# N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue Artesia, NM 88210

Form 3160-3 August 1999)	RECEI JUN 0 2		FORM APPRO OMB No. 1004 Expires November	-0136
UNITED STATES DEPARTMENT OF THE I	TERIOR OCD-AR	TESIA	5. Lease Serial No. <b>NM-14847</b>	
BUREAU OF LAND MANA  APPLICATION FOR PERMIT TO DI			6. If Indian, Allottee or Tr	ribe Name
1a. Type of Work: 🔼 DRILL 🔲 REENTE	R		7. If Unit or CA Agreemen	t, Name and No.
1b. Type of Well: Di Oil Well Gas Well Other	☐ Single Zone ☐ Multip	ple Zone	8. Lease Name and Well N PHILLIPS-19-FEDE	
2. Name of Operator CLAYTON WILLIAMS ENERGY, INC.			9. API Well No. 30-015- "为了 ζ	٥٦ <b>ـ</b>
3a. Address SIX DESTA DRIVE, #3000	3b. Phone No. (include area code) 432-682-6324		10. Field and Pool, or Explo	ratory
MIDLAND, TX 79705  4. Location of Well (Report location clearly and in accordance with			11. Sec., T., R., M., or Blk.	and Survey or Area
At surface 2310' FNL & 990' FEL; UL H (S	E/NE) Controlled Water Basin		SEC. 19, T-17-5	
14. Distance in miles and direction from nearest town or post office*  7 MILES WEST. FROM LOCO HILLS, NM	O O O O O O O O O O O O O O O O O O O		12. County or Parish EDDY	13. State
15. Distance from proposed*	16. No. of Acres in lease	17. Spacing	g Unit dedicated to this well	; team richt
location to nearest property or lease line, ft.  (Also to nearest drig. unit line, if any)	294.64	40	•	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  600 WEST OF #2	19. Proposed Depth 5000	[	BIA Bond No. on file <b>2787</b>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3673 GL	22. Approximate date work will sta UPON APPROVAL	urt*	23. Estimated duration ± 10 DAYS	
	24. Attachments			
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	4. Bond to cover t Item 20 above). 5. Operator certific	he operation cation. specific info	form:  is unless covered by an exist  formation and/or plans as ma	•
25. Signature	Name (Printed/Typed)		Date	4/22/2004
Title / Designa	BETSY LUNA			4/ 22/ 2004
Approved by (Signature) /S/ Joe G. Lara	Name (Printed/Typed)	e G. L	Date	A
FIELD MANAGER	Office CARLSBA	AD FIE	LD OFFICE	IUN 0 1 2004
Application approval does not warrant or certify the the applicant holds operations thereon.  Conditions of approval, if any, are attached.	legal or equitable title to those rights in		ease which would entitle the ROVAL FOR 1	

\*(Instructions on reverse)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

DISTRICT I
1625 N. French Dr., Bobbs, NM 88240
DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III

## State of New Mexico

Energy. Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

## OIL CONSERVATION DIVISION

1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV 2040 South Pacheco, Sants Fe, NM 87505

2040 South Pacheco Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
30-015-	96210	EMPIRE (YESO)	
Property Code	Property		Well Number
26582	PHILLIPS "19" FEDERAL		4
OGRID No.	Operator	Name	Elevation
25706	CLAYTON WILLIAMS	ENERGY, INC.	3673'

