

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 Pogo Producing Company 300 North Marienfeld, Suite 600 Midland, TX 79701 | | ² OGRID Number 233194 |
| | | ³ API Number 30-045-34136 |
| ⁴ Property Code 301366 | ⁵ Property Name La Plata #20 | ⁶ Well No. 2 |
| ⁹ Proposed Pool 1 Basin Fruitland Coal | | ¹⁰ Proposed Pool 2 |

⁷ Surface Location

| | | | | | | | | | |
|--------------------|---------------|------------------|---------------|---------|-----------------------|---------------------------|-----------------------|------------------------|--------------------|
| UL or lot no. A | Section 20 | Township 31 N | Range 13 W | Lot Idn | Feet from the 908' | North/South line North | Feet from the 891' | East/West line East | County 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 S | ¹⁵ Ground Level Elevation 5806' |
| ¹⁶ Multiple N | ¹⁷ Proposed Depth +/- 2000' | ¹⁸ Formation Basin Fruitland Coal | ¹⁹ Contractor Availability | ²⁰ Spud Date ASAP |
| ²¹ Proposed Casing and Cement Program | | Distance from nearest fresh water well > 1000' | | |
| Distance from nearest surface water ≤ 1000' | | | | |
| Pit: Liner: Synthetic <input checked="" type="checkbox"/> 20 mils thick Clay <input type="checkbox"/> Pit Volume: 160 bbls Drilling Method: Closed-Loop System <input type="checkbox"/> | | | | |

²¹ Proposed Casing and Cement Program

| Hole Size | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | Estimated TOC |
|-----------|-------------|--------------------|---------------|-----------------|---------------|
| 8- 3/4" | 7" | 20# | 160' | 150sx | Surface |
| 6- 1/4" | 4- 1/2" | 10.5# | 2000' | 200sx | 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.

Pogo plans to drill a vertical well with a 8-3/4" surface hole to approx. 160' with spud mud and set and cement to surface 7", 20# casing with 150sx (175 cu.ft.) of type 5 with additives. A double ram, 2000 pound psi rated BOP will be installed and pressure tested to 1000 psi. A 6-1/4" hole will be drilled using clear water, natural mud, and water loss control additives to approximately 1665'. New 4-1/2" 10.5# casing will be set and cemented to surface. with type 5 with additives. Cement volumes will be determined based on open hole logs.

KB elevation: approx. +5806'

Surface formation: Nacamiento

Kirtland Formation: 822' Fruitland Formation: 1307' Basal Fruitland Coal 1750' Pictured Cliffs Formation: 1802' TD 2000'

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 ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Printed name: Bradley Salzman

