

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

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

2007 MAR 30 PM 2:43

RECEIVED

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045- 34257	² Pool Code 71629/ 77410 71240	³ Pool Name BASIN (FRUITLAND COAL)/ GLADES (FRUITLAND) FS
⁴ Property Code 7108	⁵ Property Name HELMS FEDERAL	⁶ Well Number 100
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES O&G CO LP	⁹ Elevation 6181'

¹⁰ Surface Location

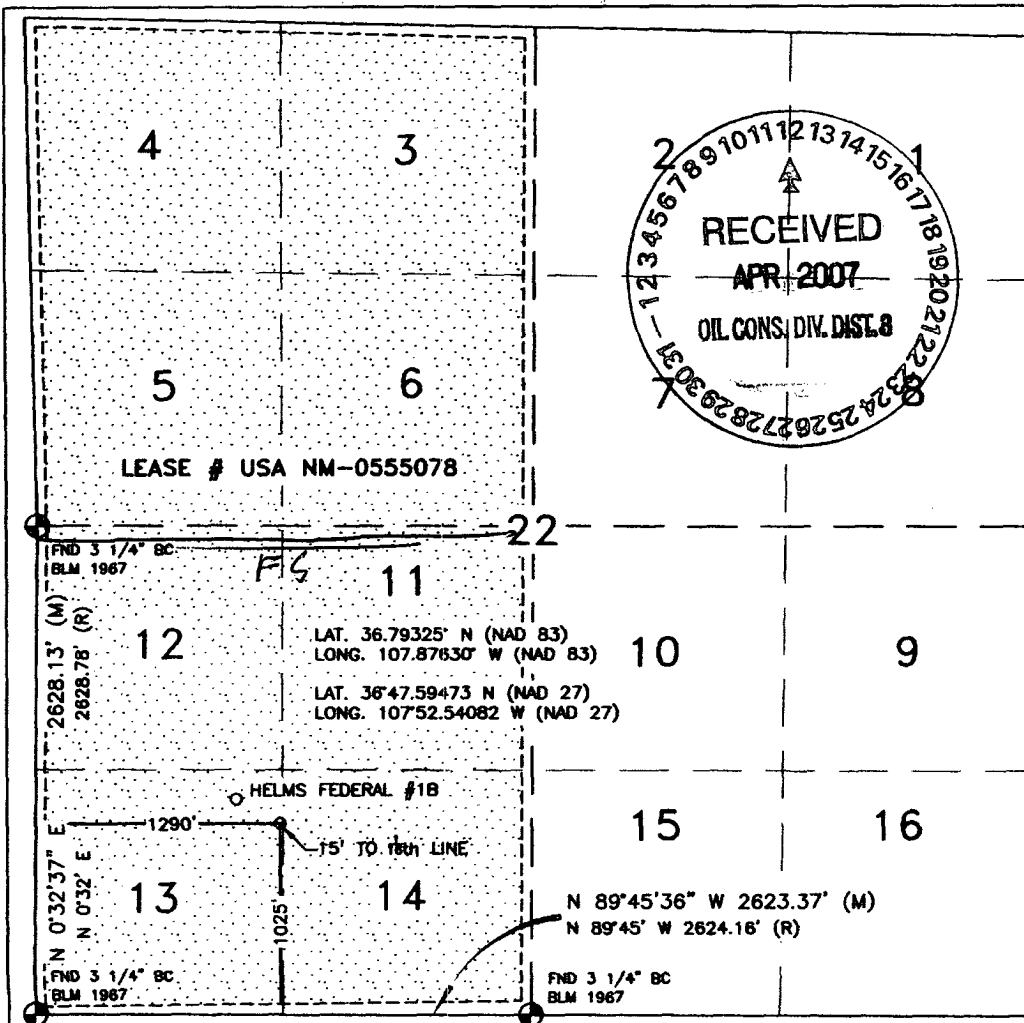
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	22	30N	10W	13	1025'	SOUTH	1290'	WEST	SAN JUAN

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
M									
¹² Dedicated Acres 323.84 F/C W/2 158.44 F/S			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



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.

Kandis Roland 2/12/07
Signature Date

Kandis Roland
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.

FEBRUARY 1, 2007
Date of Survey

David R. Russell
Signature and Seal of Professional Surveyor

DAVID RUSSELL
REGISTERED SURVEYOR

DAVID RUSSELL
Certificate Number 10201

State of New Mexico

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.

