

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, 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 Department

Form C-102
Revised July 16, 2010

Submit one copy to appropriate
District Office

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-4879	Pool Code 50461	Pool Name QUAIL RUN; BONE SPRING, SOUTH
Property Code 36777	Property Name CHAPARRAL "33" FEDERAL COM	Well Number 5H
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3686'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	33	19 S	34 E		330	NORTH	1980	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	33	19 S	34 E		330	SOUTH	1980	WEST	LEA
Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.						

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

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Paula Brunson 9/13/2013 Signature Date Printed Name pbrunson@cimarex.com Email Address 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 supervision and that the same is true and correct to the best of my belief. Date Surveyed Signature & Seal of Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS 24681
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MAY 28 2014

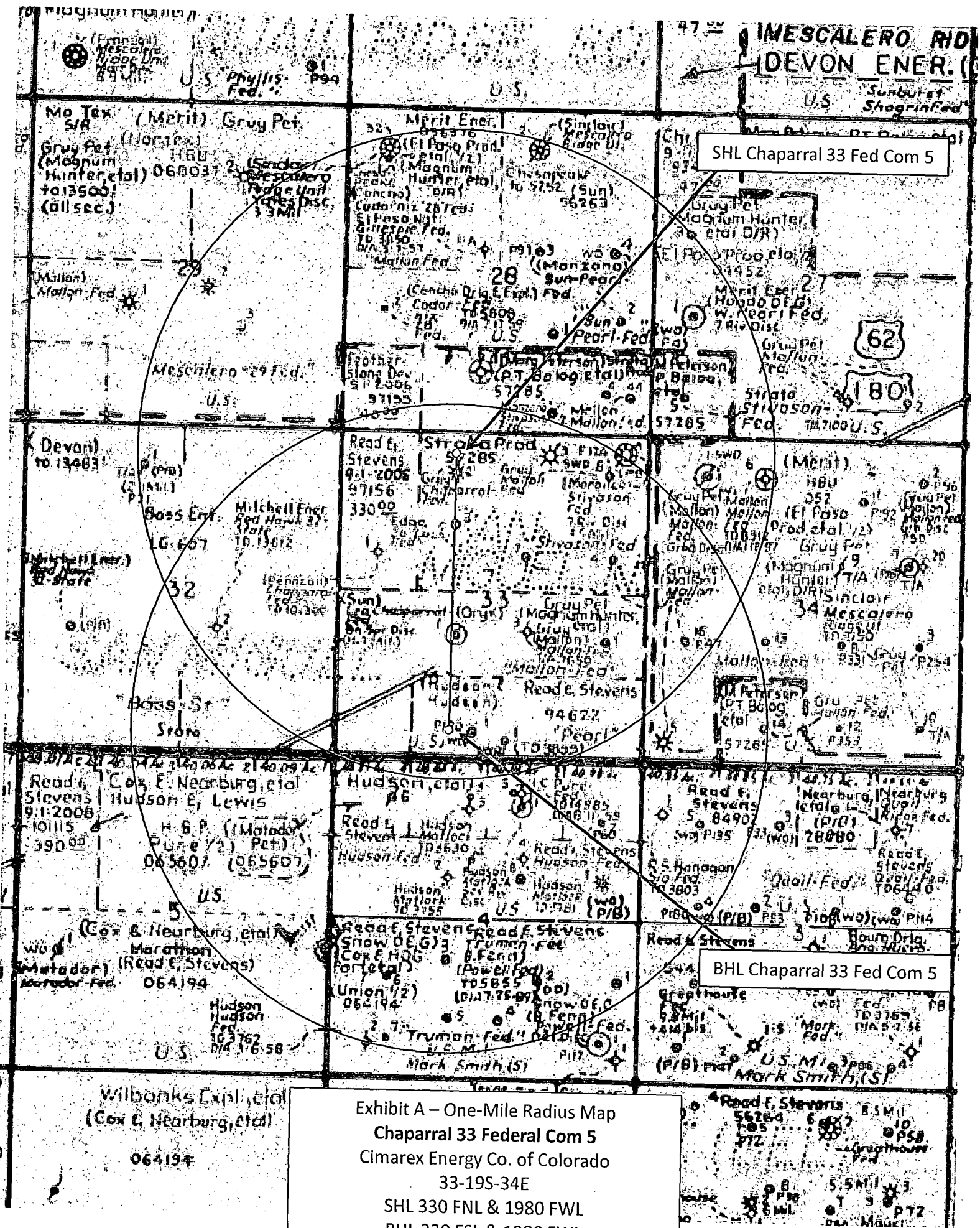
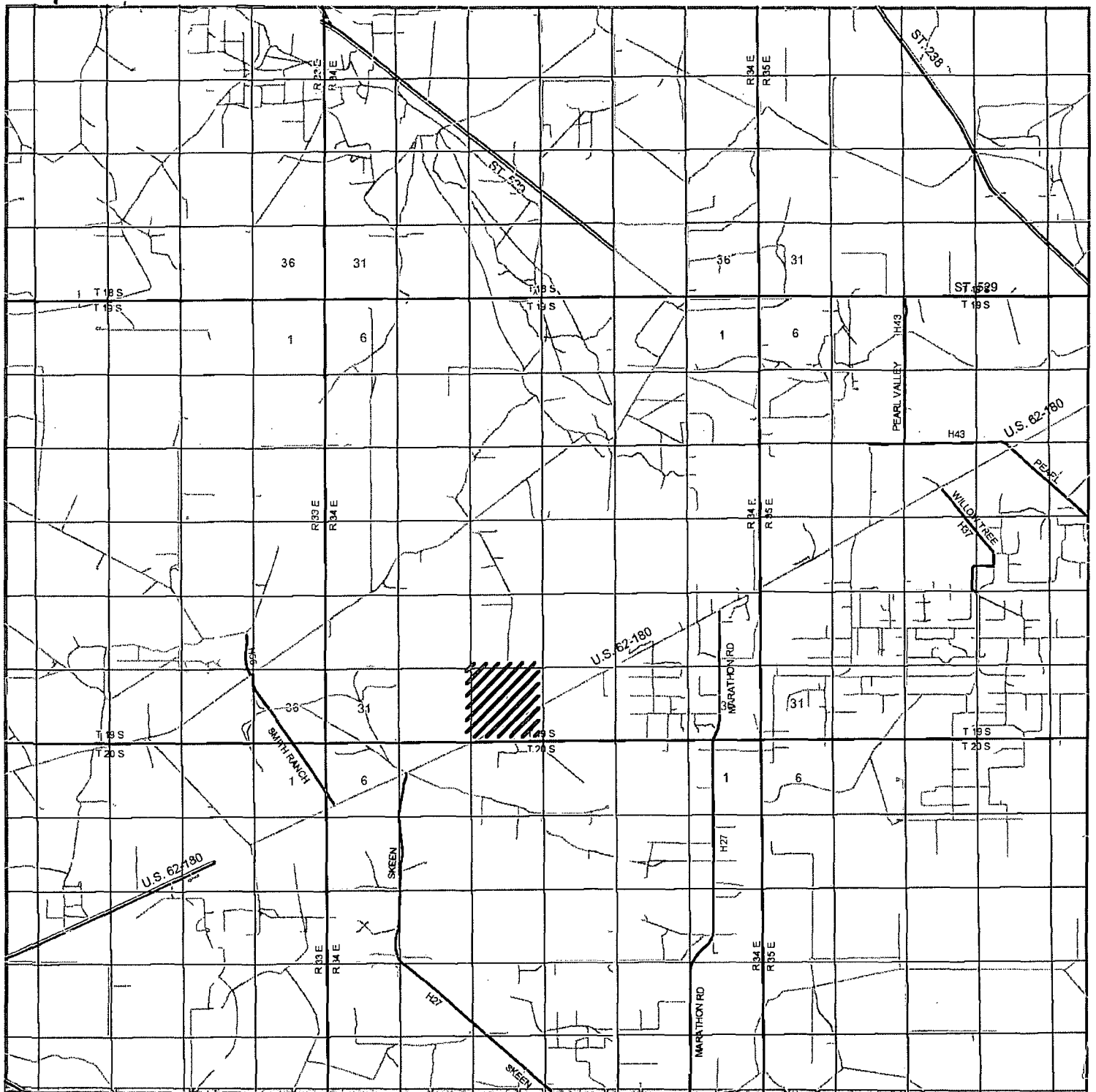


Exhibit A – One-Mile Radius Map
Chaparral 33 Federal Com 5
Cimarex Energy Co. of Colorado
33-19S-34E
SHL 330 FNL & 1980 FWL
BHL 330 FSL & 1980 FWL
Lea County, NM



CHAPARRAL "33" FEDERAL COM #5
 Located 330 FNL and 1980' FWL
 Section 33, Township 19 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.

