

APR 24 2008

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Bureau of Land Management
Farmington Field Office

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number USA SF-078081 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 NMNM 78394B Huerfanito Unit RCVD MAY 9 '08
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name OIL CONS. DIV. 9. Well Number #83E DIST. 3
4. Location of Well Surf: Unit B(NWNE), 970' FNL & 1665 FEL Surf: Latitude 36.550746° N Longitude 107.790529° W	10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) B Sec. 28, T27N, R9W API # 30-045-34695
14. Distance in Miles from Nearest Town 27 miles/Bloomfield	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 970'	
16. Acres in Lease 1280 Acres	17. Acres Assigned to Well 320 Acres (E/2)
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 53' from Huerfanito #41 PC	
19. Proposed Depth 6899' This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6350' GR	22. Approx. Date Work will Start DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Sasha Spangler</u> Sasha Spangler (Regulatory Technician)	<u>4-24-08</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.

Example Master Plan Type 4

Bond Numbers NMB-000015 and NMB-000089

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

to NMOCD

MAY 12 2008

AV

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

APR 24 2008

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 7 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-341095		² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 7138	⁵ Property Name HUERFANITO UNIT		⁶ Well Number 83E
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP		⁹ Elevation 6350

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
B	28	27-N	9-W		970	NORTH	1665	EAST	SAN JUAN

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
B									

¹² Dedicated Acres 320.0	¹³ 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

¹⁶ 	S 88°24'17" W S 88°23' W 970' 2623.3' (M) 2623.5' (R) 1665' 2640.7' (R) 2642.1' (M)	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 working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <u>Crystal Walker</u> 3/7/08 Signature <u>Crystal Walker</u> Printed Name <u>Regulatory Technician</u> Title and E-mail Address <u>March 7, 2008</u> Date
	WELL FLAG NAD 83 LAT: 36.550746° N LONG: 107.790529° W NAD 27 LAT: 36°33.044253' N LONG: 107°47.394874' W	
	E/2 DEDICATED ACREAGE USA SF - 078081 SECTION 28 T-27-N, R-9-W	
	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: 2/19/08 Signature and Seal of Professional Surveyor: 	

Certificate Number: NM 11393

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

May 27, 2004

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.)		WELL API NO. 30-045- <u>34695</u>
1. Type of Well: Oil Well ☐ Gas Well ☒ Other		5. Indicate Type of Lease STATE ☐ FEE ☐
2. Name of Operator BURLINGTON RESOURCES OIL & GAS, LP		6. State Oil & Gas Lease No. SF-078081
3. Address of Operator 3401 E. 30TH STREET, FARMINGTON, NM 87402		7. Lease Name or Unit Agreement Name Huerfanito Unit
4. Well Location Unit Letter <u>B</u> : <u>970</u> feet from the <u>North</u> line and <u>1665</u> feet from the <u>East</u> line Section <u>28</u> Township <u>27N</u> Rng <u>9W</u> NMPM County <u>San Juan</u>		8. Well Number #83E
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6350' GR		9. OGRID Number 14538
Pit or Below-grade Tank Application ☐ or Closure ☐		10. Pool name or Wildcat Basin Dakota
Pit type <u>New Drill</u> Depth to Groundwater <u>>100'</u> Distance from nearest fresh water well <u>>1000'</u> Distance from nearest surface water <u>>1000'</u>		
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>4400</u> 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 ☐

SUBSEQUENT REPORT OF:

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

OTHER: New Drill Pit ☒

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 Crystal Walker TITLE Regulatory Technician DATE 3/24/2008

Type or print name Crystal Walker E-mail address: crystal.walker@conocophillips.com Telephone No. 505-326-9837
For State Use Only

APPROVED BY [Signature] TITLE Deputy Oil & Gas Inspector, District #3 DATE MAY 12 2008
Conditions of Approval (if any):

COMPANY

BURLINGTON

Charge Code

WAN.RFE.PD07.JB

WELL NAME

HUERFANITO UNIT # 83 E

DATE

12/27/2007

DUAL WELL

WELL NAME

TRIPLE WELL

WELL NAME

COORDINATES**SEC****TNSHP****RANGE****LATITUDE****LONGITUDE**

NE 28

27 N

9 W

36.550726 N

107.790697 W

COUNTY

SAN JUAN

RECTIFIERSOLARGROUND BED240 V METER POLE480 V METER POLED C CABLESA C CABLESPRIMARY POWERDISTANCE TO POWERUNDERGROUNDPUMPJACKWATER PUMPCOMPRESSORRTUSAMSTANKS

