

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTRECEIVED
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. SF 078312
1b. TYPE OF WELL OIL WELL <input type="checkbox"/> WATER <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Great Western Drilling Company		7. UNIT AGREEMENT NAME
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. J.E. Decker #2C 4775
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *) At Surface 1340' FSL and 660' FWL At proposed Prod. Zone Same		9. API WELL NO. 30-045-30753
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 12 miles north of Aztec, 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 drlg. unit line, if any) 660'	16. NO. OF ACRES IN LEASE 1095.98	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA L Sec. 12, T32N, R12W
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR ON THIS LEASE, FT. 400'	19. PROPOSED DEPTH 5630'	12. COUNTY OR PARISH San Juan
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6248' GR		13. STATE NM
22. APPROX. DATE WORK WILL START* September 1, 2001		

23. 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	3245' +/-	639 cu.ft. lead & 305 cu.ft. tail
6-1/4"	4-1/2"	10.5# J-55	3145 - 5630' +/-	218 cu.ft. lead & 218 cu.ft. tail

Great Western Drilling Company proposes to drill a vertical 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 2001-41d

The wellpad, access road, and pipeline will be located on fee surface land. An on-site inspection was held with the BLM on 7/23/01. It was agreed during the onsite that the access road would be adjacent to the pipeline ROW.

This action is subject to BLM procedural review pursuant to 43 CFR 3105.3 and appeal pursuant to 43 CFR 3105.4.

THIS ACTION IS 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 7/23/01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

8/13/01

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

Doris J. Mooney

TITLE

AFM Minerals

DATE

8/13/01

*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.

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 30045-30153		*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 4775	*Property Name J.E. DECKER		*Well Number 2C
*OGRID No. 009338	*Operator Name GREAT WESTERN DRILLING		*Elevation 6248'

¹⁰ Surface Location

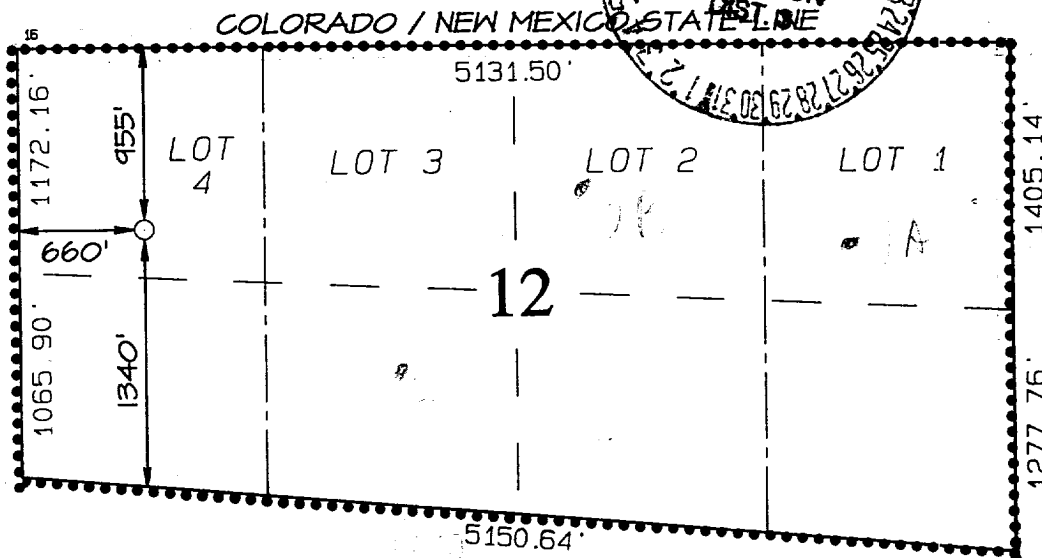
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	12	32N	12W		1340	SOUTH	660	WEST	SAN JUAN

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 S/2 336 acres	¹³ Joint or Infill I	¹⁴ Consolidation Code C	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.

Paul C. Thompson
Signature
Paul C. Thompson
Printed Name
Agent
Title
7/24/01
Date