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 in the oilfield

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

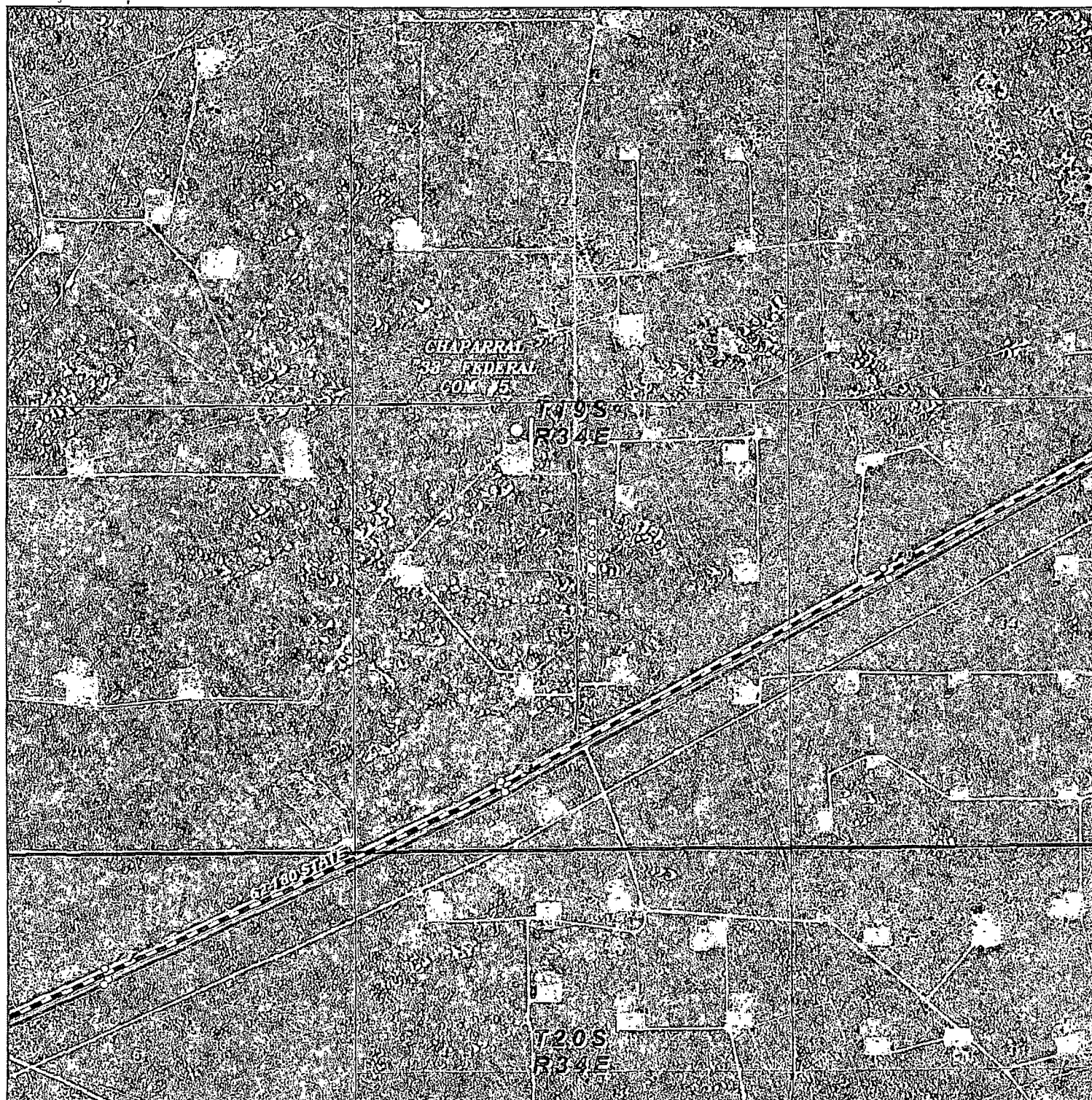
W.O. Number: BJN 24681

Survey Date: 05-14-2011

Scale: 1" = 2 Miles

Date: 05-23-2011

CIMAREX
ENERGY CO.
