


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

BLM'S APPROVAL OR ACCEPTANCE OF THIS
ACTION DOES NOT RELIEVE THE LESSEE AND
OPERATOR FROM OBTAINING ANY OTHER
AUTHORIZATION REQUIRED FOR OPERATIONS
ON FEDERAL AND INDIAN LANDS

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number USA SF-078502-A 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 RCVD DEC 31 '07 OIL CONS. DIV. DIST. 3
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Hardie 9. Well Number #4P
4. Location of Well Unit F (SENW), 1735' FNL & 1610' FWL Latitude 36.71336 N. Longitude 107.63121 W.	10. Field, Pool, Wildcat Basin Dakota/Blanco Mesaverde 11. Sec., Twn, Rge, Mer. (NMPM) F Sec. 24, T29N, R8W API # 30-045- 34531
14. Distance in Miles from Nearest Town 12 Miles/Blanco	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1735'	
16. Acres in Lease 1840.000 6460	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 76' from Hardie A Com. #120-FC	
19. Proposed Depth 7780'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6623' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	 H ₂ S POTENTIAL EXIST
24. Authorized by: <u>Jamie Goodwin</u> Jamie Goodwin (Regulatory Technician)	<u>12/11/07</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 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

JAN 08 2008

NMOCD

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

RECEIVED

Form C-102
Revised October 12, 2005

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

DEC 11 2007
Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

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

Bureau of Land Management
Farmington Field Office

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34531	² Pool Code 71599 / 72319	³ Pool Name BASIN DAKOTA/ BLANCO MESAVERDE
⁴ Property Code 35572	⁵ Property Name HARDIE	⁶ Well Number 4 P
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	⁹ Elevation 6623'

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	24	29N	8W		1735'	NORTH	1610'	WEST	SAN JUAN

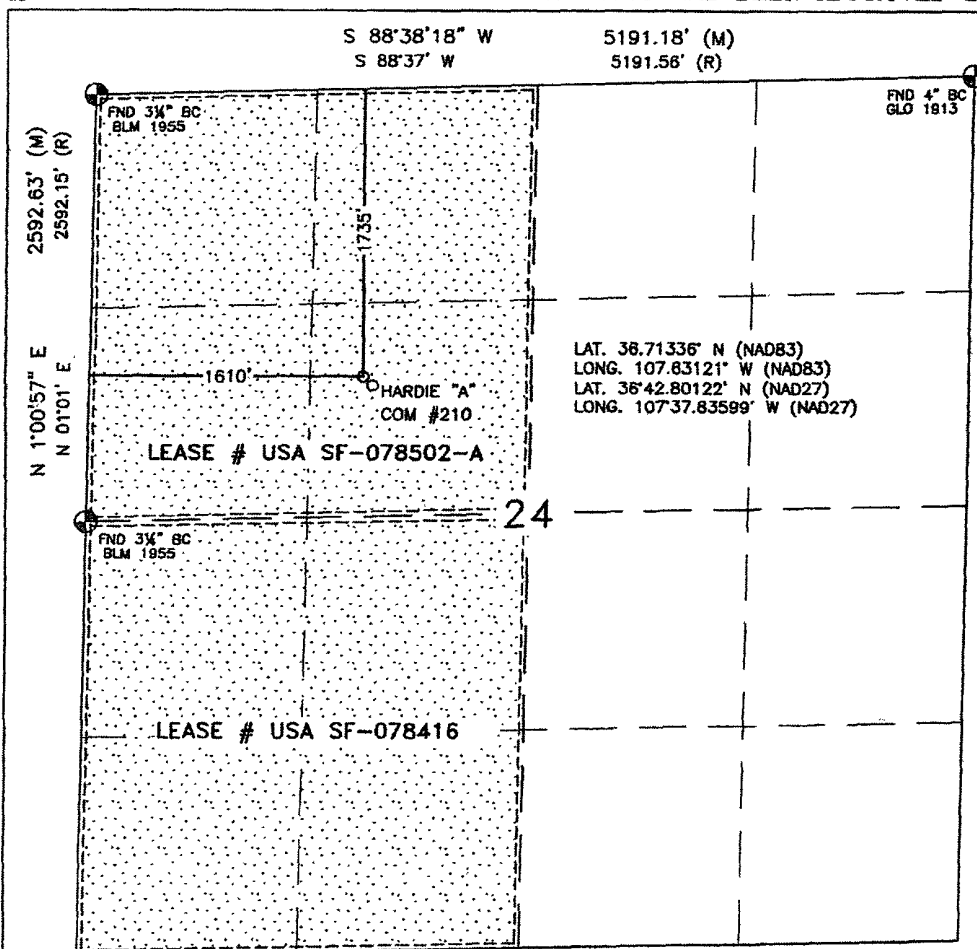
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F									

