

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Div. Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐

b. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
Dominion Oklahoma Texas Exploration & Production Inc.

3. ADDRESS AND TELEPHONE NO.
14000 Quail Springs Parkway, Suite 600, Oklahoma City, OK 73121

4. LOCATION OF WELL (Report location clearly and in accordance with any state requirements.)
At surface: UL C, 990' FNL & 1000' FWL
At proposed prod. zone: 1190' 2180'

5. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
12 Miles Northwest of Loco Hills, New Mexico

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
29603

8. FARM OR LEASE NAME, WELL NO.
Excaltibur Federal Com #1

9. API NUMBER
30-005-63460

10. FIELD AND BOO, OR WILDCAT
W. 13600 (Morrow)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
20-15S-29E

12. COUNTY OR PARISH
Chaves

13. STATE
NM

14. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
990'

15. NO. OF ACRES IN LEASE
320

16. NO. OF ACRES ASSIGNED TO THIS WELL
320

17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
10,300'

18. PROPOSED DEPTH
10,300'

19. ROTARY OR CABLE TOOLS
R

20. ELEVATIONS (Show whether DF, RT, GR, etc.)
3766'

21. APPROX. DATE WORK WILL START*
15-Feb-02

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" H-40	48#	400'	250 sx 35/65 & 180 sx Class C
11"	8 5/8" LT&C	24# & 32#	2000'	600 sx 35/65 & 220 sx Class C
7 7/8"	5 1/2" N-80	17#	10,300'	500 sx TXI

1. Drill 17 1/2" hole to \pm 400'. Set 13 3/8" H-40, 48# surface csg at \pm 400'. Cement w/250 sx 35/65 & 180 sx Class C.
2. Drill 11" hole to \pm 2000'. Set 8 5/8" LT&C, 24# & 32# csg at \pm 2,000'. Cement w/600 sx 35/65 & 220 sx Class C.
3. Drill 7 7/8" hole to \pm 9,500'. Set 5 1/2" N-80, 17# csg at \pm 10,300'. Cement w/500 sx TXI.

See Attached "Exhibit 6" for BOP program

NSL-4709

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

24. SIGNED Caleb Christian TITLE Regulatory Technician DATE 1/7/02
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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:

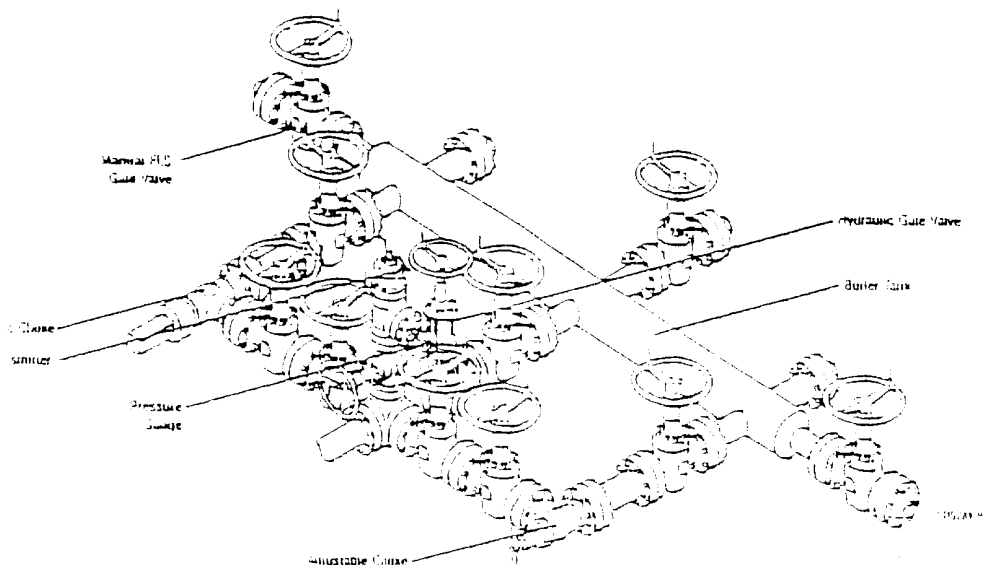
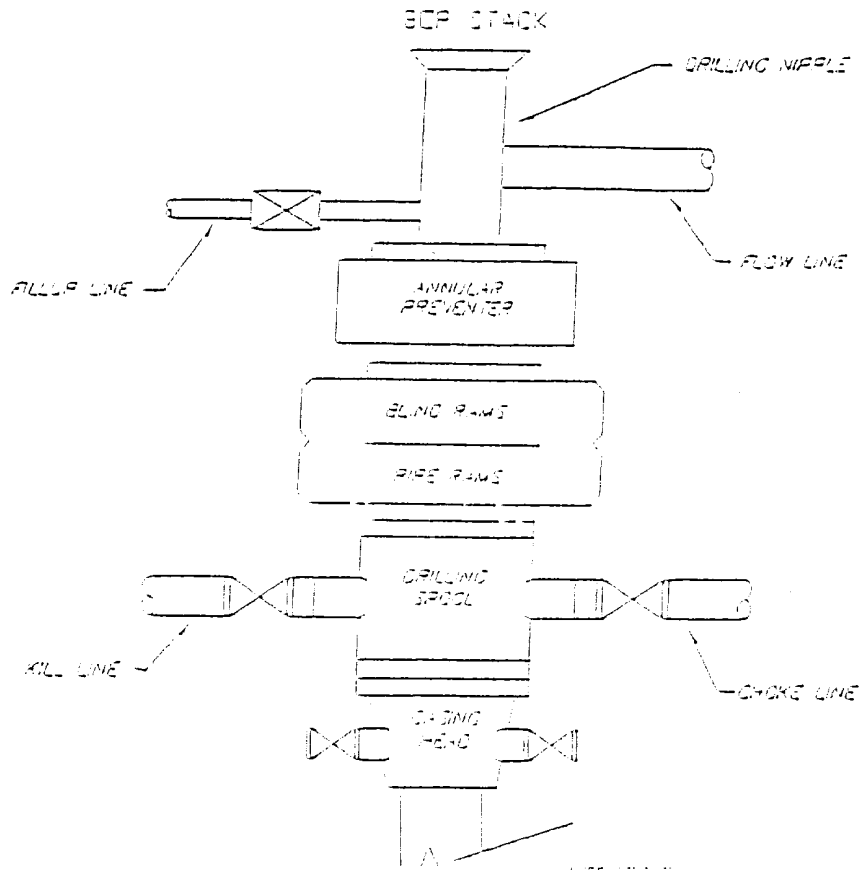
APPROVED BY /S/LARRY D. BRAY TITLE Assistant Field Manager, Lands And Minerals DATE MAR 01 2002

