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Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
LC-063586

6. If Indian, Allotee or Tribe Name

1a Type of Work ☒ DRILL ☐ REENTER

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

1b Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8 Lease Name and Well No <37971>
Southern California 29 Federal No. 16 H

2. Name of Operator
Cimarex Energy Co. of Colorado <162683>

9. API Well No
30-025- 39853

3a Address
600 N. Marienfeld St., Ste. 600; Midland, TX 79701

3b Phone No. *(include area code)*
432-571-7800

10 Field and Pool, or Exploratory
Lusk; Bone Spring, South <41460>

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At Surface 1980 FNL & 375 FWL Unit E

At proposed prod. Zone 1980 FNL & 330 FEL Unit H *Horizontal Bone Spring test*

11 Sec , T R M or Blk. and Survey or Area
29-19S-32E

14. Distance in miles and direction from nearest town or post office*

12 County or Parish
Lea

13 State
NM

15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
375'	640	S2N2 160 acres
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	**19. Proposed Depth**	**20 BLM/BIA Bond No on File**
N/A	Pilot Hole 9550' MD 13762' TVD 9300'	NM-2575
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22 Approximate date work will start***	**23. Estimated duration**
3555' GR	06.01.10	25-30 days

24. Attachments

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

1. Well plat certified by a registered surveyor
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office)
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
5. Operator Certification
6. Such other site specific information and/or plans as may be required by the authorized officer

25 Signature	Name *(Printed/Typed)*	Date
Zeno Farris	Zeno Farris	03.30.10

Title
Manager Operations Administration

Approved By *(Signature)*	Name (Printed/Typed)	Date
/s/ Don Peterson		JUL 20 2010
Title	**Office**	
FIELD MANAGER	CARLSBAD FIELD OFFICE	

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

Conditions of approval, if any, are attached APPROVAL FOR TWO YEARS

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

* *(Instructions on page 2)*

Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

KZ

Approval Subject to General Requirements & Special Stipulations Attached

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HOBBSOCD

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 15, 2009

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-39853	41460	Lusk; Bone Spring, S

Property Code	Property Name	Well Number
37971	SOUTHERN CALIFORNIA "29" FEDERAL	16 H

OGRID No.	Operator Name	Elevation
162683	CIMAREX ENERGY CO. OF COLORADO	3555'

Surface Location

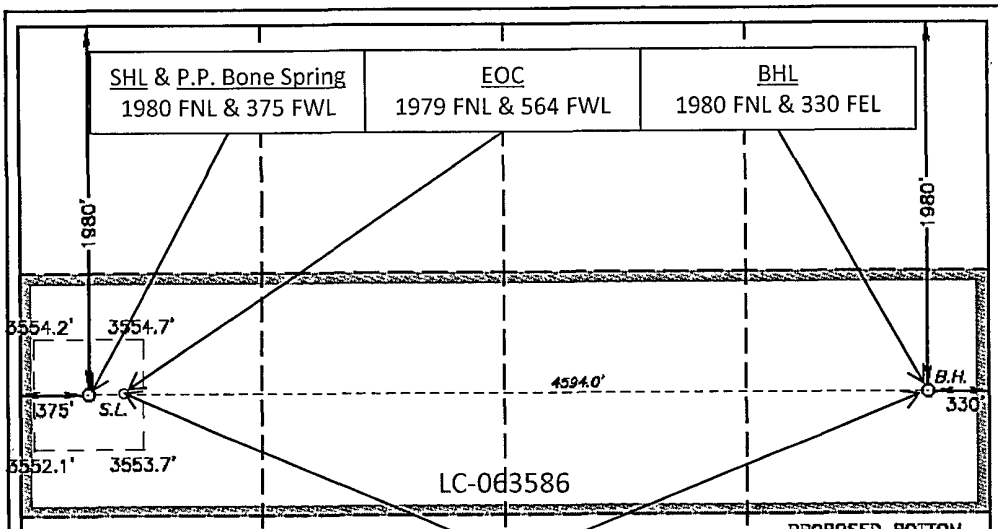
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	29	19 S	32 E		1980	NORTH	375	WEST	LEA

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
H	29	19 S	32 E		1980	NORTH	330	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



SURFACE LOCATION
Lat - N 32°37'59.74"
Long - W 103°47'44.63"
NMSPCE- N 594530.1
E 706833.7
(NAD-83)

PROPOSED BOTTOM HOLE LOCATION
Lat - N 32°37'59.65"
Long - W 103°46'50.92"
NMSPCE- N 594544.00
E 711426.62
(NAD-83)

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.