OF COLORADO



CHAPARRAL "33" FEDERAL COM #5
 Located 330' FNL and 1980' FWL
 Section 33, Township 19 South, Range 34 East,
 N.M.P.M., Lea County, New Mexico.

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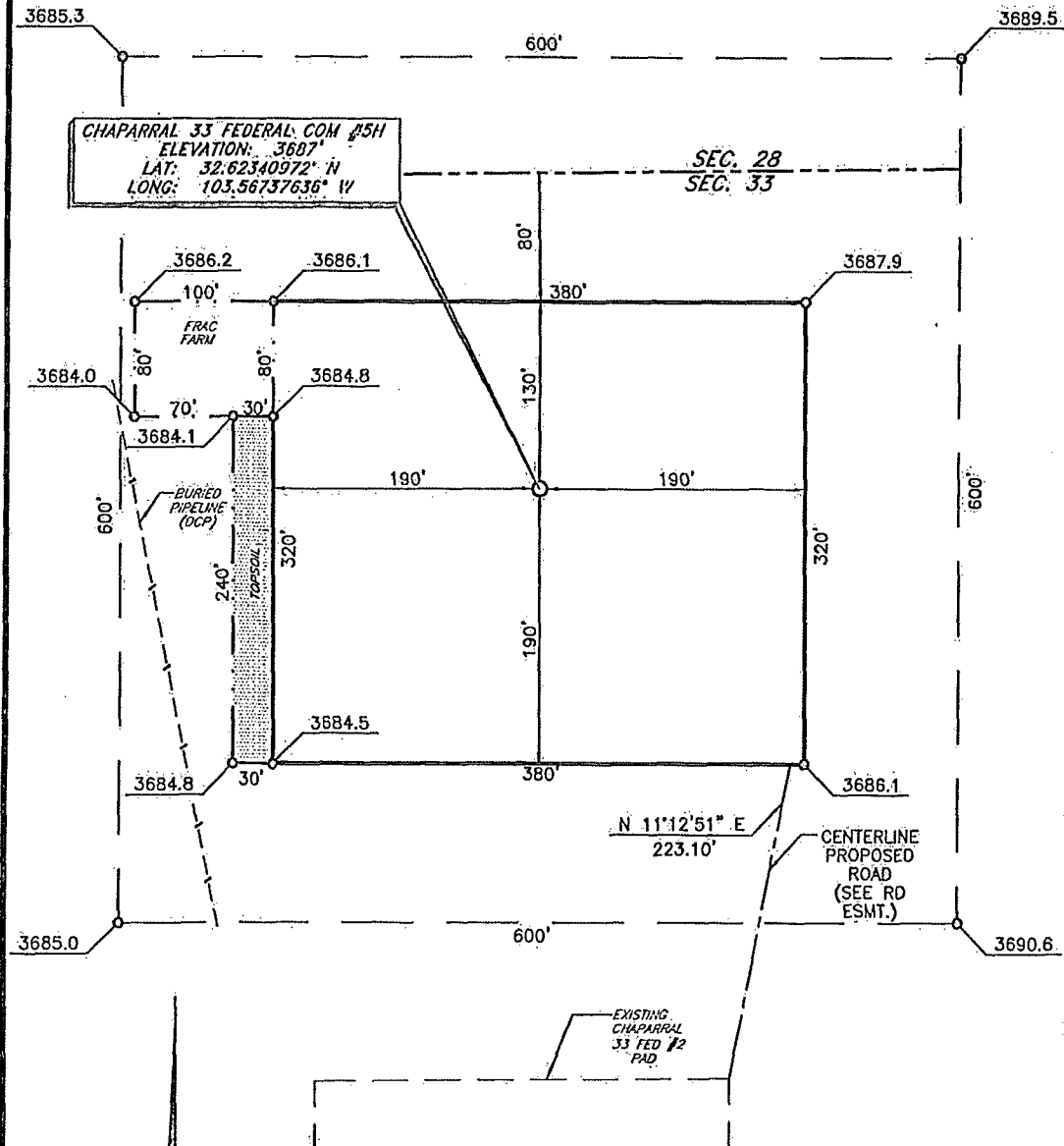
Scale: 1" = 2000'

