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OCD-H	(ato LJO		H	TS-08-444
Form 3160-3 (April 2004)	925	•	FORM API OMB No. 1	004-0137
IIII N 2 2008 UNITED STATE DEPAREMENT OF THE	INTERIOR		Expires Man 5 Lease Serial No. NMNM-116168	ch 31, 2007
HOBAPPLICATION FOR PERMIT TO	NAGEMENT		6. If Indian, Allotee or	Tribe Name
la. Type of work: 🖌 DRILL REEN	TER		7 If Unit or CA Agreem EK Penrose Sand	<u> </u>
lb. Type of Well: 🖌 Oil Well 🔲 Gas Well 🗍 Other	Single Zone Mult	iple Zone	8. Lease Name and We	
2. Name of Operator Seely Oil Company	20497	$\mathbf{b}$	9 API Well No. 30-02	5-39098
3a. Address 815 W. 10th St. Ft. Worth, TX 76102	3b Phone No. (include area code) (817) 332-1377		10 Field and Pool, or Exp EK Yates, Seven	
<ul> <li>4. Location of Well (Report location clearly and in accordance with At surface</li> <li>At surface</li> <li>At proposed prod. zone</li> <li>same</li> </ul>	any State requirements third M	Lot4	11. Sec., T. R. M. or Blk. Sec. 19-T18S-R3	·
<ul> <li>14 Distance in miles and direction from nearest town or post office*</li> <li>30 miles NW of Hobbs, NM</li> </ul>			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)	<ul><li>16 No. of acres in lease</li><li>280</li></ul>	17. Spacin 40	ng Unit dedicated to this wel	11
<ul> <li>18 Distance from proposed location*</li> <li>to nearest well, drilling, completed,</li> <li>applied for, on this lease, ft</li> <li>437'</li> </ul>	19 Proposed Depth <b>4,900'</b>	20 BLM NM-	/BIA Bond No. on file 1816	
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3940' GL	22 Approximate date work will st 06/09/2008	art*	23. Estimated duration 4 - 6 weeks	
	24. Attachments			
<ol> <li>The following, completed in accordance with the requirements of Onsl</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Syste SUPO shall be filed with the appropriate Forest Service Office)</li> </ol>	4 Bond to cover Item 20 above) m Lands, the 5 Operator certif	the operation ication e specific inf	his form: ons unless covered by an ex formation and/or plans as m	Ŭ .
25 Signature	Name (Printed/Typed) George R. Smith		D	Pate
Title Agent for Seely Oil Company			<u> </u>	5/19/08
Approved by (Signature) /s' James A. Amos	Name (Printed Typed) /s/ Jan Office CARLSBAD FI	nes A.		JUN 2 7 2008
When the application approval does not warrant or certify that the applicant he conduct operations thereon. Conditions of approval, if any, are attached.	olds legal or equitable title to those rig		bject lease which would ent	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations	crime for any person knowingly and as to any matter within its jurisdiction.			
*(Instructions on page 2)	nty Controlled Water Basin		······	······································
Lease Responsibility Statement: Seely Oil C restrictions concerning operations conducted o	company accepts all applicab	le terms, thereof.	conditions, stipulati	ons and

SEE ATTACHED FOR CONDITIONS OF APPROVAL Approval Subject to General Requirements & Special Stipulations Attached

DISTRICT I 1885 N. French Dr., Hobbe, NM & DISTRICT II 1301 W. Grand Avenue, Artesia, N DISTRICT III 200 Rio Brazos Rd., Aztec, DISTRICT IV	M 88210			SERVAT	ew Mexico al Resources Departs ION DIVIS . Francis Dr. Mexico 87505	SION	For Revised Octobe Appropriate Dis State Lease Fee Lease	trict Office – 4 Copies
1220 S. St. Francis Dr., Santa Fe		WELL LO	CATION	AND ACRE	EAGE DEDICAT	BBS O		) REPORT
API Number		1	Pool Code	1950	EK; Yates	Pool Name -Seven River	s-Queen	
Property Code			EK f	Property No PENROSE S	AND UNIT		Well N 10	)1
ogrid No. 20497		Mal Marca Strategy	SE	Operator No ELY OIL CO	OMPANY		Eleva 394	
				Surface Lo	cation			
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		Bottom	Hole Lo	cation If Dif	ferent From Su	face		
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Dedicated Acres Joint 40	or Infill Co	nsolidation	Code Or	der No.		<b></b>		
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NM-116168	 					I hereby ce contained herei the best of my this organization interest or unle land including location pursus of such a miner a voluntary pool the division.	Seely 011 OR CERTIFICAT that the well locat as plotted from field made by me or at that the same is e best of my belie RCH 4, 200	action lete to and that in the an owner st, or to entered by <u>116/08</u> Date <u>CO.</u> CO.
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In conjunction with Form 3160-3, Application for Permit to Drill subject well, Seely Oil Company submits the following items of pertinent information in accordance with BLM requirements:

