

Surface Use Plan  
**Perry 22 Federal Com #2H**  
Cimarex Energy Co.  
UL: B, Sec. 22, 20S, 34E  
Lea Co., NM

HOBBS OCD  
JAN 15 2014

RECEIVED

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what is submitted in this surface use plan without approval. If any other disturbance is needed after the APD is approved, a BLM approved sundry notice or right of way application will be submitted for approval prior to any new surface disturbance.

**1. Existing Roads:**

Area maps: Exhibit "B" - reproduction of Eddy Co. General Highway Map. Exhibit "C" - reproduction of a USGS Topographic Map. Exhibit "C-1" - well site layout map. Exhibits "C," "C-1" - existing roads map.

The maximum width of the driving surface will be 14'. The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.

Existing access road route to the proposed project is depicted on the public access point map if applicable. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of the surface use plan.

From Junction of Marathon Road and Lynch, go west on lease road for 1.7 miles to proposed well location.

If existing roads are used, the operator will improve or maintain existing roads in a condition the same as or better than before the operations began. The operator will repair pot holes, etc. All existing structures on the entire access route such as cattleguards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.

The operator will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events.

**2. New or Reconstructed Access Roads:**

No new access road planned.

**3. Planned Electric Line:**

Cimarex Energy plans to construct a new on lease electric line to service the well.

Cimarex Energy plans to install an on lease overhead electric line from the proposed well to an existing overhead electric line at the Perry 22 Federal Com #1H Bty. The proposed electric line will be 1641' in length. 4-40' poles, 480 volt, 4 wire, 3 phase. The electric line will exit off the East side of the well location and travel East for 1641' along the access road until it would intercept the existing electric line. The electric line will be routed on the south side of the access road and 10-20' from and parallel to the access road. Please see Exhibit G for proposed route information.

**4. Location of Existing Well in a One-Mile Radius -Exhibit A:**

- Water Wells - None known
- Disposal Wells - None known
- Drilling Wells - None known
- Producing Wells - As shown on Exhibit A
- Abandoned Wells - As shown on Exhibit A

JAN 21 2014

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**5. Location of Existing or Proposed Production Facilities:**

If on completion this well is a producer, a tank battery will be used and the necessary production equipment will be installed and production will be sent to the Perry 22 Federal Com #1H Bty. Cimarex Energy proposes to install two 4 inch buried HP polylines down existing lease road to the Perry 22 Federal Com #1H Bty battery.

Cimarex Energy plans to construct flowlines to service the well.

Specifications of Polyline: 1 HP polyline for oil, gas, and water production. 1 HP polyline for gas lift.

Both lines will be buried 25'-35' North of the access road.

Length: 1641'

MAOP: 1500 psi. Anticipated working pressure: 200-300 psi.

Allocation will be based on well test. Route is within lease boundaries, please see Exhibit G-1. Any changes to flowline route will be submitted via sundry notice.

**6. Location and Type of Water Supply:**

Water will be purchased locally from a commercial source and trucked over the access roads.

**7. Source of Construction Material:**

If possible, native caliche will be obtained from the excavation of drill site. The primary way of obtaining caliche will be by "turning over" the location. This means caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cu yds is the max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel:

- The top 6 inches of topsoil is pushed off and stockpiled along the side of the location.
- An approximate 120' x 120' area is used within the proposed well site to remove caliche.
- Subsoil is removed and piled alongside the 120' by 120' area within the pad site.
- When caliche is found, material will be stockpiled within the pad site to build the location and road.
- Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road.
- Once well is drilled, the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in Exhibit D – Rig Layout Diagram.

In the event that no caliche is found onsite, caliche will be hauled in from a BLM-approved caliche pit.

**8. Ancillary Facilities:**

No camps or airstrips to be constructed.

**9. Well Site Layout:**

- Exhibit "D" shows location and rig layout.
- Mud pits in the closed circulation system will be steel pits and the cuttings will be stored in steel containment pits.
- Cuttings will be stored in steel pits until they are hauled to a state-approved disposal facility.
- If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

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Cimarex Energy Co.  
UL: B, Sec. 22, 20S, 34E  
Lea Co., NM

**10. Plans for Restoration of Surface:**

Rehabilitation of the location will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

In areas planned for interim and final reclamation, surfacing materials will be removed and returned to a mineral pit or recycled to repair or build roads and well pads.

Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be recontoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be producer, those areas of the location not essential to production facilities and operations will be reclaimed and seeded per BLM requirements. Please see Production Facilities Layout Diagram, exhibit D-1

**11. Methods of Handling Waste**

- Drilling fluids, produced oil, and water from the well during drilling and completion operations will be stored safely and disposed of properly in a NMOCD approved disposal facility.
- Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around well site will be collected for disposal.
- Human waste and grey water will be properly contained and disposed of properly at a state approved disposal site.
- After drilling and completion operations, trash, chemicals, salts, frac sand and other waste will be removed and disposed of properly at a state approved disposal site.
- The well will be drilled utilizing a closed loop system. Drill cuttings will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

**12. Other Information:**

- Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- The wellsite is on surface owned by ~~Department of the Interior, Bureau of Land Management~~ <sup>Private Land, Owner/Operator Agreement Certification attached</sup>. The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.
- An archaeological survey will be conducted on the location and proposed roads and this report will be filed with the Bureau of Land Management in the Carsbad BLM office.
- There are no known dwellings within 1½ miles of this location.

