<u> </u>	PTGW
DATE IN -7-11 SUSPE	
	ABOVE THIS LINE FOR DIVISION USE ONLY
<i>i</i>	NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505 - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505 - Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505 - Engineering Bureau - - Engineer
	- Engineering Bureau - 1220 South St. Francis Drive, Santa Fe, NM 87505
	ADMINISTRATIVE APPLICATION CHECKLIST
	MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE
pplication Acronyn INSL-Non-Sta	ns: andard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
-	vnhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-P	ool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
	[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qu	alified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]
-	PPLICATION - Check Those Which Apply for [A]
[A]	Location - Spacing Unit - Simultaneous Dedication
Chec [B]	k One Only for [B] or [C] Commingling - Storage - Measurement
[2]	DHC CTB PLC PC OLS OLM
[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
	UWFX PMX SWD IPI EOR PPR
[D]	Other: Specify
2] NOTIFICAT	<b>FION REQUIRED TO:</b> - Check Those Which Apply, or   Does Not Apply
[A]	Working, Royalty or Overriding Royalty Interest Owners
[B]	Offset Operators, Leaseholders or Surface Owner
[C]	Application is One Which Requires Published Legal Notice
[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office attached to APA
[E]	For all of the above, Proof of Notification or Publication is Attached, and/or,
[F]	Waivers are Attached
] SUBMIT A	CCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

OF APPLICATION INDICATED ABOVE.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Karen Sharp	Faren Sharp	Sr. Regulatory Analyst	10/06/2011
Print or Type Name	Signature	Title	Date

ksharp@sandridgeenergy.com e-mail Address



October 6, 2011

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

Re: Parcell Federal #8 Sec 8, 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,

/Xr

Karen Sharp Sr. Regulatory Analyst

(405) 429-5745 ksharp@sandridgeenergy.com

attachments

123 Robert S. Kerr Avenue, Oklahoma City, OK 73102 • Phone 405.429.5500, Fax 405.429.5977 • www.SandRidgeEnergy.com

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 11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

## State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

Form C-102 Revised July 16, 2010 Submit to Appropriate District Office

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

AMENDED REPORT

		W	ELL LOC/	ATION A	AND ACREA	GE DEDICA	<b>TION PLAT</b>	-	
	Number			Pool Code		AL L	Pool Nam	e	
30-0			6	2700		Nantz;	ato ~	-	1 Al
Property C				ÞA				We	ll Number 8
<u> </u>	281				Operator Nam			E	o levation
2702				SAND	RIDGE E + f			· · ·	3565'
					Surface Locat	lion			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	8	21-S	38-E		1485	SOUTH	1375	EAST	LEA
				Bottom Hol	e Location If Diffe	rent From Surface			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r tofill	Consolidation C	ode Ord	er No.				
40	Source		Consolication O		ioi no.				
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NO ALLOWABLE WIL	L BE ASSIGN	ed to this (	COMPLETION UN	ITIL ALL INTER	RESTS HAVE BEEN C	ONSOLIDATED OR A N	NON-STANDARD UNI	T HAS BEEN APPROVE	ED BY THE DIVISION
				T				ATOR CERTIFI	CATION
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				1				the best of my knowledge anization either owns a w	
GL	εορετις ς	DORDINATE	S				unleased m	ineral interest in the land i	including the
	NAD 27	7 NME		ł			well at this i	ottom hole location or has ocation pursuant to a con	tract with an owner
	SURFACE	LOCATION		ļ	1			eral or working interest, o sement or a compulsory p	
	Y=5443			1				antered by the division.	,
	X=8871		······································				1	1.	
1	LAT. = 32.4. ONG. = 103.				ĺ		Signature	v Shap	<u>8-1-11</u> Date
	 1						Karen Printed Na	J <u>SHARP</u>	
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	1			1				lify that the well location s from field notes of actual (	
	1			4.	<u></u>			my supervision, and that to the best of my belief.	the same is true
	1		4	ł	3564.7'	_3563.5'		-	
	1				600'	1	Date of Su	MAY 31, 201	·
				1	0 <b>0</b>		Signature		Surveyor:
i			<u> </u>					N MEL	
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Form 3160 -3 (August 2007)					FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010		7
UNITED STATE Department of the Bureau of Land Mai	INTEF				5. Lease Serial No. LC062170A		
APPLICATION FOR PERMIT TO			ER		6. If Indian, Allotee	or Tribe	Name
la. Type of work: I DRILL	TER	·. · · · · · · · · · · · · · · · · · ·	<u></u>		7. If Unit or CA Agro	eement, Na	ame and No.
lb. Type of Well: 🗹 Oil Well 🔲 Gas Well 🗌 Other		✓ Single Zone	Multi	ple Zone	8. Lease Name and Parcell Federal #8		· · · · ·
2. Name of Operator SandRidge E&P, LLC		•			9. API Well No. 30-025-		
3a. Address 123 Robert S. Kerr Ave. OKC OK 73102-6406	A. Address 123 Robert S. Kerr Ave. OKC OK 73102-6406 3b. Phone No. (include area code) 405-429-5500				10. Field and Pool, or Wantz;Abo	Explorator	у.
4. Location of Well (Report location clearly and in accordance with arry State requirements.*)					11. Sec., T. R. M. or E	Blk. and Su	rvey or Area
At surface 1485' FSL, 1375' FEL UL J					Sec 8, T21S, R38E	Ξ	
At proposed prod. zone same							
I4. Distance in miles and direction from nearest town or post office* Approximately 5 miles NE of Eunice, NM					12. County or Parish Lea		13. State NM
15. Distance from proposed* location to nearest	16. N	lo. of acres in lease		17. Spacin	7. Spacing Unit dedicated to this well		
property or lease line, ft. (Also to nearest drig. unit line, if any)	160			40 acres	es		
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, 750' applied for, on this lease, ft.</li> </ol>		8100 Nati		Nationw	.M/BIA Bond No. on file onwide Bond B005997 swide Bond B006211		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. A	22. Approximate date work will start*			23. Estimated duration		
3565' GL	11/0	1/2011			15 days		
		Attachments					
The following, completed in accordance with the requirements of Onsho	ore Oil ar	nd Gas Order No.1,	must be a	ttached to thi	is form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>			to cover t 0 above).	he operation	ns unless covered by an	existing t	oond on file (see
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	n Lands,				ormation and/or plans as	s may be r	equired by the
25. Signature		Name (Printed/Typed) Linda Guthrie			Date 10/01/2	2011	
Title	<b>_</b>						
Regulatory Manager		e-mail: lguthrie		lgeenergy.	com	Dete	····
Approved by (Signature)		Name (Printed/Typ	iea)			Date	
Title		Office			····	I	
Application approval does not warrant or certify that the applicant hole conduct operations thereon. Conditions of approval, if any, are attached.	ds legal o	or equitable title to	those righ	ts in the sub	ject lease which would e	ntitle the a	pplicantto
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a c States any false, fictitious or fraudulent statements or representations as	crime for s to any m	any person knowinatter within its juris	ngly and w	willfully to m	ake to any department o	or agency	of the United