Zeno Farris — 3/30/2010
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 supervison, and that the same is true and correct to the best of my belief.

FEBRUARY 5, 2010
Date Surveyed

Signature & Seal of Professional Surveyor

NEW MEXICO — 7977 — REGISTERED PROFESSIONAL SURVEYOR

WO No. 22266

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

Application to Drill
Southern California 29 Federal No. 16
Cimarex Energy Co. of Colorado
Unit E, Section 29
T19S-R32E, Lea 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 FNL & 375 FWL
BHL 1980 FNL & 330 FEL

2 Elevation above sea level: 3555' GR

3 Geologic name of surface formation: Quaternery 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: Pilot Hole 9550' MD 13762' TVD 9300'

6 Estimated tops of geological markers:

Rustler	882'	7 Rivers	2725'
Capitan	2844'	Delaware Sands	4400'
T. Salt	4500'	Bone Spring	7201'
B. Salt	2224'	FBSS	8400'
Yates	2387'	SBSS	9050'

7 Possible mineral bearing formation:
Bone Spring Oil

See COA — 8 Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 920'	8.4 - 8.6	28	NC	FW
920' to 4000'	10.0	30-32	NC	Brine water
4000' to 9550'	8.4 - 9.5	30-32	NC	FW, brine
9060' to 13763'	8.4	28-32	NC	2% KCl

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.

Proposed drilling Plan
After drilling and setting surface casing, drill to vertical TD 9550' and log. Set 7" casing to 9000' and cross over to 2⅞" 2000 psi IJ fiberglass tubing underneath to 9550' and cement in place. Drill out of the bottom of the 7" with a 6⅛" bit and through cement and fiberglass tubing to KOP @ 9060' and kick off to drill the lateral. The fiberglass tubing effectively circulates cement to surface and plugs back the open hole.

Application to Drill
Southern California 29 Federal No. 16
Cimarex Energy Co. of Colorado
Unit E, Section 29
T19S-R32E, Lea County, NM

9 Casing & Cementing Program:

String	Hole Size	Depth			Casing OD		Weight	Collar	Grade
Surface	17½"	0'	to	920'	New	13⅜"	48#	STC	H-40
Intermediate	12¼"	0'	to	~~4000'~~ OK	New	9⅝"	40#	LTC	J/K-55
Production	8¾"	0'	to	9000'	New	7"	26#	LTC	P-110
Production	8¾"	9000'	to	9550'	New	2⅞"	2.18#	0	IJ
Lateral Pt. 1	6⅛"	8900'	to	9358'	New	4½"	11.6#	**BTC**	P-110
Lateral Pt. 2	6⅛"	9358'	to	13763'	New	4½"	11.6#	**LTC**	P-110

10 Cementing:

Surface 820 sx Premium Plus + 2% $CaCl_2$ (wt 14.8, yld 1.35)
TOC Surface

Intermediate Lead: 215 sx Econocem + 3% Salt + 2% $CaCl_2$ + 3 lbm/sk Gilsonite (wt 11.7, yld 2.06)
Tail: 650 sks Premium Plus + 1% $CaCl_2$ (wt 14.8, yld 1.34)
TOC Surface — See COA

See COA — **Production** Lead: 460 sx EconoCem + 3% Salt + 5 lbm/sk gilsonite (wt 13.0, yld 1.71)
Tail: 400 sx HalCem (wt 14.8, yld 1.34)
TOC ~~3800'~~ 2800'

Lateral No cement needed. Peak completion assembly.

Fresh water zones will be protected by setting 13⅜" casing at 920' and cementing to surface. Capitan Reef Hydrocarbon zones will be protected by setting 9⅝" casing at 4000' and cementing to surface, and by setting 7" casing at 9000' and fiberglass to 9550' and cementing to ~~3800'~~ 2800

Collapse Factor	*Burst Factor*	*Tension Factor*
1.125	1.125	1.6

11 Pressure control Equipment:
Exhibit "E". A 13⅜" 5000 PSI working pressure BOP tested to 3000 psi 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 as needed. 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 nippled up and 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 tested to 3000 psi.

BOPS will be tested by an independent service company to 250 psi low and 3000 psi high. Hydril will be tested to 250 psi low and 1500 psi high.