**13. On Site Notes and Information:**

On Site Results: Barry Hunt, Trish Badbear, Danny Berry, Basin surveys on location 2/14/13. Moved 128 ft. north to get closer to road. V-Door West. Top soil east. Interim reclamation: All 4 sides. Access road from northeast corner, east, to main road (NENE/4 of sec. 22. (2 cattleguards - NE corner & NW corner)

Operator Certification Statement

**Perry 22 Federal Com #2H**

Cimarex Energy Co.  
UL: B, Sec. 22, 20S, 34E  
Lea Co., NM

Operator's Representative

Cimarex Energy Co. of Colorado  
600 N. Marienfeld St., Ste. 600  
Midland, TX 79701  
Office Phone: (432) 571-7800

**CERTIFICATION:** I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 20 day of August 2013

**NAME:** \_\_\_\_\_

Terri Stathem

**TITLE:** Regulatory Compliance

**ADDRESS:** 202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74102

**TELEPHONE:** 918-585-1100

**EMAIL:** TStathem@cimarex.com

**Field Representative:** Same as above

October 13, 2013

Bureau of Land Management  
Carlsbad Field Office  
620 E. Greene St.  
Carlsbad, New Mexico 88220

**VIA CERTIFIED MAIL RETURN RECIEPT NO.**

Re: 2H – Perry 22 Federal Com, Lease LC061144  
Township 20 South, Range 34 East, N.M.P.M.  
Section 22: W/2E/2  
Lea County, New Mexico

Gentlemen:

Per the Bureau of Land Management's ("BLM") letter dated, September 5, 2013, regarding Cimarex's Application for Permit to Drill ("APD") for the above captioned well, the BLM cited the following deficiency regarding the APD:

- "1-Operator does not appear to have operating rights on the bottom hole lease:"

Cimarex owns 100% of Lease NMNM 124662, covering the W/2NE/4. Devon Energy owns the NW/4SE/4 (NMLC 064194) and Fasken Land & Minerals owns the SW/4SE/4 (NMLC 06114). Both parties have received a well proposal and proposed joint Operating Agreement and have indicated that pending the finalizing of a joint development agreement, this deficiency will be cured.

Please let this letter serve as notice for curing the deficiency cited above in Cimarex's APD for the Perry 22 Fed Com #2H.

If you should have any questions, please contact the undersigned directly at (432) 571-7896 or by email at [mcompton@cimarex.com](mailto:mcompton@cimarex.com).

Sincerely,

**Cimarex Energy Co.**

Mark Compton

## Operator - Land Owner Agreement

Company: Cimarex Energy Co.

Proposed Well: Perry 22 Federal Com #2H

Federal Lease Number: NMNM1246<sup>6</sup>22

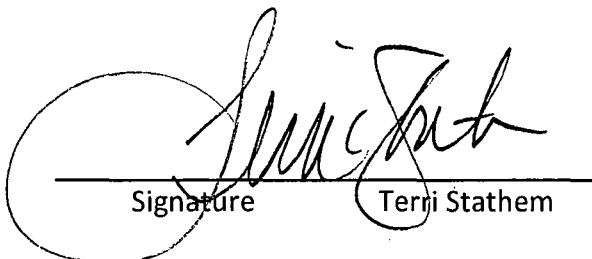
Please be advised that Cimarex Energy Co. has an agreement with the surface owner, listed below, concerning entry and surface restoration after completion of drilling operations at the above described well.

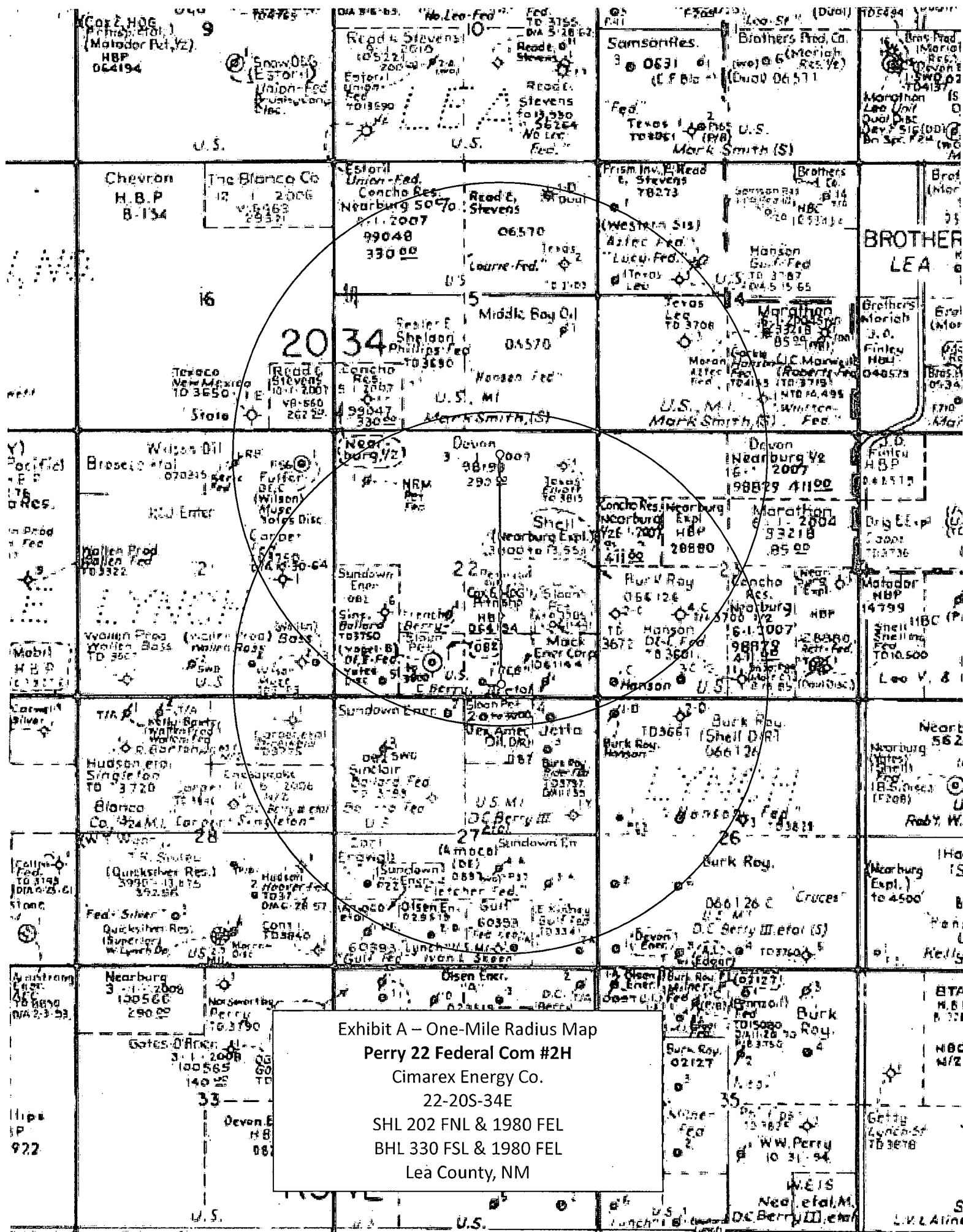
**Mr. Danny Berry**  
**Berry Ranch, Box 160**  
**Eunice, NM 88231**  
**575-369-5266**