*See Instructions On Reverse Side

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

Exhibit C

TYPICAL 5,000 p.s.i. BLOWOUT PREVENTER & CHOKE MANIFOLD SCHEMATIC



Typical Choke Manifold Designed for Land Drilling Applications

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Chaves (Morrow)
Property Code	Property Name	Well Number
	EXCALIBUR "20" Federal Com	11
OGRID No.	Operator Name	Elevation
	DOMINION Oklahoma Texas Expl. & Prod.	3773'

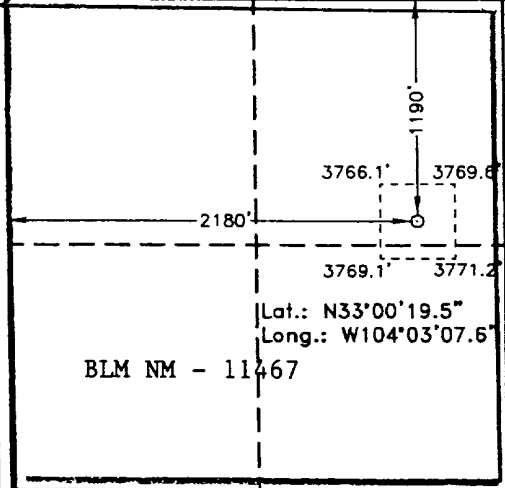
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	20	15 S	29 E		1190	NORTH	2180	WEST	CHAVES

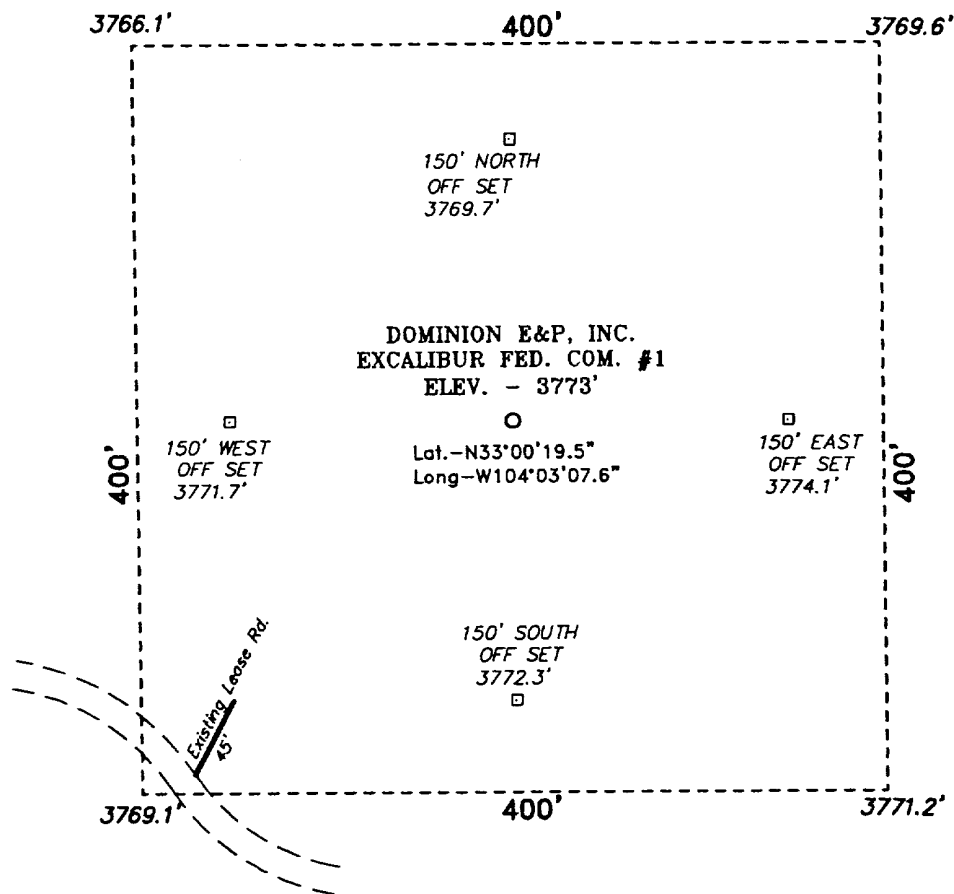
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
320	N								

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

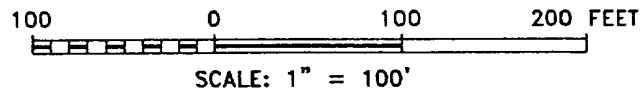
	BLM 27-800	BLM NM - 101107
<p>Lat.: N33°00'19.5" Long.: W104°03'07.6"</p>		
<p>BLM NM - 11467</p>		
<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Carla Christian</u> Signature</p> <p>Carla Christian Printed Name</p> <p>Regulatory Technician Title</p> <p>February 4, 2002 Date</p>		
<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JANUARY 29, 2002 Date Surveyed</p> <p><u>Gary L. Jones</u> Signature of Surveyor</p> <p>Professional Surveyor</p> <p>7977 No. 2273</p> <p>Certified Gary L. Jones 7977 Professional Surveyor</p>		

**SECTION 20, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.**



Directions to Location:

FROM THE JUNCTION OF US HWY 285 AND STATE HWY 249 IN HAGERMAN, GO EAST ON HWY 249 FOR APPROX. 13 MILES TO A LEASE ROAD; THENCE SOUTHERLY ON LEASE ROAD FOR APPROX. 6.2 MILES; THENCE EASTERLY ON LEASE ROAD FOR APPROX. 1.4 MILE TO A PROPOSED LEASE ROAD.



BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 2273 Drawn By: **K. GOAD**

