

OCD-ARTESIA

S

Form 3160-3
(April 2004)

REVISED
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NOV 19 2007
OCD-ARTESIA

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of Work: ☒ DRILL ☐ REENTER		5 Lease Serial No. LC-061622	
1b Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6 If Indian, Allottee or Tribe Name	
2 Name of Operator Cimarex Energy Co. of Colorado		7 If Unit or CA Agreement, Name and No	
3a Address PO Box 140907 Irving, TX 75014		8 Lease Name and Well No County Line 1 Federal No. 1	
3b. Phone No. (include area code) 972-401-3111		9 API Well No. 30-015- 35933	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface 1980' FSL & 330' FWL - L At proposed prod Zone 1980' FSL & 330' FEL - I		10. Field and Pool, or Exploratory County Line Tank; Abo	
14 Distance in miles and direction from nearest town or post office* 3 miles WNW of Loco Hills		11 Sec., T. R. M. or Blk. and Survey or Area 1-16S-29E	
15 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig unit line if any) 330'		12. County or Parish Eddy	
16. No of acres in lease 840		13. State NM	
17. Spacing Unit dedicated to this well N2S2 160			
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A		19 Proposed Depth 7260 TVD 11,653' MD	
20. BLM/BIA Bond No. on File NM-2575			
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3735' GR		22 Approximate date work will start* 1/1/2008	
23 Estimated duration 30-35 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 | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2. A Drilling Plan | 5. Operator Certification |
| 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) | 6 Such other site specific information and/or plans as may be required by the authorized officer. |

25 Signature <i>Zeno Farris</i>	Name (Printed/Typed) Zeno Farris	Date 10.05.07
------------------------------------	-------------------------------------	------------------

Manager Operations Administration

Approved By (Signature) <i>/s/ James Stovall</i>	Name (Printed/Typed) <i>/s/ James Stovall</i>	Date NOV 15 2007
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or guarantee operations thereon
Conditions of approval, if any, are attached
Title 18 U.S.S. Section 1001 and Title 43 U.S.S. any false, fictitious, or fraudulent statement

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

ject lease which would entitle the applicant to

APPROVAL FOR TWO YEARS

to make to any department or agency of the United

Roswell Controlled Water

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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

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

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 97197	Pool Name County Line Tank; Abo
Property Code 36849	Property Name COUNTY LINE "1" FEDERAL	Well Number 1
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Elevation 3735'

Surface Location

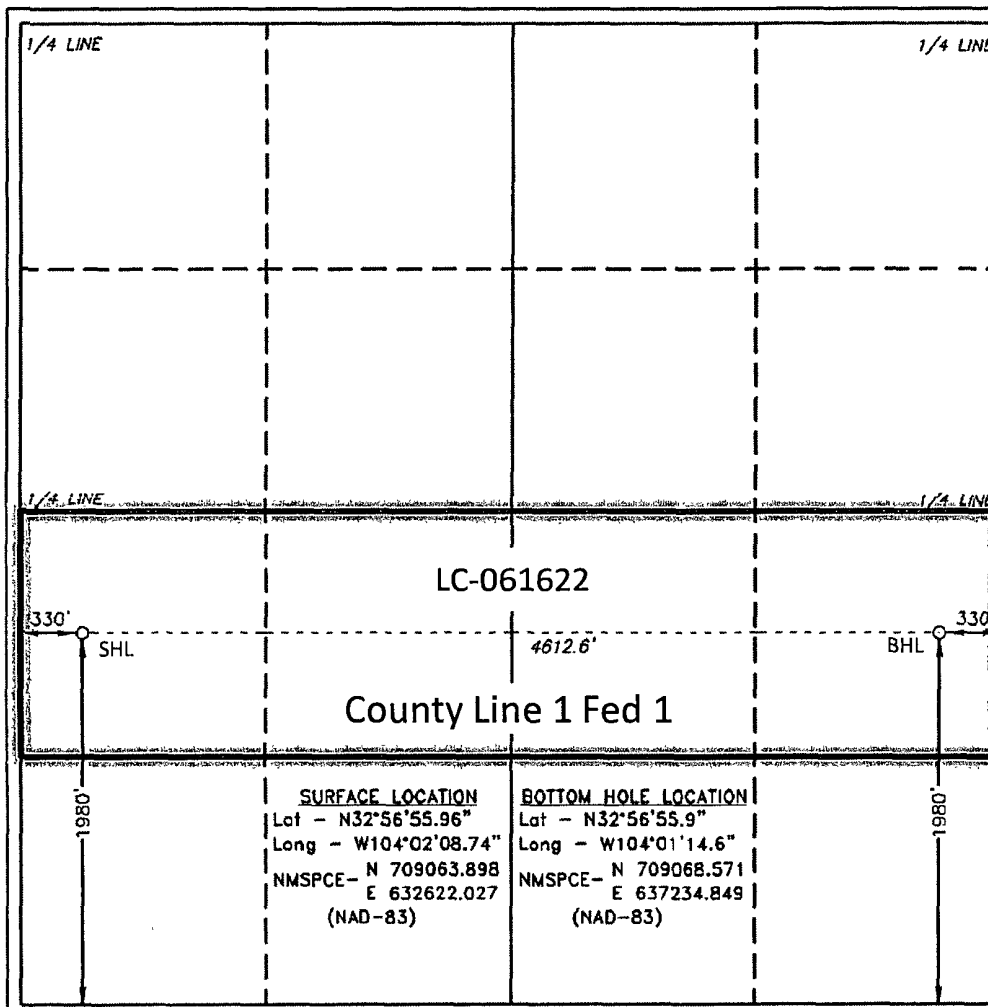
UL or lot No. UL	Section 1	Township 16 S	Range 29 E	Lot Idn	Feet from the 1980	North/South line SOUTH	Feet from the 330	East/West line WEST	County EDDY
---------------------	--------------	------------------	---------------	---------	-----------------------	---------------------------	----------------------	------------------------	----------------

Bottom Hole Location If Different From Surface

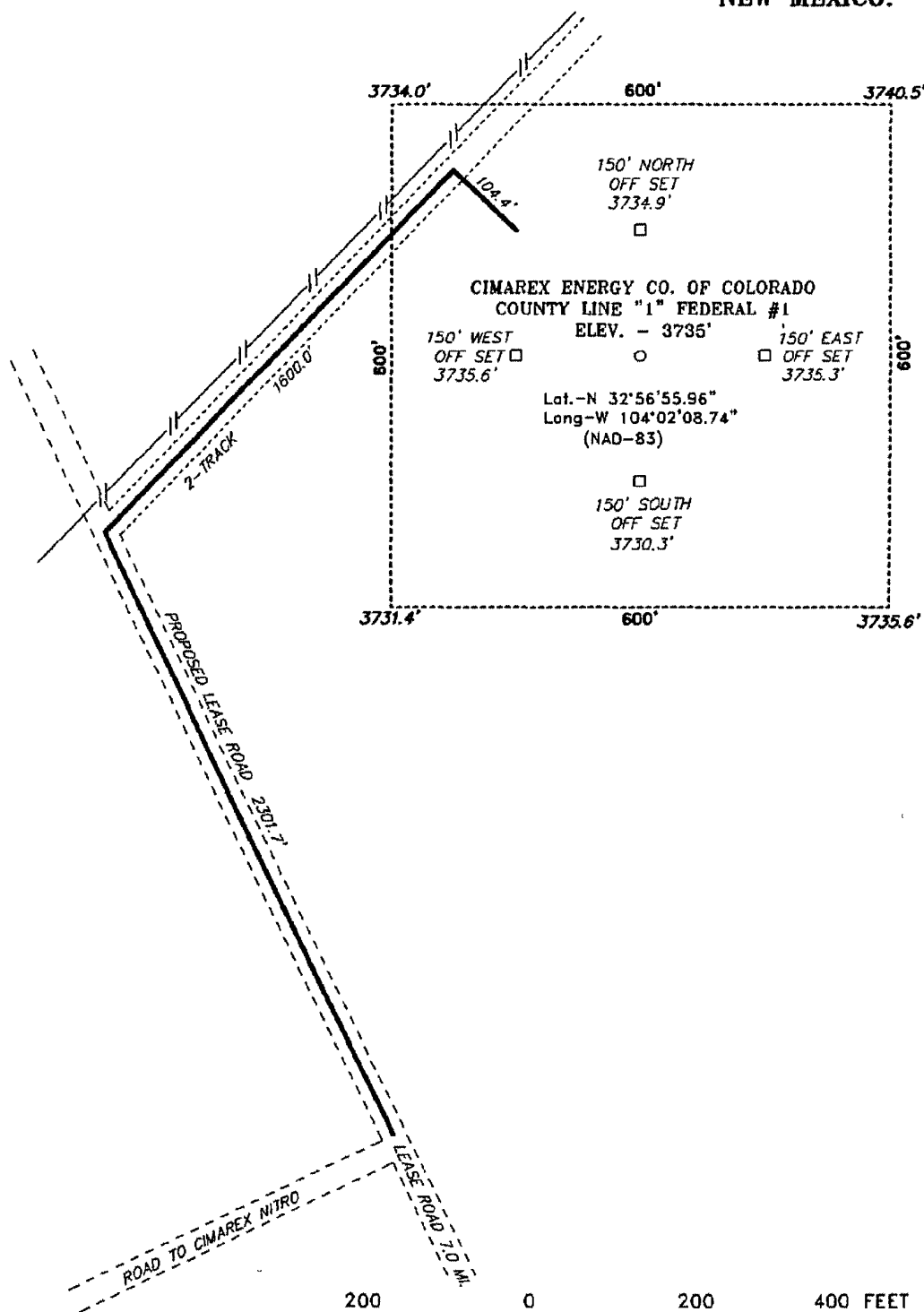
UL or lot No. XI	Section 1	Township 16 S	Range 29 E	Lot Idn	Feet from the 1980	North/South line SOUTH	Feet from the 330	East/West line EAST	County EDDY
---------------------	--------------	------------------	---------------	---------	-----------------------	---------------------------	----------------------	------------------------	----------------

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 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. <u>Zeno Farris</u> 09-21-07 Signature Date Zeno Farris Printed Name 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. SEPTEMBER 04 2007 Date Surveyed <u>GARY L. JONES</u> Signature Professional Surveyor W. NO. 1855 Certificate No. Gary L. Jones 7977 BASIN SURVEYS
--	--	---

SECTION 1, TOWNSHIP 16 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM JUNCTION OF CO. RD. 257 (MALLETT) AND CO. RD. 217 (HAGERMAN CUTOFF), GO WEST ON CO. RD. 257 FOR 0.8 MILES TO LEASE ROAD, ON LEASE ROAD GO NORTHWEST 7.0 MILES TO PROPOSED LEASE ROAD.

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

W.O. Number: 18511 Drawn By: J. SMALL

Date: 09-06-2007 Disk: JMS 18511W

CIMAREX ENERGY CO. OF COLORADO

REF: COUNTY LINE "1" FEDERAL #1 / WELL PAD TOPO

THE COUNTY LINE "1" FEDERAL #1 LOCATED 1980' FROM
THE SOUTH LINE AND 330' FROM THE WEST LINE OF
SECTION 1, TOWNSHIP 16 SOUTH, RANGE 29 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 09-04-2007 Sheet 1 of 1 Sheets

Application to Drill
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, 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 1980' FSL & 330' FWL
 BHL 1980' FSL & 330' FEL

- 2 Elevation above sea level: 3735' 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: 11,653'

- 6 Estimated tops of geological markers:
 Abo Shale 5,958'
 Lower Abo Dolomite 7,190'
 Wolfcamp lime 7,278'

- 7 Possible mineral bearing formation:
 Abo Oil Primary

8 Proposed Mud Circulating System:

Depth		Mud Wt	Visc	Fluid Loss	Type Mud
0'	to 340'	8.4 - 8.6	28-29	May lose circ	FW spud mud
340'	to 2,500'	10.0	28-29	May lose circ	Brine Water
2,500'	to 11,653'	8.4 - 9.5	29-32	NC	Fresh water and brine, use hi-vis sweeps to keep hole clean

See
COA →

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

8a. Proposed drilling Plan

Drill pilot hole to 7400.' Set kick-off plug at 7000.' Kick off horizontal leg at 6800' and drill 7-7/8" hole to 11653' MD, 7260' TVD. Run 5-1/2" 17# P-110 LTC casing and cement as shown on page 2, production casing details.