Title: Drilling Engineer

E-mail Address: brads@titusconsulting.net

Date: 12-5-06

Phone: 505-486-1701

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date: JAN 08 2007

Expiration Date: JAN 08 2008

Conditions of Approval Attached ☐

J/P

1/8/07 B

Form C - 102

001.00

2040 South Pacheco
Santa Fe. NM 87505

☐ AMENDED REPORT

OPERATOR CERTIFICATION

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

Signature *Rebecca H. Heath*

Printed Name *Rebecca H. Heath*

Title *Agent*

Date *1-8-07*

SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

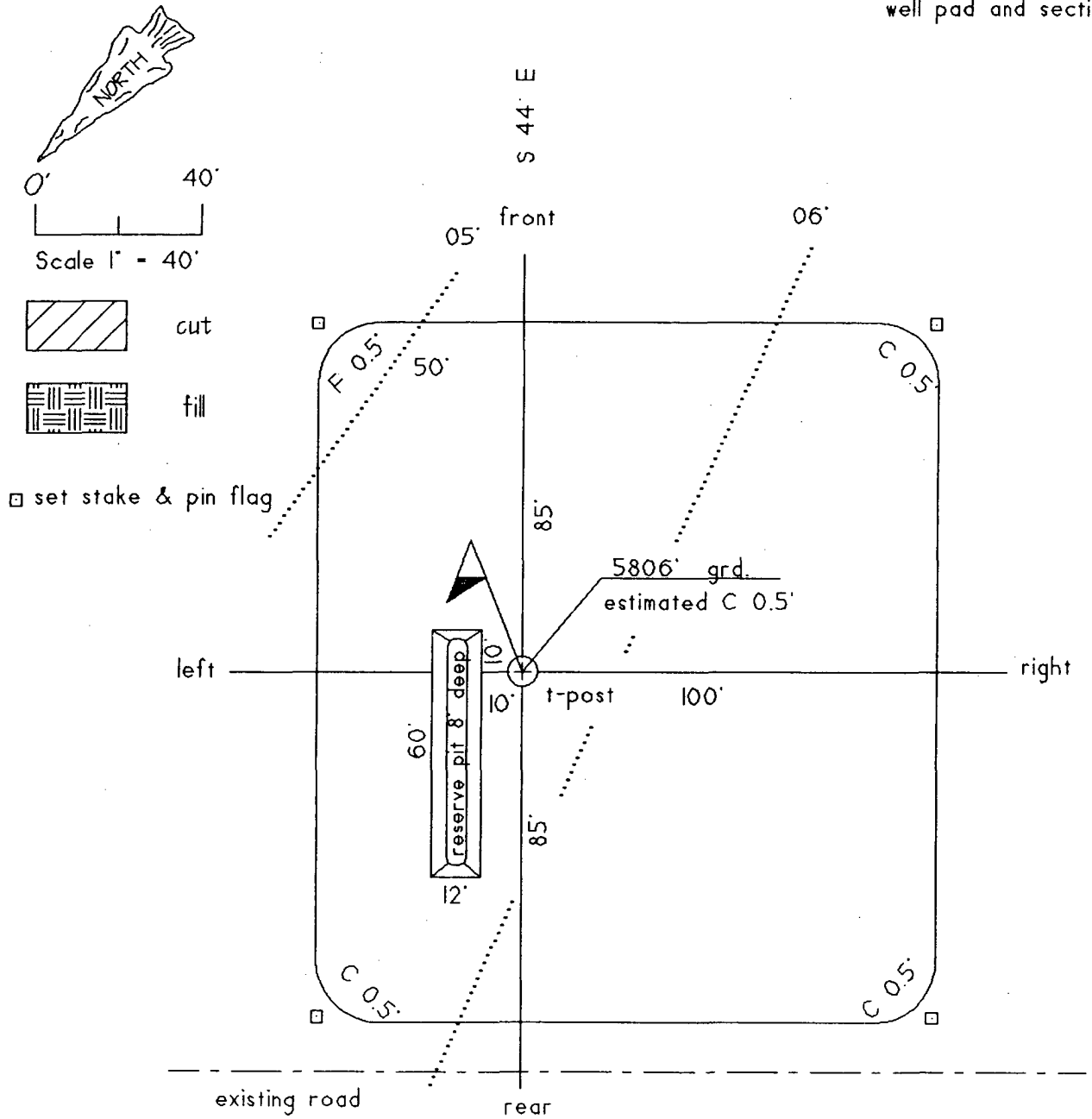
Date of Survey *10 17 '06*

Signature and Seal of Professional Surveyor

Rebecca H. Heath

GERALD S. HODDLESTON
NEW MEXICO
6844
REGISTERED LAND SURVEYOR

La Plata 20 # 2
well pad and section



TEN-POINT PROGRAM/ OPERATIONS PLAN POGO PRODUCING COMPANY

Well name: La Plata #20-2
Location: 908' FNL & 891' FEL, A-Sec. 20, T-30-N, R-13-W, NMPM
San Juan County, NM
Formation: Basin Fruitland Coal

