## RECEIVED

OIL CONS. DIV.

DIST. 3

RCVD NOV 16'12

FORM APPROVED OMB No 1004-0136

Expires November 30, 2000

AUG 29 2012

**UNITED STATES** 

DEPARTMENT OF THE INTERIOR Farmington Field Office

5. Lease Serial No.

BUREAU OF LAND MA	NMNM 109407					
APPLICATION FOR PERMIT T	6. If Indian, Allottee or Tri	be Name				
la Type of Work. X DRILL R	7 If Unit or CA Agreement, Name and No					
b Type of Well Oil Well Gas Well Other	<b>X</b> s	Single Zone	Multiple Zone	Lease Name and Well No     Juniper West 35 #24		
2 Name of Operator  Thompson Engineering an	9 API Well No 30-045-35409					
3A Address c/o Walsh Engineering 7415 E. Main, Farmington, NM 87402	10 Field and Pool, or Exploratory  Basin Fruitland Coal					
4 Location of Well (Report location clearly and in accordance wi At surface 1100' FSL and 1700' FWL	th any State requ	uirements.*)		11. Sec., T, R., M, or Blk,	and Survey or Arca	
At proposed prod Zone	Same			Sec. 35, T24N, R11W		
14 Distance in miles and direction from nearest town or post office	e*			12. County or Parish	13 State	
11 miles southwest of Blan	co Trading	Post, NM		San Juan	NM	
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any)	16. No. of A	cres in lease	17 Spacing Unit de	edicated to this well  W/2 320 acres		
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft  NA	•	20 +/-		No. on file NM2Z9Z ond #M <del>S2-65 42-42-15</del> NIM 6000 76Z		
21 Elevations (Show whether DF, KDB, RT, GL, etc.)  6,463' GL	22. Approximate date work will start*  October 1, 2012			23. Estimated duration  1 week		
	24. A	ttachments				
The following, completed in accordance with the requirements of O	nshore Oil and C	Gas Order No. 1, s	shall be attached to this	form		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan</li> </ol>		4. Bond to co	•	less covered by an existing bo	nd on file (see	
3 A Surface Use Plan (if the location is on National Forest System						
SUPO shall be filed with the appropriate Forest Service Office.	on and/or plans as may be requ	nred by the				
25 Signature	Nan	ne (Printed/Typed		Date	2/22/22/2	
Title	<u> </u>	Pau	I C. Thompson,	P.E. ;	8/28/2012	
	Pr	esident				
Approved by (Signature)	 	ne (Printed/Typed	() 	Date	115/12	
Asthue AFM Muss De	Offic	ce				
Application approval does not warrant or certify that the applicant h	nolds legal or equ	itable title to tho	se rights in the subject	lease which would entitle the a	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

Form 3160-3

(August 1999)

## NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

NMOCD '

BLM'S APPROVAL OR 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".

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240 Phone (575) 393-6161 Fax: (575) 393-0720 <u>DISTRICT II</u> 811 S. First St., Artesia, N.M. 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 <u>DISTRICT III</u> 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 OI New MICALO Energy, Minerals & Natural Resources Department 2 2012 State of New Mexico

Revised August 1, 2011 Submit one copy to appropriate

OIL CONSERVATION DIVISION
1220 South St. Francis Dr. Santa Fe, N.M. 87505 Leau AU6 10 612012 emen.

District Office

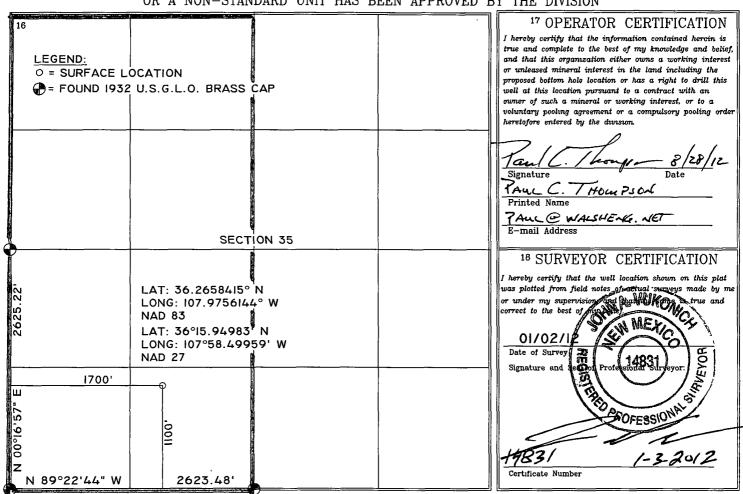
Form C-102

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number			<sup>2</sup> Pool Code		<sup>3</sup> Pool Name				
30.048.35409 71629				BASIN FRUITLAND COAL (GAS)					
*Property C				<sup>5</sup> Propert	operty Name			Well Number	
	JUNIPER WEST 35							24	
OGRID N	0.	<sup>6</sup> Operator Name						<sup>o</sup> Elevation	
37581		THOMPSON ENGINEERING & PRODUCTION CORP.					6463		
					10 Surface	e Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Ν	35	24 N	II W		1100	SOUTH	1700	WEST	SAN JUAN
			11 Botto	om Hole	Location	If Different Fro	om Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acre	s la Joint o	or Infill 14 (	Consolidation	n Code 15 Or	rder 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



# Thompson Engineering and Production Corp. OPERATIONS PLAN Juniper West 35 #24

I. Location: 1100' FSL & 1700' FWL

Date: August 20, 2012

Sec 31 T24N R11W San Juan County, NM

Field: Basin Fruitland Coal

Elev: GL 6463'

Surface: BLM

Minerals: NMNM 109407

II. Geology: Surface formation \_ San Jose

A. Formation Tops	Depths
Ojo Alamo	90′
Kirtland	475 <b>′</b>
Fruitland	620 <b>′</b>
Fruitland Coal	825 <b>′</b>
Pictured Cliffs	930'
Total Depth	1020′

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas - 825' and 930'.