SIZE	NEEDED	EXISTING	1 PHASE	3 PHASE
2 well	x			
	x			
# 8	300 ft			
			Jemez	
			1 phase	
			3/4 mile	

COMMENTS

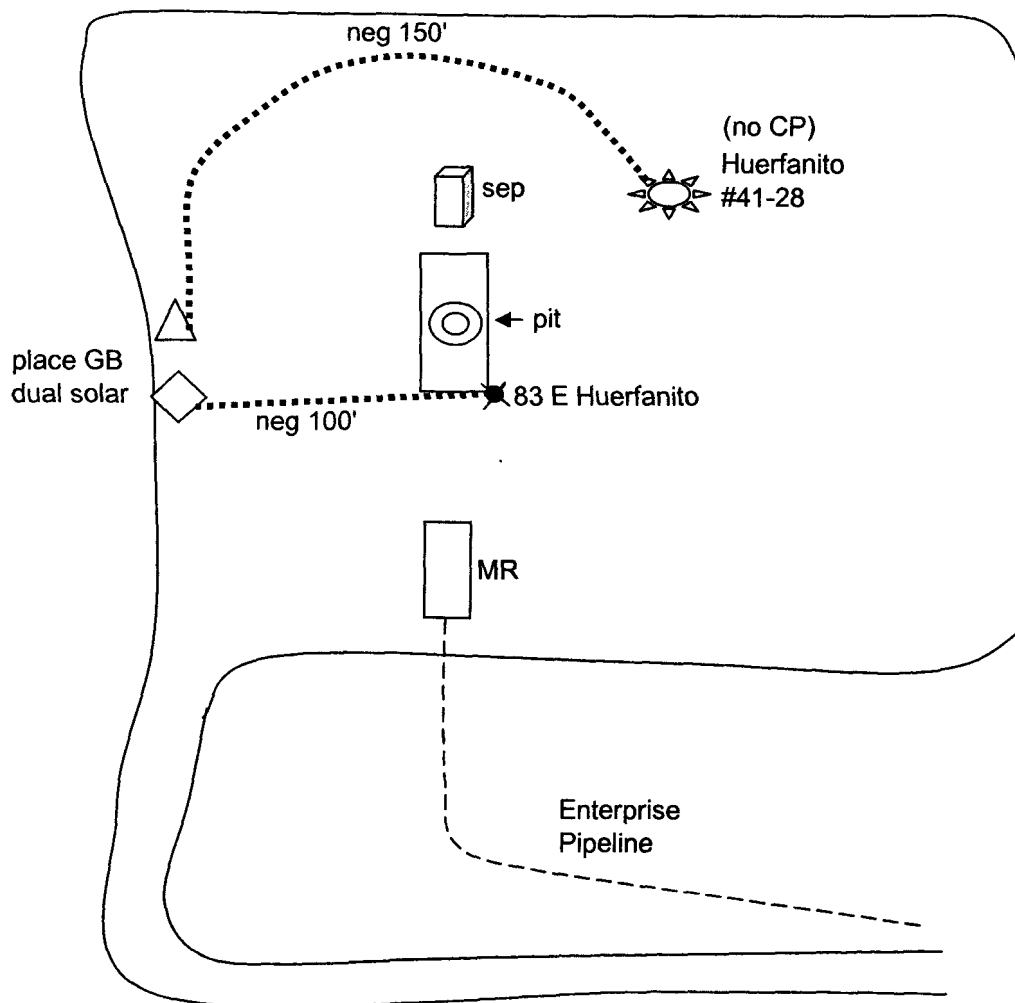
sandy soil - no crossings



Huerfanito Unit # 83 E

1 phase
Jemez power
3/4 mile west

sandy no CP on PC



TANK	SEP OR DEHY	SOLAR	240V MP	PUMP JACK	GND/BED	EXISTING CABLE
RECT	PIT	WELL	480V MP	PROPOSED CABLE	FOREIGNN PIPELINE	POWER LINE
						CONOCO PIPELINE

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HUERFANITO UNIT 83E

DEVELOPMENT

Lease:		AFE #: WAN.CDR.7409		AFE \$: 619,210.20	
Field Name: hBR_SAN JUAN		Rig: Bearcat Rig 4		State: NM	County: SAN JUAN
Geologist:		Phone:		Geophysicist:	
Geoscientist:		Phone:		Prod. Engineer:	
Res. Engineer: Prabowo, Wahyu		Phone: 505-326-9797		Proj. Field Lead:	
				Phone:	

Primary Objective (Zones):

Zone	Zone Name
FRR	BASIN DAKOTA (PRORATED GAS)