(Continued on page 2)

\*(Instructions on page 2)

## **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

## NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

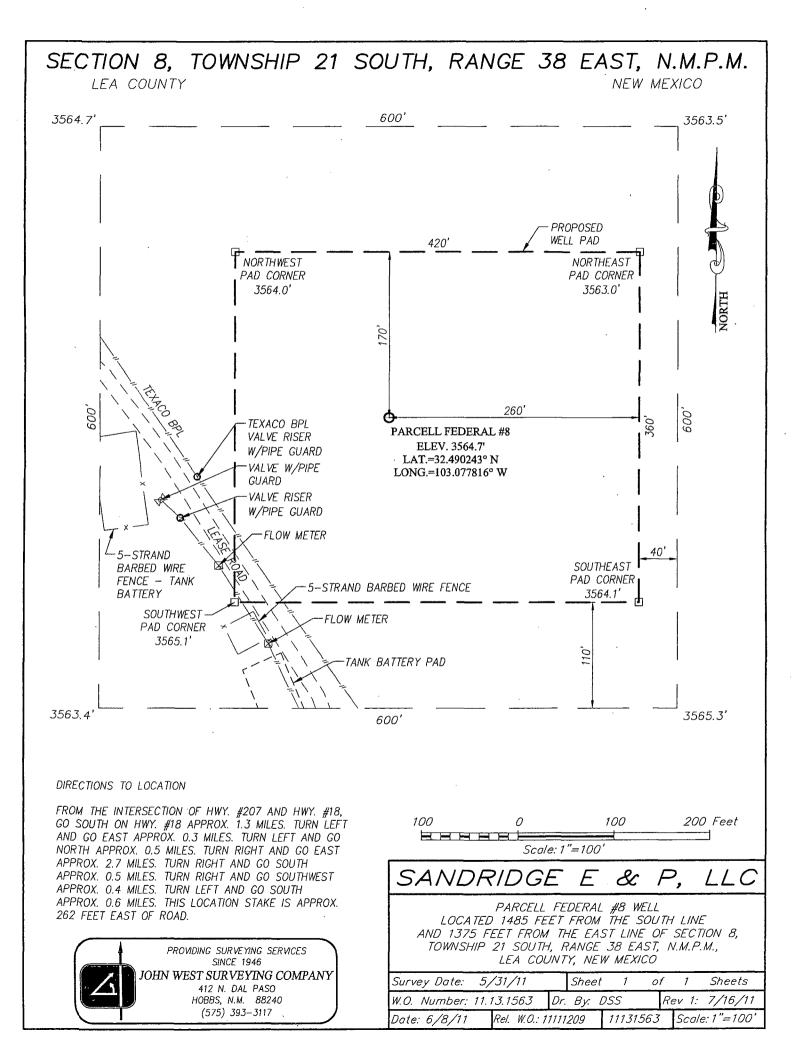
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

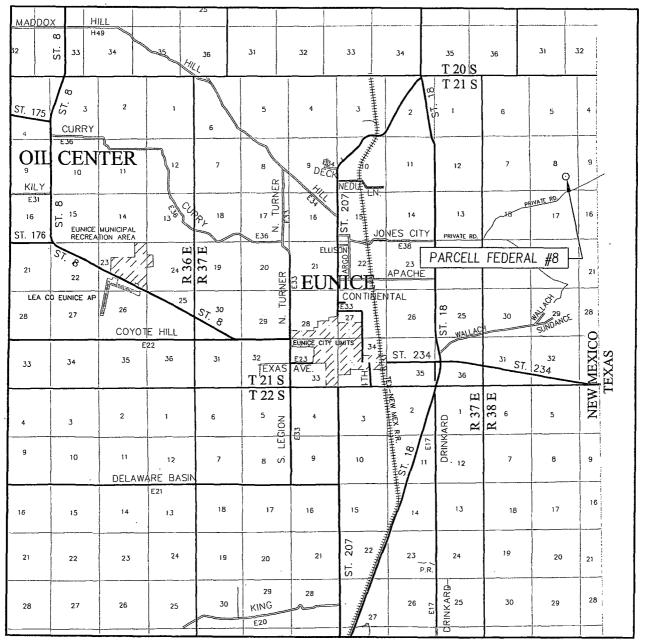
The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.