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

CIMAREX
ENERGY CO.
OF COLORADO

CIMAREX ENERGY COMPANY

Chaparral 33 Federal Com #5H
(210' FNL & 1990' FWL)
Section 33, T-19-S, R-34-E,
N. M. P. M., Lea Co., New Mexico



DIRECTIONS TO LOCATION

From the intersection of U. S. Highway 62/180 and Skeen road, go Northeast on U. S. Highway 62/180 approx. 1.5 miles to a lease road;

Turn left on lease road and go North approx. 0.6 mile;

Turn left and go West approx. 0.1 mile to the Chaparral 33 Fed #2;

Location is approx. 460 feet North of the existing Cimarex Chaparral 33 Fed #2.

Firm No.: TX 10193838 - NM 4655451

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NO.	REVISION	DATE
JOB NO.: LS140041		
DWG. NO.: 140041PAD		

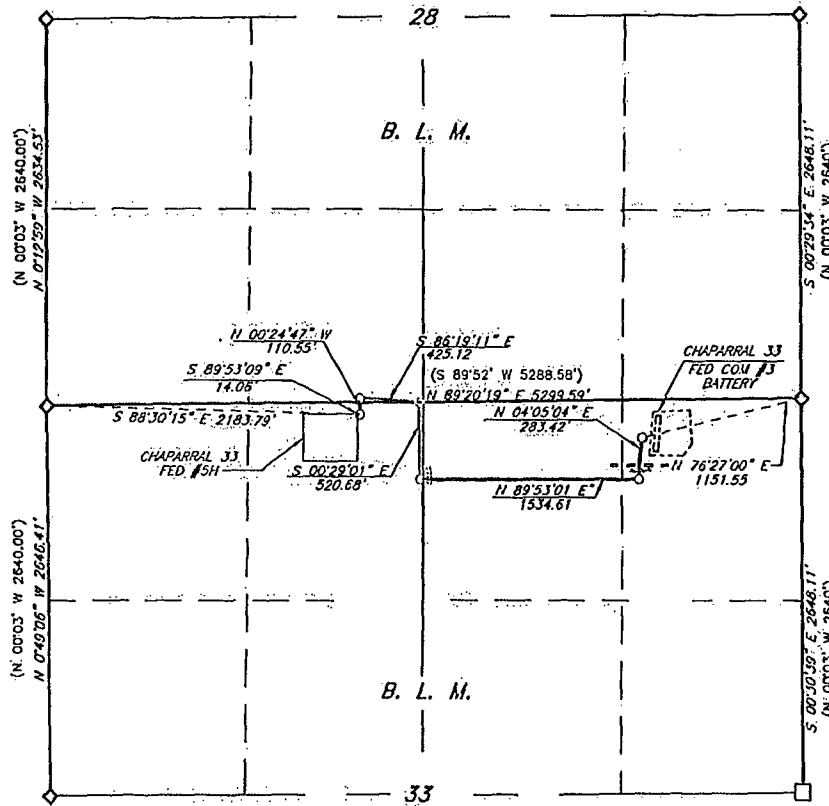
RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 100'
DATE: 1-31-14
SURVEYED BY: GB
DRAWN BY: JF
APPROVED BY: LWB
SHEET: 1 OF 1

Exhibit D-2

CIMAREX ENERGY COMPANY
PROPOSED GAS LIFT FROM THE CHAPARRAL 33 FED COM #5H
TO CHAPARRAL 33 FED COM #3 BATTERY
 Section 28 & 33, T-19-S, R-34-E,
 N. M. P. M., Lea Co., New Mexico



BEGINNING AT CHAPARRAL
 33 FED COM #5H
 P. I. 85°47'57" LT.
 SECTION LINE
 P. I. 94°05'36" RT.
 SECTION LINE
 P. I. 83°30'10" RT.
 P. I. 89°37'36" LT.
 LEASE ROAD
 0+00
 0+14.06
 0+98.46
 1+24.61
 4+98.47
 5+48.73
 10+70.41
 11+37.10

P. I. 85°47'57" LT.
 CHAPARRAL 33
 FED COM #3
 BATTERY
 E.O.L. AT BATTERY
 28+85.02
 28+95.03
 28+100.0
 28+88.44

SCALE: 1" = 1000'
 0 500 1000

BEARINGS: MAG 83-NM EAST
 DISTANCES: GROUND HORIZ.

