Form 3160-3 (December 1990)

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUBMIT IN TR.

reverse side)

N. M. Oil Cons. Division

	LA				S.LEAS	se designation and seke	AL NU.		
ΔP	PLICATIO	N FOR PERM	MIT TO DRILL OR D	EEPEN		NM0405444 Dian, allottee or tribe	MARE		
la TYPE OF WORK:	DRILL	Ø	DEEPEN			N/A			
	5111211					AGREEMENT NAME			
b. TYPE OF WELL:	GAS WELL	Osh	SINGLE ZONE	MULTIPLE	N/A				
2 NAME OF OPERAT	لسينا	Other		ZONE	8.FAR	M OR LEASE NAME, WELL N	0.010		
2 NAME OF OPERAT		ERGY CORPO	RATION (NEVADA)	6137		"23B" Federal #30	27/00		
3. ADDRESS AND TE				W17-1	i	WELL NO.	C		
			1500, OKC, OK 73102 (30-01	5-) L) LD AND POOL, OR WILDCA	>		
			cordance with any State requir		1	Dunes (Wolfcamp)			
At surface 660' F	NL & 1930' FEI	., Unit B, Section	1 23, T23S, R31E, Eddy Cou	inty, Nivi		.,T.,R.,M.,OR BLOCK AND SI	JRVEY OR AREA		
At top proposed prod.	zone (Same)		D_'	111-P-POT	ACU Unit I	В			
re top proposed prod.	zone (sume)		V-	TTT-1 -1 01	Section Section	on 23-T23S-R31E			
14.DISTANCE IN MILES AND	DIRECTION FROM	A NEAREST TOWN OR	POST OFFICE*		12. CO	UNTY OR PARISH	13. STATE		
35 miles WNW of Jal,	New Mexico				Eddy	County	New Mexico		
15.DISTANCE FROM PROPO	SED		16.NO. OF ACRES IN LEASE			17.NO. OF ACRES	ASSIGNED		
LOCATION TO NEAREST	T	660'	1320.00			TO THIS WELL			
PROPERTY OR LEASE L. (Also to nearest drig, unit line	e if any)					40.00			
18.DISTANCE FROM PROPO TO NEAREST WELL, DR		ED,	19.PROPOSED DEPTH			20.ROTARY OR CA	BLE TOOLS*		
OR APPLIED FOR, ON TI	HIS LEASE, FT.		12,000'		· · · · · · · · · · · · · · · · · · ·	Rotary			
21.ELEVATIONS (Show wheth						2. APPROX. DATE WORK WI	LL START*		
34k4	61	Circ.	5/2"	- 10	100 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	First quarter, 1999			
	· · ·	CIR.	3/L casin		SPIN JOH	n Jimitz			
SIZE OF HOLE	GRADE SI	ZE OF CASING	PROPOSED CASING AND WEIGHT PER FOOT		GRAM ING DEPTH	QUANTITY (OF CEMENT		
17 1/2"	H-40	13 3/8"	48#	WITHER	850'	500 sx Poz C + 200			
12.1/4"	J-55	9-5/8" 55/8"	40# 32H	WITHERS	4400'	1400 sx Poz C + 20			
7 7/8"	L-80	5 1/2"	17# & 20# 15,51	H	12,000 8570				
wellbore will be plug and attachments. Drilling Program Surface Use and Ope Exhibits #1 = Blowo Exhibits #2 = Locatio Exhibits #3 = Road M Exhibits #4 = Wells W Exhibits #5 = Producy Exhibit #6 = Rotary Exhibit #7 = Casing Archaeological Clean	erating Plan ut Prevention Ed n and Elevation Map and Topo M Vithin 1 Mile Ra etion Facilities P Rig Layout Design ance Report	quipment Plat fap dius OSED PROGRAM lly, give pertinent	The and reportion of the control of	undersigned accepts restrictions concerning thereof, as described in Description: All of Coverage: National Bond #: CO-1104 ve data on present prand measured and tr	all applicable terms g operations condubted below 4 Section 23-T23S-Fride APPROVA GENERAL SPECIAL S roductive zone and the vertical depths.	are outlined in the following the Baston of the leased land of the leased land of the SUBJECT TO REQUIREMENT STIPULATIONS proposed new productive blowout preventer the subject to the lease of the leas	S AND ATTACHEE To group of any		
*(This space for Fede		fice use)							
Application approval does thereon. CONDITIONS OF API			t holds legal or equitable title to			ntitle the applicant to cond	uct operations		
APPROVED BY	HI G , SGD	M. J. CHÁV	TITLE	STATE DIRE	MOR	DATE 1 - 9 - 0	2		
			See instructions Or	n Reverse Side		ASSISTANCE	IN EYEAT		

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RECEIVED

FEB 17'99

Form 3160-5 (June 1990)

UNI DE TES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Jil Cu. 1s.
N.M. DIV-Distron APPROVED
1301 W. Grand Avanta No. 1004-0135

Do not use this form for proposals to drill o	AND REPORTS ON WELLS or to deepen or reentry to a different reservoir. OR PERMIT—" for such proposals	NM-0405444 6. If Indian, Allottee or Tribe Name
SUBMIT	IN TRIPLICATE	
1. Type of Well Soli Gas Other Well Other	7. If Unit or CA, Agreement Designation	
2. Name of Operator DEVON ENERGY PRODUCTION COMPA	8. Well Name and No. Todd 23 B Federal #30	
3. Address and Telephone No.		9. API Well No.
20 NORTH BROADWAY, SUITE 1500, OF	KLAHOMA CITY, OKLAHOMA 73102 (405) 235-3611	30-015-
4. Location of Well (Footage, Sec., T., R., M., or Survey l	Description)	— 10. Field and Pool, or Exploratory Area
660' FNL & 1930' FEL, Section 23-23S-31E	E, Unit "B"	Sand Dunes (Delaware) 11. County or Parish, State
		Eddy County, NM
CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REP	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	Change of Plans
Cubermant Percent	Recompletion	New Construction
Subsequent Report	☐ Plugging Back☐ Casing Repair	☐ Non-Routine Fracturing ☐ Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other Change depth	Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
Describe Proposed or Completed Operations (Clearly state all subsurface locations and measured and true vertical depths	pertinent details, and give pertinent dates, including estimated date of starting for all markers and zones pertinent to this work.)*	any proposed work. If well is directionally drilled, give
	Drill, Form 3160-3, a proposed depth of 1200	
.	Company, L.P. requests to amend the depth to Company, L.P. also request to change the casi	A STATE OF THE STA
0 – 4350° 8 5/8" 32# J55 LT&C – Cmt to	surface	
0 – 1200' 5 ½" 17# J55 LT&C		
1200' – 7400' 5 ½" 15.5# J55 LT&C		
7400' – 8750' 5 ½" 17# J55 LT&C		
	Class H. Stage collar @ 5,500°. Cmt stage 2 value be revised pending the caliper measurement for the base of the 8 5/8° csg.	
Please see the attached casing design for	or design conditions.	
14. I hereby certify that the foregoing is true and correct		
Kain I Ponting	Karen A. Cottom	
(This space for Pederal or State office use)	Title Engineering Technician	Date October 22, 2001
This space for rederation state office use;		
Approved by Conditions of approval, if any:	Title	Date