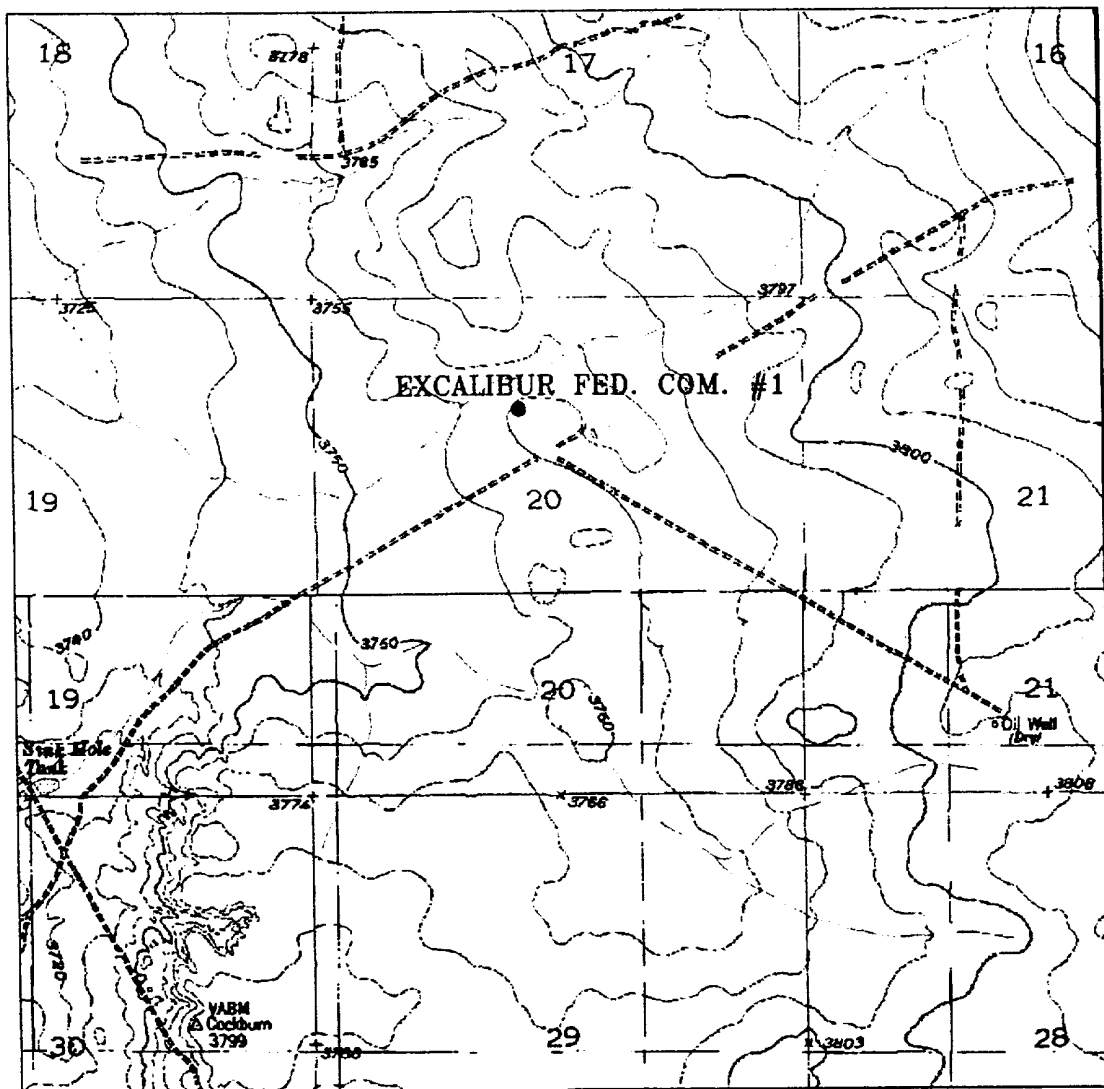
Date: 01-30-2002 Field: KIG CD#4 - 2273A DWG

DOMINION E&P, INC.

REF: EXCALIBUR FED. COM. #1 / Well Pad Topo

THE EXCALIBUR FED. COM. No. 1 LOCATED 1190' FROM THE NORTH AND 2180' FROM THE WEST LINE OF SECTION 20, TOWNSHIP 15 SOUTH, RANGE 29 EAST, N.M.P.M., CHAVES COUNTY, NEW MEXICO.

Survey Date: 01-29-2002 Sheet 1 of 1 Sheets



EXCALIBUR FEDERAL COM. #1

Located at 1190' FNL and 2180' FWL
 Section 20, Township 15 South, Range 29 East,
 N.M.P.M., Chaves County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

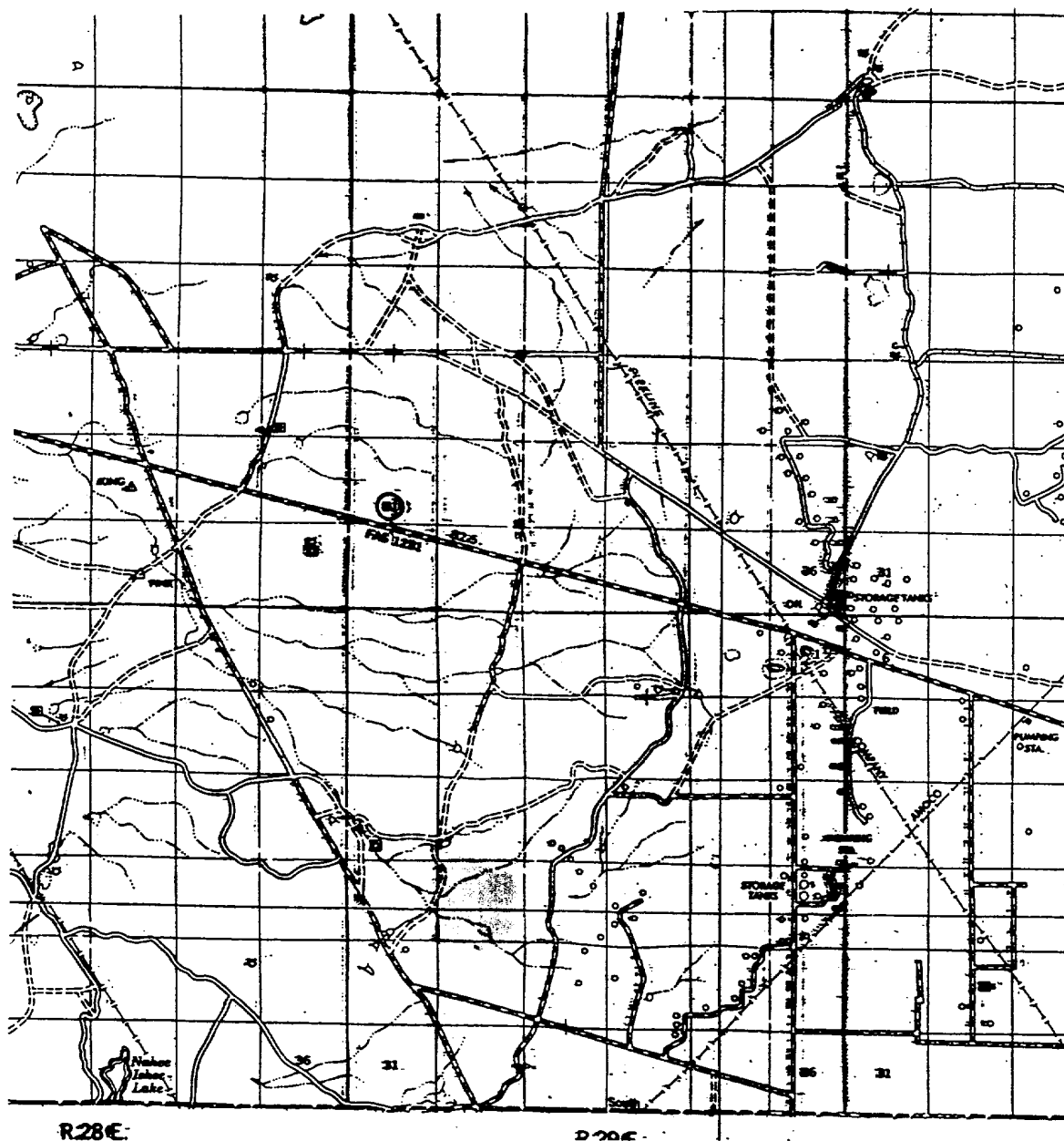
W.O. Number: 2273AA - KJG CD#5

Survey Date: 01-29-2002

Scale: 1" = 2000'

Date: 01-30-2002

DOMINION
E&P, INC.