Location: Surface		Datum Code: NAD 27		Straight Hole	
Latitude: 36.550737	Longitude: -107.789914	X:	Y:	Section: 28	Range: 009W
Footage X: 1665 FEL	Footage Y: 970 FNL	Elevation: 6350	(FT)	Township: 027N	
Tolerance:					

Location Type: Year Round	Start Date (Est.): 1/1/2009	Completion Date:	Date In Operation:
Formation Data: Assume KB = 6364 Units = FT			

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	320	6044	☐	12.25" hole		320' 8 5/8" 24 ppf, J-55, STC casing. Cement with 312 cuft. Circulate cement to surface.
OJO ALAMO	1414	4950	☐			
KIRTLAND	1535	4829	☐			
FRUITLAND	1932	4432	☐			Possible Gas
LEWIS	2308	4056	☐			
PICTURED CLIFFS	2326	4038	☐			
HUERFANITO BENTONITE	2700	3664	☐			
CHACRA	3116	3248	☐			
UPPER CLIFF HOUSE	3761	2603	☐			
MENEFEE	3854	2510	☐			
POINT LOOKOUT	4544	1820	☐	585		GAS
MANCOS	4702	1662	☐			
UPPER GALLUP	5724	640	☐			
GREENHORN	6529	-165	☐			
GRANEROS	6578	-214	☐			
TWO WELLS	6613	-249	☐	1300		Gas
PAGUATE	6696	-332	☐			
CUBERO	6758	-394	☐			
LOWER CUBERO	6766	-402	☐			
ENCINAL	6817	-453	☐			TD T/ENCN + 30' for completion + 40' for mudshoe
BURRO CANYON	6879	-515	☐			
Total Depth	6887	-523	☐			7 7/8" hole, 4-1/2" 11.6 ppf, N-80 LTC casing. Cement with 2026 cuft. Circulate cement to surface
MORRISON	6899	-535	☐			

Reference Wells:

Reference Type	Well Name	Comments
Production	Huerfanito 10	27N-9W21 SE SW
Production	Huerfanito 83	27N-9W28 SE NE

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HUERFANITO UNIT 83E

DEVELOPMENT

Production	Huerfanito 42	27N-9W-27 NE SW NW
Production	Huerfanito 41	27N-9W-28 SE NW NE

Logging Program:

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

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

Cased Hole GR / CBL

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
----------	-------	-----------	---------	----------------	---------

CONSTRUCTION										CONSTRUCTION									
HIGH PRESSURE PHASE										HIGH PRESSURE PHASE									
FACILITY DIAGRAM - SITE LAYOUT										FACILITY DIAGRAM - SITE LAYOUT									
CONOCO Phillips										CONOCO Phillips									
SAN JUAN BUSINESS UNIT										SAN JUAN BUSINESS UNIT									
ENGINEERING REVIEW DESIGN CONSTRUCTION										ENGINEERING REVIEW DESIGN CONSTRUCTION									
PROCESS MECHANICAL ELECTRICAL INSTRUMENTATION HAZOP HAZID HAZOP HAZID HAZOP HAZID										PROCESS MECHANICAL ELECTRICAL INSTRUMENTATION HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID									
HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP HAZID										HAZOP HAZID HAZOP HAZID HAZOP HAZID HAZOP									

BURLINGTON RESOURCES OIL AND GAS COMPANY LP

HUERFANITO UNIT #83E

970' FNL, 1665' FEL

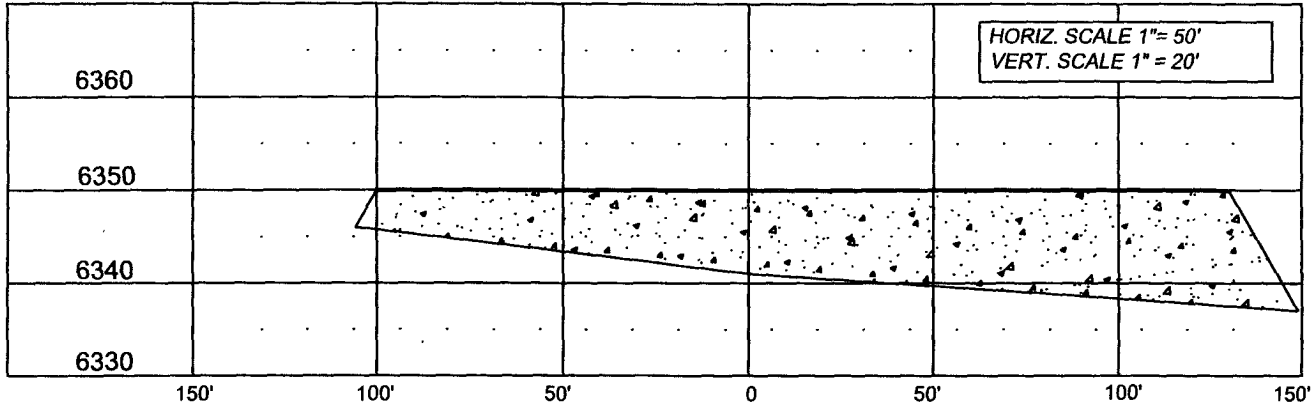
SECTION 28, T-27-N, R-9-W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