DISTRICT I P. O. Box 1980 Hobbs, NM 88241-1980

Energy, ner Tate of New Mexico and Natural Resources Depa: ent

EXHIDIT#

2 Form C-102 Revised 02-10-94

Instructions on back

DISTRICT In P. O. Drawer DD Artesia, NM 88211-0719

DISTRICT_III 1000 Rio Brazos Rd. Aztec, NM 87410

OIL CONSERVATION DIVISION P. O. Box 2088 Santa Fe, New Mexico 87504-2088

Submit to the Appropriate District Office State Lease — 4 capies Fee Lease — 3 capies

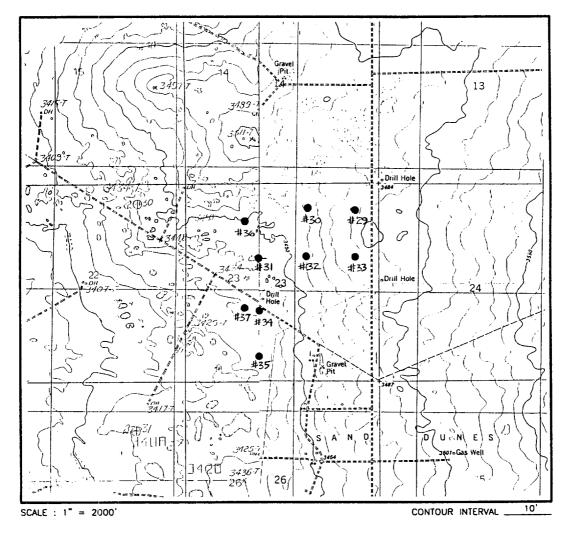
AMENDED REPORT

JOB #62797 / 47 SW / V.H.B.

DISTRICT IV

API Number			² Pool Code		3 Poo	l Name	-	ND DUNES	(WC	OLFCAMP)		
Property Cod	le	³ Property N	ame	TOD	D ,53	B*	FEDER	RAL			• Well Number	•
OGRID No. 613	7	Operator N		N ENE	RGY C	JRP0	RATIC	IN (NEV	ADA:)	* Elevation 3464	•
				" SUF	RFACE	LOC	ATION					
L or lot no.	Section 23	Township 23 SOUTH	Range 31 EAST, N		Lot Ida	1	rom the	North/South NORTH		Feet from the 1930'	East/West line EAST	County EDDY
		"BOTTO	M HOLE	LOCATI	ON IF	DIF	FERE	NT FROM	SU	JRFACE		
L or lot no.	Section	Township	Range		Lot Ida	Feet f	rom the	North/South	line	Peet from the	East/West line	County
Dedicated A	eres 13 Joi	int or Infill	14 Consolidatio	n Code	15 Order 1	No.				<u> </u>		
40	NO ALI	OWABLE WE	ELL BE ASSI	GNED T	THIS	COMP	LETION	UNTIL AI	L IN	TERESTS HA	VE BEEN	
										Y THE DIVIS		
			-							Printed Name Candace Title Enginee: April 8 SURVEYO I hereby a location she plotted from surveys many superv	R. Graham ring Tech. 1999 R CERTIFICATE Teertify that to the on this partield notes on the ond correct the ond correct belief.	ATION the weblat wolf actuary under
				 		+ 				Signature and Professional Sectificate No ROGER M. F		TI21

LOCATIC & LEVATION VERIFICATION MA.



 SECTION
 23
 TWP
 23-S
 RGE
 31-E

 SURVEY
 NEW MEXICO PRINCIPAL MERIDIAN

 COUNTY
 EDDY
 STATE
 NM

 OPERATOR
 DEVON ENERGY CORP. (NEVADA)

U.S.G.S. TOPOGRAPHIC MAP

LOS MEDANOS & BOOTLEG RIDGE

	NAME		LOCATION	ELEVATION	LAT.	LONG.
TODD	"23A" FE	D. #29	710' FNL & 660' FEL	3486'	N 32°17'42.8"	W 103'44'31.8"
TODD	"23B" FE	ED. #30	660' FNL & 1930' FEL	3464	N 32'17'43.3"	W 103'44'46.6"
TODD	"23F" FE	ED. #31	1980' FNL & 2030' FWL	3441	N 32°17'30.3"	W 103'45'02.0"
TODD	"23G" F	ED. #32	1930' FNL & 1980' FEL	3460'	N 32'17'30.8"	W 103'44'47.2"
TODD	"23H" F	ED. #33	1980' FNL & 660' FEL	3486'	N 32'17'30.2"	W 103°44'31.6"
TOOD	"23K" FI	ED. #34	1880' FSL & 2030' FWL	3440'	N 32"17'16.2"	W 103'45'02.0"
TODD	"23N" F	ED. #35	660' FSL & 2030' FWL	3429	N 32'17'04.2"	W 103'45'02.0"
TODD	"23C" FI	ED. #36	1000' FNL & 1650' FWL	3449'	N 32'17'40.0"	W 103'45'06.4"
TODD	"23K" FE	ED. #37	1980' FSL & 1650' FWL	3434	N 32'18'12.2"	W 103'45'06.4"