12 Testing, Logging and Coring Program:

See COA

A. Mud logging program: 2 man unit from 4000' to TD
B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
C. No DSTs or cores are planned at this time.

13 Potential Hazards:

See COA

No abnormal pressures or temperatures are expected. In accordance with Onshore Order 6, Cimarex does not anticipate that there will be enough H_2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H_2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H_2S Safety package on all wells, attached is an "H_2S Drilling Operations Plan." 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 **3000 psi** Estimated BHT **130°**

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.
Bone Spring pay will be perforated and stimulated.
The proposed well will be tested and potentialed as **an oil well.**

Cimarex Energy Co.

Location: Lea County, NM
Field: (SC) Sec 29, T19S, R32E
Facility: Southern California 29 Fed No. 16H

Slot: No. 16H SHL
Well: No. 16H
Wellbore: No. 16H PWB

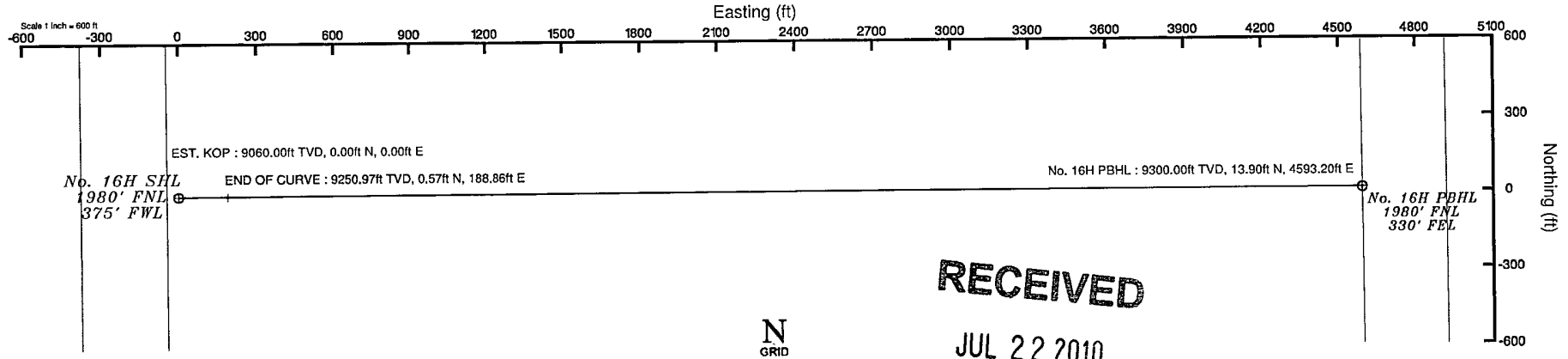
Plot reference wellpath is Prelim_1	
True vertical depths are referenced to Rig on No 16H SHL (RT)	Grid System: NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 16H SHL (RT)	North Reference: Grid north
Rig on No. 16H SHL (RT) to Mean Sea Level: 3555 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Southern California 29 Fed No. 16H): -3555 feet	Depths are in feet
Coordinates are in feet referenced to Surface Location	Created by: Victor Hernandez on 3/17/2010

CIMAREX

BAKER HUGHES INTEQ

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	89.827	0.00	0.00	0.00	0.00	0.00
EST. KOP	9060.00	0.000	89.827	9060.00	0.00	0.00	0.00	0.00
END OF CURVE	9357.87	89.362	89.827	9250.97	0.57	188.86	30.00	188.86
No. 16H PBHL	13762.51	89.362	89.827	9300.00	13.90	4593.20	0.00	4593.22



