State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division

New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-3 APD form.

Operator Signature Date: 4/24/14
Well information;
Operator Thompson E+P, Well Name and Number PGA 34 #3
API# 30-045-35540, Section 34, Township 24 (N)/S, Range 11 E/(W)

Conditions of Approval:
(See the below checked and handwritten conditions)

- ✓ Notify Aztec OCD 24hrs prior to casing & cement.
- o Hold C-104 for directional survey & "As Drilled" Plat
- o Hold C-104 for NSL, NSP, DHC
- o Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ✓ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
  - A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
  - A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
  - A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- o Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- o Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

Chuck Kern
NMOCD Approved by Signature

6-12-2014
Date

RECEIVED
APR 25 2014
Farmington Field Office
Bureau of Land Management

Form 3160-3
(August 1999)

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM 109407

6. If Indian, Allottee or Tribe Name:

1a. Type of Work: [X] DRILL [ ] REENTER

7. If Unit or CA Agreement, Name and No.: PGA Unit

b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.: PGA Unit 34 #3

2. Name of Operator: Thompson Engineering and Production Corp.

9. API Well No.: 30-045-35540

3A. Address c/o Walsh Engineering: 7415 E. Main, Farmington, NM 87402

3b. Phone No. *(include area code)*: (505) 327-4892

10. Field and Pool, or Exploratory: Basin Fruitland Coal

4. Location of Well *(Report location clearly and in accordance with any State requirements.*

OIL CONS. DIV DIST. 3

At surface: 660' FSL and 664' FWL

11. Sec., T., R., M., or Blk, and Survey or Area

At proposed prod. Zone: Same

JUN 10 2014

Sec. 34, T24N, R11W

14. Distance in miles and direction from nearest town or post office*: 11 miles southwest of Blanco Trading Post, NM

12. County or Parish: San Juan

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
660'	1280	W/2 320 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
5,280'	825 +/-	Bond #MS2-65-42-42-15
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
6,308' GL	July 1, 2014	1 week

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized office.

25. Signature	Name *(Printed/Typed)*	Date
Paul C. Thompson	Paul C. Thompson, P.E.	4/24/2014

Title: President

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Maurice Ward		6/6/14
Title: AFM	Office: FFO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001and Title 43 U.S.C. Section 1212, make 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 representations as to any matter within its jurisdiction.

NOTICE OF ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

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

(Instructions on reverse)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOCD

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

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

RECEIVED
APR 25 2014
Farmington Field Office
Bureau of Land Management

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-045-35540	71629	BASIN FRUITLAND COAL

[4] Property Code	[5] Property Name	[6] Well Number
313140	PGA UNIT 34	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
37581	THOMPSON ENGINEERING & PRODUCTION CORP.	6308

[10] Surface Location

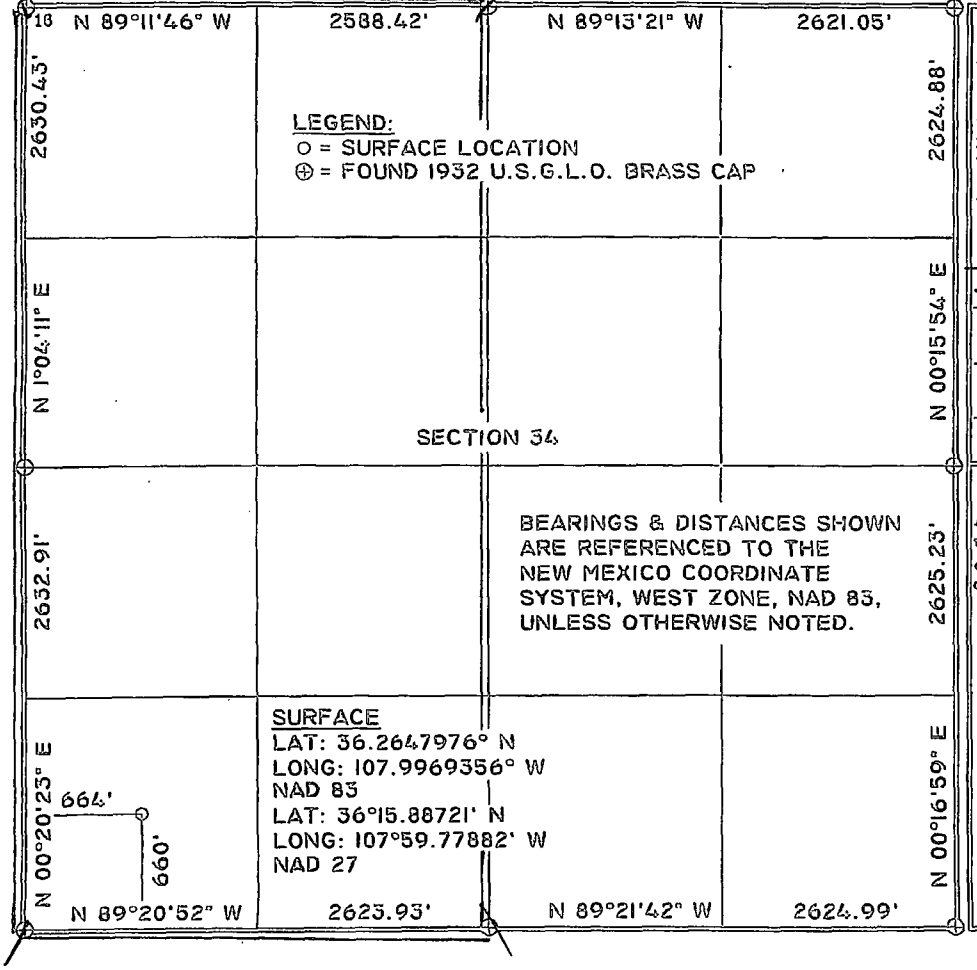
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	34	24 N	11 W		660	SOUTH	664	WEST	SAN JUAN