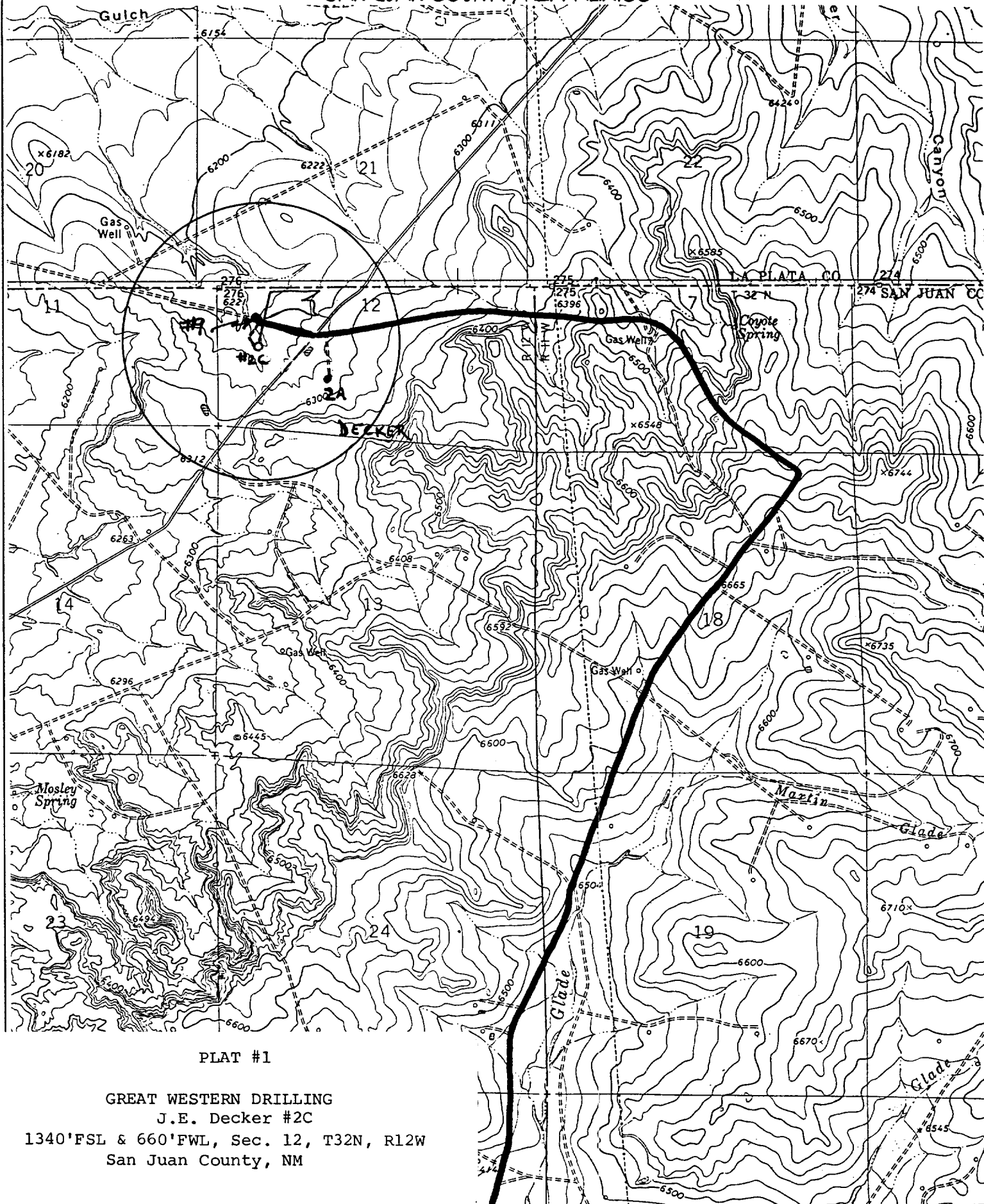
¹⁸ SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JUNE 1, 2001
Date of Survey
Signature and Seal

Certificate No. 6857

GREAT WESTERN DRILLING J.E. DECKER #2C

1340' FSL & 660' FWL, SECTION 12, T32N, R12W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



PLAT #1

GREAT WESTERN DRILLING
J.E. Decker #2C

1340' FSL & 660' FWL, Sec. 12, T32N, R12W
San Juan County, NM

C. Minimum Blowout Control Specifications:

Double ram type 2000 psi working pressure BOP with a rotating head. 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"	3245'	7"	20# J-55
6-1/4"	5630'	4-1/2"	10.5# J-55

B. Float Equipment:

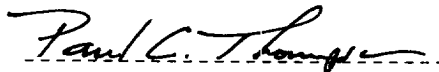
- a) Surface Casing: Notched collar and 3 centralizers on the bottom 3 collars.
- b) Intermediate Casing: Cement-nosed guide shoe and insert float collar on top of the bottom joint. Place 5 centralizer on every other collar starting at the float, and turbolizers on every third collar starting at 2900' to the surface.
- c) Production Casing: 4-1/2" whirler type cement-nosed guide shoe and a latch collar on top of the shoe joint. A 7" X 4-1/2" liner hanger will be set at approximately 3145' (at least 100' of overlap into the 7" casing).

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 310 sx (639 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 210 sx (305 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 = 944 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 150 sx (218 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 150 sx (218 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 464 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.