AT S-10-576

OCD-ARTESIA

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

5. Lease Serial No.
NM-124659

6. If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO DRILL OR REENTER SECRETARY'S POTASH

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.
Burton 6 Federal No. 2

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

9. API Well No.
30-015- 38486

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
Parkway; Bone Spring

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

TEN 10/22/10

At Surface 475 ~~875~~ FNL & 1500 FWL

At proposed prod. Zone 330 FSL & 1980 FWL *Horizontal Bone Spring test*

11. Sec., T. R. M. or Blk. and Survey or Area
6-20S-30E

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

12. County or Parish
Eddy

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
180'	480	E2W2 160.08
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 8550' MD 12775' TVD 8275'	NM-2575
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3294' GR	08.01.10	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	05.18.10
Title: Manager Operations Administration		
Approved By *(Signature)* /s/ Linda S.C. Rundell	Name (Printed/Typed) /s/ Linda S.C. Rundell	Date JAN 19 2011
Title STATE DIRECTOR	Office NM STATE OFFICE	

RECEIVED
FEB 04 2011
NMOCD ARTESIA

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

Approval Subject to General Requirements
& Special Stipulations Attached

Application to Drill
Burton 6 Federal No. 2
Cimarex Energy Co. of Colorado
Unit C, Section 6
T20S-R30E, 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 150 FNL & 660 FWL
BHL 330 FSL & 660 FWL

2 Elevation above sea level: 3323' 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 8550' MD 12775' TVD 8275'

6 Estimated tops of geological markers:

T. Salt	612'	Bone Spring	6120'
Capitan	1647'	FBSS	7460'
Yates	2387'	SBSS	8175'
Delaware Sands	3500'		

7 Possible mineral bearing formation:
Bone Spring Oil

8 Proposed Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 320'	8.4 - 8.6	28	NC	FW
320' to 1600'	10.0	30-32	NC	Brine water
1600' to 3500'	8.4 - 8.8	28	NC	FW
1600' to 8550'	8.4 - 9.5	30-32	NC	FW, brine
8025' to 12775'	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 8550' and log. Set 7" casing to 7965' and cross over to 2⅞" 2000 psi IJ fiberglass tubing underneath to 8550' and cement in place. Drill out of the bottom of the 7" with a 6⅛" bit and through cement and fiberglass tubing to KOP @ 8025' and kick off to drill the lateral. The fiberglass tubing effectively circulates cement to surface and plugs back the open hole.

Drill to lateral TD (12972' MD, 8275' TVD). Run 4½" PEAK liner from RSB packer @ 7865' to TD @ 12972.' Request a 100' tieback for lateral casing string in order to be able to set the pump as deep as possible.

Application to Drill
Burton 6 Federal No. 2
Cimarex Energy Co. of Colorado
Unit C, Section 6
T20S-R30E, Eddy County, NM

9 Casing & Cementing Program:

String	Hole Size	Depth			Casing OD		Weight	Collar	Grade
Surface 1	26"	0'	to	320'	New	20"	94#	BTC	J/K-55
Surface 2	17½"	0'	to	1600'	New	13⅜"	61#	BTC	J-55
Intermediate	12¼"	0'	to	3500'	New	9⅝"	40#	LTC	J/K-55
Production	8¾"	0'	to	7965'	New	7"	26#	LTC	P-110
Production	8¾"	7965'	to	8550'	New	2⅞"	2.18#	0	IJ
Lateral Pt. 1	6⅛"	7865'	to	8418'	New	4½"	11.6#	**BTC**	P-110
Lateral Pt. 2	6⅛"	8418'	to	12775'	New	4½"	11.6#	**LTC**	P-110

10 Cementing:

Surface 1 1963 sx Premium Plus + 2% $CaCl_2$ (wt 14.8, yld 1.35)
TOC Surface

Surface 2 Lead: 1354 sx Econocem + 3% Salt + 2% $CaCl_2$ + 3# Gilsonite (wt 11.7, yld 2.06)
Tail: 610 sx Premium Plus + 1% $CaCl_2$ (wt 14.8, yld 1.34)
TOC Surface

