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

Form 3160-3 August 1999)	

(August 1999)	332425	262>	OMB No. 1004-0 Expires November 30	136
UNITED STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAG	/O: T	1285	5. Lease Serial No. NM-99009	
APPLICATION FOR PERMIT TO DR	UL OR RESITER NOV 2	002	If Indian, Allottee or Trib	e Name
AFFEIGATION FOR FERMIT TO BE	© BEUEL		3/19	91
ia. Type of Work: 🔼 DRILL 🔲 REENTER	T 000 AD		N If Unit or CA Agreement,	Name and No.
S DALLE S REENTER		*	ω	
1b. Type of Well: (A) Oil Well (B) Gas Well (D) Other	Single Zone (Multi	nia Zorta O	8. Lease Name and Well No.	
2. Name of Operator	Strigte Zone Can Multi	163	Chiricahua R 21 9. API Well No.	Federal #1
Threshold Development Company	3132		30 -035-20	074
3a. Address Taylor St Penthouse II	3b. Phone No. (include area code)		10. Field and Pool, or Explora	
Fort Worth, TX 76102	817-870-1483		Exploratory	•
4. Location of Well (Report location clearly and in accordance with a	any State requirements.*)		11. Sec., T., R., M., or Blk. an	d Survey or Area
Atsurface 1115' FNL & 660' FWL (Unit D,	NWNW)			•
At proposed prod. zone			Section 21-T24	S-R18E
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State
Approx. 28 miles northwest of Dell (City, Texas		0tero	NM
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of Acres in lease	17. Spacin	g Unit dedicated to this well	
(Also to nearest drig. unit line, if any) 660	1943.48	<u> </u>	160	
18. Distance from proposed location*	19. Proposed Depth	20. BLM/I	BIA Bond No. on file	
to nearest well, drilling, completed, applied for, on this lease, ft. N/A	5419'	1 0	679796 - statewid	e
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta	1	23. Estimated duration	
3716' GR	ASAP after approva	1	3 weeks	
	24. Attachments			· · · · · · · · · · · · · · · · · · ·
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be at	tached to this	s form:	
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	I tem 20 above). 5. Operator certific	cation. specific infe	ormation and/or plans as may	•
25 Signature Usa	Name (Printed/Typed) Rusty Klein		Desc)	2.9,2003
Agent for Threshold Development Compan	ıv		•	
Approved by (Signature)	Name (Printed/Typed) EON/R/)	T. 1/2	ALCK! Date	ov 2/2002
Title ASST FIELD MOR	Office LCFO		APPROVED FO	R 1 YEAR
Application approval does not warrant or certify the the applicant holds le operations thereon.	gal or equitable title to those rights in	the subject	lease which would entitle the ap	plicant to conduct
Conditions of approval, if any, are attached.				

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

Cement to cover all oil, gas and water bearing zones.

BOULO MENSOE IMPNI ONE PO OVEROS

2002 AUG 13 PH 1: 52

BECEINED

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

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

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87605

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87505

□ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API	Number	ſ	Pool Code Pool Name							
			Wildcat							
Property	Code	ŀ			Property Nam	ie .		Well Number		
			CHIRICAHUA R 21 Federal						1	
OGRID N	ο.		Operator Name					Eleva	Lion	
23032	·		TH	IRESHOL	D DEVELOPA	DEVELOPMENT COMPANY 3716				
					Surface Loca	ation				
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County	
D	21	24 S	18 E		1115'	NORTH	660'	WEST	OTERO	

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 Acre	Joint o	r Infill Co	onsolidation (Code Ore	der No.				
160									

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

	OR A NON-SIAN	DARD UNIT HAS BEEN APPROVED BY TH	E DIVISION
3722.6' 3722.0'660'			OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and beltef. Signature Rysty Klein Printed Name Agent f/Threshold Dev. Tyde Date SURVEYOR CERTIFICATION
			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. MARCH 8, 2002 Date Surveyed 1 JONES Signsypte & Seed of
			Certific Gory Landones 7977 BASIN SURVEYS