30-045- 34257

5. Indicate Type of Lease

STATE ☐FEE ☐

6. State Oil & Gas Lease No.

USA NM-0555078

7. Lease Name or Unit Agreement Name

HELMS FEDERAL

8. Well Number

#100

9. OGRID Number

14538

10. Pool name or Wildcat

Basin FC/Glades FS

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 M : 1025' feet from the South line and 1290' feet from the West line
Section 22 Township 30N Rng 10W NMPM County San Juan

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

6181'

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:

N/A

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 ☐

SUBSEQUENT REPORT OF:

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

OTHER:

New Drill ☒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, Unlined:

Burlington Resources proposes to construct a new drilling pit and an associated vent/flare pit. Based on Burlington's interpretation of the Ecosphere's risk ranking criteria, the new drilling pit and vent/flare pit will be an unlined pit 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 unlined, 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

3-30-07

Type or print name

Rhonda Rogers

E-mail address:

ogerrs@conocophillips.com

Telephone No.

505-599-4018

For State Use Only

APPROVED BY

TITLE

DEPUTY OIL & GAS INSPECTOR, DIST. 4

DATE

APR 16 2007

Conditions of Approval (if any):

LATITUDE: 36.79325°N
LONGITUDE: 107.87630°W
DATUM: NAD 83

HELMS FEDERAL #100

1025' FSL & 1290' FWL

LOCATED IN THE SW/4 SW/4 OF

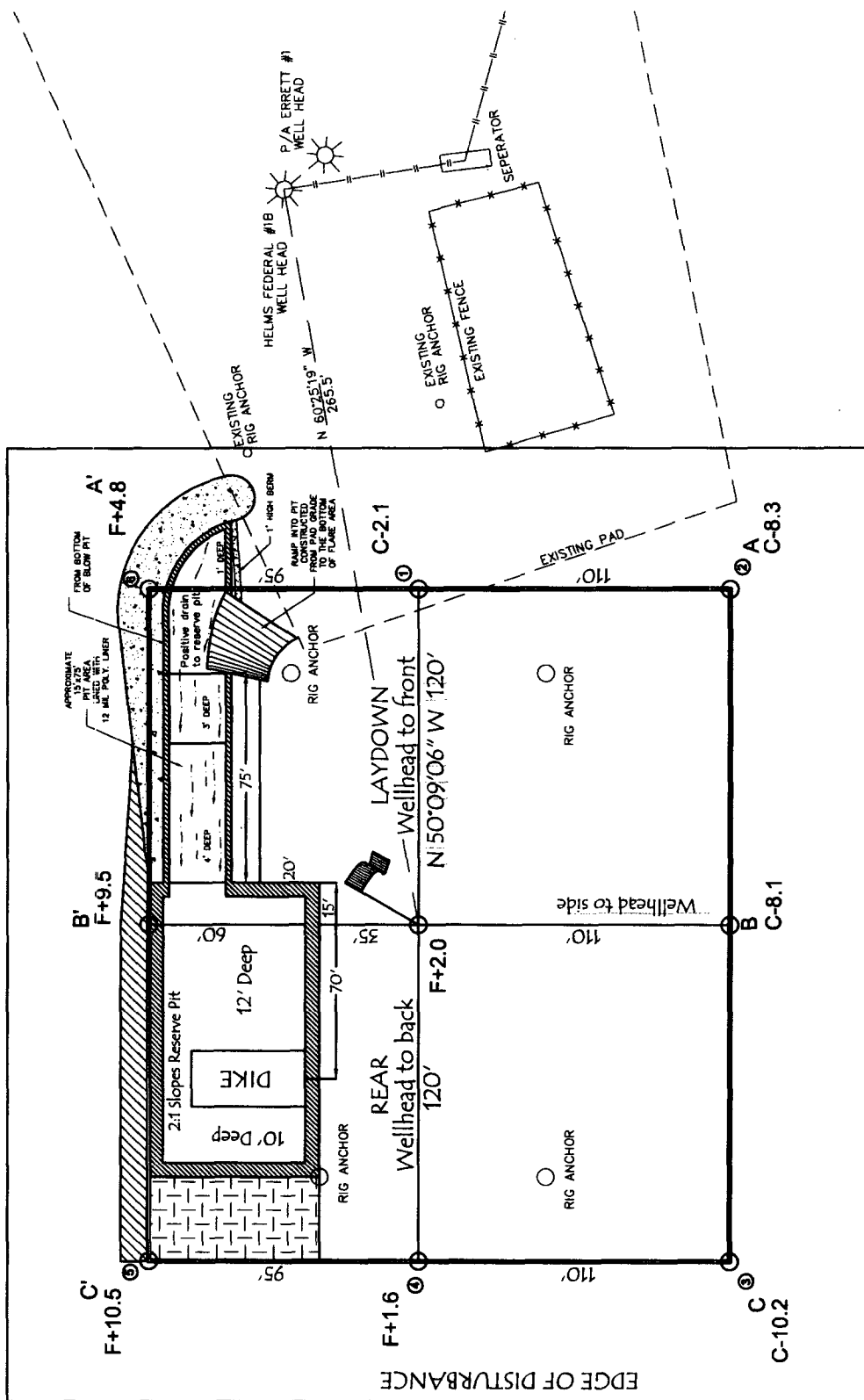
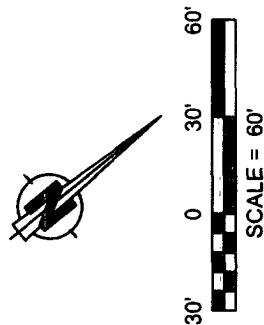
SECTION 22, T30N, R10W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 6181', NAVD 88

