

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

OCD-ARTESIA

Month - Year  
MAR - 5 2007  
OCD - ARTESIA, NMFORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 013814
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator RSC Resources limited Partnership		7. If Unit or CA Agreement, Name and No.
3a. Address 6824 Island Circle Midland, Tx 79707		8. Lease Name and Well No. 36355 Wolf Pack "1" Federal Com # 1
3b. Phone No. (include area code) 432-553-1849		9. API Well No. 30-015-35465
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 860' FNL & 660' FEL At proposed prod. zone Roswell Controlled Water Basin		10. Field and Pool, or Exploratory Henshaw, SW; Morrow
11. Sec., T. R. M. or Blk. and Survey or Area Sec 1, T17S, R29E		12. County or Parish Eddy
13. State NM		14. Distance in miles and direction from nearest town or post office* 3 miles North of Loco Hills
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	660'	16. No. of acres in lease 320 after Communitizing
17. Spacing Unit dedicated to this well	N/2	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
200' (shallow prod)	19. Proposed Depth 11,000'	20. BLM/BIA Bond No. on file NMB 000437
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3689' G.L.	22. Approximate date work will start* 07/01/2007	23. Estimated duration 40 days

## 24. Attachments

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

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

25. Signature	Name (Printed/Typed) RANDALL CATE	Date 1/19/07
Title PRESIDENT		
Approved by (Signature) /s/ James Stovall	Name (Printed/Typed) /s/ James Stovall	Date FEB 26 2007
Title ACTING FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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

\*(Instructions on page 2)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHEDSEE ATTACHED FOR  
CONDITIONS OF APPROVAL

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

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease- 4 Copies  
Fee Lease- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code <b>97149</b>	Pool Name <b>Henshaw; Morrow, SW</b>
Property Code	Property Name <b>WOLFPACK "1" FEDERAL</b>	Well Number <b>1</b>
OCRID No.	Operator Name <b>RSC RESOURCES, LIMITED PARTNERSHIP</b>	Elevation <b>3689'</b>

Surface Location

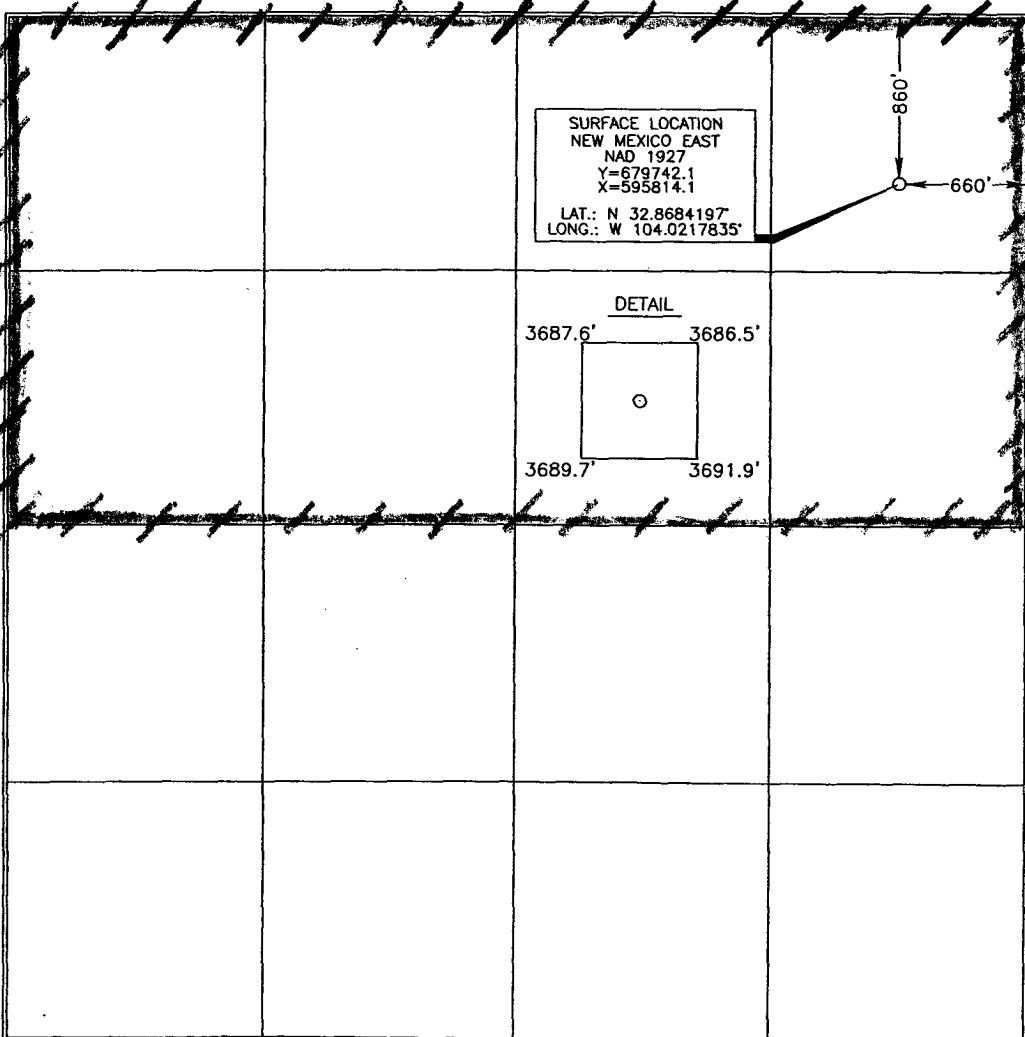
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	1	17 SOUTH	29 EAST, N.M.P.M.		860	NORTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <b>320</b>	Joint or Infill	Consolidation Code	Order No.
-------------------------------	-----------------	--------------------	-----------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*[Signature]* 1/19/07  
Signature Date

