

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Devon Energy Production Company, L.P. PO Box 6459 Navajo Dam, NM 87419		² OGRID Number 6137
		³ API Number 30 - 045-34203
⁴ Property Code 19641	⁵ Property Name Northeast Blanco Unit	⁶ Well No. 346E
⁹ Proposed Pool 1 Basin Dakota		¹⁰ Proposed Pool 2

7 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	36	31N	8W		945	North	1930	East	San Juan

8 Proposed 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

Additional Well Information

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code Private State	¹⁵ Ground Level Elevation 6,478'
¹⁶ Multiple N	¹⁷ Proposed Depth 8,030'	¹⁸ Formation Dakota	¹⁹ Contractor	²⁰ Spud Date Unknown
Depth to Groundwater >100'		Distance from nearest fresh water well >1,000'		Distance from nearest surface water >1,000'
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12_mils thick Clay <input type="checkbox"/> Pit Volume: _____ bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input checked="" type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	9 5/8"	32#	0-285'	200	Surface
8 3/4"	7"	23#	0-3,598'	575	Surface
6 1/4"	4 1/2"	11.6#	0-TD	700	Surface

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

RCVD MAR 07
OIL CONS. DIV.

DIST. 3

NOTIFY AZTEC OCD
IN TIME TO WITNESS

24 hrs
Gog & cement

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		OIL CONSERVATION DIVISION	
Printed name: Melisa Castro		Approved by:	
Title: Senior Staff Operations Technician		Title: DEPUTY OIL & GAS INSPECTOR, DIST. 3	
E-mail Address: Melisa.castro@dmn.com		Approval Date: MAR 08 2007	Expiration Date: MAR 08 2008
Date: 3-5-07	Phone: 505-632-0244	Conditions of Approval Attached <input type="checkbox"/>	

3/8/07

b

District I
PO Box 1980, Hobbs NM 88241-1980
District II
PO Drawer KK, Artesia, NM 87211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT
RCVD MARG'07
OIL CONS. DIV.

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-34203	² Pool Code 71599	³ Pool Name Basin Dakota	DIST. 3
⁴ Property Code 19641	⁵ Property Name NEBU		⁶ Well Number # 346 E
⁷ OGRID No. 6137	⁸ Operator Name Devon Energy Production Company, L.P.		⁹ Elevation 6478

¹⁰ Surface Location

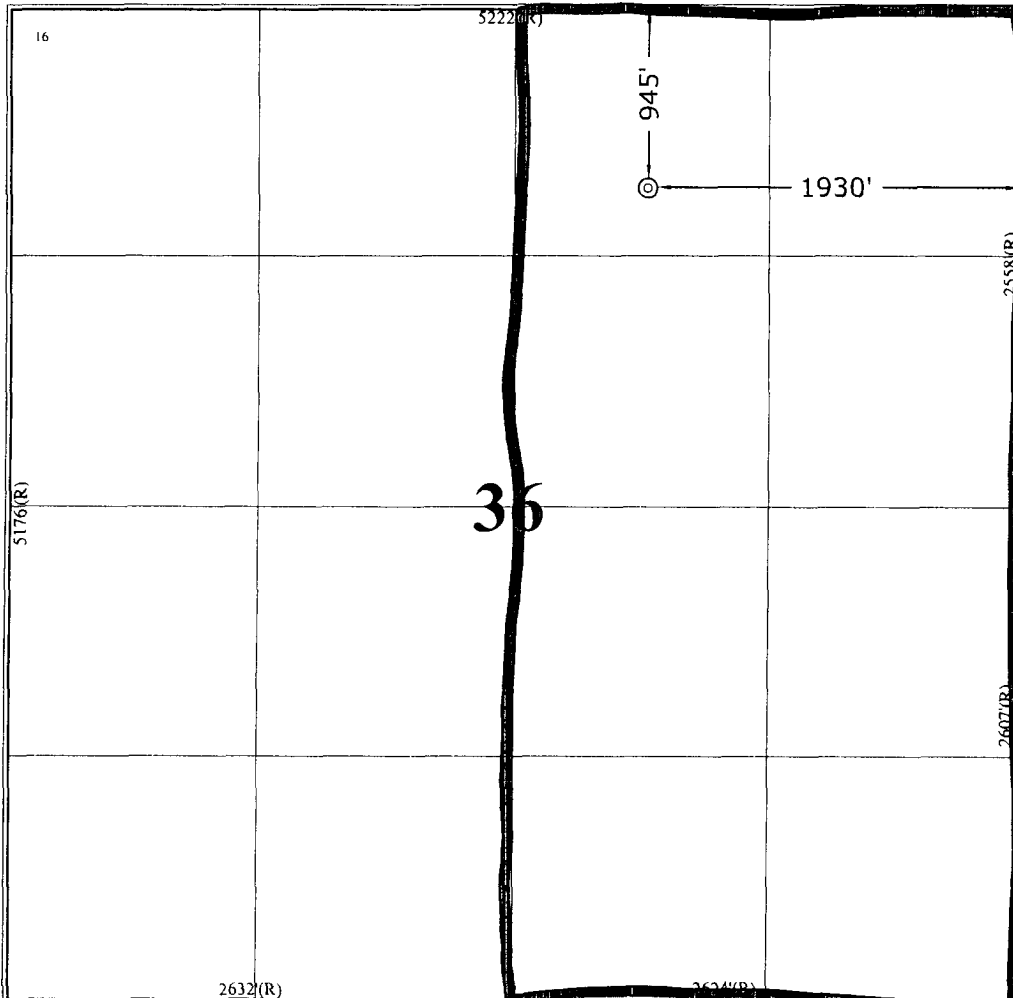
UL or Lot No. B	Section 36	Township 31 N	Range 8 W	Lot Idn	Feet from the 945	North/South line NORTH	Feet from the 1930	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