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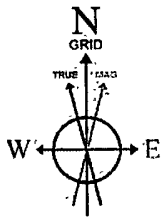
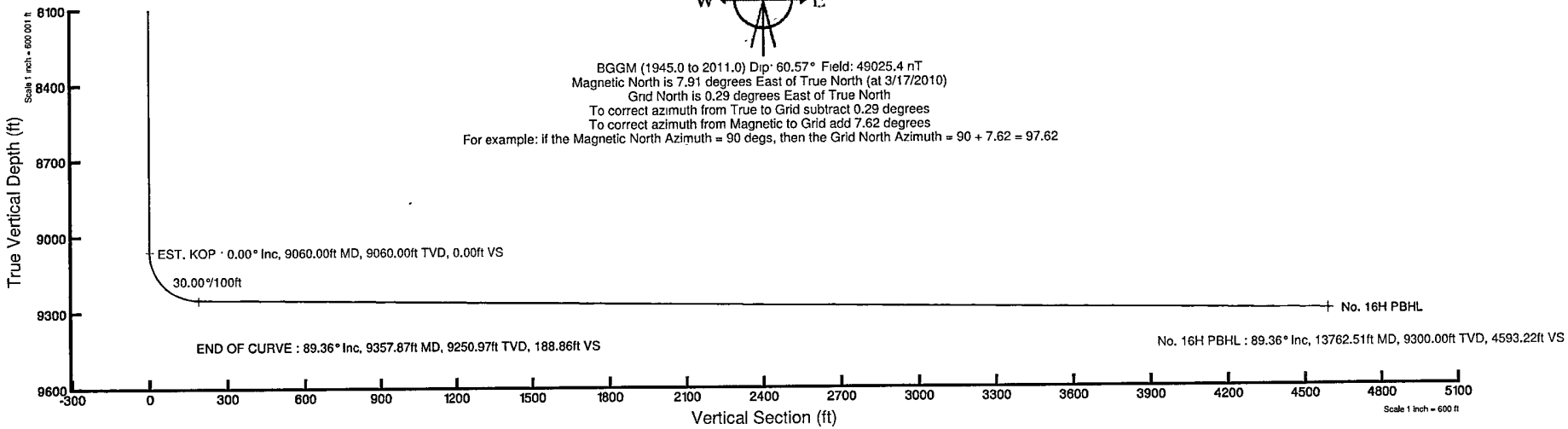


BGGM (1945.0 to 2011.0) Dip: 60.57° Field: 49025.4 nT
Magnetic North is 7.91 degrees East of True North (at 3/17/2010)
Grid North is 0.29 degrees East of True North
To correct azimuth from True to Grid subtract 0.29 degrees
To correct azimuth from Magnetic to Grid add 7.62 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.62 = 97.62



Azimuth 89.83° with reference 0.00 N, 0.00 E

CIMAREX

Planned Wellpath Report

Prelim_1

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Cimarex Energy Co.**	Slot	**No. 16H SHL**
Area	**Lea County, NM**	Well	**No. 16H**
Field	**(SC) Sec 29, T19S, R32E**	Wellbore	**No. 16H PWB**
Facility	**Southern California 29 Fed No. 16H**		

REPORT SETUP INFORMATION			
Projection System	**NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 2.0**
North Reference	**Grid**	User	**Victor Hernandez**
Scale	**0.99994**	Report Generated	**3/17/2010 at 3:10:43 PM**
Convergence at slot	**0.29° East**	Database/Source file	**WA_Midland/No._16H_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	**0.00**	**0.00**	706833.70	594530.10	32°37'59.741"N	103°47'44.627"W
Facility Reference Pt			**706833.70**	**594530.10**	32°37'59.741"N	103°47'44.627"W
Field Reference Pt			**706799.20**	**591606.30**	32°37'30.812"N	103°47'45.203"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No. 16H SHL (RT) to GL	**0.00ft**
Horizontal Reference Pt	**Surface Location**	Rig on No. 16H SHL (RT) to Mean Sea Level	**3555.00ft**
Vertical Reference Pt	**Rig on No. 16H SHL (RT)**	GL to Mud Line (Facility)	**0.00ft**
MD Reference Pt	**Rig on No. 16H SHL (RT)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**89.83°**

Planned Wellpath Report

Prelim_1

CIMAREX

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 16H SHL
Area	Lea County, NM	Well	No. 16H
Field	(SC) Sec 29, T19S, R32E	Wellbore	No. 16H PWB
Facility	Southern California 29 Fed No. 16H		