**RANDALL CATE**  
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of a duly surveyed made by me or under my supervision, and that the same is true and correct to the best of my belief.

DECEMBER 1, 2006  
Date of Survey

Signature and Seal of Professional Surveyor

*[Signature]* 12/5/06  
Certificate Number 15079

WO# 061201WL (LA)

**RSC Resources Limited Partnership**  
**Drilling and Operations Program**

Wolf Pack "1" Federal Com # 1  
860' FNL & 660' FEL  
Sec. 1, T17S, R29E, Eddy Co., NM

In accordance with Part 24 of Form 3160-3, Application For Permit To Drill, RSC Resources submits the following:

1. The geological surface formation is Permian.
2. The estimated tops of geologic markers are as follows:

Queen	2000	Wolfcamp	7450
San Andres	2750	Cisco	8800
Glorieta	4200	Strawn	10000
Tubb	5600	Atoka	10250
Abo	6300	Morrow	10750
		TD	11000

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

San Andres	2700'	Oil
Glorieta	4000'	Oil
Strawn	9900'	Gas
Morrow	10750'	Gas

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 400' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a float shoe joint into the 13 3/8 production casing which will be run at TD.

4. Proposed Casing Program:

Hole Size	Interval	OD Casing	Wt	Grade
17 1/2"	400	13 3/8"	48#	H-40 STC
12 1/4"	2700	9 5/8"	36#	J-55 STC
8 3/4"	11000'	5 1/2"	17#	P-110 STC

**Proposed Cement Program:**

13 3/8" Surface Casing: Cement w/ 400 sx Class C. Circulate to surface.

9 5/8" Intermediate Casing: Cement w/ 750 sx Class C. Circulate to surface.  
5 1/2" Production Casing: Cemented sufficient to cover 200' above all oil & gas horizons.

5. Pressure Control Equipment:

See Exhibit #1. RSC proposes to nipple up on the 13 3/8" casing with a 2M system, testing it to 1000# with rig pumps, then nipple up on the 9 5/8" casing with a 5M system, tested to 5000# before drilling out.

6. Mud Program: The applicable depths and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
400	Fresh Wtr (spud)	8.5	28	N.C.
2700	Brine	9.8-10.2	40-45	N.C.
11000	Cut Brine	8.6-9.4	28-36	N.C.

7. Auxiliary Equipment: Kelly Cock; Sub with full opening valve on floor; and drill pipe connections.

8. Testing, Logging and Coring Program:

No drillstem tests are anticipated.

