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Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAR 12 2012

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Sandridge E&P, LLC		7. If Unit or CA Agreement, Name and No.
3a. Address 123 Robert S. Kerr Ave. Oklahoma City, OK 73102		8. Lease Name and Well No. <38680> Elliott Federal #4
3b. Phone No. (include area code) <270265> 405-429-5500		9. API Well No. 30-025- 40487
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1285' FSL & 580' FEL, Lot 4 At proposed prod. zone Same		10. Field and Pool, or Exploratory Wantz; Abo <62700>
14. Distance in miles and direction from nearest town or post office* Approximately 3 miles NE of Eunice, NM		11. Sec., T. R. M. or Blk. and Survey or Area Section 9-T21S-R38E
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 580'	16. No. of acres in lease 170.69 acres	17. Spacing Unit dedicated to this well 40 acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 387'	19. Proposed Depth 8100'	20. BLM/BIA Bond No. on file Nationwide Bond: B005997 Statewide Bond: B006211
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3565' GL	22. Approximate date work will start* 11/01/2011	23. Estimated duration 15 days

UNORTHODOX
LOCATION

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature	Name (Printed/Typed) Linda Guthrie	Date 11/28/11
Title Regulatory Manager		

Approved by (Signature) 	Name (Printed/Typed) Is/ Don Peterson	Date MAR 08 2012
Title FIELD MANAGER		Office 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.C. 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.

(Continued on page 2) **NSL-6513** * (Instructions on page 2)

KZ 07/14/12

Capitan Controlled Water Basin

MAR 19 2012

Approval Subject to General Requirements
& Special Stipulations Attached

ATTACHED FOR
CONDITIONS OF APPROVAL *dm*

DRILLING PROGRAM

SandRidge Exploration and Production, LLP

Elliott Federal #4

Surface Location: 1285' FSL, 580' FEL, Lot 4, Sec 9, T21S R38E, Lea County, New Mexico

Bottom Hole Location: same

1. Geologic Name of Surface Formation:

Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

?? —

a. Ogallala	100'	Water
b. Rustler	1610'	Barren
c. Top of Salt	1611'	
d. Base of Salt	2780'	
e. Tansil	2781'	Barren
f. Yates	2907'	Oil/Gas
g. Seven Rivers	3163'	Barren
h. Queen	3507'	Barren
i. San Andres	4327'	Oil
j. Glorieta	5571'	Oil
k. Blinbry	6010'	Oil
l. Tubb	6563'	Oil
m. Drinkard	6745'	Oil
n. Abo	7163'	Oil
o. Total Depth	8100'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 8-5/8" casing @ 1660' and circulating cement back to the surface. The Abo intervals will be isolated by setting 4-1/2" casing to total depth and circulating cement to the surface.

3. Casing Program:

See COA

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade	N/U
17	0-80'	14	0-80'	50#			
12-1/4"	80-1660'	8-5/8"	0-1660' 1640	24#	STC	J-55	NEW
7-7/8"	1660'-7900'	4-1/2"	0-7900'	11.6#	LTC	L-80	NEW

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
8-5/8"	1.73	3.73	6.12
4-1/2"	1.52	1.86	2.31

Casing load assumptions for new 8-5/8" J-55 24# casing:

Collapse: Fluid inside casing is evacuated. A full column of 9 ppg fluid is present in the annulus.
Burst: Fluid in the annulus is evacuated and a full column of 9 ppg fluid is present in the casing.
Tension: All fluid inside wellbore is evacuated

Casing load assumptions for new 4 1/2" L-80 11.6# casing:

Collapse: Fluid inside casing is evacuated. A full column of 10 ppg fluid is present in the annulus.
Burst: Surface treating pressures will not exceed 4200 psi exposure to the casing.
Tension: All fluid inside wellbore is evacuated

4. Cement Program:

a. 14" Conductor

Ready-mix concrete

b. 8-5/8" Surface

Lead: 500 sacks (100% excess) Class C (65:35) Poz Cement ECONOCЕМ™ System +3% lbm/sk Poly-E-Flake, 12.8 ppg, Yield: 1.86 ft³/sk, Mixing Fluid: 9.94 gal/sk.

