

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-4452
1b. TYPE OF WELL OIL WELL <input type="checkbox"/> <input checked="" type="checkbox"/> OTHER SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Schalk Development Company		7. UNIT AGREEMENT NAME 10041
3. ADDRESS OF OPERATOR c/o Walsh Engineering, 7415 E. Main St. Farmington, NM 87402 (505) 327-4892		8. FARM OR LEASE NAME, WELL NO. Schalk 52 #6A
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements*) At Surface 2480' FSL and 690' FWL At proposed Prod. Zone 1980' FNL and 660' FWL		9. API WELL NO. 30-039-26756
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 30 miles east of Blanco, NM		10. FIELD AND POOL OR WILDCAT Blanco Mesa Verde
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 660' at BHL	16. NO. OF ACRES IN LEASE 548.52	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 24, T29N, R5W
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. 3000'	19. PROPOSED DEPTH 5995'	12. COUNTY OR PARISH Rio Arriba
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6545' GR		13. STATE NM
		17. NO. OF ACRES ASSIGNED TO THIS WELL N/2 274.21
		20. ROTARY OR CABLE TOOLS Rotary
		22. APPROX. DATE WORK WILL START* August 1, 2001

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	36# J-55	200'	130 cu.ft. Cl "B" w/ 3% CaCl ₂
8-3/4"	7"	20# J-55	3875'	783 cu.ft. lead & 341 cu.ft. tail
6-1/4"	4-1/2"	10.5# J-55	3775' - 5995'	196 cu.ft. lead & 196 cu.ft. tail

Schalk Development Company proposes to drill a directional well to develop the Blanco Mesa Verde formation at the above described location in accordance with the attached drilling and surface use plans.

This location has been archaeologically surveyed by La Plata Archeological Service. Copies of their report are have been submitted directly to your office. LAC Report 2001-10a, CNF Report # 2001-02-08

The wellpad, access road, and pipeline will be located on Carson National Forest land. An on-site inspection was held with the Forset Service on 4/20/01.

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"

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Paul C. Thompson TITLE Paul Thompson, Agent DATE 5/7/01

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 12/15/01
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.

APPROVED BY [Signature] TITLE AEM DATE 12/05/01

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

HOLD C104 FOR Dir. Survey

NM000

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26756		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 10037	*Property Name SCHALK 52		*Well Number 6A
*OGRID No. 020389	*Operator Name SCHALK DEVELOPMENT COMPANY		*Elevation 6495'

¹⁰ Surface Location

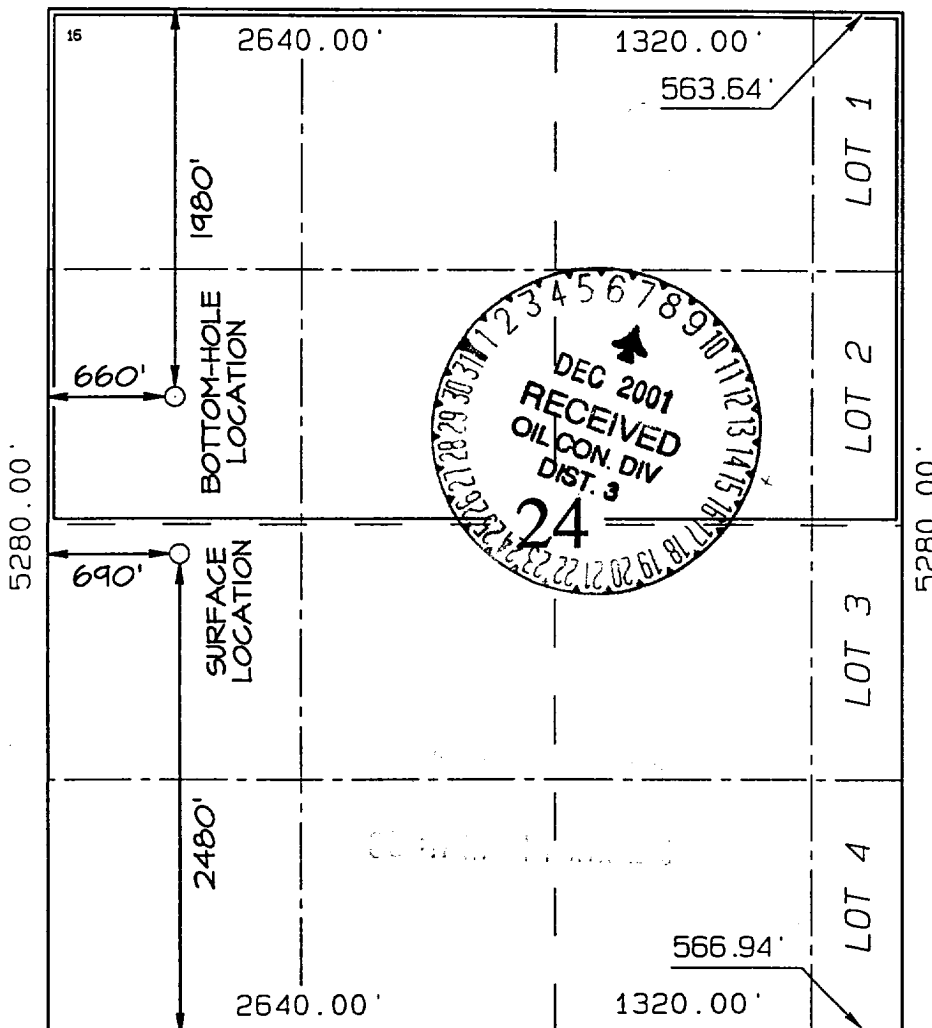
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	24	29N	5W		2480	SOUTH	690	WEST	RIO ARriba