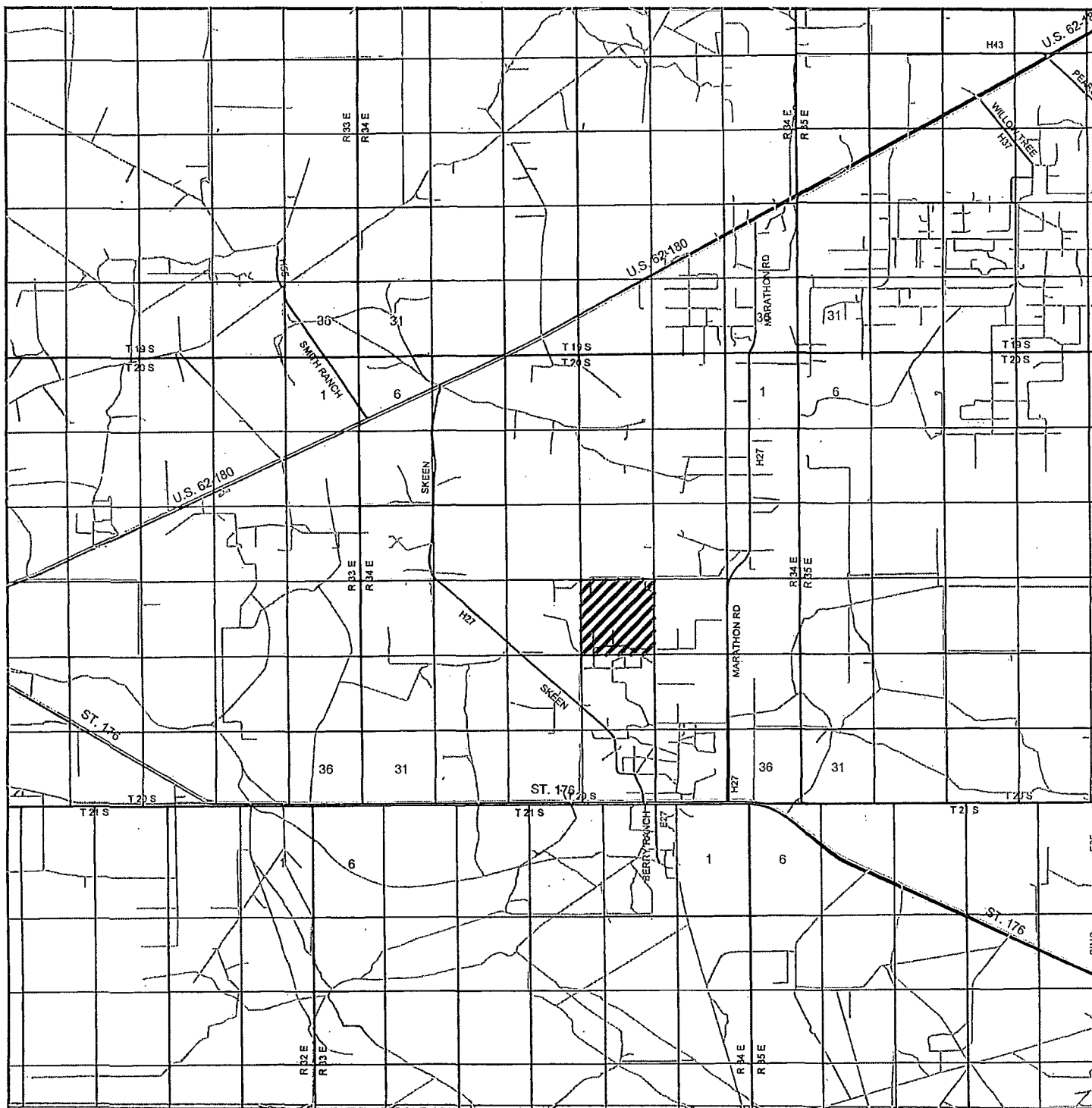
After abandonment of the well, all pits will be filled and levelled and all equipment and trash will be removed from the well site. No other requirements were made concerning restoration of the well site.

8-20-13

Date

  
Signature Terri Stathem





**PERRY 22 FEDERAL COM 2H**  
 Located 202' FNL and 1980' FEL  
 Section 22, Township 20 South, Range 34 East,  
 N.M.P.M., Lea County, New Mexico.