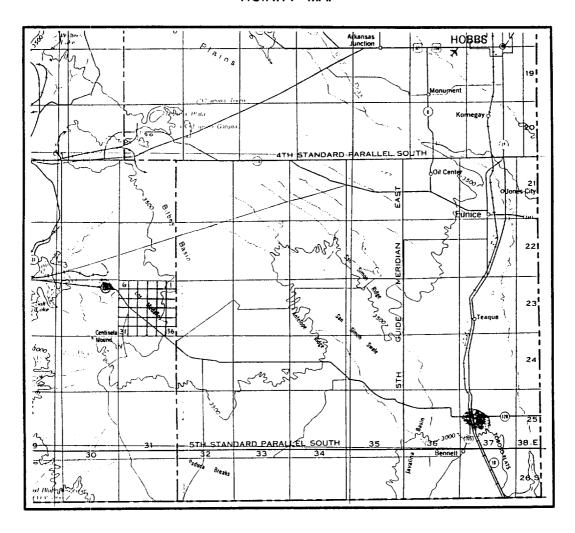
These locations have been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and natify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry

VICINITY MAP



SECTION 11, 1	3, 14, 15, 22 8	23 TWP 23-	S RGE 31-E
SURVEY	NEW MEXICO PE	RINCIPAL MERIDIA	N
COUNTY	EDDY	STATE	NM

OPERATOR _	DEVON	ENERG	Y COR	PORATIO	ON	
LEASE		TODO	& BARCI	,AY		
DISTANCE &	DIRECTIO	N FR	OM THE	JCT. OF	S.H. 12	8 &
	798, 34.0					
MILES ON	CO. RD.	798 TO	THE SO	UTHEAST	CORNER	OF
SECTION	23.					

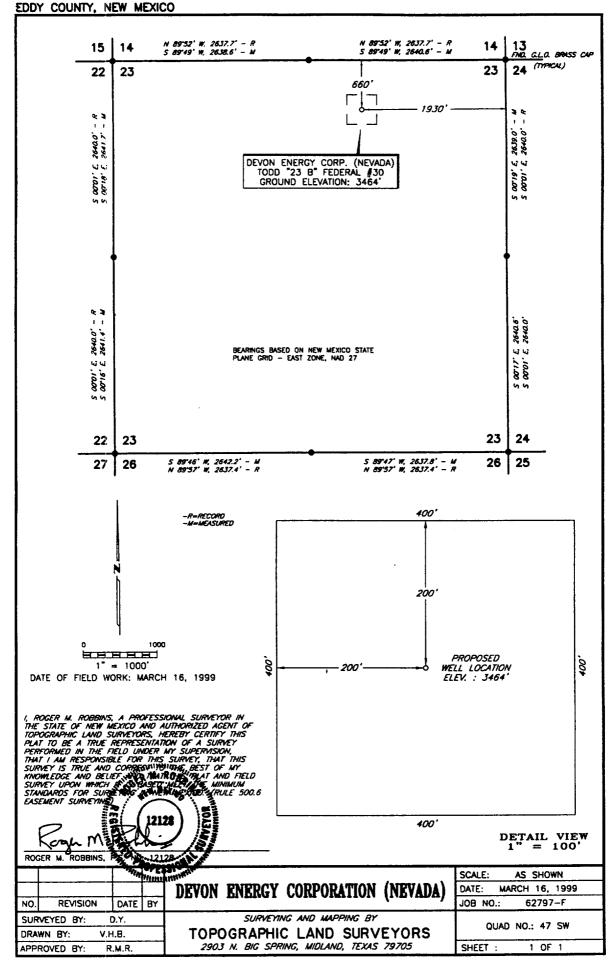


This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and natify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

Surveying & Mapping for the Oil & Gas Industry



DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation (Nevada)
TODD "23B" FEDERAL #30
660' FNL & 1930' FEL
Section 23-T23S-R31E, Unit B
Eddy County, New Mexico

1. Geologic Name of Surface Formation

Permian

2. Estimated Tops of Important Geologic Markers

Rustler	800'
Top of Salt	1100'
Base of Salt	3900'
Bell Canyon	4400'
Cherry Canyon	5600'
Brushy Canyon	7000'
Bone Spring Lime	8300'
Third Bone Spring	10700'
Wolfcamp	11600'
Total Depth	12000'

3. Estimated Depths of Possible Fresh Water-, Oil-, or Gas-Bearing Formations

Upper Permian Sands	above 800'	fresh water
Delaware (Bell Canyon)	4400'	oil
Delaware (Cherry Canyon)	6000'	oil
Delaware (Brushy Canyon)	8000'	oil
Third Bone Spring	10700°	oil
Wolfcarnp	11600'	oil

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 850' and circulating cement back to surface. The Potash and Salt intervals will be protected by setting 9 5/8" casing at 4400' and circulating cement to surface. The lower producing intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing.

4. <u>Casing Program</u>

Hole Size	<u>Interval</u>	Casing OD	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
30"	0-40'	20"		Conductor	0.30" wall
17 1/2"	0-850'	13 3/8"	48#	H-40	ST&C, new R-3
12 1/4"	0-4400'	9 5/8"	40#	J-55	ST&C, new R-3
7 7/8"	0'-TD (12,000'±)	5 1/2"	17# & 20#	L-80	LT&C, new R-3

Cementing Program

20" Conductor Casing	Cement with Ready-mix to surface.
13 3/8" Surface Casing	Cement to surface using 500 sx Poz (35% Poz, 65% Class C) with 6% Bentonite, 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes + 200 sx Class C with 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes.
9 5/8" Intermediate Casing	Cement to surface using 1400 sx Poz (35% Poz, 65% Class C) with 6% Bentonite, 3% NaCl ₂ and 1/4 lb/sx Cellophane flakes + 200 sx Class C with 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes.
5 1/2" Production Casing with DV tool at ±5500'	Cement 1 st stage with 250 sx Class H with 12lbs/sx BA-0, 2#/sx NaCl ₂ , 0.5% FL-52, 0.25% CD-32 and 1/4 lb/sx Cellophane flakes. Cement 2 nd stage with 420 sks Class C with 4% Bentonite, 6.5% NaCl ₂ and 1/4 lb/sx Cellophane flakes.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach 450'± above the 9 5/8" casing seat at 4400'.

5. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (2000 psi WP) preventer and a bag-type (Hydril) preventer (2000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOP's will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to 1200 psi before drilling

out the 13 3/8" casing shoe (70% of 48# H-40 casing). Prior to drilling out the 9 5/8" casing shoe, the BOP's and Hydril will be function tested as per BLM drilling Operations Order #2.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System

The well will be drilled to total depth using brine, cut brine and polymer mud systems. Depths of systems are as follows.

<u>Depth</u>	<u>Type</u>	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc/30 mins)
0-850'	Fresh water	8.8	34-36	No control
850-4400'	Brine water	10.0	28	No control
4400'-TD	Brine water polymer	r 10.0	32-36	10-20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment

- A. A kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- C. Hydrogen Sulfide detection equipment (Compliance Package) will be in operation from drilling out the 9 5/8" casing shoe until the 5 1/2" casing is cemented.

8. Logging, Testing and Coring Program

- A. Drill stem tests will be based on geological sample shows.
- B. The open hole wireline logging program will be as follows.

TD to intermediate casing: Induction / Gamma Ray / Neutron / Density Log.

TD to surface: Neutron with Gamma Ray.

- C. Rotary sidewall cores will be based on geological sample shows.
- D. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on geological sample shows, drill stem tests log evaluation and core analysis.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is approximately 175 degrees and maximum bottom hole pressure is approximately 3500 psig. No hydrogen sulfide gas has been reported or is known to exist at these depths in this area. No major lost circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations

A Cultural Resources Examination will be completed by Don Clifton Archaeological Consultant and submitted to the BLM. Road and location preparation will not be undertaken until approval has been received from the BLM. If approved, the anticipated spud date for the well will be in the first quarter, 1999. The drilling operation should require approximately 21 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.

SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3 Devon Energy Corporation (Nevada) TODD "23B" FEDERAL #30 660' FNL & 1930' FEL Section 23-T23S-R31E, Unit B Eddy County, New Mexico

1. Existing Roads

- A. This location will be staked by John West Surveying, Co. of Hobbs, New Mexico and the well site and elevation plat for the proposed TODD "23B" FEDERAL #30 will be submitted as Exhibit #2.
- B. All roads into the location are depicted in Exhibit #3. New construction from the County road will be used to access the location. New construction will conform to the specifications outlined in item 2 below.
- C. Directions to location: Travel west-northwest from Jal, NM approximately 35 miles on State Highway 128 to County Road 798, just into Eddy County from Lea County. Thence north approximately 4 miles on paved County Road 798 and turn west (right) to the Todd "23A" Federal #9. Travel approximately 0.1 mile to the existing Todd "23B" Federal #10 well pad and the proposed Todd "23B" Federal #30 location.

2. Proposed Access Road

Exhibit #3 shows the existing entry road to the proposed TODD "23B" FEDERAL #30 location. If necessary any additional road construction will be as follows.

- A. The maximum width of the road will be fifteen (15) feet.
- B. It will be crowned and made of six (6) inches of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- C. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location.
- D. The average grade will be approximately 1%.
- E. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

3. Location of Existing Wells

Exhibit #4 shows all existing & proposed wells within a one-mile radius of the proposed TODD "23B" FEDERAL #30.

4. <u>Location of Existing and/or Proposed Facilities</u>

- A. Devon Energy Corporation (Nevada) will build the tank battery on the Todd "23G" Federal #7 location in the SW NE of Section 23.
- B. In the event the TODD "23B" FEDERAL #30 is found productive, the production equipment will be as follows.
 - 1. Exhibit #5 shows the battery facility to be utilized by the TODD "23B" FEDERAL #30. This facility may be upgraded to include one or two additional 500 barrel tanks.
 - 2. The tank battery, all connections and all lines will adhere to API standards.
 - 3. The well will be operated by means of an electric prime mover. Power poles will be set along the access road right-of-way.
- C. If the well is productive, rehabilitation plans are as follows.
 - a) The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
 - b) Caliche from unused portions of the drill pad will be removed. The original top soil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply

The TODD "23B" FEDERAL #30 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in Exhibit #3. Additionally, produced salt water from lease gathering tanks may be utilized. No water well will be drilled on the location.

6. Source of Construction Materials

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit roughly 125' x 125' x 6', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids and saturation of the ground with brine water used to drill from 850' to 4400'.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks. Produced oil will be separated into steel stock tanks until sold.
- E. A portable chemical toilet will be available on the location for human waste during the drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste material will be

contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.

G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed as per BLM specifications. Only the portion of the drilling pad used by the production equipment (pumping unit and tank battery) will remain in use. If the well is deemed non-commercial, only a dry hole marker will remain.

8. Ancillary Facilities

No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.
- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface

A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.

- B. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location and road will be rehabilitated as recommended by the BLM.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- E. If the well is deemed commercially productive, the reserve pit will be restored as described in 10 (A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

The well site is owned by the Bureau of Land Management.

Road routes have been approved and the surface location will be restored as directed by the BLM.

12. Other Information

- A. The area surrounding the well site is grassland. The top soil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca and miscellaneous weeds.
- B. There is no permanent or live water in the general proximity of the location.
- C. A Cultural Resources Examination will be completed by Don Clifton Archaeological Consultant, and a copy forwarded to the BLM office in Carlsbad, New Mexico.

TODD "23B" FEDERAL #30 Surface Use and Operating Plan Page 6

13. Lessee's and Operator's Representative

The Devon Energy Corporation (Nevada) representatives responsible for ensuring compliance of the surface use plan are as follows.