LEGEND

- () RECORD DATA
- ◆ FOUND BRASS CAP "1912"
- CALCULATED CORNER

Firm No.: TX 10193838 NM 4655151

I, Larry Busby, a N. M. Professional Surveyor, hereby certify that this plot was prepared from an actual ground survey made under my direct supervision, said survey and plot meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Larry Busby NM PS 11398



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NO.	REVISION	DATE
JOB NO.:	LS140041	
DWG. NO.:	140041GLL	

RRC

308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 2-3-14
SURVEYED BY: GB
DRAWN BY: JF
APPROVED BY: LWB
SHEET : 1 OF 2

Section 33, T-19-S, R-34-E,
N. M. P. M., Lea Co., New Mexico



SCALE: 1" = 1000'
DATE: 2-3-14
SURVEYED BY: GB
DRAWN BY: JF
APPROVED BY: LWB
SHEET : 1 OF 2

CIMAREX ENERGY COMPANY
PROPOSED ACCESS ROAD EASEMENT FOR THE CHAPARRAL
33 FED COM #5H
Section 33, T-19-S, R-34-E,
N. M. P. M., Lea Co., New Mexico

DESCRIPTION

A strip of land 30 feet in width and 223.10 feet or 13.521 rods in length situated within Section 33, Township 19 South, Range 34 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

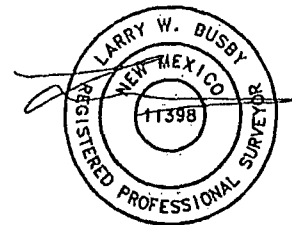
BEGINNING at Engr. Sta. 0+00, a point which lies S 74°22'00" E, 2,211.36 feet from a brass cap, stamped "1912", found for the Northwest corner of the aforementioned Section 33 :

Thence N 11°12'51" E, 223.10 feet to the End of Survey, from which a brass cap, stamped "1912" found for the Northeast corner of the above-mentioned Section 33 bears N 82°01'12" E, 3156.86 feet.

Said strip of land contains 0.154 acres and is allocated by forties as follows:

SECTION 33

NE 1/4 NW 1/4 0.154 Ac.



Firm No.: TX 10193838 NM 4655451

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RRC			SCALE: 1" = 1000'
			DATE: 2-3-14
			SURVEYED BY: GB
			DRAWN BY: JF
			APPROVED BY: LWB
			SHEET : 2 OF 2
NO.	REVISION	DATE	
JOB NO.: LS140041			
DWG. NO.: 140041RD_1			
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200			

CIMAREX ENERGY COMPANY
PROPOSED GAS LIFT FROM THE CHAPARRAL 33 FED COM #5H
TO CHAPARRAL 33 FED COM #3 BATTERY

Section 28 & 33, T-19-S, R-34-E,
N. M. P. M., Lea Co., New Mexico

DESCRIPTION

A strip of land 30 feet in width and 2,888.44 feet or 175.057 rods in length situated within Sections 28 and 33, Township 19 South, Range 34 East, N. M. P. M., Lea County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point which lies S 88°30'15" E, 2,183.79 feet from a brass cap, stamped "1912", found for the common West corner of the aforementioned Sections 28 and 33;

Thence S 89°53'09" E, 14.06 feet to Engr. Sta. 0+14.06, a P. I. of 90°31'38" left;

Thence N 00°24'47" W, passing the common boundary line of the above-mentioned Sections 28 and 33 at 82.40 feet and continuing for a total distance of 110.55 feet to Engr. Sta. 1+24.61, a P. I. of 94°05'36" right;