WELLPATH DATA (51 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	89.827	0.00	0.00	0.00	0.00	706833.70	594530.10	32°37'59.741"N	103°47'44.627"W	0.00	Tie On
9060.00	0.000	89.827	9060.00	0.00	0.00	0.00	706833.70	594530.10	32°37'59.741"N	103°47'44.627"W	0.00	EST. KOP
9160.00†	30.000	89.827	9155.49	25.59	0.08	25.59	706859.29	594530.18	32°37'59.741"N	103°47'44.327"W	30.00	
9260.00†	60.000	89.827	9225.40	95.49	0.29	95.49	706929.19	594530.39	32°37'59.740"N	103°47'43.510"W	30.00	
9357.87	89.362	89.827	9250.97	188.86	0.57	188.86	707022.55	594530.67	32°37'59.738"N	103°47'42.418"W	30.00	END OF CURVE
9360.00†	89.362	89.827	9251.00	190.99	0.58	190.98	707024.67	594530.68	32°37'59.738"N	103°47'42.393"W	0.00	
9460.00†	89.362	89.827	9252.11	290.98	0.88	290.98	707124.66	594530.98	32°37'59.736"N	103°47'41.224"W	0.00	
9560.00†	89.362	89.827	9253.22	390.97	1.18	390.97	707224.65	594531.28	32°37'59.734"N	103°47'40.055"W	0.00	
9660.00†	89.362	89.827	9254.34	490.97	1.49	490.97	707324.63	594531.59	32°37'59.732"N	103°47'38.886"W	0.00	
9760.00†	89.362	89.827	9255.45	590.96	1.79	590.96	707424.62	594531.89	32°37'59.729"N	103°47'37.716"W	0.00	
9860.00†	89.362	89.827	9256.56	690.95	2.09	690.95	707524.61	594532.19	32°37'59.727"N	103°47'36.547"W	0.00	
9960.00†	89.362	89.827	9257.68	790.95	2.39	790.95	707624.60	594532.49	32°37'59.725"N	103°47'35.378"W	0.00	
10060.00†	89.362	89.827	9258.79	890.94	2.70	890.94	707724.58	594532.80	32°37'59.723"N	103°47'34.209"W	0.00	
10160.00†	89.362	89.827	9259.90	990.94	3.00	990.93	707824.57	594533.10	32°37'59.721"N	103°47'33.039"W	0.00	
10260.00†	89.362	89.827	9261.02	1090.93	3.30	1090.93	707924.56	594533.40	32°37'59.719"N	103°47'31.870"W	0.00	
10360.00†	89.362	89.827	9262.13	1190.92	3.60	1190.92	708024.55	594533.70	32°37'59.717"N	103°47'30.701"W	0.00	
10460.00†	89.362	89.827	9263.24	1290.92	3.91	1290.91	708124.53	594534.01	32°37'59.715"N	103°47'29.531"W	0.00	
10560.00†	89.362	89.827	9264.35	1390.91	4.21	1390.91	708224.52	594534.31	32°37'59.713"N	103°47'28.362"W	0.00	
10660.00†	89.362	89.827	9265.47	1490.91	4.51	1490.90	708324.51	594534.61	32°37'59.711"N	103°47'27.193"W	0.00	
10760.00†	89.362	89.827	9266.58	1590.90	4.81	1590.89	708424.49	594534.91	32°37'59.709"N	103°47'26.024"W	0.00	
10860.00†	89.362	89.827	9267.69	1690.89	5.12	1690.89	708524.48	594535.22	32°37'59.707"N	103°47'24.854"W	0.00	
10960.00†	89.362	89.827	9268.81	1790.89	5.42	1790.88	708624.47	594535.52	32°37'59.705"N	103°47'23.685"W	0.00	
11060.00†	89.362	89.827	9269.92	1890.88	5.72	1890.87	708724.46	594535.82	32°37'59.703"N	103°47'22.516"W	0.00	
11160.00†	89.362	89.827	9271.03	1990.87	6.03	1990.87	708824.44	594536.12	32°37'59.701"N	103°47'21.347"W	0.00	
11260.00†	89.362	89.827	9272.15	2090.87	6.33	2090.86	708924.43	594536.43	32°37'59.699"N	103°47'20.177"W	0.00	
11360.00†	89.362	89.827	9273.26	2190.86	6.63	2190.85	709024.42	594536.73	32°37'59.697"N	103°47'19.008"W	0.00	
11460.00†	89.362	89.827	9274.37	2290.86	6.93	2290.85	709124.40	594537.03	32°37'59.695"N	103°47'17.839"W	0.00	
11560.00†	89.362	89.827	9275.48	2390.85	7.24	2390.84	709224.39	594537.34	32°37'59.692"N	103°47'16.670"W	0.00	
11660.00†	89.362	89.827	9276.60	2490.84	7.54	2490.83	709324.38	594537.64	32°37'59.690"N	103°47'15.500"W	0.00	
11760.00†	89.362	89.827	9277.71	2590.84	7.84	2590.83	709424.37	594537.94	32°37'59.688"N	103°47'14.331"W	0.00	