- 1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

Rustler	1,692'	7-Rivers	3,670'
Top of Salt	1,839'	Queen	4,428'
Base of Salt	3,,027'	Penrose	4,697'
Yates	3,229'	T.D.	4,900'

- 3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:
  - Water: Surface water in the Triassic between 50' 230'.
  - Oil: Possible in the Queen below 4,428'
  - Gas: None expected.

### 4. Proposed New Casing Program:

	HOLE	CASING	WEIGHT	GRADE	JOINT	SETTING	COLLAPSE	BURST	TENSION
	SIZE	SIZE				DEPTH	DESIGN	DESIGN	DESIGN
							FACTOR	FACTOR	FACTOR
SEE COA	12 1/4"	8 5/8"	24.0#	J-55	ST&C	1-7-10-1780	2.28	3.69	6.73
JEE	7 7/8"	5 1/2"	15.5	J-55	LT&C	4,900'	2.26	2.10	2.38
•									

### 5. Cement Program

CASING	SETTING DEPTH	QUANITY OF CEMENT	YEILD
8 5/8"	1,710'	Circulate 600 sx "C"	1.39
5 1/2"	4,900'	400 sx H/Lite + 300 sx Premium Pozmix	1.2
		TOC = 1500'	

### 6. Proposed Control Equipment: See Exhibit "E":

### BOP Program:

A 10" 3000 psi wp Cameron Space Saver, double ram BOP, will be installed on the 8 5/8" casing and used as a 2000 psi wp system. Casing and BOP will be tested as described in Onshore Order No. 2 before drilling out with 7 7/8". The pipe rams will be operated and checked daily, plus each time drill pipe is out of hole. This will be documented on driller's log. See Exhibit "E".

### SEELY OIL COMPANY

E-K Penrose Sand Unit, Well No. 101 Page 2

### 7. Mud Program

	MUD PE	ROGRAM	MUD WEIGHT	VIS.	W/L CONTROL
	DEPTH	MUD			
	0-1.7.10 1780	Fresh water mud	9.3 ppg	33	No W/L control
1780'	1710"4000'	Brine mud	10.0 ppg	33	No W/L control
	4000' - 4900'	Cut Brine mud w/gel	10.0 ppg	34	W/L control 10cc +/-

8. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock,.

### 9. Testing, Logging, and Coring Program:

 Drill Stem Tests:
 None unless warranted.

 Logging:
 T.D. to 1615':
 G/R-Density Neutron, Dual Induction Log

 1615' to surface:
 G/R, Neutron

 Coring:
 None planned unless warranted.

- 10. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, the proposed mud program will be modified to increase the mud weight. Estimated (evac) BHP=2242 surface pressure = 1164 psi (part. evac. hole) with BH temperature of 109<sup>°</sup>.
- 11. H<sub>2</sub>S: None expected. None in previously drilled wells, but the Mud Log Unit will be cautioned to use a gas trap to detect H<sub>2</sub>S and if any is detected the mud weight will be increased along with H<sub>2</sub>S inhibitors sufficient to control the gas.
- 12. Anticipated starting date: June 9, 2008. Anticipated completion of drilling operations: Approx. 4 – 6 wks

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EXHIBIT "E" SEELY OIL COMPANY EK Penrose Sand Unit, Well No. 101 BOP Specifications



Seely Oil Company

.... m n 7008

# H2S DRILLING OPERATIONS PLAN

### I. HYDROGEN SULFIDE TRAINING

All key personnel whether regularly assigned, contracted or employed on an unscheduled basis will receive or represent that they have received training in accordance with the general training requirements outlined in the API RP49 for safe drilling of wells containing hydrogen sulfide, Section 2.

In addition, supervisory personnel will be trained in the following areas:

- 1. The corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention in well control procedures.
- The contents and requirements of the H<sub>2</sub>S drilling operations plan. 2.

# II. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS

Note: All H<sub>2</sub>S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500' above the first zone containing or reasonably expected to contain 100 ppm or more hydrogen sulfide.