Walter Frank
District Engineer

Daryl Lowder Superintendent

Date: 0/-29

DEVON ENERGY CORPORATION 20 North Broadway, Suite 1500 Oklahoma City, OK 73102-8260 DEVON ENERGY CORPORATION P. O. Box 250

(505) 748-3371 (office)

Artesia, NM 88211-0250

(405) 552-4595 (office) (405) 364-3504 (home)

(505) 746-9280 (home)

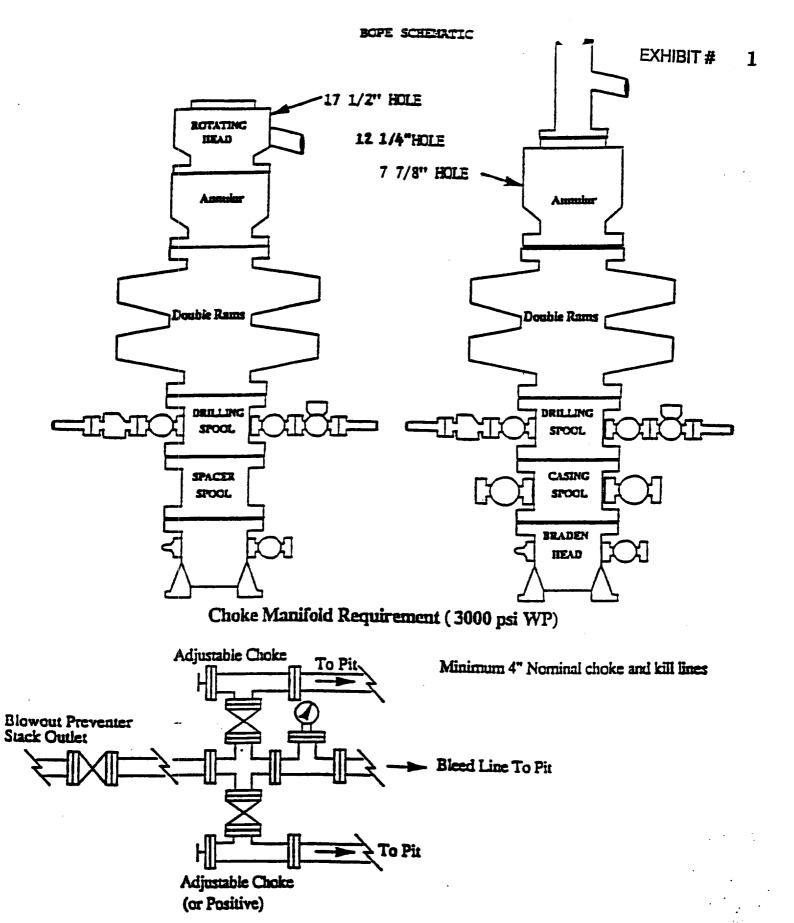
Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Devon Energy Corporation (Nevada) and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed:

Candace R. Graham

Engineering Technician



3 MWP

STACK REQUIREMENTS

No.	ilem		Min. I.D.	Min. Nominal
1	Flowline			
2	Fill up line			2"
3	Drilling nipple			
4	Annular preventer			
5	Two single or one dual hy operated rams	draulically		
6a	Drilling spool with 2" min 3" min choke line outlets	, kill line and		
6b	2" min. kill line and 3" mi outlets in ram. (Alternate	n, choke line to 6a above.)		
7	Valve	Gale 🗆 Plug 🗆	3-1/8"	
B	Gale valve—power opera	ted	3-1/8"	
9	Line to choke manifold			3-
10	Vaives	Gate C Plug C	2-1/16*	
11	Check valve		2-1/16*	
12	Casing head			
13	Valve	Gate □ Plug □	1-13/16"	
14	Pressure gauge with nee	die valve		
15	Kill line to rig mud pump			2"

<u></u>)D 2	
·.	ANNUL AR PREVENTER	•	
	BLIND RAMS		
(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	PIPE RAMS)
	SPOOL CASING HEAD		•
@	CASING	12	· O

CONFIGURATION

OPTIONAL					
16 Flanged valve		1-13/16"			

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- 3.BOP controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- 5.Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7.Plug type blowout preventer tester.
- Extra set pipe rams to fit drill pipe in use on location at all times.
- 9.Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- Bradenhead or casinghead and side valves.
- 2.Wear bushing, if required.

GENERAL NOTES:

- 1.Deviations from this drawing may be made only with the express permission of MEC's Drifting Manager.
- 2.All connections, vaives, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chore. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- 6. Choke lines must be sullably anchored.

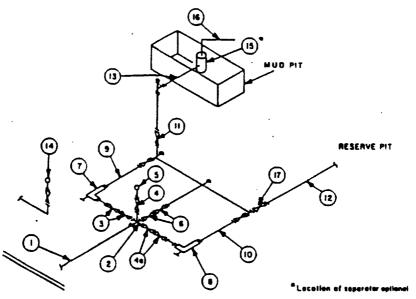
- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- 10.Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations.

MINIMUM CHOKE MANIFOLD 3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

EXHIBIT#

1 .



E١	r o	NO.	SUE	ST	RU	. 1	URE	į

			MINI	MUM REQL	JIREMENT:	S				
			10,000 MWP							
No.		I.D.	NOMINAL	RATING	1.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3.	3,000		3-	5,000		3.	10,000
2	Cross 3"x3"x3"x2"			3,000			5.000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate □ Plug □(2)	3-1/8*		3,000	3-1/8*		5,000	3-1/8"		10.000
4	Vaive Gale □ Plug □(2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16*		10,000
4a	Valves(1)	2-1/16"		3.000	2-1/15*		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate □ Plug □(2)	3-1/8*		3.000	3-1/6"		5,000	3-1/8"		10,000
7	Adjustable Choke(3)	2"		3,000	2"		5,000	2-	†	10,000
8	Adjustable Choke	1-		3,000	1.		5,000	2.		10,000
9	Line		3.	3,000		3-	5,000		3*	10,000
10	Line		5.	3,000		2-	5,000		3-	10,000
11	Valves Gate [] Plug [](2)	3-1/6"		3,000	3-1/8"		5,000	3-1/8"		10.000
12	Lines		3*	1,000		3-	1,000		3-	2,000
13	Lines		3.	1,000		3*	1,000	•	3*	2.000
14	Remote reading compound standpipe pressure gauge			3.000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4*	1,000		4-	1,000		4"	2,000
17	Valves Gate (2)	3-1/8"		3,000	3-1/8*		5,000	3-1/8"		10,000

