

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RCVD APR 11 08
OIL CONS. DIV.
DIST. 3

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL	5. Lease Number USA NM-0555078 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
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Helms Federal 9. Well Number #1G
4. Location of Well Surf: Unit C(NENW), 1080' FNL & 1770' FWL Surf: Latitude 36.80209° N Longitude 107.87469° W	10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) C Sec. 22, T30N, R10W API # 30-045-34654
14. Distance in Miles from Nearest Town 9 miles/Aztec	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1080'	
16. Acres in Lease 323.84	17. Acres Assigned to Well 323.84 Acres - (W/2)
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 350' from Helms Federal #1A - MV/DK	
19. Proposed Depth 7505'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6319' 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>Crystal Walker</u> Crystal Walker (Regulatory Technician)	3/14/08 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 3 Bond Numbers NMB-000015 and NMB-000089

NMOCD 8 APR 14 2008



H₂S POTENTIAL EXIST

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised October 12, 2005

DISTRICT II
1301 W. 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

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

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

MAR 14 2008

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34654	² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 7108	⁵ Property Name HELM FEDERAL	⁶ Well Number 1 G
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	⁹ Elevation 6319'

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
C	22	30N	10W	3	1080'	NORTH	1770'	WEST	SAN JUAN

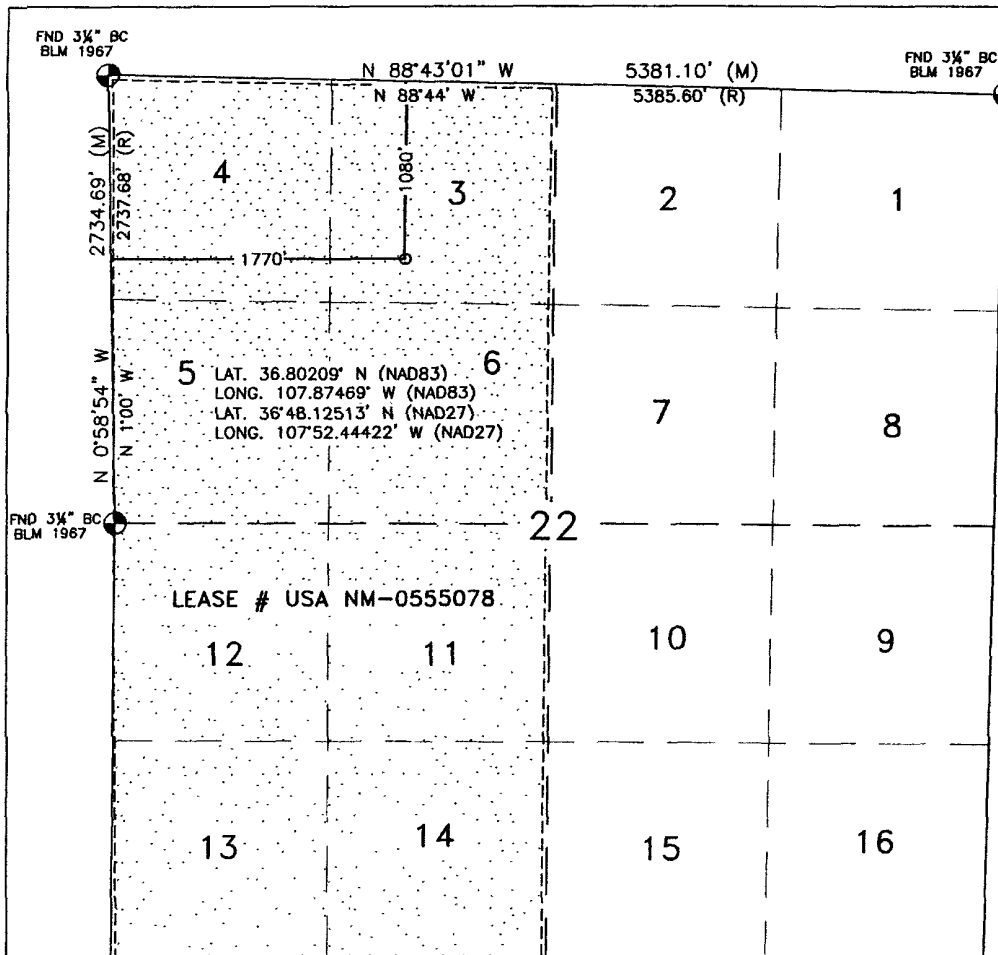
¹¹ Bottom Hole Location If Different From Surface

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

¹² Dedicated Acres 323.84 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.