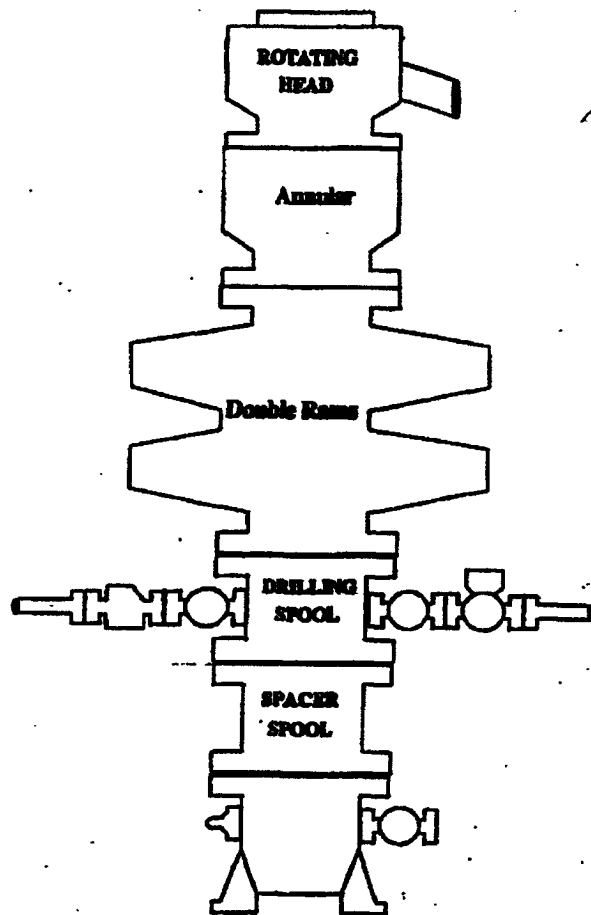
The electric logging program will consist of Dual Laterolog Micro SFL, Spectral Density Dual Spaced Neutron Csg Log, and Depth Control Log.

No conventional coring is anticipated.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated starting date: As soon as possible after approval.

