SUBMIT IN TRIPLICATE\*

Form approved. Budget Bureau No. 42-R1425.

(Other instructions on reverse side)

UNIII	בט ג	SIAII	-5
DEPARTMENT	OF	THE	INTERIOR

	UNI <sup>-</sup> DEPARTMEN	TED STATES	reverse	side)	30-045,2	
		GICAL SURVE			5. LEASE DESIGNATION	AND SEBIAL NO.
APPLICATION			EEPEN, OR PLUG	BACK	SF-080781 6. IF INDIAN, ALLOTTEE	OR TRIBE NAME
1a. TYPE OF WORK		DEEPEN [	<del></del>		7. UNIT AGREEMENT N	AME
b. Type of well			SINGLE MULTI		0	
WELL GAS WEL  NAME OF OPERATOR	L X OTHER		ZONE ZONE	Y X	8. FABM OR LEASE NAM Cair	1E -
Southland Ro	yalty Company			-	9. WELL NO.	
3. ADDRESS OF OPERATOR			_		#10E	·
4. LOCATION OF WELL (Repo		ton, NM 8/4	O. any State requirements.*)	in, C,	10. FIELD AND POOL, O. Basin Dakota Undesignated 11. SEC., T., R., M., OR B AND SURVEY OR AR	Chacra
1665' FNL & At proposed prod. zone	1850, LMP			-		
14. DISTANCE IN MILES AND	D DIRECTION FROM NEA	REST TOWN OR POST	OFFICE*		Section 15, T	28N RLUW 13. STATE
Approximately 15. DISTANCE FROM PROPOSE	y 4 miles SE o	of Bloomfiel	d, NM	17 30	San Juan	New Mexic
LOCATION TO NEAREST PROPERTY OR LEASE LINE		_		TO TE	F ACRES ASSIGNED HIS WELL  / 320/ 160	
(Also to nearest drlg. u 18. DISTANCE FROM PROPOSI	ED LOCATION*	1665'	2258.46 19. PROPOSED DEPTH		RY OR CABLE TOOLS	
TO NEAREST WELL, DRILL OR APPLIED FOR, ON THIS I		300'	6680 <b>'</b>		Rotary	
21. ELEVATIONS (Show whether	er DF, RT, GR, etc.)				March 15, 198	
28.		PROPOSED CASING	AND CEMENTING PROGR	AM	Figure 13, 130	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOO			QUANTITY OF CEMEN	т
12 1/4"	8 5/8"	24#	200'	140 Sa		
7 . 7./8"	5 1/2"	15.5			cks (Stage One	
		RE	CEIVED		cks (Stage Two cks (Stage Thr	
				200 54	CAB (Budge III)	CC)
		, , ,	EC 1 4 1979			
Surface forma	ation is Nacin lamo sand is a	niento. U. s. o	GEOLOGICAL SURVEY IMINGTON, N. M.			
			from surface to 1			
It is anticip	pated that an	IES and GR-1	Density log will b ses are anticipate	xeruna x1 in th	t lotal beptn.	<b>.</b>
It is expecte	ed that this v	well will be	drilled before Au	igust 31	, 1980. This	depends
on time requi	ired for appro	oval, rig ava	ailability and the	weathe	r!	*
Gas is dedica	ated.					*
					A CONTRACTOR OF THE CONTRACTOR	vi vi
preventer program, if any.	orosed Program: If p	proposal is to deepen lly, give pertinent d	or plug back, give data on p ata on subsurface locations a	resent produ nd measured	ctive zone and proposed and true vortical depths	new productive Give blowout
SIGNED	Parson	TITLE	District Enginee	er		79
(This space for Federal	or State office use)					<u> </u>
PERMIT NO.			_ APPROVAL DATE			
APPROVED BY		TITLE			DATE	

oh Fruh

F 19 1 5 6 7

# STATE OF NEW MEXICO LINERGY AND MINERALS DEPARTMENT

# OIL CONSERVATION DIVISION P. O. BOX 2088

P. O. BOX 2088 SANTA FE, NEW MEXICO 87501 Form C-102 kevised 1U-1-1B

All distances must be from the cuter boundaries of the Section.