### 1. Well Control Equipment:

- Choke manifold with a minimum of one choke. a.
- Blind rams and pipe rams and pipe rams to accommodate all drill pipe sizes with a properly sized Ь. closing unit.
- Protective Equipment: 2.
  - Proper protective breathing apparatus shall be readily accessible to all essential personnel on the a. drill site.
- H<sub>2</sub>S and Monitoring Equipment: 3.
  - Three portable H<sub>2</sub>S monitors positioned on location for best coverage and response. These units a. have warning lights and audible sirens.

#### **Visual Warning Systems:** 4.

- Wind direction indicators as shown on well site diagram. a.
- Caution/Danger signs shall be posted on roads providing direct access to location. b.

### Seely Oil Company.

### Page 2

- 5. Mud Program:
  - a. The mud program has been designed to minimize the volume of  $H_2S$  circulated to the surface. Proper mud weight and safe drilling practices will minimize hazards when penetrating possible  $H_2S$  bearing zones.
- 6. Communications:
  - a. Cell phone communication available in all vehicles and at the drilling site.
- 7. Well Testing:
  - a. Drillstem testing, if required, will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. When drillstem testing intervals known to or reasonably expected to contain 100 ppm or more H<sub>2</sub>S, the drillstem test will be conducted during daylight hours and formation fluids will not be flowed to the surface.

HOBBS OCD

### Hobbs, Lea County, New Mexico

911
911 or 575 392-5580
911 or 575 396-3611
911 or 575 397-9308
575 393-2870
575 393-6161

### Carlsbad, Eddy County, New Mexico

Ambulance	911
State Police	911 or 575 885-3138
Sheriff's Department	911 or 575 887-7551
Fire Department	911 or 575 885-3125
Local Emergency Planning Committee	575 887-7553
Bureau of Land Management	575 887-6544
New Mexico Oil Conservation Division (Artesia)	575 748-1283

### **Statewide and National Emergency Numbers**

New Mexico Department of Homeland Security	
And Emergency Management	505 476-9600
New Mexico State Emergency Operations	
Center (24 Hour Number)	505 476-9635
National Emergency Response Center	800 424-8802

### **Other Numbers for Emergency Response**

Boots & Coots IWC Cudd Pressure Control MCH Care Star Flight Service (air ambulance) Aerocare (air ambulance) 800 256-9688 or 281 931-8884 432 563-3356 432 640-4000 <u>806 725-1111</u>



## MULTI POINT SURFACE USE AND OPERATIONS PLAN

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172 3-8 mg

SEELY OIL CO. E-K Penrose Sand Unit, Well No. 101 330 FSL & 330' FWL, Sec. 19-T18S-R34E Lea County, New Mexico Lease No.: NMNM-116168 (Development Well)





This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, to be followed in rehabilitating the surface environmental effects associated with the operations.

### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a USGS/BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 53 road miles southeast of Artesia, New Mexico or 30 road miles northwest of Hobbs, NM. Traveling east from Artesia there will be approximately 50 miles of paved highway and 2 miles of gravel oilfield road.
- B. Directions: Travel east from Artesia, NM on U.S. Highway 82 for approximately 34 miles; turn southeast on NM Highway 529 for approximately 16.8 miles. Turn south .8 mile east of MM 16 at a cattle guard onto an oil field road with Oryx and Baber signs. Continue south for 1.15 miles to a "Y" in the road: take left hand road for .6 mile to a crossroad. Turn west for .2 mile to an injection well site. The proposed access road will start on the southwest corner of this well pad and run 184 feet to the southwest corner of the proposed well site.

### 2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be approximately 184 feet in length. The proposed access road is color coded red on Exhibit "A".
- B. Construction: The proposed access road will be constructed by grading and topping with compacted caliche and will be properly drained. Grading, topping and compacting with additional caliche, as needed, will repair the existing access road.
- C. Turnouts: One turnout may be required on the existing access road.
- D. Culverts: None required.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: No cattle guard will be required.
- G. Off Lease R/W: None required.

### 3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two-mile radius are shown on Exhibit "C".

### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. There are oil production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas production-process equipment will be installed on the drilling pad.