Intermediate Lead: 708 sx Econocem + 3% Salt + 2% $CaCl_2$ + 3 lbm/sk Gilsonite (wt 11.7, yld 2.06)
Tail: 210 sks Premium Plus + 1% $CaCl_2$ (wt 14.8, yld 1.34)
TOC Surface

Production Lead: 240 sx EconoCem + 3% Salt + 5 lbm/sk gilsonite (wt 13.0, yld 1.71)
Tail: 485 sx HalCem (wt 14.8, yld 1.34)
TOC 3200'

Lateral No cement needed. Peak completion assembly.

Fresh water zones will be protected by setting 20" casing at 320' and 13⅜" casing at 1600' and cementing to surface. Hydrocarbon zones will be protected by setting 9⅝" casing at 3500' and cementing to surface, and by setting 7" casing at 7965' and fiberglass to 8550' and cementing to 3000.'

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 20" surface pipe, the well will be equipped with a 2M diverter system with rotating head (see exhibit E-1). From the base of the 13⅜" casing 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.

Application to Drill
Burton 6 Federal No. 2
Cimarex Energy Co. of Colorado
Unit C, Section 6
T20S-R30E, Eddy County, NM

12 Testing, Logging and Coring Program: See COA

A. Mud logging program: 2 man unit from 3200' 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:

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.

Eddy County (NM83E)
Sec 6 - T20S - R30E
Burton 6 Federal #2

Wellbore #1

Plan: Plan #1

Standard Planning Report

18 May, 2010

Great White Directional Services

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Burton 6 Federal #2
Company:	Cimarex Energy Co.	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 6 - T20S - R30E	**North Reference:**	Grid
Well:	Burton 6 Federal #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project Eddy County (NM83E)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Sec 6 - T20S - R30E

Site Position:		**Northing:**	585,528.50 usft	**Latitude:**	32° 36' 33.382 N
From:	Map	**Easting:**	638,530.00 usft	**Longitude:**	104° 1' 3.694 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.17 °

Well Burton 6 Federal #2

Well Position	**+N/-S**	-222.9 usft	**Northing:**	585,305.60 usft	**Latitude:**	32° 36' 31.152 N
	+E/-W	840.5 usft	**Easting:**	639,370.50 usft	**Longitude:**	104° 0' 53.875 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	0.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2010/05/18	7.94	60.51	48,965

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	173.92

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,025.0	0.00	0.00	8,025.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,417.7	90.00	173.92	8,275.0	-248.6	26.5	22.92	22.92	0.00	173.92	
12,775.1	90.00	173.92	8,275.0	-4,581.4	488.0	0.00	0.00	0.00	0.00	Burton #2

