

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☒

2. NAME OF OPERATOR

Schalk Development Company

3. ADDRESS OF OPERATOR

P.O. Box 25865, Albuquerque NM 87125

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

NW/4 NE/4 Section 34

At proposed prod. zone

410' FNL & 2300' FEL, Section 34

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

5 miles northwest of Lindrith

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

410'

16. NO. OF ACRES IN LEASE

640

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

380'

19. PROPOSED DEPTH

8,500'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

7,289' GL

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED

"GENERAL REQUIREMENTS"
PROPOSED CASING AND CEMENTING PROGRAM

22. APPROX. DATE WORK WILL START*

October 15, 1985

23.

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

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	
12 1/4"	9 5/8"	36#	300'	188 cu. ft.
7 7/8"	4 1/2"	11.6#	8,500'	Stage 1: 518 Cu. Ft. Stage 2: 360 Cu. Ft. Stage 3: 879 Cu. Ft.

(DV tools set at 6,100'
& 3,900')

Propose to drill this Gallup-Dakota well in order to obtain maximum oil production from the Ojito Gallup-Dakota field. Samples will be taken at 20' intervals from 4,500' to TD. No cores or DST's are planned. Logs will be run from surface casing to TD. Prospective zones will be perforated and fractured. Blowout preventer equipment will be as indicated on the attached exhibit and will be tested at regular intervals. Necessary steps will be taken to protect the environment.

** ADDITIONAL INFORMATION ON ATTACHED SHEET

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

Steve Schalk

(This space for Federal or State Use)

General Manager

APPROVED

AS AMENDED

PERMIT NO.

OCT 02 1985

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

OIL CON. DIV.

DIST. 3

NMOCC

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102
Supersedes O-102
Effective 1-1-55

All distances must be from the outer boundaries of the section.

Operator Schalk Development Co.			Lease Schalk Gavilan		Well No. 1
Unit Letter B	Section 34	Township 25 North	Range 3 West	County Rio Arriba	
Actual Footage Location of Well: 410 feet from the North line and 2300 feet from the East line					
Ground Level Elev. 7289	Producing Formation Gallup-Dakota		Pool West Lindrith	Dedicated Acreage 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

RECEIVED

SEP 26 1985

BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

Section 34

CERTIFICATION

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

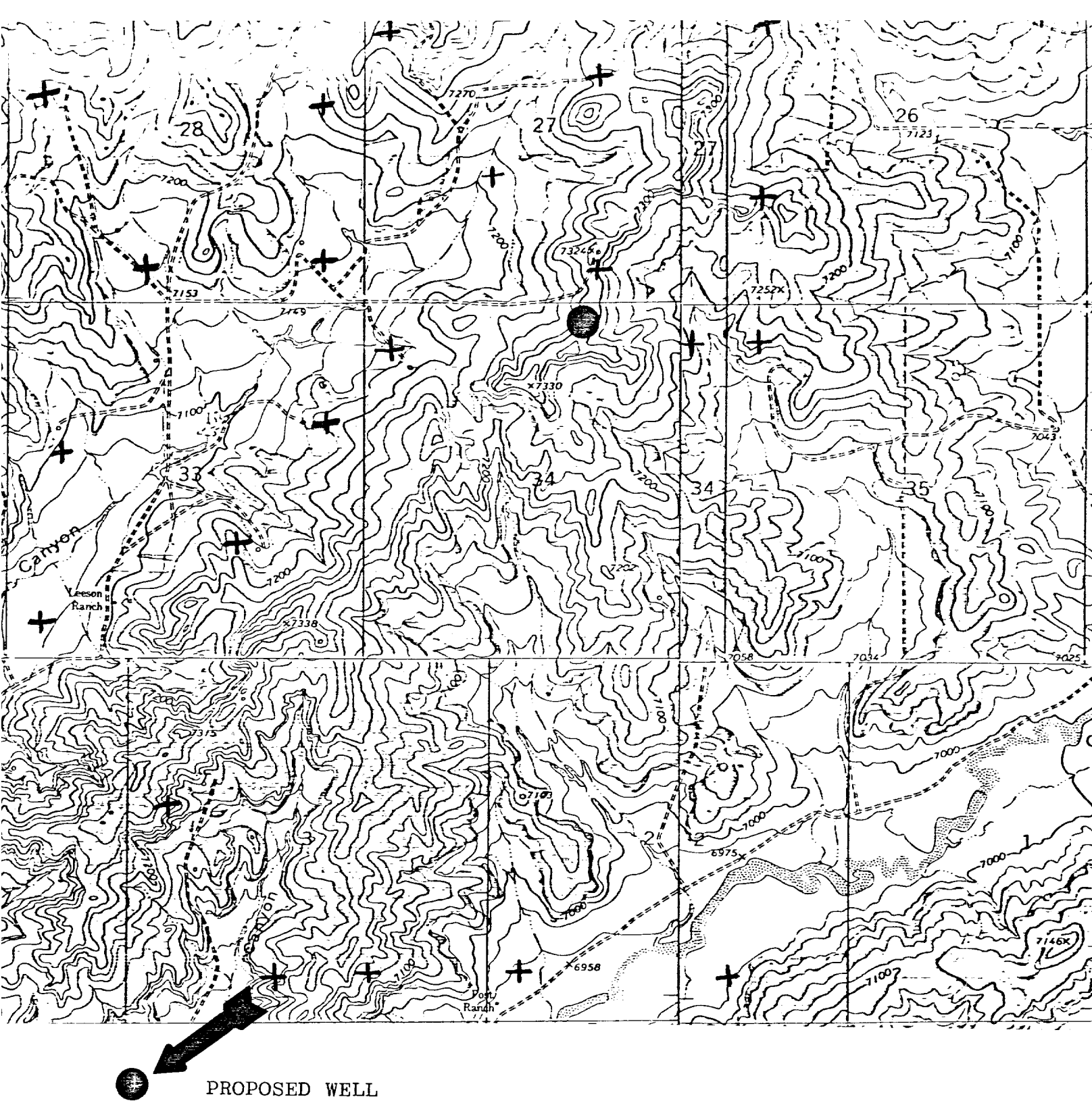
Name
Steve Schalk
Position
General Manager
Company
Schalk Development Co.
Date
9-24-85

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 knowledge and belief.