SOLTHLAND ROTALTY COMPANY  Down Laws Sention of Well:  1655	Operator			Lease		Well No.
Actual Fusional Locations of Wills  1665  First troot the North Inc and 1820  Freet troot the State too the North Inc and 1820  Freet troot the State too the North Inc and 1820  Freet troot the State too too the State too too the State too too this too too the State too too this form if necessary.  We note that one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?  Free No If answer is "yes," type of consolidation  He 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 communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  RECEIVED  PECI 4 1979  U. S. PROJOGICAL SURVEY Framing of State to State to State to the Sea of his was been subject to the Sea of his was able bleft.  Now State of State to State	•	D ROYALTY COMP	<b>1</b>	_		10-E
Actual Fosting Localisme if well:  1655  The time the North line and 1820 feet from the West line  5878 F. Discourance Forestime  5878 F. Discourance Forestime  1820 feet from the West line  1820 J. Chings	_	I .	1	1 '	1 '	
1625 Interest through the North the end 1820 feet from the West the Comment of the Span Delota Production Delota Production of the Span Delota Production of the Span Delota Production of the Span Delota Productin Delota Production Delota Production Delota Production Delota Pr		1 <u>.</u>	20N	1000	San Juan	
Description   Producting Foundation   Solid   Charges   Sasin / Understreament   U.   Sasin / U.			North line and	1820 fe	et from the West	line
1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 communitization, unitization, force-pooling, etc?    Yea		Producing For	mation I	P∞1		220 /160
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 communitization, unitization, force-pooling, etc?    Yes	1. Outline th	e acreage dedica	ted to the subject wel	l by colored pencil	or hachure marks on	the plat below.
Yes   No   If answer is "yes," type of consolidation			dedicated to the well,	outline each and id	entify the ownership	thereof (both as to working
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 communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  RECEIVED  OFC 1 41979  U. S. REOLOGICAL SURVEY FAMMINGTON, N. M.  Sec.  SP-080781  15  15  16  17  18  18  18  19  19  19  19  19  19  19					, have the interests o	of all owners been consoli-
this form if necessary.)  No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  RECEIVED  OEC 141979  U. S. GEOLOGICAL SURVEY  FARMINGTON, N. M.  Name  Curtisc, Parsons  Position  District Engineer  Company  Southland Royalty Company  Dote  December 4, 1979  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Outcome and the same is true and correct to the best of my knowledge and belief.  Outcome and the same is true and correct to the best of my knowledge and belief.  Outcome and surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.  Outcome and surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.  Outcome and surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.  Outcome and surveys and surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.  Outcome and surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.  Outcome and surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	Yes	No If an	iswer is "yes," type of	consolidation	,	
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.    CERTIFICATION			owners and tract descri	ptions which have a	ctually been consolic	dated. (Use reverse side of
RECEIVED  DEC 1 4 1979  U. S. GEOLOGICAL SURVEY EARMINGTON. N. M.  Sec.  Sec.  Sec.  18201  Sec.  18201  1 hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Company Southland Royalty Company Dote December 4, 1979  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 Surveyed October 29, 1979 Registeria Riffegesteria Principles and Configuration of Configuration	No allowat forced-poo	ole will be assigne				
DEC 1 4 1979  U. S. BEOLOGICAL SURVEY FARMINGTON. N. M.  18201  Sec.  Sec.  Sec.  Sec.  15  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 Surveyed Oct. The				1		CERTIFICATION
DEC 1 4 1979  U. S. GEOLOGICAL SURVEY EARMINGTON. N. M.  18201  Sec.  Sec.  Sec.  Destroit Engineer  Company Southland Royalty Company Date December 4, 1979  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 Surveyed Oct the 1979  Registered By Registered Engineer  Comfany  Determine The Company  Determine The Company Suthland Royalty Company Determine The Company Suthland Royalty Company Determine The Company Suthland Royalty Company Determine The Company Anowledge and belief.				RECEIVE	D I hereby	·
Sec.  1820'  Sec.		.665		DEC 1 4 197		
Sec.  Curtis C. Parsons  Position  District Engineer  Company  Southland Royalty Company  Date  December 4, 1979  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 Surveyed  October 29, 1979  Register Rivergetong Prisinger  and/or Land Surveyor  Certified Rivergetong Trigineer  Certifi				U. S. BEOLOGICAL S	URVEY. Name	1/21/202
District Engineer  Company Southland Royalty Company Date December 4, 1979  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 Surveyed October 25, 1979 Registered Riprice and Conference and/or front furry produces and/or furry produces and/or front furry produces and/or furry produces and/or furry pro		+-+-	<b>L</b>	FARMINGTON, N.	Curtis	C. Parsons
Sec.  Sec.  Sp-080781  15  I hereby certify that the well location shown on this plat was platted 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 Surveyed  October 29 1979  Registered Rivingslongl Engineer and/or Land Surveys of Certificide Rivingslongl Engineer and/or Land Surveys of Certificide Rivingslongl Engineer and/or Land Surveys of Certificide Rivingslongle Engineer and	1820'			i I	1 1	ct Engineer
SF-080781  15  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 Surveyed  October 20 1970  Registered Riversetinal Engineer and/or and Surveyed  October 20 1970  Registered Riversetinal Engineer and/or and Surveyed  October 20 1970  Registered Riversetinal Engineer and/or and Surveyed  Certificate No.		!		<b>i</b>	1 1	and Dorroller Company
I hereby certify that the well location shown on this plat was platted 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 Surveyed  October 29 1979  Registered Rifficational Engineer and/or Land Surveyor of Certificate No.		) 		į ·	1	ind Royalty Company
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 Surveyed  October 29, 1979  Registered Ripferstonal Engineer and/or Land surveyor  The B. Karrour.  Certificate No.		l Se	ec.	1	Decembe	er 4, 1979
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 Surveyed  October 200 1979  Registered Rivergelongi Engineer and/or and Surveyor of Conditioner and/or and Surveyor of Certificale No. 11	SF-	-080781		· · · · · · · · · · · · · · · · · · ·		
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 Surveyed  October 250, 1979 Registered Riviessional Engineer and/or Landsurveyor  October 250, 1979  Certificale Ro		!	15	1	1 hereby	certify that the well location
Date Surveyed  October 29 1979  Registered Rivesselmal Engineer and/or and Surveyor of Certificale Ro.  Certificale Ro.  Certificale Ro.		i		1	11	
Date Surveyed  October 199 1979  Registered Riverson of Cand Surveyor  Fred R. Kerrorr  Certificate No. //		1		i N	1 1	
Date Surveyed  October 79, 1979  Registered Riverger and/or Land Surveyor of the Surveyor of t		1		i 🖟	11	
October 25 1979  Registered Rypressional Engineer and/or and surveyor of the Representation of the Register of the Representation of the Register of t		1		1	1 1	
October 25 1979  Registered Rypressional Engineer and/or and surveyor of the Representation of the Register of the Representation of the Register of t	H	+	#		7	
October 25 1979  Registered Rypressional Engineer and/or and surveyor of the Representation of the Register of the Representation of the Register of t		) I	1	1	Date Supre	ved
Registered Riverselonal Engineer and/or Land Surveyor of Fred R. Rerrour.  Certificate No. //		)   		i !	<u> </u>	15050
Fred B. Kerrojr.  Certificate No.	·	İ		1	Registered	Ripleseional Engineer
Certificate No. //		i		Į.	and/or fran	2 3 3 7 7 7 7
Certificate No. //				İ	Frod	
3950 AFR. 1111					1 1	No.

# SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

# CAIN #10E

1665' FNL & 1820' FWL Section 15, T28N, R10W San Juan County, New Mexico

Field:	Basin	Dakota	/Undes.	Chacra	Elevation:	587 <b>8 '</b>	GR

#### Geology:

Formation Tops:	Oio Alamo	1090'	Point Lookout	4340'
	Fruitland	1800'	Gallup	552 <b>0'</b>
	Pictured Cliffs	2025'	Graneros	636 <b>0'</b>
	Chacra	305 <b>0'</b>	Dakota	6480'
	Cliff House	35 <b>90'</b>	Total Depth	668 <b>0'</b>

Logging Program: IES and GR-Denisty from Total Depth to surface casing.

### Drilling:

Contractor:

Tool Pusher:

SRC Representative:

SRC Answering Service: 325-1841 Dispatch Number: 325-7391

Dispatch Number: 325-7391

Mud Program: Fresh water to 5500'. Mud up at 5500'. Maintain mud weight of 8.9 to 9.4, viscosity of 35 to 40 seconds, water loss of

10 to 12 cc. Anticipate lost circulation in the bottom of the Gallup formation at approximately 5950'. Have ICM available

on location.

#### Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. &	Grade
	12 1/4"	200'	8 5/8"	24#	
	7 7/8 <b>"</b>	668 <b>0'</b>	5 1/2"	15.5#	K-55

#### Float Equipment:

8 5/8" Surface Casing: Pathfinder type "A" guide shoe.