Great White Directional Services

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Burton 6 Federal #2
Company:	Cimarex Energy Co.	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 6 - T20S - R30E	**North Reference:**	Grid
Well:	Burton 6 Federal #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,025.0	0.00	0.00	8,025.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP 22.92°/100 DLS @ 173.92° AZI									
8,050.0	5.73	173.92	8,050.0	-1.2	0.1	1.2	22.92	22.92	0.00
8,075.0	11.46	173.92	8,074.7	-5.0	0.5	5.0	22.92	22.92	0.00
8,100.0	17.19	173.92	8,098.9	-11.1	1.2	11.2	22.92	22.92	0.00
8,125.0	22.92	173.92	8,122.4	-19.6	2.1	19.7	22.92	22.92	0.00
8,150.0	28.65	173.92	8,144.9	-30.4	3.2	30.6	22.92	22.92	0.00
8,175.0	34.38	173.92	8,166.2	-43.4	4.6	43.7	22.92	22.92	0.00
8,200.0	40.11	173.92	8,186.1	-58.5	6.2	58.8	22.92	22.92	0.00
8,225.0	45.84	173.92	8,204.3	-75.4	8.0	75.8	22.92	22.92	0.00
8,250.0	51.57	173.92	8,220.8	-94.1	10.0	94.6	22.92	22.92	0.00
8,275.0	57.30	173.92	8,235.4	-114.3	12.2	114.9	22.92	22.92	0.00
8,300.0	63.03	173.92	8,247.8	-135.8	14.5	136.6	22.92	22.92	0.00
8,325.0	68.75	173.92	8,258.0	-158.5	16.9	159.4	22.92	22.92	0.00
8,350.0	74.48	173.92	8,265.9	-182.1	19.4	183.1	22.92	22.92	0.00
8,375.0	80.21	173.92	8,271.4	-206.3	22.0	207.5	22.92	22.92	0.00
8,400.0	85.94	173.92	8,274.4	-231.0	24.6	232.3	22.92	22.92	0.00
8,417.7	90.00	173.92	8,275.0	-248.6	26.5	250.0	22.92	22.92	0.00
EOC - Hold toTD									
8,500.0	90.00	173.92	8,275.0	-330.4	35.2	332.3	0.00	0.00	0.00
8,600.0	90.00	173.92	8,275.0	-429.9	45.8	432.3	0.00	0.00	0.00
8,700.0	90.00	173.92	8,275.0	-529.3	56.4	532.3	0.00	0.00	0.00
8,800.0	90.00	173.92	8,275.0	-628.7	67.0	632.3	0.00	0.00	0.00
8,900.0	90.00	173.92	8,275.0	-728.2	77.6	732.3	0.00	0.00	0.00
9,000.0	90.00	173.92	8,275.0	-827.6	88.2	832.3	0.00	0.00	0.00
9,100.0	90.00	173.92	8,275.0	-927.1	98.7	932.3	0.00	0.00	0.00
9,200.0	90.00	173.92	8,275.0	-1,026.5	109.3	1,032.3	0.00	0.00	0.00
9,300.0	90.00	173.92	8,275.0	-1,125.9	119.9	1,132.3	0.00	0.00	0.00
9,400.0	90.00	173.92	8,275.0	-1,225.4	130.5	1,232.3	0.00	0.00	0.00
9,500.0	90.00	173.92	8,275.0	-1,324.8	141.1	1,332.3	0.00	0.00	0.00
9,600.0	90.00	173.92	8,275.0	-1,424.2	151.7	1,432.3	0.00	0.00	0.00
9,700.0	90.00	173.92	8,275.0	-1,523.7	162.3	1,532.3	0.00	0.00	0.00
9,800.0	90.00	173.92	8,275.0	-1,623.1	172.9	1,632.3	0.00	0.00	0.00
9,900.0	90.00	173.92	8,275.0	-1,722.6	183.5	1,732.3	0.00	0.00	0.00
10,000.0	90.00	173.92	8,275.0	-1,822.0	194.1	1,832.3	0.00	0.00	0.00
10,100.0	90.00	173.92	8,275.0	-1,921.4	204.7	1,932.3	0.00	0.00	0.00
10,200.0	90.00	173.92	8,275.0	-2,020.9	215.3	2,032.3	0.00	0.00	0.00
10,300.0	90.00	173.92	8,275.0	-2,120.3	225.8	2,132.3	0.00	0.00	0.00
10,400.0	90.00	173.92	8,275.0	-2,219.7	236.4	2,232.3	0.00	0.00	0.00
10,500.0	90.00	173.92	8,275.0	-2,319.2	247.0	2,332.3	0.00	0.00	0.00
10,600.0	90.00	173.92	8,275.0	-2,418.6	257.6	2,432.3	0.00	0.00	0.00
10,700.0	90.00	173.92	8,275.0	-2,518.1	268.2	2,532.3	0.00	0.00	0.00
10,800.0	90.00	173.92	8,275.0	-2,617.5	278.8	2,632.3	0.00	0.00	0.00
10,900.0	90.00	173.92	8,275.0	-2,716.9	289.4	2,732.3	0.00	0.00	0.00
11,000.0	90.00	173.92	8,275.0	-2,816.4	300.0	2,832.3	0.00	0.00	0.00
11,100.0	90.00	173.92	8,275.0	-2,915.8	310.6	2,932.3	0.00	0.00	0.00
11,200.0	90.00	173.92	8,275.0	-3,015.2	321.2	3,032.3	0.00	0.00	0.00
11,300.0	90.00	173.92	8,275.0	-3,114.7	331.8	3,132.3	0.00	0.00	0.00
11,400.0	90.00	173.92	8,275.0	-3,214.1	342.4	3,232.3	0.00	0.00	0.00
11,500.0	90.00	173.92	8,275.0	-3,313.6	352.9	3,332.3	0.00	0.00	0.00
11,600.0	90.00	173.92	8,275.0	-3,413.0	363.5	3,432.3	0.00	0.00	0.00
11,700.0	90.00	173.92	8,275.0	-3,512.4	374.1	3,532.3	0.00	0.00	0.00
11,800.0	90.00	173.92	8,275.0	-3,611.9	384.7	3,632.3	0.00	0.00	0.00
11,900.0	90.00	173.92	8,275.0	-3,711.3	395.3	3,732.3	0.00	0.00	0.00