Crystal Walker 3/14/08
Signature Date

Crystal Walker 3-14-08

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.

DECEMBER 21, 2007

Date of Survey

Signature and Seal of Professional Surveyor:

David R. Russell



DAVID RUSSELL

Certificate Number

10201

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.

30-045- 341054

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

NM-0555078

7. Lease Name or Unit Agreement Name

Helms Federal

8. Well Number

#1G

9. OGRID Number

14538

10. Pool name or Wildcat

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 C

: 1080

feet from the

North

line and

1770

feet from the

West

line

Section 22

Township

30N

Rng

10W

NMPM

County

San Juan

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

6322' GR

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

Pit Liner Thickness:

12

mil

Below-Grade Tank:

Volume

4400

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

Crystal Walker

TITLE

Regulatory Technician

DATE

2/26/2008

Type or print name

Crystal Walker

E-mail address:

crystal.walker@conocophillips.com

Telephone No.

505-326-9837

For State Use Only

APPROVED BY

Crystal Walker

TITLE

Deputy Oil & Gas Inspector
District #3

DATE

APR 14 2008

Conditions of Approval (if any):

Cathodic Plat

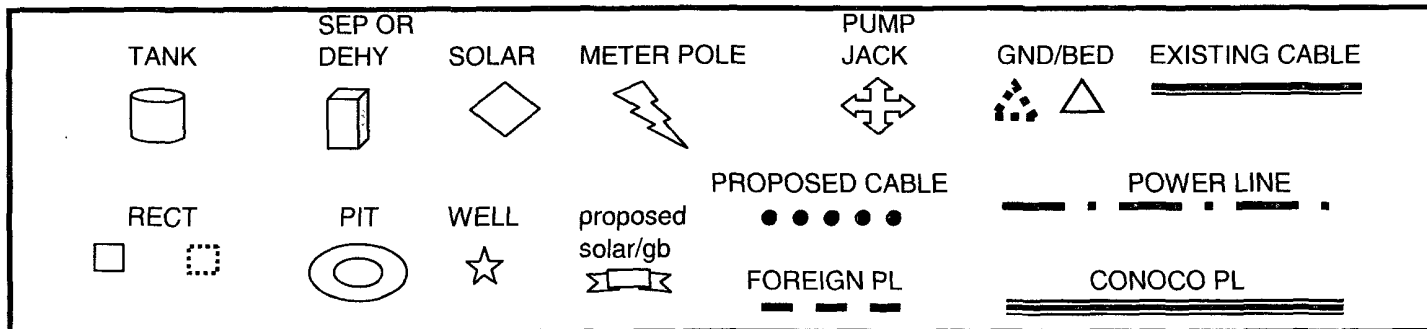
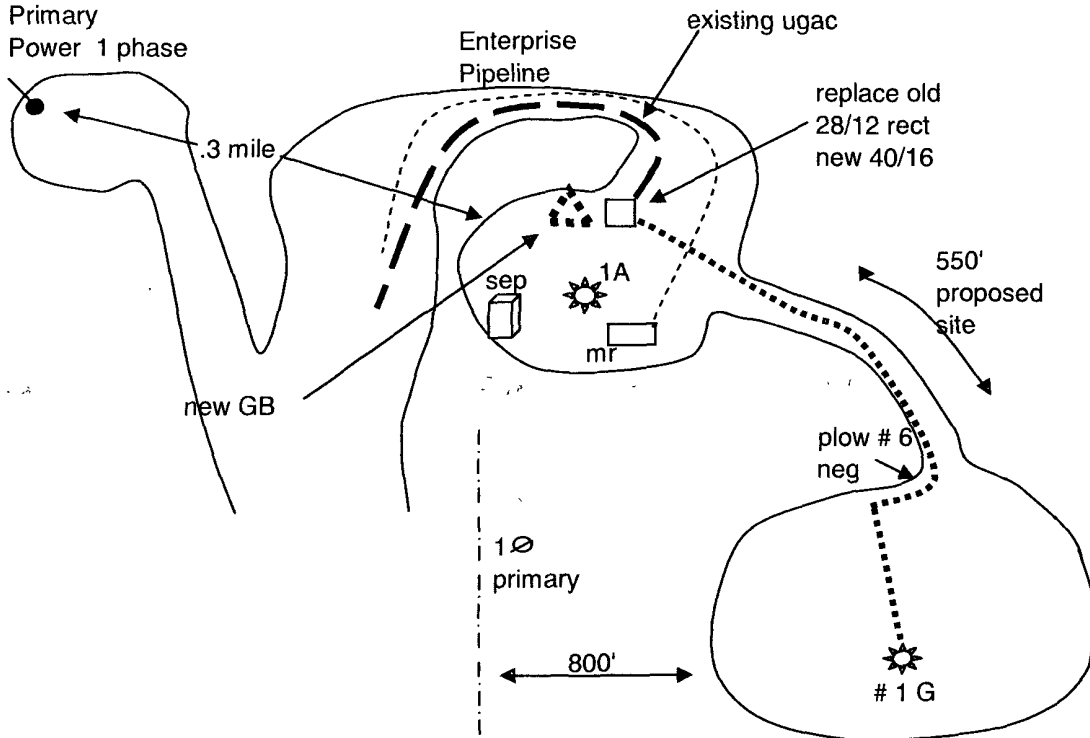
HELMS FED # 1 G