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
E	24	29N	5W		1980	NORTH	660	WEST	RIO ARriba

¹² Dedicated Acres N/2 274.21	¹³ Joint or Infill I	¹⁴ Consolidation Code	¹⁵ Order 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



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

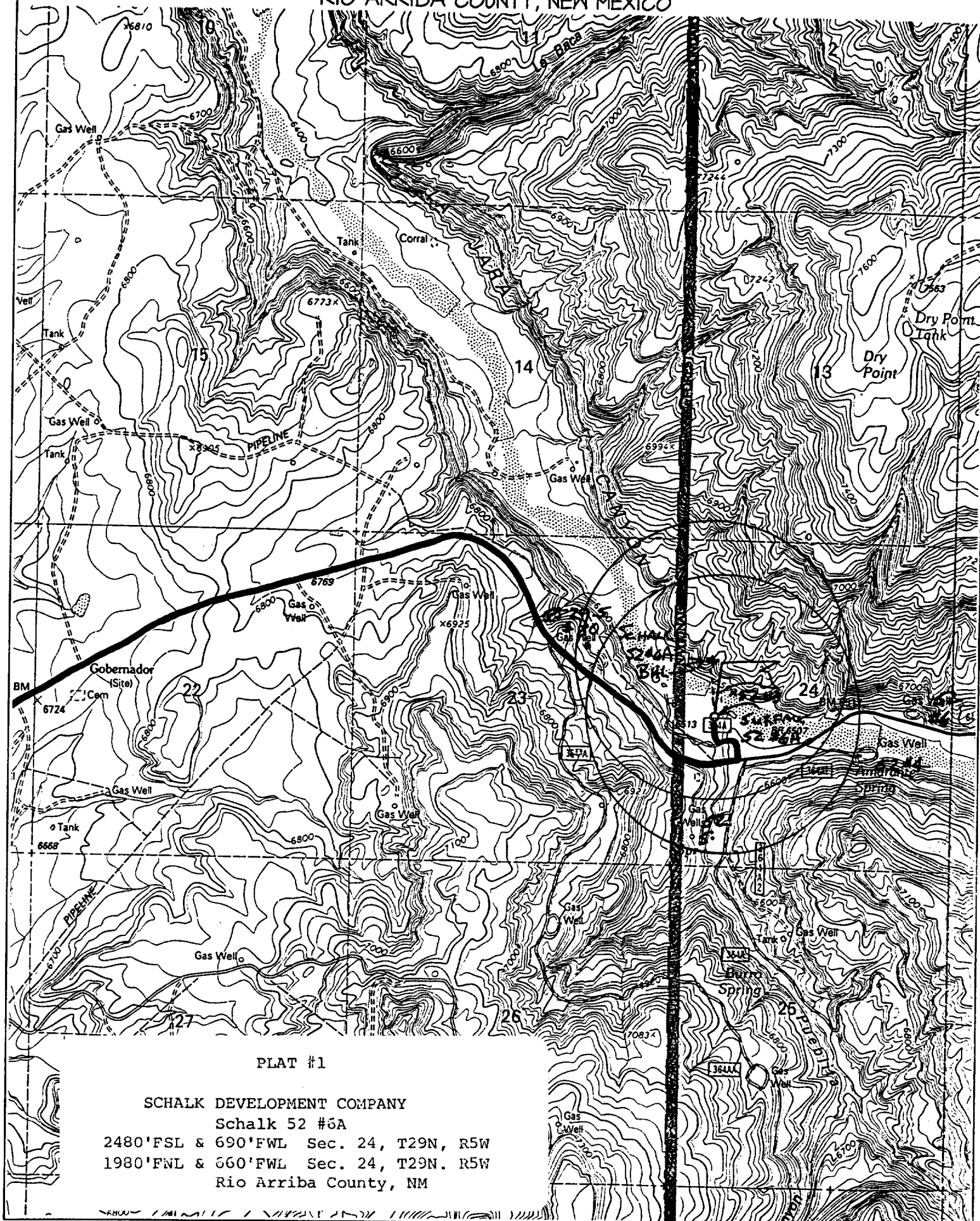
Paul C. Thompson
Signature
Paul C. Thompson
Printed Name
Agent
Title
5/8/01
Date