Planned Wellpath Report

Prelim_1

CIMAREX

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Cimarex Energy Co.**	Slot	**No. 16H SHL**
Area	**Lea County, NM**	Well	**No. 16H**
Field	**(SC) Sec 29, T19S, R32E**	Wellbore	**No. 16H PWB**
Facility	**Southern California 29 Fed No. 16H**		

WELLPATH DATA (51 stations) **† = interpolated/extrapolated station**

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11860.00†	89.362	89.827	9278.82	2690.83	8.14	2690.82	709524.35	594538.24	32°37'59.686"N	103°47'13.162"W	0.00	
11960.00†	89.362	89.827	9279.94	2790.82	8.45	2790.81	709624.34	594538.55	32°37'59.684"N	103°47'11.993"W	0.00	
12060.00†	89.362	89.827	9281.05	2890.82	8.75	2890.81	709724.33	594538.85	32°37'59.682"N	103°47'10.823"W	0.00	
12160.00†	89.362	89.827	9282.16	2990.81	9.05	2990.80	709824.31	594539.15	32°37'59.680"N	103°47'09.654"W	0.00	
12260.00†	89.362	89.827	9283.28	3090.81	9.35	3090.79	709924.30	594539.45	32°37'59.678"N	103°47'08.485"W	0.00	
12360.00†	89.362	89.827	9284.39	3190.80	9.66	3190.79	710024.29	594539.76	32°37'59.676"N	103°47'07.316"W	0.00	
12460.00†	89.362	89.827	9285.50	3290.79	9.96	3290.78	710124.28	594540.06	32°37'59.674"N	103°47'06.146"W	0.00	
12560.00†	89.362	89.827	9286.62	3390.79	10.26	3390.77	710224.26	594540.36	32°37'59.671"N	103°47'04.977"W	0.00	
12660.00†	89.362	89.827	9287.73	3490.78	10.56	3490.77	710324.25	594540.66	32°37'59.669"N	103°47'03.808"W	0.00	
12760.00†	89.362	89.827	9288.84	3590.78	10.87	3590.76	710424.24	594540.97	32°37'59.667"N	103°47'02.639"W	0.00	
12860.00†	89.362	89.827	9289.95	3690.77	11.17	3690.75	710524.23	594541.27	32°37'59.665"N	103°47'01.469"W	0.00	
12960.00†	89.362	89.827	9291.07	3790.76	11.47	3790.75	710624.21	594541.57	32°37'59.663"N	103°47'00.300"W	0.00	
13060.00†	89.362	89.827	9292.18	3890.76	11.77	3890.74	710724.20	594541.87	32°37'59.661"N	103°46'59.131"W	0.00	
13160.00†	89.362	89.827	9293.29	3990.75	12.08	3990.73	710824.19	594542.18	32°37'59.659"N	103°46'57.961"W	0.00	
13260.00†	89.362	89.827	9294.41	4090.74	12.38	4090.73	710924.17	594542.48	32°37'59.657"N	103°46'56.792"W	0.00	
13360.00†	89.362	89.827	9295.52	4190.74	12.68	4190.72	711024.16	594542.78	32°37'59.654"N	103°46'55.623"W	0.00	
13460.00†	89.362	89.827	9296.63	4290.73	12.99	4290.71	711124.15	594543.08	32°37'59.652"N	103°46'54.454"W	0.00	
13560.00†	89.362	89.827	9297.75	4390.73	13.29	4390.71	711224.14	594543.39	32°37'59.650"N	103°46'53.284"W	0.00	
13660.00†	89.362	89.827	9298.86	4490.72	13.59	4490.70	711324.12	594543.69	32°37'59.648"N	103°46'52.115"W	0.00	
13760.00†	89.362	89.827	9299.97	4590.71	13.89	4590.69	711424.11	594543.99	32°37'59.646"N	103°46'50.946"W	0.00	
13762.51	89.362	89.827	9300.00†	4593.22	13.90	4593.20	711426.62	594544.00	32°37'59.646"N	103°46'50.917"W	0.00	No. 16H PBHL

Planned Wellpath Report

Prelim_1

INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Cimarex Energy Co.**	Slot	**No. 16H SHL**
Area	**Lea County, NM**	Well	**No. 16H**
Field	**(SC) Sec 29, T19S, R32E**	Wellbore	**No. 16H PWB**
Facility	**Southern California 29 Fed No. 16H**		

