

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0136

Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

2004 JUN -4 AM 9:32

5. Lease Designation and Serial No.

NM-10183-A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement, Name and No.

8. Lease Name and Well No.

FEDERAL M 2 #2

9. API Well No.

3004532402

10. Field and Pool, or Exploratory

Basin Fruitland Coal

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 1, T-31-N, R-13-W

12. County or Parish,

San Juan

13. State

New Mexico

Spacing Unit dedicated to this well

South 320 acres

20. BLM/BIA Bond No. on file

23. Estimated duration

30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan

3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office.

4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above).

5. Operator certification.

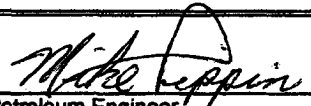
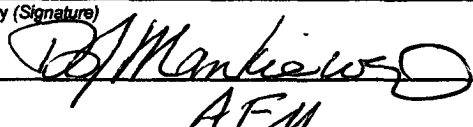
6. Such other site specific information and/or plans as may be required by the authorized officer

Size of Hole	Grade, Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
8-3/4"	7" K-55	20#	200'	100 Sxs, 118 ft3 - 100% Excess
6-1/4"	4-1/2" K-55	11.6#	2200'	181 Sxs, 367 ft3 - 45% Excess

On site inspection with Roger Herrera 5/26/04.

SEE ATTACHED APD INFORMATION

Latitude: 36 Deg, 55.4492 N
Longitude: 108 Deg, 08.9227 W

25. Signature 	Name(Printed/Typed) Mike Pippin	Date 6/2/2004
Title Petroleum Engineer		
Approved by (Signature) 	Name(Printed/Typed) AFM	Date 7-16-04
Title AFM	Office FFO	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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)

✓ This action is subject to technical and program review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOC

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer 00, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-05-32402		*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 34167	*Property Name FEDERAL M 2		*Well Number 2
*GRID No. 9812	*Operator Name HEC PETROLUEM, INC.		*Elevation 5788'

10 Surface Location


UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
P	1	31N	13W		1055	SOUTH	1030	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County

*Dedicated Acres 320.0 Acres - S/2	*Joint or Infill	*Consolidation Code	*Order No.
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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

<div>15</div> <div>1294.26'</div> <div>LOT 4</div> <div>1306.80'</div> <div>2004 JUN -4 AM 9:32</div> <div>RECEIVED</div>	<div>5282.64'</div> <div>LOT 3</div> <div>LOT 2</div> <div>LOT 1</div> <div>1319.34'</div> <div>1319.34'</div> <div>2640.00'</div> <div>5352.60'</div> <div>LAT: 36°55.4492'N LONG: 108°08.9227'W DATUM: NAD27</div> <div>1055'</div> <div>1030'</div>				<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div> <div><i>Mike Pippin</i></div> <div>Signature</div> <div>MIKE PIPPIN</div> <div>Printed Name</div> <div>AGENT - PETR. ENGR.</div> <div>Title</div> <div>6/2/04</div> <div>Date</div>
	<div>18 SURVEYOR CERTIFICATION</div> <div>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 belief.</div> <div>Survey Date: APRIL 16, 2004</div> <div>Signature and Seal of Professional Surveyor</div> <div></div> <div>JASON C. EDWARDS</div> <div>Certificate Number 15269</div>				

HEC PETROLEUM INC.
FEDERAL M 2 #2 FRTC
1030' FEL, 1055' FSL
Unit P Sec. 1 T31N R13W
San Juan County, NM

Drilling Program

1. ESTIMATED FORMATION TOPS (GL)

<u>Formation Name</u>	<u>Depth</u>
Ojo Alamo	Surface
Kirtland	616'
Fruitland	1452'
Pictured Cliffs	2073'
TD (4-1/2")	2200'

2. NOTABLE ZONES

<u>Gas or Oil Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Fruitland		Fruitland
Pictured Cliffs	Ojo Alamo Kirtland	

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the engineer's recommendations.

3. PRESSURE CONTROL

Maximum expected pressure is ~1000 psi. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 7-1/16" 3,000 psi annular is on PAGE #5.

BOP equipment and all accessories will meet or exceed BLM requirements in 43 CFR Part 3160 for a 3000 psi system. A 3000 psi annular BOP will be used. Accumulator system capacity will be sufficient to close all BOPE with a 50% safety factor. Fill, kill, and choke manifold lines will be 2". Accessories will include an upper Kelly cock with a handle, stabbing valve to fit drill pipe on floor at all times, string float at bit, 3000 psi choke manifold with 2" adjustable and 2" positive chokes, and pressure gauge. BOPs will be tested every 24 hours. Tests will be recorded on IADC log.