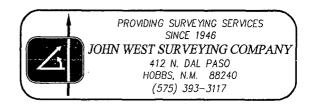
VICINITY MAP



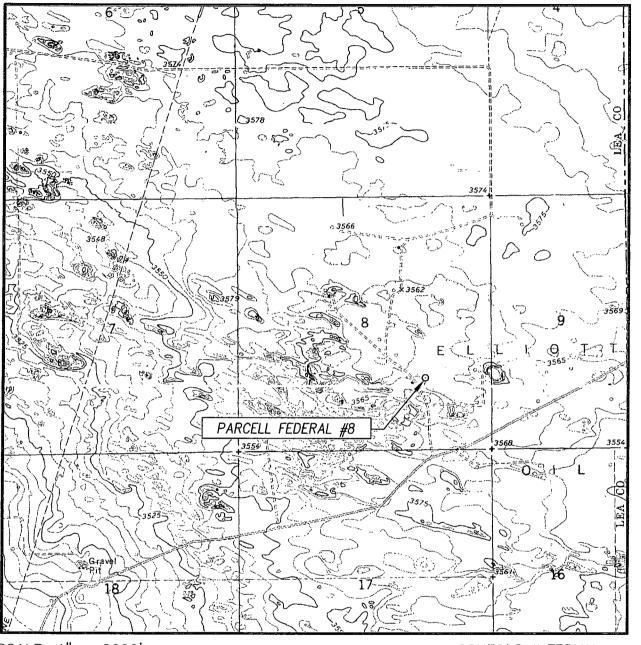
SCALE: 1" = 2 MILES

NORTH

SEC. <u>8</u> TWP.<u>21-S</u> RGE. <u>38-E</u> SURVEY <u>N.M.P.M.</u>, COUNTY <u>LEA</u> STATE NEW MEXICO DESCRIPTION <u>1485' FSL & 1375' FEL</u> ELEVATION <u>3565'</u> OPERATOR <u>SANDRIDGE E & P, LLC</u> LEASE <u>PARCELL FEDERAL</u>



# LOCATION VERIFICATION MAP

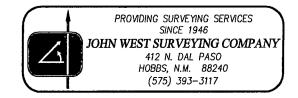


SCALE: 1'' = 2000'

EUNICE NE, N.M.

SEC. <u>8</u> TWP. <u>21-S</u> RGE. <u>38-E</u>
SURVEYN.M.P.M.
COUNTYLEASTATE_NEW_MEXICO
DESCRIPTION 1485' FSL & 1375' FEL
ELEVATION3565'
OPERATOR
LEASE PARCELL FEDERAL
U.S.G.S. TOPOGRAPHIC MAP

CONTOUR INTERVAL: EUNICE NE, N.M. – 5' HOBBS SE, N.M. – 5' NORTH



## DRILLING PROGRAM

## SandRidge Exploration and Production, LLP **Parcell Federal #8** Surface Location: 1485' FSL, 1375' FEL, Unit J, Sec 8, 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:

		<b>v</b> 1	•	•
a.	Ogallala	100'	Water	
b.	Rustler	1600'	Barren	
c.	Top of Salt	1600'		
d.	Base of Salt	2799'		
e.	Tansil	2800'	Barren	
f.	Yates	2923'	Oil/Ga:	S
g.	Seven Rivers	3155'	Barren	
h.	Queen	3533'	Barren	
i.	San Andres	4291'	Oil	
j.	Glorieta	5622'	Oil	
k.	Blinebry	6090'	Oil	
I.	Tubb	6600'	Oil	
m.	Drinkard	6810'	Oil	
n.	Abo	7250'	Oil	
о.	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 @ 1525' 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:

<u>Hole Size</u>	<u>Hole Interval</u>	OD Csg	Casing Interval	Weight	<u>Collar</u>	<u>Grade</u>
17	0-80'	14	0-80′	50#		
12 -1/4"	80-1525'	8-5/8"	0-1525′	24#	STC	J-55
7-7/8"	1525-8100'	4-1/2"	0-8100'	11.6#	LTC	L-80

## **Design Parameter Factors:**

Casing Size	Collapse Design Factor	<b>Burst Design Factor</b>	<b>Tension Design Factor</b>
8-5/8"	1.95	4.20	10.68
4-1/2"	, 1.51	1.85	2.26

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  $4 \frac{1}{2}$ " 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 ECONOCEM <sup>™</sup> System +3% lbm/sk Poly-E-Flake, 12.8 ppg, Yield: 1.86 ft^3/sk , Mixing Fluid: 9.94 gal/sk.

Tail: 270 sacks (100% excess) Class C Cement Halcem <sup>™</sup> System+ 2% Calcium Chloride+ 0.125 lbm/sk Poly-E-Flake, 14.8 ppg, Yield:1.35 ft^3/sk, Mixing Fluid 6.37 gal/sk. **TOC** @ surface.

#### c. 4 ½" Production

Lead: 500 sacks (25% excess) Class H (50:50) Poz EXTENDACEM <sup>™</sup> System + 5 #/sk Gilsonite, 12.2 ppg, Yield 2.26 ft^3/sk, Mixing fluid:12.07 gal/sk.

Tail: 935 sacks (25% excess) Class H (50:50) Poz Versacem <sup>™</sup> System + 0.3% Halad <sup>®</sup>-9 + 3% Salt + 5 lbm/sk Gilsonite, 14.4 ppg, Yield: 1.25 ft^3/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.