P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
 basinsurveys.com

W.O. Number: JMS 28175

Survey Date: 02-15-2013

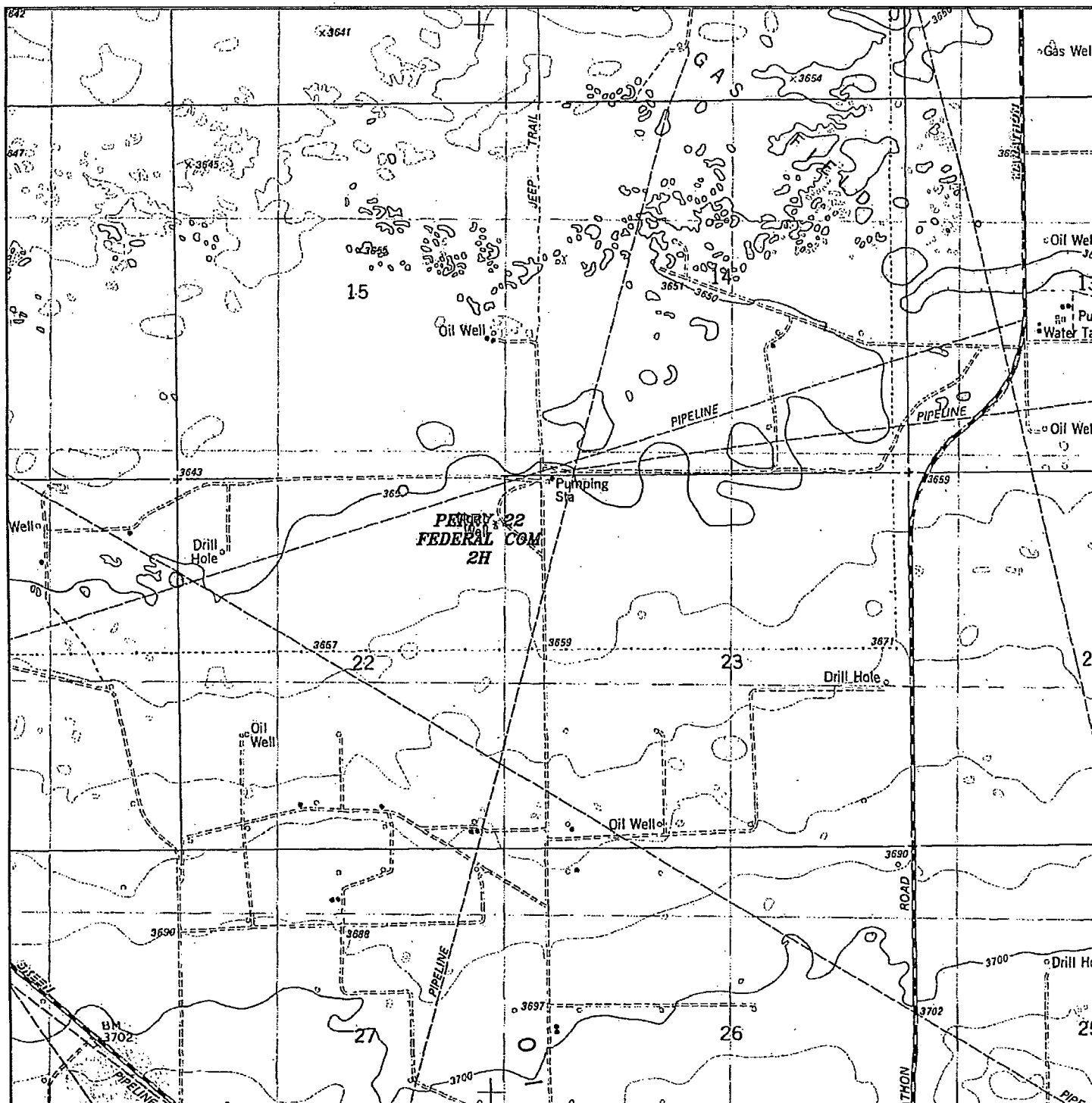
Scale: 1" = 2 Miles

Date: 02-20-2013

**CIMAREX  
 ENERGY CO.**

Exhibit B





**PERRY 22 FEDERAL COM 2H**  
 Located 202' FNL and 1980' FEL  
 Section 22, Township 20 South, Range 34 East,  
 N.M.P.M., Lea County, New Mexico.



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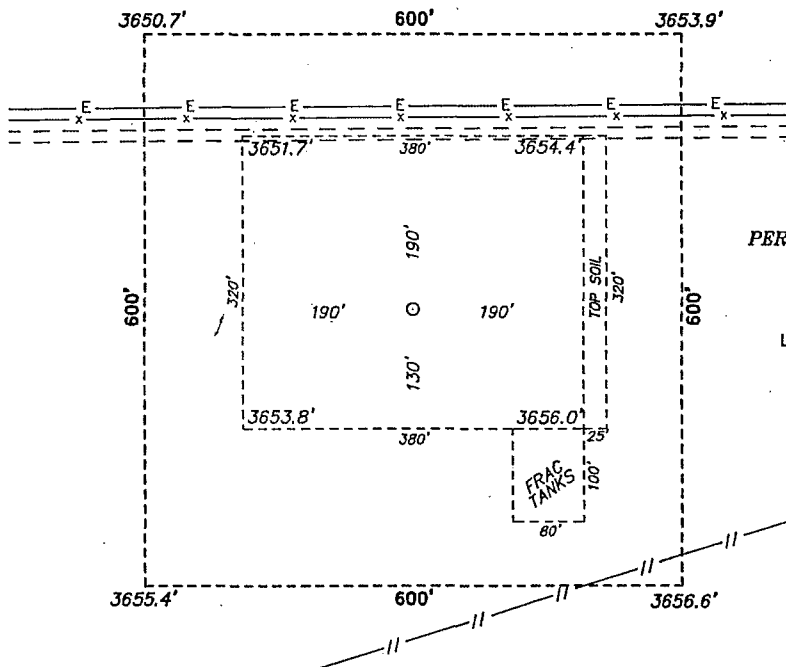
Scale: 1" = 2000'

Date: 02-20-2013

**CIMAREX  
 ENERGY CO.**

Exhibit C

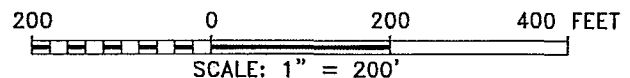
SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



CIMAREX ENERGY CO.  
PERRY 22 FEDERAL COM 2H  
ELEV. - 3653'

Lat - N 32°33'55.16"  
Long - W 103°32'45.40"  
NMSPCE- N 570292.7  
E 783912.5  
(NAD-83)

EUNICE, NM IS ±23 MILES TO THE EASTERLY OF LOCATION.