Thence S 86°19'11" E, passing the common boundary line of the aforementioned Sections 28 and 33 at 372.86 feet and continuing for a total distance of 425.12 feet to Engr. Sta. 5+49.73, a P. I. of 85°50'10" right;

Thence S 00°29'01" E, 520.68 feet to Engr. Sta. 10+70.41, a P. I. of 89°37'58" left;

Thence N 89°53'01" E, 1,534.61 feet to Engr. Sta. 26+05.02, a P. I. of 85°47'57" left;

Thence N 04°05'04" E, 283.42 feet to Engr. Sta. 28+88.44, the End of Survey from which a brass cap, stamped "1912", found for the common East corner of the above-mentioned Sections 28 and 33 bears N 76°27'00" E, 1,151.55 feet.

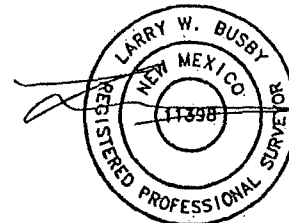
Said strip of land containing 1.989 acres, more or less and is allocated by forties as follows:

Section 28

SE 1/4 SW 1/4 0.276 Ac.

Section 33

NE 1/4 NW 1/4 0.482 Ac. NW 1/4 NE 1/4 0.912 Ac.
NE 1/4 NE 1/4 0.319 Ac.



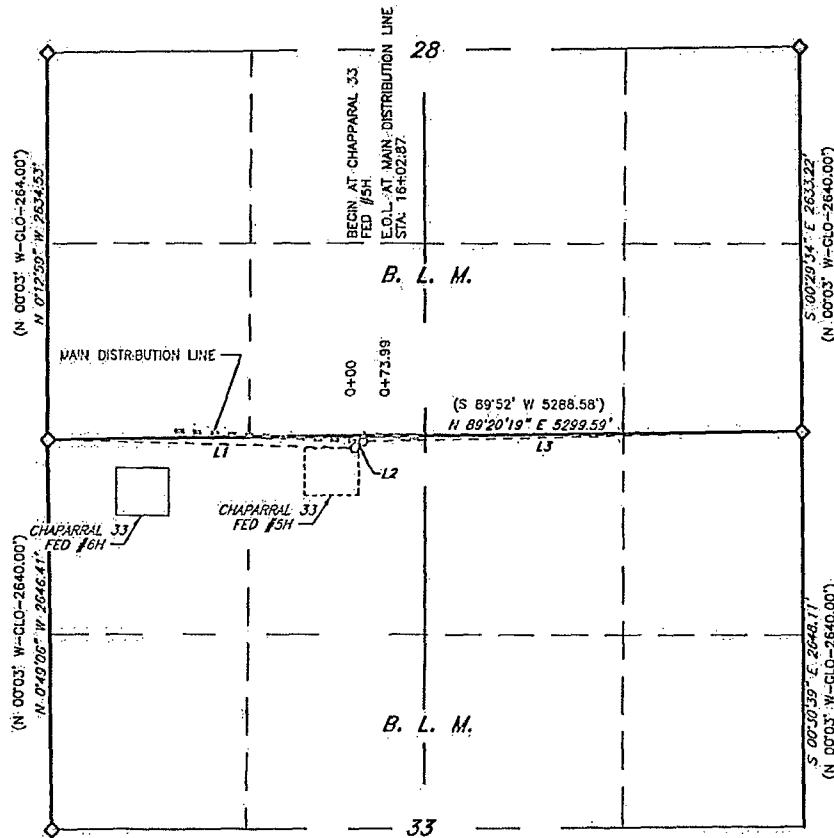
Firm No.: TX-10193838 NM 4655451

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			SCALE: 1" = 1000' DATE: 2-3-14 SURVEYED BY: GB DRAWN BY: JF APPROVED BY: LWB SHEET : 2 OF 2
NO.	REVISION	DATE	
JOB NO.: LS140041			
DWG. NO.: 140041GLL			
308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200			

CIMAREX ENERGY COMPANY

PROPOSED CENTER LINE ELECTRIC EASEMENT LATERAL FROM THE CHAPARRAL 33 FED #5H TO MAIN LINE Section 33, T-19-S, R-34-E, N. M. P. M., Lea Co., New Mexico



LINE TABLE		
LINE	BEARING	LENGTH
L1	N 88°29'03\" W	2153.73'
L2	N 52°47'04\" E	73.99'
L3	N 88°38'17\" E	3088.20'

SCALE: 1" = 1000'
0 500 1000
BEARINGS: NAD 83-NM EAST
DISTANCES: GROUND HORIZ.