DEPTH	HOLE SIZE	CASING SIZE	MUD WT.	VISCOSITY	FLUID LOSS
0 - 1,525'	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

## 6. MUD PROGRAM SUMMARY:

## Interval Discussion:

INTERVAL	DAYS	WEIGHT	VISCOSITY	API FILTRATE	LCM	рН
0 – 1,525′	1	8.6 -9.4 Ibs/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
--

INTERVAL	DAYS	WEIGHT	VISCOSITY	API FILTRATE	LCM	рН
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	рН
4,100'-	1	9.8-9.9	30 - 31	15 -10 cc	As needed	10.0 -
6,300′		lbs/gal	sec/qt			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	рН
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. A Kelly cock will be in the drill string at all times.
  - b. 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:

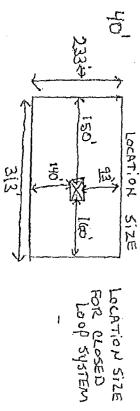
Gamma Ray / Neutron – Surface to TD Spectral Gamma Ray, Density / Resistivity – Surface casing to TD

## 9. Potential Hazards:

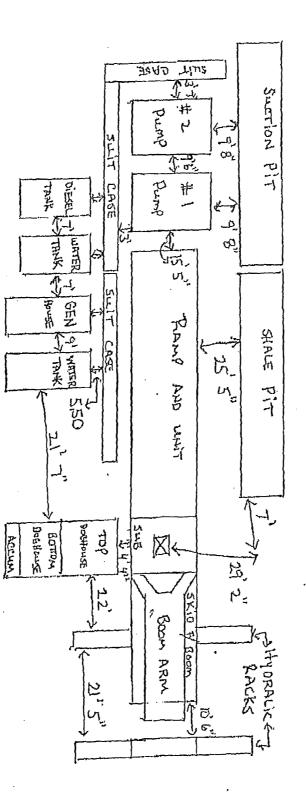
No abnormal pressures or temperatures are expected. If H2S is encountered, the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this 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.



CENTER OF HOLE TO BACK OF STEEL PITS CENTER OF HOLE TO END OF ACCUMULATOR BY CENTER OF HOLE TO END OF MAIT RAMP 58 CENTER OF HOLE TO BACK OF LAST PIPE RACK -48 CENTER OF HOLE TO END OF SKID FOR ROOM - 34



Reserve Pit should be added as needed

# LARIAT SERVICES, INC. RIG #17 TYPICAL LOCATION FOOTPRINT

## Lariat Services, Inc. – Rig #17 Inventory

## APPROXIMATE AGE:

Bullt 2005

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#### POWERED DRAW WORKS:

Rt 400 Single Drum Drawworks Lebus Grooved for 1 1/8" Line 42" x 10" Brakes with 424-400,000# Tension Torque Brake.

Powered by 630 HP Series 60 Detroit Engine with an Allison 6061 Transmission to 500 HP Right Angle Gear Box.

#### MAST & SUBSTRUCTURE:

International Derrick Service 67' 500,000 GNC Mast Mounted on a 3 Axle Carrier with Boatskid 12' Substructure with Pipe Handling Boom Arm.

#### **POWERED PUMPS:**

(1) RSF-1000 Powered by Detroit Series 2000 Diesel Engine.

(1) EMSCO DB-550 Powered by Caterpillar 3406 Diesel Engine.

#### TOP HEAD DRIVE AND POWER UNIT:

Top Drive system XK250-24K Powered by Detroit Series 60 / 350 HP @ 1200 RPM with Sunstrawn Hydraulic Pump. Maximum Circulating Pressure 5000 PSI with Torque Capacity of 24,000 Ft. lbs. Max. RPM 150.

#### CROWN AND TRAVELING CARRIER FOR TOP HEAD DRIVE:

Crown is Designed for 8 Line String Up. Consisting of (8) 20" x 1 1/8" Sheaves. Banjo Sheaves are 1 1/8" X 250 Ton.

## WELL CONTROL EQUIPMENT:

Koomey 8 Bottle 5 Station Accumulator. 5000 # Choke Manifold. 11" x 3000 # Double Shaffer B.O.P.

#### **GENERATOR HOUSE:**

10' x 48' Skid Mounted House.(2) 380 KW Marathon Generators Powered by (2) Detroit Series 60 550 HP Diesel Engines.Sullivan Paletek Rotary Screw Compressor.

#### MUD SYSTEM:

(2) 10' W x 5' H x 40' L with 10' Porch on Each End 400 BBL Each with (4) 5" x 6" Centrifugal Pumps with 50 HP, Electric motors, Linear Shale Shaker. (2) Cone Desander (12) Cone Desilter and Mud Hopper.

#### **TOOLPUSHER'S HOUSE:**

8' W x 40' L Idle Time Trailer.

#### TOP DOGHOUSE:

8' W x 20' L with 4' Porch.

#### BOTTOM DOG HOUSE:

25' L x 8' W with 5 Station Accumulator Mounted on Front.

#### WATER TANK:

8' W x 8' H x 40' L with Lubster Mounted on One End with (2) 2" X 3" Centrifugal Pumps with 20 HP Electric Motors. Water Tank 500 BBL Cap.

### HANDLING TOOLS AND AUXILLARY EQUIPMENT:

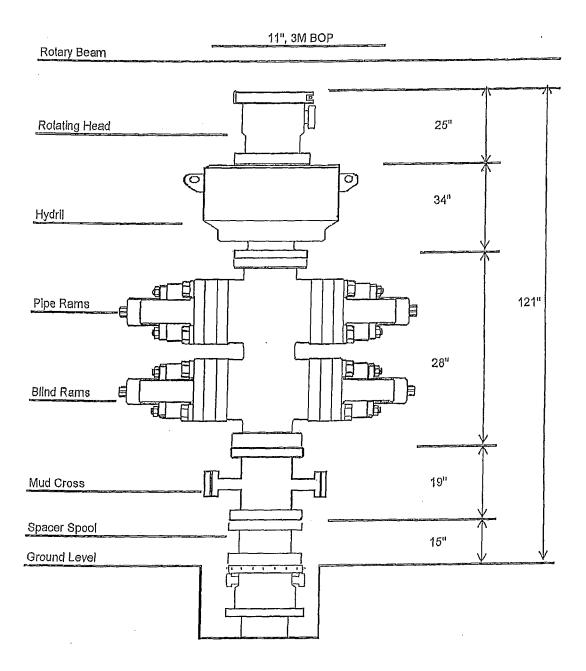
OWI 1000 Hydraulic Wireline Machine, U.S. Oil Tools, Air Slips, (2) Braden Hydraulic 3/8" Line Winches.

