

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

Form 3160-3
(August 1999)

RECEIVED

JAN 14 2009

RCVD MAR 5 '09
OIL CONS. DIV.

DIST. 3

FORM APPROVED

OMB No 1004-0136

Expires November 30, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Bureau of Land Management
Farmington Field Office

Lease Serial No.

NM - 4457

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

b. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Schalk Development Company

3A. Address

c/o Walsh Engineering, 7415 E. Main, Farmington, NM 87402

3b. Phone No. (include area code)

(505) 327-4892

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

At surface 660' FNL and 825' FEL

At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office*

50 miles east of Farmington, NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg unit line, if any)

660'

16. No. of Acres in lease

200

17. Spacing Unit dedicated to this well

N/2 268.63 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.

39'

19. Proposed Depth

3510 +/-

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6697' GR

22. Approximate date work will start*

June 2009

23. Estimated duration

4 weeks

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

Paul C. Thompson

Name (Printed/Typed)

Paul C. Thompson, P.E.

Date

1/9/2009

Title

Agent

Approved by (Signature)

Wayne Townsend
Acting AFM

Name (Printed/Typed)

Wayne Townsend

Date

3/7/09

Title

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 1001 and 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

*(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

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

NMOCD

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

MAR 09 2009

Our

District I
1625 N French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, 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 & Natural Resources Department

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

Form C-102
Revised October 12, 2005
Instructions on back
Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

RECEIVED

JAN 14 2003

☐ AMENDED REPORT

Bureau of Land Management
Dedication Field Office

WELL LOCATION AND ACREAGE DEDICATION FIELD PLAT

*API Number 30039.30653		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 10045	*Property Name SCHALK 57		*Well Number 200
*OGRID No. 20389	*Operator Name SCHALK DEVELOPMENT COMPANY		*Elevation 6697'

¹⁰ Surface Location

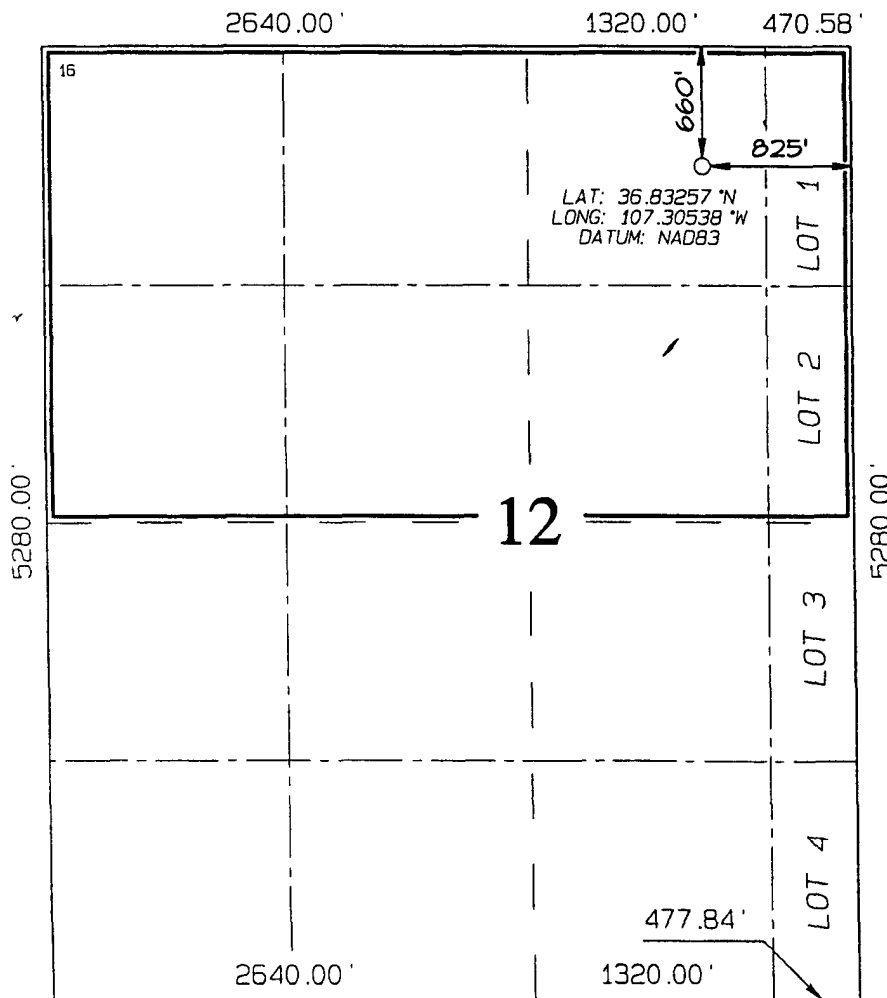
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	12	30N	5W		660	NORTH	825	EAST	RIO ARriba

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 268.63 Acres - N/2	¹³ Joint or Infill Y	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, 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.