Application to Drill
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, NM

9 Casing & Cementing Program:

Hole Size	Depth	Casing OD	Weight	Thread	Collar	Grade
17-1/2	0 to 340'	New 13-3/8	48#	8-R	STC	H-40
11	0 to 2,500'	New 8-5/8	24#	8-R	LTC	J-55
7-7/8	0 to 11,653'	New 5-1/2	17#	8-R	LTC	N-80

← see
COA

10 Cementing & Setting Depth:

13-3/8 **Surface** Set 340' of 13-3/8 48# H-40 STC
Lead: 300 sx Thixotropic/Premium Plus + 10# Gilsonite + 10# Cal-Seal + 1% CaCl +
0.125# Poly-e-flake (wt 14.2, yld 1.64)
Tail: 220 sx Premium Plus + 2% CaCl (wt 14.8, yld 1.35)
TOC Surface

8-5/8 **Intermediate** Set 2,500' of 8-5/8 24# J-55 LTC
Lead: 425 sx Interfill C + 0.125# flocele (wt 11.9, yld 2.45)
Tail: 200 sx Prem Plus + 1% CaCl (wt 14.8, yld 1.33)
TOC Surface

5-1/2 **Production** Set 11,653' of 5-1/2 17# N-80 LTC
Lead: 640 sx Permian Basin Super H + 0.5% Halad 344 + 0.25% D-AIR 3000 + 0.4% CFR-
3 + 1# Salt + 5# Gilsonite + 0.125# Poly-E-Flake + 0.35% HR-7 (wt 13.0, yld 1.68).

TOC 2300'

Fresh water will be protected by setting 13-3/8 casing at 340' and cementing to Surface
Hydrocarbon zones will be protected by setting 8-5/8 casing at 2,500' and cementing to Surface
and by setting 5-1/2 casing at 11,653' and cementing to 2300'

Cimarex uses the following minimum safety factors:

Burst	Collapse	Tension
1.125	1.0	1.80

Application to Drill
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, NM

11 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be nipped up on the 8-5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling. From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 psi BOP system.

We are requesting a variance for testing the 13-3/8" surface casing from Onshore Order No. 2, which states that all casing strings below the conductor shall be pressure tested to 0.22 psi per foot or 1500 psi, whichever is greater, but not to exceed 70% of the manufacturer's stated maximum internal yield. We are requesting to test the 13-3/8" casing to 1000 psi using rig pumps. The BOP will be tested to 5000 PSI by an independent service company.

12 Testing, Logging and Coring Program:

- A. Mud logging program: 2 man unit from 5000' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DSTs are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures are expected. The area has a potential H2S hazard. An H2S drilling plan is attached. Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

Estimated BHP **4000 psi** Estimated BHT **175**

14 Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved.

Drilling expected to take 30-35 days

If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

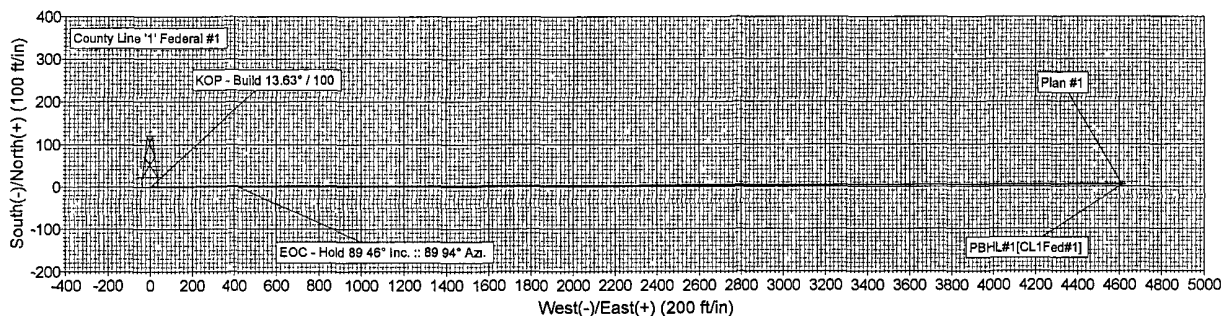
After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals.

Abo pay will be perforated and stimulated.

The proposed well will be tested and potentialized as **an oil well**



Project: Eddy Co., New Mexico
 Site: County Line '1' Federal #1
 Well: County Line '1' Federal #1
 Wellbore: Lateral #1
 Plan: Plan #1 (County Line '1' Federal #1/Lateral #1)



ANNOTATIONS

TVD	MD	Annotation
6800.00	6800.00	KOP - Build 13.63° / 100
7220.45	7456.51	EOC - Hold 89.46° Inc 89.94° Azi.

PROJECT DETAILS Eddy Co., New Mexico

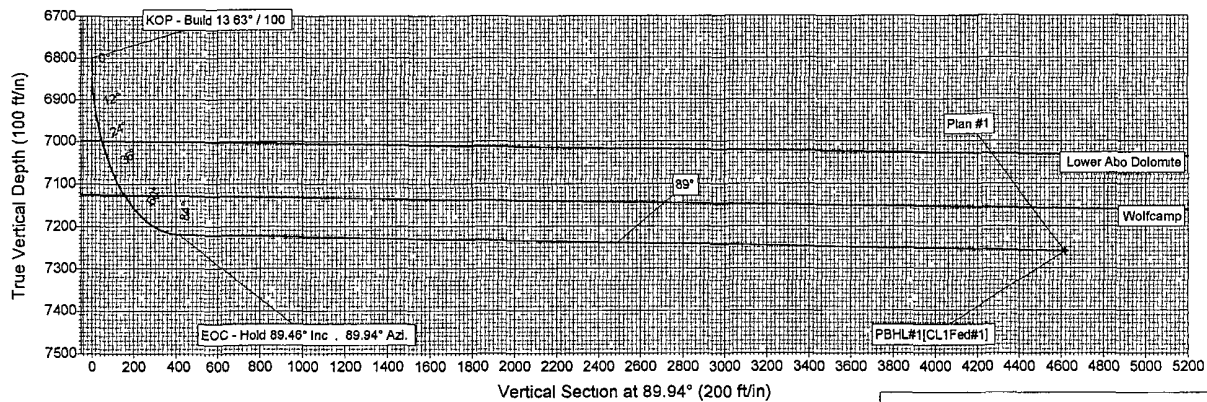
Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Ground Level



Azimuths to Grid North
 True North: -0.16°
 Magnetic North: 8.13°
 Magnetic Field
 Strength: 49368.2nT
 Dip Angle: 80.88°
 Date: 9/19/2007
 Model: IGRF200510

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	6799.00	0.00	0.00	6799.00	0.00	0.00	0.00	0.00	0.00	
2	6800.00	0.00	0.00	6800.00	0.00	0.00	0.00	0.00	0.00	
3	7456.51	89.46	89.94	7220.45	0.42	416.51	13.63	89.94	416.51	
4	11653.01	89.46	89.94	7260.00	4.67	4612.82	0.00	0.00	4612.82	PBHL#1[CL1Fed#1]



Plan: Plan #1 (County Line '1' Federal #1/Lateral #1)
 Created By: LD Burton Date: September 19, 2007



Lateral #1

Standard Survey Report

19 September, 2007





Black Viper Energy Survey Report



Company:	Cimarex Energy Co., Inc	Local Co-ordinate Reference:	Well County Line '1' Federal #1
Project:	Eddy Co., New Mexico	TVD Reference:	WELL @ 3735 00ft (Original Well Elev)
Site:	County Line '1' Federal #1	MD Reference:	WELL @ 3735 00ft (Original Well Elev)
Well:	County Line '1' Federal #1	North Reference:	Grd
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003 14 1 0 Server DB

Project:	Eddy Co., New Mexico		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	County Line '1' Federal #1		
Site Position:		Northing:	709,063 90 ft
From:	Map	Easting:	632,622 03 ft
Position Uncertainty:	0 00 ft	Slot Radius:	"
		Latitude:	32° 56' 55 926 N
		Longitude:	104° 2' 8 718 W
		Grid Convergence:	0 16 °

Well:	County Line '1' Federal #1		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0 00 ft	Wellhead Elevation:	ft
		Ground Level:	0 00 ft

Wellbore:	Lateral #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF200510	9/19/2007	8 29
			Dip Angle
			(°)
			60 88
			Field Strength
			(nT)
			49,368

Design:	Plan #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			6,799 00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0 00	0 00	0 00
			Direction
			(°)
			89 94

Survey Tool Program	Date: 9/19/2007		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
6,799 00	11,653 01	Plan #1 (Lateral #1)	MWD
			Description
			MWD - Standard

Planned Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)
6,799 00	0 00	0 00	6,799 00	0 00	0 00	0 00	0 00	0 00	0 00
6,800 00	0 00	0 00	6,800 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP - Build 13.63° / 100									
6,825 00	3 41	89 94	6,824 99	0 00	0 74	0 74	13 63	13 63	0 00
6,850 00	6 81	89 94	6,849 88	0 00	2 97	2 97	13 63	13 63	0 00
6,875 00	10 22	89 94	6,874 60	0 01	6 67	6 67	13 63	13 63	0 00
6,900 00	13 63	89 94	6,899 06	0 01	11 84	11 84	13 63	13 63	0 00
6,925 00	17 03	89 94	6,923 17	0 02	18 44	18 44	13 63	13 63	0 00
6,950 00	20 44	89 94	6,946 84	0 03	26 47	26 47	13 63	13 63	0 00
6,975 00	23 85	89 94	6,969 99	0 04	35 90	35 90	13 63	13 63	0 00
7,000 00	27 25	89 94	6,992 54	0 05	46 68	46 68	13 63	13 63	0 00
7,008 84	28 46	89 94	7,000 35	0 05	50 80	50 80	13 63	13 63	0 00
Lower Abn Dolomite									



Black Viper Energy Survey Report



Company:	Cimarex Energy Co., Inc	Local Co-ordinate Reference:	Well County Line '1' Federal #1
Project:	Eddy Co., New Mexico	TVD Reference:	WELL @ 3735 00ft (Original Well Elev)
Site:	County Line '1' Federal #1	MD Reference:	WELL @ 3735 00ft (Original Well Elev)
Well:	County Line '1' Federal #1	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003 14 1 0 Server DB