Great White Directional Services

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Burton 6 Federal #2
Company:	Cimarex Energy Co.	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 6 - T20S - R30E	**North Reference:**	Grid
Well:	Burton 6 Federal #2	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,000.0	90.00	173.92	8,275.0	-3,810.7	405.9	3,832.3	0.00	0.00	0.00
12,100.0	90.00	173.92	8,275.0	-3,910.2	416.5	3,932.3	0.00	0.00	0.00
12,200.0	90.00	173.92	8,275.0	-4,009.6	427.1	4,032.3	0.00	0.00	0.00
12,300.0	90.00	173.92	8,275.0	-4,109.1	437.7	4,132.3	0.00	0.00	0.00
12,400.0	90.00	173.92	8,275.0	-4,208.5	448.3	4,232.3	0.00	0.00	0.00
12,500.0	90.00	173.92	8,275.0	-4,307.9	458.9	4,332.3	0.00	0.00	0.00
12,600.0	90.00	173.92	8,275.0	-4,407.4	469.5	4,432.3	0.00	0.00	0.00
12,700.0	90.00	173.92	8,275.0	-4,506.8	480.0	4,532.3	0.00	0.00	0.00
12,775.1	90.00	173.92	8,275.0	-4,581.4	488.0	4,607.4	0.00	0.00	0.00
TD at 12775.1 - Burton #2									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Burton #2	0.00	0.00	8,275.0	-4,581.5	487.9	580,724.14	639,858.38	32° 35' 45.802 N	104° 0' 48.332 W
- plan misses target center by 0.1usft at 12775.1usft MD (8275.0 TVD, -4581.4 N, 488.0 E)									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
8,025.0	8,025.0	0.0	0.0	KOP 22.92°/100 DLS @ 173.92° AZI
8,417.7	8,275.0	-248.6	26.5	EOC - Hold toTD
12,775.1	8,275.0	-4,581.4	488.0	TD at 12775.1

Cimarex Energy Co.

Project: Eddy County (NM83E)
Site: Sec 6 - T20S - R30E
Well: Burton 6 Federal #2
Wellbore: Wellbore #1
Design: Plan #1

WELL DETAILS: Burton 6 Federal #2

GREAT WHITE DIRECTIONAL SERVICES, L.L.C.