ELEV.: 6350 NAVD88

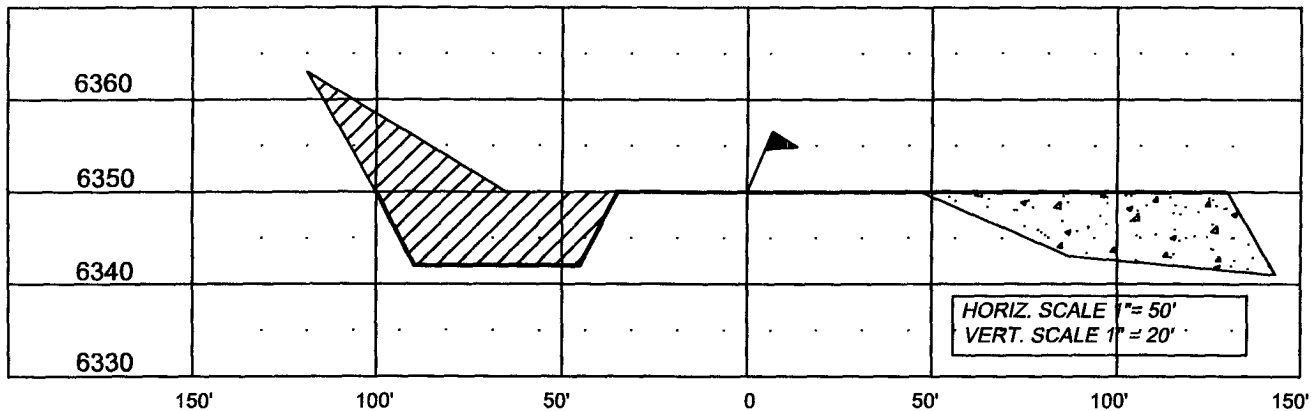
A - A'

C/L



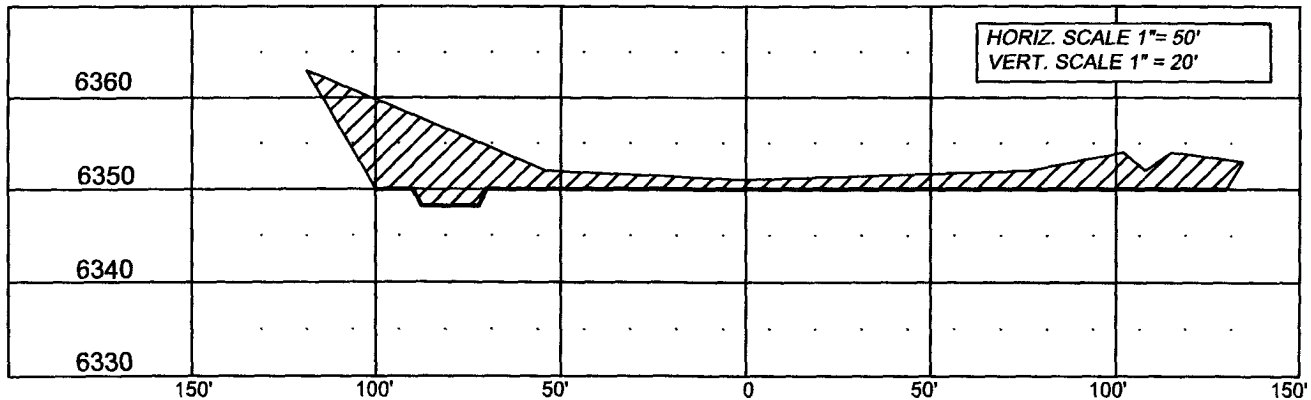
B - B'

C/L



C - C'

C/L



NOTE: CCI 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 PRIOR TO CONSTRUCTION.

REVISIONS

NO.	DESCRIPTION	REVISED BY	DATE
1	ISSUED FOR REVIEW	TJR	11/07/07
2	WELL MOVE	TJR	2/19/08

CCI

CHENAULT CONSULTING INC.

P O. BOX 328
BLOOMFIELD, NM, 87413
PHONE. (505) 325-7707