¹² Dedicated Acres 320.00 Acres - (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

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 or a compulsory pooling order heretofore entered by the division.

Patsy Clugston 8/28/07
Signature Date

Patsy Clugston
Printed Name

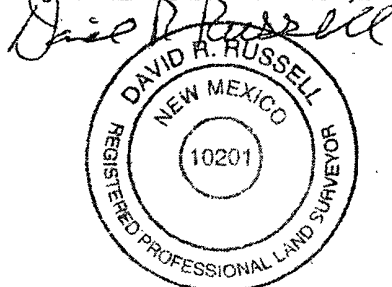
¹⁸ SURVEYOR CERTIFICATION

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.

AUGUST 16, 2007

Date of Survey

Signature and Seal of Professional Surveyor:



DAVID RUSSELL

Certificate Number 10201

State of New Mexico

Energy, Minerals and Natural Resources

Form C-103

May 27, 2004

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

WELL API NO.

30-045- 34531

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

USA SF-078502-A

7. Lease Name or Unit Agreement Name

Hardie

8. Well Number

4P

9. OGRID Number

14538

10. Pool name or Wildcat

DK/MV

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 F : 1735' feet from the North line and 1610' feet from the West line
Section 24 Township 29N Rng 8W NMPM County San Juan

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

6623'

Pit or Below-grade Tank Application

☐ or Closure ☐

Pit type

New Drill

Depth to Groundwater

>100'

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

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

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

OTHER:

New Drill ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐COMMENCE DRILLING OPNS. ☐CASING/CEMENT JOB ☐ALTERING CASING ☐P AND A ☐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 Sasha Spangler TITLE Regulatory Technician DATE 12/10/2007

Type or print name

Sasha Spangler

E-mail address: spangs@conocophillips.comTelephone No. 505-326-9568

For State Use Only

APPROVED BY

TITLE

Deputy Oil & Gas Inspector,

DATE

JAN 08 2008

Conditions of Approval (if any):