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,025 00	30 66	89 94	7,014 41	0 06	58 78	58 78	13 63	13 63	0 00
7,050 00	34 07	89 94	7,035 53	0 07	72 16	72 16	13 63	13 63	0 00
7,075 00	37 47	89 94	7,055 81	0 09	86 77	86 77	13 63	13 63	0 00
7,100 00	40 88	89 94	7,075 19	0 10	102 56	102 56	13 63	13 63	0 00
7,125 00	44 29	89 94	7,093 59	0 12	119 47	119 47	13 63	13 63	0 00
7,150 00	47 69	89 94	7,110 96	0 14	137 45	137 45	13 63	13 63	0 00
7,174 78	51 07	89 94	7,127 09	0 16	156 26	156 26	13 63	13 63	0 00
Wolfcamp									
7,175 00	51 10	89 94	7,127 23	0 16	156 43	156 43	13 63	13 63	0 00
7,200 00	54 51	89 94	7,142 34	0 18	176 34	176 34	13 63	13 63	0 00
7,225 00	57 91	89 94	7,156 24	0 20	197 11	197 11	13 63	13 63	0 00
7,250 00	61 32	89 94	7,168 88	0 22	218 68	218 68	13 63	13 63	0 00
7,275 00	64 73	89 94	7,180 22	0 24	240 95	240 95	13 63	13 63	0 00
7,300 00	68 13	89 94	7,190 22	0 27	263 87	263 87	13 63	13 63	0 00
7,325 00	71 54	89 94	7,198 83	0 29	287 33	287 33	13 63	13 63	0 00
7,350 00	74 95	89 94	7,206 04	0 32	311 26	311 26	13 63	13 63	0 00
7,375 00	78 35	89 94	7,211 81	0 34	335 59	335 59	13 63	13 63	0 00
7,400 00	81 76	89 94	7,216 13	0 36	360 21	360 21	13 63	13 63	0 00
7,425 00	85 17	89 94	7,218 97	0 39	385 04	385 04	13 63	13 63	0 00
7,450 00	88 57	89 94	7,220 34	0 42	410 00	410 00	13 63	13 63	0 00
7,456 51	89 46	89 94	7,220 45	0 42	416 51	416 51	13 62	13 62	0 00
EOC - Hold 89.46° Inc. :: 89.94° Azi.									
7,500 00	89 46	89 94	7,220 86	0 47	460 00	460 00	0 00	0 00	0 00
7,600 00	89 46	89 94	7,221 80	0 57	559 99	559 99	0 00	0 00	0 00
7,700 00	89 46	89 94	7,222 74	0 67	659 99	659 99	0 00	0 00	0 00
7,800 00	89 46	89 94	7,223 69	0 77	759 98	759 98	0 00	0 00	0 00
7,900 00	89 46	89 94	7,224 63	0 87	859 98	859 98	0 00	0 00	0 00
8,000 00	89 46	89 94	7,225 57	0 97	959 97	959 97	0 00	0 00	0 00
8,100 00	89 46	89 94	7,226 51	1 07	1,059 97	1,059 97	0 00	0 00	0 00
8,200 00	89 46	89 94	7,227 46	1 17	1,159 96	1,159 97	0 00	0 00	0 00
8,300 00	89 46	89 94	7,228 40	1 28	1,259 96	1,259 96	0 00	0 00	0 00
8,400 00	89 46	89 94	7,229 34	1 38	1,359 96	1,359 96	0 00	0 00	0 00
8,500 00	89 46	89 94	7,230 28	1 48	1,459 95	1,459 95	0 00	0 00	0 00
8,600 00	89 46	89 94	7,231 23	1 58	1,559 95	1,559 95	0 00	0 00	0 00
8,700 00	89 46	89 94	7,232 17	1 68	1,659 94	1,659 94	0 00	0 00	0 00
8,800 00	89 46	89 94	7,233 11	1 78	1,759 94	1,759 94	0 00	0 00	0 00
8,900 00	89 46	89 94	7,234 05	1 88	1,859 93	1,859 93	0 00	0 00	0 00
9,000 00	89 46	89 94	7,235 00	1 99	1,959 93	1,959 93	0 00	0 00	0 00
9,100 00	89 46	89 94	7,235 94	2 09	2,059 92	2,059 93	0 00	0 00	0 00
9,200 00	89 46	89 94	7,236 88	2 19	2,159 92	2,159 92	0 00	0 00	0 00
9,300 00	89 46	89 94	7,237 82	2 29	2,259 92	2,259 92	0 00	0 00	0 00
9,400 00	89 46	89 94	7,238 77	2 39	2,359 91	2,359 91	0 00	0 00	0 00
9,500 00	89 46	89 94	7,239 71	2 49	2,459 91	2,459 91	0 00	0 00	0 00
9,600 00	89 46	89 94	7,240 65	2 59	2,559 90	2,559 90	0 00	0 00	0 00
9,700 00	89 46	89 94	7,241 59	2 69	2,659 90	2,659 90	0 00	0 00	0 00
9,800 00	89 46	89 94	7,242 54	2 80	2,759 89	2,759 89	0 00	0 00	0 00
9,900 00	89 46	89 94	7,243 48	2 90	2,859 89	2,859 89	0 00	0 00	0 00
10,000 00	89 46	89 94	7,244 42	3 00	2,959 88	2,959 89	0 00	0 00	0 00
10,100 00	89 46	89 94	7,245 36	3 10	3,059 88	3,059 88	0 00	0 00	0 00
10,200 00	89 46	89 94	7,246 31	3 20	3,159 87	3,159 88	0 00	0 00	0 00
10,300 00	89 46	89 94	7,247 25	3 30	3,259 87	3,259 87	0 00	0 00	0 00
10,400 00	89 46	89 94	7,248 19	3 40	3,359 87	3,359 87	0 00	0 00	0 00
10,500 00	89 46	89 94	7,249 13	3 50	3,459 86	3,459 86	0 00	0 00	0 00
10,600 00	89 46	89 94	7,250 08	3 61	3,559 86	3,559 86	0 00	0 00	0 00



Black Viper Energy Survey Report



Company:	Cimarex Energy Co., Inc	Local Co-ordinate Reference:	Well County Line '1' Federal #1
Project:	Eddy Co., New Mexico	TVD Reference:	WELL @ 3735 00ft (Original Well Elev)
Site:	County Line '1' Federal #1	MD Reference:	WELL @ 3735 00ft (Original Well Elev)
Well:	County Line '1' Federal #1	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	EDM 2003 14 1 0 Server DB

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,700 00	89 46	89 94	7,251 02	3 71	3,659 85	3,659 85	0 00	0 00	0 00
10,800 00	89 46	89 94	7,251 96	3 81	3,759 85	3,759 85	0 00	0 00	0 00
10,900 00	89 46	89 94	7,252 90	3 91	3,859 84	3,859 85	0 00	0 00	0 00
11,000 00	89 46	89 94	7,253 85	4 01	3,959 84	3,959 84	0 00	0 00	0 00
11,100 00	89 46	89 94	7,254 79	4 11	4,059 83	4,059 84	0 00	0 00	0 00
11,200 00	89 46	89 94	7,255 73	4 21	4,159 83	4,159 83	0 00	0 00	0 00
11,300 00	89 46	89 94	7,256 67	4 31	4,259 83	4,259 83	0 00	0 00	0 00
11,400 00	89 46	89 94	7,257 62	4 42	4,359 82	4,359 82	0 00	0 00	0 00
11,500 00	89 46	89 94	7,258 56	4 52	4,459 82	4,459 82	0 00	0 00	0 00
11,600 00	89 46	89 94	7,259 50	4 62	4,559 81	4,559 81	0 00	0 00	0 00
11,653 01	89 46	89 94	7,260 00	4 67	4,612 82	4,612 82	0 00	0 00	0 00

PBHL#1[CL1Fed#1]

Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL#1[CL1Fed#1]	- plan hits target	0 00	0 00	7,260 00	4 67	4,612 82	709,068 57	637,234 85	32° 56' 55 840 N	104° 1' 14 584 W
	- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,008 84	7,000 00	Lower Abo Dolomite		-0 40	270 00
7,174 78	7,126 00	Wolfcamp		-0 40	270 00

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
6,800 00	6,800 00	0 00	0 00	KOP - Build 13 63° / 100
7,456 51	7,220 45	0 00	0 00	EOC - Hold 89 46° Inc 89 94° Azi

Checked By _____

Approved By _____

Date _____

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt
 Cimarex Energy Co., Inc.
 County Line '1' Federal #1 - Plan #1

Eddy Co., New Mexico
 County Line '1' Federal #1

Measured Dogleg Depth Rate (ft) (°/100ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)
6800.00	0.000	0.000	6800.00	0.00 N	0.00 E	0.00
0.00						
6810.00	1.363	89.942	6810.00	0.00 N	0.12 E	0.12
13.63						
6820.00	2.725	89.942	6819.99	0.00 N	0.48 E	0.48
13.63						
6830.00	4.088	89.942	6829.97	0.00 N	1.07 E	1.07
13.63						
6840.00	5.451	89.942	6839.94	0.00 N	1.90 E	1.90
13.63						
6850.00	6.813	89.942	6849.88	0.00 N	2.97 E	2.97
13.63						
6860.00	8.176	89.942	6859.80	0.00 N	4.27 E	4.27
13.63						
6870.00	9.539	89.942	6869.68	0.01 N	5.81 E	5.81
13.63						
6880.00	10.901	89.942	6879.52	0.01 N	7.59 E	7.59
13.63						
6890.00	12.264	89.942	6889.31	0.01 N	9.60 E	9.60
13.63						
6900.00	13.627	89.942	6899.06	0.01 N	11.84 E	11.84
13.63						
6910.00	14.989	89.942	6908.75	0.01 N	14.31 E	14.31
13.63						
6920.00	16.352	89.942	6918.38	0.02 N	17.01 E	17.01
13.63						
6930.00	17.715	89.942	6927.94	0.02 N	19.94 E	19.94
13.63						
6940.00	19.077	89.942	6937.43	0.02 N	23.09 E	23.09
13.63						
6950.00	20.440	89.942	6946.84	0.03 N	26.47 E	26.47
13.63						
6960.00	21.803	89.942	6956.17	0.03 N	30.08 E	30.08
13.63						
6970.00	23.165	89.942	6965.41	0.03 N	33.90 E	33.90
13.63						
6980.00	24.528	89.942	6974.55	0.04 N	37.94 E	37.94
13.63						
6990.00	25.891	89.942	6983.60	0.04 N	42.20 E	42.20
13.63						
7000.00	27.253	89.942	6992.54	0.05 N	46.68 E	46.68
13.63						
7010.00	28.616	89.942	7001.38	0.05 N	51.36 E	51.36
13.63						
7020.00	29.979	89.942	7010.10	0.06 N	56.25 E	56.25
13.63						
7030.00	31.341	89.942	7018.70	0.06 N	61.35 E	61.35
13.63						
7040.00	32.704	89.942	7027.18	0.07 N	66.66 E	66.66
13.63						

	County	Line '1'	Federal #1	Lateral	Plan #1	Report 9-19-07.txt	
7050.00	34.067	89.942	7035.53	0.07	N	72.16	E 72.16
13.63 7060.00	35.429	89.942	7043.74	0.08	N	77.86	E 77.86
13.63 7070.00	36.792	89.942	7051.82	0.08	N	83.75	E 83.75
13.63 7080.00	38.155	89.942	7059.76	0.09	N	89.83	E 89.83
13.63 7090.00	39.517	89.942	7067.55	0.10	N	96.11	E 96.11
13.63 7100.00	40.880	89.942	7075.19	0.10	N	102.56	E 102.56
13.63 7110.00	42.243	89.942	7082.67	0.11	N	109.19	E 109.19
13.63 7120.00	43.605	89.942	7089.99	0.12	N	116.00	E 116.00
13.63 7130.00	44.968	89.942	7097.15	0.12	N	122.99	E 122.99
13.63 7140.00	46.331	89.942	7104.14	0.13	N	130.14	E 130.14
13.63 7150.00	47.693	89.942	7110.96	0.14	N	137.45	E 137.45
13.63 7160.00	49.056	89.942	7117.60	0.15	N	144.93	E 144.93
13.63 7170.00	50.419	89.942	7124.06	0.15	N	152.56	E 152.56
13.63 7180.00	51.781	89.942	7130.34	0.16	N	160.34	E 160.34
13.63 7190.00	53.144	89.942	7136.44	0.17	N	168.27	E 168.27
13.63 7200.00	54.507	89.942	7142.34	0.18	N	176.34	E 176.34
13.63 7210.00	55.869	89.942	7148.05	0.19	N	184.55	E 184.55
13.63 7220.00	57.232	89.942	7153.56	0.20	N	192.89	E 192.89
13.63 7230.00	58.595	89.942	7158.87	0.20	N	201.37	E 201.37
13.63 7240.00	59.957	89.942	7163.98	0.21	N	209.96	E 209.96
13.63 7250.00	61.320	89.942	7168.88	0.22	N	218.68	E 218.68
13.63 7260.00	62.683	89.942	7173.58	0.23	N	227.51	E 227.51
13.63 7270.00	64.045	89.942	7178.06	0.24	N	236.45	E 236.45
13.63 7280.00	65.408	89.942	7182.33	0.25	N	245.49	E 245.49
13.63 7290.00	66.771	89.942	7186.38	0.26	N	254.63	E 254.63
13.63 7300.00	68.133	89.942	7190.22	0.27	N	263.87	E 263.87
13.63 7310.00	69.496	89.942	7193.83	0.28	N	273.19	E 273.19
13.63 7320.00	70.859	89.942	7197.22	0.29	N	282.60	E 282.60
13.63 7330.00	72.221	89.942	7200.39	0.30	N	292.08	E 292.08
13.63 7340.00	73.584	89.942	7203.33	0.31	N	301.64	E 301.64
13.63 7350.00	74.947	89.942	7206.04	0.32	N	311.26	E 311.26
13.63 7360.00	76.309	89.942	7208.52	0.33	N	320.95	E 320.95