1-7-08



old GB = 2.4 ohm

Farmington
Primary
Power 1 phase



PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HELMS FEDERAL 1G

DEVELOPMENT

Lease:		AFE #: WAN.CDR.7438		AFE \$: 646,278.50	
Field Name: hBR_SAN JUAN		Rig: H&P Rig 283		State: NM	County: SAN JUAN
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				
FRR	BASIN DAKOTA (PRORATED GAS)				
Location: Surface Datum Code: NAD 27 Orientation: Straight Hole					
Latitude: 36.802206	Longitude: -107.874180	X:	Y:	Section: 22	Range: 010W
Footage X: 1711 FWL	Footage Y: 1039 FNL	Elevation: 6322	(FT)	Township: 030N	
Tolerance: 1770	1080				
Location Type: Year Round		Start Date (Est.): 1/1/2009		Completion Date:	Date In Operation:
Formation Data: Assume KB = 6334 Units = FT					
Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT
Surface Casing	200	6134	<input type="checkbox"/>		
OJO ALAMO	1657	4677	<input type="checkbox"/>		
KIRTLAND	1739	4595	<input type="checkbox"/>		
FRUITLAND	2541	3793	<input type="checkbox"/>		Possible Gas
PICTURED CLIFFS	2964	3370	<input type="checkbox"/>		
LEWIS	3086	3248	<input type="checkbox"/>		
Intermediate Casing	3186	3148	<input type="checkbox"/>		
HUERFANITO BENTONITE	3679	2655	<input type="checkbox"/>		
CHACRA	3942	2392	<input type="checkbox"/>		
MASSIVE CLIFF HOUSE	4549	1785	<input type="checkbox"/>		Gas
MENEFEE	4731	1603	<input type="checkbox"/>		
MASSIVE POINT LOOKOUT	5231	1103	<input type="checkbox"/>		
MANCOS	5564	770	<input type="checkbox"/>		
UPPER GALLUP	6454	-120	<input type="checkbox"/>		
GREENHORN	7194	-860	<input type="checkbox"/>		
GRANEROS	7247	-913	<input type="checkbox"/>		
TWO WELLS	7297	-963	<input type="checkbox"/>	1800	Gas
PAGUATE	7391	-1057	<input type="checkbox"/>		
CUBERO	7441	-1107	<input type="checkbox"/>		
ENCINAL	7505	-1171	<input type="checkbox"/>		
TOTAL DEPTH DK	7505	-1171	<input type="checkbox"/>		
12-1/4" hole. 200' 9 5/8" 32.3 ppf, H-40, STC casing. Cement with 159 cuft. Circulate cement to surface.					
8 3/4" Hole. 7", 20 ppf, J-55, STC Casing. Cement with 718 cuft. Circulate cement to surface.					
6 1/4" hole 4 1/2" 10.5 ppf J-55 Casing. Cement with 588 cuft					
Reference Wells: <i>Circulate cement minimum 100ft inside 7" casing</i>					
Reference Type	Well Name	Comments			

PROJECT PROPOSAL - New Drill / Sidetrack

San Juan Business Unit

HELMS FEDERAL 1G

DEVELOPMENT

Logging Program:

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

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

Est bottom perf ~15' above TD.