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
March 4, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease Federal STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator HEC PETROLEUM INC.		6. State Oil & Gas Lease No. Federal: NM-10183-A
3. Address of Operator c/o Agent, Mike Pippin LLC 3104 N. Sullivan, Farmington, NM 87401 505-327-4573		7. Lease Name or Unit Agreement Name FEDERAL M 2
4. Well Location Unit Letter <u>P</u> : <u>1030</u> feet from the <u>East</u> line and <u>1055</u> feet from the <u>South</u> line Section <u>1</u> Township <u>31N</u> Range <u>13W</u> NMPM San Juan County		8. Well Number #2
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5788' GL		9. OGRID Number 009812
Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)		
Pit Location: UL <u>P</u> Sect <u>1</u> Twp <u>31N</u> Rng <u>13W</u> Pit type: <u>Drilling</u> Depth to Groundwater <u><100'</u> Distance from nearest fresh water well <u>>200'</u> Distance from nearest surface water <u>>1000'</u> Below-grade Tank Location UL <u></u> Sect <u></u> Twp <u></u> Rng <u></u> ; feet from the <u></u> line and <u></u> feet from the <u></u> line		
10. Pool name or Wildcat Basin Fruitland Coal		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐

OTHER: Drilling Pit Registration ☒

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

We intend to drill a new FRTC well. The drilling pit will be built according to our general pit guidelines on file at the NMOCD in Aztec, NM.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Mike Pippin TITLE Agent - Petroleum Engineer DATE June 3, 2004

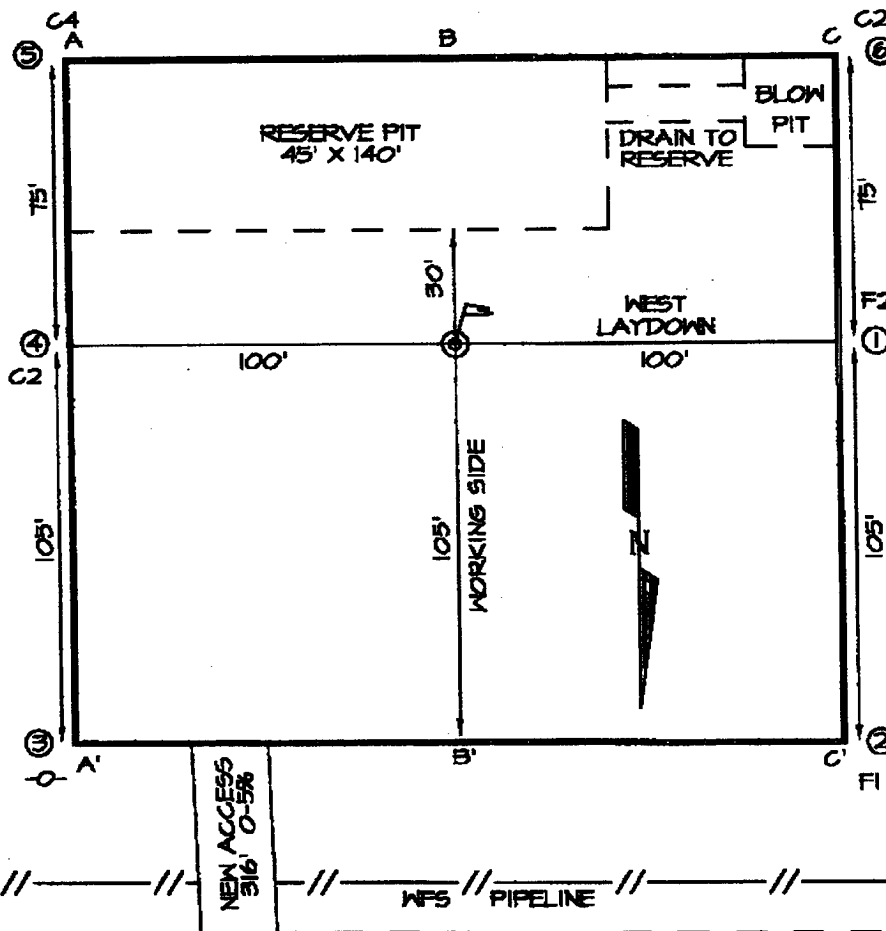
Type or print name Mike Pippin E-mail address: mpippin@ddbroadband.net Telephone No. 505-327-4573

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APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE JUL 23 2004
Conditions of approval, if any:

HBC PETROLEUM, INC. FEDERAL M 2-2
1055' FSL & 1030' FEL, SECTION 1, T31N, R13W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 5788'

