rio Arriba

PURPOSED C.P. SYSTEM: Drill GB and set 2 to 3 well solar on Wedge of location (N side of access road). Trench approx 100' of #8 neg from existing well (SJ 27-4 #22) to solar. Trench approx 160' of #8 neg from proposed well to solar.



EXISTING WELLHEAD	METER HOUSE	G.B.	POWER SOURCE	CABLE	NEW WELL	OVERHEAD A.C.

COMMENTS: _____

NEAREST POWER SOURCE N/A DISTANCE: _____

PIPELINES IN AREA: WFS P/L

TECHNICIAN: Michelle Ferguson DATE: 8/16/07

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-4 UNIT 22M

DEVELOPMENT

Lease:		AFE #: WAN.ZA2.7574				AFE \$:	
Field Name: hBR_SAN JUAN 27-4 UNIT		Rig: XXX Deferred PDT		State: NM	County: RIO ARRIBA	API #:	
Geologist:		Phone:		Geophysicist:		Phone:	
Geoscientist: Head, Chip F		Phone: 505-326-9772		Prod. Engineer:		Phone:	
Res. Engineer: Prabowo, Wahyu		Phone: 505-326-9797		Proj. Field Lead:		Phone:	
Primary Objective (Zones):							
Zone	Zone Name						
R20076	DAKOTA(R20076)						
R20002	MESAVERDE(R20002)						
Location: Surface Datum Code: NAD 27 Deviated							
Latitude: 36.570682	Longitude: -107.225388	X:	Y:	Section: 14	Range: 004W		
Footage X: 1030 FWL	Footage Y: 1735 FSL	Elevation: 6898	(FT)	Township: 027N			
Tolerance:							
Location: Bottom Hole Datum Code: NAD 27 Deviated							
Latitude: 36.568056	Longitude: -107.223128	X:	Y:	Section: 14	Range: 004W		
Footage X: 1690 FWL	Footage Y: 780 FSL	Elevation:	(FT)	Township: 027N			
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2020		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6912		Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks	
Surface Casing	200	6712	☐			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 170 cu. ft. Circulate cement to surface.	
OJO ALAMO	3197	3715	☐				
KIRTLAND	3387	3525	☐				
FRUITLAND	3482	3430	☐			Possible Gas	
PICTURED CLIFFS	3772	3140	☐				
LEWIS	3897	3015	☐				
Intermediate Casing	4000	2912	☐			8 3/4" Hole. 7", 23 ppf, L-80, LTC Casing. Cement with 952 cu. ft. Circulate cement to surface.	
HUERFANITO BENTONITE	4319	2593	☐				
CHACRA	4759	2153	☐				
UPPER CLIFF HOUSE	5333	1579	☐			Gas	
MASSIVE CLIFF HOUSE	5494	1418	☐	810		Gas	
MENEFEE	5617	1295	☐				
POINT LOOKOUT	5924	988	☐				
MANCOS	6244	668	☐				
GALLUP	6966	-54	☐				
GREENHORN	7906	-994	☐				
GRANEROS	7967	-1055	☐				
TWO WELLS	8014	-1102	☐	1250		Gas	
PAGUATE	8086	-1174	☐				
CUBERO	8113	-1201	☐				
LOWER CUBERO	8158	-1246	☐				
OAK CANYON	8203	-1291	☐				

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-4 UNIT 22M

DEVELOPMENT

ENCINAL	8224	-1312	☐	
Total Depth	8224	-1312	☐	6-1/4" hole, 4-1/2", 11.6 ppf, L-80, LTC casing. Cement w/ 575 cu. ft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:

Reference Type	Well Name	Comments
Production	SJ 27-4 #139M	SE 09-27N-4W
Production	SJ 27-4 #143A	SE 22-27N-4W
Production	SJ 27-4 #98	SW 10-27N-4W
Production	SJ 27-4 #3A	SE 15-27N-4W
Production	SJ 27-4 #22	SW 14-27N-4W

Logging Program:

Intermediate Logs: ☐ Log only if show ☐ GR/ILD ☐ Triple Combo

TD Logs: ☐ Triple Combo ☐ Dipmeter ☐ RFT ☐ Sonic ☐ VSP ☐ TDT ☒ Other

GR_CBL

Mudlog from 100' above Greenhorn to TD - mudlogger will call TD.