Directions to Location:

FROM THE JUNCTION OF MARATHON ROAD AND  
LYNCH, GO WEST ON LEASE ROAD FOR 1.7 MILES  
TO PROPOSED WELL LOCATION.

**CIMAREX ENERGY CO.**

REF: PERRY 22 FEDERAL COM 2H / WELL PAD TOPO

THE PERRY 22 FEDERAL COM 2H LOCATED 202'

FROM THE NORTH LINE AND 1980' FROM THE EAST LINE OF  
SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST,

N.M.P.M., LEA COUNTY, NEW MEXICO.

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

W.O. Number: 28175

Drawn By: J. SMALL

Date: 02-20-2013

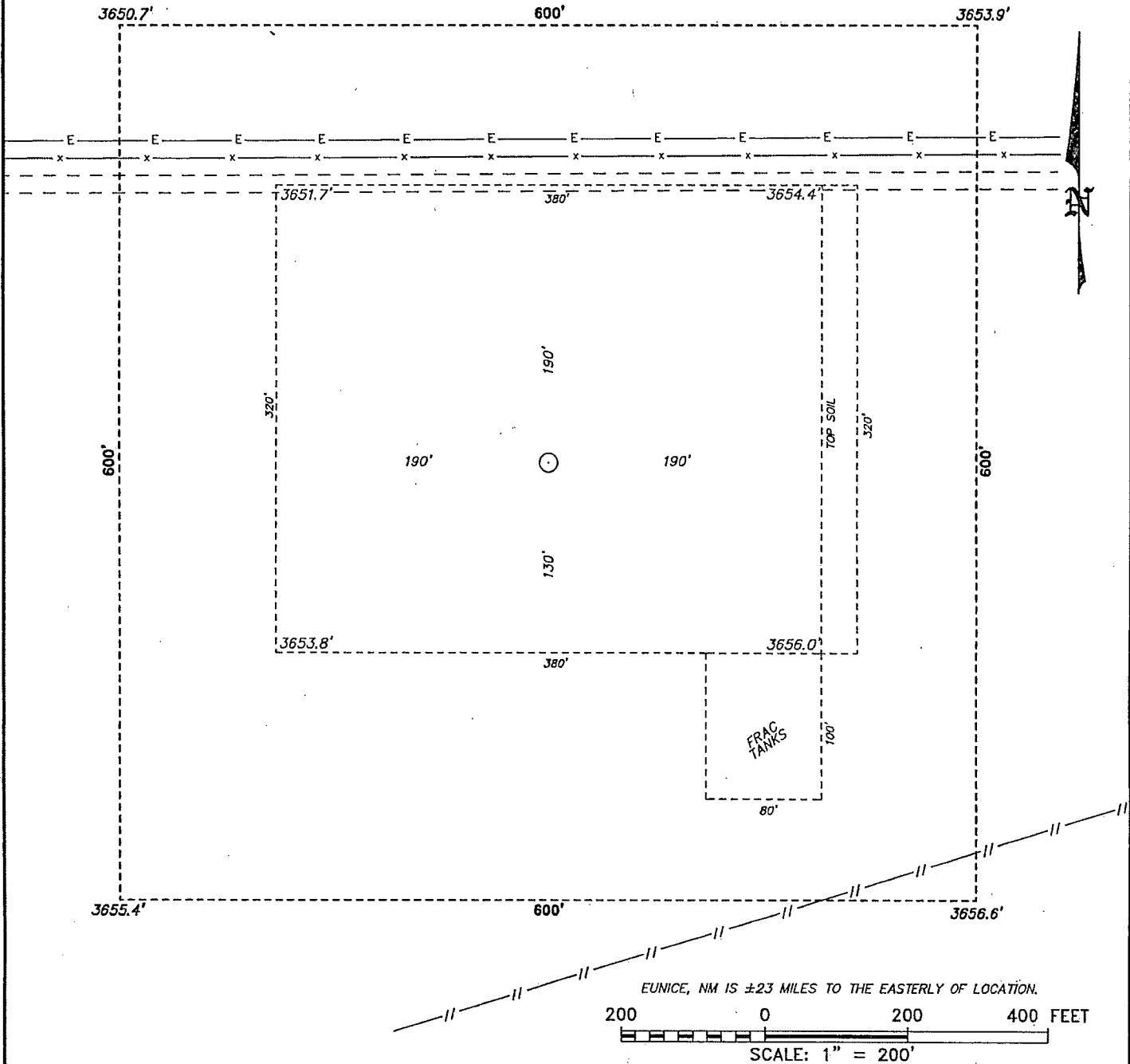
Disk: JMS 28175

Survey Date: 02-15-2013

Sheet 1 of 1 Sheets

Exhibit C-1

SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



**CIMAREX ENERGY CO.**

REF: PERRY 22 FEDERAL COM 2H / WELL PAD TOPO

THE PERRY 22 FEDERAL COM 2H LOCATED 202'

FROM THE NORTH LINE AND 1980' FROM THE EAST LINE OF

SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST,

N.M.P.M., LEA COUNTY, NEW MEXICO.