EXCALIBUR FEDERAL COM. #1
 Located at 1190' FNL and 2180' FWL
 Section 20, Township 15 South, Range 29 East,
 N.M.P.M., Chaves County, New Mexico.

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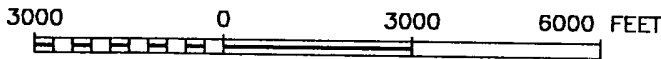
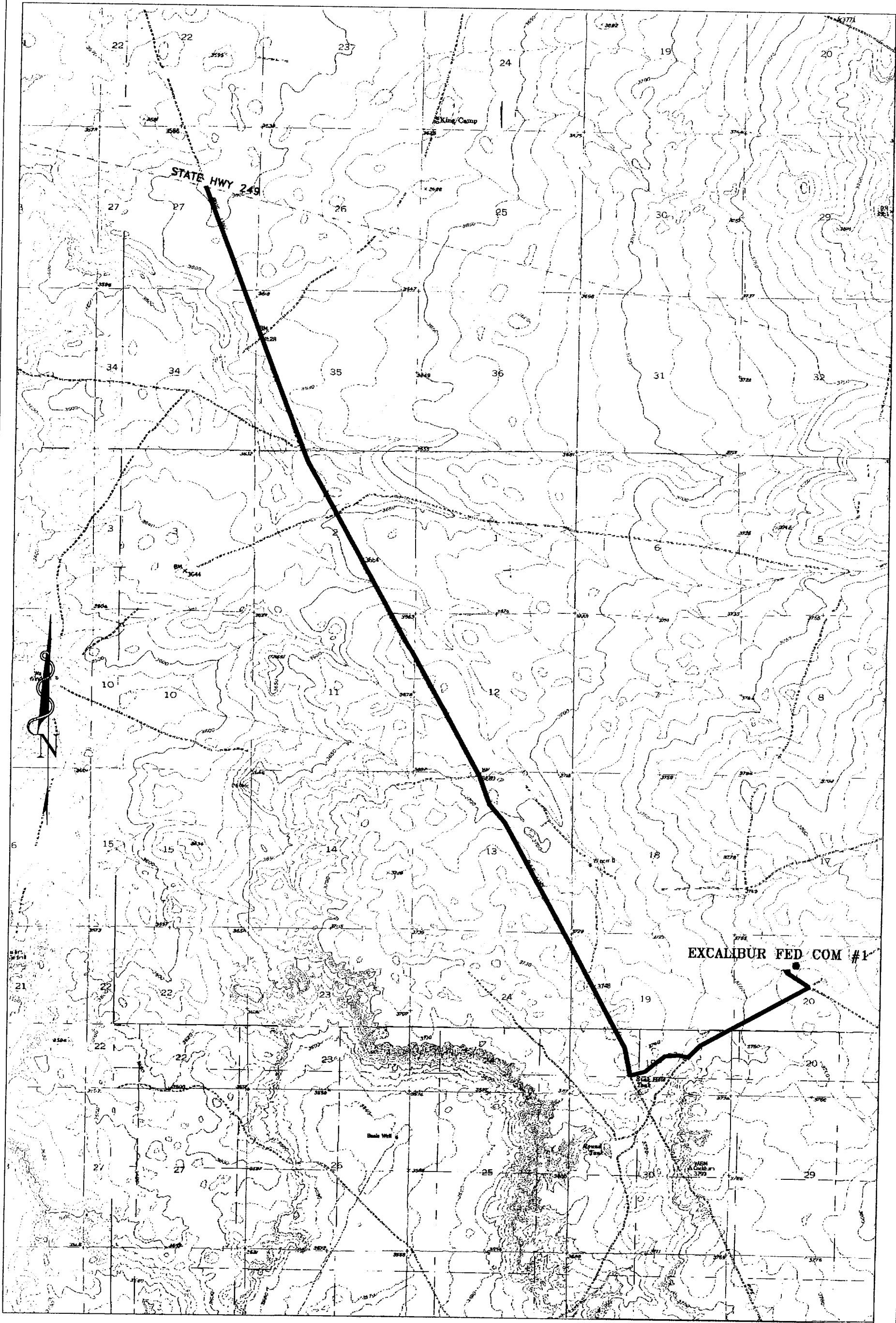
Survey Date: 01-29-2002

Scale: 1" = 2 MILES

Date: 01-30-2002

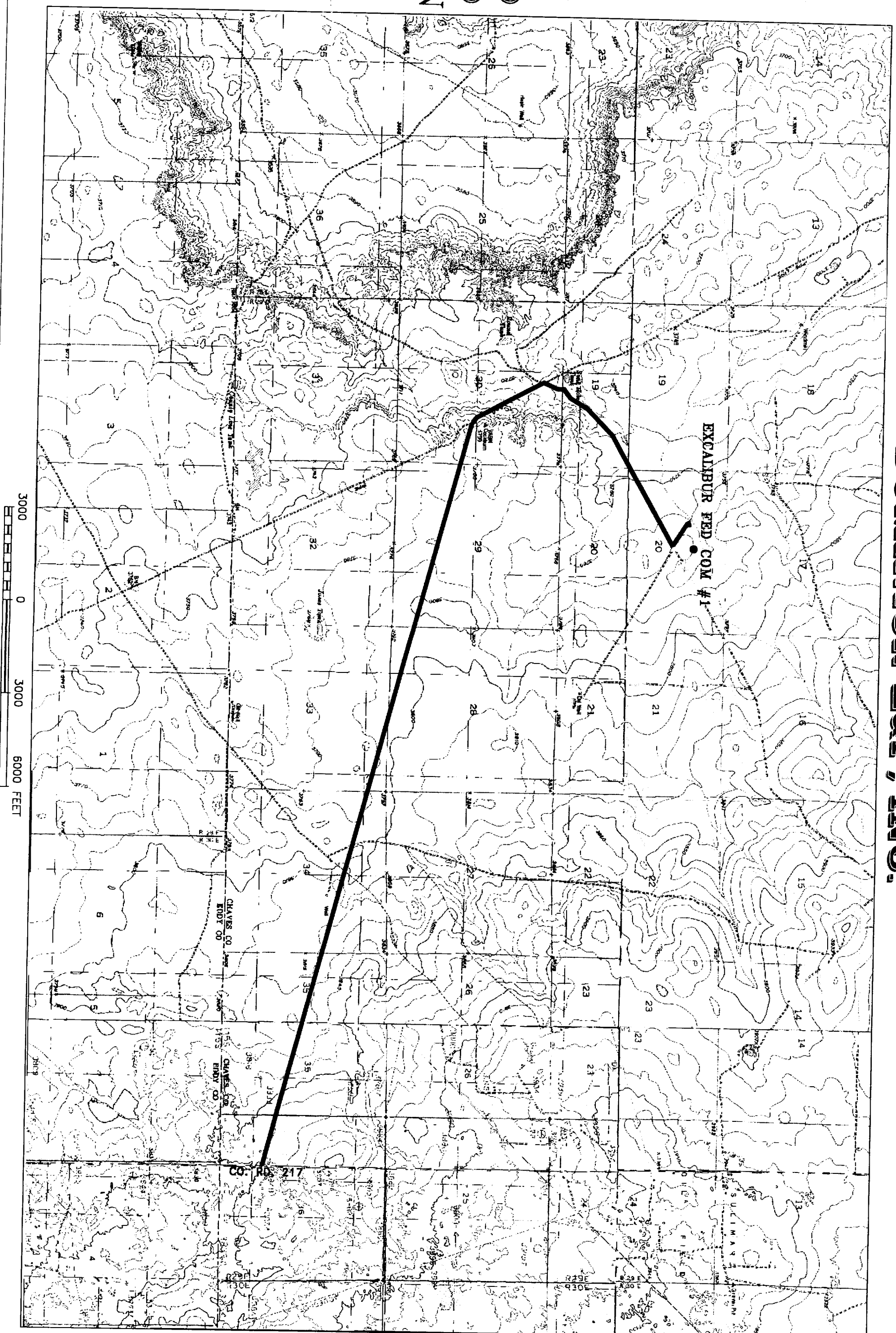
DOMINION
E&P, INC.