THRESHOLD DEVELOPMENT COMPANY Chiricahua R 21 Federal #1 1115' FNL & 660' FWL Section 21-T24S-R18E Otero County, New Mexico

1. The estimated tops of geological markers are as follows:

San Andres Surface Abo 3220' Basement 3919'

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered are:

Water: Nearest well is 6 miles north - reported fresh water at

268-278**'**

Oil or Gas: Oil 3220'; Gas below 3220'

3. Pressure Control Equipment: See Exhibit B

Shaffer 11" 3000 psi Type B with 2-3" openings below the rams; pipe rams and blind rams, choke manifold with 2-2" adjustable chokes plus 2" flow lines.

Shaffer 11" 3000 psi spherical annular preventor. Float in drillpipe, TIW valve on floor

Auxiliary Equipment:

- A. kelly cock, pit level indicators, flow sensor equipment and a sub with full opening valve to fit the drillpipe and collars will be available on the rig floor in the open position at all times for use when kelly is not is use.
- 4. Proposed Casing and Cementing Program: See Exhibit F
 - A. Casing Program: (New or Used)

Hole Size	Casing Size	Wt./Ft.	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>
14-3/4"	11-3/4"	42#	H-40	ST&C	Surface-600'
11"*	8 - 5/8 ''	32#/24#	J-55	ST&C	Surface-2000'
7-7/8"	5-1/2"	17#/15.5#	J ~ 55	LT&C	Surface-5419'

*Contingency for loss circulation possibilities

- B. Minimum Casing Design Factors: Collapse 4910 psi; Burst 5320 psi; Tensile Strength 55
- C. Cementing Program:

Surface Casing: Lead - 65-35-6 Poz C + 1/4# celloflake + 2% CaCl2 (13.2#/gal); Tail - 250 sacks Class C + 1/4# celloflake + 2% CaCl2 (14.8#/gal) - 150% excess over hole volume - Circulate to surface.

Intermediate Casing: Lead - 65-35-6 Poz H + additives based on hole conditions. Tail - 250 sacks "H" + additives based on hole conditions. Fill to inside of surface casing.

THRESHOLD DEVELOPMENT COMPANY Chiricahua R 21 Federal #1 Page 2:

Proposed Casing and Cementing Program Continued:

Production Casing: Class "H" + 10% salt + additives based on hole conditions (16.0#/gal). Cement volume based on caliper + 25% excess. Cement top based on potential pay zones.

5. Mud Program and Auxiliary Equipment:

<u>Interval</u>	Type	Weight	Viscosity	Fluid Loss
0-600'	Water	8.4	Water	No Control
600-2000'	Fresh	9.0	35 sec/qt	No Control
2000-4000'	Cut Brine	9.5	45 sec/qt	14 m1
4000-TD	Brine	9.9+	55 sec/qt	10 ml

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the wellsite during drilling operations. Mud will be checked hourly by rig personnel.

6. Evaluation Program:

Samples: 1 dry cut, 1 wet cut every 30' to geologist's request, then every

10' to TD

Logging: FDC/CNL (Schlumberger platform express triple combo), Gamma Ray,

Sonic long space full wave form induction log, PE, Dual Laterolog,

SP if fresh mud

Coring: Side-wall core at direction of wellsite geologist

DST's: DST as needed to evaluate shows. RT after logging to evaluate

reservoir

7. Abnormal Conditions, Bottom Hole PRessure and Potential Hazards:

Anticipated BHP:

From 3200' to 5200', anticipated max BHP - 1100 psig - 1750 psig From 5200' to 5419', anticipated max BHP - 2080 psig - 2165 psig

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: Possibly at 1850'

H2S Zones Anticipated: None

Maximum Bottom Hole Temperature: 175°F

8. Anticipated Starting Date:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 20 days to drill the well with completion taking another 30 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN Threshold Development Company Chiricahua R 21 Federal #1 1115' FNL & 660' FWL Section 21-T24S-R18E Otero County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit Ais a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately twenty eight (28) miles northwest of Dell City, Texas. The access route to the location is indicated in red and green on Exhibit Ai.