- (1) Only one required in Class 3M.
- (2) Gate valves only shall be used for Class 10M.
- (3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

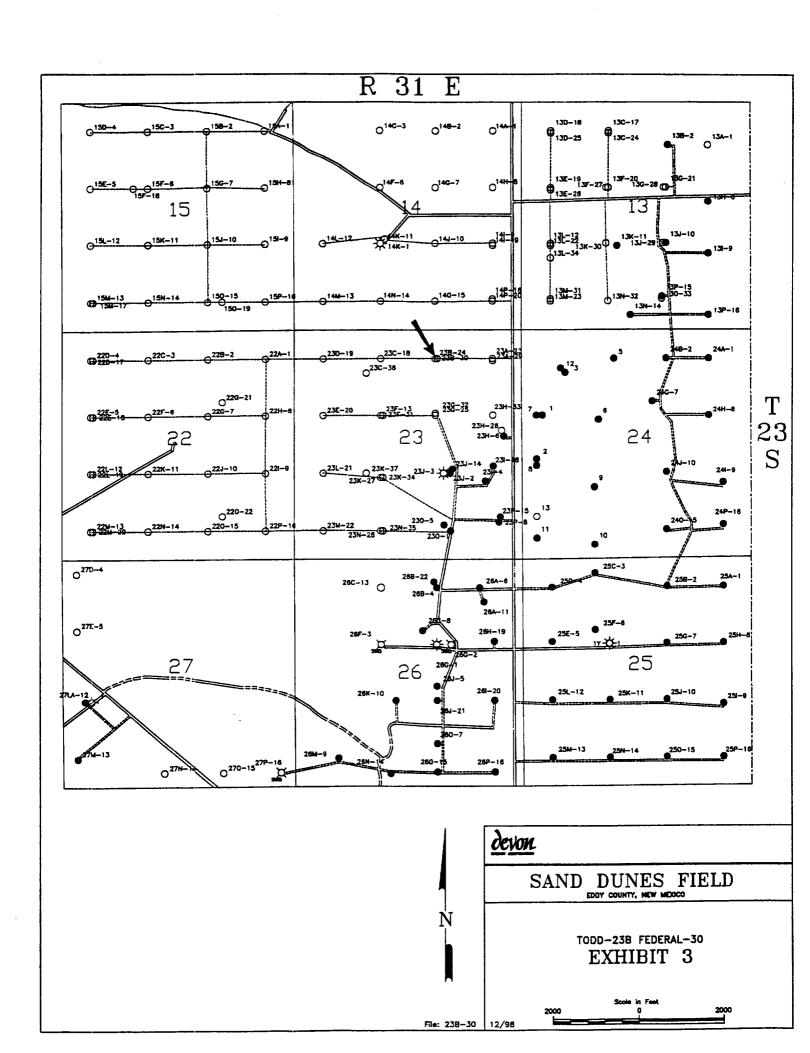
EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

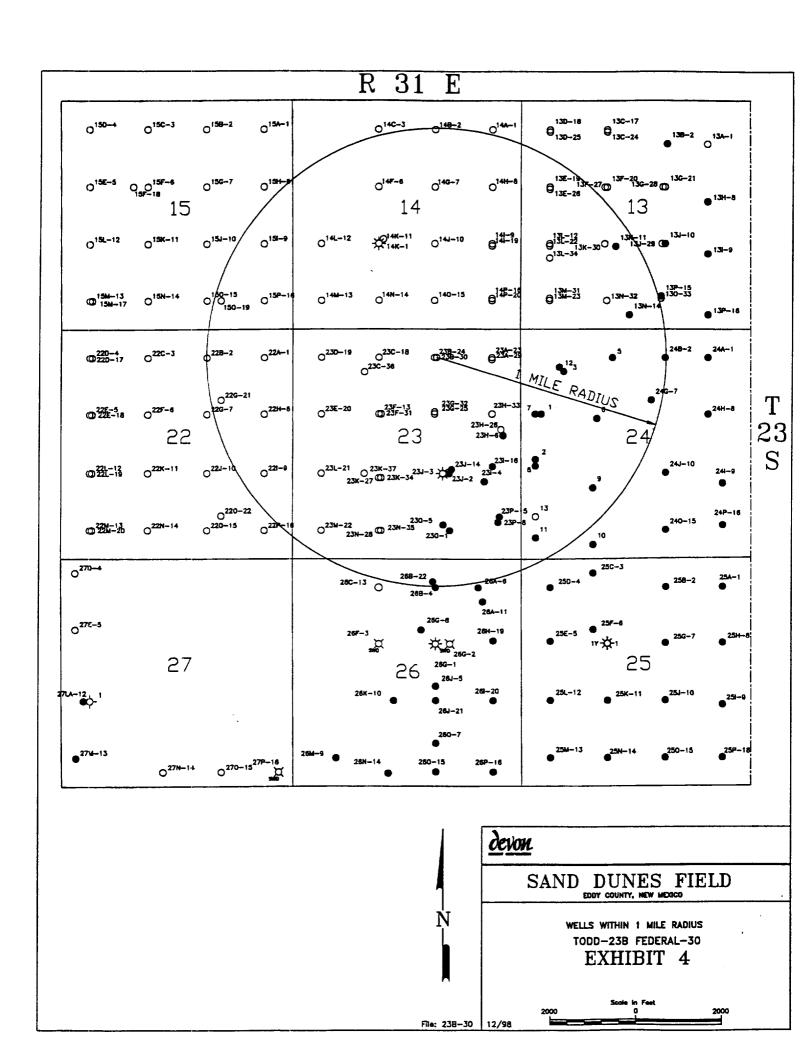
- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with lungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an afternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- 7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

