

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RCVD FEB 27 '08
OIL CONS. DIV.
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-78408A-AV
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	
4. Location of Well Unit J (NWSE), 2495' FSL & 2455' FEL Unit H (SENE), 2255' FNL & 945' FEL Latitude 36.558444 N. Longitude 107.220093 W. Latitude 36.559728 N. Longitude 107.214963 W.	9. Well Number #109M 10. Field, Pool, Wildcat Blanco Mesaverde/Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) J Sec. 23, T27N, R4W 14 Sec. 23, T27N, R4W API # 30-045- 039-30449	
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 945'		
16. Acres in Lease 2560.000	17. Acres Assigned to Well MV/DK 320.0 (E/2)	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 100' from San Juan 27-4 Unit 109B		
19. Proposed Depth TVD 8258/TMD 8565.8'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6961' 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>1/2/08</u> Date	

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY [Signature] TITLE AFM DATE 2/25/08

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 to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

Example Master Plan Type 3

Bond Numbers NMB-000015 and NMB-000089

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

HOLD C104 FOR

NMOCD

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

FEB 27 2008 AV

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

RECEIVED

JAN 2 2008

Form C-102
Revised October 12, 2005

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

Bureau of Land Management
Farmington Field Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-30449		*Pool Code 72319/71599	*Pool Name BLANCO MESAVERDE/BASIN DAKOTA
*Property Code 7452	*Property Name SAN JUAN 27-4 UNIT		*Well Number 109M
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		*Elevation 6961'

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
J	23	27-N	4-W		2495'	SOUTH	2455'	EAST	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
H	23	27-N	4-W		2255'	NORTH	945'	EAST	RIO ARriba

¹² Dedicated Acres 320.00 E/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.

16

<i>S 89° 59' W 5202.01'</i> BOTTOM HOLE LAT: 36°33.5831' N. LONG: 107°12.8619' W. NAD 1927 LAT: 36.559728° N. LONG: 107.214963° W. NAD 1983		<i>USA SF-080672</i> <i>2255'</i> <i>945'</i> <i>2455'</i> <i>2495'</i> <i>S 89° 44' 46" W 5197.25'</i>		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. <i>Jamie Goodwin</i> Signature Printed Name 01/02/2008	
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. <i>11-20-07</i> Date of Survey <i>NEW MEXICO</i> LICENSED PROFESSIONAL SURVEYOR 15703 <i>Carla W. Russell</i> Signature Certificate Number 15703					

May 27, 2004

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

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.	39-30449
5. Indicate Type of Lease	STATE ☐ FEE ☐
6. State Oil & Gas Lease No.	Federal Lease # USA SF - 080672
7. Lease Name or Unit Agreement Name	San Juan 27-4 Unit
8. Well Number	#109M
9. OGRID Number	14538
10. Pool name or Wildcat	Blanco Mesaverde/Basin Dakota
11. Elevation (Show whether DR, RKB, RT, GR, etc.)	6961'
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 <1000
Pit Liner Thickness:	12 mil Below-Grade Tank: Volume bbls; Construction Material

SUNDY 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 J : 2495' feet from the South line and 2455' feet from the East line
Section 23 Township 27N Rng 4W NMPM County Rio Arriba11 Elevation (Show whether DR, RKB, RT, GR, etc.)
6961'

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 Jamie Goodwin TITLE Regulatory Technician DATE 1/21/08Type or print name Jamie Goodwin E-mail address: goodwin@conocophillips.com Telephone No. 505-326-9784

For State Use Only

Deputy Oil & Gas Inspector,

District #3

APPROVED BY [Signature] TITLE Deputy Oil & Gas Inspector, District #3 DATE FEB 27 2008

Conditions of Approval (if any):

Vulnerable area close pits per Rule 50, F.1
The pit liner and all contents must be removed at the time of closure