# Lariat Services, Inc. – Rig #17 Inventory

(1) 450 Gallon Day Tank on Unit.
(1) 450 Gallon Hydraulic Tank.
(3) Suitcases (1) 32' x 3' x 1" - (1) 40' x 3' x 1" - (1) 34' x 3' x 2".
(1) Diesel Tank Skid Mounted 38' L x 7' (Tank is 6' x 6' x 14').
(1) Junk Box 5' x 8" x 20'.
(1) Auto-Drill Automatic Driller.
Type "D" Weight Indicator with E-80 Sensator.
Deadline Anchor Hercules Type HA 118T.
Crown Protection System.
(1) Pre-Mix Pit 7' W x 7' H x 28' L with 5" x 6" Mixing Pump 100 HP Electric Motor.
(1) 500 BBL Storage Tank.

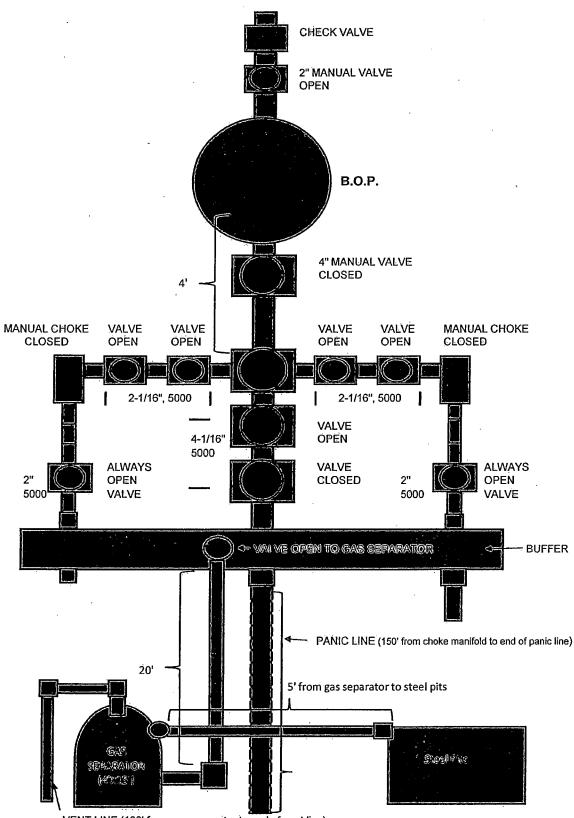
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## Lariat 17 choke Manifold



VENT LINE (130' from gas separator to end of vent line)

## SURFACE USE PLAN

## SandRidge Exploration and Production, LLC

## Parcell Federal #8

## 1485' FSL, 1375' FEL, Unit J, Sec 8, T21S R38E, Lea County, New Mexico

#### 1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout, Form C-102. The well was staked by John West Engineering.
- b. All roads into the location are depicted on the surveyor plats.
- c. Directions to Location: From the intersection St. Hwy #18 and St. Hwy #207, Go south on Hwy #18 approximately 1.3 miles. Turn left and go east approximately 0.3 miles. Turn left and go north appx 0.5 miles. Turn right and go East appx 2.7 miles. Turn right and go south appx 0.5 miles. Turn right and go East appx 2.7 miles. Turn right and go south appx 0.5 miles. Turn right and go East appx 2.7 miles. Turn right and go south appx 0.5 miles. Turn right and go East appx 2.7 miles. Turn right and go South appx 0.5 miles.
  - miles. Turn right and go SW appx 0.4 miles. Turn left and go South appx 0.6 miles. This location stake is appx. 262' east of road.
- d. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.
- e. If existing road is shared with other operators, SandRidge will share in its cost to maintain the road as required by the BLM.
- 2. New or Reconstructed Access Roads: No new roads will be constructed.

#### 3. Location of Existing Wells:

One-mile Radius Plat shows all existing and proposed wells within a one-mile radius of this proposed location. See attached.

## 4. Location of Existing and/or Proposed Production Facilities:

- a. In the event the well is found productive, the Parcell Federal #8 tank battery will be utilized and the necessary production equipment will be installed at the well site.
- b. If necessary, the well will be operated by means of an electric prime mover.
- c. If the well is productive, rehabilitation plans are as follows:
  - i. A closed-loop system will be utilized.
  - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as practical to the original state.

## 5. Location and Types of Water Supply:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck.

#### 6. Construction Materials:

The caliche utilized for the drilling pad will be from minerals that are located onsite or will be used onsite. If minerals are not available onsite, then an established mineral pit will be used to build the location.

## 7. Methods of Handling Waste Material:

- a. Drill cuttings will be disposed of in a closed loop system and hauled to CRI Holdings.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier will pick up salts remaining after completion of well, including broken sacks.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during well operations and will be removed when all operation are complete.
- e. Remaining drilling fluids will be sent to a closed-loop system. Water produced during completion will be put into a closed-loop system. Oil and condensate produced will be put into a storage tank and sold.
- f. Disposal of fluids to be transported by the following companies:
  - 1. Parabo Disposal Facility
  - 2. Controlled Recovery, Inc.
- 8. Ancillary Facilities: No campsite or other facilities will be constructed as a result of this well.

## 9. Well Site Layout:

- a. The rig layout diagram shows the proposed well site layout with dimensions of the pad layout.
- b. A closed-loop system will be utilized.
- c. If a pit or closed-loop system will be utilized, SandRidge will comply with the NMOCD requirements 19.15.17. and submit form C-144 CLEZ to the appropriate NMOCD District Office. An unapproved copy of the pit permit is provided within this APD.