SEELY OIL CO. EK Penrose Sand Unit, Well No. 101 Page 2



### 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing access roads or by surface fast line.

### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the proposed access road and well site pad will be obtained on location, if available, or from a Federal pit in the SW¼NW¼ of Section 18-T18S-R34E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in a closed mud system to be hauled to a disposal site.
- B. Drilling fluids will be trucked away to a disposal site.
- C. No pits will need to be fenced.
- D. Water produced during operations will be collected in tanks and then by pipeline to a disposal injection well.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

### 8. ANCILLARY FACILITIES:

A. None required.

## 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components.
- B. Mat Size: 240' X 175', plus 100' X 64' working area for the closed mud system on the north/ northeast.
- C. Cut & Fill: A cut of 1-1.5 feet on the north with fill to the south and west.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

SEELY OIL CO. EK Penrose Sand Unit, Well No. 101 Page 3

### 10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. The location will be cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible
- B. There will be no unguarded pits containing fluids..
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to work after abandonment.

#### 11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road is located in the Querecho Plains on the southwest slope of the Mescalero Ridge (Caprock). The location has a southwesterly slope of 1.7% from an elevation of 3946'.
- B. Soil: The topsoil at the well site is a light brown, non-calcareous fine sandy loam of the Pyote and Maljamar fine sands soils series.
- C. Flora and Fauna: The vegetation cover is a poor to fair grass cover of three-awn, bluestem, sand and spike dropseed, fluff grass, and other miscellaneous native grasses along with plants of mesquite, yucca, shinnery oak brush, sage, broomweed, cacti and miscellaneous weeds and wildflowers. The wildlife consists of antelope, rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None in area.
- E. Residences and Other Structures: There are no structures other than oilfield tanks, pump jacks and other oilfield equipment.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road are on Federal surface.
- H. There is no evidence of archaeological, historical or cultural sites on the well site. There is a small site south of the well pad area, but will not be impacted. Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202 are conducting an archaeological survey and their report will be submitted to the appropriate government agencies.





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SEELY OIL CO. EK Penrose Sand Unit, Well No. 101 Page 4

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### **12. OPERATOR'S REPRESENTATIVE:**

A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

David Henderson SEELY OIL CO. 815 W. 10th St. Ft. Worth, TX 76102 Office Phone: (817) 332-1377

# RELIEIVED

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### SEELY OIL CO. EK Penrose Sand Unit, Well No. 101

### **CERTIFICATION:**

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I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Seely Oil Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

May 16, 2008

A. Amitte

George R. Smith Agent for: Seely Oil Co.







District 1 -1625 N French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S St Francis Dr., Santa Fe, NM 87505

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State of New Mexico Energy Minerals and Natural Resources

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

ade Tank Registration or Closi	
ank covered by a "general plan"? Yes [] N it or below-grade tank x Closure of a pit or below-gr	No X rade tank
phone: (817) 332-1377	e-mail address
Below-grade tank	
Volumebbl Type of fluid	·····
Construction material:	
Double-walled, with leak detection? Yes 🗌 If	not, explain why not
Less than 50 feet	(20 points)
50 feet or more, but less than 100 feet	(10 points)
100 feet or more	(0 points) -0-
Yes	(20 points)
No	( 0 points) -0-
Less than 200 feet	(20 points)
200 feet or more, but less than 1000 feet	(10 points)
1000 feet or more	( 0 points) -0-
Ranking Score (Total Points)	-0-
it's relationship to other equipment and tanks (2) Ind	licate disposal location
(3) Attach a general description of remedial	action taken including remediation start date and
oth below ground surfaceft and attack	h sample results. (5) Attach soil sample results and
of my knowledge and belief. I further certify that t a general permit , or an (attached) alternative	OCD-approved plan [].
Signature	Egek. Smith
not relieve the operator of liability should the contents he operator of its responsibility for compliance with a	s of the pit or tank contaminate ground water or
Signature	
	III N Z 2003
	RRS OCD
	ank covered by a "general plan"? Yes    tor below-grade tank x Closure of a pit or below-gr   ahone: (817) 332-1377

Form C-144 March 12, 2004

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Seely Oil Company
LEASE NO.:	NM-116168
WELL NAME & NO.:	EK Penrose Sand Unit #101
SURFACE HOLE FOOTAGE:	330' FSL & 330' FWL
BOTTOM HOLE FOOTAGE	,
LOCATION:	Section 19, T. 18 S., R 34 E., NMPM
COUNTY:	Lea County, New Mexico

# **TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions Permit Expiration	
🔀 Archaeology, Paleontology, and Historical Sites	
☐ Noxious Weeds ⊠ Special Requirements	
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Lesser Prairie Chicken	
Sand Dune Lizard	
Cultural	
Construction	
Notification	
Topsoil	
Reserve Pit	
Federal Mineral Material Pits	
Well Pads	
Roads	
Road Section Diagram	
⊠ Drilling	
Production (Post Drilling)	
Well Structures & Facilities	2
Interim Reclamation	
Final Abandonment/Reclamation	
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# I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

# **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

# **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

# **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.





# V. SPECIAL REQUIREMENT(S)

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Timing Limitation Stipulation/Condition of Approval for Lesser Präirie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1 through June 15 annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.



