		2010.C	an at against a				
500							
Form 3160-3					FORM	APPROVE	n
August 1999)				353	OMB N	 o. 1004-013 vember 30, 	36
	ITED STATES	· / .	· · · · · · · · · · · · · · · · · · ·	5	5. Lease Serial No		
	FLAND MANA	1.000	an a	ارد اردع		-14847	
APPLICATION FOR P	ERMIT TO DI	RILL OR I	REENTEREIVED		6. If Indian, Allotte	e or Tribe	Name
la. Type of Work: DRILL		R	ARTESTA		7. If Unit or CA Ag	reement, N	ame and No.
			ŝe -	n N	8. Lease Name and		1287
1b. Type of Well: Well Gas Well	Other		Single Zone / C Mult	ple Zone	Phillips-		deral#2
2. Name of Operator	_ /	15704	, 0		9. API Well No.	711	1.0
Clayton Williams Energy,			lo. (include area code)		30-015-		
3a. Address Six Desta Dr., Ste. Midland, TX 79705	3000	1	682-6324		10. Field and Pool, or	-	ry
4. Location of Well (Report location clearly and i	n accordance with				Empire, Y		Survey or Area
At surface 2310' FNL & 5		• •	2				•
At proposed prod. zone					Sec. 18,	T-17S	, R-29E
4. Distance in miles and direction from nearest tow	n or post office*				12. County or Parish		13. State
9 miles West ^h from Loco H	ills	-r		r	Eddy		NM
5. Distance from proposed* location to nearest property or lease line ft 530 [†]		16. No. of	Acres in lease	17. Spacin	g Unit dedicated to this	well	
(Also to nearest drig. unit line, if any)		29	93.5		40		
8. Distance from proposed location* 709' f	/Phillips	19. Propos	ed Depth	20. BLM/F	BIA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft. 18 Fed.		50	0001	NM27	87		
1. Elevations (Show whether DF, KDB, RT, GL,	etc.)	22. Approx	timate date work will sta	ut*	23. Estimated duration	on	·
3657' GL			approval		±10 days		
			schments *	2628		50 \$ 0 \$ 3 5 8	ry
ne following, completed in accordance with the requ	irements of Onsho	re Oil and Ga	s Order No.1, shall be at	tached to this	s form:		
Well plat certified by a registered surveyor.			4. Bond to cover t	he operation	is unless covered by a	n existing	bond on file (see
A Drilling Plan. A Surface Use Plan (if the location is on Natio	nal Format Surtam	Lands the	Item 20 above). 5. Operator certific				
SUPO shall be filed with the appropriate Forest S	ervice Office).	Lanus, inc	 Such other site authorized office 	specific info er.	ormation and/or plans	as may be	required by the
5. Signature		Name	e (Printed/Typed)		······································	Date	<u> </u>
(Detry Luna	······	I	Betsy Luna			1-2-1	10-2
Engineering Technician							
pproved by (Signature)		Nam	c (Printed/Typed)	· · ·		Date))
/s/ LESLIE A.	THEISS		Est sur-	•		11/-1	<u> 1 1 2691</u>
		i Offi		AD E			
pplication approval does not warrant or certify the the erations thereon.	ne applicant holds l	egal or equital	ble title to those rights in	the subject l	lease which would entit	le the appl	•
the 18 U.S.C. Service 1001 and Title 42 U.S.C. Se			ny paran knowingly	d will6-0-			
tle 18 U.S.C. Section 1001 and Title 43 U.S.C. Set ates any false, fictitious or fraudulent statements or	representations as t	a crume for a	within its jurisdiction.		o make to any departm	ent or age	ncy of the United
(Instructions on reverse)							