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt

13.63						
7370.00	77.672	89.942	7210.77	0.33 N	330.69 E	330.69
13.63						
7380.00	79.035	89.942	7212.79	0.34 N	340.49 E	340.49
13.63						
7390.00	80.397	89.942	7214.58	0.35 N	350.33 E	350.33
13.63						
7400.00	81.760	89.942	7216.13	0.36 N	360.21 E	360.21
13.63						
7410.00	83.123	89.942	7217.44	0.37 N	370.12 E	370.12
13.63						
7420.00	84.485	89.942	7218.52	0.38 N	380.06 E	380.06
13.63						
7430.00	85.848	89.942	7219.36	0.40 N	390.02 E	390.02
13.63						
7440.00	87.211	89.942	7219.97	0.41 N	400.01 E	400.01
13.63						
7450.00	88.573	89.942	7220.34	0.42 N	410.00 E	410.00
13.63						
7460.00	89.460	89.942	7220.48	0.43 N	420.00 E	420.00
8.87						
7470.00	89.460	89.942	7220.58	0.44 N	430.00 E	430.00
0.00						
7480.00	89.460	89.942	7220.67	0.45 N	440.00 E	440.00
0.00						
7490.00	89.460	89.942	7220.77	0.46 N	450.00 E	450.00
0.00						
7500.00	89.460	89.942	7220.86	0.47 N	460.00 E	460.00
0.00						
7510.00	89.460	89.942	7220.95	0.48 N	470.00 E	470.00
0.00						
7520.00	89.460	89.942	7221.05	0.49 N	480.00 E	480.00
0.00						
7530.00	89.460	89.942	7221.14	0.50 N	489.99 E	490.00
0.00						
7540.00	89.460	89.942	7221.24	0.51 N	499.99 E	499.99
0.00						
7550.00	89.460	89.942	7221.33	0.52 N	509.99 E	509.99
0.00						
7560.00	89.460	89.942	7221.42	0.53 N	519.99 E	519.99
0.00						
7570.00	89.460	89.942	7221.52	0.54 N	529.99 E	529.99
0.00						
7580.00	89.460	89.942	7221.61	0.55 N	539.99 E	539.99
0.00						
7590.00	89.460	89.942	7221.71	0.56 N	549.99 E	549.99
0.00						
7600.00	89.460	89.942	7221.80	0.57 N	559.99 E	559.99
0.00						
7610.00	89.460	89.942	7221.90	0.58 N	569.99 E	569.99
0.00						
7620.00	89.460	89.942	7221.99	0.59 N	579.99 E	579.99
0.00						
7630.00	89.460	89.942	7222.08	0.60 N	589.99 E	589.99
0.00						
7640.00	89.460	89.942	7222.18	0.61 N	599.99 E	599.99
0.00						
7650.00	89.460	89.942	7222.27	0.62 N	609.99 E	609.99
0.00						
7660.00	89.460	89.942	7222.37	0.63 N	619.99 E	619.99
0.00						
7670.00	89.460	89.942	7222.46	0.64 N	629.99 E	629.99
0.00						

	County	Line '1'	Federal #1	Lateral	Plan #1	Report 9-19-07.txt	
7680.00	89.460	89.942	7222.56	0.65	N	639.99	E 639.99
0.00							
7690.00	89.460	89.942	7222.65	0.66	N	649.99	E 649.99
0.00							
7700.00	89.460	89.942	7222.74	0.67	N	659.99	E 659.99
0.00							
7710.00	89.460	89.942	7222.84	0.68	N	669.99	E 669.99
0.00							
7720.00	89.460	89.942	7222.93	0.69	N	679.99	E 679.99
0.00							
7730.00	89.460	89.942	7223.03	0.70	N	689.99	E 689.99
0.00							
7740.00	89.460	89.942	7223.12	0.71	N	699.99	E 699.99
0.00							
7750.00	89.460	89.942	7223.22	0.72	N	709.98	E 709.99
0.00							
7760.00	89.460	89.942	7223.31	0.73	N	719.98	E 719.98
0.00							
7770.00	89.460	89.942	7223.40	0.74	N	729.98	E 729.98
0.00							
7780.00	89.460	89.942	7223.50	0.75	N	739.98	E 739.98
0.00							
7790.00	89.460	89.942	7223.59	0.76	N	749.98	E 749.98
0.00							
7800.00	89.460	89.942	7223.69	0.77	N	759.98	E 759.98
0.00							
7810.00	89.460	89.942	7223.78	0.78	N	769.98	E 769.98
0.00							
7820.00	89.460	89.942	7223.88	0.79	N	779.98	E 779.98
0.00							
7830.00	89.460	89.942	7223.97	0.80	N	789.98	E 789.98
0.00							
7840.00	89.460	89.942	7224.06	0.81	N	799.98	E 799.98
0.00							
7850.00	89.460	89.942	7224.16	0.82	N	809.98	E 809.98
0.00							
7860.00	89.460	89.942	7224.25	0.83	N	819.98	E 819.98
0.00							
7870.00	89.460	89.942	7224.35	0.84	N	829.98	E 829.98
0.00							
7880.00	89.460	89.942	7224.44	0.85	N	839.98	E 839.98
0.00							
7890.00	89.460	89.942	7224.53	0.86	N	849.98	E 849.98
0.00							
7900.00	89.460	89.942	7224.63	0.87	N	859.98	E 859.98
0.00							
7910.00	89.460	89.942	7224.72	0.88	N	869.98	E 869.98
0.00							
7920.00	89.460	89.942	7224.82	0.89	N	879.98	E 879.98
0.00							
7930.00	89.460	89.942	7224.91	0.90	N	889.98	E 889.98
0.00							
7940.00	89.460	89.942	7225.01	0.91	N	899.98	E 899.98
0.00							
7950.00	89.460	89.942	7225.10	0.92	N	909.98	E 909.98
0.00							
7960.00	89.460	89.942	7225.19	0.93	N	919.98	E 919.98
0.00							
7970.00	89.460	89.942	7225.29	0.94	N	929.98	E 929.98
0.00							
7980.00	89.460	89.942	7225.38	0.95	N	939.97	E 939.98
0.00							
7990.00	89.460	89.942	7225.48	0.96	N	949.97	E 949.97

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt

0.00							
8000.00	89.460	89.942	7225.57	0.97 N	959.97 E	959.97	
0.00							
8010.00	89.460	89.942	7225.67	0.98 N	969.97 E	969.97	
0.00							
8020.00	89.460	89.942	7225.76	0.99 N	979.97 E	979.97	
0.00							
8030.00	89.460	89.942	7225.85	1.00 N	989.97 E	989.97	
0.00							
8040.00	89.460	89.942	7225.95	1.01 N	999.97 E	999.97	
0.00							
8050.00	89.460	89.942	7226.04	1.02 N	1009.97 E	1009.97	
0.00							
8060.00	89.460	89.942	7226.14	1.03 N	1019.97 E	1019.97	
0.00							
8070.00	89.460	89.942	7226.23	1.04 N	1029.97 E	1029.97	
0.00							
8080.00	89.460	89.942	7226.33	1.05 N	1039.97 E	1039.97	
0.00							
8090.00	89.460	89.942	7226.42	1.06 N	1049.97 E	1049.97	
0.00							
8100.00	89.460	89.942	7226.51	1.07 N	1059.97 E	1059.97	
0.00							
8110.00	89.460	89.942	7226.61	1.08 N	1069.97 E	1069.97	
0.00							
8120.00	89.460	89.942	7226.70	1.09 N	1079.97 E	1079.97	
0.00							
8130.00	89.460	89.942	7226.80	1.10 N	1089.97 E	1089.97	
0.00							
8140.00	89.460	89.942	7226.89	1.11 N	1099.97 E	1099.97	
0.00							
8150.00	89.460	89.942	7226.99	1.12 N	1109.97 E	1109.97	
0.00							
8160.00	89.460	89.942	7227.08	1.13 N	1119.97 E	1119.97	
0.00							
8170.00	89.460	89.942	7227.17	1.14 N	1129.97 E	1129.97	
0.00							
8180.00	89.460	89.942	7227.27	1.15 N	1139.97 E	1139.97	
0.00							
8190.00	89.460	89.942	7227.36	1.16 N	1149.97 E	1149.97	
0.00							
8200.00	89.460	89.942	7227.46	1.17 N	1159.96 E	1159.97	
0.00							
8210.00	89.460	89.942	7227.55	1.18 N	1169.96 E	1169.96	
0.00							
8220.00	89.460	89.942	7227.65	1.20 N	1179.96 E	1179.96	
0.00							
8230.00	89.460	89.942	7227.74	1.21 N	1189.96 E	1189.96	
0.00							
8240.00	89.460	89.942	7227.83	1.22 N	1199.96 E	1199.96	
0.00							
8250.00	89.460	89.942	7227.93	1.23 N	1209.96 E	1209.96	
0.00							
8260.00	89.460	89.942	7228.02	1.24 N	1219.96 E	1219.96	
0.00							
8270.00	89.460	89.942	7228.12	1.25 N	1229.96 E	1229.96	
0.00							
8280.00	89.460	89.942	7228.21	1.26 N	1239.96 E	1239.96	
0.00							
8290.00	89.460	89.942	7228.30	1.27 N	1249.96 E	1249.96	
0.00							
8300.00	89.460	89.942	7228.40	1.28 N	1259.96 E	1259.96	
0.00							

	County	Line '1'	Federal #1	Lateral	Plan #1	Report 9-19-07.txt	
8310.00	89.460	89.942	7228.49	1.29 N	1269.96 E	1269.96	
0.00							
8320.00	89.460	89.942	7228.59	1.30 N	1279.96 E	1279.96	
0.00							
8330.00	89.460	89.942	7228.68	1.31 N	1289.96 E	1289.96	
0.00							
8340.00	89.460	89.942	7228.78	1.32 N	1299.96 E	1299.96	
0.00							
8350.00	89.460	89.942	7228.87	1.33 N	1309.96 E	1309.96	
0.00							
8360.00	89.460	89.942	7228.96	1.34 N	1319.96 E	1319.96	
0.00							
8370.00	89.460	89.942	7229.06	1.35 N	1329.96 E	1329.96	
0.00							
8380.00	89.460	89.942	7229.15	1.36 N	1339.96 E	1339.96	
0.00							
8390.00	89.460	89.942	7229.25	1.37 N	1349.96 E	1349.96	
0.00							
8400.00	89.460	89.942	7229.34	1.38 N	1359.96 E	1359.96	
0.00							
8410.00	89.460	89.942	7229.44	1.39 N	1369.96 E	1369.96	
0.00							
8420.00	89.460	89.942	7229.53	1.40 N	1379.95 E	1379.96	
0.00							
8430.00	89.460	89.942	7229.62	1.41 N	1389.95 E	1389.96	
0.00							
8440.00	89.460	89.942	7229.72	1.42 N	1399.95 E	1399.95	
0.00							
8450.00	89.460	89.942	7229.81	1.43 N	1409.95 E	1409.95	
0.00							
8460.00	89.460	89.942	7229.91	1.44 N	1419.95 E	1419.95	
0.00							
8470.00	89.460	89.942	7230.00	1.45 N	1429.95 E	1429.95	
0.00							
8480.00	89.460	89.942	7230.10	1.46 N	1439.95 E	1439.95	
0.00							
8490.00	89.460	89.942	7230.19	1.47 N	1449.95 E	1449.95	
0.00							
8500.00	89.460	89.942	7230.28	1.48 N	1459.95 E	1459.95	
0.00							
8510.00	89.460	89.942	7230.38	1.49 N	1469.95 E	1469.95	
0.00							
8520.00	89.460	89.942	7230.47	1.50 N	1479.95 E	1479.95	
0.00							
8530.00	89.460	89.942	7230.57	1.51 N	1489.95 E	1489.95	
0.00							
8540.00	89.460	89.942	7230.66	1.52 N	1499.95 E	1499.95	
0.00							
8550.00	89.460	89.942	7230.76	1.53 N	1509.95 E	1509.95	
0.00							
8560.00	89.460	89.942	7230.85	1.54 N	1519.95 E	1519.95	
0.00							
8570.00	89.460	89.942	7230.94	1.55 N	1529.95 E	1529.95	
0.00							
8580.00	89.460	89.942	7231.04	1.56 N	1539.95 E	1539.95	
0.00							
8590.00	89.460	89.942	7231.13	1.57 N	1549.95 E	1549.95	
0.00							
8600.00	89.460	89.942	7231.23	1.58 N	1559.95 E	1559.95	
0.00							
8610.00	89.460	89.942	7231.32	1.59 N	1569.95 E	1569.95	
0.00							
8620.00	89.460	89.942	7231.41	1.60 N	1579.95 E	1579.95	