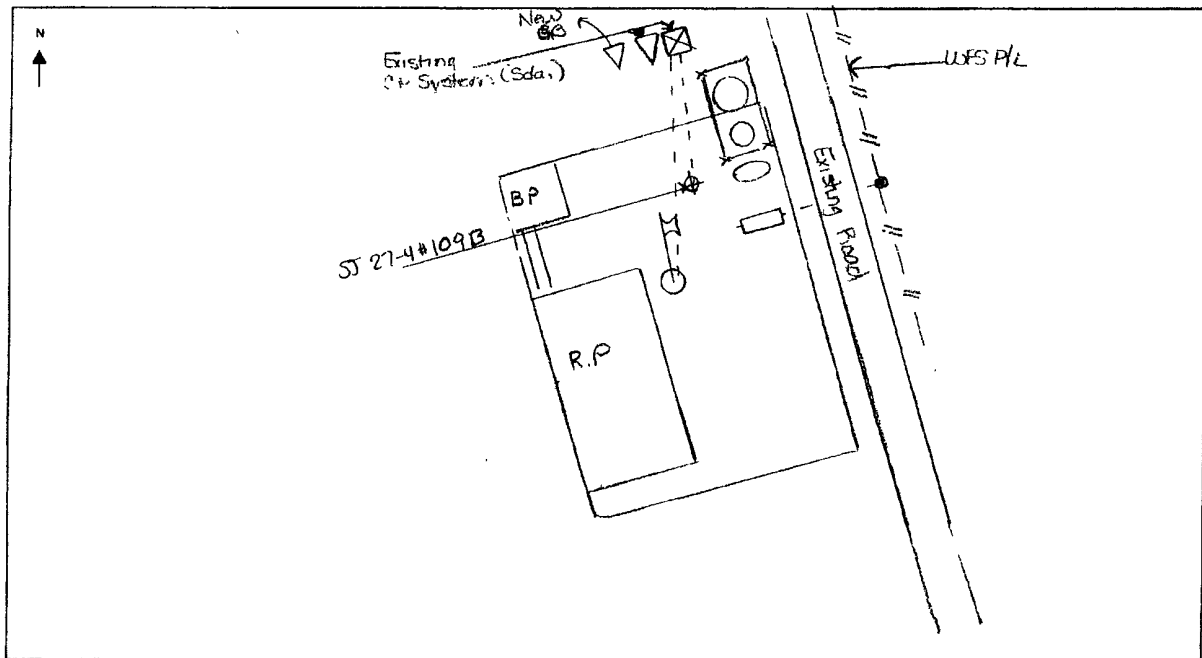


TECHNICAL SERVICES
A CORROSION COMPANY

CATHODIC PROTECTION PLAN FOR NEW WELLS

WELL NAME SJ 27-4 #109B LEGALS J-23-27-4 COUNTY Rio Arriba

PURPOSED C.P. SYSTEM: Drill new GB just west of existing system and tie in. Trench approx 260' of #8 neg from proposed well to existing upgraded solar.