## EXHIBIT NO. <u>1</u>

Bureau of Land Management, Carlsbad Field Office 620 E. Greene Street Carlsbad, NM 88220

Cultural and Archaeological Resources

Date of Issue: 6/26/2008

BLM Report No. \*

# NOTICE OF STIPULATIONS

<u>Historic properties</u> in the vicinity of this project are protected by federal law. In order to ensure that they are not damaged or destroyed by construction activities, the project proponent and construction supervisors shall ensure that the following stipulations are implemented.

Project Name:	EK Penrose Sand Unit Federal Well No. 101					
REQUIRED	<u>1). A 3-day preconstruction call-in notification.</u> Contact BLM Inspection and Enforcement at (505) 234- 5977, 5909, or 5995, to establish a construction start date.					
REQUIRED	2. Professional archaeological monitoring. Contact your project archaeologist, or BLM's Cultural Resources Section at (505) 234-5980, 5917, or 5986, for assistance.					
A. 🖂	These stipulations must be given to your monitor at least 5 days prior to the start of construction.					
B. 🖂	No construction, including vegetation removal or other site prep may begin prior to the arrival of the monitor.					
NO	3. Cultural site barrier fencing. (Your monitor will assist you).					
A. 🗌	<u>A temporary site protection barrier(s)</u> shall be erected prior to all ground-disturbing activities. The minimum barrier(s) shall consist of upright wooden survey lath spaced no more than ten (10) feet apart and marked with blue ribbon flagging or blue paint. There shall be no construction activities or vehicular traffic past the barrier(s) at any time.					
В. 🗌	A permanent, 4-strand barbed wire fence strung on standard "T-posts" shall be erected prior to all ground-disturbing activities. No construction activities or vehicle traffic are allowed past the fence.					

•	4. The archaeological monitor shall:					
A. 🗌	Ensure that all site protection barriers are located as indicated on the attached map(s).					
<b>B.</b> 🔀	Observe all ground-disturbing activities within 100 feet of cultural site no. (s) <u>LA45332 and LA159507</u> , as shown on the attached map(s).					
C. 🗌	Ensure that all reroutes are adhered to avoid cultural site no.(s) LA					
D. 🗌	Ensure the proposed is/are located as shown on the attached map(s).					
E. 🖂	Submit a brief monitoring report within 30 days of completion of monitoring.					
Other:	- -					

<u>Site Protection and Employee Education</u>: It is the responsibility of the project proponent and his construction supervisor to inform all employees and subcontractors that cultural and archaeological sites are to be avoided by all personnel, vehicles, and equipment; and that it is illegal to collect, damage, or disturb cultural resources on Public Lands.

For assistance, contact BLM Cultural Resources:

Martin Stein (575) 234-5980 George MacDonell (575) 234-2228

Bruce Boeke (575) 234-5917

James Smith (575) 234-5986

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Exhibit 2 – Map of Areas to Monitor

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# VI. CONSTRUCTION

## A. NOTIFICATION



The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

## B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 8 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

## C. RESERVE PITS

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

## D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

## E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

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#### **ON LEASE ACCESS ROADS** F.

### **Road Width**

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NDDC A The access road shall have a driving surface that creates the smallest possible disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

### Ditching

Ditching shall be required on both sides of the road.

### **Turnouts**

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

### **Standard Turnout – Plan View**





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### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low vater) (

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.



**Cross Section of a Typical Lead-off Ditch** 

All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 400' + 100' = 200' lead-off ditch interval 4%

### **Culvert Installations**

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

### Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for

the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

### Fence Requirement

Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.