- B. Logging Program: Induction/GR and density logs at TD.
- C. No over pressured zones are expected in this well. No  $\rm H_2S$  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. Materiáls

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
12-1/4"	120'	8-5/8"	24# J-55
7-7/8"	1020′	5-1/2"	15.5# J-55

- B. Float Equipment:
- a) Surface Casing: Three 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  $\frac{1}{4}$  #/sk celloflake and 2% CaCl<sub>2</sub> (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 115 sx (237 cu.ft) of Cl "B" with 2% metasilicate and  $\frac{1}{4}$  #/sk celloflake. (Yield = 2.06 cu.ft./sk; slurry weight = 12.5 PPG). Tail with 75 sx (89 cu.ft.) of Cl "B" with  $\frac{1}{4}$  #/sk celloflake (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). Total cement volume is 326 cu.ft. (80% excess to circulate cement to surface).

Paul C. Thompson, P.E.

D&D Drilling Rig #1 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.

#### Kill Line Valve:

Connect the test truck to the kill line valve and pressure test the valve to 250 psig low and 1,000 psig high. Test each pressure for 10 minutes.

#### 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.

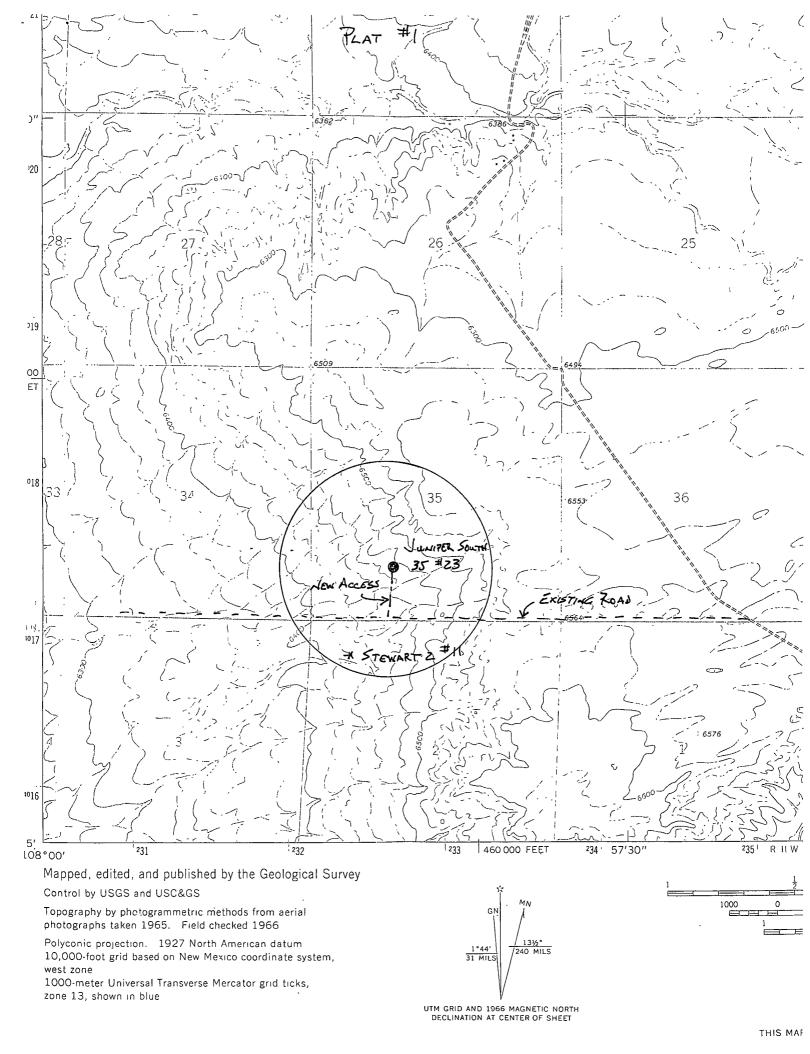
If the test is not successful, open the blind rams and install the test plug at the bottom of the bradenhead (the test plug seal is below the two valves on the bradenhead). Close the bradenhead valve to the choke manifold. Pressure test the blind rams and bradenhead to 250 psig low and 1,000 psig high. Open the bradenhead valve to the choke manifold and repeat the test. If theses test fail with no obvious leaks at either the blind rams or the choke manifold, remove the test plug and run a 7" packer into the first joint of casing and repeat both tests. Use caution when pulling the test plug if pressure is trapped below the plug. Recommend closing the pipe rams and opening the bradenhead valve to the choke manifold before trying to pull the test plug.

#### 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 closed, pressure test the TIW valve to 250 psig low and 1,000 psig high for 10 minutes. Open and the TIW valve and close the upper Kelly cock. Pressure test the Kelly and upper Kelly cock to 250 psig low and 1,000 psig high. Hold each pressure for 10 minutes with 0% drop during the test.



## "2M" BLOWOUT PREVENTER SYSTEM