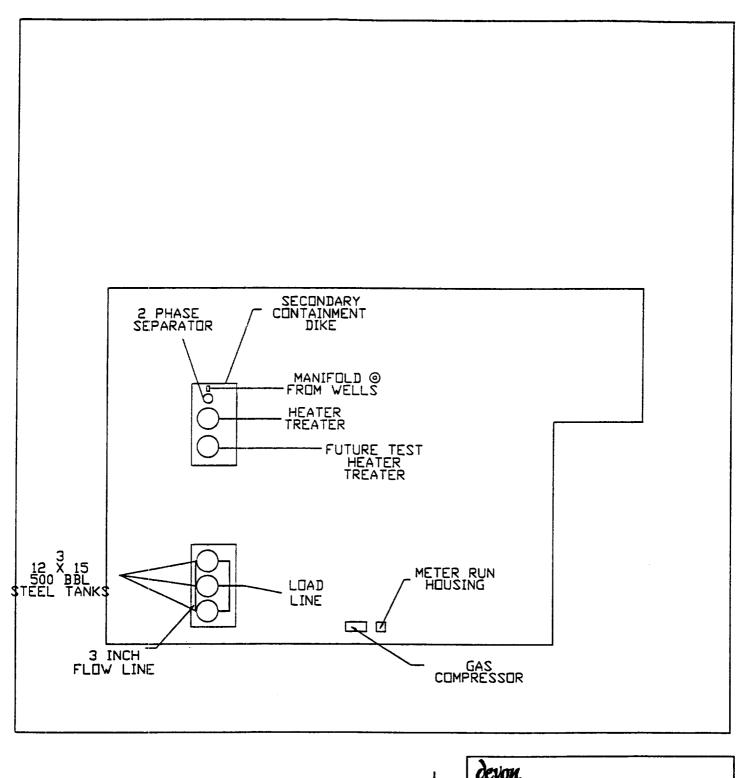
Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS

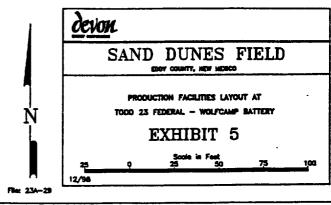
Devon Energy Corporation (Nevada)
TODD "23B" FEDERAL #30
660' FNL & 1930' FEL
Section 23-T23S-R31E, Unit B
Eddy County, New Mexico

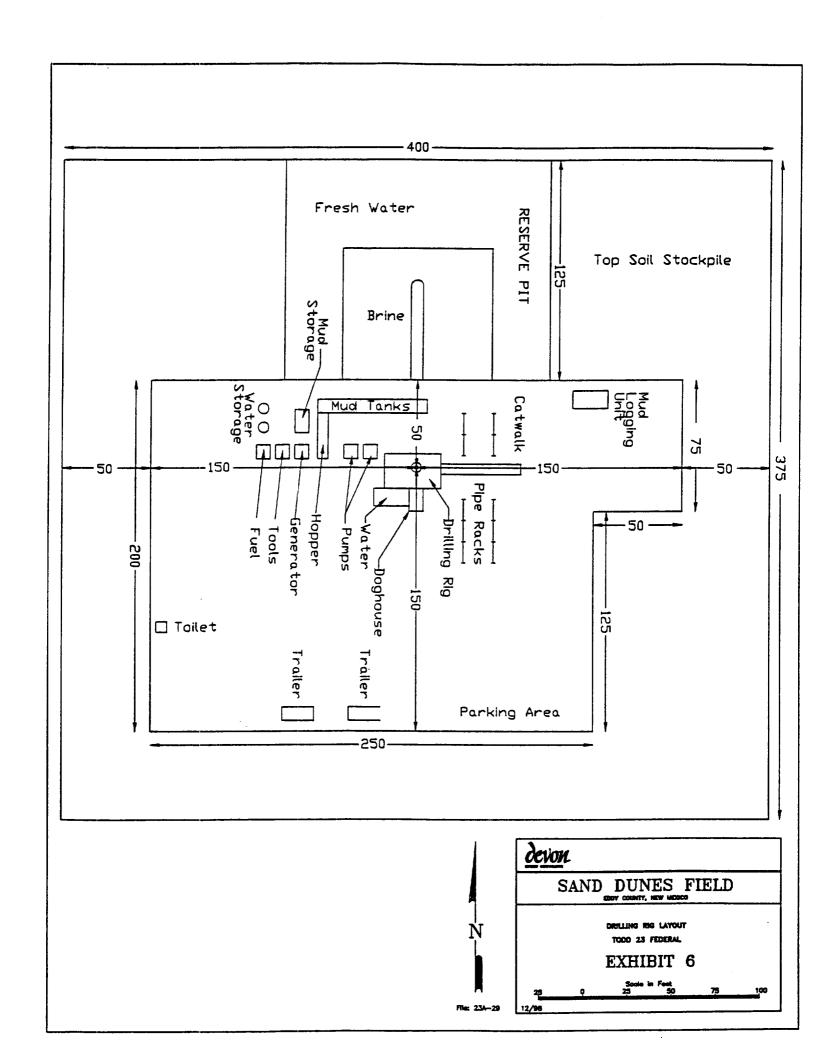
- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.











'Neil name:

Typical Well Surface

Operator:

Devon Energy Corporation (Nevada)

String type:

Surface

Location:

T23S, R31E, Eddy County, New Mexico

Collag Muc Des	n paramet se I weight ign is based		8.500 ppg ited pipe.	Minimus Collapse Design fa Burst; Design fa	ictor	1.125 1.00	Environment: H2S considered? Surface temperature: Bottom hole temperature: Temperature gradient: Minimum section length: Minimum Drift: 850 ft 2,559 in			
Max p inter Calc	Max anticipated surface pressure: 468 psi Internal gradient: 0.021 psi/ft Calculated BHP 486 psi Annular backup: 8.50 ppg		Tension: 8 Round STC: 8 Round LTC: Buttress: Premium: Body yield: Tension is based on bud Neutral point:		1.80 (J) 1.80 (J) 1.60 (J) 1.50 (J) 1.50 (B) cyed weight. 744 ft	Non-directional strings: Re subsequent strings: Next setting depth: Next mud weight: Next setting BHP: Practure mud wt: Fracture depth: Injection pressure Non-directional strings: 4,400 ft 10,000 ppg 2,286 psi 11,000 ppg 850 ft 486 psi				
Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal	
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Capacity	
1	(ft) 850	(in) 13.375	(lbs/ft) 48.00	H-40	ST&C	(ft) 850	(ft) 850	(in) 12.59	(ft²) 79.8	
ı	630	13.373	70.50	1,-10	3140	930	ozu	14,33	73.0	
Run Seq 1	Collapse Load (psi) 375	Collapse Strength (psi) 740	Collapse Design Factor 1.97	Burst Load (psi) 468	Burst Strength (psi) 1730	Burst Design Factor 3.70	Tension Load (Kips) 36	Tension Strength (Kips) 322	Tension Design Factor 9.01 J	