⁷ UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 6 1/2 - 320	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



¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *[Signature]*
Printed Name: **Melissa S. Castro**
Title: **SR. Staff Operations Technician**
Date: **March 5, 2006**

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.

Restaked: September 5, 2006
Date of Survey: **July 12, 2006**

Signature and Seal of Professional Surveyor: *[Signature]*
Certificate Number: **7016**

GARY D. VANN
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
7016

Submit 3 Copies To Appropriate District
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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
March 4, 2004

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

WELL API NO. 30-045-34203	
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No. E-5382	
7. Lease Name or Unit Agreement Name NORTHEAST BLANCO UNIT	
8. Well Number 346E	
9. OGRID Number 6137	
10. Pool name or Wildcat Basin Dakota	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR 6,478'	
Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)	
Pit Location: UL_B_Sect_36_Twp_31N_Rng_7W_Pit type_Drilling_Depth to Groundwater_>100'_Distance from nearest fresh water well_>1000'_ Distance from nearest surface water_>1000'_ Below-grade Tank Location UL_Sect_Twp_Rng; feet from the line and feet from the line	

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
Devon Energy Production Company, L.P.

3. Address of Operator
PO Box 6459, Navajo Dam, NM 87419

4. Well Location
Unit Letter **B**: **945** feet from the **North** line and **1,930** feet from the **East** line
Section **36** Township **31N** Range **7W** NMPM County - **SAN JUAN**

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

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER: CONSTRUCT DRILLING PIT <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>

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.

14. **Devon Energy will be constructing a lined drilling pit. The closure of said pit will be in accordance with the NMOCD regulations with the cutting of the liner applying to the BLM rules.**

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 Melisa Castro TITLE Sr. Staff Operations Technician DATE 3-5-07

Type or print name Melisa Castro E-mail address: Melisa.castro@dmn.com Telephone No. 405-552-7917

(This space for State use)