FINISHED PAD ELEVATION: 6182.5' NAVD 88

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



NOTE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).
RESERVE PIT DIKE: IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
RUSSELL SURVEYING, INC. 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.

330' x 400' = 3.03 ACRES OF DISTURBANCE
SCALE: 1" = 60'
JOB No.: COPC060; REV1
DATE: 02/06/07

Russell Surveying
1409 W. Aztec Blvd. #5
Aztec, New Mexico 87410
(505) 334-8637

LATITUDE: 36.79325°N
LONGITUDE: 107.87630°W
DATUM: NAD 83

BURLINGTON RESOURCES O&G CO LP

HELMS FEDERAL #100

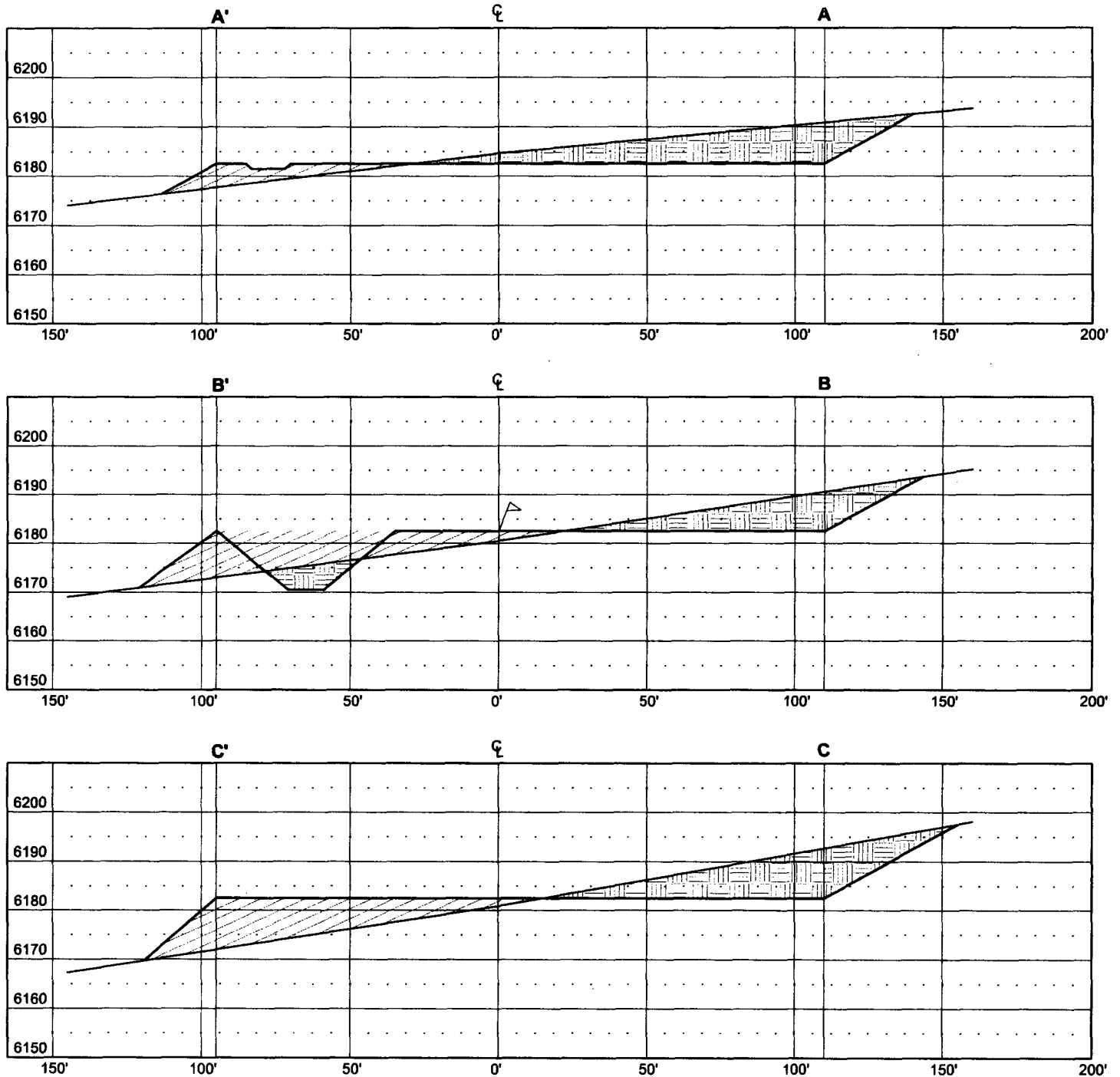
1025' FSL & 1290' FWL

LOCATED IN THE SW/4 SW/4 OF
SECTION 22, T30N, R10W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

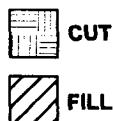
GROUND ELEVATION: 6181', NAVD 88

FINISHED PAD ELEVATION: 6182.5', NAVD 88



THIS DIAGRAM IS AN ESTIMATE OF DIRT BALANCE AND IS NOT INTENDED TO BE AN EXACT MEASURE OF VOLUME

VERT. SCALE: 1" = 30'
HORZ. SCALE: 1" = 50'
JOB No.: COPC060; REV1
DATE: 02/06/07



Russell Surveying
1409 W. Aztec Blvd. #5
Aztec, New Mexico 87410
(505) 334-8637

PROJECT PROPOSAL - New Drill / Sidetrack

HELMS FEDERAL 100

DEVELOPMENT

Lease:		AFE #: WAN.CDR.7059		AFE \$:	
Field Name: hBR_SAN JUAN		Rig: Aztec Rig 580		State: NM	County: SAN JUAN
Geologist:		Phone:		Geophysicist:	
Geoscientist: Clark, Dave D		Phone: 505-326-9762		Prod. Engineer:	
Res. Engineer: Schlabaugh, Jim L		Phone: 505-326-9788		Proj. Field Lead:	
				Phone:	

Primary Objective (Zones):

Zone	Zone Name
2035	FRUITLAND COAL