## d. Topsoil Stockpiling:

Standard practice is topsoil will be pushed to the high side of the location to prevent water from running across location to control erosion. If a cutout is done and there are two or three high sides, we will use those there.

## 10. Plans for Surface Reclamation

At the conclusion of oil and gas operations, Sandridge Exploration and Production, LLC, will restore the lands to original conditions as nearly as practical in accordance with BLM standards.

## 11. Surface Ownership

- a. The surface is State owned and is currently under a grazing lease with Mr. Paige McNeill. Known address is McNeill Ranch, POB 1058, Hobbs NM 88241. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.
- b. Roads and surface location will be restored as directed by the BLM.

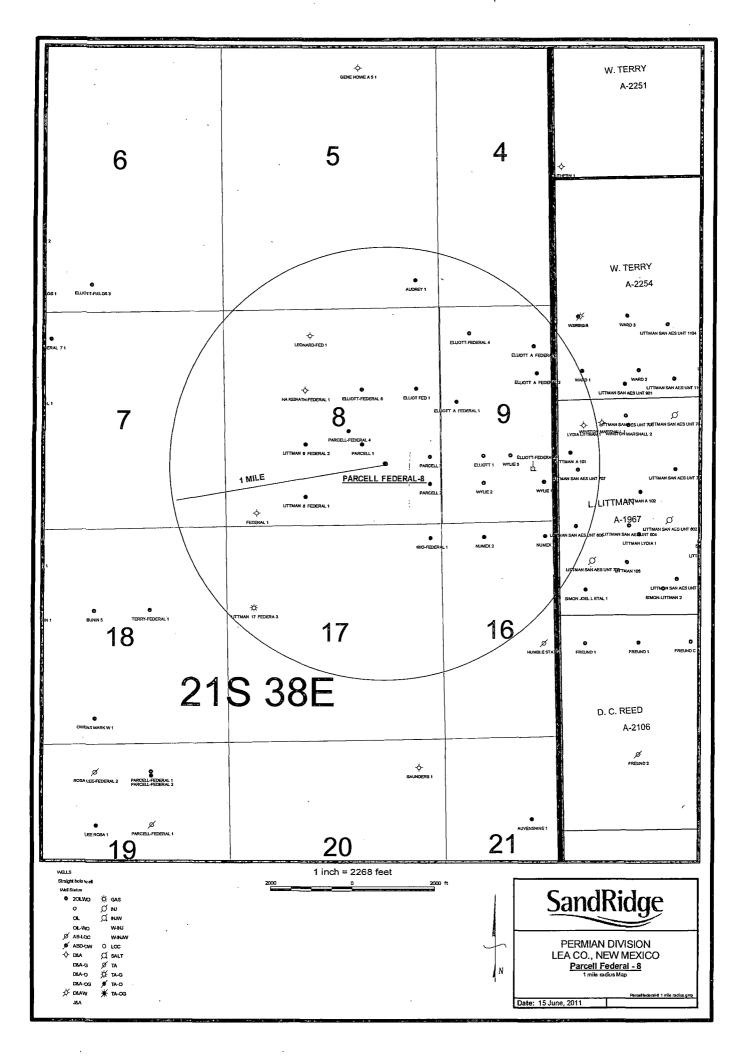
## **12.** Other Information:

- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca and miscellaneous weeds. No wildlife was observed, but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. There is no permanent or live water in the general proximity of the location.
- c. There are no dwellings within 2 miles of well location.

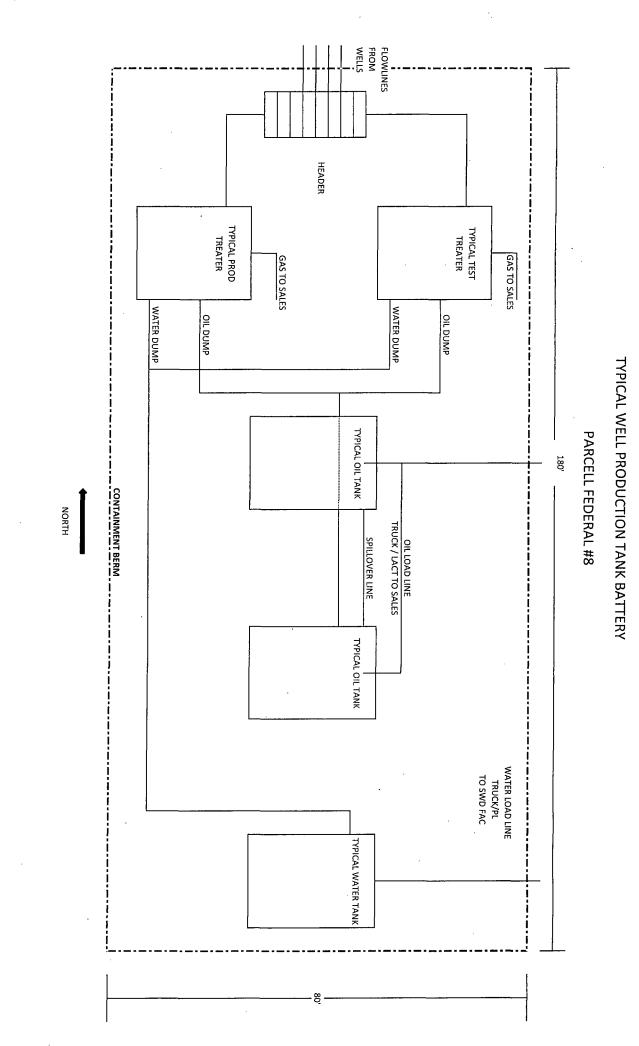
d. A Cultural Resources Examination has been completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.