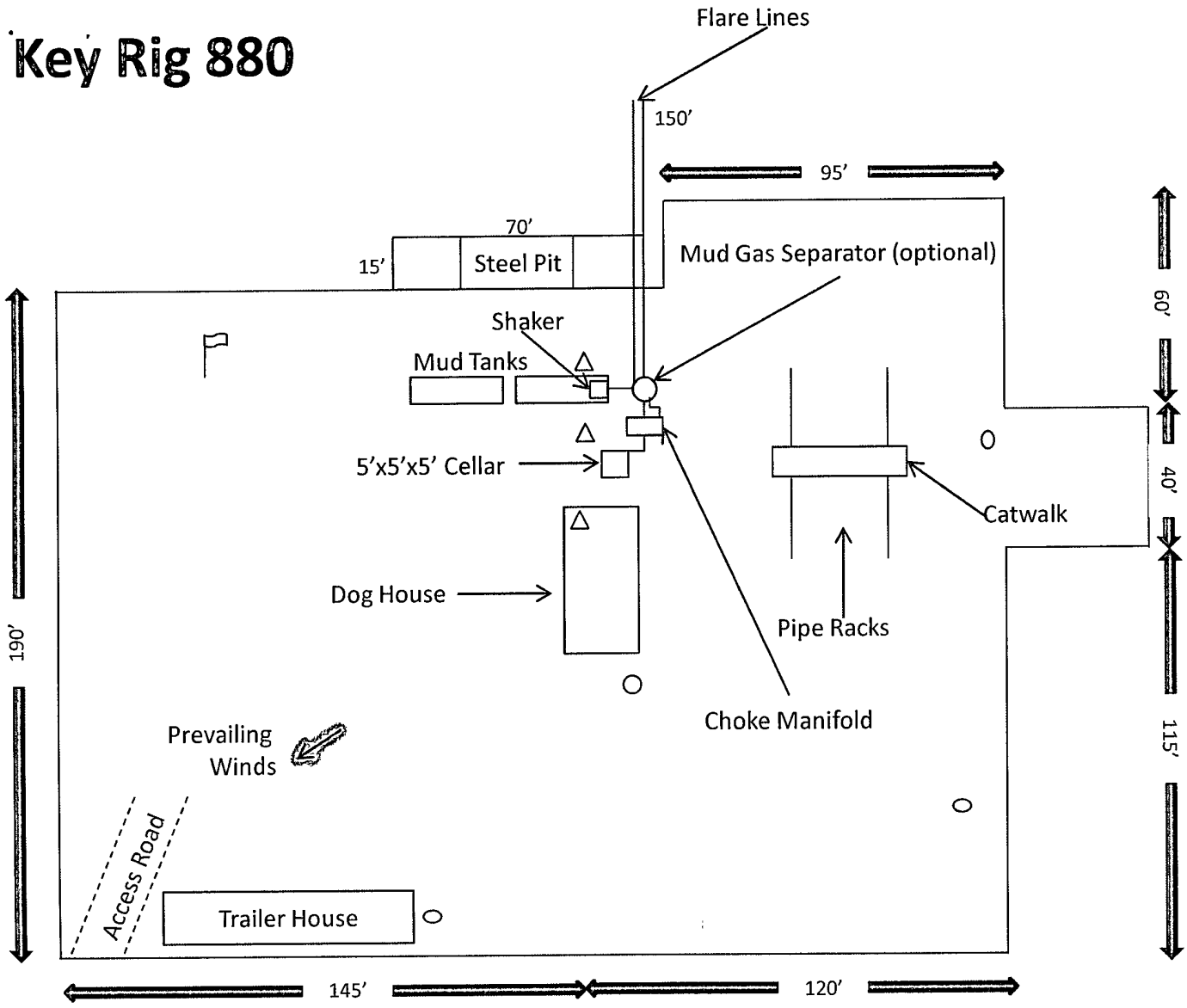
TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) No. 16H PBHL	13762.51	9300.00	13.90	4593.20	**711426.62**	**594544.00**	32°37'59.646"N	103°46'50.917"W	point

SURVEY PROGRAM Ref Wellbore: No. 16H PWB Ref Wellpath: Prelim_1

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	13762.51	NaviTrak (Standard)		No. 16H PWB

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

Exhibit D – Rig Diagram
Southern California 29 Federal No. 16
Cimarex Energy Co. of Colorado
29-19S-32E
SHL 1980 FNL & 375 FWL
BHL 1980 FNL & 330 FEL
Lea County, NM