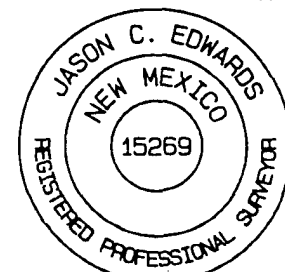
Paul C. Thompson 1/9/09
Signature Date
Paul C. Thompson
Printed Name

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.

Date of Survey: JULY 30, 2008

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

SCHALK DEVELOPMENT CORPORATION
OPERATIONS PLAN
Schalk 57 #200

I. Surface 660' FNL & 825' FEL Date: January 9, 2009
Location: Sec 12 T30N R5W
Rio Arriba County, NM

Field: Basin Fruitland Coal Elev: GL 6697'
Surface: Carson Nat'l Forest
Minerals: NM-4457

II. Geology: Surface formation _ Nacimiento

A. Formation Tops	Depth
Ojo Alamo	2925'
Kirtland	3040'
Fruitland	3405'
Pictured Cliffs	3510'
Total Depth	3530'

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

Water and gas - 3405', 3510'.

B. Logging Program: CCL and GR through the liner.

C. No over pressured zones are expected in this well. No H₂S zones will be penetrated in this well. Max. BHP = 1500 psig.

III. Drilling

A. Contractor:

B. Mud Program:

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

The intermediate 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.

The production hole will be drilled and under-reamed with air-mist, then open hole cavitated. An uncemented liner will be run across the Fruitland Coal section.

C. Minimum Blowout Control Specifications:

Double ram type 2000 psi working pressure BOP with a rotating head. See 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 1500 psi.

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"	200'	9-5/8"	36# J-55
8-3/4"	3400'	7"	20# J-55
6-1/4"	3510'	5-1/2"	15.5# J-55

B. Float Equipment:

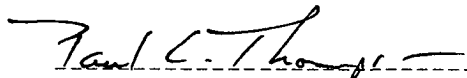
- a) Surface Casing: Notched collar and 3 centralizers on the bottom 3 collars.
- b) Intermediate Casing: Cement-nosed guide shoe and float collar on top of the bottom joint. Place 5 centralizers on every other collar starting at the float, and 5 turbolizers spaced every 5th collar across the Ojo Alamo.
- c) Production casing. Weld 6-1/4" bit to the bottom of the casing. Set the liner with a 7" X 5-1/2" liner hanger without a packoff.

V. Cementing:

Surface casing: 9-5/8" - Use 110 sx (130 cu. ft.) of Type 5 with 3% CaCl₂, and ¼ #/sk. celloflake. (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 1500 psi for 30 min.

Intermediate casing: 7" - - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 20 bbls of fresh water. **Lead** with 365 sx (763 cu. ft.) of Type 5 65/35 poz with 8% gel, 1% CaCl₂, and ¼ #/sk. celloflake. Yield = 2.09 cu. ft./sk; slurry weight = 12.3 PPG). **Tail** with 100 sx (139 cu. ft.) of Type 5 with 1% CaCl₂, and ¼ #/sk. celloflake. (Yield = 1.39 cu. ft./sk; slurry weight = 14.5 PPG). Total volume = 902 cu.ft. Use 75% excess in lead and tail to circulate cement to surface.

Production Casing: None



Paul C. Thompson, P.E.

C. HARRADEN/ January 15, 2009 ~~cdh~~

SCHALK DEVELOPMENT COMPANY/Schalk 57 #200 APD

STIPULATION/CONDITION OF APPROVAL

A sump/rathole into the non-productive underlying main P.C. ss is proposed by operator. In order to determine that the P.C. fm. in this wellbore is naturally non-productive, the operator is required to have a mudlogger on location to monitor for gas while drilling the P.C. fm.).

Schalk Development Company

Well Control Equipment Schematic for 2M Service

Attachment to Drilling Technical Program

Exhibit #1 Typical BOP setup

Location: San Juan Basin, New Mexico

Date: August 20, 2001

By: John Thompson (Walsh E&P)