DIRECTIONS:

From the intersection of 62/180 (Greene Street) & Highway 285 (Canal Street) in Carlsbad, New Mexico, proceed south on Highway 62/180 for approximately 77.1 miles to Texas Farm Road 1576. Turn north (right) on Farm Road 1576 and proceed north for approximately 20.3 miles. Pavement will turn east (right). Continue east on pavement for 1 mile. Turn north (left - Snodgrass Road) and continue north for .9 of a mile. Pavement will fork. Take right fork and continue east on FR 1576 for 1.3 miles. Turn north (right). NOTE: You will cross the state line here - Highway 506/FR 1576. Continue north/northeast on Hwy 506 for approx. 14.6 miles to intersection of Highway 506/County Road G-4. (NOTE: Highway 506 will turn to dirt after crossing cattleguard). Turn west (left) on CR G-4 and continue west for approximately 1.7 miles. The new road will start here going north for approximately 3/4 of a mile to southeast edge of location.

2. PLANNED ACCESS ROAD:

- A. The proposed new access will be approximately 3/4 miles in length from the point of origin to the southeast corner of the drilling pad. The road will lie in a southwest to northwest direction.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. Existing road will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL:

A. There is no drilling activity within a one-mile radius of the wellsite.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are no production facilities on the wellsite at this time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive oil, a gas or diesel self contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

THRESHOLD DEVELOPMENT COMPANY Chiricahua R 21 Federal #1 Surface Use & Operations Plan Page 2:

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit AL

6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will locate the nearest pit and obtain any permits and materials needed for construction.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. Drilling fluids will be allowed to evaporate in the reserve pit until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill. Burial on site is not approved.

8. ANCILLARY FACILITIES: None

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' X 400' area has been staked and flagged.

10. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other materials not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have been dried and been levelled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

THRESHOLD DEVELOPMENT COMPANY Chiricahua R 21 Federal #1 Surface Use & Operations Plan Page 3:

11. SURFACE OWNERSHIP: Federal - administered by the Bureau of Land Management

GRAZING LESSEE: Jane Shafer

P. O. Box 316

Dell City, TX 79837

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaelogical report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

13. OPERATOR'S REPRESENTATIVE:

A. Through APD approval:

Rusty Klein, Consultant Koyote Konsulting Services Agent for Threshold Development Company P. O. Box 1491 Artesia, NM 88211-1491 Office: 505-746-6565 Cellular: 505-365-4245

B. Through Drilling, Completions and Production:

Gary Tidmore, Land Manager Threshold Development Company 777 Taylor Street - Penthouse II Fort Worth, TX 76102 Office: 817-870-1483

14. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Threshold Development Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C.

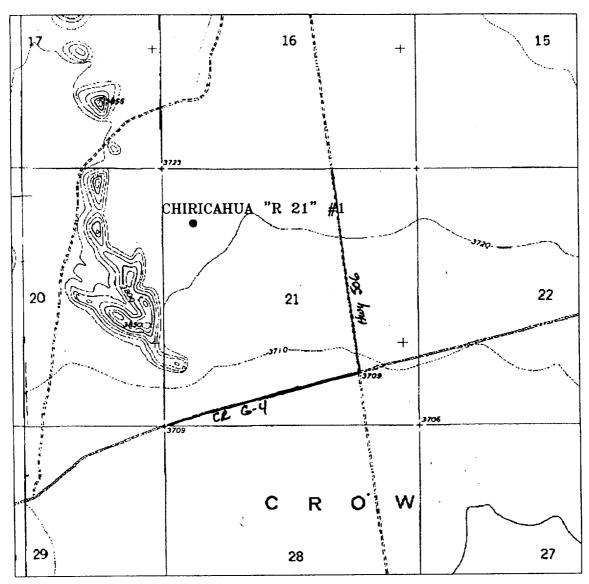
1001 for the filing of a false statement.

egest 4, 2002

Rusty Klein, Jonsulfant

Koyofe Konsulting Services

Agent for Threshold Development Company



THRESHOLD DEVELOPMENT COMPANY Chiricahua R 21 Federal #1 1115' FNL & 660' FWL of Section 21-T24S-R18E Otero County, New Mexico