District #3

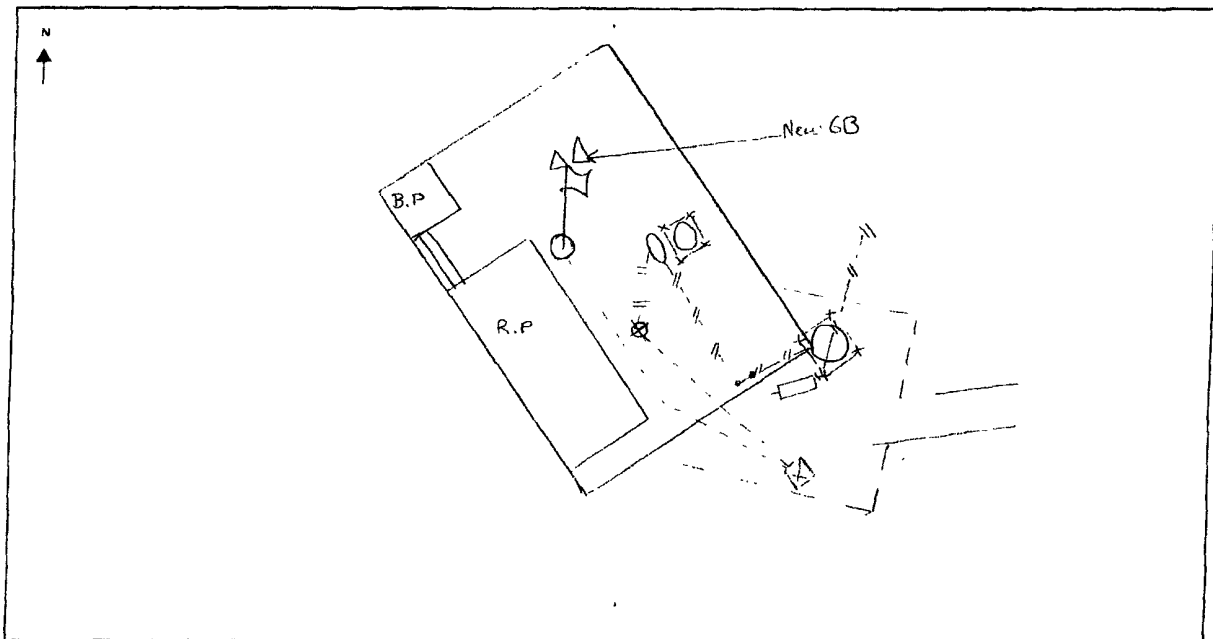


TECHNICAL SERVICES
A CORROSION COMPANY

CATHODIC PROTECTION PLAN FOR NEW WELLS

WELL NAME Hardie #4P LEGALS F-24-29-8 COUNTY San Juan

PURPOSED C.P. SYSTEM: Drill new GB to the east of old GB, at least 50ft away, to avoid shunting power. Upgrade existing rectifier and bundle approx 495' of #8 neg cable from proposed well to rectifier.



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

COMMENTS: A/C breaker on location / GB post rated and junction box for GB on ground -

NEAREST POWER SOURCE Existing Rect. DISTANCE: Same location
PIPELINES IN AREA: _____

TECHNICIAN: Michael J. [signature] DATE: 9/14/07

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

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HARDIE 4P

DEVELOPMENT

Lease:		AFE #: WAN.CDR.7314		AFE \$:	
Field Name: hBR_SAN JUAN		Rig: H&P Rig 282		State: NM	County: SAN JUAN
Geologist:		Phone:		Geophysicist:	
Geoscientist: Riley, Brook		Phone: +1 505-324-6108		Prod. Engineer:	
Res. Engineer: McKee, Cory J		Phone: 505-326-9826		Proj. Field Lead:	

Primary Objective (Zones):	
Zone	Zone Name
FRR	BASIN DAKOTA (PRORATED GAS)
RON	BLANCO MESAVERDE (PRORATED GAS)

Location: Surface		Datum Code: NAD 27		Straight Hole	
Latitude: 36.713354	Longitude: -107.630600	X:	Y:	Section: 24	Range: 008W
Footage X: 1610 FWL	Footage Y: 1735 FNL	Elevation: 6623 (FT)	Township: 029N		
Tolerance:					