## 13. Bond Coverage:

- a. Nationwide Lease Bond #B005997, written with U.S. Specialty Insurance Co.
- b. Statewide Bond #B006211, written with U.S. Specialty Insurance Co. and specific to Lea and Eddy Counties.

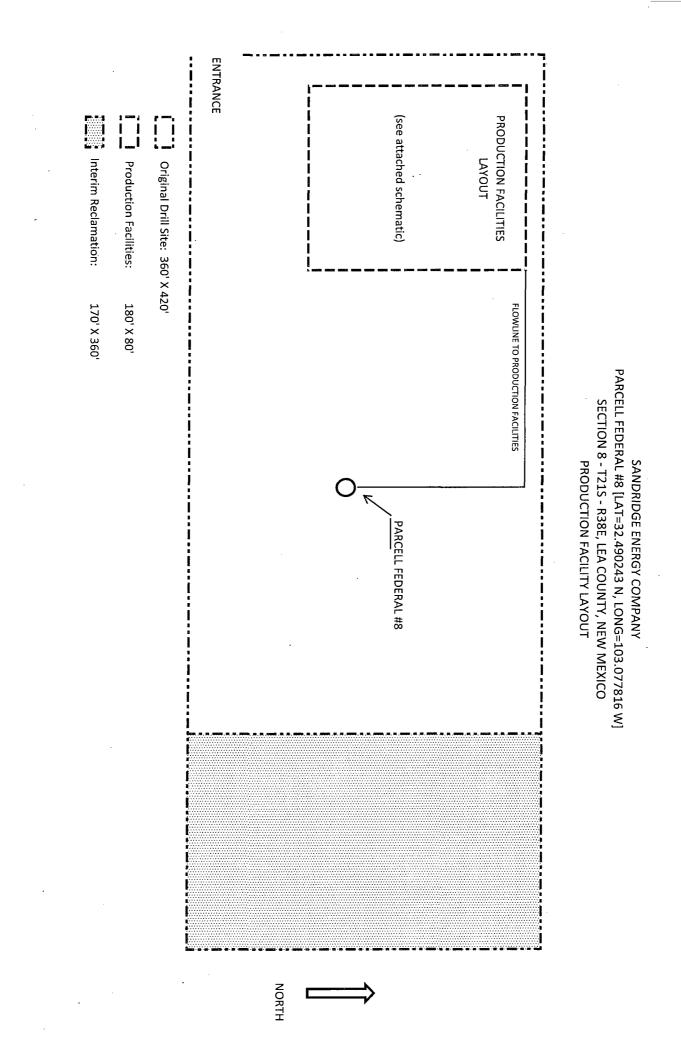


Prepared by: Terry L. Reeves



SANDRIDGE ENERGY COMPANY

13 JUN 2011



## **OPERATOR'S REPRESENTATIVE:**

SandRidge Exploration and Production, LLC, representatives responsible for ensuring compliance of the surface use plan are listed below:

Greg Rowe Operations Manager 123 Robert S. Kerr Ave. OKC OK 73102-6406 Raul Rodriguez Completions Superintendent 1101 E. Pool Rd. Odessa TX 79766

(405) 429-6192 (office)

(432) 290-1392 (Cell)

## Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in the APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I or SandRidge Exploration and Production, LLC, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or SandRidge Exploration and Production, LLC, have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this \_\_\_\_\_ day of \_\_\_\_\_ Printed Name: Linda Guthrie

Signed Name: \_\_\_\_\_ Position Title: Regulatory Manager Address: 123 Robert S. Kerr Ave., OKC OK 73102-6406 Telephone: (405) 429-6085

## Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS SandRidge Exploration and Production, LLC **Parcell Federal #8** 1485' FSL, 1375' FEL, Unit J, Sec 8, 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.

From: Sent: To: Subject: Spence Laird [slaird@sandridgeenergy.com] Thursday, December 01, 2011 6:17 AM Jones, William V., EMNRD RE: Non-standard location applications from Sandridge E&P, LLC: Parcell Federal #8 and Elliot Federal #4

Mr. Jones:

These locations are being built NSL due to the surrounding topography and potential Sand Dune Lizard or Lesser Prairie Chicken Habitat. Sandridge looked for areas that may have been previously disturbed or would lessen the new disturbance of potential habitat from the construction of these new well pads. If you would like further clarification please don't hesitate to contact me at your earliest convenience.

Best Regards,

Spence Laird

From: Karen Sharp
Sent: Thursday, December 01, 2011 6:50 AM
To: Spence Laird; Jones, William V., EMNRD
Subject: FW: Non-standard location applications from Sandridge E&P, LLC: Parcell Federal #8 and Elliot Federal #4

Hey Will ~

I did have a nice holiday, thank you. Hope yours was good as well. Spence Laird is now handling the New Mexico wells, so I a copying him on this e-mail. I am sure he can fix you right up! Thanks for all you do!

Karen Sharp 405-429-5745 SANDRIDGE

"There are many things in life that will catch your eye, but only a few will catch your heart..pursue those.."

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Wednesday, November 30, 2011 5:56 PM
To: Karen Sharp
Subject: Non-standard location applications from Sandridge E&P, LLC: Parcell Federal #8 and Elliot Federal #4

Karen,

Hope thanksgiving was great for you.

6

Still seem to be missing the reasons these wells were spotted at these non-standard locations? We accept all sorts of reasons, i.e. Geological, Topographical, Avoiding pipelines, etc.