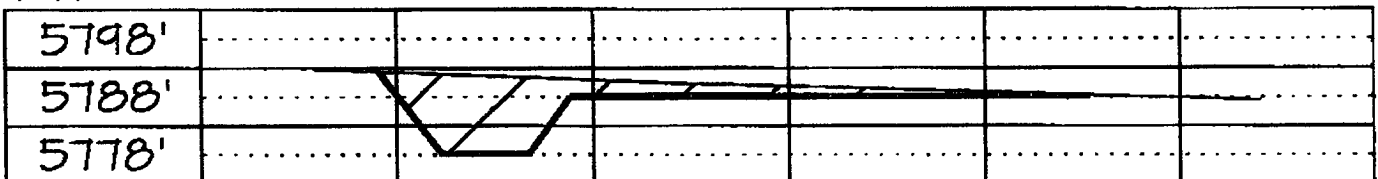
50' CONSTRUCTION ZONE



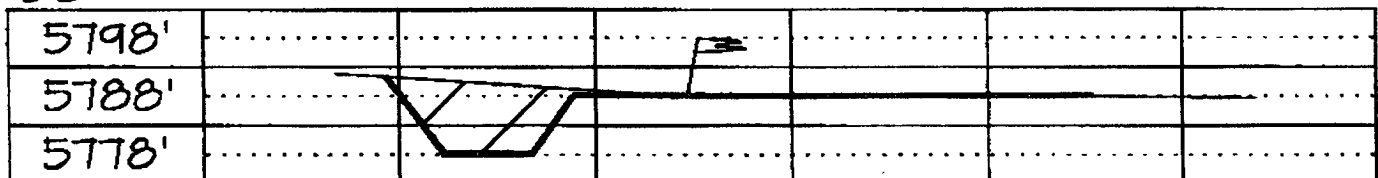
LATITUDE: 36.92415°
LONGITUDE: 108.14871°
 DATUM: NAD1921

NOTE:
 BEFORE ANY CONSTRUCTION BEGINS,
 CONTRACTOR IS ADVISED TO CALL
 ONE-CALL FOR LOCATION OF ANY
 MARKED OR UNMARKED PIPELINES OR
 CABLES IN THE AREA OF THIS PROJECT.

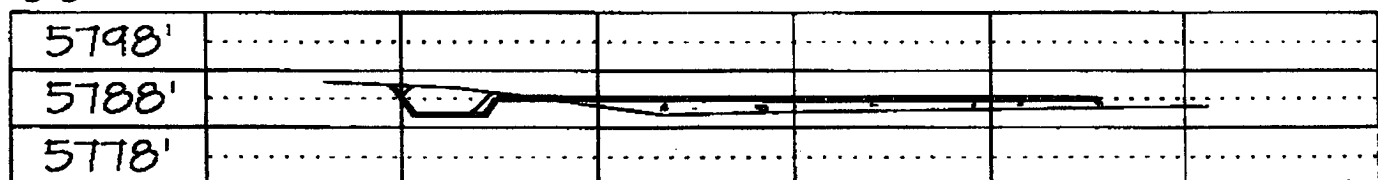
A-A'



B-B'



C-C'



PAGE #11

HEC PETROLEUM INC.
FEDERAL M 2 #2 FRTC
 1030' FEL, 1055' FSL
 Unit P Sec. 1 T31N R13W
 San Juan County, NM

4. CASING & CEMENT

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connection</u>	<u>GL Setting Depth</u>
8-3/4"	7"	20#	K-55	New	ST&C	200'
6-1/4"	4-1/2"	11.6#	K-55	New	ST&C	2200'

Surface Casing will be cemented to the surface with ~60 cu. ft. (~51 sx) Class "B" cmt or equivalent (1.18 ft³/sx yield, 15.6 ppg, & 5.2 gps) with 2% CaCl₂ and 1/4#/sx celloflake. Volume based on 100% excess. We plan to run a minimum of at least 3 centralizers. A wooden wiper plug will be displaced to within 20' of the shoe. WOC = 12 hours. Surface casing will be tested to 500 psi for 15 minutes.

Production Casing will be cemented to surface with a single stage. Total cement = ~388 cu. ft. (~200 sx). Volumes are calculated at 45% excess in the lead cmt. If cement does not circulate to surface, then a temperature survey or CBL will be run to determine the actual cement top as needed. WOC = 12 hours. Test to 1000 psi for 15 minutes.

Lead cement will be ~332 cu. ft. (~160 sx) Class "B" cmt or equivalent w/2% SM, 1/4#/sx cello flake, 3#/sx gilsonite mixed at 11.9 gps, 12.5 ppg for a yield of 2.09 cu. ft. per sx.

Tail cement will be ~56 cu. ft. (~40 sx) Class "B" cmt or equivalent w/1% gel, 2% CaCl₂, 1/4#/sx cello flake, 3#/sx gilsonite mixed at 6.8 gps, 14.5 ppg for a yield of 1.4 cu. ft. per sx.

Cementing equipment will include a guide shoe, and autofill float collar will be run 20' off bottom. We plan on running at least 10 centralizers.

5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	<u>Wt./ppg.</u>	<u>Vis.</u>	<u>Fluid Loss</u>	<u>PH</u>
0'-200'	FW gel/lime spud mud	8.4-8.7	30-50	NC	10
200'-2200'	FW gel/Polymer	8.3-8.6	30-35	<20cc's	9.5

Lost circulation and absorption material will be on location.

6. CORING, TESTING, & LOGGING

No cores, drill stem tests, or open hole logs are planned. A cased hole neutron log will be run from TD through the top of the Fruitland during completion operations.

Drilling Rig

3000 psi BOP System