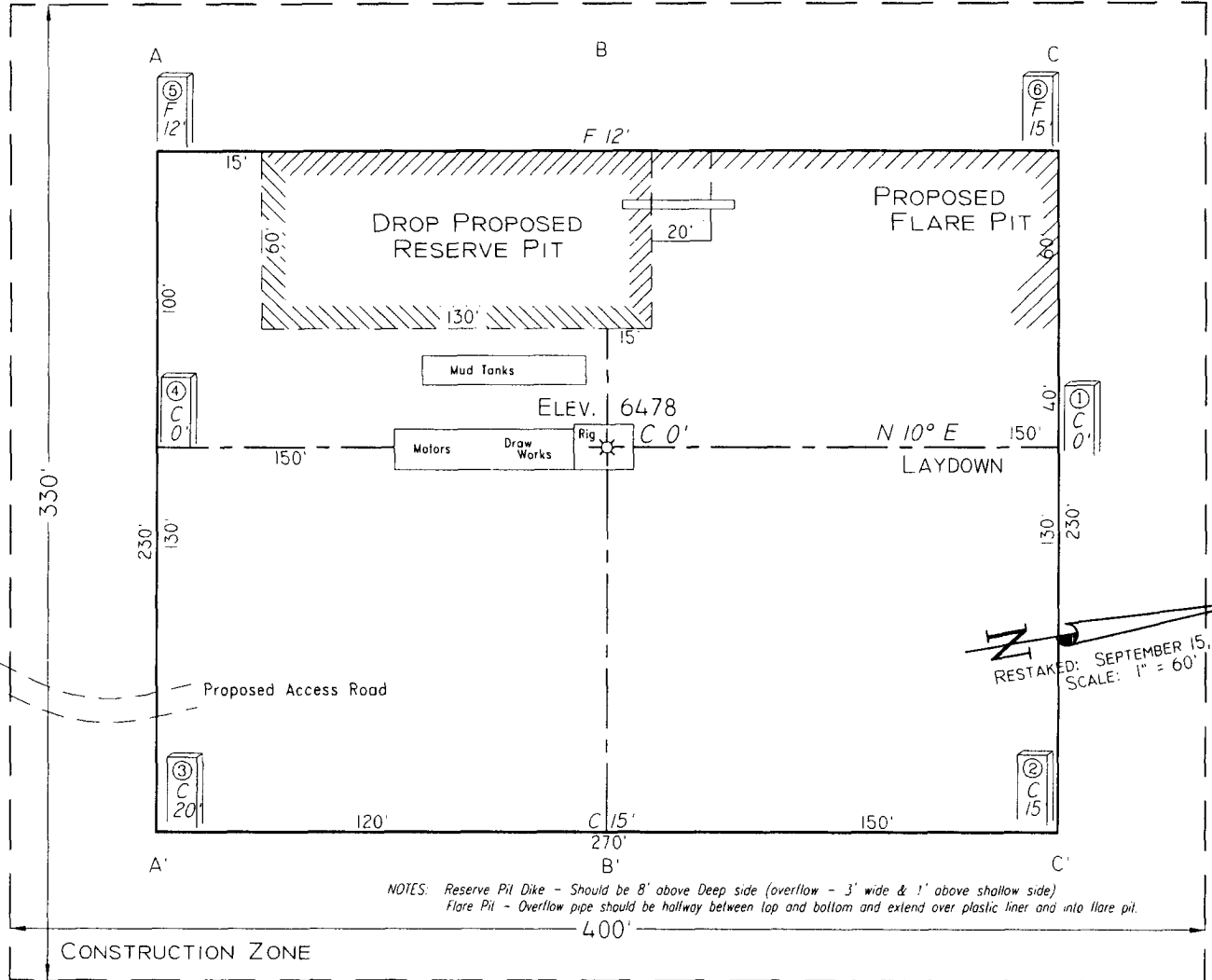
APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. # DATE MAR 08 2007

Conditions of approval, if any:

PAD LAYOUT PLAN & PROFILE
DEVON ENERGY PRODUCTION COMPANY, L.P.