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Figure 1 – Cross Sections and Plans For Typical Road Sections

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VII. DRILLING



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# I. DRILLING

# A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

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

 Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 393-3612

- 1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the <u>Yates</u> formation. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

## B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

## Possible lost circulation in the Grayburg & San Andres Possible H2O/brine flows in the Salado & Artesia Group

- 1. The <u>8-5/8</u> inch surface casing shall be set at approximately <u>1780</u> feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. Fresh water mud to be used to casing set point.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 5-1/2 inch production casing is:

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

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

# C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.





- 2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

## **D. DRILL STEM TEST**

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

## LB 6/25/08

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# **II. PRODUCTION (POST DRILLING)**

## A. WELL STRUCTURES & FACILITIES

### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color Shale Green, Munsell Soil Color Chart # 5Y 4/2



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# **III. INTERIM RECLAMATION & RESERVE PIT CLOSURE**

## A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.



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## Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

Species lb/acre Plains Bristlegrass 5lbs/A 111 0.2 2002 Sand Bluestem 5lbs/A Little Bluestem 3lbs/A RRS () M Big Bluestem 6lbs/A Plains Coreopsis 2lbs/A Sand Dropseed 1lbs/A

\*\*Four-winged Saltbush

5lbs/A

\* This can be used around well pads and other areas where caliche cannot be removed.

\*Pounds of pure live seed:

Pounds of seed  $\mathbf{x}$  percent purity  $\mathbf{x}$  percent germination = pounds pure live seed

(Insert Seed Mixture Here)

# X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.



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	UNITED STATES DEPARTMENT OF THE INTERIOR		OCD-1	ОМВ	OMB No 1004-0137 Expires: July 31, 2010	
BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.				5. Lease Serial No. NMNM-116168 6 If Indian, Allottee or Tribe Name		
SUBMIT	IN TRIPLICATE – Other inst		7. If Unit of CA/Agreement, Name and/or No EK Penrose Sand Unit #101			
1. Type of Well				8. Well Name and No		
2 Name of Operator	ell Other			9. API Well No 30 - 02	5 - 39098	
Seely Oil Company 3a Address 815 W 10th St Ft Worth, TX 76102	3b. Phone No (include area code) 817-332-1377			10. Field and Pool or Exploratory Area EK Yates-Seven Rivers-Queen		
Ft Worth, 1X 76102     017-532-1377       4 Location of Well (Footage, Sec., T.R., M., or Survey Description)       330' FSL & 330' FWL       Sec 19-1185-R34E				11. Country or Parish, State Lea County, New Mexico		
12. CHEC	K THE APPROPRIATE BOX(E	S) TO INDICATE NATU	RE OF NOTIO	CE, REPORT OR OTHER	DATA	
TYPE OF SUBMISSION	l	Т	YPE OF ACT	ION		
Notice of Intent	Acidıze	Deepen Fracture Treat		uction (Start/Resume) amation	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair	New Construction		omplete	Other	
Final Abandonment Notice	Change Plans	Plug and Abandon Plug Back		porarıly Abandon er Dısposal		
In a recently approved Authority for This csg is becoming difficult to find 1/2" 23 lb/ft P-110 that is currently b defects or weaknesses.	r final inspection.) a Permit to Drill (APD), Seely and cannot be guaranteed to	Oil Company (Seely) pr be available when the v	oposed settir vell is drilled t	ng and cementing new 5 to TD. Seely is proposir	1/2" 15.5 lb/ft J-55 csg to 4900'. Ig to run and cement used 5	
	JUI 2 4 2008		SEE	E ATTACHEL	) FOR	
anse	IOBBS O(		CO	NDITIONS O	F APPROVAL	
14. I hereby certify that the foregoing is t	rue and correct Name (Printed/Ty	ped)				
David L. Henderson		Title Execu	Title Executive Vice President			
Signature and I	Chileson	Date 07/14	/2008			
	THIS SPACE FO	OR FEDERAL OR S	STATE OF	FICE USE AF	PROVED	
Approved by Conditions of approval, if any, are attache that the applicant holds legal or equitable entitle the applicant to conduct operations	title to those rights in the subject le	t warrant or certify ase which would Office	* . *		INL 2 2 2008	
Title 18 U S C. Section 1001 and Title 43 fictitious or fraudulent statements or repr	U.S.C. Section 1212, make it a cri	me for any person knowingl its jurisdiction	y and willfully	to make to any depathent	ROLE W ENGINESTERS any LISE,	

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## E K Penrose Sand Unit 101 Seely Oil Company July 22, 2008 Conditions of Approval

The certification for the used casing showing the results of the test and inspection are to be submitted for review prior to spudding the well to verify that the casing will meet the requirements in Onshore Order 2.III.B.1.a.

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