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments: Location/Tops/Logging - MVNM027N004W14SW2 Keep at same spot for legal DK.

Zones - MVNM027N004W14SW2 DKNM027N004W14SW1

General/Work Description - Forest Well - Directional Drill

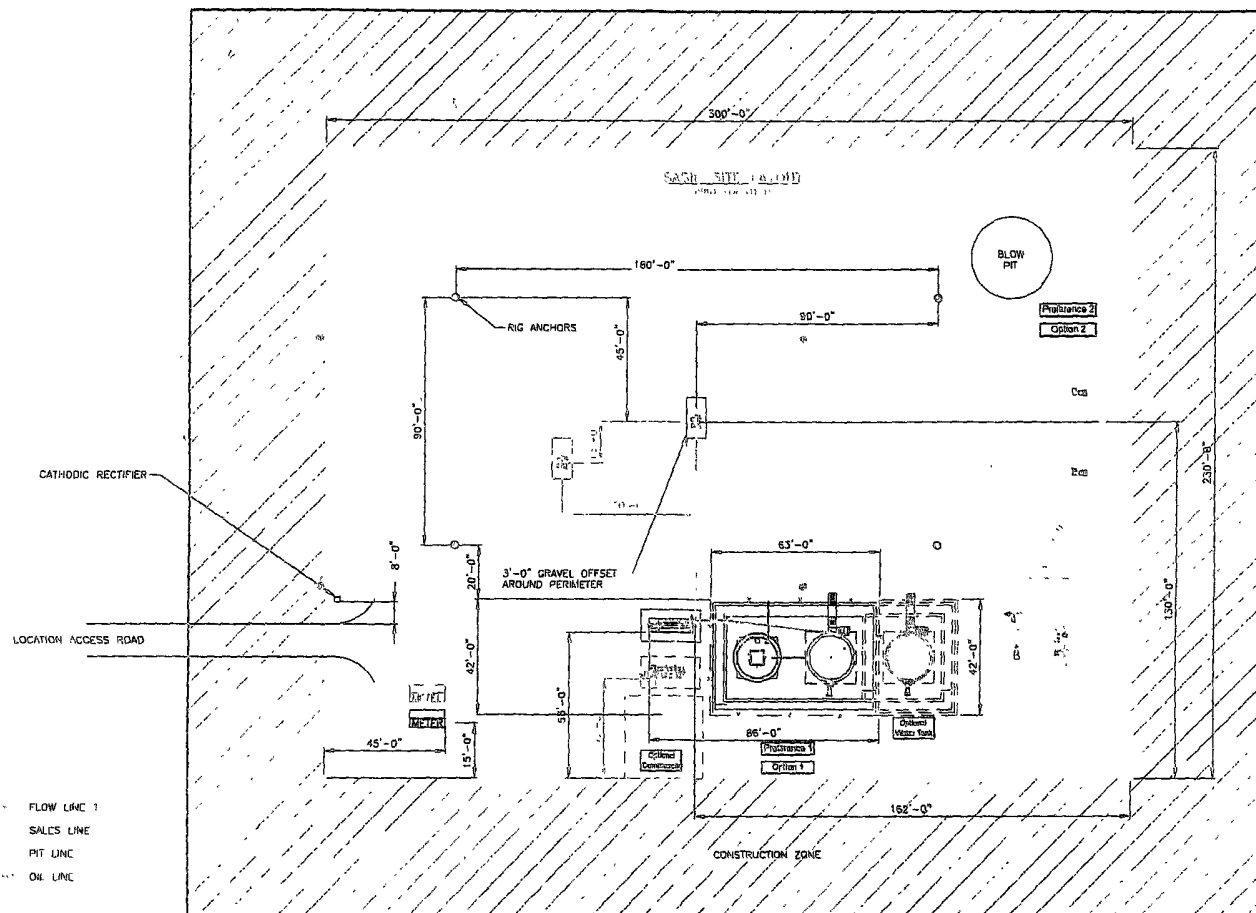
10/4/07 Added the DK tail. Economic as a MV/DK directional. - pas