[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

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
W/2 320			

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, 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 of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Paul C. Thompson 4/24/14
Signature Date

PAUL C. THOMPSON
Printed Name

PAUL@WALSHENG.NET
E-mail Address

[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.

01/23/14
Date of Survey

Signature and Seal of Professional Surveyor:

MARSHALL W. LINDEEN
NEW MEXICO
17078
PROFESSIONAL SURVEYOR

17078
Certificate Number
United Field Services, Inc.

Thompson Engineering and Production Corp.
OPERATIONS PLAN
PGA Unit 34 #3

I. Location: 660' FSL & 664' FWL
Sec 34 T24N R11W
San Juan County, NM

Date: April 24, 2014

Field: Basin Fruitland Coal
Surface: BLM
Minerals: NMNM 109407

Elev: GL 6308'

II. Geology: Surface formation _ San Jose

A.

Formation Tops	Depths
Ojo Alamo	50'
Kirtland	225'
Fruitland	375'
Fruitland Coal	665'
Pictured Cliffs	710'
Total Depth	825'

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:
Water and gas - 665' and 710'.

B. Logging Program: Induction/GR and density logs at TD.

C. No over pressured zones are expected in this well. No H_2S zones will be penetrated in this well. Max. BHP = 600 psig.

III. Drilling
A. Contractor:

B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The production hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.5 ppg.

C. Minimum Blowout Control Specifications:

Double ram type or annular type 2000 psi working pressure BOP with a rotating head. See the attached exhibit #1 for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi.

C. Cont.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

IV. Materials

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
12-1/4"	120'	8-5/8"	24# J-55
7-7/8"	825'	5-1/2"	15.5# J-55

B. Float Equipment:

a) Surface Casing: Two centralizers and an insert fiber baffle.

b) Production Casing: 5-1/2" cement guide shoe and self fill insert float collar. Place float one joint above shoe. Five centralizers spaced every other joint above shoe and five turbolizers every other joint from the top of the well.

V. Cementing:

Surface casing: 8-5/8" - Use 85 sx (100.3 cu. ft.) of Cl "B" with ¼ #/sk celloflake and 2% $CaCl_2$ (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 600 psi for 30 min.

Production Casing: 5-1/2" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 10 bbls of fresh water. **Lead** with 80 sx (165 cu.ft) of Cl "B" with 2% metasilicate and ¼ #/sk celloflake. (Yield = 2.06 cu.ft./sk; slurry weight = 12.5 PPG). **Tail** with 75 sx (89 cu.ft.) of Cl "B" with ¼ #/sk celloflake (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). Total cement volume is 254 cu.ft. (75% excess to circulate cement to surface).

Paul C. Thompson

Paul C. Thompson, P.E.

Daylight Drilling
~~Chihuahua or Scorpion~~ Rig
BOP Testing Procedure.

Refer to the attached diagram for the bradenhead and BOP configuration. No mud cross will be utilized. The choke manifold will be connected to one side of the bradenhead. Connect the third-party testing company's test truck to the opposite side of the bradenhead.

Blind Rams:
Close the blind rams and open the bradenhead valve to the choke manifold. Have all three of the choke manifold valves closed. Pressure test the blind rams, casing, bradenhead, and choke manifold to 250 psig low and 1,000 psig high. Test each pressure for 30 minutes. A successful test will not have more than a 10% drop during the 30 minute test period.

If the test is successful proceed with the pipe ram test.

If the test is not successful, open the blind rams and install the test plug at the bottom of the bradenhead. Close the bradenhead valve. Pressure test the blind rams and bradenhead to 250 psig low and 1,000 psig high. Open the bradenhead valve to the choke manifold and repeat the test.

Pipe Rams:
Install the TIW valve on the bottom of one joint of drill pipe. Run the one joint into the well and close the pipe rams. Chain down the joint of drill pipe but leave the top of the pipe open. With the bradenhead valve open and the test truck still connected to the other side of the bradenhead, test the pipe rams to 250 psig low and 1,000 psig high. Hold each pressure for 30 min with no more than a 10% drop during the test period.