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt

0.00						
8630.00	89.460	89.942	7231.51	1.61 N	1589.95 E	1589.95
0.00						
8640.00	89.460	89.942	7231.60	1.62 N	1599.95 E	1599.95
0.00						
8650.00	89.460	89.942	7231.70	1.63 N	1609.94 E	1609.95
0.00						
8660.00	89.460	89.942	7231.79	1.64 N	1619.94 E	1619.94
0.00						
8670.00	89.460	89.942	7231.89	1.65 N	1629.94 E	1629.94
0.00						
8680.00	89.460	89.942	7231.98	1.66 N	1639.94 E	1639.94
0.00						
8690.00	89.460	89.942	7232.07	1.67 N	1649.94 E	1649.94
0.00						
8700.00	89.460	89.942	7232.17	1.68 N	1659.94 E	1659.94
0.00						
8710.00	89.460	89.942	7232.26	1.69 N	1669.94 E	1669.94
0.00						
8720.00	89.460	89.942	7232.36	1.70 N	1679.94 E	1679.94
0.00						
8730.00	89.460	89.942	7232.45	1.71 N	1689.94 E	1689.94
0.00						
8740.00	89.460	89.942	7232.55	1.72 N	1699.94 E	1699.94
0.00						
8750.00	89.460	89.942	7232.64	1.73 N	1709.94 E	1709.94
0.00						
8760.00	89.460	89.942	7232.73	1.74 N	1719.94 E	1719.94
0.00						
8770.00	89.460	89.942	7232.83	1.75 N	1729.94 E	1729.94
0.00						
8780.00	89.460	89.942	7232.92	1.76 N	1739.94 E	1739.94
0.00						
8790.00	89.460	89.942	7233.02	1.77 N	1749.94 E	1749.94
0.00						
8800.00	89.460	89.942	7233.11	1.78 N	1759.94 E	1759.94
0.00						
8810.00	89.460	89.942	7233.21	1.79 N	1769.94 E	1769.94
0.00						
8820.00	89.460	89.942	7233.30	1.80 N	1779.94 E	1779.94
0.00						
8830.00	89.460	89.942	7233.39	1.81 N	1789.94 E	1789.94
0.00						
8840.00	89.460	89.942	7233.49	1.82 N	1799.94 E	1799.94
0.00						
8850.00	89.460	89.942	7233.58	1.83 N	1809.94 E	1809.94
0.00						
8860.00	89.460	89.942	7233.68	1.84 N	1819.94 E	1819.94
0.00						
8870.00	89.460	89.942	7233.77	1.85 N	1829.93 E	1829.94
0.00						
8880.00	89.460	89.942	7233.87	1.86 N	1839.93 E	1839.94
0.00						
8890.00	89.460	89.942	7233.96	1.87 N	1849.93 E	1849.93
0.00						
8900.00	89.460	89.942	7234.05	1.88 N	1859.93 E	1859.93
0.00						
8910.00	89.460	89.942	7234.15	1.89 N	1869.93 E	1869.93
0.00						
8920.00	89.460	89.942	7234.24	1.90 N	1879.93 E	1879.93
0.00						
8930.00	89.460	89.942	7234.34	1.91 N	1889.93 E	1889.93
0.00						

	County	Line '1'	Federal #1	Lateral	Plan #1	Report 9-19-07.txt	
8940.00	89.460	89.942	7234.43	1.92	N	1899.93	E 1899.93
0.00							
8950.00	89.460	89.942	7234.53	1.93	N	1909.93	E 1909.93
0.00							
8960.00	89.460	89.942	7234.62	1.94	N	1919.93	E 1919.93
0.00							
8970.00	89.460	89.942	7234.71	1.95	N	1929.93	E 1929.93
0.00							
8980.00	89.460	89.942	7234.81	1.96	N	1939.93	E 1939.93
0.00							
8990.00	89.460	89.942	7234.90	1.97	N	1949.93	E 1949.93
0.00							
9000.00	89.460	89.942	7235.00	1.99	N	1959.93	E 1959.93
0.00							
9010.00	89.460	89.942	7235.09	2.00	N	1969.93	E 1969.93
0.00							
9020.00	89.460	89.942	7235.18	2.01	N	1979.93	E 1979.93
0.00							
9030.00	89.460	89.942	7235.28	2.02	N	1989.93	E 1989.93
0.00							
9040.00	89.460	89.942	7235.37	2.03	N	1999.93	E 1999.93
0.00							
9050.00	89.460	89.942	7235.47	2.04	N	2009.93	E 2009.93
0.00							
9060.00	89.460	89.942	7235.56	2.05	N	2019.93	E 2019.93
0.00							
9070.00	89.460	89.942	7235.66	2.06	N	2029.93	E 2029.93
0.00							
9080.00	89.460	89.942	7235.75	2.07	N	2039.93	E 2039.93
0.00							
9090.00	89.460	89.942	7235.84	2.08	N	2049.92	E 2049.93
0.00							
9100.00	89.460	89.942	7235.94	2.09	N	2059.92	E 2059.93
0.00							
9110.00	89.460	89.942	7236.03	2.10	N	2069.92	E 2069.92
0.00							
9120.00	89.460	89.942	7236.13	2.11	N	2079.92	E 2079.92
0.00							
9130.00	89.460	89.942	7236.22	2.12	N	2089.92	E 2089.92
0.00							
9140.00	89.460	89.942	7236.32	2.13	N	2099.92	E 2099.92
0.00							
9150.00	89.460	89.942	7236.41	2.14	N	2109.92	E 2109.92
0.00							
9160.00	89.460	89.942	7236.50	2.15	N	2119.92	E 2119.92
0.00							
9170.00	89.460	89.942	7236.60	2.16	N	2129.92	E 2129.92
0.00							
9180.00	89.460	89.942	7236.69	2.17	N	2139.92	E 2139.92
0.00							
9190.00	89.460	89.942	7236.79	2.18	N	2149.92	E 2149.92
0.00							
9200.00	89.460	89.942	7236.88	2.19	N	2159.92	E 2159.92
0.00							
9210.00	89.460	89.942	7236.98	2.20	N	2169.92	E 2169.92
0.00							
9220.00	89.460	89.942	7237.07	2.21	N	2179.92	E 2179.92
0.00							
9230.00	89.460	89.942	7237.16	2.22	N	2189.92	E 2189.92
0.00							
9240.00	89.460	89.942	7237.26	2.23	N	2199.92	E 2199.92
0.00							
9250.00	89.460	89.942	7237.35	2.24	N	2209.92	E 2209.92

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt

0.00							
9260.00	89.460	89.942	7237.45	2.25 N	2219.92 E	2219.92	
0.00							
9270.00	89.460	89.942	7237.54	2.26 N	2229.92 E	2229.92	
0.00							
9280.00	89.460	89.942	7237.64	2.27 N	2239.92 E	2239.92	
0.00							
9290.00	89.460	89.942	7237.73	2.28 N	2249.92 E	2249.92	
0.00							
9300.00	89.460	89.942	7237.82	2.29 N	2259.92 E	2259.92	
0.00							
9310.00	89.460	89.942	7237.92	2.30 N	2269.91 E	2269.92	
0.00							
9320.00	89.460	89.942	7238.01	2.31 N	2279.91 E	2279.92	
0.00							
9330.00	89.460	89.942	7238.11	2.32 N	2289.91 E	2289.92	
0.00							
9340.00	89.460	89.942	7238.20	2.33 N	2299.91 E	2299.91	
0.00							
9350.00	89.460	89.942	7238.29	2.34 N	2309.91 E	2309.91	
0.00							
9360.00	89.460	89.942	7238.39	2.35 N	2319.91 E	2319.91	
0.00							
9370.00	89.460	89.942	7238.48	2.36 N	2329.91 E	2329.91	
0.00							
9380.00	89.460	89.942	7238.58	2.37 N	2339.91 E	2339.91	
0.00							
9390.00	89.460	89.942	7238.67	2.38 N	2349.91 E	2349.91	
0.00							
9400.00	89.460	89.942	7238.77	2.39 N	2359.91 E	2359.91	
0.00							
9410.00	89.460	89.942	7238.86	2.40 N	2369.91 E	2369.91	
0.00							
9420.00	89.460	89.942	7238.95	2.41 N	2379.91 E	2379.91	
0.00							
9430.00	89.460	89.942	7239.05	2.42 N	2389.91 E	2389.91	
0.00							
9440.00	89.460	89.942	7239.14	2.43 N	2399.91 E	2399.91	
0.00							
9450.00	89.460	89.942	7239.24	2.44 N	2409.91 E	2409.91	
0.00							
9460.00	89.460	89.942	7239.33	2.45 N	2419.91 E	2419.91	
0.00							
9470.00	89.460	89.942	7239.43	2.46 N	2429.91 E	2429.91	
0.00							
9480.00	89.460	89.942	7239.52	2.47 N	2439.91 E	2439.91	
0.00							
9490.00	89.460	89.942	7239.61	2.48 N	2449.91 E	2449.91	
0.00							
9500.00	89.460	89.942	7239.71	2.49 N	2459.91 E	2459.91	
0.00							
9510.00	89.460	89.942	7239.80	2.50 N	2469.91 E	2469.91	
0.00							
9520.00	89.460	89.942	7239.90	2.51 N	2479.91 E	2479.91	
0.00							
9530.00	89.460	89.942	7239.99	2.52 N	2489.91 E	2489.91	
0.00							
9540.00	89.460	89.942	7240.09	2.53 N	2499.90 E	2499.91	
0.00							
9550.00	89.460	89.942	7240.18	2.54 N	2509.90 E	2509.91	
0.00							
9560.00	89.460	89.942	7240.27	2.55 N	2519.90 E	2519.90	
0.00							

	County	Line '1'	Federal #1	Lateral	Plan #1	Report 9-19-07.txt	
9570.00	89.460	89.942	7240.37	2.56 N	2529.90 E	2529.90	
0.00							
9580.00	89.460	89.942	7240.46	2.57 N	2539.90 E	2539.90	
0.00							
9590.00	89.460	89.942	7240.56	2.58 N	2549.90 E	2549.90	
0.00							
9600.00	89.460	89.942	7240.65	2.59 N	2559.90 E	2559.90	
0.00							
9610.00	89.460	89.942	7240.75	2.60 N	2569.90 E	2569.90	
0.00							
9620.00	89.460	89.942	7240.84	2.61 N	2579.90 E	2579.90	
0.00							
9630.00	89.460	89.942	7240.93	2.62 N	2589.90 E	2589.90	
0.00							
9640.00	89.460	89.942	7241.03	2.63 N	2599.90 E	2599.90	
0.00							
9650.00	89.460	89.942	7241.12	2.64 N	2609.90 E	2609.90	
0.00							
9660.00	89.460	89.942	7241.22	2.65 N	2619.90 E	2619.90	
0.00							
9670.00	89.460	89.942	7241.31	2.66 N	2629.90 E	2629.90	
0.00							
9680.00	89.460	89.942	7241.41	2.67 N	2639.90 E	2639.90	
0.00							
9690.00	89.460	89.942	7241.50	2.68 N	2649.90 E	2649.90	
0.00							
9700.00	89.460	89.942	7241.59	2.69 N	2659.90 E	2659.90	
0.00							
9710.00	89.460	89.942	7241.69	2.70 N	2669.90 E	2669.90	
0.00							
9720.00	89.460	89.942	7241.78	2.71 N	2679.90 E	2679.90	
0.00							
9730.00	89.460	89.942	7241.88	2.72 N	2689.90 E	2689.90	
0.00							
9740.00	89.460	89.942	7241.97	2.73 N	2699.90 E	2699.90	
0.00							
9750.00	89.460	89.942	7242.06	2.74 N	2709.90 E	2709.90	
0.00							
9760.00	89.460	89.942	7242.16	2.75 N	2719.89 E	2719.90	
0.00							
9770.00	89.460	89.942	7242.25	2.76 N	2729.89 E	2729.90	
0.00							
9780.00	89.460	89.942	7242.35	2.78 N	2739.89 E	2739.90	
0.00							
9790.00	89.460	89.942	7242.44	2.79 N	2749.89 E	2749.89	
0.00							
9800.00	89.460	89.942	7242.54	2.80 N	2759.89 E	2759.89	
0.00							
9810.00	89.460	89.942	7242.63	2.81 N	2769.89 E	2769.89	
0.00							
9820.00	89.460	89.942	7242.72	2.82 N	2779.89 E	2779.89	
0.00							
9830.00	89.460	89.942	7242.82	2.83 N	2789.89 E	2789.89	
0.00							
9840.00	89.460	89.942	7242.91	2.84 N	2799.89 E	2799.89	
0.00							
9850.00	89.460	89.942	7243.01	2.85 N	2809.89 E	2809.89	
0.00							
9860.00	89.460	89.942	7243.10	2.86 N	2819.89 E	2819.89	
0.00							
9870.00	89.460	89.942	7243.20	2.87 N	2829.89 E	2829.89	
0.00							
9880.00	89.460	89.942	7243.29	2.88 N	2839.89 E	2839.89	