Tail: 270 sacks (100% excess) Class C Cement Halcem™ System+ 2% Calcium Chloride+ 0.125 lbm/sk Poly-E-Flake, 14.8 ppg, Yield:1.35 ft³/sk, Mixing Fluid 6.37 gal/sk. **TOC @ surface.**

c. 4 1/2" Production

Lead: 500 sacks (25% excess) Class H (50:50) Poz EXTENDACЕМ™ System + 5 #/sk Gilsonite, 12.2 ppg, Yield 2.26 ft³/sk, Mixing fluid:12.07 gal/sk.

Tail: 890 sacks (25% excess) Class H (50:50) Poz Versacem™ System + 0.3% Halad®-9 + 3% Salt + 5 lbm/sk Gilsonite, 14.4 ppg, Yield: 1.25 ft³/sk, Mixing fluid: 5.06 gal/sk. **TOC @ surface.**

Final volumes will be determined using caliper log and 25% excess.

5. Pressure Control Equipment:

BOP DESIGN: The BOP system used to drill the production hole will consist of an 11" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the surface casing shoe.

The pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These tests will be logged into the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a Kelly cock, floor safety valve, choke lines, and choke manifold rated at 3000 psi WP.

6. MUD PROGRAM SUMMARY:

DEPTH	HOLE SIZE	CASING SIZE	MUD WT.	VISCOSITY	FLUID LOSS
0 - 1,525' ¹⁶⁴⁰	12-1/4"	8-5/8"	8.6 - 9.4	31 - 33	NC
1,525' - 4,100'	7-7/8"	---	9.7-9.8	28 - 29	NC
4,100' - 6,300	7-7/8"	---	9.8-9.9	30 - 31	15 - 10 cc
6,300' - TD	7- 7/8"	4-1/2"	9.9-10	32 - 38	10 - 6 cc

Interval Discussion:

INTERVAL	DAYS	WEIGHT	VISCOSITY	API FILTRATE	LCM	pH
0 - 1,525' ¹⁶⁴⁰	1	8.6 -9.4 lbs/gal	31 -33 sec/qt	NC	NC	As needed

Spud in with fresh water allowing native solids to build and maintain viscosity @ 31 – 33 sec./qt. Circulate through closed loop system. Utilize all available solids control equipment and dilution with fresh water to control viscosity, mud weight, and volume. Add 1 sack of Paper every other connection through this interval to help clean hole and/or more Paper as needed for seepage losses. Although lost circulation is not anticipated drilling this interval, ample supply of fibrous LCM will be on location. Approximately 100' from surface TD, mix 15 sacks of yellow starch @ 5 min./sx to help condition hole for running surface casing. Use pre-mix to build viscous PHPA pill and sweep the hole with +/- 10 Bbl. of same prior to tripping out to run 8-5/8" surface casing.

Materials to be Utilized: PHPA, Paper, Starch & Fibrous LCM if required

INTERVAL	DAYS	WEIGHT	VISCOSITY	API FILTRATE	LCM	pH
1,525' - 4,100'	1	9.7-9.8 lbs/gal	28 -29 sec/qt	NC	As needed	10.0 - 10.

Drill below surface casing with 9.7-9.8 lb/gal Brine circulating closed loop system. Build viscous PHPA pills in pre-mix and use to sweep hole for additional cleaning as needed. Mix Paper as required to control seepage losses. Use Lime to control and maintain 10 – 10.5 pH throughout

this interval. Use all available solids control equipment and if needed, drip non-ionic PHPA below flow line to help maintain clear Brine. Severe lost circulation is not anticipated drilling this interval but sufficient fibrous material will be on location to combat same should it occur.