KOBANETT' NW HEB 13.01

DISTRIC					For some			Recently Reportment			rm C-102
DISTRIC	тп	NM 86841-19 a. NM 88211		Energy, Minerals and Natural Resources Department Submit to OIL CONSERVATION DIVISION P.O. Box 2088				Revised Februa to Appropriate Dis State Lease Fee Lease	rict Office - 4 Copies		
DISTRIC 1000 Rio E		., Astec, NI	u 8 7410		Santa F			088 087504-2088			
DISTRIC P.O. BOX 20		72, N.M. 871	504-205 8	WELL LO	CATION	AND	ACREA	GE DEDICATI	ON PLAT	AMENDEI	REPORT
<u> </u>		lumber			Pool Code		Γ		Pool Name		
	-015-			96	210			EMPIRE,	YESO		
	operty C				PHI		18 FI	DERAL		Well Num 2	aber
_	GRD No.	•		CT	AVTON	-	rator Nam			Elevatio	-
			l		AIIUN			NERGY, INC.		365	/
UL or lo	t No	Section	Township	Range	Lot Idn		ce Loca	North/South line			<u> </u>
H		18	175	29E	LOUIGH	23		NORTH	Feet from the 530	East/West line EAST	County EDDY
L	1				<u> </u>	L					
UL or lo	t No.	Section	Township	Range	Lot Idn		om the	rent From Sur North/South line	IACE Feet from the	East/West line	
			p	ge				Northy South mile	reet from the	East/west Inte	County
Dedicate	d Acres	Joint o	r Infill (Consolidation	Code Or	der No.			I		
40											
NO	ALLO	WABLE W	ILL BE	ASSIGNED	TO THIS	COMPLE	ETION U	NTIL ALL INTER	ESTS HAVE BE	EN CONSOLIDA	ATED
r			OR A	NON-STAN	IDARD UN	VIT HAS	BEEN	APPROVED BY	THE DIVISION		
	LOT 26.69 / LOT 26.81 / LOT 26.92 / LOT	CRES 2 CRES 3			3667.3 	3671.8 0 3654.3		530'	I hereby contained herein best of my known Signature BETSY I Printed Name ENGINEI Title 2 - 12 Date SURVEYO I hereby certify on this plat was actual surveys supervison and correct to the JANL Date Surveyed Signature & S Professional	LUNA ERING TECHN -O1 R CERTIFICAT that the well locats s plotted from field best of my belie locat the same is best of my belie DARY 9, 2001 Scal of Surveyor	ICIAN ICIAN ICIAN ICIAN ION ion shown i notes of under my i rue and AWB I///b/01
	27.04 A	CRES							AL AL	GARY EIDSON	

· ·

1

·

LOCA'I ION VERFICATION MAP



SCALE: 1'' = 2000'

SEC. <u>18</u> TWP. <u>17-S</u> RGE. <u>29-E</u>

SURVEY N.M.P.M.

COUNTY____EDDY

DESCRIPTION 2310' FNL &530' FEL

ELEVATION 3657

OPERATOR <u>CLAYTON WILLIAMS ENERGY</u>, INC. LEASE <u>PHILLIPS 18 FEDERAL</u> U.S.G.S. TOPOGRAPHIC MAP

RED LAKE SE, N.M.

CONTOUR INTERVAL: 10' RED LAKE SE, N.M.

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117

.

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. <u>18</u> TWP.<u>17-S</u> RGE. <u>29-E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>EDDY</u> DESCRIPTION <u>2310' FNL & 530' FEL</u> ELEVATION <u>3657</u> OPERATOR <u>CLAYTON WILLIAMS ENERGY</u>, INC. LEASE <u>PHILLIPS 18 FEDERAL</u>

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117 ÷





CLAYTON WILLIAMS ENERGY, INC. DRILLING PROGRAM

Attached to BLM form 3160-3

Lease Name: Phillips -18-Federal Well No.: 2 Location: 2310' FWL & 530' FEL, UL H Sec. 18, T-17-S, R-29-E Eddy Co., NM

- 1. Geological name of surface location: Triassic
- 2. Estimated tops of important geological markers:

Name	Depth
Yates	825'
Seven Rivers	1090'
Queen	1666'
Grayburg	2045'
San Andres	2353'
Glorieta	3794'

3. Estimated name of anticipated fresh water, oil, and gas:

Formation	Depth	Fresh Water/Oil/Gas
Seven Rivers	1090'	Oil
Queen	1666'	Oil
Grayburg	2045'	Oil
San Andres	2353'	Oil
Glorieta	3794'	Oil