DOMINION E&P, INC.



DOMINION E&P, INC.

EXCALBUR PED COM #1



MULTI-POINT SURFACE USE AND OPERATIONS PLAN

DOMINION OKLAHOMA TEXAS EXPLORATION & PRODUCTION, INC.,
EXCALIBUR FEDERAL COM WELL NO. 1
CHAVES COUNTY, NEW MEXICO
LEASE NO. NM 11467

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to identify the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal may be made of the environmental effects associated with the operation.

The well, and work area have been staked by a registered New Mexico land surveyor. Geo-Marine Inc. has been engaged to make an Archaeological survey of the work area. A copy is attached for your reference (Exhibit "A").

1. Existing Roads

A copy of Map Reference U.S.G.S. 7.5' Series; King Camp, NM (1951, Photo inspected 1975), quadrangle map is attached showing the proposed location. The well location is spotted on this map, which also shows the existing road system (Exhibit B).

Directions to location:

From the junction of US hwy 285 and State Hwy 249 in Hagerman, go East on Hwy 249 for approximately 13 miles to a lease road; thence Southerly on lease road for approximately 6.2 miles; thence Easterly on lease road approximately 1.4 miles to a proposed lease road.

2. Planned Access Road

1. New access road to begin at the existing lease road, see attached Exhibit B.
2. Surfacing material: Caliche
3. Maximum Grade: N/A
4. Turnouts: Every 2,000'
5. Drainage Design: N/A
6. Culverts: N/A
7. Cuts and Fills: N/A

8. Gates and Cattle Guards: N/A
3. Existing wells within one mile radius of the proposed well are shown on (Exhibit C).
4. Location of Existing and/or Proposed Facilities
 1. If the well is productive, production facilities will be constructed on the well pad. The facility will consist of a separator, two 210 bbl oil tank and one 210 bbl fiberglass water tank. All permanent above ground facilities will be painted in accordance with the BLM's painting guidelines.
 2. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to and a site security plan will be submitted for the Excalibur Federal Com #1 tank battery. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
5. Location and Type of Water Supply

Fresh water and brine water will be used to drill this well. It will be purchased from a local source and transported to the well site.
6. Source of Construction Materials

Caliche will be hauled in from area caliche pits.
7. Method of Handling Waste Disposal
 1. Drill Cuttings will be disposed of in drilling pits.
 2. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
 3. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
 4. Current laws and regulations pertaining to the disposal of human waste will be complied with.
 5. Trash, waste paper, garbage and junk will be collected in steel trash bins and removed after drilling and completion operations are completed. All waste material will be contained to prevent scattering by the wind.

6. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations.
8. Ancillary Facilities
 1. None needed.
9. Wellsite Layout
 1. The location and dimensions of the well pad, mud pits, reserve pit and location of major rig components are shown on the well site layout sketch (Exhibit "D").
 2. Leveling of the well site will be required with minimal cuts or fills anticipated.
 3. The reserve pit will be plastic lined.
 4. The pad and pit area have been staked and flagged.
10. Plans for Restoration of the Surface
 1. After completion of drilling and/or completion operations, all equipment and other materials not needed for operations will be removed.
 2. Pits will be filled and location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible. Any plastic material used to line the pits or sumps will be cut off below ground level as far as possible and disposed of before the pits are covered. All unattended pits containing liquid will be fenced and the liquid portion allowed to evaporate before the pits are broken and backfilled.
 3. After abandonment of the well, surface restoration will be in accordance with the BLM. This will be accomplished as expeditiously as possible. Barring unforeseen problems, all pits will be filled and leveled within 90 days after abandonment.
11. Surface Ownership
 1. The well site is on BLM surface.

12. Other information

1. Topography: Generally flat, a small intermittent drainage crosses the location northeast to southwest.
2. Soil: Gravelly fine sandy loam that is very shallow over caliche.
3. Flora and Fauna: Vegetation cover is little-leaf horsebush, mesquite, creosote, snakeweed, grasses.
4. Ponds and streams: There are no rivers, streams, lakes or ponds in the area.
5. Residences and Other Structures: None
6. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Geo-Marine Inc. has completed an archaeological report of the work area, see attached exhibit "A".
7. Land Use: Grazing
8. The well site, if a producer, will be maintained and kept clean of all trash and litter, which detracts from the surrounding environment. Equipment will be maintained in accordance with good operating practice.
9. After the wellsite is cleaned and pits and sumps backfilled, any obstruction to the natural drainage will be corrected by ditching or terracing. All disturbed areas, including any access road no longer needed, will be ripped. Those areas will be reseeded with native grasses as described by BLM.

13. Operator's Representatives and Certification

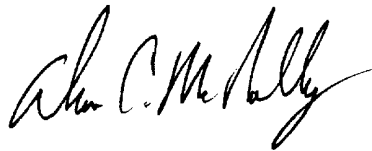
The field representative responsible for assuring compliance with the approved surface use and operations plan are as follows:

Gene Simer
District Operations Manager
309 S. Halagueno Street
Carlsbad, NM 88220
Office: (505) 885-1313
Mobile: (505) 390-3722

Alan McNally
District Engineering Manager
14000 Quail Springs Parkway, Suite 600
Oklahoma City, OK 73134
Office: (405) 749-5277
Mobile: (405) 590-2449

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; that the work associated with the operations proposed herein will be performed by Dominion Oklahoma Texas Exploration & Production, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

January 4, 2002
Date



Alan C. McNally
District Engineering Manager
Dominion Oklahoma Texas
Exploration & Production, Inc.