Additional Information:

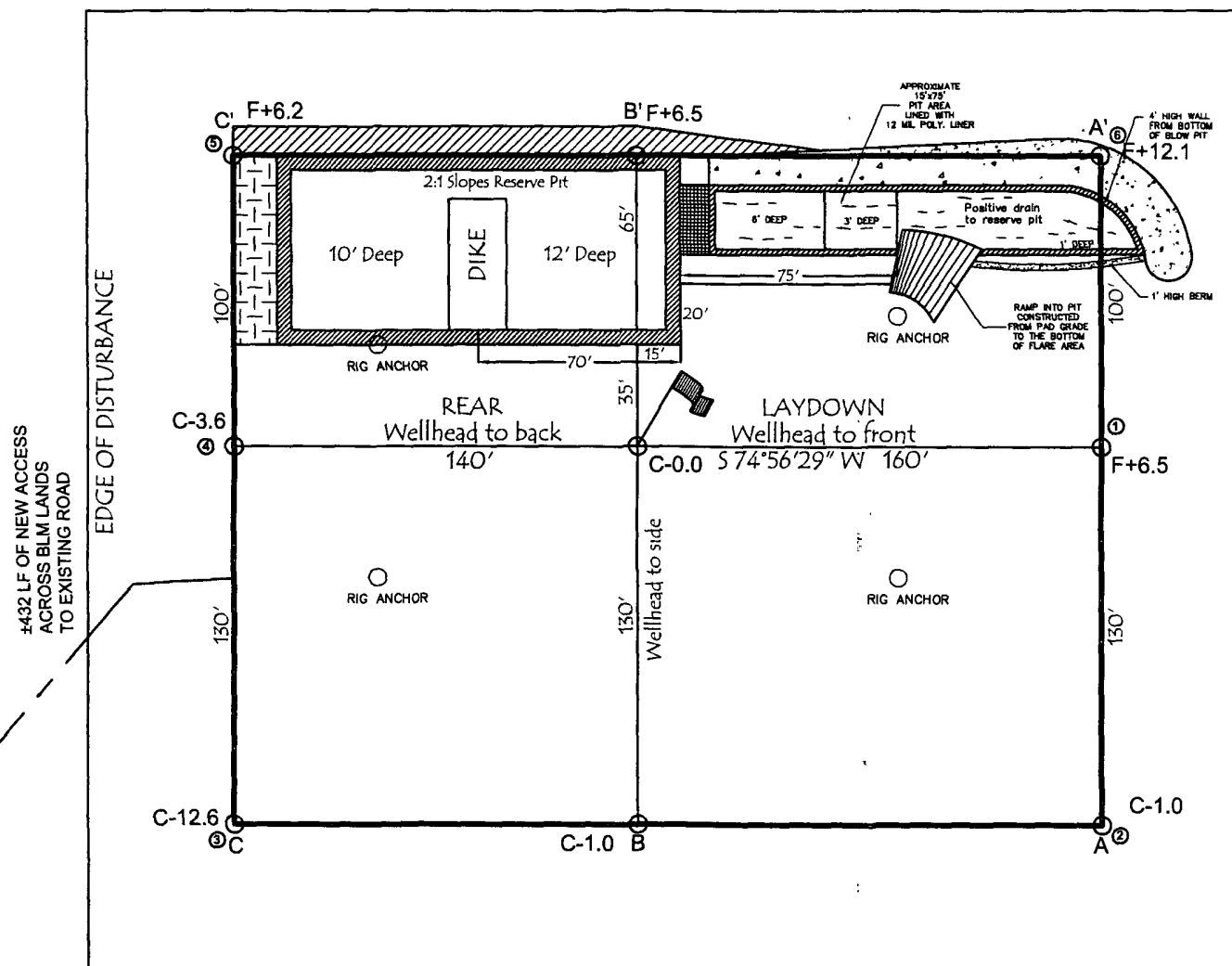
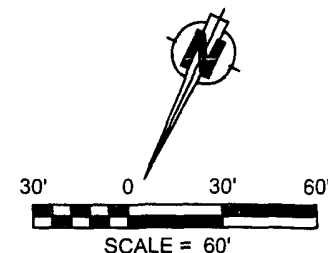
Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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LATITUDE: 36.80209°N
 LONGITUDE: 107.87469°W
 DATUM: NAD 83

BURLINGTON RESOURCES O&G CO LP

HELM FEDERAL #1 G
 1080' FNL & 1770' FWL
 LOCATED IN THE NE/4 NW/4 OF SECTION 22,
 T30N, R10W, N.M.P.M.,
 SAN JUAN COUNTY, NEW MEXICO
 GROUND ELEVATION: 6319', NAVD 88
 FINISHED PAD ELEVATION: 6318.7', NAVD 88

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



330' x 400' = 3.03 ACRES OF DISTURBANCE
 SCALE: 1" = 60'
 JOB No.: COPC131
 DATE: 01/11/08

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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