Name changed from the 27-4 22B with the addition of the DK formation 10/10/07 KJL

ConocoPhillips or its affiliates
Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Well SJ 27-4 #22M
Company:	ConocoPhillips SJBU	TVD Reference:	Generic Rig RKB @ 6913.0ft (Generic Rig)
Project:	San Juan Basin	MD Reference:	Generic Rig RKB @ 6913.0ft (Generic Rig)
Site:	Russell's Site for Directional MV/DK wells	North Reference:	True
Well:	SJ 27-4 #22M	Survey Calculation Method:	Minimum Curvature
Wellbore:	SJ 27-4 #22M		
Design:	APD Directional Plan		

Formations							
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)		
3,415.3	3,197.0	Ojo Alamo		0.00			
3,611.5	3,387.0	Kirtland		0.00			
3,708.4	3,482.0	Fruitland		0.00			
4,001.0	3,772.0	Pictured Cliffs		0.00			
4,126.2	3,897.0	Lewis		0.00			
4,548.3	4,319.0	Huerfano Bentonite		0.00			
4,988.3	4,759.0	Chacra		0.00			
5,562.3	5,333.0	Upper Cliffhouse		0.00			
5,723.3	5,494.0	Mass Cliffhouse		0.00			
5,846.3	5,617.0	Menefee		0.00			
6,153.3	5,924.0	Pt Lookout		0.00			
6,473.3	6,244.0	Mancos Shale		0.00			
7,195.3	6,966.0	Gallup		0.00			
8,135.3	7,906.0	Greenhorn		0.00			
8,196.3	7,967.0	Graneros		0.00			
8,243.3	8,014.0	Two Wells		0.00			
8,315.3	8,086.0	Paguate		0.00			
8,342.3	8,113.0	Upper Cubero		0.00			
8,387.3	8,158.0	Lower Cubero		0.00			
8,432.3	8,203.0	Oak Canyon		0.00			
8,453.3	8,224.0	TD		0.00			
8,453.3	8,224.0	Encinal		0.00			