RCO087	FRUITLAND SAND(RCO087)

Location: Surface

Datum Code: NAD 27

Straight Hole

Latitude: 36.793416	Longitude: -107.876210	X:	Y:	Section: 22	Range: 010W
Footage X: 1135 FWL		Footage Y: 1085 FSL		Elevation: 6184 (FT)	Township: 030N

Tolerance:

Location Type: Year Round	Start Date (Est.):	Completion Date:	Date In Operation:
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Formation Data: Assume KB = 6196 Units = FT

Formation Call & Casing Points	Depth (TVD in Ft)	SS (Ft)	Depletion (Yes/No)	BHP (PSIG)	BHT	Remarks
Surface Casing	120	6076	<input type="checkbox"/>			8-3/4" hole. 7" 20 ppf J-55 STC casing. Cement with 50 cuft. Circulate cement to surface.
OJO ALAMO	1506	4690	<input type="checkbox"/>			
KIRTLAND	1590	4606	<input type="checkbox"/>			
FRUITLAND	2354	3842	<input type="checkbox"/>			
PICTURED CLIFFS	2793	3403	<input type="checkbox"/>			
Total Depth	2993	3203	<input type="checkbox"/>	300		6-1/4" hole. 4-1/2" 10.5 ppf, J-55, STC casing. Cement with 460 cuft. Circulate cement to surface.

Reference Wells:

Reference Type	Well Name	Comments
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Logging Program:

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

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

Additional Information:

Log Type	Stage	From (Ft)	To (Ft)	Tool Type/Name	Remarks
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Comments: Location/Tops/Logging - FCNM030N010W22SW1 and FSNM030N010W22SW1 Prefer M, N, L and twin Helms Federal 1B, stay away from PC well.

Zones - FCNM030N010W22SW1 and FSNM030N010W22SW1