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	585305.60	639370.50	32° 36' 31.152 N	104° 0' 53.875 W

SHL: 375' FNL / 1500' FWL
BHL: 330' FSL / 1980' FWL

Azimuths to Grid North
Total Correction: 7.77°
Magnetic Field
Strength: 48964.6snT
Dip Angle: 60.51°
Date: 2010/05/18
Model: IGRF200510

WELLBORE TARGET DETAILS

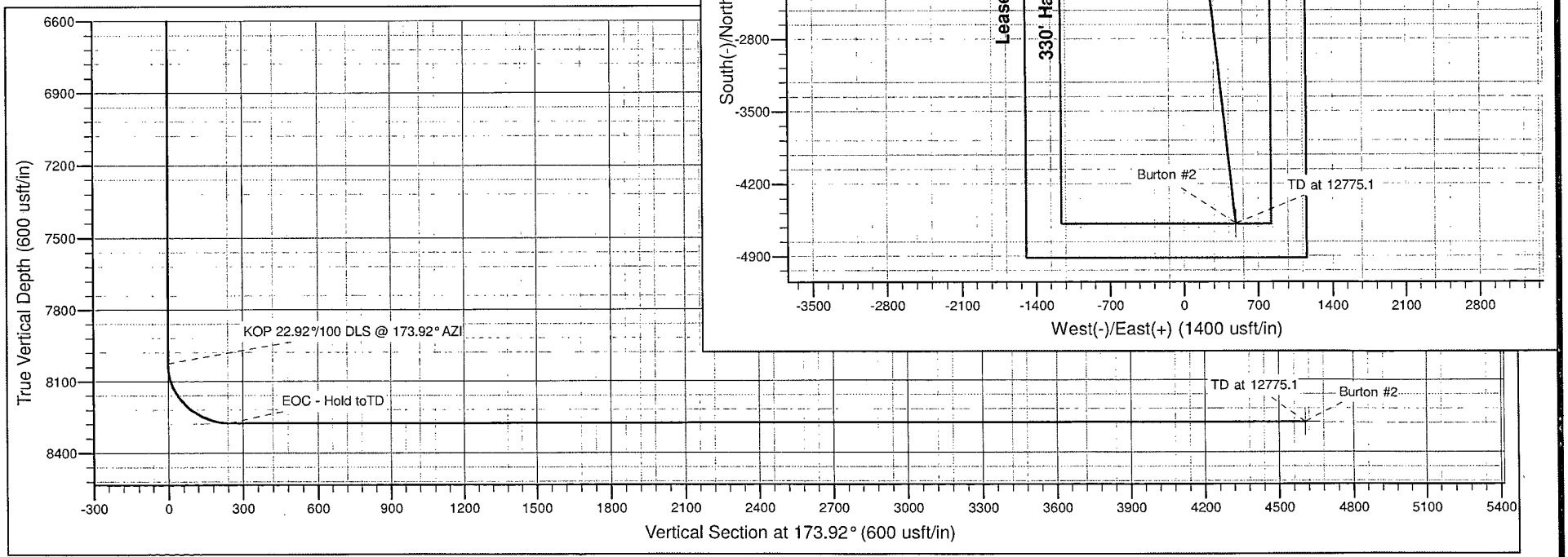
Name	TVD	+N/-S	+E/-W	Northing	Easting	
Burton #2	8275.0	-4581.5	487.9	580724.14	639858.38	Point

PLAN DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
8025.0	0.00	0.00	8025.0	0.0	0.0	0.00	0.00	0.0	
8417.7	90.00	173.92	8275.0	-248.6	26.5	22.92	173.92	250.0	
12775.1	90.00	173.92	8275.0	-4581.4	488.0	0.00	0.00	4607.4	Burton #2

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
025.	8025.0	0.00	0.00	0.0	0.0	0.0	0.0	KOP 22.92°/100 DLS @ 173.92° AZI
275.	8417.7	90.00	173.92	-248.6	26.5	250.0	250.0	EOC - Hold toTD
275.	12775.1	90.00	173.92	-4581.4	488.0	4607.4	4607.4	TD at 12775.1