SEE SHEET 3 & 4 FOR PUMP DETAILS
ALL UNDERGROUND PIPING IS TO BE BURIED A MIN. OF 3'-0" TOP

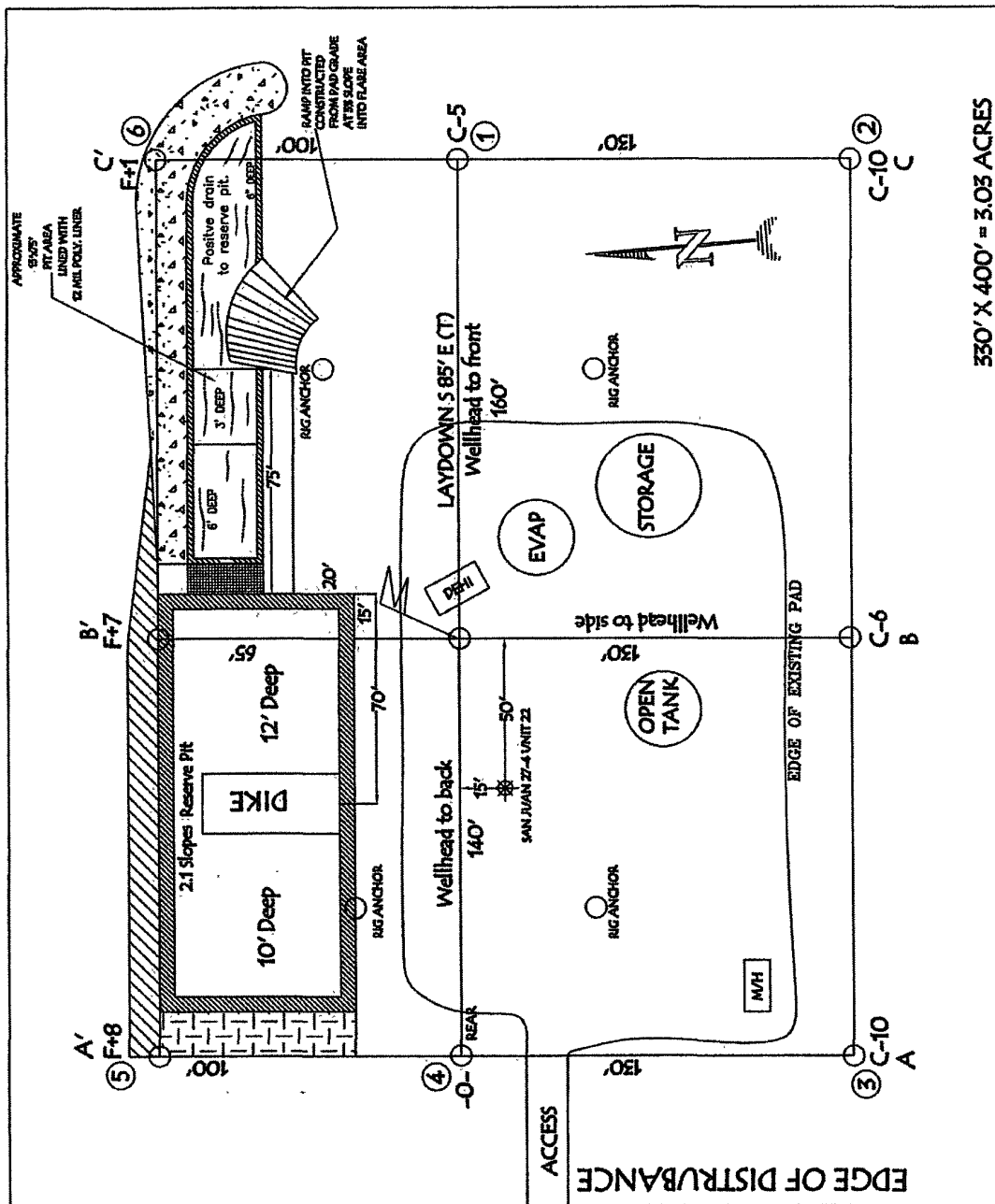
SHEET 1 OF 5

										ENGINEERING REVIEW			REFERENCE DRAWINGS		CONOCOPHILLIPS HIGH PRESSURE 3 PHASE FACILITY DIAGRAM- SITE LAYOUT				
										DESIGNER	REVIEWED	DATE	NO.	DESCRIPTION					
										PROCESS					CONOCOPHILLIPS	CLIENT NO. DESIGN NO.	CLIENT APPR. SCALE HERE	APP'D. DATE ENGINEERING DATE 6/28/07	
										MECHANICAL									
										PIPING									
										ELECTRICAL									
										I & C									
										CIVIL/STRUCTURAL									
										PROJECT					SAN JUAN BUSINESS UNIT				
OCTOBER 2007										DATE	BY	CHK'D	ENG	DESC	PLN				

SAN JUAN 27-4 UNIT 22M, 1735' FSL & 1030' FWL
SECTION 14, T-27-N, R-4-W, NMMP, RIO ARriba COUNTY, NM
GROUND ELEVATION: 6898', DATE: APRIL 3 2007

GROUND ELEVATION: 6898', DATE: APRIL 3, 2007

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.