# BOPE SCHEMATIC



Choke Manifold

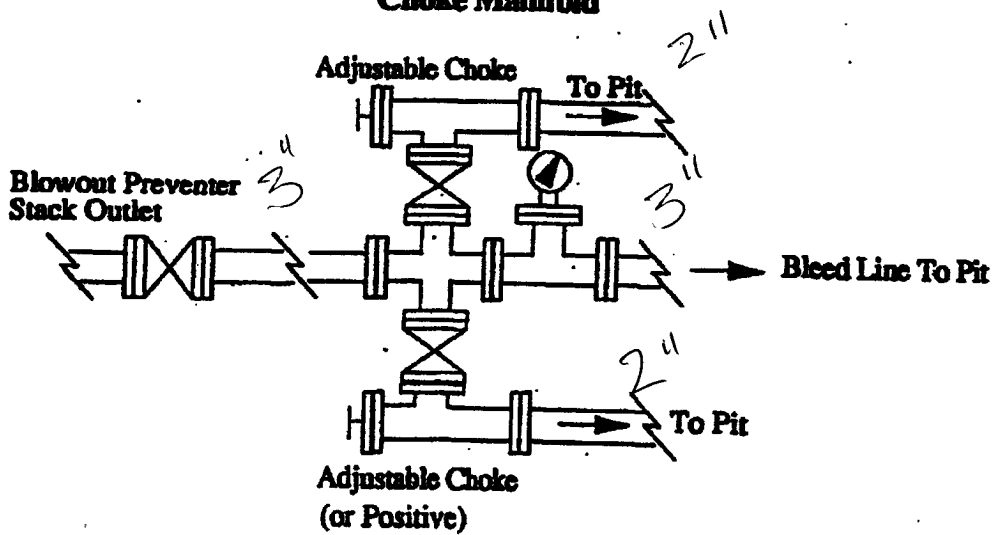
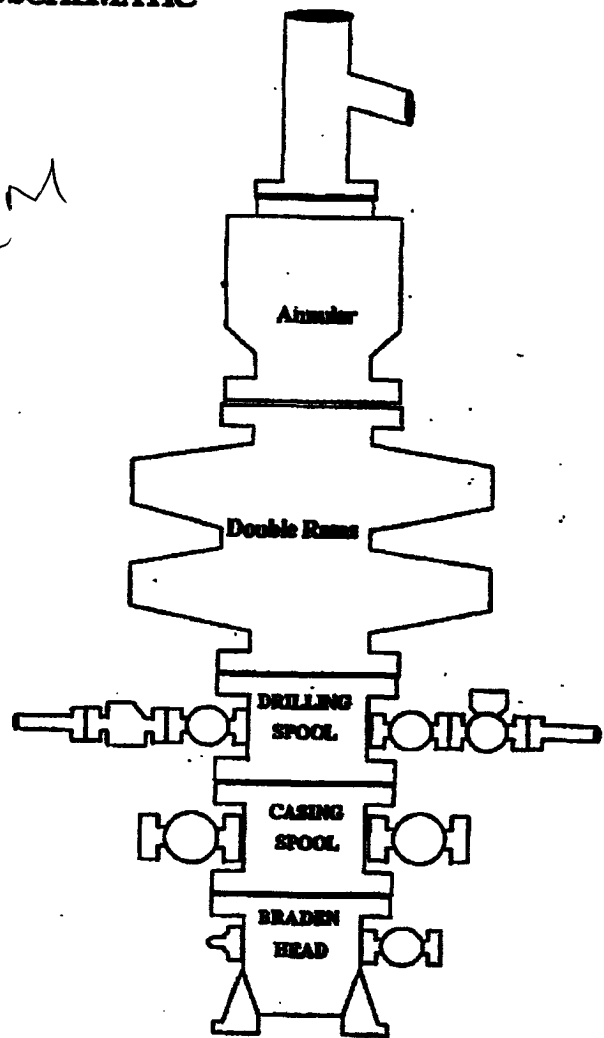
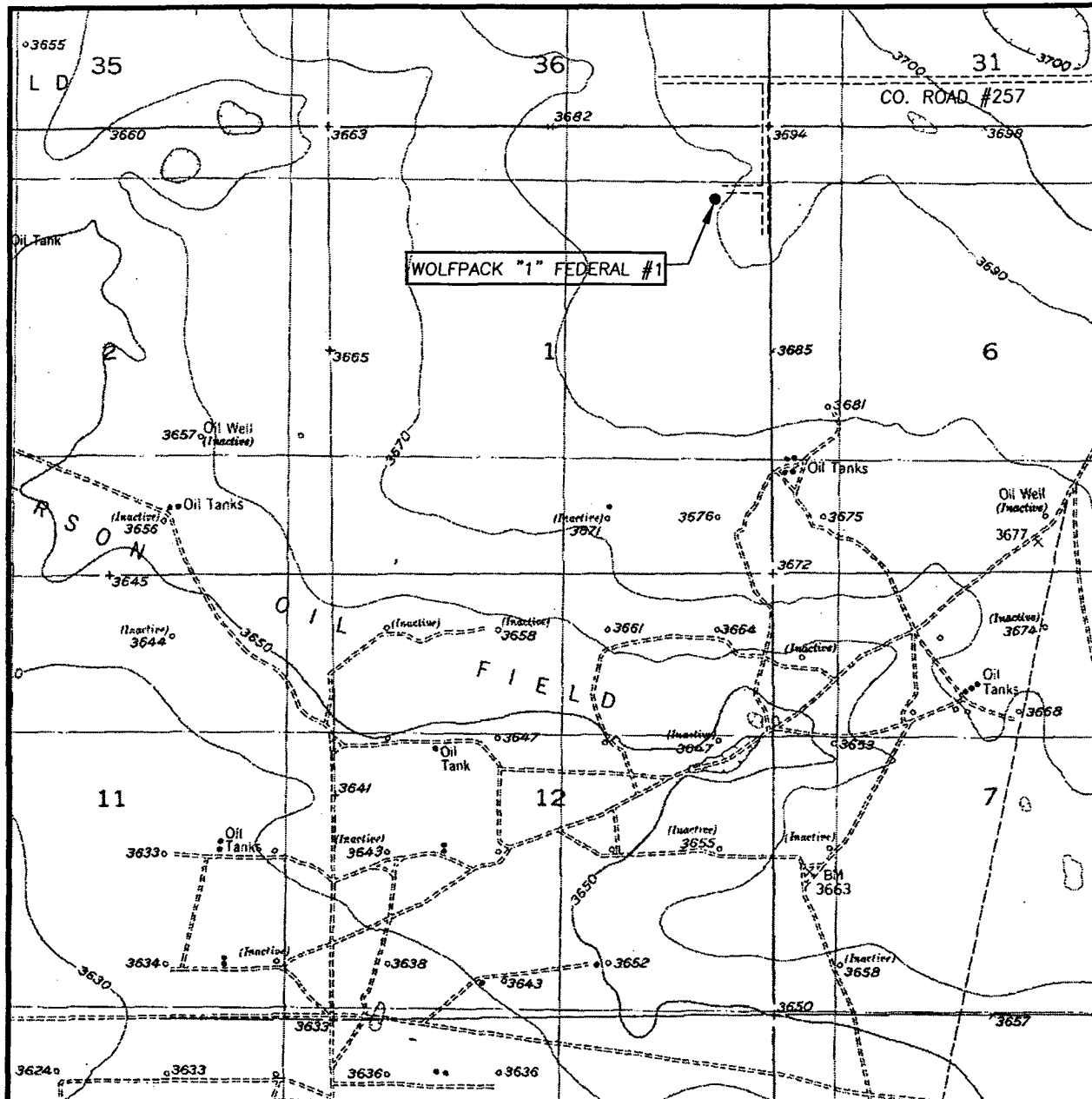