**BASIN SURVEYS**

P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 28175

Drawn By: J. SMALL

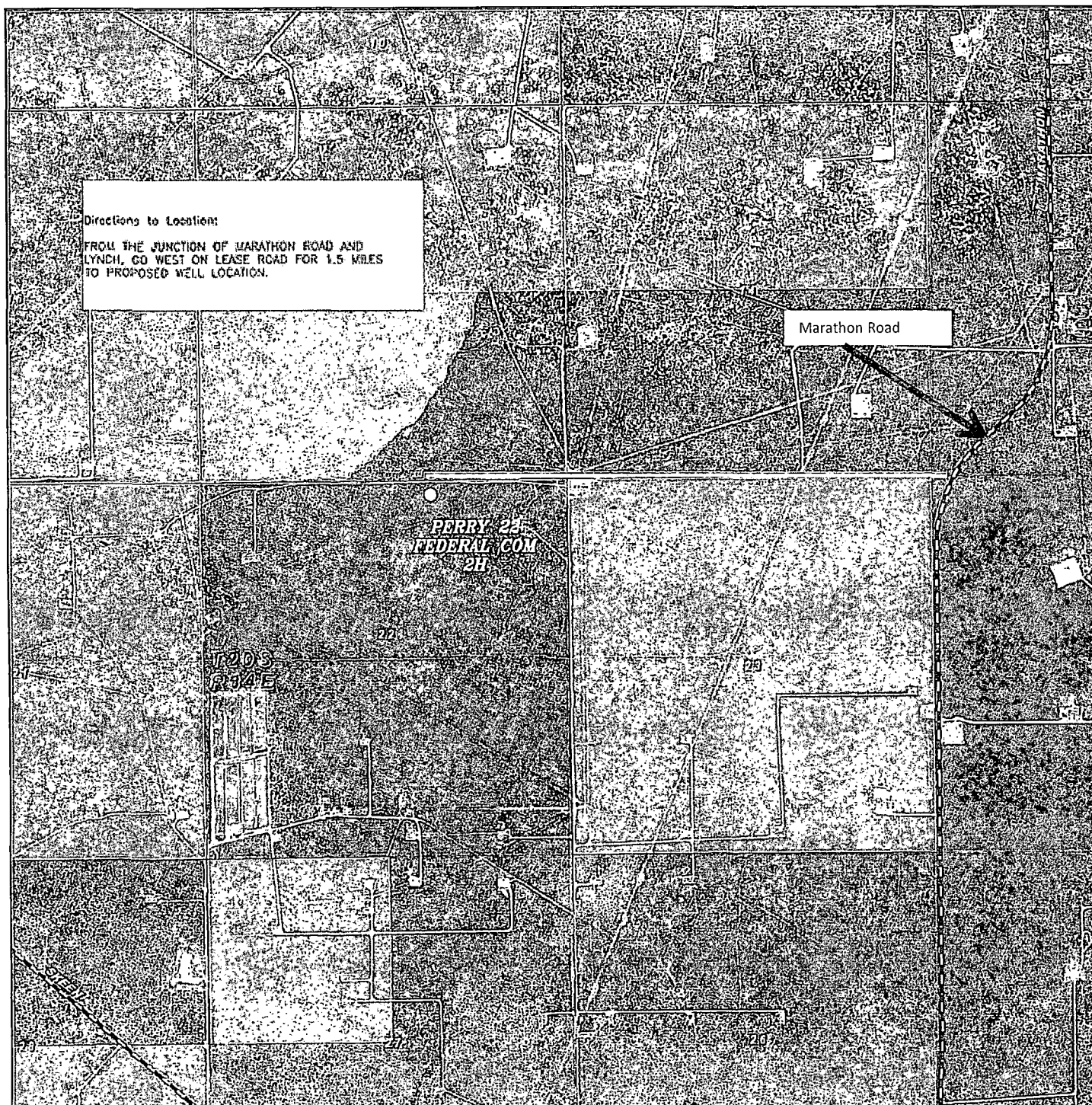
Date: 02-20-2013

Disk: JMS 28175

Survey Date: 02-15-2013

Sheet 1 of 1 Sheets

Exhibit C-1



Directions to Location:

FROM THE JUNCTION OF MARATHON ROAD AND  
LYNCH, GO WEST ON LEASE ROAD FOR 1.5 MILES  
TO PROPOSED WELL LOCATION.

Marathon Road

PERRY 22  
FEDERAL COM  
2H

T20S  
R34E

**PERRY 22 FEDERAL COM 2H**  
Located 202' FNL and 1980' FEL  
Section 22, Township 20 South, Range 34 East,  
N.M.P.M., Lea County, New Mexico.

Public Access Route

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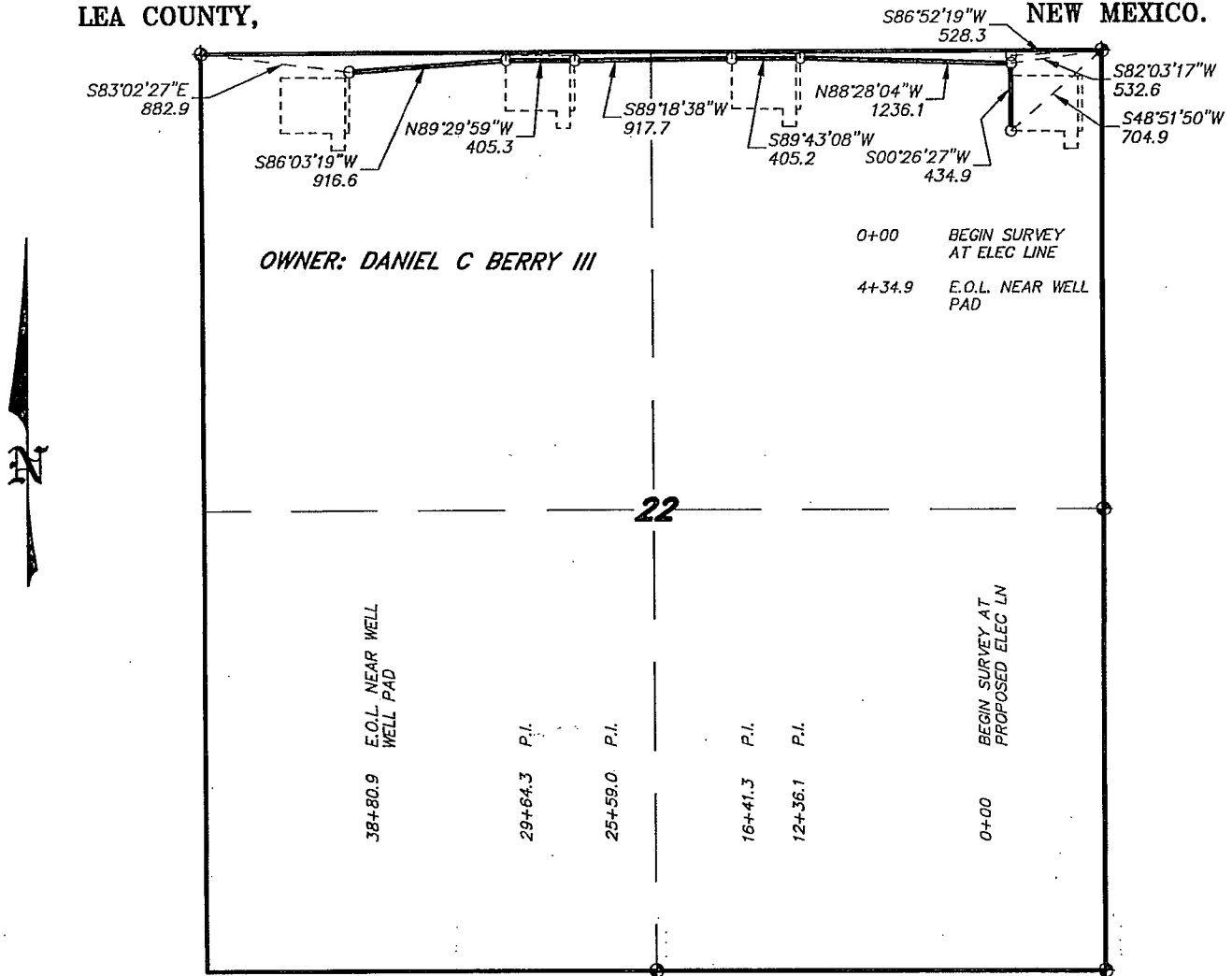
W.O. Number: JMS 28175