SR & A

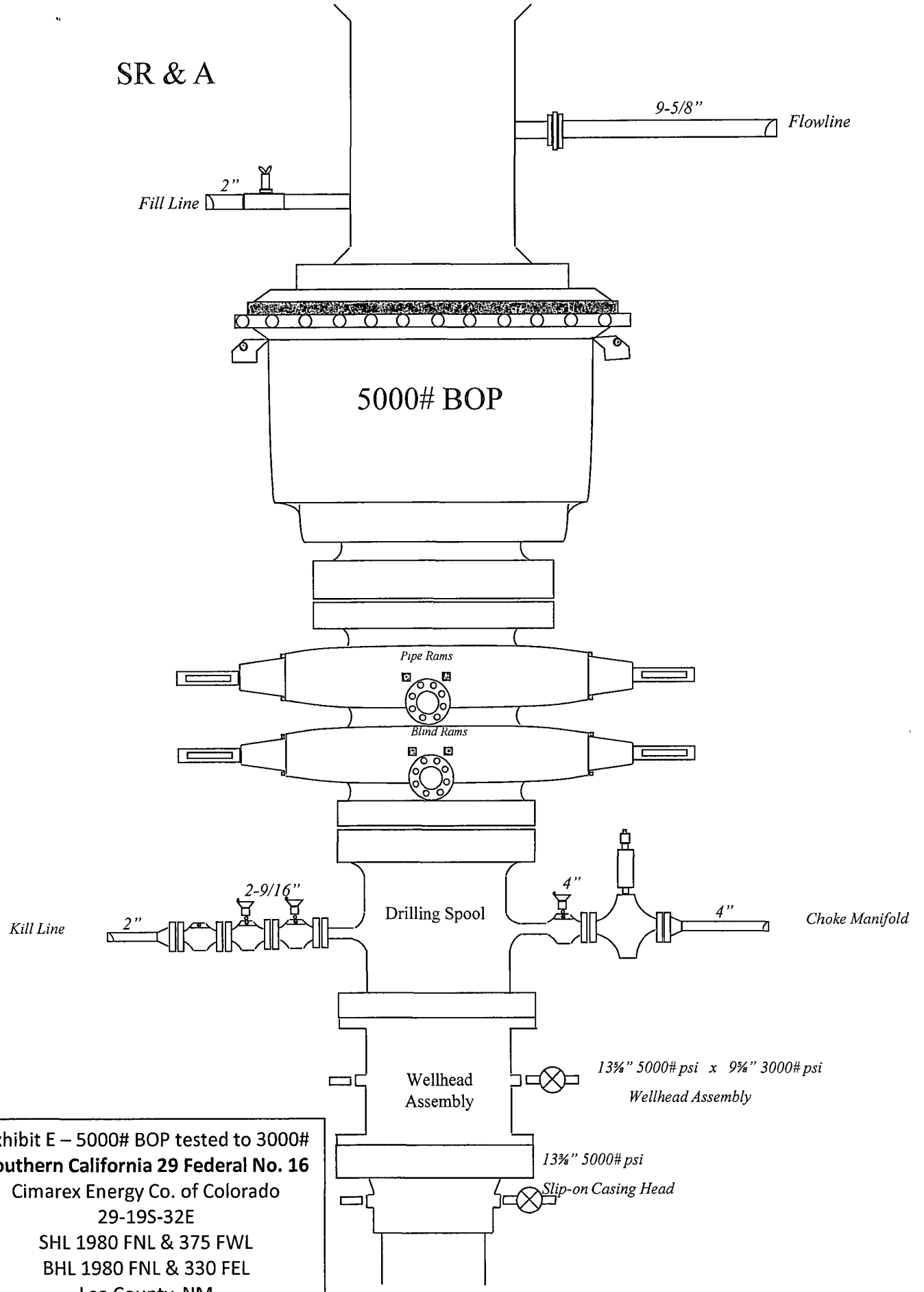


Exhibit E – 5000# BOP tested to 3000#
Southern California 29 Federal No. 16
Cimarex Energy Co. of Colorado
29-19S-32E
SHL 1980 FNL & 375 FWL
BHL 1980 FNL & 330 FEL
Lea County, NM

Drilling Operations
Choke Manifold
5M Service (tested to 3M)

Exhibit E-1 – Choke Manifold Diagram
Southern California 29 Federal No. 16
Cimarex Energy Co. of Colorado
29-19S-32E
SHL 1980 FNL & 375 FWL
BHL 1980 FNL & 330 FEL
Lea County, NM