Location Type: Year Round	Start Date (Est.): 1/1/2008	Completion Date:	Date In Operation:
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Formation Data: Assume KB = 6635	Units = FT
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Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	216	6419	<input type="checkbox"/>			12-1/4" hole. 9-5/8", 32.3 ppf, H-40, STC casing. Cement with 171 cu ft. Circulate cement to surface.
OJAM	2239	4396	<input type="checkbox"/>			
KRLD	2463	4172	<input type="checkbox"/>			
FRLD	2871	3764	<input type="checkbox"/>			Possible Gas
PCCF	3324	3311	<input type="checkbox"/>			
LEWS	3671	2964	<input type="checkbox"/>			
Intermediate Casing	3771	2864	<input type="checkbox"/>			8-3/4" hole. 7", 20 ppf, J-55, STC Casing. Cement with 849 cu ft. Circulate cement to surface.
HUERFANITO BENTONITE	3805	2830	<input type="checkbox"/>			
CHRA	4260	2375	<input type="checkbox"/>			
UCLFH	4803	1832	<input type="checkbox"/>			Gas
MASSIVE CLIFF HOUSE	4922	1713	<input type="checkbox"/>	390		Gas
MENF	5100	1535	<input type="checkbox"/>			
PTLK	5473	1162	<input type="checkbox"/>			
MNCS	5700	935	<input type="checkbox"/>			
GLLP	6714	-79	<input type="checkbox"/>			
GRHN	7461	-826	<input type="checkbox"/>			
GRRS	7520	-885	<input type="checkbox"/>			
TWLS	7559	-924	<input type="checkbox"/>	1850		Gas
PAGUATE	7660	-1025	<input type="checkbox"/>			
CBRO	7688	-1053	<input type="checkbox"/>			
CBRL	7708	-1073	<input type="checkbox"/>			
ENCINAL	7780	-1145	<input type="checkbox"/>			
TOTAL DEPTH DK	7780	-1145	<input type="checkbox"/>			6-1/4" hole. 4-1/2", 10.5/11.6 ppf, J-55, STC/LTC casing. Cement with 546 cu ft. Circulate cement a minimum of 100' inside the previous casing string.

Reference Wells:		
Reference Type	Well Name	Comments

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HARDIE 4P

DEVELOPMENT

Logging Program:			
Intermediate Logs:	<input type="checkbox"/> Log only if show	<input type="checkbox"/> GR/ILD	<input type="checkbox"/> Triple Combo

TD Logs:	<input type="checkbox"/> Triple Combo	<input type="checkbox"/> Dipmeter	<input type="checkbox"/> RFT	<input type="checkbox"/> Sonic	<input type="checkbox"/> VSP	<input type="checkbox"/> TDT	<input checked="" type="checkbox"/> Other
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Bottom perf 20 feet above TD,
GR_CBL

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments: Location/Tops/Logging - MVNM029N008W24NW2 DK 29N08W24NW2 Avoid C & E, topo is an issue, twin Hardie A Com 210 (FTC-UPE), else prefer F,D.

Zones - MVNM029N008W24NW2 DK 29N08W24NW2

General/Work Description - 10/16/07 DRILLING: LPT (DK zone) Required. (RAM/RWall)

LATITUDE: 36.71336°N
 LONGITUDE: 107.63121°W
 DATUM: NAD 83

SLOPES TO BE CONSTRUCTED TO
 MATCH THE ORIGINAL CONTOURS
 AS CLOSE AS POSSIBLE.