Exhibit Al

CHIRICAHUA "R 21" #1

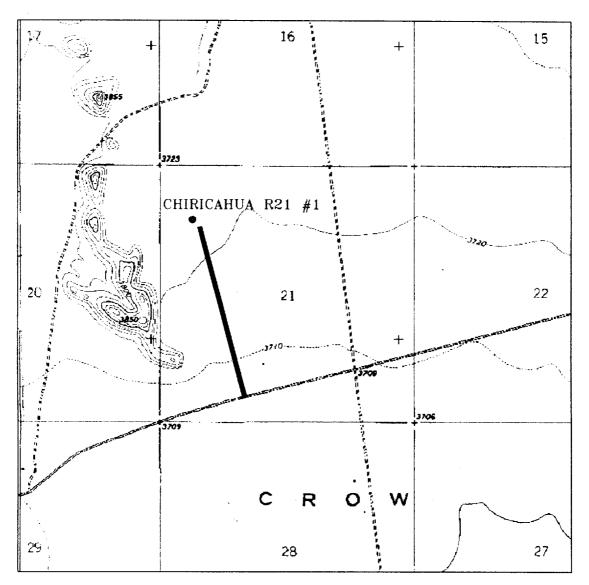
Located at 1115' FNL and 660 rul Section 21, Township 24 South, Range 18 East, N.M.P.M., Otero County, New Mexico.



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:	2372AA KJG CD#5
Survey Date:	0308-2002
Scale: 1" = 2	000'
Date 03-14	-2002

THRESHOLD DEVELOPEMENT COMPANY



THRESHOLD DEVELOPMENT COMPANY Chiricahua R 21 Federal #1 1115' FNL & 660' FWL of Section 21-T24S-R18E Otero County, New Mexico

Exhibit A2

CHIRICAHUA R21 #1 Located at 1115' FNL and 660 Section 21, Township 24 South, Range 18 East, N.M.P.M., Otero County, New Mexico.

Date:

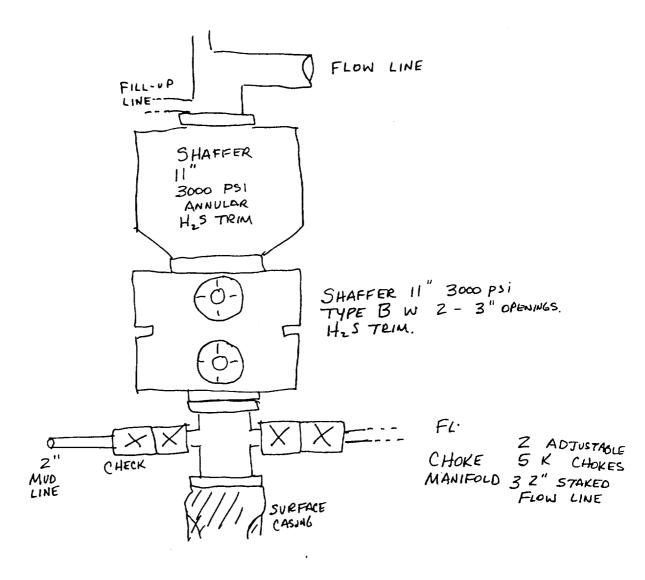


P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

W.O. Number:	2372AA - KJG CD#5
Survey Date:	06-06-2002
Scale: 1" = 2	000'