1. The geological surface formation is: Nacamiento
2. The tops of important geological markers: (based on existing log information)

| | |
|----------------------|-------------------|
| Nacamiento | Surface Formation |
| Kirtland Shale | 822' |
| Fruitland FM | 1307' |
| Basal Fruitland Coal | 1750' |
| Pictured Cliffs | 1802' |
| TD | 2000' |

3. Estimated depths of anticipated water, oil, gas, or minerals:

| <u>Substance</u> | <u>Formation</u> | <u>Anticipated Depth</u> |
|------------------|------------------|--------------------------|
| Gas | Fruitland Coal | 2000 +/- |

4. The Casing Program:

| <u>Depth</u> | <u>Hole Size</u> | <u>Casing O.D.</u> | <u>Wt.</u> | <u>Grade</u> | <u>Type</u> | <u>New/Used</u> |
|--------------|------------------|--------------------|------------|--------------|-------------|-----------------|
| 0-160' | 8 3/4" | 7" | 20# | J-55 | ST&C | New |
| 0-2000' | 6 1/4" | 4-1/2" | 10.5# | J-55 | ST&C | New |

Proposed Cement Program: To effectively isolate and seal off all water, oil, gas and coal bearing strata encountered by the utilization of spacer, centralizers and swirling centralizers at the base of the Ojo Alamo formation as specified by NTL-FRA 90-1 III.B and API standards; and by using cement volumes as follows: (Exact volumes to be determined from logs):

Surface: 100sx (120 cuft) Type 5 w/0.25 pps celloflake w/ 2% CaCl @ 15.6 ppg x 1.18 cuft/sx (100% excess). *Circ to Surface*

Production: 90 sx (185 cu.ft) Type 5 w/ 2% Sodium Metasilicate & 0.25 pps celloflake @ 12.4 ppg and 2.03 cu.ft /sx, followed by 70 sx (85 cu.ft) Type 5 w/ 0.25 pps celloflake @ 15.6 ppg & 1.18 cu.ft /sx. *Circ to Surface*

5. Operators Minimum Specifications for pressure control:

Expected bottom hole pressure 250 psi or less.

Attached is a schematic of the blowout preventer commonly in Fruitland Coal development. The BOP will be a double ram type with flanged connections. The BOP will be tested to a minimum of 750 psi.

**TEN-POINT PROGRAM
POGO PRODUCING COMPANY**

Well name: La Plata #20-2
Location: 908' FNL & 891' FEL, A-Sec. 20, T-30-N, R-13-W, NMPM
San Juan County, NM
Formation: Basin Fruitland Coal

6. The type and characteristic of the proposed circulating muds:

Surface Casing: Spud flocculating bentonite with lime.
Production Casing: Low solids non- disbursing system.

| Interval | Mud Weight | Viscosity | Fluid Loss | Ph | Additives |
|----------|------------|-----------|------------|----|------------------|
| 0-160' | 9.0 | 45 | ----- | 9 | Gel, Lime |
| 160'-TD | 8.6 - 9.2 | 30-50 | <15cc | 9 | Chemicals needed |

7. Auxiliary Equipment to be used is as follows:

- a. Float valve above bit.
- b. Monitoring of mud system will be visual.
- c. A safety valve and subs to fit all drill strings will be used.

8. Testing, logging and coring will be as follows:

- a. Cores: None
- b. Drill stem tests: none anticipated.
- c. Logs will include: High Resolution Induction w/ Gamma Ray, SP, Caliper, Microlog, Spectral Density and Dual Spaced Neutron Microlog; all from Total depth to the surface casing shoe.

9. Anticipated Abnormal Pressures and temperatures:

No abnormal pressures, temperatures, or Hydrogen Sulfide gases are anticipated during the completion of this well.

10. Anticipated starting date and duration of operations:

The anticipated starting date is January 1, 2007. The drilling operations should be completed within 10 days after rig-up date. Completion will be done as equipment availability and weather permit.

Date: 12-5-06 Drilling Engineer: Bradley K. Salzman