Prepared W. M. Frank

by: Devon Energy

Phone: (405) 552-4595 FAX: (405) 552-4621

Date: November 24,1998 Okiahoma City, Okiahoma

Collapse is based on a vertical depth of 850 ft, a mud weight of 8.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Weil name:

Typical Well Intermediate

Operator:

Devon Energy Corporation (Nevada)

String type:

Intermediate

Location:

T23S, R31E, Eddy County, New Mexico

Design parameters: <u>Collapse</u> Mud weight: 9.500 ppg Design is based on evacuated pipe. .:				Collapse	Minimum design factors: Collapse: Design factor 1.125 Burst:			Environment: H2S considered? Surface temperature: Bottom hole temperature: 110 °F Temperature gradient: 0.80 °F/100f Minimum section length: 850 ft Minimum Drift: 8,500 in		
				Design fa	ector	1.00		-		
Burst										
	anticipated		2.286 psi							
inte	ressure: mai gradien culated BHP	t	0.000 psi/ft 2.286 psi		Tension: Non-directional string. 8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J)					
Ann	ular backup	•	10.00 ppg	Buttress: Premium:		1.60 (J) 1.50 (J)				
				Body yield: 1.50 (B)			Re subseq	uent strings:		
				Tension is Neutral po	s based on bu pint	oyed weight. 3,778 ft	Next setting depth: 12,000			
Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal	
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Capacity	
•	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(ft²)	
1	4400	9.625	40.00	J-55	LT&C	4400	4400	8.75	350	
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension	
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design	
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor	
1	2171	2570	1.18	2286	3950	1.73	151	520	3.44 J	

Prepared W. M. Frank

by: Devon Energy

Phone: (405) 552-4595 FAX: (405) 552-4621

Date: November 24,1998 Oklahoma City, Oklahoma

Collapse is based on a vertical depth of 4400 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Duniop & Kemier method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Na

Wolfcamp Well Production Well name:

Devon Energy Corporation (Nevada) Coerator:

Production String type:

T23S, R31E, Eddy County, New Mexico Location:

Minimum design factors: Design parameters: Environment Collapse: Collapse H2S considered? Mud weight: 9.500 ppg Design factor 1.125 Design is based on evacuated pipe.

Surface temperature: 75 °F 171 °F Bottom hole temperature: Temperature gradient: 0.80 °F/100ft Minimum section length: 850 ft

Non-directional string.

Burst

Tension:

Buttress:

8 Round STC:

8 Round LTC:

Design factor 1.00

Burst

Max anticipated surface

pressure: 5,922 psi 0.000 psi/ft Internal gradient Calculated BHP 5,922 psi

Annular backup:

9.50 ppg

Premium: Body yield:

5322

1.80 (J)

1.80 (J)

1.60 (J)

1.50 (J)

1.50 (8)

1.73

Tension is based on buoyed weight. Neutral point: 10.481 ft

Packer fluid details:

Fluid density: Packer depth:

8.400 ppg 11,500 ft

1.49

Run	Segment		Nominal		End	True Vert	Measured	Drift	internal
Seq	Length (ft)	Siz a (in)	Weight (lbs/ft)	Grade	Finish	Depth (ft)	Depth (ft)	Diameter (in)	Capacity (ft²)
2	10500	5.5	17.00	L-80	LT&C	10500	10500	4.767	361.8
1	1500	5.5	20.00	L-80	LT&C	12000	12000	4.653	60.7
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor
2	5182	6290	1.21	5922	<i>7</i> 740	1.31	178	338	1.89 J

9190

5922

Prepared W. M. Frank

8830

by: Devon Energy

Phone: (405) 552-4595 FAX: (405) 552-4621

Date: November 24,1998 Okiahoma City, Okiahoma

416

٥

S9.99 J

Collapse is based on a vertical depth of 12000 ft, a mud weight of 9.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kernier method of biaxial correction for tension.

Burst strength is not adjusted for tension.

1500 Mid-America Tower 20 North Broadway Oklahoma City, Oklahoma 73102-8260

405/235-3611 TWX 910-831-3277

May 5, 1989

State of New Mexico Oil & Gas Conservation Commission State Capitol Building Santa Fe, NM 87504

e: Blanket Plugging Bond

State of New Mexico No. 56-0130-11003-87

Gentlemen:

Devon Energy Corporation formerly Devon Corporation has changed its name to Devon Energy Corporation (Nevada). In this regard, enclosed is a Rider for the referenced bond to include both company names. Please amend your records.

Very truly yours,

Charlene Newkirk

Lease Records Supervisor

encis

cc: Carolyn Wilson

McEldowney McWilliams

RIDER

To be attached to and become a part of Bond No. 56-0130-11003-87-1
issued by the United States Fidelity and Guaranty Company, on
behalf of Devon Energy Corporation
as Principal, and in favor of State of New Mexico
as Obligee, in the penalty of Fifty thousand and no/100
Dollars (\$ 50,000.00) for Blanker plugging bond
It is hereby understood and agreed that effective on the

the Principal in this

bond shall be Devon Energy Corporation (Nevada)

February 10, 1989

However, the liability of the Surety in the argregate to the Obligge for any and all defaults of the Principal, whether occuring before or after or partly before and partly after this rider become effective, shall in no event exceed the penalty stated in the bond.

Signed, Sealed, and Dated this 3rdday of March 1989.

ATTEST:	Devon Energy Corporation (Nevada)
ast denet	By: Vice President
Unite By:	STATES FIDELITY AND GUARANTY COMPANY
~	ia C. Brejda Attorney-in-fact