Materials to be Utilized: PHPA, Paper, Lime, & Fibrous LCM if required

INTERVAL	DAYS	WEIGHT	VISCOSITY	API FILTRATE	LCM	pH
4,100'– 6,300'	1	9.8-9.9 lbs/gal	30 -31 sec/qt	15 -10 cc	As needed	10.0 – 10.5

At 4,100', reduce fluid loss to 15cc with addition of starch @ 6-8 mins./sk. Continue additions of Lime as needed to control pH. Further reduce fluid loss to 10cc by 6,300' with continued starch additions. Sweep hole as required with viscous PHPA sweeps from premix. Add Paper to sweeps as needed for seepage. Severe lost circulation is not anticipated while drilling this interval but sufficient quantities of fibrous LCM will be on location. Small amounts of Defoamer may be required while drilling this interval. Continue to use all available mechanical solids control and non-ionic PHPA dripped below shaker for additional solids control.

Materials to be Utilized: PHPA, Paper, Lime, Starch; Defoamer & Fibrous LCM if required

INTERVAL	DAYS	WEIGHT	VISCOSITY	API FILTRATE	LCM	pH
6,300'– TD	2	9.9-10.0 lbs/gal	32 -38 sec/qt	10 - 6 cc	As needed	10.0 – 10.5