4. CASING PROGRAM

<u>Hole Size</u>	Interval	OD Csg	Weight, Grade, Type.	
11"	365' 300'	8-5/8	24#, J-55, ST&C	WITNESS
7-7/8"	5000'	5-1/2"	17#, J-55, LT&C	

CEMENT PROGRAM

Conductor Casing: N/A

8-5/8" Surface Casing: 300 SX CI "C" + 2% CaCl₂ + ¼#/sx Flocele SER 233

5-1/2" Production Casing: Stage tool @ +/- 2600' 1" Stage: 400 sx. 35:65 Poz:C + 6% gel + 2% CaCl₂ + 1/4 pps Cello-flake 150 sx. Class "C" Neat

2nd Stage: Lead: 800 sx 61:15:11 Lite + 1 pps salt + 4 pps Kolite + 0.2% D-65 + 0.3# D-167 + 0.2% D-46 + 0.25% D-13

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) schematic attached will consist of a double ram-type (3000 psi WP) preventer and/or a bag-type (hydril) preventer (3000 psi WP). BOP will be hydraulically operated and the ramtype preventer will be equipped with blind rams and appropriate pipe rams. The BOP will be nippled up on the surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 3000 psi and the hydril to 50% of rated working pressure (1500 psi). Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be attached to a drilling spool or BOP side outlets. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

6. Type & Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of Fresh Water Gel/Brine System.

The applicable depths and properties of this system are as follows:

Depth Sk5	Type	Weight (ppg)	Viscosity (sec)	Water Loss (cc)
300°	FW Gel	8.6-9.0	34-45	N/C
5000'	Brine	9.8-10.1	28-30	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

- 7. Auxiliary Well Control and Monitoring Equipment:
 - A. A Kelly cock will be kept in the drill string at all times.
 - B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
 - C. The drilling fluids system will be visually monitored at all times.
 - D. A mudlogging unit will be continuously monitoring drilling penetration rate and hydrocarbon shows from surface casing to TD.
 - E. A fixed electronic H2S monitoring system, including alarms with monitors at the shaker and the bell nipple, will be in operation from surface to TD.
- 8. Logging, Testing, & Coring Program:
 - A. Drill stem tests: None anticipated
 - B. Electronic logging program: DSN, MSFL, DLL, FMI (optional)
 - C. Coring: None
- 9. Abnormal Conditions, Pressures, Temperatures & Potentials Hazards:

Possible sulfur water in flow in the Queen/Grayburg intervals

10. Anticipated Starting Date & Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is upon approval of APD. Once commenced, the drilling operations should be finished within approximately 10 days. If the well is productive, an additional 10 days will be required for completion and testing.

~ ÷

CLAYTON WILLIAMS ENERGY, INC. HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well.

- 1. The hazards and characteristics of hydrogen sulfide (H2S).
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site, specific H2S Drilling Operations Plan, and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

11. H2S SAFETY EQUIPMENT AND SYSTEMS

NOTE: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

- 1. Well Control Equipment:
 - A. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - B. Auxiliary equipment to include: annular preventer
- 2. Protective Equipment for Essential Personnel:

Five – 30 minute self – contained breathing apparatuses (Scott).

- 3. H2S Detection and Monitoring Equipment:
 - A. Fixed electronic monitoring system and alarms with two monitors: one at shaker and one at bell nipple.

- 4. Visual Warning Systems:
 - A. Two windsocks with frames and extension poles.
 - B. One entrance sign with flags (with "CAUTION" and present well condition).
 - C. Two briefing area signs.
- 5. Mud Program:
 - A. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practice, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
- 6. Metallurgy:
 - A. All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- 7. Communication:
 - A. Cellular telephones in Company vehicles and at rig.
- 8. Well Testing:
 - A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity which is necessary to safely and adequately conduct the test. All drill stem testing operations conducted in an H2S environment will use the closed chamber method of testing.