Exhibit One

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
RED LAKE SE, N.M. - 10'

SEC. 1 TWP. 17-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 860' FNL & 660' FEL

ELEVATION 3689

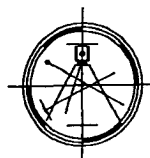
OPERATOR RSC RESOURCES,  
LIMITED PARTNERSHIP

LEASE WOLFPACK "1" FEDERAL #1

U.S.G.S. TOPOGRAPHIC MAP  
RED LAKE SE, N.M.

Asel Surveying  
& Consulting

P.O. BOX 393 - 310 W. TAYLOR  
HOBBS, NEW MEXICO - 505-393-9146



**RSC Resources Limited Partnership**  
**Surface Use Plan**

Wolf Pack "1" Federal Com # 1  
860' FNL & 660' FEL  
Sec. 1, T17S, R29E, Eddy Co., NM

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

**1. EXISTING ROADS:**

Exhibit 2 is a portion of a topo map showing the well and roads in the vicinity of the proposed location. The proposed wellsite and the access route to the location are indicated in red on Exhibit 2.

**DIRECTIONS:**

From Loco Hills at the intersection of Hwy 82 and County Rd 217, go north on 217 for 3.7 miles, turn west/left on County Rd 257(Mallett Rd) for 2 miles, turn south/left on lease road for 0.25 miles, turn west/right on lease road for 0.1 mile to location

**2. PLANNED ACCESS ROAD:**

An existing access road is already in place. The road is constructed as follows:

- A. The maximum width of the running surface will be 10'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low-water crossings, or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM-approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.
- F. The proposed access road as shown in Exhibit 2 has been centerline flagged by Asel Surveying and Consulting.

**RSC Resources Limited Partnership**

**HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**

**I. HYDROGEN SULFIDE TRAINING**

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- A. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S).
- B. The proper use and maintenance of personal protective equipment and life support systems.
- C. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- D. The proper techniques for first aid and rescue procedures.

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

- A. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- B. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- C. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.



## **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 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H<sub>2</sub>S.

### **A. Well Control Equipment:**

Flare line.

Choke manifold.

Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

### **B. Protective equipment for essential personnel:**

Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

### **C. H<sub>2</sub>S detection and monitoring equipment:**

2 - portable H<sub>2</sub>S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H<sub>2</sub>S levels of 20 ppm are reached.

### **D. Visual warning systems:**

Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

E. Mud Program:

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to the surface.

F. Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.

G. Communication:

Company vehicles equipped with cellular telephone and 2-way radio.

# **W A R N I N G**

**YOU ARE ENTERING AN H<sub>2</sub>S AREA  
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CK WITH RSC RESOURCES, L.P. MAIN OFFICE**

**RSC Resources Limited Partnership**

**1-432-553-1849**