Upper Kelly Cock:
Install the TIW valve to the bottom of the Kelly. Install the test truck to the TIW Valve. With the TIW valve open and the upper Kelly cock closed, pressure test the Kelly and upper Kelly cock to 250 psig low and 1,000 psig high. Hold each pressure for 10 minutes with no more than a 10% drop during the test.

Surface Use Plan of Operations
Thompson Engineering & Production Corporation (TEPC)

PGA Unit 34 No. 3 vertical natural gas well
SHL: 660' FSL, 664' FWL
SW/4 SW/4 Section 34, T24N, R11W, NMPM
San Juan County, NM
Lease # NMNM-109407

Please see attached survey package and supporting documents:

Sheet A - Form C-102 (Well Location and Acreage Dedication Plat)
Sheet B - Cut and Fill Diagram
Sheet C - Well Pad Layout during Drilling
Sheet D - Well Pad Layout during Completion
Sheet E - Topo Map of Well Pad Location and Access Roads
Sheet F - Pipeline and Access Road Survey Plats
Sheet G - Location of Existing Adjacent Wells
Sheet H - Access Map from Highway #550
Sheet I - Location of Water Supply Source

Appendix A - Surface Reclamation Plan
Appendix B - Road Maintenance Plan

Summary: Activities associated with the proposed project will include construction of an access road and well pad; drilling, stimulation, and completion of the proposed PGA Unit 34 No. 3 well; installation of production facilities at the proposed well site; and installation of a pipeline-tie to transport natural gas to sales. The total new surface disturbance for the proposed project would be approximately 1.05 acres.

A. Existing Roads:

Access to the proposed project site would be gained by traveling south on U.S. Highway 550 from Bloomfield, NM. Turn right on NM State Hwy 57 at Blanco Trading Post and continue southwesterly to County Road 7635. Turn right and travel approximately 2.3 miles to County Road 7515. Turn right and travel approximately 0.7 miles and then continue approximately 5.9 miles westerly on existing resource roads to the proposed access road on the right. See Sheet H for a map of the proposed well site and access route to the proposed well in relation to a town, village or other locatable public access point.

All existing roads used to access the proposed location shall be maintained in the same or better condition than presently found.

B. New or Reconstructed Access Roads:

d. Well pad construction equipment may include chain saws, a brush hog, scraper, maintainer, excavator, and dozer. Construction of the well pad will take approximately 2 weeks.

3. Pipeline

a. TEPC would construct, operate, maintain, and terminate a buried, steel well-connect pipeline to transport produced natural gas to a gathering pipeline to established later. The pipeline would be constructed entirely on-Lease and would be approximately 628.58 feet in length, within a 20-foot construction width. The pipeline would parallel the proposed access road and would overlap proposed well pad disturbance for approximately 75.4 feet.

b. Within the proposed pipeline corridor, all vegetation would be cleared, the top 6 inches of topsoil would be salvaged and stockpiled, and the pipeline trench would be excavated.

c. Trenching activity would be conducted using a trencher or backhoe. Where a pipeline trench would be required, it would be 4 to 5 feet in depth. The trench would be 16 inches in width if a trencher is used or 24 inches in width if a backhoe is used.

d. After trenching and pipe placement in the trench, the soils excavated from the trench would be returned and compacted to prevent subsidence. The trench would be compacted after approximately two feet of fill is placed within the trench and after the ground surface has been leveled.

e. Construction of the pipeline will take approximately 2 weeks.

G. <u>Methods for Handling Waste Disposal:</u>

1. Drilling Fluids and Dry Cuttings

a. Drilling fluids and dry cuttings will be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids will be recycled and transferred to other permitted locations or returned to the vendor for re-use, as practical. Residual fluids and dry cuttings will be removed from the storage tanks and disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities.

b. Drilling fluid storage tanks will be adequately sized to ensure confinement of all fluids and will provide sufficient freeboard to prevent uncontrolled releases.

c. Drilling fluid storage tanks will be placed in bermed secondary containment sized to accommodate a minimum of 110 percent of the volume of the largest storage tank.

2. Flowback Water

a. The water-based solution that flows back to the surface during and after completion operations will be placed in storage tanks on location.

b. Flowback water will be confined to a storage tank for a period not to exceed 90 days after initial production and will be disposed of at Basin Disposal, Inc. and/or Industrial Ecosystem, Inc. waste disposal facilities or recycled.

3. Spills - any spills of non-freshwater fluids will be immediately cleaned up and removed to an approved disposal site.

4. Sewage - self-contained, chemical toilets will be provided for human waste disposal. The toilet holding tanks will be pumped, as needed, and the contents thereof disposed of in an approved sewage disposal facility. The toilets will be onsite during all operations.

5. Garbage and other waste material - garbage, trash, and other waste materials will be collected in a portable, self-contained and fully-enclosed trash container during drilling and completion operations. The accumulated trash will be removed, as needed, and will be disposed of at an authorized sanitary landfill. No trash will be buried or burned on location.

6. Immediately after removal of the drilling rig, all debris and other waste materials not contained in the trash container will be cleaned up and removed from the well location.

7. No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.

8. No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced,

EXHIBIT #1

"2M" BLOWOUT PREVENTER SYSTEM