•

CLAYTON WILLIAMS ENERGY, INC. SURFACE USE PLAN

Attached to form 3160-3

Lease Name: Phillips -18-Federal

Well No.: 2 Location: 2310' E

Location: 2310' FNL & 530' FEL, UL H Sec. 18, T-17-S, R-29-E Eddy Co., NM

1. Existing Roads:

- A. The well site and elevation for the proposed well are shown on the attached plat.
- **B.** Existing roads are indicated on attached map. Existing roads are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling well will be done when necessary as determined during the onsite inspection.
- C. Direction to location: Phillips-19-Federal wells: On Hwy. 82 approximately 6 miles West of Loco Hills, NM, turn North 1.5 mile on Old Loco Hills Rd. Turn left 1/2 mile to enter lease.
- **D**. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. <u>Proposed access Roads:</u>

Attached map indicates the proposed new access road to be constructed. The road will be constructed as follows:

- A. The maximum width of the running surface will be 20'. The road will be crowned and ditched and constructed of 6" rolled and compacted caliche. Ditches will be 3.1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.
- **B.** The average grade will be less than 1%
- C. No turnouts are planned
- **D.** Culverts, cattle guards, low-water crossing, fence cuts:
- E. Surface material will consist of native caliche. Caliche will be obtained from nearest BLM approved pit. Any additional materials required will be purchased from the dirt contractor.
- **F.** The proposed access road will be centerlined flagged.

3. Location of Existing Wells :

No existing wells on this lease

- 4. Location of Existing Wells and/or Proposed Facilities:
 - A. Tank Battery: Sec. 18, T17S, R 29E; 1650' FNL & 1950' FEL; UL G (site of Phillips-18-Federal #8 proposed wellsite
 - B. Flowlines: See attached Property Line & Road Diagram.

5. Location and type of Water Supply: To be hauled by contract company.

6. <u>Source of Construction Materials:</u>

All caliche required for construction of the drill pad and the proposed new access road will be obtained from a BLM approved caliche pit.

7. Methods of Handling Waste Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed of into the reserve pit.
- **B.** Drilling fluids will be contained in steel mud tanks. The reserve pit will contain any excess drilling fluids or flow from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit, approximately 60'X 90'X10' deep and fences on three sides prior to drilling. It will be fenced on on the fourth side immediately following rig removal. The reserve will be plastic-lined to minimize loss of drilling fluids and saturations of the ground with brine water.
- C. Water produced from the well during completion may be disposed into the reserve pit or steel tank. After the well is permanently placed on production, produced water will be collected in tanks until hauled by transport to an approved disposal system or separate disposal application will be submitted for appropriate approval. Produced oil will be collected in steel tanks until sold.
- **D.** A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.
- E. Garbage and trash produced during drilling and completion will be put in trash trailer. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. All waste material will be contained to prevent scattering by the wind. No toxic waste or hazardous chemicals will be produced by this operation.
- F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to break out and fill and, as weather permits, the unused portion of the well site will be leveled and re-seeded as per BLM specifications. Only the part of the pad required for production will be kept in use. In the event of a dry hole, only a dry hole marker will remain.

8. <u>Ancillary Facilities:</u>

No airstrip, campsite, or other facilities will be built as a result of the operations of this well.

9. Well Site Layout:

- A. Drill pad: Per attached plat.
- **B.** Attached plat shows planned orientation for the rig and associated drilling equipment, reserve pit, pipe racks, turnaround and parking areas, and access road. No permanent living facilities are planned, but a temporary foreman/tool pusher's trailer will be on location during the drilling operations.
- C. The reserve pit will be lined with high-quality plastic sheeting.

10. Plans for Restoration of the Surface:

A. Upon completion of the proposed operations, if the well is to be abandoned, the caliche will be removed from the location and road and returned to the pit from which it was taken. The pit area, after allowing to dry; will be broken out and leveled. The original topsoil will be returned to the entire location, which will be leveled and contoured to as nearly to the original topography as possible.

All trash, garbage, and pit lining will be buried or hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

- **B.** The disturbed area will be re-vegetated by re-seeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time the rig is removed; the reserve pit will be fenced on the rig (fourth) side to prevent livestock or wildlife from being entrapped.

The fencing will remain in place until the pit area is cleaned up and leveled. No oil will be left on the surface of the fluid in the pit. The entire reserve pit will be netted until the fluid has completely evaporated.

D. Upon completion of the proposed operations, if the well is completed; the reserve pit area will be treated as outlined above within the same prescribed time. Topsoil removed from the drill site will be used to re-contour the pit area; any uncased portions of the drill pad to the original natural level and re-seeded as per BLM specifications.