SR & A

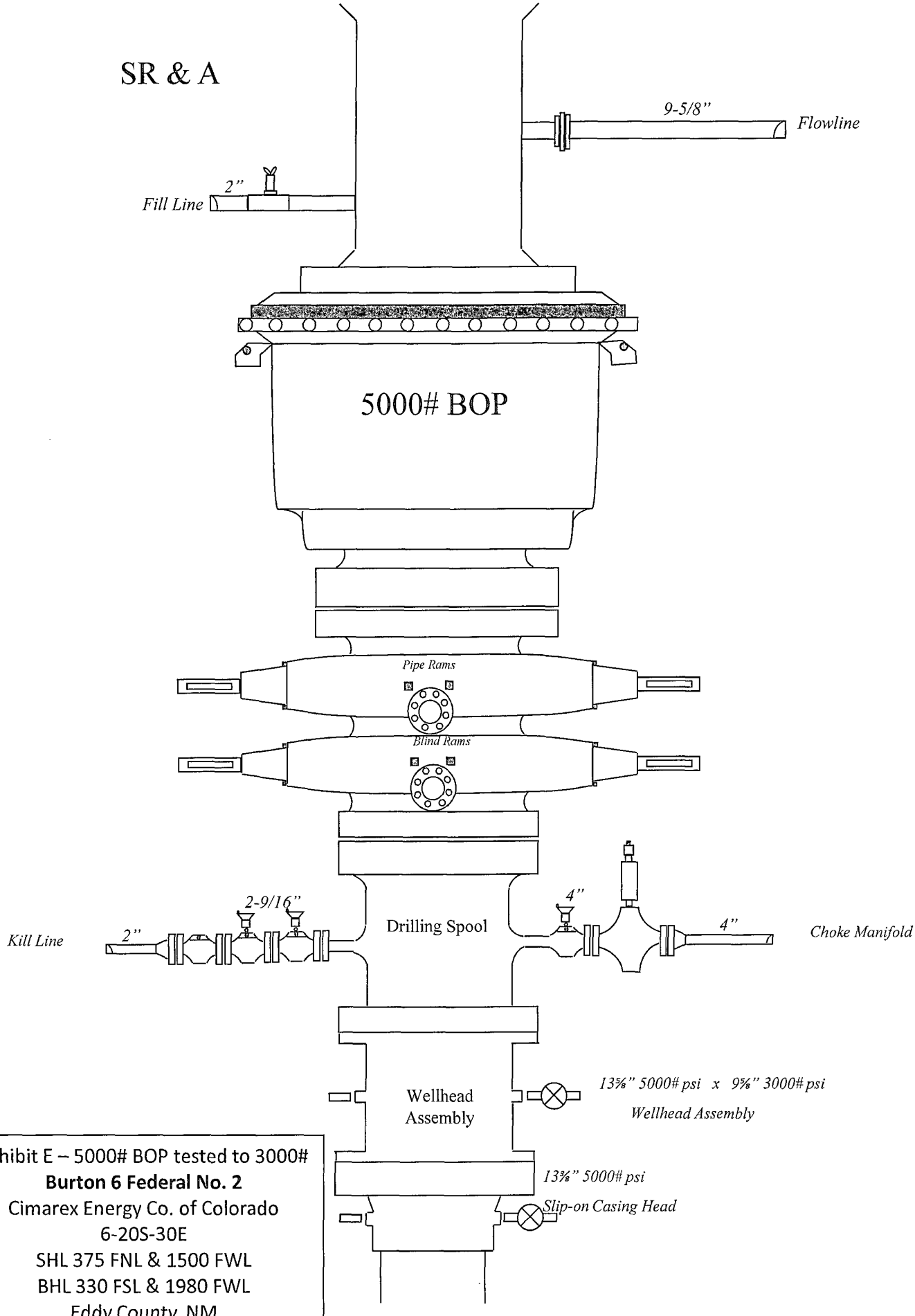