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

COMMENTS: 1.04 v / 10 amp solar needs new IC chip / upgrade solar possibly

NEAREST POWER SOURCE N/A DISTANCE: _____

PIPELINES IN AREA: WFS PL

TECHNICIAN: Michelle Thompson DATE: 8/16/07

6 CR 5412 BLOOMFIELD, N.M. 87413
OFFICE: 505-634-0271 CELL: 505-793-6953

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-4 UNIT 109M

DEVELOPMENT

Lease:		AFE #: WAN.CDR.7075				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: Datum Code: NAD 27							
Latitude: 36.558434		Longitude: -107.219495		X:	Y:	Section: 23	Range: 004W
Footage X: 2455 FEL		Footage Y: 2495 FSL		Elevation: 6961 (FT)		Township: 027N	
Tolerance:							
Location: Datum Code: NAD 27							
Latitude: 36.559718		Longitude: -107.214365		X:	Y:	Section: 23	Range: 004W
Footage X: 945 FEL		Footage Y: 2255 FNL		Elevation:		(FT) Township: 027N	
Tolerance:							
Location Type: Restricted		Start Date (Est.): 1/1/2020		Completion Date:		Date In Operation:	
Formation Data: Assume KB = 6977 Units = FT							
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks	
Surface Casing	320	6657	☐			12-1/4 hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 244 cu. ft. Circulate cement to surface.	
OJAM	3230	3747	☐				
KRLD	3404	3573	☐				
FRLD	3477	3500	☐			Possible Gas	
PCCF	3794	3183	☐				
LEWS	3892	3085	☐				
HUERFANITO BENTONITE	4333	2644	☐				
CHRA	4785	2192	☐				
Intermediate Casing	4885	2092	☐			8 3/4" Hole. 7", 23 ppf, L-80, LTC Casing. Cement with 1164 cu. ft. Circulate cement to surface.	
UCLFH	5363	1614	☐			Gas	
MASSIVE CLIFF HOUSE	5529	1448	☐	865		Gas	
MENF	5657	1320	☐				
PTLK	5947	1030	☐				
MNCS	6267	710	☐				
GLLP	6988	-11	☐				
GRHN	7928	-951	☐				
GRRS	7991	-1014	☐				
TWLS	8026	-1049	☐	1250		Gas	
CBRO	8148	-1171	☐				
CBRL	8192	-1215	☐				
OAK CANYON	8237	-1260	☐				
ENCINAL	8258	-1281	☐				

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

SAN JUAN 27-4 UNIT 109M

DEVELOPMENT

Total Depth	8258	-1281	☐	6-1/4" hole, 4-1/2" 11.6 ppf, L-80, LTC casing. Cement w/ 462 cu. ft. Circulate cement a minimum of 100' inside the previous casing string.
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Reference Wells:		
Reference Type	Well Name	Comments
Production	27-4 #109B	SE 23-27N-4W
Production	27-4 #139M	SE 09-27N-4W
Production	27-4 #98	SW 10-27N-4W
Production	27-4 #22	SW 14-27N-4W
Production	27-4 #3A	SE 15-27N-4W
Production	27-4 #143A	SE 22-27N-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 well call TD.

Additional Information:					
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks

Comments: Location/Tops/Logging - MVNM027N004W23NE1 Keep at same spot: SHL at 2495' FSL & 2455' FEL and BHL at 2255' FNL & 945' FEL.

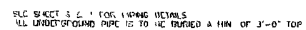
Zones - MVNM027N004W23NE1 DKNM027N004W23NE2

General/Work Description - NO LEWIS

Forest well - Directional Drill

10/4/07 - Added the DK tail per RAM. It is still economic as a directional MV/DK - pas

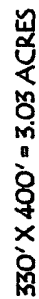
Name changed from 27-4 Unit 109C KJL 10-9-07



SHEET 1 OF 2

[illegible]

SAN JUAN 27-4 UNIT 109M, 2495' FSL & 2455' FEL
SECTION 23, T-27-N, R-4-W, NMPM, RIO ARriba COUNTY, NM
GROUND ELEVATION: 6961', DATE: MARCH 21, 2007



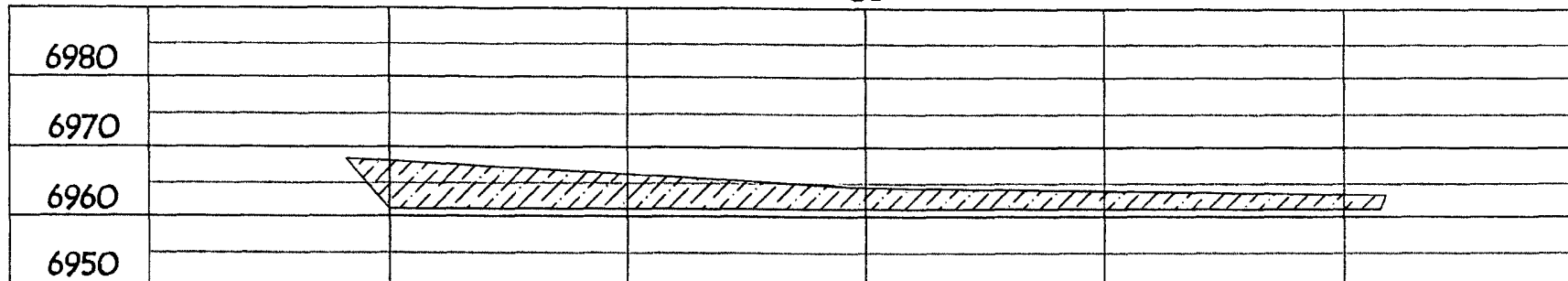
LATITUDE: 36° 33.5060' N LONGITUDE: 107° 13.1698' W NAD27