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.

MARCH 29, 2001
Date of Survey
Signature and Seal of Professional Surveyor
NEALE C. EDWARDS
NEALE C. EDWARDS
NEW MEXICO
6857
Certificate 6857

SCHALK DEVELOPMENT COMPANY SCHALK 52 #6A

2480' FSL & 690' FWL, SECTION 24, T29N, R5W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO



PLAT #1

SCHALK DEVELOPMENT COMPANY

Schalk 52 #6A

2480' FSL & 690' FWL Sec. 24, T29N, R5W

1980' FSL & 660' FWL Sec. 24, T29N, R5W

Rio Arriba County, NM

C. Minimum Blowout Control Specifications:

Double ram type 2000 psi working pressure BOP with a rotating head. See the attached exhibits (#1 and #2) 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"	3875'	7"	20# J-55
6-1/4"	3775' - 5995'	4-1/2"	10.5# 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 insert float collar on top of the bottom joint. Place one rigid centralizer every 120' starting at the float to the surface pipe shoe. Total of 31 spiral centralizers.
- c) Production Casing: 4-1/2" whirler type cement-nosed guide shoe and a latch collar on top of the shoe joint.

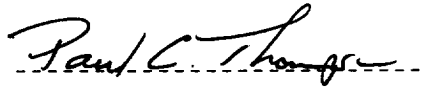
V. Cementing:

Surface casing: 9-5/8" - Use 110 sx (130 cu. ft.) of Cl "B" with 3% CaCl_2 , and $\frac{1}{4}$ #/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" - Lead with 380 sx (783 cu. ft.) of Cl "B" 65/35 poz with 10% gel, 2% CaCl_2 , and $\frac{1}{4}$ #/sk. celloflake. Yield = 2.06 cu. ft./sk; slurry weight = 12.3 PPG). Tail with 235 sx (341 cu. ft.) of Cl "B" 50/50 poz with 4% gel, 0.4% fluid loss, 2% CaCl_2 , and $\frac{1}{4}$ #/sk. celloflake. Yield = 1.45 cu. ft./sk; slurry weight = 13.2 PPG). Total volume = 1124 cu.ft. Use 100% excess in lead and 75% excess in tail to circulate cement to surface. WOC 12 hours. Pressure test casing to 1500 psi for 30 min.

Production Casing: 4-1/2" - Before cementing circulate hole clean with air. Precede cement with 20 bbls of gel water and 10 bbls of water.

1st Stage: Lead with 135 sx (196 cu.ft) of Cl "B" 50/50 poz with 4% gel 0.4% fluid loss, and 2% CaCl_2 . Yield = 1.45 cu. ft./sk; slurry weight = 13.2 PPG); Tail with 135 sx (196 cu.ft.) of Cl "B" 50/50 poz with 4% gel, 0.4% fluid loss, 2% CaCl_2 , 4% phenoseal, and $\frac{1}{4}$ #/sx celloflake (Yield = 1.45 cu. ft./sk; slurry weight = 13.2 PPG). Total cement volume is 406 cu.ft. 70% excess to circulate the liner top. Run temperature survey after 8 hours if cement is not circulated.


Paul C. Thompson, P.E.