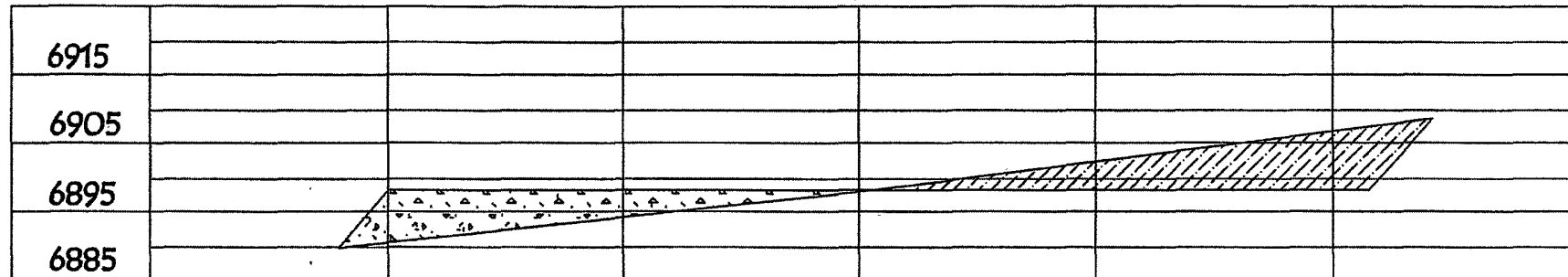
LATITUDE: 36°34.2409' N
LONGITUDE: 107°13.5233' W
NAD27

330' X 400' = 3.03 ACRES

BURLINGTON RESOURCES OIL & GAS COMPANY LP
SAN JUAN 27-4 UNIT 22M, 1735' FSL & 1030' FWL
SECTION 14, T-27-N, R-4-W, NMPM, RIO ARriba COUNTY, NM
GROUND ELEVATION: 6898', DATE: APRIL 3, 2007

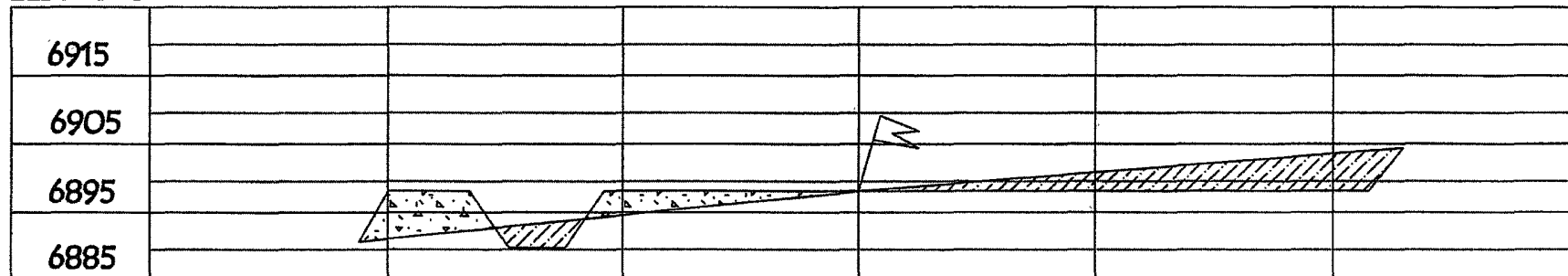
ELEV. A'-A

C/L



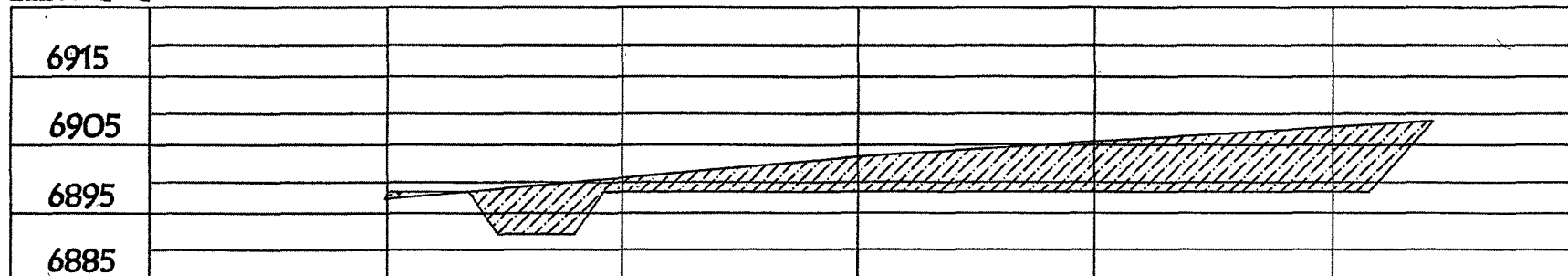
ELEV. B'-B

C/L



ELEV. C'-C

C/L



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