BURLINGTON RESOURCES O&G CO LP

HARDIE #4 P

1735' FNL & 1610' FWL

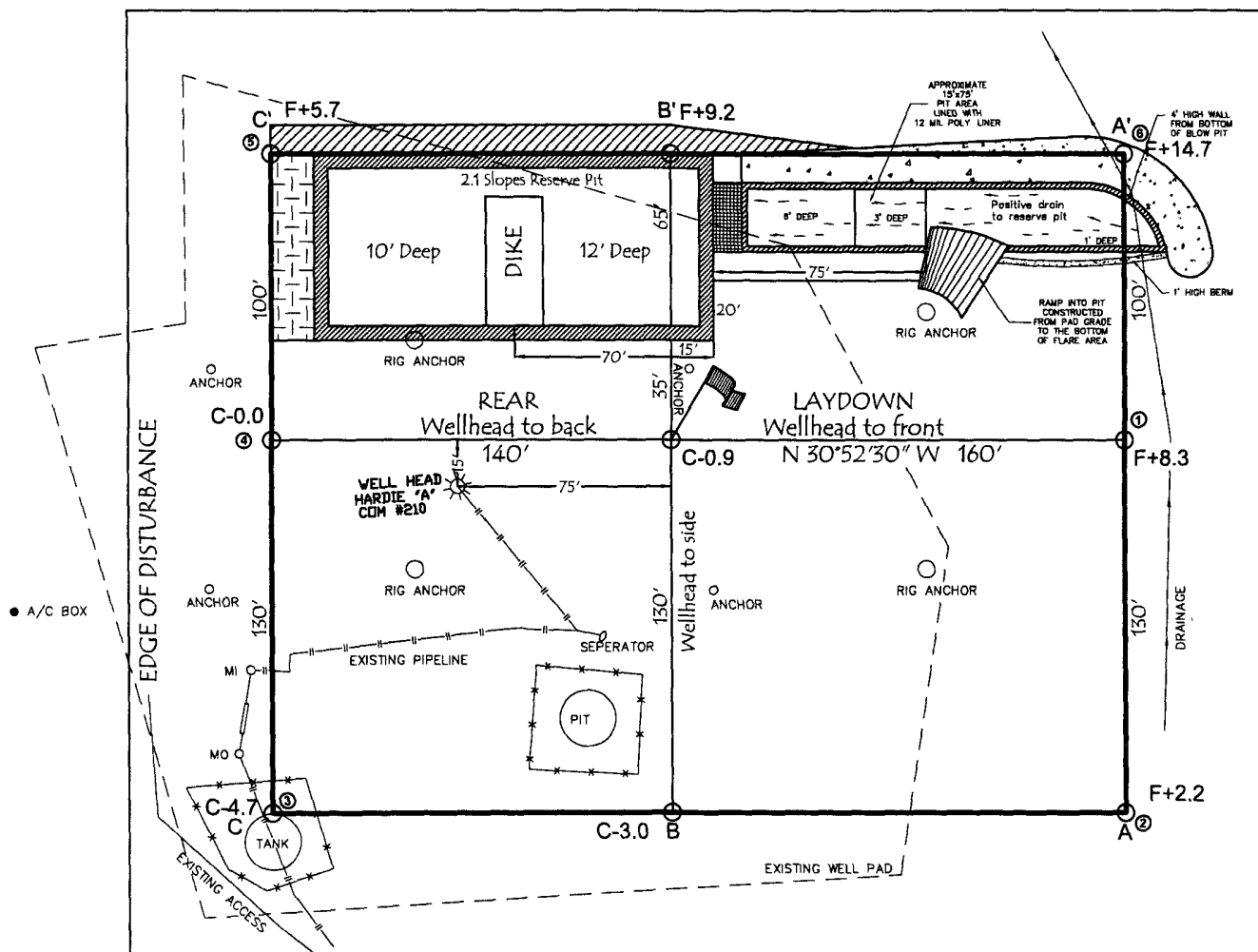
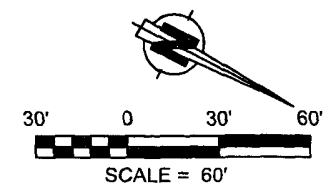
LOCATED IN THE SE/4 NW/4 OF SECTION 24,

T29N, R8W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 6623', NAVD 88

FINISHED PAD ELEVATION: 6622.0', NAVD 88



330' x 400' = 3.03 ACRES OF DISTURBANCE

SCALE: 1" = 60'

JOB No.: COPC099

DATE: 08/21/07

NOTE:

RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).
 RUSSELL SURVEYING, INC. 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, IN CONSTRUCTION ZONE AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR
 TO CONSTRUCTION.



Russell Surveying
 1409 W. Aztec Blvd. #2
 Aztec, New Mexico 87410
 (505) 334-8637

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