11. <u>Surface Ownership:</u>

The wellsite and lease is located entirely on Federal surface.

Other Information:

- A. Terrain: See Archaeological Report
- B. Soil: See Archaeological Report
- C. Vegetation: See Archaeological Report
- D. Surface Use: See Archaeological Report
- E. Ponds and Streams: None
- F. Water Wells: None
- G. Residences and Buildings: None
- H. Arroyos, Canyons, Etc.: None
- **L** Well Sign: To be installed at the wellsite
- J. Archaeological Resources: None reported. References archaeological report.

12. Lessee's and Operator's Representative:

The Clayton Williams Energy, Inc. representatives responsible for assuring compliance with the Surface Use Plan are:

John Kennedy Clayton Williams Energy, Inc. Six Desta Drive, Ste. 3000 Midland, TX 79705 (915) 682-6324

or

Matt Swierc Clayton Williams Energy, Inc. Six Desta Drive, Ste. 3000 Midland, TX 79705 (915) 682-6324

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the 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; and that the work associated with the operations proposed herein will be performed by Clayton Williams Energy, Inc. and it's contractors in conformity with this plan and the terms and conditions under which it is approved.

on J. Lennedy John F. Kennedy

Drilling Manager

UNITED STATES DEPARTMENT OF THE INTERIOR Bureau of Land Management Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:	Clayton Williams Energy, Inc.
Street or Box:	Six Desta Drive, Suite 3000
City, State:	Midland, Texas
Zip Code:	79705

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-14847

Legal Description of Land:	Well No. 2 Phillips –18-Federal UL H, Sec. 18, T-17-S, R-29-E 2310' FNL & 530' FEL Eddy Co., New Mexico				
Formation(s) if applicable:	Empire (Yeso)				
Bond Coverage:	\$25,000.00 SW (copy attached)				
BLM Bond File No.:	NM2787 (Surety Bond No. RLB0002027)				

Swierce /ul Authorized Signature:

Name:

Matt Swierc

Title:

Production Superintendent

Phone No.: Fax No.:

(915) 682-6324 (915) 688-3225

Date:

February 6, 2001

.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT New Mexico State Office 1474 Rodeo Road P. O. Box 27115 Santa Fe, New Mexico 87502-0115

in Reply Refer to: 3104 (93000-at)

May 15, 2000

DECISION

:	BLM Bond Number: <u>NM2787</u>
:	Surety Bond Number: <u>RLB0002027</u>
:	
:	Bond Amount: <u>\$25.000.00</u>
:	Execution Date: April 26, 2000
:	
	•

Statewide Oil and Gas Surety Bond Accepted

The bond described above has been examined and found satisfactory. It is accepted effective May 1, 2000, which is the date the bond was received in this office.

The bond constitutes coverage of all operations conducted by or on behalf of the principal on Federal leases in the State of New Mexico. The bond provides coverage of the principal where that principal has interest in, and/or responsibility for operations on, leases issued under the authority of any of the Acts cited on the bond form. Federal leases do not include Indian leases.

The bond will be maintained by this office. Termination of liability under the bond will be permitted only after this office is satisfied that there is no outstanding liability on the bond or satisfactory replacement bonding coverage is furnished.