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt

0.00						
9890.00	89.460	89.942	7243.38	2.89 N	2849.89 E	2849.89
0.00						
9900.00	89.460	89.942	7243.48	2.90 N	2859.89 E	2859.89
0.00						
9910.00	89.460	89.942	7243.57	2.91 N	2869.89 E	2869.89
0.00						
9920.00	89.460	89.942	7243.67	2.92 N	2879.89 E	2879.89
0.00						
9930.00	89.460	89.942	7243.76	2.93 N	2889.89 E	2889.89
0.00						
9940.00	89.460	89.942	7243.86	2.94 N	2899.89 E	2899.89
0.00						
9950.00	89.460	89.942	7243.95	2.95 N	2909.89 E	2909.89
0.00						
9960.00	89.460	89.942	7244.04	2.96 N	2919.89 E	2919.89
0.00						
9970.00	89.460	89.942	7244.14	2.97 N	2929.89 E	2929.89
0.00						
9980.00	89.460	89.942	7244.23	2.98 N	2939.88 E	2939.89
0.00						
9990.00	89.460	89.942	7244.33	2.99 N	2949.88 E	2949.89
0.00						
10000.00	89.460	89.942	7244.42	3.00 N	2959.88 E	2959.89
0.00						
10010.00	89.460	89.942	7244.52	3.01 N	2969.88 E	2969.88
0.00						
10020.00	89.460	89.942	7244.61	3.02 N	2979.88 E	2979.88
0.00						
10030.00	89.460	89.942	7244.70	3.03 N	2989.88 E	2989.88
0.00						
10040.00	89.460	89.942	7244.80	3.04 N	2999.88 E	2999.88
0.00						
10050.00	89.460	89.942	7244.89	3.05 N	3009.88 E	3009.88
0.00						
10060.00	89.460	89.942	7244.99	3.06 N	3019.88 E	3019.88
0.00						
10070.00	89.460	89.942	7245.08	3.07 N	3029.88 E	3029.88
0.00						
10080.00	89.460	89.942	7245.17	3.08 N	3039.88 E	3039.88
0.00						
10090.00	89.460	89.942	7245.27	3.09 N	3049.88 E	3049.88
0.00						
10100.00	89.460	89.942	7245.36	3.10 N	3059.88 E	3059.88
0.00						
10110.00	89.460	89.942	7245.46	3.11 N	3069.88 E	3069.88
0.00						
10120.00	89.460	89.942	7245.55	3.12 N	3079.88 E	3079.88
0.00						
10130.00	89.460	89.942	7245.65	3.13 N	3089.88 E	3089.88
0.00						
10140.00	89.460	89.942	7245.74	3.14 N	3099.88 E	3099.88
0.00						
10150.00	89.460	89.942	7245.83	3.15 N	3109.88 E	3109.88
0.00						
10160.00	89.460	89.942	7245.93	3.16 N	3119.88 E	3119.88
0.00						
10170.00	89.460	89.942	7246.02	3.17 N	3129.88 E	3129.88
0.00						
10180.00	89.460	89.942	7246.12	3.18 N	3139.88 E	3139.88
0.00						
10190.00	89.460	89.942	7246.21	3.19 N	3149.88 E	3149.88
0.00						

	County	Line '1'	Federal #1	Lateral	Plan #1	Report 9-19-07.txt	
10200.00	89.460	89.942	7246.31		3.20 N	3159.87 E	3159.88
0.00							
10210.00	89.460	89.942	7246.40		3.21 N	3169.87 E	3169.88
0.00							
10220.00	89.460	89.942	7246.49		3.22 N	3179.87 E	3179.88
0.00							
10230.00	89.460	89.942	7246.59		3.23 N	3189.87 E	3189.88
0.00							
10240.00	89.460	89.942	7246.68		3.24 N	3199.87 E	3199.87
0.00							
10250.00	89.460	89.942	7246.78		3.25 N	3209.87 E	3209.87
0.00							
10260.00	89.460	89.942	7246.87		3.26 N	3219.87 E	3219.87
0.00							
10270.00	89.460	89.942	7246.97		3.27 N	3229.87 E	3229.87
0.00							
10280.00	89.460	89.942	7247.06		3.28 N	3239.87 E	3239.87
0.00							
10290.00	89.460	89.942	7247.15		3.29 N	3249.87 E	3249.87
0.00							
10300.00	89.460	89.942	7247.25		3.30 N	3259.87 E	3259.87
0.00							
10310.00	89.460	89.942	7247.34		3.31 N	3269.87 E	3269.87
0.00							
10320.00	89.460	89.942	7247.44		3.32 N	3279.87 E	3279.87
0.00							
10330.00	89.460	89.942	7247.53		3.33 N	3289.87 E	3289.87
0.00							
10340.00	89.460	89.942	7247.63		3.34 N	3299.87 E	3299.87
0.00							
10350.00	89.460	89.942	7247.72		3.35 N	3309.87 E	3309.87
0.00							
10360.00	89.460	89.942	7247.81		3.36 N	3319.87 E	3319.87
0.00							
10370.00	89.460	89.942	7247.91		3.37 N	3329.87 E	3329.87
0.00							
10380.00	89.460	89.942	7248.00		3.38 N	3339.87 E	3339.87
0.00							
10390.00	89.460	89.942	7248.10		3.39 N	3349.87 E	3349.87
0.00							
10400.00	89.460	89.942	7248.19		3.40 N	3359.87 E	3359.87
0.00							
10410.00	89.460	89.942	7248.29		3.41 N	3369.87 E	3369.87
0.00							
10420.00	89.460	89.942	7248.38		3.42 N	3379.87 E	3379.87
0.00							
10430.00	89.460	89.942	7248.47		3.43 N	3389.86 E	3389.87
0.00							
10440.00	89.460	89.942	7248.57		3.44 N	3399.86 E	3399.87
0.00							
10450.00	89.460	89.942	7248.66		3.45 N	3409.86 E	3409.87
0.00							
10460.00	89.460	89.942	7248.76		3.46 N	3419.86 E	3419.87
0.00							
10470.00	89.460	89.942	7248.85		3.47 N	3429.86 E	3429.86
0.00							
10480.00	89.460	89.942	7248.94		3.48 N	3439.86 E	3439.86
0.00							
10490.00	89.460	89.942	7249.04		3.49 N	3449.86 E	3449.86
0.00							
10500.00	89.460	89.942	7249.13		3.50 N	3459.86 E	3459.86
0.00							
10510.00	89.460	89.942	7249.23		3.51 N	3469.86 E	3469.86

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt

0.00						
10520.00	89.460	89.942	7249.32	3.52 N	3479.86 E	3479.86
0.00						
10530.00	89.460	89.942	7249.42	3.53 N	3489.86 E	3489.86
0.00						
10540.00	89.460	89.942	7249.51	3.54 N	3499.86 E	3499.86
0.00						
10550.00	89.460	89.942	7249.60	3.55 N	3509.86 E	3509.86
0.00						
10560.00	89.460	89.942	7249.70	3.57 N	3519.86 E	3519.86
0.00						
10570.00	89.460	89.942	7249.79	3.58 N	3529.86 E	3529.86
0.00						
10580.00	89.460	89.942	7249.89	3.59 N	3539.86 E	3539.86
0.00						
10590.00	89.460	89.942	7249.98	3.60 N	3549.86 E	3549.86
0.00						
10600.00	89.460	89.942	7250.08	3.61 N	3559.86 E	3559.86
0.00						
10610.00	89.460	89.942	7250.17	3.62 N	3569.86 E	3569.86
0.00						
10620.00	89.460	89.942	7250.26	3.63 N	3579.86 E	3579.86
0.00						
10630.00	89.460	89.942	7250.36	3.64 N	3589.86 E	3589.86
0.00						
10640.00	89.460	89.942	7250.45	3.65 N	3599.86 E	3599.86
0.00						
10650.00	89.460	89.942	7250.55	3.66 N	3609.85 E	3609.86
0.00						
10660.00	89.460	89.942	7250.64	3.67 N	3619.85 E	3619.86
0.00						
10670.00	89.460	89.942	7250.74	3.68 N	3629.85 E	3629.86
0.00						
10680.00	89.460	89.942	7250.83	3.69 N	3639.85 E	3639.86
0.00						
10690.00	89.460	89.942	7250.92	3.70 N	3649.85 E	3649.85
0.00						
10700.00	89.460	89.942	7251.02	3.71 N	3659.85 E	3659.85
0.00						
10710.00	89.460	89.942	7251.11	3.72 N	3669.85 E	3669.85
0.00						
10720.00	89.460	89.942	7251.21	3.73 N	3679.85 E	3679.85
0.00						
10730.00	89.460	89.942	7251.30	3.74 N	3689.85 E	3689.85
0.00						
10740.00	89.460	89.942	7251.40	3.75 N	3699.85 E	3699.85
0.00						
10750.00	89.460	89.942	7251.49	3.76 N	3709.85 E	3709.85
0.00						
10760.00	89.460	89.942	7251.58	3.77 N	3719.85 E	3719.85
0.00						
10770.00	89.460	89.942	7251.68	3.78 N	3729.85 E	3729.85
0.00						
10780.00	89.460	89.942	7251.77	3.79 N	3739.85 E	3739.85
0.00						
10790.00	89.460	89.942	7251.87	3.80 N	3749.85 E	3749.85
0.00						
10800.00	89.460	89.942	7251.96	3.81 N	3759.85 E	3759.85
0.00						
10810.00	89.460	89.942	7252.05	3.82 N	3769.85 E	3769.85
0.00						
10820.00	89.460	89.942	7252.15	3.83 N	3779.85 E	3779.85
0.00						

	County	Line	'1'	Federal	#1	Lateral	Plan	#1	Report	9-19-07.txt	
10830.00	89.460	89.942	7252.24	3.84	N	3789.85	E	3789.85			
0.00											
10840.00	89.460	89.942	7252.34	3.85	N	3799.85	E	3799.85			
0.00											
10850.00	89.460	89.942	7252.43	3.86	N	3809.85	E	3809.85			
0.00											
10860.00	89.460	89.942	7252.53	3.87	N	3819.85	E	3819.85			
0.00											
10870.00	89.460	89.942	7252.62	3.88	N	3829.84	E	3829.85			
0.00											
10880.00	89.460	89.942	7252.71	3.89	N	3839.84	E	3839.85			
0.00											
10890.00	89.460	89.942	7252.81	3.90	N	3849.84	E	3849.85			
0.00											
10900.00	89.460	89.942	7252.90	3.91	N	3859.84	E	3859.85			
0.00											
10910.00	89.460	89.942	7253.00	3.92	N	3869.84	E	3869.85			
0.00											
10920.00	89.460	89.942	7253.09	3.93	N	3879.84	E	3879.84			
0.00											
10930.00	89.460	89.942	7253.19	3.94	N	3889.84	E	3889.84			
0.00											
10940.00	89.460	89.942	7253.28	3.95	N	3899.84	E	3899.84			
0.00											
10950.00	89.460	89.942	7253.37	3.96	N	3909.84	E	3909.84			
0.00											
10960.00	89.460	89.942	7253.47	3.97	N	3919.84	E	3919.84			
0.00											
10970.00	89.460	89.942	7253.56	3.98	N	3929.84	E	3929.84			
0.00											
10980.00	89.460	89.942	7253.66	3.99	N	3939.84	E	3939.84			
0.00											
10990.00	89.460	89.942	7253.75	4.00	N	3949.84	E	3949.84			
0.00											
11000.00	89.460	89.942	7253.85	4.01	N	3959.84	E	3959.84			
0.00											
11010.00	89.460	89.942	7253.94	4.02	N	3969.84	E	3969.84			
0.00											
11020.00	89.460	89.942	7254.03	4.03	N	3979.84	E	3979.84			
0.00											
11030.00	89.460	89.942	7254.13	4.04	N	3989.84	E	3989.84			
0.00											
11040.00	89.460	89.942	7254.22	4.05	N	3999.84	E	3999.84			
0.00											
11050.00	89.460	89.942	7254.32	4.06	N	4009.84	E	4009.84			
0.00											
11060.00	89.460	89.942	7254.41	4.07	N	4019.84	E	4019.84			
0.00											
11070.00	89.460	89.942	7254.51	4.08	N	4029.84	E	4029.84			
0.00											
11080.00	89.460	89.942	7254.60	4.09	N	4039.84	E	4039.84			
0.00											
11090.00	89.460	89.942	7254.69	4.10	N	4049.83	E	4049.84			
0.00											
11100.00	89.460	89.942	7254.79	4.11	N	4059.83	E	4059.84			
0.00											
11110.00	89.460	89.942	7254.88	4.12	N	4069.83	E	4069.84			
0.00											
11120.00	89.460	89.942	7254.98	4.13	N	4079.83	E	4079.84			
0.00											
11130.00	89.460	89.942	7255.07	4.14	N	4089.83	E	4089.84			
0.00											
11140.00	89.460	89.942	7255.17	4.15	N	4099.83	E	4099.83			