Date Survey
August 26 1985
Registered Professional Engineer
3084
State of New Mexico
Certification

RECEIVED
OCT 02 1985
OIL CON. DIV.
DIST. 3

330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500



PROPOSED WELL

Schalk Development Co.
Schalk Gavilan No. 1
410' FNL & 2300' FEL, Sec. 34, T-25N, R-3W
Rio Arriba County, New Mexico

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐

2. NAME OF OPERATOR

Schalk Development Co.

3. ADDRESS OF OPERATOR

P.O. Box 25825, Albuquerque, NM 87125

4. LOCATION OF WELL (Report location clearly and in accordance with State requirements)*

At surface

NW/4 of NE/4

At top prod. Interval reported below

At total depth

410' FNL & 2,300' FEL

BUREAU OF LAND MANAGEMENT
FARMINGTON RESOURCE AREA

DATE ISSUED

9/30/85

15. DATE SPUDDED

1-30-86

16. DATE T.D. REACHED

2-18-86

17. DATE COMPL. (Ready to prod.)

May 19, 1986

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

7,289' GL

19. ELEV. CASINGHEAD

7,292'

20. TOTAL DEPTH, MD & TVD

8,236'

21. PLUG, BACK T.D., MD & TVD

8,183'

22. IF MULTIPLE COMPL., HOW MANY*
single

23. INTERVALS DRILLED BY
ROTARY TOOLS
CABLE TOOLS

0 - 8,236'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)*

Gallup-Dakota 7007'-7135' / 7169'-7353' / 7556'-7594' / 7958'-8124'

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Induction - SFL / Density Compensated Neutron / Cyberlook / Fracture

No

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	319'	12 1/4"	215 sacks = 253.70 cu. ft.	
5 1/2"	17#	8,236'	8 3/4"	first stage - 1,050 sacks	= 1,680 cu. ft.
				second stage - 650 sacks	= 1,199 cu. ft.
				third stage - 650 sacks	= 1,199 cu. ft.

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	7,180'	---

31. PERFORATION RECCED (Interval, size and number)

See Attachment #1

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
See Attachment #1	

33.* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)					WELL STATUS (Producing or shut-in)	
5-19-86		Flowing					producing	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL--BBL.	GAS--MCF.	WATER--BBL.	GAS-OIL RATIO	
5-19-86	10 1/2	.500	→	145	63	40	434	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)		
38	810	→	331	144		ACCEPTED FOR RECORD		

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

35. LIST OF ATTACHMENTS

Attachment #1 (covering #31 & #32)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Steve Schalk

TITLE

General Manager

BY

DATE 6-4-86

*(See Instructions and Spaces for Additional Data on Reverse Side)

NMOCC

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP MEAS. DEPTH TRUE VERT. DEPTH
Ojo Alamo	3,177	3,250	Water		
Kirtland	3,437	3,486			
Fruitland	3,540	3,646			
Pictured Cliffs	3,647	3,706			
Lewis	3,707	3,811			
Chacra	4,560	5,330			
Cliffhouse	5,331	5,849			
Point Lookout	5,850	6,010			
Mancos	6,011	6,987			
Gallup	6,988	7,849	Oil, Gas		
Greenhorn	7,850	7,956	Gas, Oil		
Graneros	7,957	8,069	Gas, Oil		
Dakota	8,070	8,187	Gas, Oil, Water		

Attachment #1

Lease #: NM 23043
 Operator: Schalk Development Company
 Well: Schalk Gavilan #1

Item #31 -

<u>Perforation Record</u>	<u>Number of Holes</u>	<u>Size</u>
Dakota 'C' - 8108' to 8124'	13	.40"
Graneros - 7958' to 7974'	12	.40"
Sanostee - 7556' to 7594'	5	.40"
Lower Gallup - 7169' to 7353'	32	.40"
Upper Gallup - 7007' to 7135'	36	.40"

Item #32 -Acid, Perforating, and Fracturing Record

8108' to 8124' & 7958' to 7974'	Acidize	with 2000 gallons of 15% HCL & Adds and 54 ball sealers
	Fractured	with 70,000 gallons of gelled 2% KCL water and 100,000# of 20/40 mesh sand
7556' to 7594'	Acidize	with 2000 gallons of 15% HCL & Adds and 500 gallons of Xylene and 15 ball sealers
7169' to 7353'	Acidize	with 3000 gallons of 15% HCL & Adds and 64 ball sealers
	Fractured	with 98,000 gallons of gelled 2% KCL water and 148,000# of 20/40 mesh sand
7007' to 7135'	Acidize	with 3500 gallons of 15% HCL & Adds and 72 ball sealers
	Fractured	with 85,000 gallons of gelled 2% KCL water & Adds and 109,000# 20/40 mesh sand

Attachment #1

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