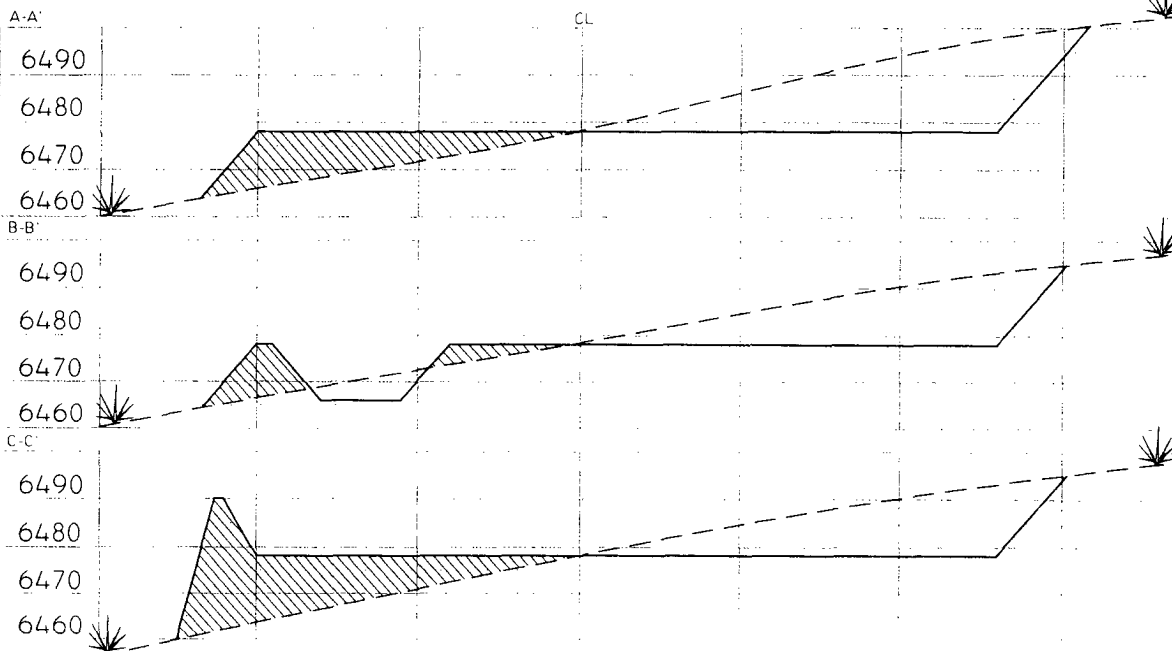
Nebu # 346E
945' F/NL 1930' F/EL
SEC. 36, T31N, R8W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

Lat: 36.85899°
Long: 107.62459° (83)



Area of Construction Zone - 330'x400' or 3.03 acres, more or less.

SCALE: 1"=60'-HORIZ.
1"=40'-VERT.



NOTE: 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.

Cuts and fills shown are approximate - final finished elevation is to be adjusted so earthwork will balance. Corner stakes are approximate and do not include additional areas needed for sideslopes and drainages. Final Pad Dimensions are to be verified by Contractor.

VANN SURVEYS
P. O. Box 1306
Farmington, NM

NEBU 346E

From the town of Aztec, NM, take State HWY 173 for 18 miles to State HWY 511. Turn left on State HWY 511 and travel 9.5 miles. Travel for another 0.5 miles then turns right. Travel for 0.6 miles to location turn off to location turn off. Well will be on left side of location road.

NEBU 346E
Unit B 36-31N-8W
San Juan Co., NM

DRILLING PLAN

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS & ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Formation	TVD (ft)	Hydrocarbon/Water Bearing Zones
San Jose	Surface	
Ojo Alamo	2303	Aquifer
Kirtland	2403	
Fruitland	2937	Gas
Fruitland 1 st Coal	3138	Gas
Pictured Cliffs Tongue	3303	Gas
Pictured Cliffs	3380	Gas
Lewis	3498	Gas
Intermediate TD	3598	
Mesaverde	4146	Gas
Chacra \ Otera	4516	Gas
Cliff House	5137	Gas
Menefee	5364	Gas
Point Lookout	5668	Gas
Mancos	6054	Gas
Gallup	6973	Gas
Greenhorn	7678	
Graneros	7731	Gas
Paguate	7859	
Cubero	7868	
Oak Canyon	7936	
Encinal Canyon	7961	

TD	8030	
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*All shows of fresh water and minerals will be adequately protected and reported.

2. PRESSURE CONTROL EQUIPMENT:

All well control equipment shall be in accordance with Onshore Order #2 for 2M systems.

The minimum specifications for pressure control equipment that will be provided are included on the attached schematic diagram, with a size of 2", and pressure ratings.

2000# BOP With Pipe Rams and 2000# BOP With Blind Rams

Auxiliary equipment to be used:

- Upper kelly cock with handle available.