5 1/2" Production Casing: Pathfinder type "A" guide shoe. Self-fill flapper

type collar run one joint above shoe. 5 Pathfinder bow-type stabilizers. (Run every other joint above shoe.) Run Dowell stage tools at 4750' and 2250'. Run one cement basket below and 5 Pathfinder rigid

stabilizers above each tool.

Wellhead Equipment: 8 5/8" x 10", 2000 psi casing head with 5 1/2" casing hanger

10" X 6", 2000# tubing head and tree

## Cementing:

8 5/8" Surface Casing:

140 sacks (165 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl<sub>2</sub>. WOC for 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

5 1/2" Production Casing:

STAGE ONE: 170 sacks (251 cu. ft.) of 50/50 Poz with 6% gel, 1/4# gel flake per sack, followed by 50 sacks of neat with 2% CaCl<sub>2</sub>. (Volume is 25% excess to cover top of Gallup.)

STAGE TWO: 200 sacks (301 cu. ft.) of 50/50 Poz with 6% gel followed by 50 sacks of neat with 2% CaCl<sub>2</sub>. (Volume is 50% excess to cover top of cliff House.)

STAGE THREE: 200 sacks (301 cu. ft.) of 50/50 Poz with 6% gel. (Volume is 50% excess to cover top of Ojo Alamo.)

WOC and circulate between stages as required by well conditions.

L. O. Van Rayan District Production Manager



December 4, 1979

United States Geological Survey Mr. James Sims P. O. Box 959 Farmington, NM 87401

Dear Sir:
Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's <u>East #10E</u> well.
The locations of tank batteries and flow lines will be on location with well. A burn pit will be provided for disposal of trash. Cuttings, drilling fluid and produced fluids will be put into the reserve pit and properly disposed of depending on amount and type of fluids.
There will be no camps or airstrips.
Also, enclosed is a location layout showing approximate location of rig, pits and pipe racks.
Water supply will be the Blanco Wash
The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.
Mr. Ross Lankford will be Southland Royalty Company's field representative supervising these operations.
Yours truly,
( C farsons

CCP/ke

Curtis C. Parsons District Engineer



United States Geological Survey Mr. James Sims P. O. Box 595 Farmington, NM 87401

Dear Sir:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite 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; and, that the work associated with the operations proposed herein will be performed by Southland Royalty Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: December 4, 1979

L. O. Van Ryan

District Production Manager

LOVR/ke



December 4, 1979

United States Geological Survey Mr. James Sims P. O. Box 959 Farmington, NM 87401

RE: Blowout Preventer Plan

Dear Sir:

All drilling and completion rigs will be equipped with 6" or larger double hydraulic blowout preventers and a hydraulic closing unit with steel lines.

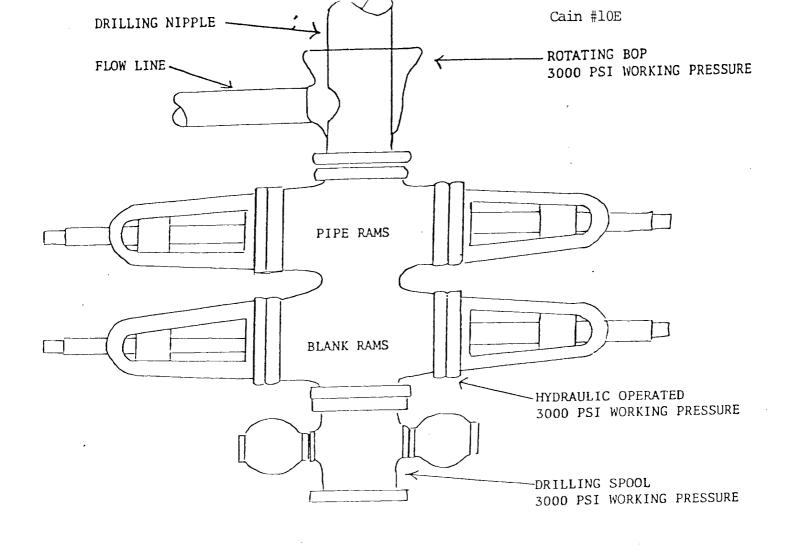
The preventer is 3000# working pressure and 6000# test pressure.

All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure proper operation.

Yours truly.

Curtis C. Parsons District Engineer

CCP/ke



PREVENTERS AND SPOOLS ARE TO HAVE THROUGH BORE OF 6" - 3000 PSI OR LARGER