Scale: 1" = 2000'

YELLOW TINT - USA LAND  
BLUE TINT - STATE LAND  
NATURAL COLOR - FEE LAND

**CIMAREX**  
**ENERGY CO.**

SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



**LEGAL DESCRIPTION**

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES S.86°52'19"W, 528.3 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 22; THENCE S.00°26'27"W, 434.9 FEET TO THE END OF THIS LINE WHICH LIES S.48°51'50"W, 704.9 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 22; THENCE BEGINNING AGAIN AT A POINT WHICH LIES S.82°03'17"W, 532.6 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 22; THENCE N.88°28'04"W, 1236.1 FEET; THENCE S.89°43'08"W, 405.2 FEET; THENCE S.89°18'38"W, 917.7 FEET; THENCE N.89°29'59"W, 405.3 FEET; THENCE S.86°03'19"W, 916.6 FEET TO THE END OF THIS LINE WHICH LIES S.83°02'27"E, 882.9 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 22. SAID STRIP OF LAND BEING 4315.8 FEET OR 261.56 RODS IN LENGTH.

I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES, Surveyor No. 7977  
No. 5074

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

W.O. Number: 28178 Drawn By: J. M. SMALL

Date: 02-20-2013 Disk: JMS 28178

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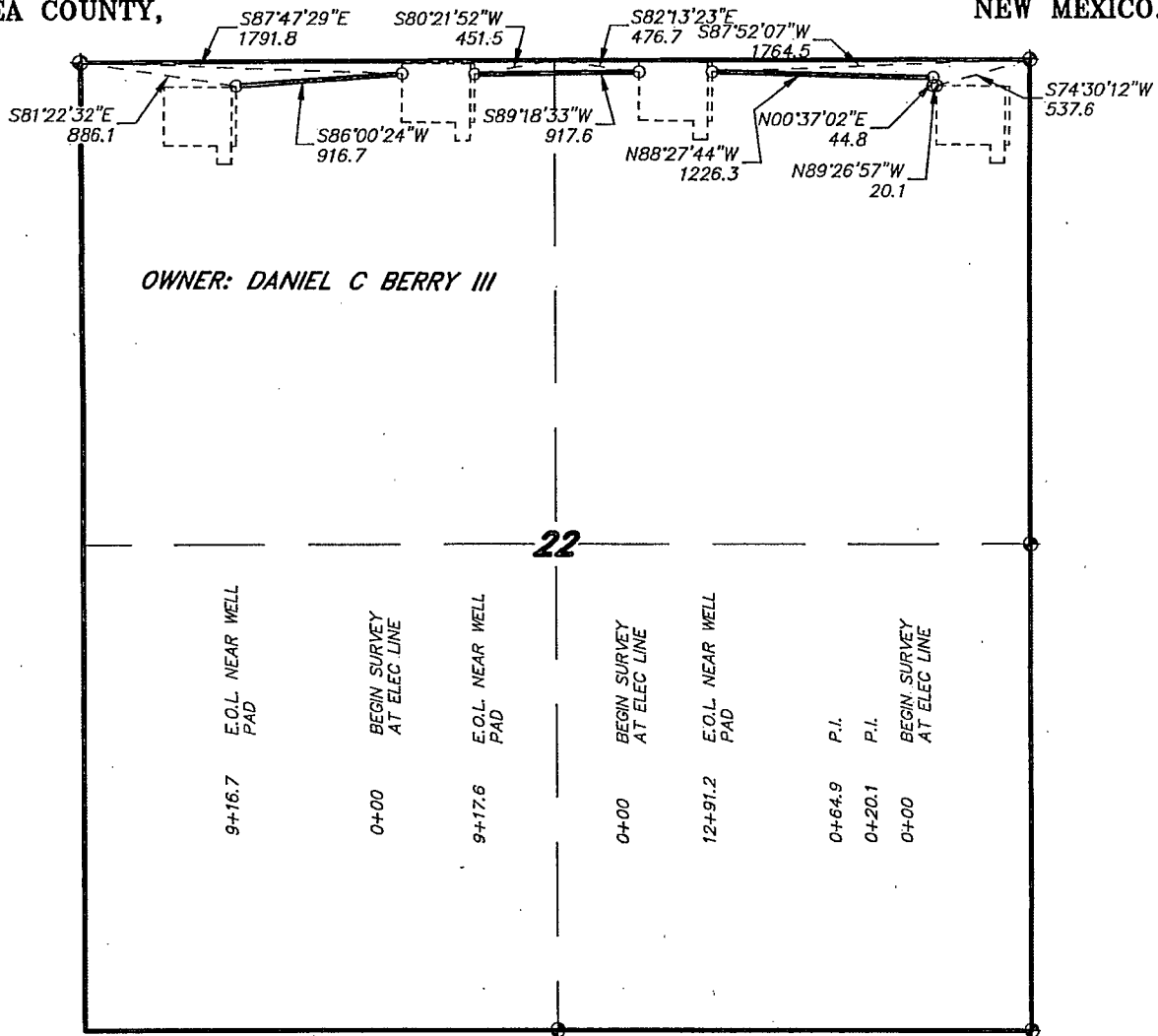
**CIMAREX ENERGY COMPANY**