The manifold includes appropriate valves and adjustable chokes. The kill line will have one check valve. Ram type preventers will be pressure tested to full working pressure (utilizing a test plug) or 70% of the internal yield pressure (without a test plug) at:

- Initial installation
- Whenever any seal subject to test pressure is broken
- Following related repairs
- At 30 day intervals

Pipe and blind rams shall be activated each trip.

A BOPE pit level drill will be conducted weekly for each drilling crew.

All tests and drills will be recorded in the drilling log.

The accumulator will have sufficient capacity to close all rams and retain 200 psi above pre-charge pressure without the use of closing unit pumps.

Master controls will be at the accumulator. Anticipated bottom hole pressure is 3400 psi.

3. CASING & CEMENTING PROGRAM:

A. The proposed casing program will be as follows:

TVD	Hole Size	Size	Grade	Weight	Thread	Condition
0-285	12-1/4"	9-5/8"	H-40	32#	STC	New
0-3598	8-3/4"	7"	K-55	23#	LTC	New
0- TD	6-1/4"	4-1/2"	J-55	11.6 #	LTC	New

The 9-5/8" surface pipe will be tested to 750 psi. All casing strings below the surface shoe shall be pressure tested to 0.22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% minimum internal yield.

Surface: The bottom three joints of the surface casing will have a minimum of one centralizer per joint and one centralizer every joint thereafter (Total 5 centralizers estimated)

Intermediate: The bottom three joints of the 7" casing will have a minimum of one centralizer per joint and one centralizer every fifth joint thereafter to above Ojo Alamo with turbolizers below and throughout the Ojo Alamo. (Total 12 centralizers, 3 turbolizers estimated).

Production: The bottom three joints will have a minimum of one centralizer per joint and one centralizer every fifth joint to 3400' (estimated 25 centralizers used). Centralizers will be open bow spring or basket bow spring type.

B. The proposed cementing program will be as follows:

Surface String: Cement will be circulated to surface.

Lead: 200 sx Class "B" with 100% Standard Cement, 2.00% CaCl₂, .25 #/sx Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sx; Water: 5.24 gal/sx *

*** Minor variations possible due to existing conditions**

Intermediate String: Cement will be circulated to surface.

Lead: 500 sx Of 50/50/Std/ Poz, Yd-1.45, Water Gal/Sk 6.8, Mixed @ 13ppg Foamed W/ N2 Down To 9.0# Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl.

Tail: 75 sx 50/50 Poz with 94#/sx Standard Cement, 0.3% Halad-344, .25 #/sx Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sx; Water: 5.23 gal/sx *

*** Minor variations possible due to existing conditions**

If hole conditions dictate an alternate cement design will be used:

Lead: 575 sx 50/50 Poz with 50% Class B Cement, 50% San Juan Poz, .4% Halad-344, .1% CFR-3, 3% Bentonite, 5#/sx Gilsonite, .25#/sx Flocele. Density: 13.0 lb/gal; Yield: 1.46 cuft/sk; Water: 6.42 gal/sx *

Tail: 75 sx 50/50 Poz, Yd-1.45, Water Gal/sx 6.8, Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl

*** Minor variations possible due to existing conditions**

Production String: TOC designed to circulate 1000' into intermediate string, cement will tie into the intermediate casing as a minimum. Volumes may vary with actual well characteristics.

Lead: 250 sx 50/50 Poz with 2% Gel, 0.2% Halad, 0.1% CFR-3, 5 #/sx Gilsonite, 0.25 #/sx Flocele. Mixed at 13 ppg, 1.47 ft 3/sx foamed to 9 ppg, 2.18 ft 3/sx.

Tail: 450 sx 50/50 Poz with 50% Standard Cement, 50% San Juan Poz, 3% Bentonite, 1.40% Halad-9, .10% CFR-3, .10% HR-5, 5 #/sx Gilsonite, 0.25 #/sx Flocele. Density: 13.0 lb/gal; Yield: 1.47 cuft/sx; Water: 6.35 gal/sx *

*** Minor variations possible due to existing conditions**

Actual volumes will be calculated and adjusted with caliper log prior to cementing.