1000 × alean

Angela Trujillo Land Law Examiner Fluids Adjudication Team

in S

Form 3000-4 (June 1988)			UNITED STATES TMENT OF THE INTERIO OF LAND MANAGEME		Bond Number	97
		184 M 18 1 1 1 1 1 1	R GEOTHERMAL L			
			y 25, 1920 (30 U.S.C. 18			
	Departm	Act of Augu	y 25, 1920 (30 0.3.0. 18 Ist 7, 1947 (30 U.S.C. 35 Appropriations Act, FY_1	1-359)		FEITIGINS /
		Act of Decemb	er 24, 1970 (30 U.S.C. 1	001-1025)	Lease Serial Number	r (For Individual Bond Only)
-	Uther (Di and Gas and G	eothermal Leasing Auth	ornies as Applicable		111/1
CHECK ONE:		AND GAS	GEOTHERMAL	RESOURCES -	<u>.</u>	
CHECK ONE:		(1997)		i of Mange	San Stain T	· · · · · · · · · · · · · · · · · · ·
SURETY I	BOND	Ż.			الم من الم الم	
KNOW ALL E	BY THESE PRESENTS,	THAT	Clayton William	s Energy, Inc.		
6 De	esta Drive. Su	ite 6500 M	lidland, IX 7970	·····/	-	
10 10	Julia Dilive, Du	128 0500, H	(addr			
as principal an	RLI I	nsurance Co	mpany			مہ
as principar, ar	iu			(name)		
of	8 Greenway	Plaza, # 400	, Houston, TX 7	7046	• .	
			(address)		······································	, as surety,
are held and fin	rmly bound unto the Uni	ted States of Ameri	ca in the sum of	enty Five Thous	and and no/1	00 00
···• · · ·	$= e^{i \phi} (Y_{i})_{i} = e^{-i \phi} (y_{i})_{i$			e e en en se contra		
			dollars (s <u>25,000.00</u>), (
lawful money o	of the United States, whi		d or decreased by a rider h	ereto executed in the same		
	· · ·	~ 2.5 , ~ 2.0 , m_{\odot} $E_{\rm H}$ \sim	in an internal in			
PERSONA	LBOND		nanu zontra aven inn			- *. * · · · · · · · · · · · · · · · · ·
	··· ··· · · · · · · · · · · · · · · ·	14 . St.	·			
KNOW ALL E	BY THESE PRESENTS,	That	· · · · ·	(name)		
- f				(• ,	e at branch i
of			(address)	· · · · · · · · ·		as principal, is held and firmly
hound unto the	United States of Americ	in the mum of		. .		
	Children States of Aliteria				· · ·	
		dollars (s).	lawful money of the l	United States which sum may be
increased on de						childred states which suit may be
	creased by a rider herei		to the state of the state			
of the Interior to forth in this bond	act as his attorney. The inte and the instrument(s) granti	ant to the authority co rest accruing on the Ui ng rights and interests.	nferred by Section 1 of the Act nited States securities deposited.	, in the absence of any default is the principal. The principal h	.S.C. 9303), does hereby in the performance of an	outable securities of a par value equal constitute and appoint the Secretary of the conditions, or stipulations set any heirs, executors, administrators,
for a Surety Bond	ruments granting rights and l, the surety/principal shall a	interests in Federal lan poly the bond or any p	nds. In the case of any default u	the performance of the condition is a second to be been used in the secretary shall have	ions and stipulations of s full power to assign, any	ns and stipulations as set forth in this uch undertaking, it is agreed that: (1) ropriate, apply or transfer the deposit
by the United Sta	t of the oil and gas and good tes covering the same land a	bermal deposits to the l shiert to this bond, co	United States; (3) any lessee, pe wering the use of the surface or	rmatice, or contractor, under a l the prospecting for, or the deve	lease, permit, or resource	y right to compensation in connection : sale contract issued, or to be issued, deposits in any portion of such land, rs, and assigns, jointly and severally.
This bond shall o	over all surface disturbing	activities related to dri	lling operations on a Federal le	aschold(s) in accordance with :	authorization(s) granted	inder the Acts cited above for:
CHECK ONE:	5					
NATIONW	in Alaska (l of multiple	NPR-A) when a rider s exploration operations	afficient to bring the amount m	contormance with 43 CFR 313	14 is provided, and provi	iding the National Petroleum Reserve ded a rider is obtained, also coverage
STATEWII	DE BOND — Operations coverage of	conducted by or on be f multiple exploration of	half of the principal(s) or on the operations within the single state	e leasehold(s) of the principal(e of New Mexico	s), except the NPR-A, a	nd, provided a rider is obtained, also
			chaif of the principal or on the			
			A) BOND — This bond shall c	over:		
	ASE BOND - The terms					
🗀 NPR-A WI	DE BOND - The terms	and conditions of all le	cases, and provided a rider is o	btained, coverage of multiple e	xploration operations.	