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 27-4 UNIT 109M, 2495' FSL & 2455' FEL
 SECTION 23, T-27-N, R-4-W, NMPM, RIO ARriba COUNTY, NM
 GROUND ELEVATION: 6961', DATE: MARCH 21, 2007

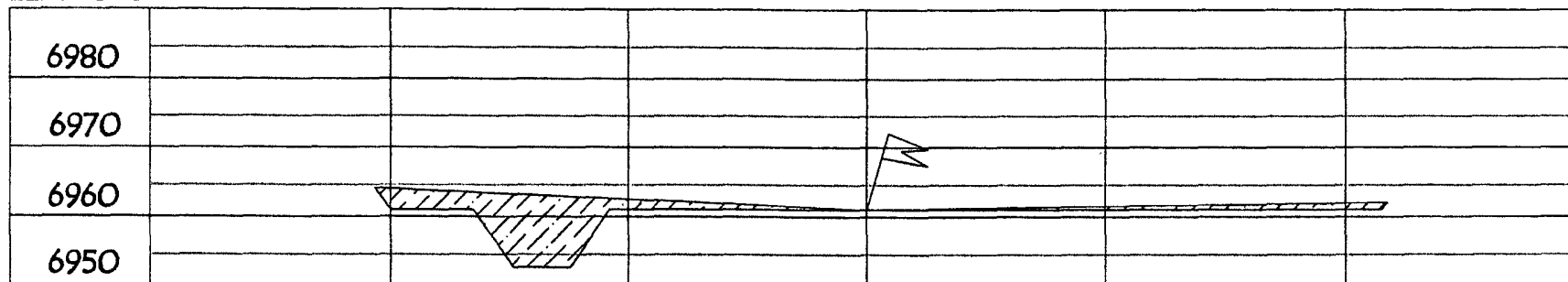
ELEV. A'-A

C/L



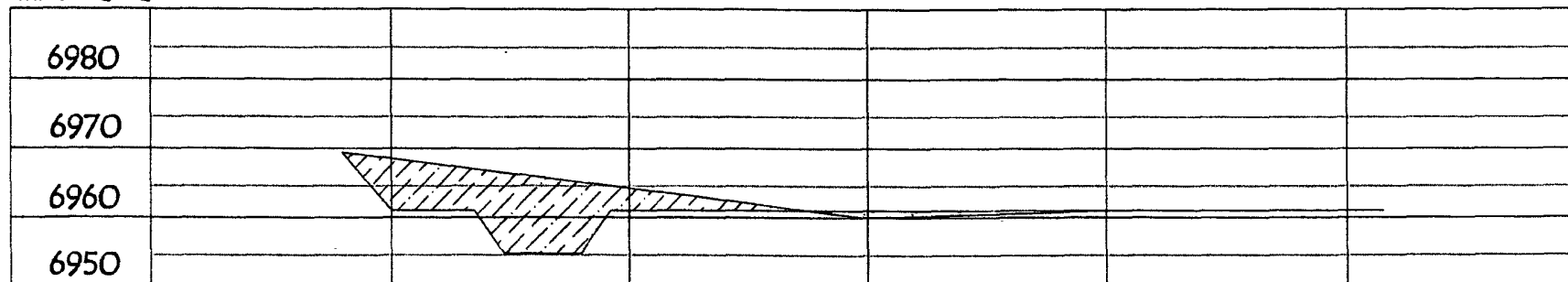
ELEV. B'-B

C/L



ELEV. C'-C

C/L



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.