From:	Karen Sharp [ksharp@sandridgeenergy.com]
Sent:	Monday, November 14, 2011 1:05 PM
To:	Jones, William V., EMNRD
Subject:	FW: Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-
	NA Wantz-Abo Pool Target

And here is the second response. We are in the process of amending the C102 and will submit that as well. Thank you!! Have a super day ~

ks

From: Joel Eilerts

Sent: Monday, November 14, 2011 1:51 PM

**To:** Terry Reeves; Karen Sharp

**Subject:** RE: Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-NA Wantz-Abo Pool Target

a. We acquired McElvair's interest as well as the other WI partners in these tracts. Our working interest in these tracts are 100%

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- b. We have 100% WI on all offsetting tracts, this is the same as our drillsite tract. V
- c. Don't know anything about this....seems like a regulatory issue.
- d. No idea, I had no input in the drillisite location.

JME

From: Terry Reeves
Sent: Monday, November 14, 2011 9:09 AM
To: Karen Sharp
Cc: Joel Eilerts
Subject: RE: Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-NA Wantz-Abo Pool Target

Same response as the last one. Joel??

Terry

Terry L. Reeves

Terry L. Reeves Sr. Operations Engineer

NDRIDGE THE POWER OF US

123 Robert S. Kerr Avenue Oklahoma City, OK 73102-6406 Office: 405-429-6328 Cell: 405-365-4827 Fax: 405-429-5978

"He paid a price He didn't owe because I owed a price I couldn't pay."

From:Jones, William V., EMNRDSent:Wednesday, November 30, 2011 4:56 PMTo:'Karen Sharp'Subject:Non-standard location applications from Sandridge E&P, LLC: Parcell Federal #8 and Elliot<br/>Federal #4

Karen,

Hope thanksgiving was great for you.

Still seem to be missing the reasons these wells were spotted at these non-standard locations? We accept all sorts of reasons, i.e. Geological, Topographical, Avoiding pipelines, etc.

Will

From: Joel Eilerts
Sent: Monday, November 14, 2011 1:51 PM
To: Terry Reeves; Karen Sharp
Subject: RE: Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-NA Wantz-Abo Pool Target

- a. We acquired McElvain's interest as well as the other WI partners in these tracts. Our working interest in these tracts are 100%
- b. We have 100% WI on all offsetting tracts, this is the same as our drillsite tract.
- c. Don't know anything about this....seems like a regulatory issue.
- d. No idea, I had no input in the drillisite location.

JME

From: Terry Reeves
Sent: Monday, November 14, 2011 9:09 AM
To: Karen Sharp
Cc: Joel Eilerts
Subject: RE: Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-NA Wantz-Abo Pool Target

Same response as the last one. Joel??

Terry

Terry L. Reeves

Terry L. Reeves Sr. Operations Engineer



123 Robert S. Kerr Avenue Oklahoma City, OK 73102-6406 "finitus non capio infinitus"

"Uncertainty will not rule our lives if our lives are dependent on our heavenly Father."

From: Karen Sharp
Sent: Monday, November 14, 2011 7:54 AM
To: Terry Reeves
Cc: Jones, William V., EMNRD; Spence Laird; Frank Guerrero
Subject: FW: Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-NA Wantz-Abo Pool Target

Here is the second request...

From: Jones, William V., EMNRD [mailto:William.V.Jones@state.nm.us]
Sent: Tuesday, November 08, 2011 2:56 PM
To: Karen Sharp
Cc: Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD
Subject: Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-NA Wantz-Abo Pool Target

Hello Karen,

For this proposed vertical well to be drilled to 8100 feet....The well encroaches on Units I, O, and P and I see that McElvain is an old operator in our records for at least two of those Unit letters. And there does not appear to be any Wantz-Abo oil wells in any of those Unit letters – so no "operators of record" actually exist in those three Unit letters.

- a. Does Sandridge now control the minerals in those Unit letters? Is McElvain still involved?
- b. Our notice requirement on NSL's drills down to the working interest owner level but not below that. That means if Sandridge controls those lands, then notice still should be sent to the working interest partners of Sandridge - but not if the working interests are identical (same owners in the same percentages) between the Unit letter J and the offsetting "affected" Unit letter. Please let me know about each of those three Unit letters separately.
- c. The form C-102 for Unit letter J showing the Wantz-Abo Pool should show all wells completed in that pool our records show that there is at least one other well on that Unit letter J operated by Sandridge. Please send a new C-102 showing any existing wells in that spacing unit along with the proposed well.
- d. The proposed well is being drilled at a non-standard location. Why did Sandridge pick this location instead of a standard one?

Will Jones

William V Jones, P.E. Engineering, Oil Conservation Division 1220 South St. Francis Drive, Santa Fe, NM 87505 Tel 505.476.3448 ~ Fax 505.476.3462



From: Sent: To: Cc: Subject:	Jones, William V., EMNRD Tuesday, November 08, 2011 1:56 PM 'Karen Sharp' Ezeanyim, Richard, EMNRD; Brooks, David K., EMNRD Non-standard location application from Sandridge E&P, LLC: Parcell Federal #8 30-025-NA Wantz-Abo Pool Target				
Tracking:	Recipient	Read			
	'Karen Sharp'				
	Ezeanyim, Richard, EMNRD	Read: 11/8/2011 2:03 PM			
	Brooks, David K., EMNRD				

Hello Karen,

Nice to see you are still around!

I rarely do NSL's so please bear with me on the requests and questions.

For this proposed vertical well to be drilled to 8100 feet....The well encroaches on Units I, O, and P and I see that McElvain is an old operator in our records for at least two of those Unit letters. And there does not appear to be any Wantz-Abo oil wells in any of those Unit letters – so no "operators of record" actually exist in those three Unit letters.

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d. The proposed well is being drilled at a non-standard location. Why did Sandridge pick this location instead of a standard one?

... and watch out for the earthquakes!!

Will Jones

William V Jones, P.E. Engineering, Oil Conservation Division 1220 South St. Francis Drive, Santa Fe, NM 87505 Tel 505.476.3448 ~ Fax 505.476.3462



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