BOND CONDITIONS

The conditions of the foregoing obligations are such that:

and royalics, compensatory royality payments, or otherwise; and ations or production, waivers, suspensions or changes in rental, minimum royalty

without any interruption due to the expiration of the term set forth in the lease(s); and d. Any extension of a lease(s) covered by this bond, such coverage to continue

terms and conditions of all remaining leases and obligations covered by the bond; and ation of law or otherwise, the bond shall remain in full force and effect as to the mination, expiration, cancellation or relinquishment of any lease(s), whether by oper-5. WHEREAS the principal and surety hereby agree(s) that notwithstanding the ter-

all obligations of such for the entire lesschold in the same manner and to the same hereby bind himself/herself to fulfill on behalf of each lesses or operating rights owner licu of the lessee(s) or operating rights owner(s), agrees and by these presents does he/she is the operator, in consideration of being permitted to furnish this bond in 6. WHEREAS the principal, as to any lease or part of a lease for land on which

extent as though he/she were lessee or operating rights owner, and

liability under this bond; and shall not, in any way, release the principal and surcty, or either of them from any rentals or royalties or the performance of any other term or condition of the lease(s) ance of said lessor in enforcing, as against any responsible party, the payment of 7. WHEREAS the obligor/principal and surety agree(s) that the neglect or forbear-

of joining the lesses(s); and proceeding against the principal and surety or either of them, without the necessity der the lease(s) the lessor may commence and prosecute any claim, suit, or other 8. WHEREAS the principal and surety agree(s) that in the event of any default un-

of any other legal and equitable remedy, including warver of the default. Act. This provision shall not be construed to prevent the exercise by the United States Act (30 U.S.C. 1701 et seq.) or the Federal Onshore Oil and Gas Leasing Reform applicable provisions and penalties of the Federal Oil and Cas Royalty Management such lease shall be subject to cancellation and the principal shall also be subject to lease, and the noncompliance continues for thirty (30) days after written notice thereof, 9. WHEREAS if the principal fails to comply with any provisions of an oil and gas

above, then the obligations are to be void; otherwise to remain in full force and effect. sions of the instrument(s) granting rights and interests in Federal lands referred to successors, or assigns shall in all respects faithfully comply with all of the provithe of the fight water water and the anternet part that 10: NOW, THEREFORE If said principal, his/her heirs, executors, administrators,

.oul

operations on a lease(s) issued under the Acts cited in this bond; and 1. WHEREAS the principal has an interest in a lease(s) and/or responsibility for

granted to the principal, shall extend to and include: coverage of this bond, in addition to the present holding(s) of and/or authorization(s) 2. WHEREAS the principal and surety agree(s) that with notice to the surety the

in favor of the principal; and effective immediately upon such authorization, approval or issuance of a transfer ing(s) ind/or suitorization(s) granted under the Acts cited in this bond, and to become under individual lease bonds, the coverage is to be confined to the principal's holda. Any lease(s) hereafter issued to or acquired by the obligor/principal, except

: • principal affecting lease(s); and 🗧 Any transfer(s) of operating rights hereafter entered into or acquired by the ъ.

أمجا ورجده فالرجا تتحيرها الطحري Lin té nuc pursuant to the Acts cited in this bond; and a survey of the stress are seen as my activity subsequent hereto of the principal as operator under a lease(s) issued. .***a** T2 . 12 - 22 - 32 - 23 - 23 -

pue the additional interest(s) identified in this paragraph will not be covered by this bond; receives notice of the election to terminate. After the termination becomes effective. underthis paragraph. Such termination will become effective 30 days after the BLM Provided, That the surety may elect to terminate the additional coverage authorized

signatures appeared thereon; and bond as fully and to the same extent as though his/her or their duly, authenticated the assignce(s) shall be considered to be coprincipal(s) on an individual or NPR-A of an undivided interest in any part or all of the lands in the lease(s) in which event this hand shall remain in full force and effect notwithstanding: Any assignment(s) 3. WHEREAS the principal and surces agree(s) that with notice to the surcey that

that this bond shall remain in full for ∞ and effect notwithstanding: 4. WHEREAS the obligor/surety here by waives any right to notice of, and agrees

Any transfer(s) either in whole or in part, of any or all of the operating rights bond to remain in full force and effect only as to the lands retained in the lease(s); and a: Any assignment(s) of 100% of sume of the lands described in the lease(s), the

. . . ing agine retained by the principal: and and wither agrees to remain bound under this bond as to the interests in the operat- (2 P.