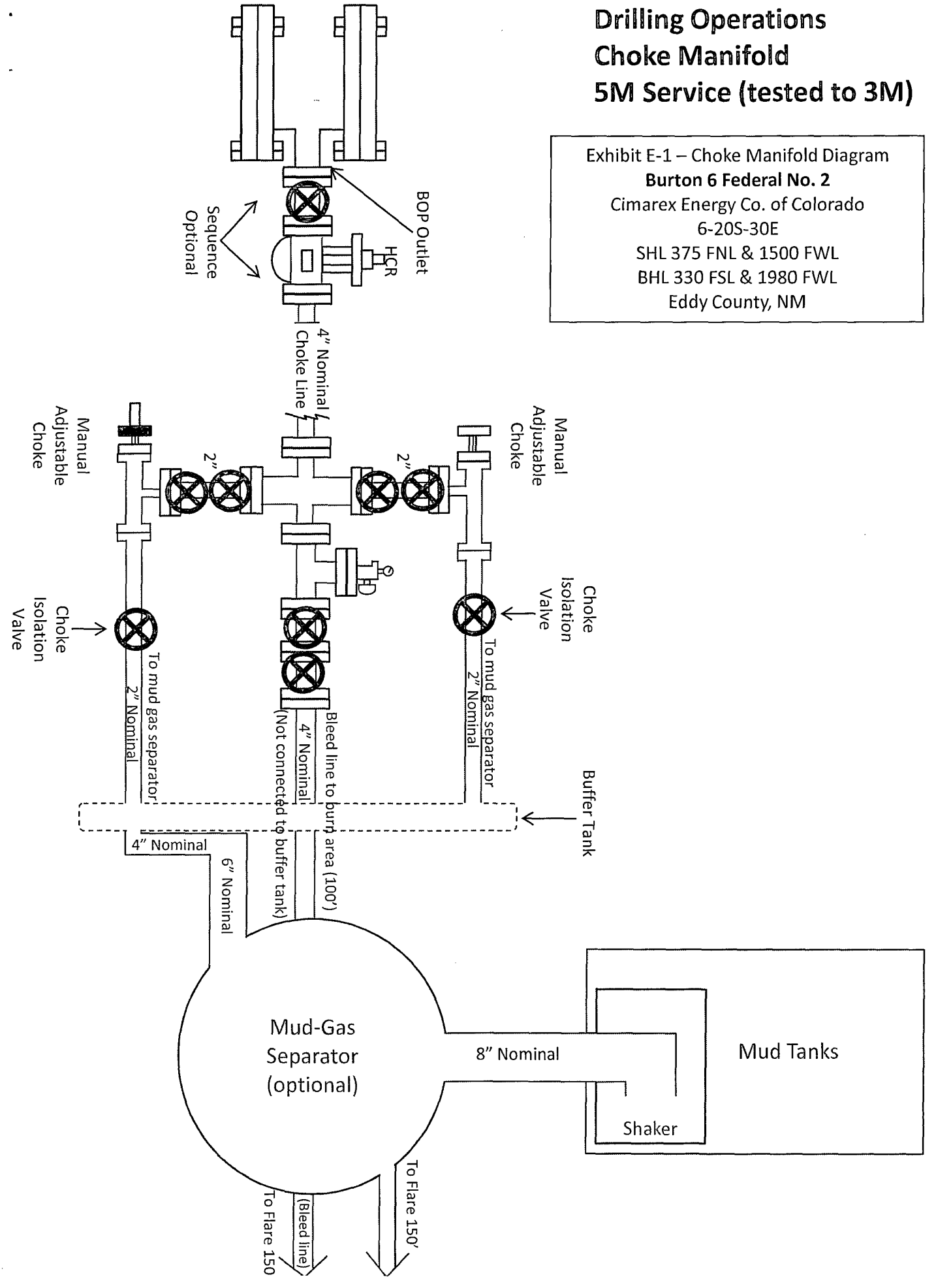