4. DRILLING FLUIDS PROGRAM:

Interval	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-3629'	Spud-foam	8.4-9.0	29-70	8.0	NC	FW gel, LSND or stiff foam
3598'-7859'	Air				NC	
7859' - TD	Air/N2 or Mud	8.5-9.0*	30-50	8.0-10.0	8-810cc @ TD	Low solids- non-dispersed. * min Wt. to control formation pressure

NC = no control

Sufficient quantities of mud material will be maintained on site or be readily accessible for the purpose of assuring well control. SPR will be recorded on daily drilling report after mudding up. Visual mud monitoring will be conducted during operations.

5. EVALUATION PROGRAM:

Logs: Density
Neutron
Induction

In the event open hole logs are not run in the well, a cased hole evaluation log will be run from

Survey: Deviation surveys will be taken every 500' of the 8 3/4" hole, or first succeeding bit change. The hole will be air drilled from intermediate TD – well TD. The equipment used in this type of operation will not allow for single shot surveys without considerable operational delays. A survey will be taken at TD. Similar wells in this area have not shown significant deviation in this section of the hole.

Cores: None anticipated.

DST's: None anticipated.

6. ABNORMAL CONDITIONS:

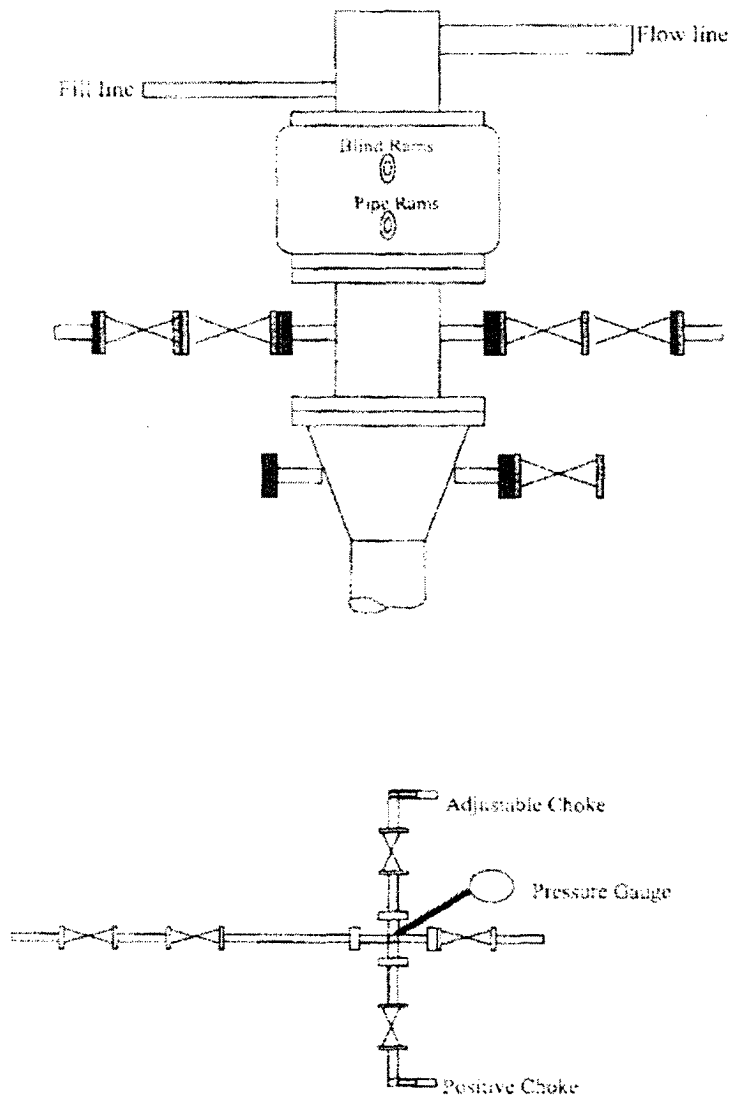
The Fruitland Coal will be encountered within the 8 3/4" hole. Estimated formation pressure is 300 psi. No other abnormal pressures and/or temperatures are expected. No hydrogen sulfide should be present.

7. OTHER INFORMATION:

The anticipated starting date and duration of the operation will be as follows:

Starting Date: Upon Approval
Duration: 20 days

Well Control Equipment 2,000 psi Configuration



All well control equipment designed to meet or exceed the Onshore Oil and Gas Order No. 2, 21M-43 CFR 3150 requirements for 2M systems