**TITLE PAGE/ABSTRACT/
NEGATIVE SITE REPORT
CFO/RFO**

1/95

1. BLM Report No.	2. (ACCEPTED) (REJECTED)	3. NMCRIS No. 77082
4. Title of Report (Project Title) Class III Archaeological Survey of DOMINION EXPLORATION & PRODUCTION, INC.'s Proposed Excalibur Federal Com. #1 Well Pad and Access Road in Section 20, T15S, R29E, Chaves County, NM		5. Project Date(s) 12/14/01 to _____ 6. Report Date 12/17/01
7. Consultant Name & Address: Direct Charge: Mark C. Slaughter Name: Geo-Marine Inc. Address: 150-A N. Festival Drive, El Paso, TX 79912 Authors Name: R.C. Medlock Field Personnel Names: R.C. Medlock Phone: (915)585-0168		8. Permit No. 103-2920-01-P 9. Consultant Report No. 525EP
10. Sponsor Name and Address: Indiv. Responsible: Mr. Gene Simer Name: DOMINION EXPLORATION & PRODUCTION, INC. Address: 309 S. Halagueno St. Carlsbad, NM 88220 Phone: (505)885-1313		11. For BLM Use Only. 12. ACREAGE: Total No. of acres surveyed: <u>3.87</u> SURFACE OWNERSHIP: Federal: <u>3.87</u> State: _____, Private: _____
13. Location: (Maps Attached if Negative Survey) <ul style="list-style-type: none"> a. State: New Mexico b. County: Chaves c. BLM Office Roswell d. Nearest City or Town: Hagerman e. Legal Location: T <u>15S</u> R <u>29E</u> Sec. <u>24</u>: NE 1/4 NW 1/4 Well Footages: 990 FNL, 1980 FWL f. USGS 7.5 Map Name(s) and Code Number(s): King Camp, NM (1951, Photoinspected 1975) 33104-A1 g. Area: Block: surveyed: 3.67 acres Impact: Within staked area Linear: Surveyed: 85' x 100' Impact: 85' x 50' 		

14. a. Records Search; ARMS: Date(s): 12/10/01 Name(s): R.C. Medlock
BLM Office: Date(s): 12/13/01 Name(s): R.C. Medlock
List Sites within .25 miles of Project: None
Show sites within 500' on Project Map

b. Description of Undertaking:

Construction of a well pad and access road. The access road begins at an existing lease road.

c. Environmental Setting (NRCS soil designation; vegetative community; etc.):

NRCS: Tencee-Simona-Sotim association: Gravelly fine sandy loam that is very shallow over caliche.

Topography: Generally flat, a small intermittent drainage crosses the location northeast to southwest.

Vegetation: Little-leaf horsebush, mesquite, creosote, snakeweed, grasses.

Visibility: 70% due to locally dense patches of grass.

Elevation: 3760-3770

d. Field Methods:

Parallel transects 15 meters apart

Crew size: 1

Time in field: 1.5 hrs

15. Cultural Resource Findings:

a. Identification and description

One isolated manifestation was found.

I.M. 1: T15S, R29E, Sec. 20: SE 1/4 NE 1/4 NW 1/4 588566E, 3652102N

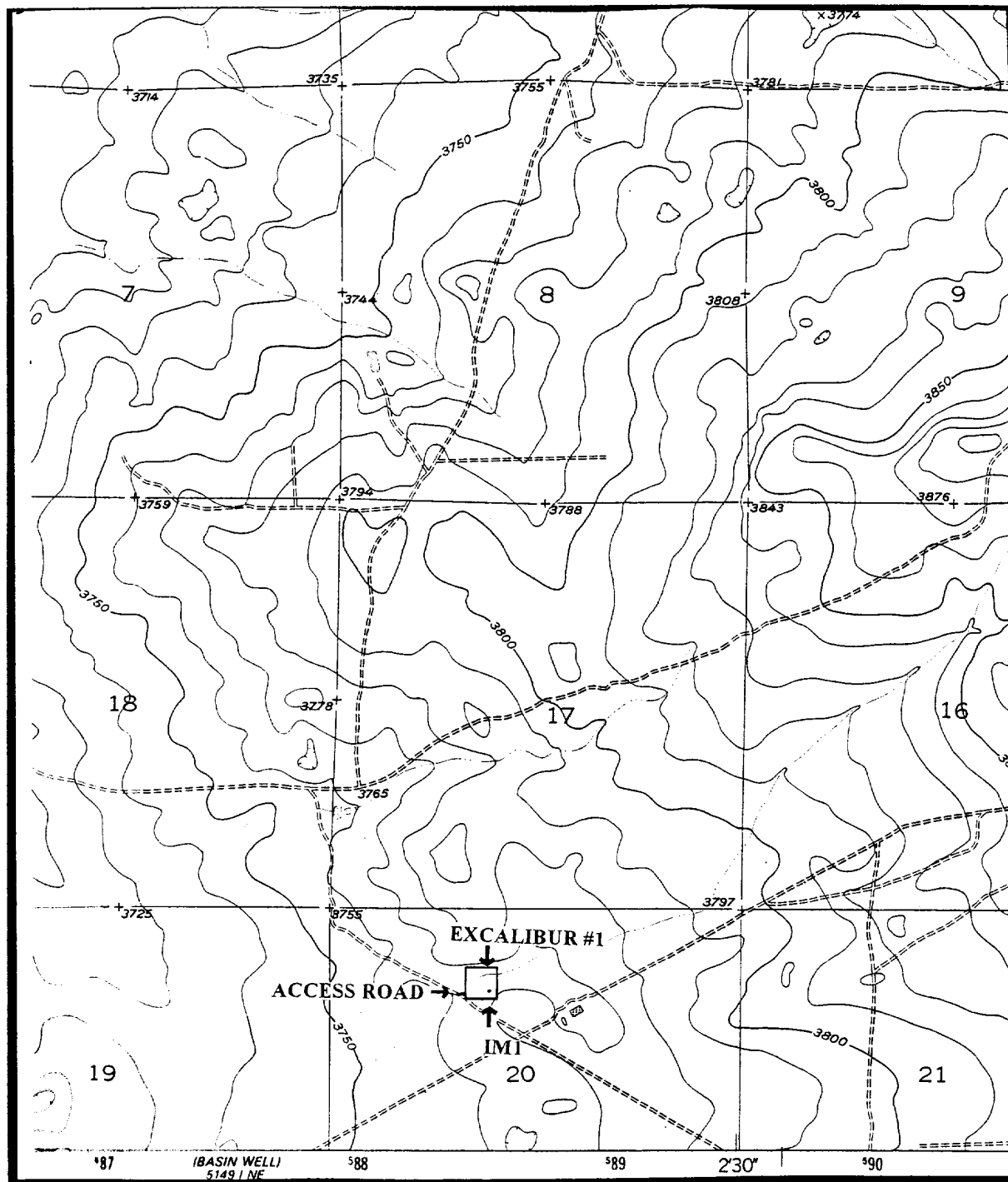
Complete flake of gray quartzite, 0% cortex, single-facet platform, 31mm.