Linga ---------- 4192 ----- sin bangis - jo Arp - --xit - 5000 in the presence of: $\overline{\mathbb{D}}_{i}$ - - - -1.2.1. (2.7.6.2) 10.12 communitation or storage agreenents, or development connacts, suspensions of oper-11546 . ಇವರು ವ made or effected by communent of case or operating right to unit, cooperative. Any modification of a lease or oprised attacts or obligation instrumber, whether source Live Live and and and 10. · >

NAMES AND ADIRESSES OF WITNESSES THE SUB CLAYCON WILLIAMS ENGLEY.

JDEN-RSCE Teserser 24, 1976 (30 U.S.C. 100 BI 31 U (r.s.) with the weather t M inontal prizeal isometree Lassing Authonia KLL Insurance Lompany fisng BY G.Pesta Dr., \$6500, Midland, S0767_XT -2 T A X0390 BA to the Bull :18 (rs.j) 99 E

STATE CETIVE . 1005027 (20-3 2. 11/19 2 SCHRENT OF THE BATERADE $\oplus r$. 113" EOVERNMENT PRINTING DEFICE 1990 - 773-016 reenvery Plaza, #400, Houston, IX, 77046, EHWAT, FEVSE BOAD 1 11 17.13 8 (Business Address) 8 CICEBREA PLEZEMENO, HOUSTON, IX 77046° PM SA 18 GIES E. Chilson, 0 (Surty) Attorney IX 77046' PM SA 19 6 CIES E. Chilson, 1400, Houston, TX 77046' PM SA 19 6 CIES E. Chilson, 1400, Houston, TX 77046' PM SA 19 6 CIES E. Chilson, 1400, Houston, TX 77046' PM SA 19 6 CIES E. Chilson, 10 704 6' PM SA 19 704 6' PM SA 19 6' PM SA 19 704 6' PM SA 19 704 6' PM SA 19 6' PM SA 19 704 6' BY

131

13 64





9025 North Lindbergh Dr. • Peoria, IL 61615 (309) 692-1000 or (800) 645-2402

RLB0002027 POWER OF ATTORNEY RLI Insurance Company

Know All Men by These Presents:

That the RLI INSURANCE COMPANY, a corporation organized and existing under the laws of the State of Illinois, and authorized and licensed to do business in all states and the District of Columbia does hereby make, constitute and appoint: GREG E. CHILSON

in the City of HOUSTON, State of TEXAS _, as Attorney-in-Fact, with full power and authority hereby conferred upon him to sign, execute, acknowledge and deliver for and on its behalf as Surety and as its act and deed, all of the following classes of documents to-wit:

\$25,000.00

Indemnity, Surety and Undertakings that may be desired by contract, or may be given in any action or proceeding in any court of law or equity; policies indemnifying employers against loss or damage caused by the misconduct of their employees; official, balk and surety and fidelity bonds. Indemnity in all cases where indemnity may be lawfully given; and with full power and authority to execute consents and waivers to modify or change or extend any bond or document executed for this Company and to compromise and settle any and all claims or demands made or existing against said Company. 1 Sect The section of the section A

The RLI INSURANCE COMPANY further certifies that the following is a true and exact copy of a Resolution adopted by the Board of Directors of RLI Insurance Company, and now in force to-wit:

"All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President; or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys-in-Fact or Agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

(Blue shaded areas above indicate authenticity)

IN WITNESS WHEREOF, the RLI Insurance Company has caused these presents to be executed by its _CHAIRMAN, CEO_with its corporate seal affixed this

lly apr C^y ATTEST RLI INSURANCE COMPANY Corporate Secretary Chairman, CEO State of Illinois SS County of Peoria

On this day of April 2000 before me, a Notary Public, personally appeared Gerald D. Stephens and Camille J. Hensey, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as Chairman. CEO and Corporate Secretary, respectively, of the said RLI INSURANCE COMPANY, and acknowledged said instrument to be the voluntary act and deed of said corporation.

Notary ublic

"OFFICIAL SEAL" CYNTHIA S. DOHM NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 02/24/02