## Surface Location

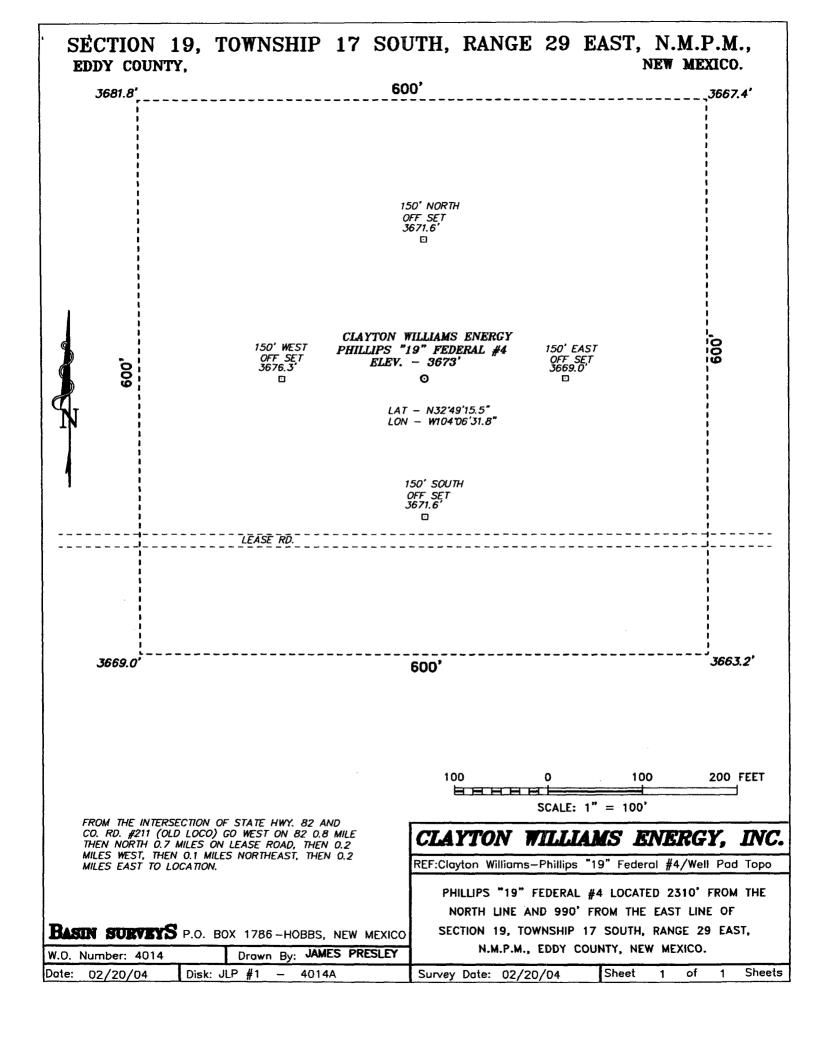
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Н	19	17 S	29 E		2310'	NORTH	990'	EAST	EDDY

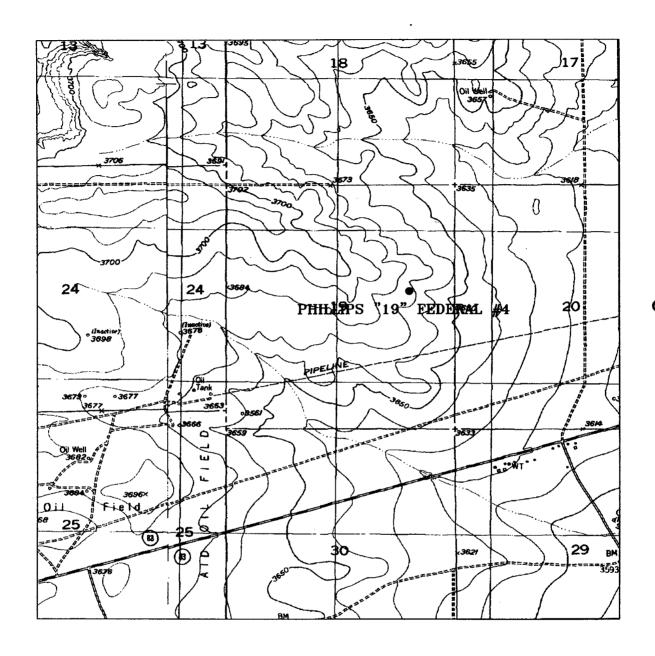
## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r lnfill C	onsolidation (	Code Or	der No.	<u> </u>	<del></del>		·
40	<u> </u>								

## NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	. 2310'	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Adam Luna
Lat.: N32°49'15.5" Long.: W104°06'31.8"	3681.8	Signature ()  BETSY LUNA  Printed Name  ENGINEERING TECHNICIAN  Title  4/22/2004  Date  SURVEYOR CERTIFICATION
	3669.0° 3663.2°	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 supervison and that the same is true and correct to the best of my belief.  February 19 2004
		Date Surveye  Signature  See ARY L. JONES  Professional SurveyonAEX  Professional SurveyonAEX  Certificate  BASIN SURVEYS  Page 12 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -





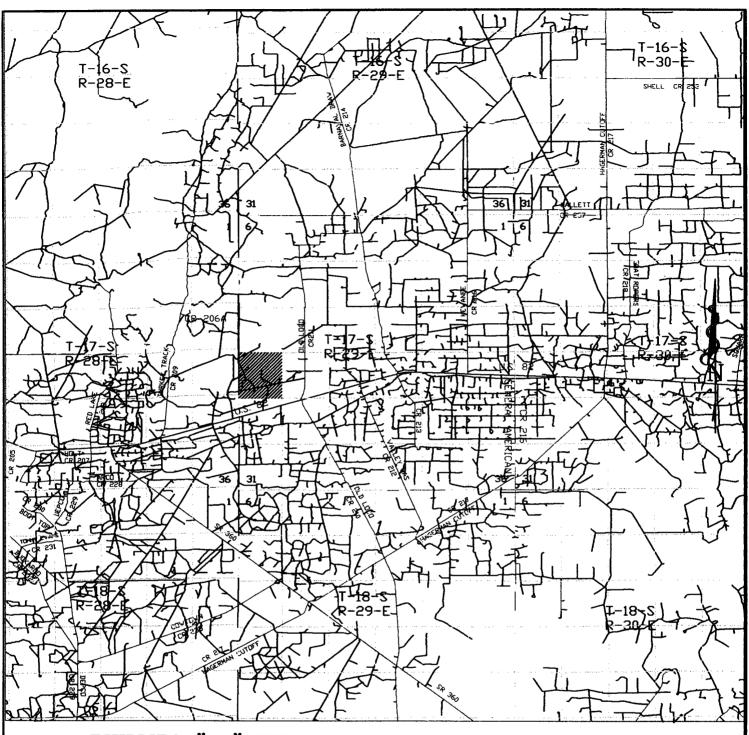
PHILLIPS "19" FEDERAL #4
Located at 2310' FNL and 990' FEL
Section 19, Township 17 South, Range 29 East,
N.M.P.M., Eddy County, New Mexico.



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

W.O. Number:	4014AA - JLP #1
Survey Date:	02/19/04
Scale: 1" = 20	
Date: 02/20/	04

CLAYTON WILLIAMS ENERGY, INC.



PHILLIPS "19" FEDERAL #4
Located at 2310' FNL and 990' FEL
Section 19, Township 17 South, Range 29 East,
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P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 — Office (505) 392-3074 — Fax basinsurveys.com

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Date: 02/20/	04

CLAYTON WILLIAMS ENERGY, INC.

# CLAYTON WILLIAMS ENERGY, INC. DRILLING PROGRAM

Attached to BLM form 3160-3

Lease Name: Phillips -19-Federal

Well No.: 4

Location: 2310' FNL & 990' FEL, UL H

Sec. 19, 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:

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

## 4. CASING PROGRAM

Hole Size	<u>Interval</u>	OD Csg	Weight, Grade, Type.
	25' into top of 300 Rustler 5000' 355		
11"	300 RUSTIE	8-5/8	24#, J-55, ST&C
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% CaCl<sub>2</sub> + ½#/sx Flocele

5-1/2" Production Casing:

Stage tool @ +/- 2600'

1<sup>st</sup> Stage: 400 sx. 35:65 Poz:C + 6% gel + 2% CaCl<sub>2</sub> + 1/4 pps Cello-flake

150 sx. Class "C" Neat

2<sup>nd</sup> 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 ram-type 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:

<u>Depth</u>	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

## 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.
- 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:

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

## II. 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:

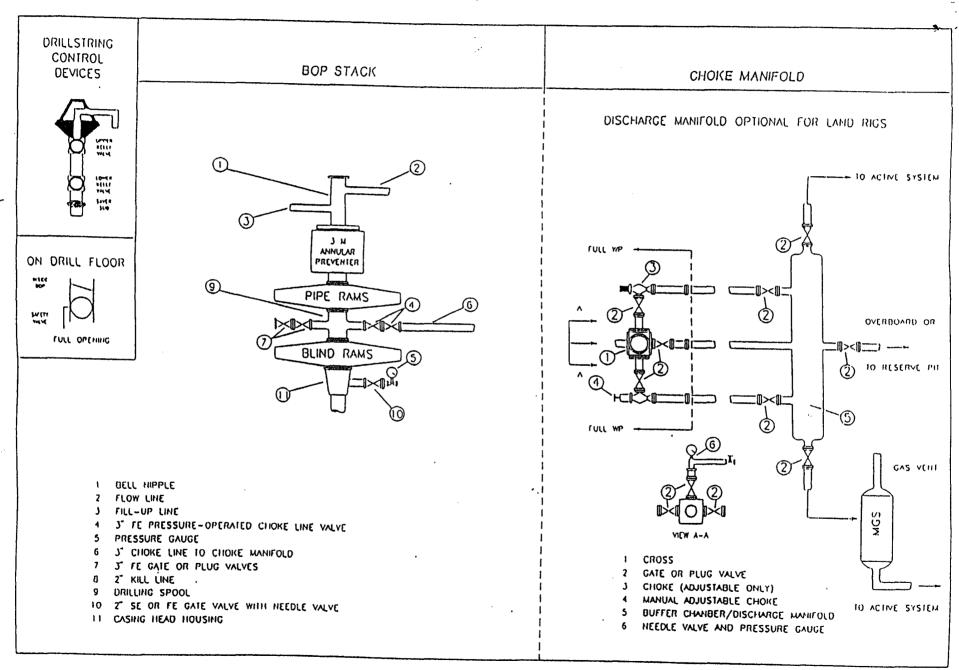
A. All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