REF: PROPOSED ELECTRIC LINE TO THE PERRY 22 WELLS

AN ELECTRIC LINE CROSSING FEE LAND IN  
SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 02-15-2013 Sheet 1 of 1 Sheets

SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

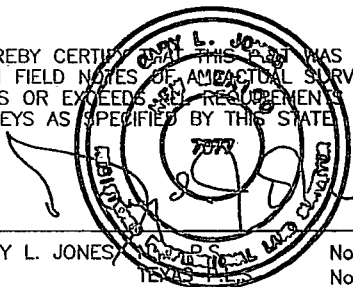


LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES S.74'30'12"W., 537.6 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 22; THENCE N.89'26'57"W., 20.1 FEET; THENCE N.00'37'02"E., 44.8 FEET; THENCE N.88'27'44"W., 1226.3 FEET TO THE END OF THIS LINE WHICH LIES S.87'52'07"W., 1764.5 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 22; THENCE BEGINNING AGAIN AT A POINT WHICH LIES S.82'13'23"E., 476.7 FEET FROM THE NORTH QUARTER CORNER OF SAID SECTION 22; THENCE S.89'18'33"W., 917.6 FEET TO THE END OF THIS LINE WHICH LIES S.80'21'52"W., 451.5 FEET FROM THE NORTH QUARTER CORNER OF SAID SECTION 22; THENCE BEGINNING AGAIN AT A POINT WHICH LIES S.87'47'29"E., 1791.8 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 22; THENCE S.86'00'24"W., 916.7 FEET TO THE END OF THIS LINE WHICH LIES S.81'22'32"E., 886.1 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 22. SAID STRIP OF LAND BEING 3125.5 FEET OR 189.42 RODS IN LENGTH.

I HEREBY CERTIFY THAT THIS MAP WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS THE REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.



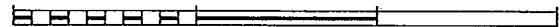
GARY L. JONES, No. 7977  
No. 5074

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

W.O. Number: 28178 Drawn By: J. M. SMALL

Date: 02-20-2013 Disk: JMS 28178

1000 0 1000 2000 FEET



**CIMAREX ENERGY COMPANY**

REF: PROPOSED FLOWLINE TO THE PERRY 22 WELLS

A FLOWLINE CROSSING FEE LAND IN  
SECTION 22, TOWNSHIP 20 SOUTH, RANGE 34 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 02-15-2013 Sheet 1 of 1 Sheets

Application to Drill  
**Perry 22 Federal Com #2H**  
 Cimarex Energy Co.  
 UL: B, Sec. 22, 20S, 34E  
 Lea Co., NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1. **Location:** SHL 202 FNL & 1980 FEL  
 BHL 330 FSL & 1980 FEL
2. **Elevation Above Sea Level:** 3,653' GR
3. **Geologic Name of Surface Formation:** Quaternary Alluvium Deposits
4. **Drilling Tools and Associated Equipment:** Conventional rotary drilling rig using fluid as a circulating medium for solids removal
5. **Proposed Drilling Depth:** 15,623 MD 10,900 TVD Pilot Hole TD: N/A
6. **Estimated Tops of Geological Markers:**

Formation	Est Top	Bearing
Rustler	1650	N/A
Salt	1800	N/A
Tansill	3400	N/A
Yates	3600	N/A
Capitan Reef	3970	N/A
Delaware Sands	5700	N/A
Brushy Canyon	8080	N/A
Bone Spring	8400	Hydrocarbons
Avalon Shale	8900	Hydrocarbons
1st BSS	9600	Hydrocarbons
2nd BS Carb	9860	Hydrocarbons
2nd BSS	10150	N/A
3rd Carbonate	10630	N/A
3rd BSS	10960	Hydrocarbons
3rd NS "C" SS	10980	N/A
Wolfcamp	11114	Hydrocarbons

7. **Possible Mineral Bearing Formation:** Shown above

7A. **OSE Ground Water Estimated Depth:** 200'

8. **Casing Program:**

*see COA*

Name	Casing Depth From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft) TVD	Open Hole Size (inches)	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Condition	BHP (psig)	Anticipated Mud Weight (ppg)	Collapse SF at Full Evacuation(1.125)	Collapse SF at 1/3 Evacuation(1.125)	Burst SF (1.125)	Cumulative Air Weight	Cumulative Bouyed Weight (lbs)	Bouyant Tension SF (1.8)
Surface	0	1680	1680	17 1/2	13-3/8"	54.50	J-55	ST&C	New	725	8.3	1.56		3.78	91,560	79,958	6.43
Intermediate	0	5680	5600	12 1/4	9-5/8"	40.00	J-55	LT&C	New	2912	10.0		1.36	1.36	224,000	189,801	2.74
Production	0	10598	10598	8 3/4	5-1/2"	17.00	P-110	LT&C	New	4959	9.0	1.51		2.15	185,300	159,839	2.78
Production	10598	15623	10900	8 3/4	5-1/2"	17.00	P-110	BT&C	New	5101	9.0	1.47		2.09	5,134	4,429	123.29