County Line '1' Federal #1 Lateral Plan #1 Report 9-19-07.txt

0.00						
11150.00	89.460	89.942	7255.26	4.16 N	4109.83 E	4109.83
0.00						
11160.00	89.460	89.942	7255.35	4.17 N	4119.83 E	4119.83
0.00						
11170.00	89.460	89.942	7255.45	4.18 N	4129.83 E	4129.83
0.00						
11180.00	89.460	89.942	7255.54	4.19 N	4139.83 E	4139.83
0.00						
11190.00	89.460	89.942	7255.64	4.20 N	4149.83 E	4149.83
0.00						
11200.00	89.460	89.942	7255.73	4.21 N	4159.83 E	4159.83
0.00						
11210.00	89.460	89.942	7255.82	4.22 N	4169.83 E	4169.83
0.00						
11220.00	89.460	89.942	7255.92	4.23 N	4179.83 E	4179.83
0.00						
11230.00	89.460	89.942	7256.01	4.24 N	4189.83 E	4189.83
0.00						
11240.00	89.460	89.942	7256.11	4.25 N	4199.83 E	4199.83
0.00						
11250.00	89.460	89.942	7256.20	4.26 N	4209.83 E	4209.83
0.00						
11260.00	89.460	89.942	7256.30	4.27 N	4219.83 E	4219.83
0.00						
11270.00	89.460	89.942	7256.39	4.28 N	4229.83 E	4229.83
0.00						
11280.00	89.460	89.942	7256.48	4.29 N	4239.83 E	4239.83
0.00						
11290.00	89.460	89.942	7256.58	4.30 N	4249.83 E	4249.83
0.00						
11300.00	89.460	89.942	7256.67	4.31 N	4259.83 E	4259.83
0.00						
11310.00	89.460	89.942	7256.77	4.32 N	4269.83 E	4269.83
0.00						
11320.00	89.460	89.942	7256.86	4.33 N	4279.82 E	4279.83
0.00						
11330.00	89.460	89.942	7256.96	4.34 N	4289.82 E	4289.83
0.00						
11340.00	89.460	89.942	7257.05	4.35 N	4299.82 E	4299.83
0.00						
11350.00	89.460	89.942	7257.14	4.37 N	4309.82 E	4309.83
0.00						
11360.00	89.460	89.942	7257.24	4.38 N	4319.82 E	4319.83
0.00						
11370.00	89.460	89.942	7257.33	4.39 N	4329.82 E	4329.82
0.00						
11380.00	89.460	89.942	7257.43	4.40 N	4339.82 E	4339.82
0.00						
11390.00	89.460	89.942	7257.52	4.41 N	4349.82 E	4349.82
0.00						
11400.00	89.460	89.942	7257.62	4.42 N	4359.82 E	4359.82
0.00						
11410.00	89.460	89.942	7257.71	4.43 N	4369.82 E	4369.82
0.00						
11420.00	89.460	89.942	7257.80	4.44 N	4379.82 E	4379.82
0.00						
11430.00	89.460	89.942	7257.90	4.45 N	4389.82 E	4389.82
0.00						
11440.00	89.460	89.942	7257.99	4.46 N	4399.82 E	4399.82
0.00						
11450.00	89.460	89.942	7258.09	4.47 N	4409.82 E	4409.82
0.00						

	County	Line '1'	Federal #1	Lateral	Plan #1	Report 9-19-07.txt
11460.00	89.460	89.942	7258.18	4.48 N	4419.82 E	4419.82
0.00						
11470.00	89.460	89.942	7258.28	4.49 N	4429.82 E	4429.82
0.00						
11480.00	89.460	89.942	7258.37	4.50 N	4439.82 E	4439.82
0.00						
11490.00	89.460	89.942	7258.46	4.51 N	4449.82 E	4449.82
0.00						
11500.00	89.460	89.942	7258.56	4.52 N	4459.82 E	4459.82
0.00						
11510.00	89.460	89.942	7258.65	4.53 N	4469.82 E	4469.82
0.00						
11520.00	89.460	89.942	7258.75	4.54 N	4479.82 E	4479.82
0.00						
11530.00	89.460	89.942	7258.84	4.55 N	4489.82 E	4489.82
0.00						
11540.00	89.460	89.942	7258.93	4.56 N	4499.81 E	4499.82
0.00						
11550.00	89.460	89.942	7259.03	4.57 N	4509.81 E	4509.82
0.00						
11560.00	89.460	89.942	7259.12	4.58 N	4519.81 E	4519.82
0.00						
11570.00	89.460	89.942	7259.22	4.59 N	4529.81 E	4529.82
0.00						
11580.00	89.460	89.942	7259.31	4.60 N	4539.81 E	4539.82
0.00						
11590.00	89.460	89.942	7259.41	4.61 N	4549.81 E	4549.81
0.00						
11600.00	89.460	89.942	7259.50	4.62 N	4559.81 E	4559.81
0.00						
11610.00	89.460	89.942	7259.59	4.63 N	4569.81 E	4569.81
0.00						
11620.00	89.460	89.942	7259.69	4.64 N	4579.81 E	4579.81
0.00						
11630.00	89.460	89.942	7259.78	4.65 N	4589.81 E	4589.81
0.00						
11640.00	89.460	89.942	7259.88	4.66 N	4599.81 E	4599.81
0.00						
11650.00	89.460	89.942	7259.97	4.67 N	4609.81 E	4609.81
0.00						
11653.01	89.460	89.942	7260.00	4.67 N	4612.82 E	4612.82
0.00						

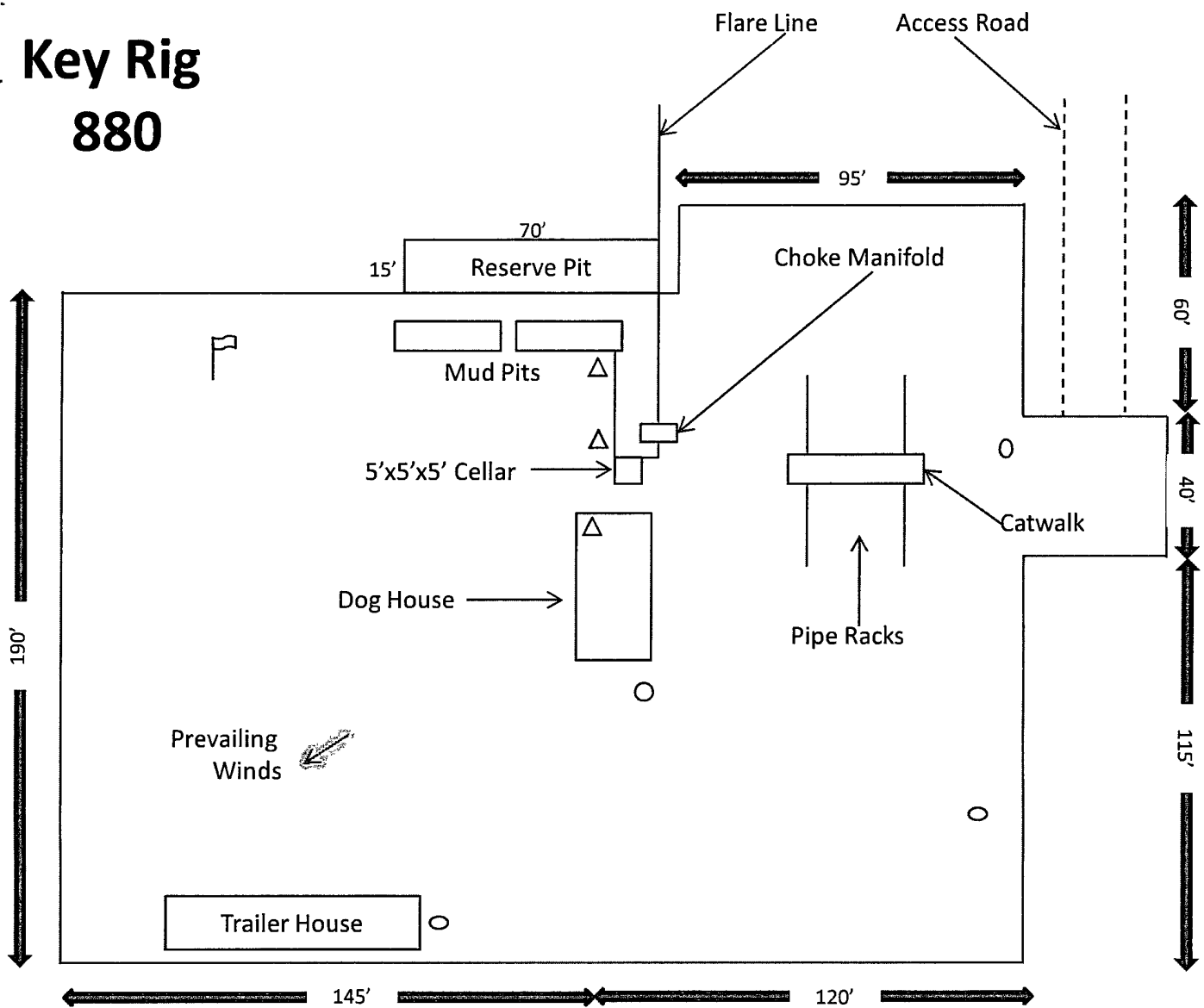
All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Site and calculated along an Azimuth of 89.942° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983, New Mexico Eastern Zone.
Central meridian is -104.333°.
Grid Convergence at Surface is 0.162°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 11653.01ft., the Bottom Hole Displacement is 4612.82ft., in the Direction of 89.942° (Grid).

Key Rig 880



-  Wind Direction Indicators (wind sock or streamers)
-  H2S Monitors (alarms at bell nipple and shale shaker)
-  Briefing Areas
-  Remote BOP Closing Unit

*See COA's
Pit North
V-Door East*

Exhibit D – Rig Diagram
County Line 1 Federal No. 1
Cimarex Energy Co. of Colorado
SHL 1980' FSL & 330' FWL
BHL 1980' FSL & 330' FEL
Sec. 1-16S-29E
Eddy County, NM

SR & A

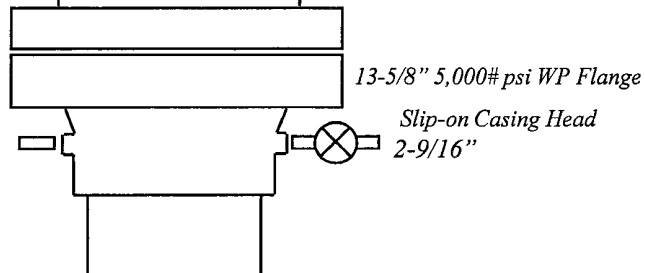
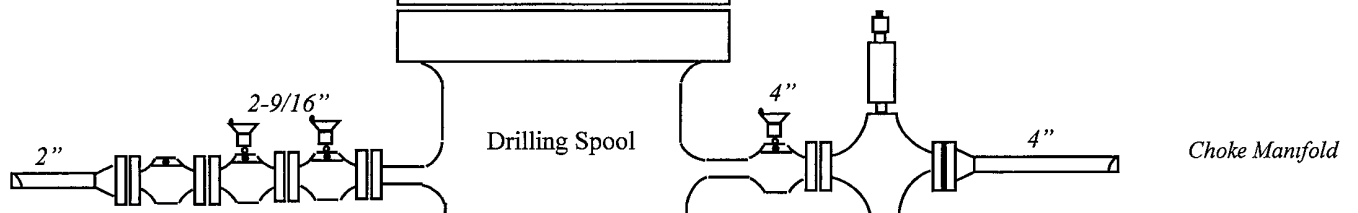
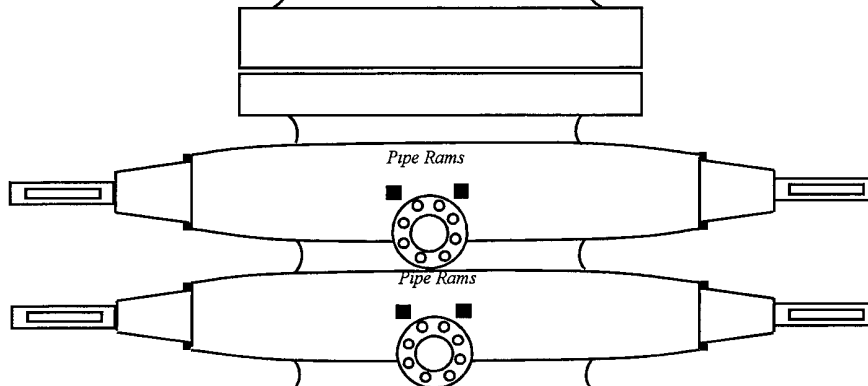
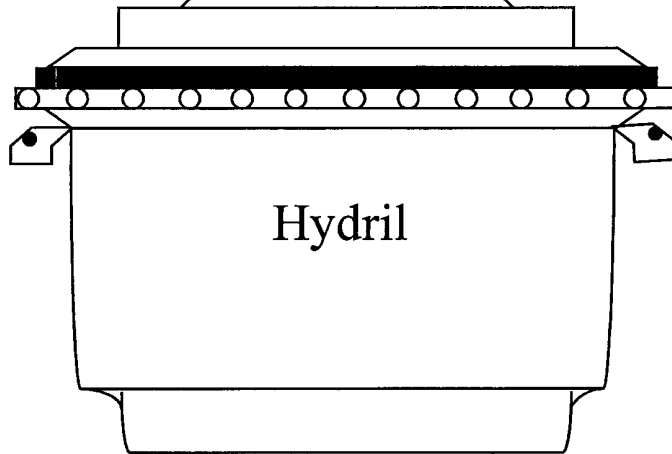
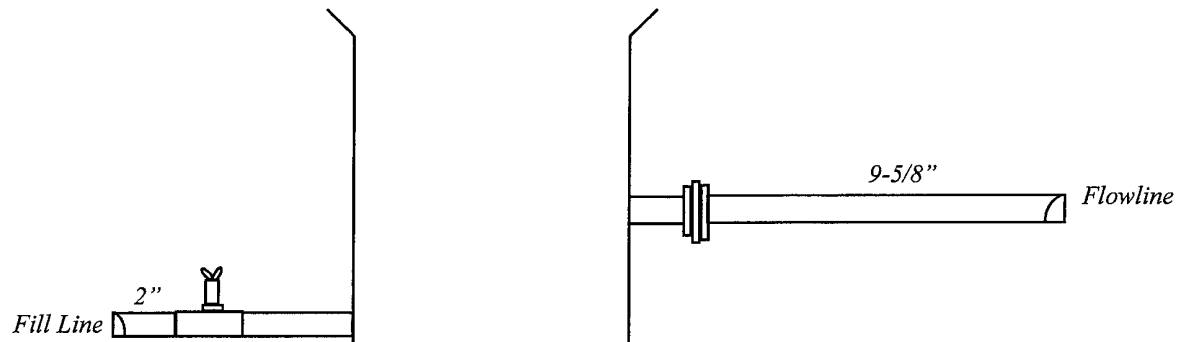