16. Management Summary (Recommendations):

Archaeological clearance is recommended. A BLM archaeologist should be notified immediately if any cultural resources are encountered at any time.

I certify that the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist RC Medlock 12/18/01
Signature Date



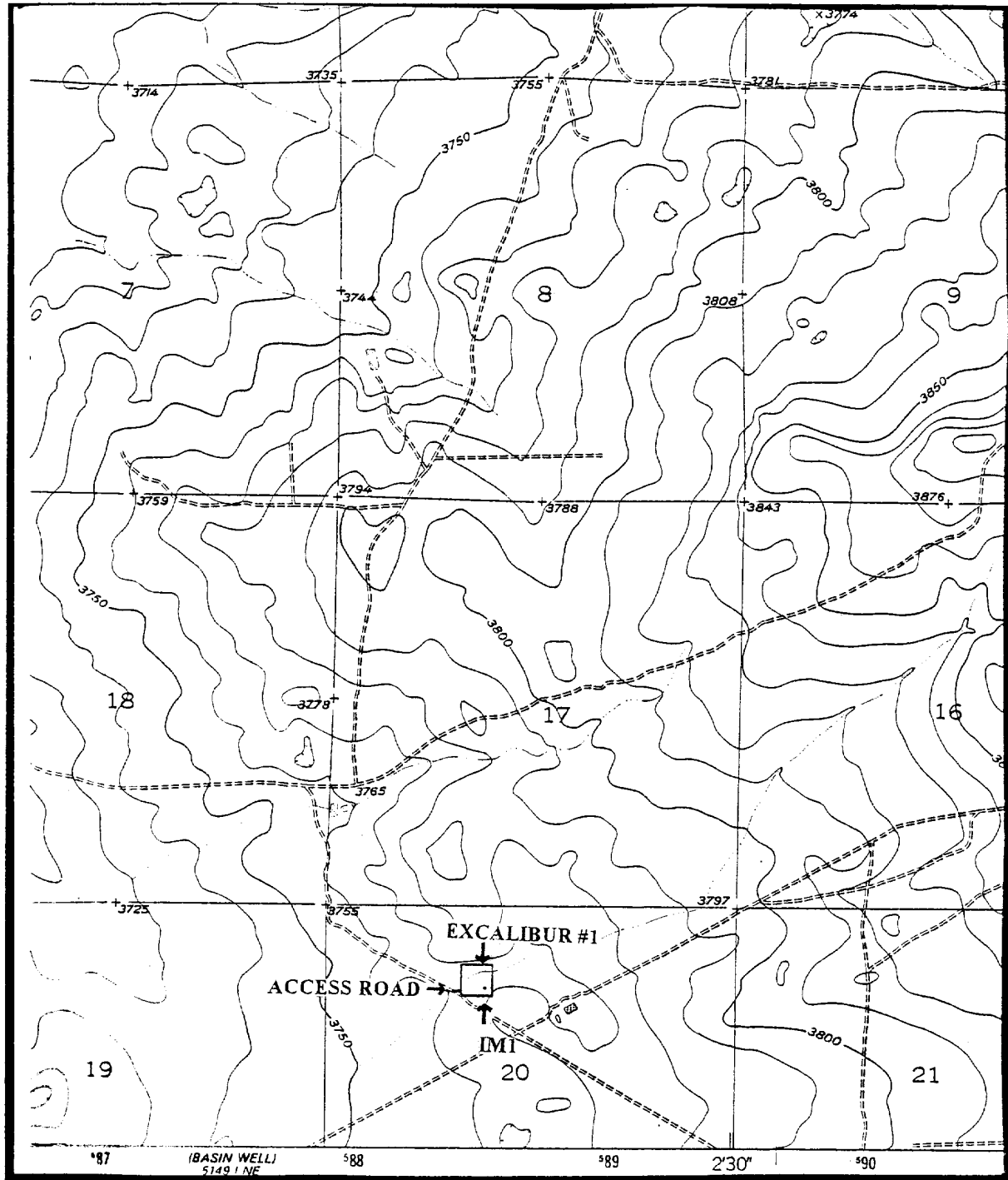


Figure 1. Location of DOMINION E&P, INC.'s Proposed Excalibur Federal Com. #1 Well Pad and Access Road in Section 20, T15S, R29E, NMPM, Chaves County, NM. Map Reference: U.S.G.S 7.5' King Camp, NM (1951, Photoinspected 1975).



4/20/99

Patterson Drilling Company

Rig #75

7,000' - 15,000'

DRAWWORKS

Brewster N-75A, 1000 HP
 Brake: Parmac Model 342 Hydromatic
 1 1/2" Drilling Line - Crown-3-made

ENGINES

Two 3412 Caterpillar engines, w/Torque
 Converter, 450 HP each

DERRICK

Pyramid, 137', 571,000 lb rated capacity

SUBSTRUCTURE

Pyramid, 21' high, 500,000 lb rated capacity
 KB - 23', Rotary Clearance 17.2

MUD PUMPS

Pump #1: Nat 9-P-100, 1000 HP w/Cat 339
 Pump #2: Nat 9-P-100, 1000 HP w/Cat 339

DRILL STRING

12,000' 4-1/2" Drill Pipe
 Other sizes of drill pipe and drill collars are
 available

BLOWOUT PREVENTERS

3000# - 5000# working pressure as required

MUD SYSTEM

Two steel pits, 1000 bbl volume, 4 electric mud
 agitators, two 5' x 8' centrifugal pumps powered
 by two electric motors w/ 75/HP, Ingersoll 2-cone
 desander, Brandt Linear Flow-line cleaner & 700
 bbl Pre-mix system if needed