At 6,300' mud up to 32 -34 sec./qt. viscosity with Salt Gel. Continue additions of Lime to control pH. Maintain fluid loss at 10.0 cc with Starch until 6,900'. At 6,900', further reduce fluid loss to 6 cc with additional Starch prior to topping the ABO. Moderate loss of circulation is possible in this interval. Use Paper for seepage losses and fibrous LCM for more severe losses. At 7,600', raise viscosity to 38 sec./qt. with Salt Gel and maintain to TD. At TD, sweep hole with 5 Bbl. viscous PHPA pill and circulate completely out of hole prior to tripping.

Materials to be Utilized: PHPA, Paper, Lime, Salt Gel, Starch; Defoamer & Fibrous LCM if required. Mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

- c. Hydrogen Sulfide detection equipment will be in operation prior to spud and throughout the entire drilling process until total depth is reached. Breathing equipment will be on location prior to spud and until total depth is reached.

8. Logging, Coring, and Testing Program: *See CORA*

Gamma Ray / Neutron – Surface to TD

Spectral Gamma Ray / Density / Resistivity / Sonic – Surface casing to TD

Image - ~6700' to TD

Mud Loggers – Surface casing to TD

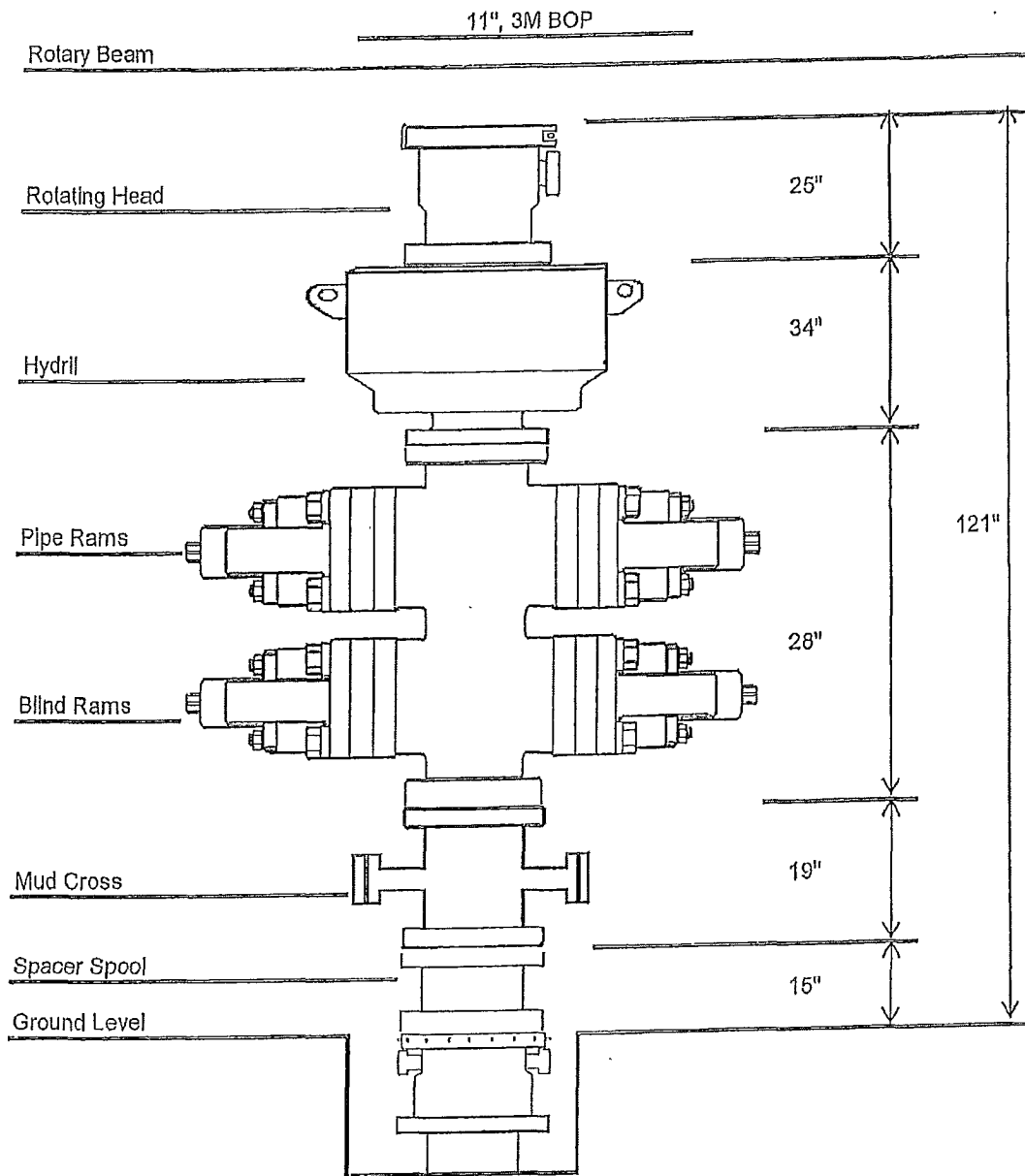
9. Potential Hazards:

No abnormal pressures or temperatures are expected. If H₂S is encountered, the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3,204 psi and estimated BHT 110 degrees. H₂S monitoring equipment will be on location 24/7 during drilling operations.

10. Anticipated Starting Date and Duration of Operations:

- a. Location construction will begin after the BLM and NMOCD have approved the APD. Anticipated spud date will be as soon after approval as rig is available. Move in operations and drilling is expected to take 15 days.
- b. If production casing is run, an additional 30 days will be required to complete well and construct surface facilities and/or lay flow lines in order to place the well on production.

Lariat 17 BOP

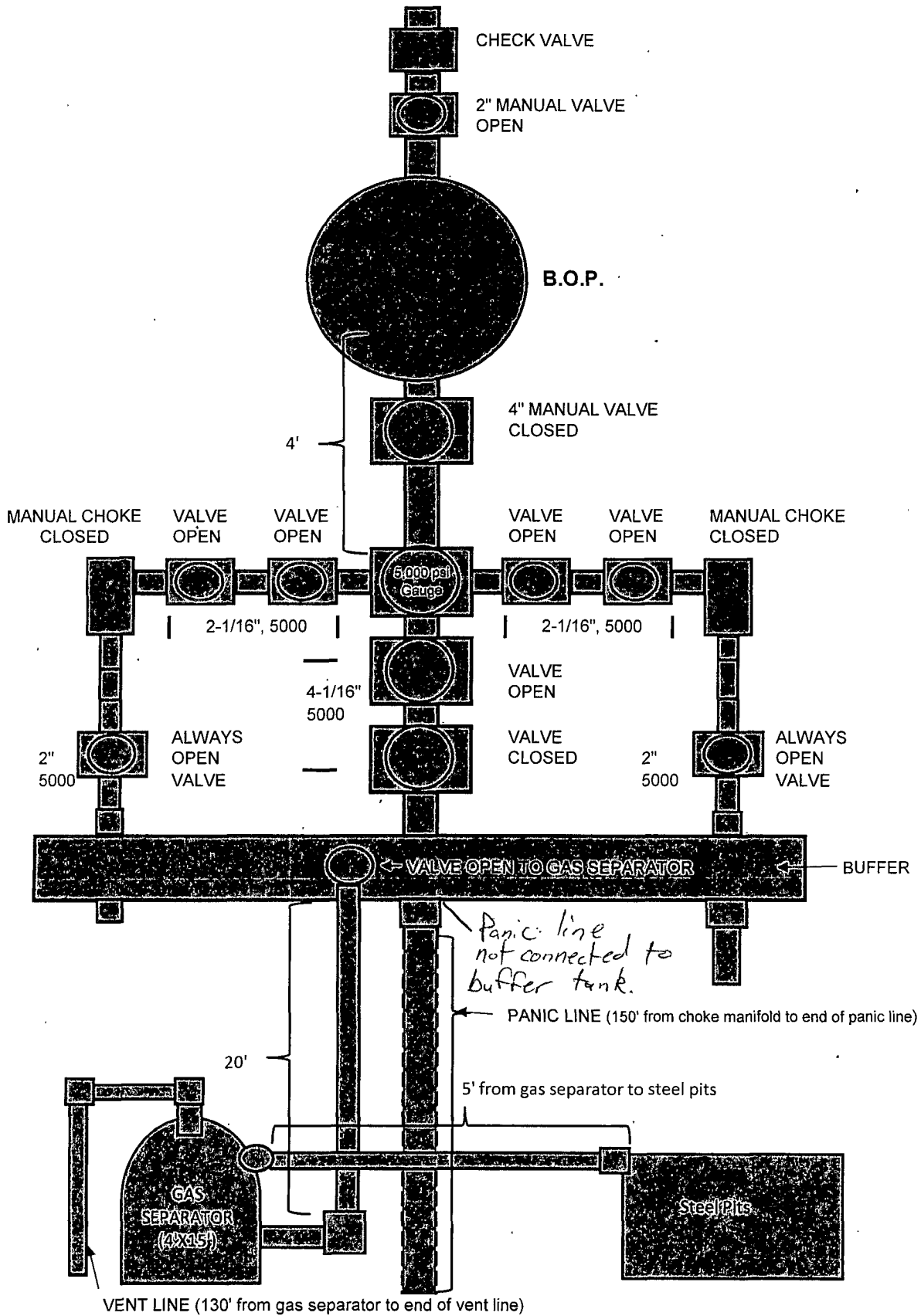


Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
SandRidge Exploration and Production, LLC
Elliott Federal #4

Location: 1285' FSL, 580' FEL, Section 9, T21S, R38E, Lea County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. *Wear ring will be properly installed in head.*
3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum of 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a Kelly cock attached to the Kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operations.
10. Hydraulic floor control for blowout preventer will be location as near in proximity to the driller's controls as practical.
11. All BOP equipment will meet API standards and include a minimum 40-gallon accumulator having two independent means of power to initiate closing operations.

Lariat 17 choke Manifold



DESIGN PLAN

Above ground steel tanks will be utilized for the management of all fluids.

OPERATIONS AND MAINTENANCE PLAN

SandRidge E&P, LLC, will operate and maintain all above ground steel tanks in a prudent manner to prevent any spills. Operator will conduct daily visual tank inspection to locate any leak which might occur and potentially cause spoil or ground water contamination. NMOCD will be notified immediately of any significant volume(s) pursuant NMOCD rule 19.15.29.

CLOSURE PLAN

Solids and fluids will be removed from steel tanks and hauled off by trucking companies. They will be taken to the nearest approved public disposal: (See Form C-144EZ, Item 5.).



October 6, 2011

Mr. David Brooks
New Mexico Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe NM 87505

Re: Elliott Federal #4
Sec 9, T21S, R38E
Lea County, New Mexico

Dear Sir:

Please find attached Form 3160-3, Federal Application for Permit to Drill, which we have prepared for submittal to the BLM, as well as an Administrative Application Checklist for the above captioned well. I believe it contains all information required for review and approval of a non-standard location. SandRidge is the offset operator for this well location; therefore, no notifications will be required.

Thank you in advance for your time and consideration of our NSL approval request. If additional information is required, please contact me.

Sincerely,

Karen Sharp
Sr. Regulatory Analyst

(405) 429-5745
ksharp@sandridgeenergy.com

attachments