Exhibit E – 5000# BOP Diagram
County Line 1 Federal No. 1
 Cimarex Energy Co. of Colorado
 SHL 1980' FSL & 330' FWL
 BHL 1980' FSL & 330' FEL
 Sec. 1-16S-29E
 Eddy County, NM

**DRILLING OPERATIONS
CHOKE MANIFOLD
5M SERVICE**

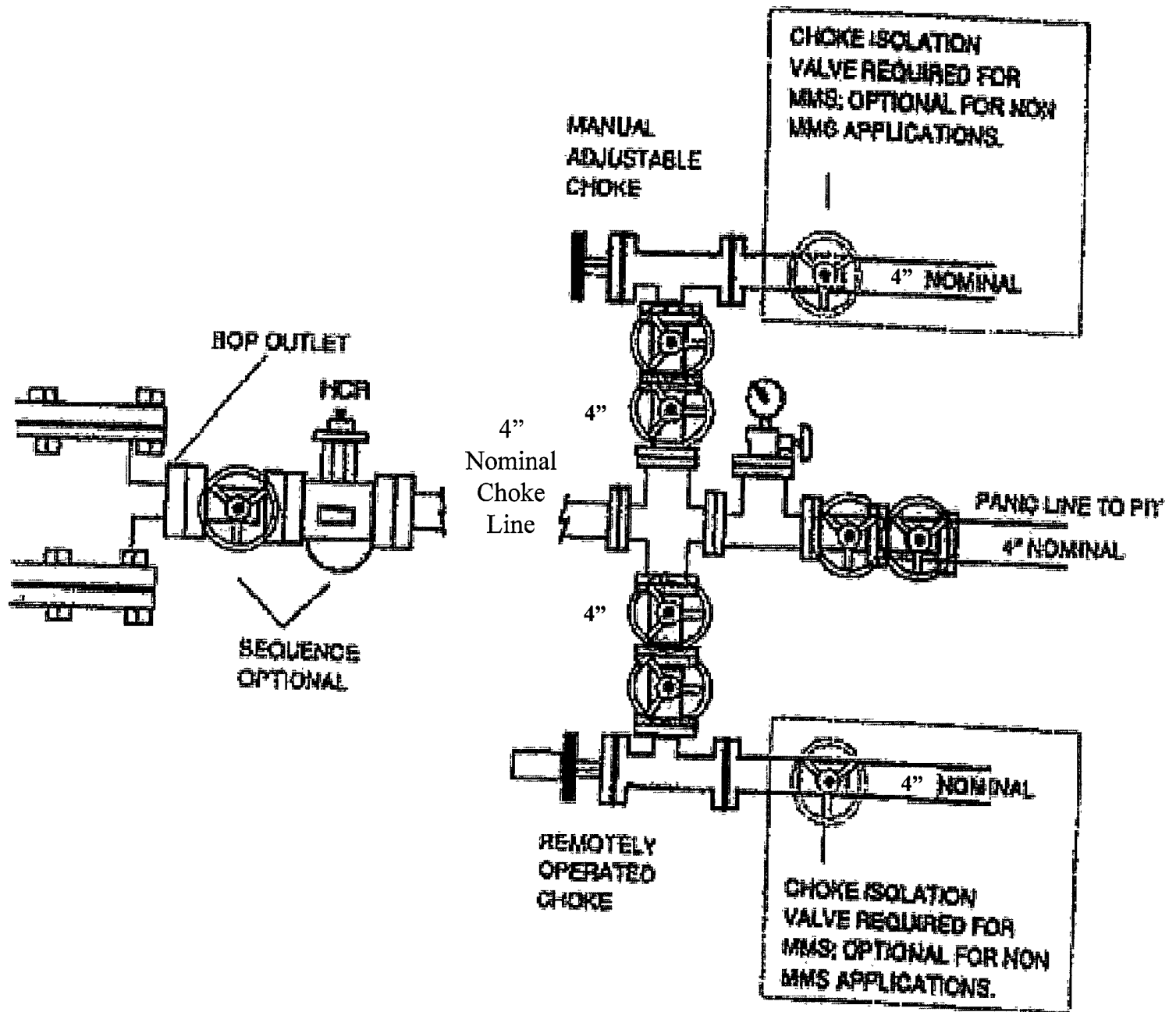


Exhibit E-1 – Choke Manifold Diagram
County Line 1 Federal No. 1
Cimarex Energy Co. of Colorado
SHL 1980' FSL & 330' FWL
BHL 1980' FSL & 330' FEL
Sec. 1-16S-29E
Eddy County, NM

Hydrogen Sulfide Drilling Operations Plan

Cimarex Energy Co. of Colorado

County Line 1 Federal No. 1

Unit L Section 1

T16S R29E Eddy County, NM

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - A. Characteristics of H2S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H2S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
- 2 H2S Detection and Alarm Systems
 - A. H2S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.
- 3 Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
- 4 Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H2S present in dangerous concentration). Only emergency personnel admitted to location.
- 5 Well control equipment
 - A. See exhibit "E"
- 6 Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7 Drillstem Testing

No DSTs are planned at this time.
- 8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
- 9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

Surface Use Plan
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, NM

- 1 Existing Roads: Area maps, Exhibit "B" is a reproduction of Eddy Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.

A. Exhibit "A" shows the proposed well site as staked.

B. From the junction of Co Rd 257 (Mallet) and Co Rd 217 (Hagerman Cutoff), go West on Co Rd 257 for 0.8 miles to lease road. On lease road, go Northwest 7.0 miles to proposed lease road.

- 2 Planned Access Roads: 2406.1' of new lease road is proposed, 296' of which will be on-lease.

3 Location of Existing Wells in a One-Mile Radius - Exhibit A

A. Water wells - None known

B. Disposal wells - None known

C. Drilling wells - None known

D. Producing wells - As shown on Exhibit "A"

E. Abandoned wells - As shown on Exhibit "A"

Surface Use Plan
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, NM

- 4 If on completion this well is a producer, Cimarex Energy Co. of Colorado will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied by a Sundry Notice.
- 5 Location and Type of Water Supply
Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.
- 6 Source of Construction Material
If possible, construction will be obtained from the excavation of drill site. If additional material is needed, it will be purchased from a local source and transported over the access route as shown on Exhibit "C".
- 7 Methods of Handling Waste Material
 - A. Drill cuttings will be disposed of in the reserve pit.
 - B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.
 - C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
 - D. Sewage from living quarters will drain into holding tanks and be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
 - E. Remaining drilling fluids will be allowed to dry in the reserve pit until the pit is dry enough for breaking out. In the event that drillings fluids do not dry out in a reasonable time they will be hauled off by transports and be disposed of at a State approved disposal facility. Water produced during drilling will be put in reserve pit. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.
- 8 Ancillary Facilities
 - A. No camps or airstrips to be constructed.

Surface Use Plan
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, NM

9 Well Site Layout

- A. Exhibit "D" shows location and rig layout.
- B. This exhibit indicates proposed location of reserve and trash pits; and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pit is proposed to be lined with PVC or polyethylene liner. The pit liner will be 12 mils thick. Pit liner will extend a minimum, 2'00" over the reserve pits dikes where the liner will be anchored down.
- D. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10 Plans for Restoration of Surface

Rehabilitation of the location and cuttings burial cell 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.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. 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 recountoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.

Surface Use Plan
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, NM

11 Other Information

- A. Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- B. The wellsite is on surface owned by Department of the Interior, Bureau of Land Management. The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.
- C. 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 Carlsbad BLM office.
- D. There are no know dwellings within 1 1/2 miles of this location.

Operator Certification Statement
Cimarex Energy Co. of Colorado
County Line 1 Federal No. 1
Unit L Section 1
T16S R29E Eddy County, NM

Operator's Representative

Cimarex Energy Co. of Colorado
P.O. Box 140907
Irving, TX 75014
Office Phone: (972) 443-6489
Zeno Farris

CERTIFICATION: I hereby certify that the statements and plans made in this APD are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Cimarex Energy Co. of Colorado and/or its contractors/subcontractors and is in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME: Zeno Farris
Zeno Farris
DATE: September 21, 2007
TITLE: Manager Operations Administration

VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Chaves and Roosevelt Counties, T16S Eddy County**

Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
(505) 627-0272.

1. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. It has been reported in the township to the east.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. When floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

1. The 13-3/8 inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite and above the salt at approximately 375 feet** and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the Grayburg and San Andres formations.

Possible water flows in the Salado and Artesia groups.

Possible high pressure gas bursts from the Wolfcamp.

- 2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a-d above.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

- e. A variance to test only the surface casing to the reduced pressure of 1000 psi with the rig pumps is approved. **The BOP will be tested to 5000 psi by an independent service company.**

Engineer on call phone (after hours): Carlsbad: (505) 706-2779

WWI 101507



Cimarex Energy Co. of Colorado

5215 North O'Connor Blvd. ♦ Suite 1500 ♦ Irving, TX 75039 ♦ (972) 401-3111 ♦ Fax (972) 443-6486

Mailing Address: P.O. Box 140907 ♦ Irving, TX 75014-0907

A subsidiary of Cimarex Energy Co • A NYSE Listed Company • "XEC"

SEP 25 2007
OCD-ARTESIA

September 21, 2007

Oil Conservation Division
District II Office
1301 W. Grand Ave.
Artesia, New Mexico 88210
Attn: Mr. Bryan Arrant

Re: Statewide Rule 118
Hydrogen Sulfide Gas Contingency Plan
Proposed County Line 1 Federal No. 1 Well

Dear Mr. Arrant:

In accordance with NMAC 19.15.3.118 C. (1) governing the determination of the hydrogen sulfide concentration in gaseous mixtures in each of its operations, Cimarex Energy Co. of Colorado does not anticipate that there will be enough H₂S from the surface to the Abo formations to meet the OCD's minimum requirements for the submission of a contingency plan for the drilling and completion of the following test(s):

County Line 1 Federal No. 1
SHL 1980' FSL & 330' FWL
BHL 1980' FSL & 330' FEL
Sec. 1-16S-29E
Eddy County, NM

If anything further is needed regarding this issue, or if you have any questions, please feel free to contact the undersigned at 972-443-6489.

Yours truly,

Zeno Farris
Manager, Operations Administration