LEGEND
() RECORD DATA
◇ FOUND BRASS CAP "1912"
- - - MAIN LINE ELECTRIC LINE

I, Larry Busby, a N. M. Professional Surveyor, hereby certify that this plat was prepared from an actual ground survey made under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

[Signature]
Larry Busby NM PS 11398



Firm No.: TX 10193838 NM 4655451

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308 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200			SCALE: 1" = 1000'
			DATE: 2-3-14
			SURVEYED BY: GB
			DRAWN BY: JC
NO.	REVISION	DATE	APPROVED BY: LWB
JOB NO.: LS140042			SHEET: 1 OF 2
DWG. NO.: 140042EL3			

CIMAREX ENERGY COMPANY

PROPOSED CENTER LINE ELECTRIC EASEMENT LATERAL FROM THE CHAPARRAL 33 FED #5H TO MAIN LINE

Section 33, T-19-S, R-34-E,
N. M. P. M., Lea Co., New Mexico

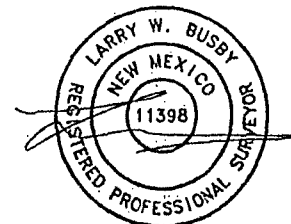
DESCRIPTION

A strip of land 30 feet in width and 73.99 feet or 4.484 rods in length situated in Section 33, Township 19 South, Range 34 East, N. M. P. M., Lea County, New Mexico being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point from which a brass cap, stamped "1912", found for the Northwest corner of the aforementioned Section 33 bears N 88°29'03" W, 2153.73 feet;

Thence N 52°47'014" E, 73.99 feet to Engr. Sta. 0+73.99, the End of the Survey and a point from which a brass cap, stamped "1912", found for the Northeast corner of the above-mentioned Section 33 bears N 88°38'17" E, 3,088.20 feet.

Said strip of land containing 0.051 acre, more or less, all within the NE 1/4 of the NW 1/4 of the aforementioned Section 33.



Firm No.: TX 10193838 NM 4655451

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RRC			SCALE: 1" = 1000'
			DATE: 2-3-14
			SURVEYED BY: GB
			DRAWN BY: JC
NO.	REVISION	DATE	APPROVED BY: LWB
JOB NO.: LS140042			SHEET: 2 OF 2
DWG. NO.: 140042EL4			
309 W. BROADWAY ST., HOBBS, NM 88240 (575) 964-8200			

Application to Drill
Chaparral 33 Federal Com 5
 Cimarex Energy Co.
 UL: C, Sec. 33, 19S, 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 330 FNL & 1980 FWL
 BHL 330 FSL & 1980 FWL
2. **Elevation Above Sea Level:** 3,686' 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:** 15,225 MD 10,820 TVD Pilot Hole TD: N/A
6. **Estimated Tops of Geological Markers:**

Formation	Est Top	Bearing
Rustler	1630	N/A
Salado (Top Salt)	1700	N/A
Castille (Base Salt)	3260	N/A
Delaware	5480	Hydrocarbons
Bone Spring	8250	N/A
1st Bone Spring	9480	N/A
2nd Bone Spring	10000	N/A
3rd Bone Spring	10570	Hydrocarbons
Wolfcamp	10870	N/A

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

7A. **OSE Ground Water Estimated Depth:** 175'

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	5450	5450	12 1/4	9-5/8"	40.00	N-80	LT&C	New	2834	10.0		1.62	2.03	218,000	184,718	3.99
Production	0	10322	10322	8 3/4	5-1/2"	17.00	P-110	LT&C	New	4830	9.0	1.55		2.20	183,940	158,666	2.80
Production	10322	15225	10820	8 3/4	5-1/2"	17.00	P-110	BT&C	New	5063	9.0	1.48		2.10	8,466	7,303	74.77

Note: Operator may drill a 8-1/2" OH from end of curve to TD of the well. This is to reduce the need to ream the conventionally drilled curve to run a RSS assembly into the lateral.