## 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 -19-Federal

Well No.: 4

Location: 2310' FNL & 990' FEL, UL H

Sec. 19, 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. Proposed access Roads:

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:

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Phillips-19-Federal, well #1: Sec. 19, T-17-S, R-29-E, UL A, 990' FNL & 330' FEL Phillips-19-Federal, well #2: Sec. 19, T-17-S, R-29-E, UL H, 2310' FNL & 330' FEL Phillips-19-Federal, well #3: Sec. 19, T-17-S, R-29-E, UL A, 520' FNL & 880' FEL Phillips-19-Federal, well #5: Sec. 19, T-17-S, R-29-E, UL B, 990' FNL & 1650' FEL Phillips-19-Federal, well #6: Sec. 19, T-17-S, R-29-E, UL G, 2310' FNL & 1650' FEL Phillips-19-Federal, well #9: Sec. 19, T-17-S, R-29-E, UL C, 991' FNL & 1882' FWL Phillips-19-Federal, well #10: Sec. 19, T-17-S, R-29-E, UL C, 530' FNL & 1225' FWL
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Phillips-19-Federal, well #11: Sec. 19, T-17-S, R-29-E, Lot 1, 985' FNL & 585' FWL Phillips-19-Federal, well #12: Sec. 19, T-17-S, R-29-E, Lot 2, 2252' FNL & 445' FWL Phillips-19-Federal, well #13: Sec. 19, T-17-S, R-29-E, UL F, 2312' FNL & 1350' FWL

## 4. Location of Existing Wells and/or Proposed Facilities:

## A. Tank Battery:

Sec. 19 wells: Sec. 19, T-17-S, R-29-E, UL G, 1980' FNL & 2310' FEL (Green B Federal #9 location)

- B. Flowlines: See attached Property Line & Road Diagram.
- 5. Location and type of Water Supply: To be hauled by contract company.

## 6. Source of Construction Materials:

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. Ancillary Facilities:

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. Surface Ownership:

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
- I. Well Sign: To be installed at the wellsite
- 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 (432) 682-6324

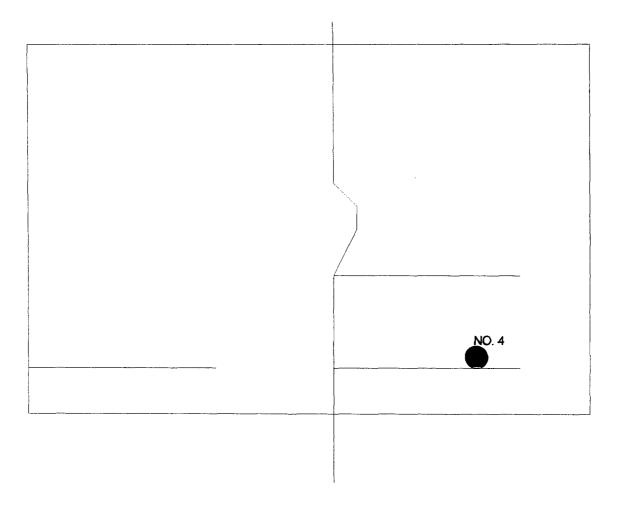
or

Matt Swierc Clayton Williams Energy, Inc. Six Desta Drive, Ste. 3000 Midland, TX 79705 (432) 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.

John F. Kennedy Drilling Manager CLAYTON WILLIAMS ENERGY, INC. PHILLIPS 19 FEDERAL NO. 4 ACCESS ROAD PLAT N / 2 SEC. 19 - T17S - R29E



ALL ROADS ARE EXISTING / NO NEW ROADS WILL BE BUILT

CLAYTON WILLIAMS ENERGY, INC.
PHILLIPS 19 FEDERAL NO. 4
RIG ORIENTATION: V - DOOR NORTH

RESERVE PIT AREA 100 FEET X 100 FEET			
125 FEET	40 FEET	125 FEET	
	125 FEET		