Exhibit E – 5000# BOP tested to 3000#
Burton 6 Federal No. 2
Cimarex Energy Co. of Colorado
6-20S-30E
SHL 375 FNL & 1500 FWL
BHL 330 FSL & 1980 FWL
Eddy County, NM

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

Exhibit E-1 – Choke Manifold Diagram
Burton 6 Federal No. 2
Cimarex Energy Co. of Colorado
6-20S-30E
SHL 375 FNL & 1500 FWL
BHL 330 FSL & 1980 FWL
Eddy County, NM



20" Diverter System

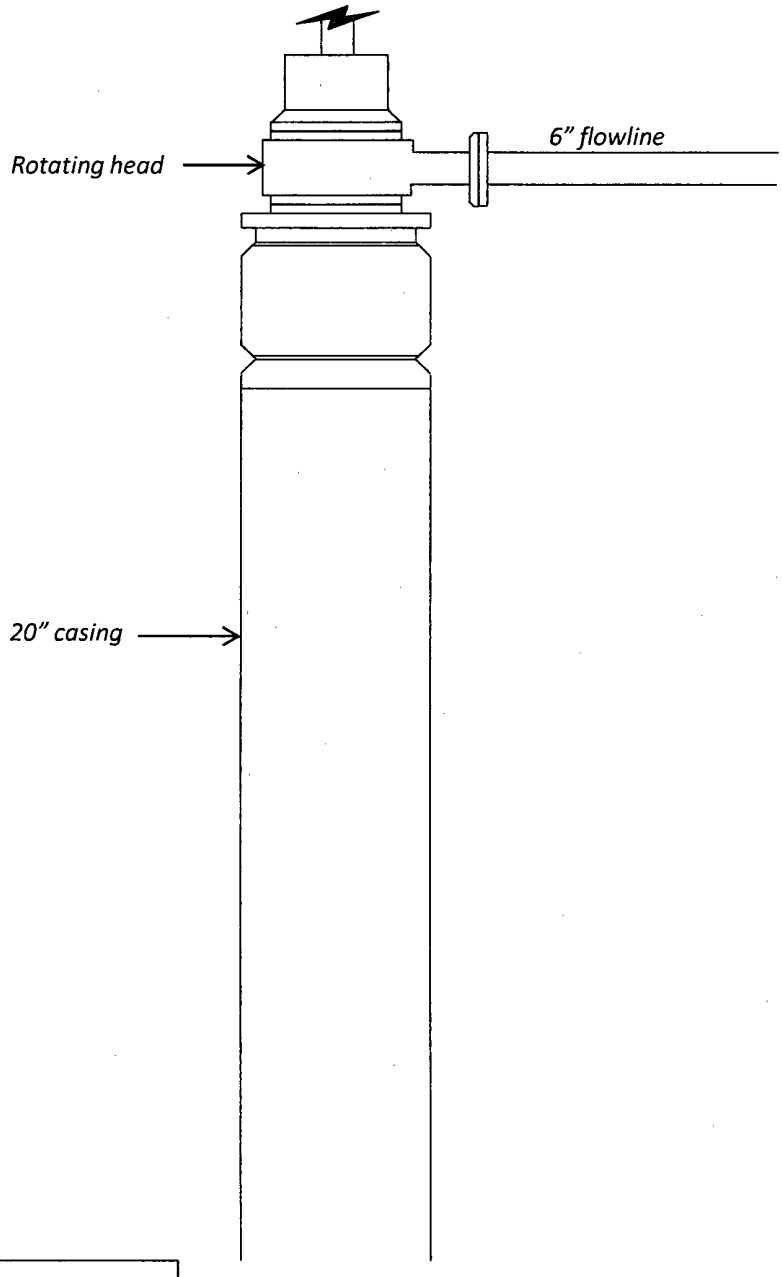


Exhibit E-1 – 20" Diverter System
Burton 6 Federal No. 2
Cimarex Energy Co. of Colorado
6-20S-30E
SHL 375 FNL & 1500 FWL
BHL 330 FSL & 1980 FWL
Eddy County, NM