06-05-2002

THRESHOLD **DEVELOPEMENT COMPANY**

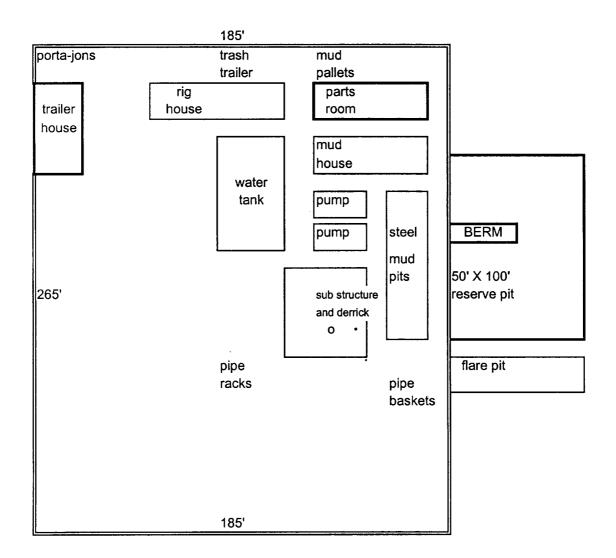


THRESHOLD DEVELOPMENT COMPANY
Chiricahua R 21 Federal #1
1115' FNL & 660' FWL of
Section 21-T24S-R18E
Otero Co., NM

Exhibit B

Chiricahua R 21 Federal #1 1115' FNL & 660' FWL Sec 21 T24S R18E Otero County, New Mexico

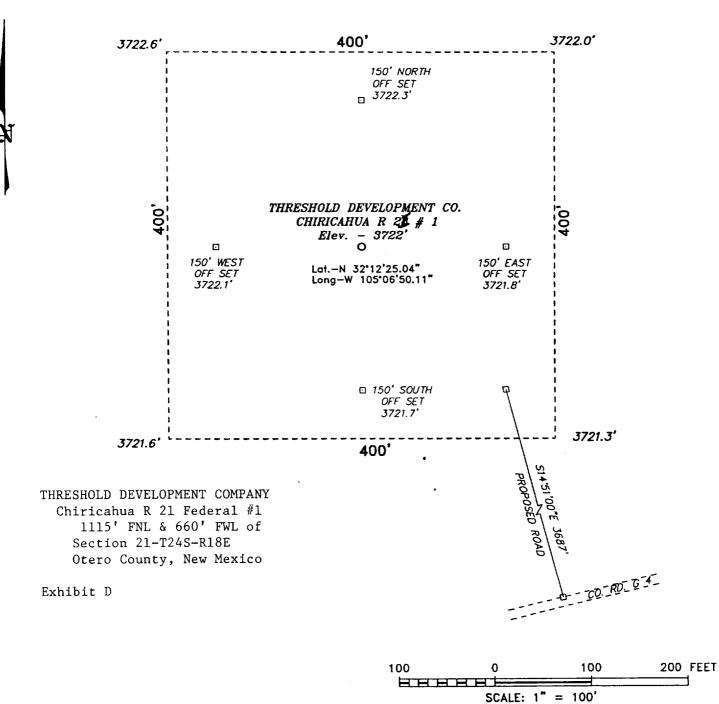
Drilling Rig Location Schematic



THRESHOLD DEVELOPMENT COMPANY
Chiricahua R 21 Federal #1
1115' FNL & 660' FWL of
Section 21-T24S-R18E
Otero Co., NM

Exhibit C

SECTION 21, TOWNSHIP 24 SOUTH, RANGE 18 EAST, N.M.P.M., otero county, New Mexico.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 506 AND CO. RD. G 4, GO SOUTHWEST ON CO. RD. G 4 APPROX. 1.9 MILES TO PROPOSED ROAD TO LOCATION RIGHT.

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

W.O. Number: 2372 | Drawn By: **G. SHOULTS**Date: 03-14-2002 | Disk: GWS # 1 - CHIRIC R21 1 B