MUD HOUSE

10 x 40 Storage

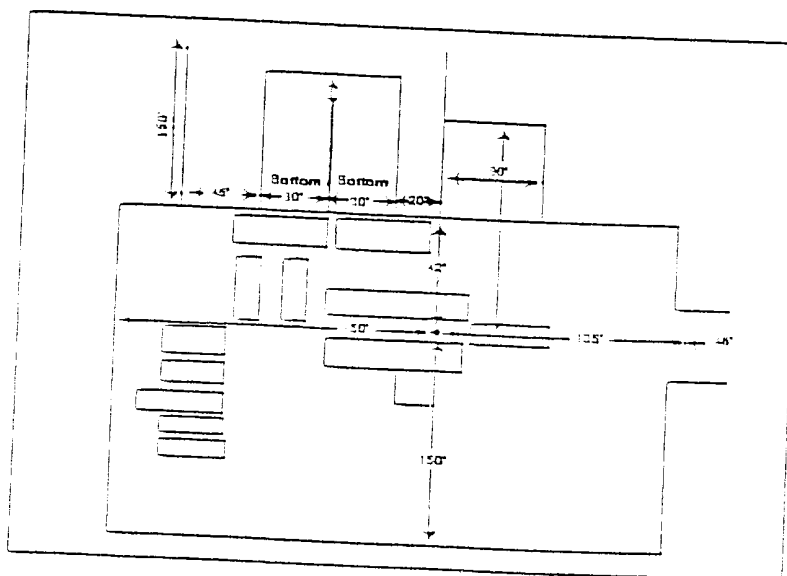
COMMUNICATIONS

24 hour direct cellular telephone

OTHER EQUIPMENT

Blocks: Gardner Denver 300 Ton
 Hook: Unitized
 Swivel: Emsco LB 300
 Rotary Table: National 27 1/2"
 Shale Shaker: Brandt Linear Flow-line Cleaner
 Electrical Power: Two 320-kw w/3406
 Fresh Water Storage: Two 500 bbl tanks
 Housing:
 Kelly: 5 1/4 Hex, 46' Long

"Hole Requirements will dictate actual Reserve Pit size (TOOLPUSHER SHOULD BE CONSULTED)"



Rig 75

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Operator name: Dominion Oklahoma Texas Exploration & Production, Inc.
Street or Box: 14000 Quail Springs Parkway, Suite 600
City, State: Oklahoma City, OK
Zip: 73134

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: NM-11467
Legal Description of Land: UL C, Sec. 20-15S-29E, Chaves County, NM
Formation(s) (if applicable): Chaves (Morrow)
Bond Coverage: Nationwide
BLM Bond File No.: CO-1050

Authorized Signature:



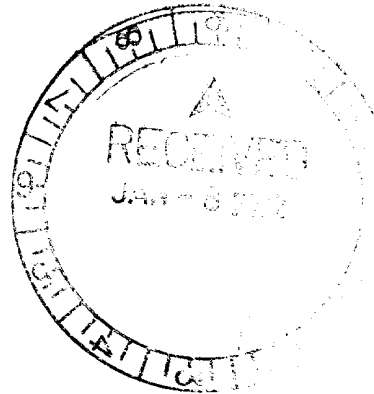
Title: Regulatory Technician

Date: January 4, 2002



January 7, 2002

United States Department of the Interior
Bureau of Land Management
Roswell District Office
2909 West Second Street
Roswell, New Mexico 88201



Re: Application for Permit to Drill
Dominion Oklahoma Texas Exploration & Production, Inc.
Excalibur Federal Com Well No. 1
Chaves County, New Mexico
Federal Lease NM - 11467

Gentlemen:

Dominion Oklahoma Texas Exploration & Production, Inc. respectfully requests permission to drill our Excalibur Federal Com Well No. 1 Well located 990' FNL and 1980' FWL of Section 20-T15S-R29E, Chaves County, New Mexico, Federal Lease NM-11467. The proposed well will be drilled to a TVD of approximately 10,300'. The location and work area have been staked approximately 12 miles Northwest of Loco Hills, New Mexico.

In accordance with requirements stipulated in Federal Onshore Oil and Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

1. Application for Permit to Drill:
 1. Form 3160.3, Application for Permit to Drill
 2. Form C-102 Location and Acreage Dedication Plat certified by Gary L. Jones, Registered Land Surveyor No. 7977 in the State of New Mexico, dated December 3, 2001.
 3. The elevation of the unprepared ground is 3766' feet above sea level.
 4. The geologic name of the surface formation is Rustler.
 5. Rotary drilling equipment will be utilized to drill the well to TD 10,300' (TVD), and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.
 6. Proposed total depth is 10,300' TVD.

7. Estimated tops of important geologic markers:

Tubb Sand	5,100 TVD
Abo Shale	5,900 TVD
Atoka Clastics	9,550 TVD
Lower Atoka	9,850 TVD
Morrow Clastics	9,900 TVD
Chester	10,100 TVD

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Primary Objective: Morrow 9,900' TVD

9. The proposed casing program is as follows:

Surface: 13 3/8" 48# H-40 ST&C new casing set from 0-400'

Intermediate: 8 5/8" 24# & 32# J55 LT&C new casing set from 0-2,000'.

Production: 5 1/2" 17# N80 new casing set from 0-10,300' TVD.

10. Casing setting depth and cementing program:

1. 13 3/8" surface casing set at 400' in 17 1/2" hole. Circulate cement to surface with 250 sks 35/65/6% gel + 2% CaCl₂ mixed at 12.4 ppg, Yield – 2.0 cf/sk and 180 sk Class C + 2% CaCl₂ mixed @ 14.8 ppg, Yield – 1.32 cf/sk.
2. 8 5/8" 24# & 32# J-55 casing set at 2,000' in 11" hole. A fluid caliper will be ran to determine exact cement volume required. Cement will be circulated to surface with 600 sks 35/65/6% gel + 5% salt mixed at 12.4 ppg, yield – 2.15 cf/sk and 220 sks Class C + 1% CaCl₂ mixed at 14.8 ppg, yield – 1.32 cf/sk.
3. 5 1/2" 17# dual grade N80 casing set at 10,300' TVD. Hole will be logged to determine exact cement volume to bring TOC to 7,000'.

Cement with: 500 sks TXI + 4% D800 + .4% D167 + 2% D65 +.2% D46 mixed @ 13.0 ppg, yield – 1.47 cf/sk.

11. Pressure Control Equipment

0'– 400'	None
400'–2000'	<p>11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular type preventer. A choke manifold and accumulator with floor and remote operating stations and auxiliary power system.</p> <p>A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.</p>
2,000'–10,300'	<p>After setting the 8 5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 5000 psi. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller=s Log. The BOP=s will be maintained ready for use until drilling operations are completed.</p> <p>BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.</p> <p>Accumulatory shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.</p>

12. Mud Program:

0' - 400'	Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt. 8.7 - 9.2 ppg, vis 32 - 34 sec.
400' - 2000'	Brine H2O. Sweep as necessary, weight 9.2 – 10.0.
2,000'–10,300'	Fresh Water/mud, weight 8.4 – 11.0. Sweep as necessary. Control fluid loss on top of Strawn.

13. Testing, Logging and Coring Program:
 1. Testing program: DST=s are possible
 2. Electric logging program: CNL/LDT/CAL/GR, DLL/CAL/GR.
 3. Coring program: Possible sidewall rotary cores.
14. Anticipated starting date is February 15, 2002. It should take approximately 30 days to drill the well and another 15 days to complete.

The Multi-Point Surface Use & Operation Plan is attached. If you need additional information to evaluate this application, please call me at (405) 749-5263.

Sincerely,

LOUIS DREYFUS NATURAL GAS CORP.

A handwritten signature in cursive script that reads "Carla Christian".

Carla Christian
Regulatory Technician