THRESHOLD DEVELOPMENT COMPANY

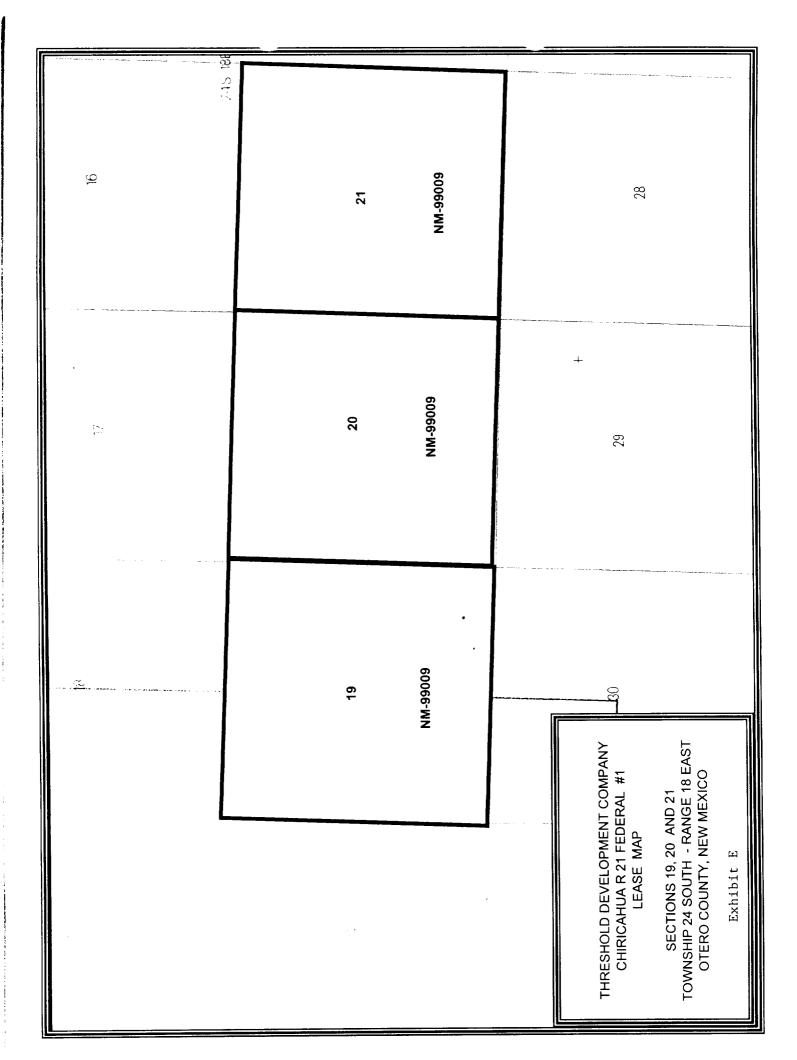
REF: CHIRICAHUA R 21 No. 1 / Well Pad Topo

THE CHIRICAHUA R 21 No.1 LOCATED 1115" FROM THE NORTH LINE AND 660' FROM THE WEST LINE OF SECTION 21, TOWNSHIP 24 SOUTH, RANGE 18 EAST, N.M.P.M., OTERO COUNTY, NEW MEXICO.

Survey Date: 03-08-2002

Sheet 1 of 1

Sheets



Threshold Development Company

Chiricahua R 21 Federal #1

1115" FNL, 660' FWL Sec 21 T24S R18E Ortero County, New Mexico

40' of 24" conductor

14 3/4" hole

11 3/4" @ 600" 42# H-40 STC. Cement to surface

possible intermediate contingency 8 5/8" 32#, 24# J-55 set @ 2,000' 11" hole to 2,000'. Set casing or reduce hole size to 7 7/8"

Top of cement to be determined by uphole potential pay

7 7/8" hole to TD

5 1/2" J-55 17#, 15.5# LTC casing @ 5,419' Float shoe, full joint , float collar

not to scale

Anticipated tops:

THRESHOLD DEVELOPMENT COMPANY
Chiricahua R 21 Federal #1
1115' FNL & 660' FWL of
Section 21-T24S-R18E
Otero Co., NM

Exhibit F

LIST OF ATTACHMENTS

THRESHOLD DEVELOPMENT COMPANY Chiricahua R 21 Federal #1 1115' FNL & 660' FWL Section 21-T24S-R18E Otero County, New Mexico

Exhibit Al Exhibit A2	BLM map showing area of location BLM map showing proposed road
Exhibit B	BOP Diagram
Exhibit C	Location and Rig Layout
Exhibit D	Survey Diagram
Exhibit E	Lease Map
Exhibit F	Diagramatic of casing strings