

OCD-ARTESIA

D-06-45

RECEIVED

APR 27 2006

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 113934	
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 RUBICON OIL & GAS, LLC		7. If Unit or CA Agreement, Name and No.	
3a. Address 508 W Wall St STE 500 Midland, TX 79701		8. Lease Name and Well No. Twin Peaks 29 Federal #1	
3b. Phone No. (include area code) (432) 687-5100		9. API Well No. 30-015- 34823	
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface 890' FSL & 990' FWL, Unit Ltr M At proposed prod. zone Same		10. Field and Pool, or Exploratory Undesignated Springs Morrow	
14. Distance in miles and direction from nearest town or post office* 6 Miles South of Lakewood		11. Sec., T. R. M. or Blk. and Survey or Area Sec 29, T20-S, R-26-E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 890' FSL & 990' FWL	16. No. of acres in lease 480	17. Spacing Unit dedicated to this well 320	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1st Morrow Test	19. Proposed Depth 10,500'	20. BLM/BIA Bond No. on file BLM Bond #2922 Statewide Bond # B32644643	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL 3349'	22. Approximate date work will start* 02/28/2006	23. Estimated duration. 30 days	

24. Attachments

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

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

25. Signature <i>Kay Maddox</i>	Name (Printed/Typed) Kay Maddox (432) 638-8475	Date 01/23/2006
Title Regulatory Agent		

Approved by (Signature) /s/ Tony J. Herrell	Name (Printed/Typed) /s/ Tony J. Herrell	Date APR 25 2006
Title FIELD MANAGER		Office CARLSBAD FIELD OFFICE

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

Conditions of approval, if any, are attached.

APPROVAL FOR 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)

DECLARED WATER BASIN
CEMENT BEHIND THE 13'8"
CASING MUST BE CIRCULATED
WITNESSAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHEDDECLARED WATER BASIN
CEMENT BEHIND THE 9'8"
CASING MUST BE CIRCULATED
WITNESSIf earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be
obtained prior to pit construction.

State of New Mexico

DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

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

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-	Pool Code 8S635	Pool Name Undesignated Springs Morrow
Property Code	Property Name TWIN PEAKS PROSPECT	Well Number 1
OGRID No. 194266	Operator Name RUBICON OIL AND GAS, LLC	Elevation 3349'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	29	20-S	26-E		890	SOUTH	990	WEST	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 320	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 the the information contained herein is true and complete to the best of my knowledge and belief. <i>Kay Maddox</i> Signature KAY MADDOX Printed Name Regulatory Agent Title 1/20/2006 Date
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief. NOVEMBER 2, 2005 Date Surveyed Signature & Seal of Professional Surveyor <i>Ronald J. Eidsen</i> 11/04/05 Certificate No. GARY EIDSON 12641

**Nine Point Drilling Plan
(Supplement to BLM 3160-3)**

Rubicon Oil & Gas, LLC

Twin Peaks 29 Fed #1

Section 29, T-20-S, R-26-E 890' FSL & 990 FWL

Lease # : NM 113934 Pool: Undesignated Springs Morrow

Eddy Co., NM

1. Name and estimated tops of geologic horizons:

Surface formation is the Quarternary Alluvium

Queen ~ 500, San Andres ~ 1550, Bone Springs Lm ~2350, 1st Bone Springs ~ 4620, 3rd Bone Springs ~ 6960, Wolfcamp ~ 7366, Cisco ~ 8335, Strawn ~ 8630, Atoka ~ 9400, Morrow ~ 9913, Upper Morrow Clastics ~ 9965, Barnett~10,130, Miss ~10,390

2. Protection of possible useable water will be achieved by setting 13-3/8" surface casing @ 400' +/- and cementing it to surface. Isolation of any evaporate/anhydrite section will be achieved by setting 9-5/8" casing @ 2500' +/- into the Bone Springs Lime, and cementing back to surface.
3. The well control equipment to be employed during the drilling of this well is illustrated on attached EXHIBIT A. This equipment includes a 13 5/8"- 2 ram BOP, annular BOP and choke manifold of comparable pressure rating. Equipment will be rated for 5000 PSI (except annular which is rated for 3000 psi) and will be tested to 5000 psi (except annular which will be tested to 70% of rated working pressure-2100 psi) prior to drilling out of the 9 5/8" intermediate casing. Prior to drilling out of the 13 3/8" surface casing the same equipment and casing shall be tested to 1211 PSI or 70% of the burst rating of the casing utilizing the rig pumps. A hydraulic closing unit will be a part of this equipment and will be function tested daily.
4. The casing strings will consist of the following:
- Conductor 20" set @ 40'
- Surface 13-3/8" OD, 48 #/ft, H40, STC, new pipe @ 400' +/- in 17-1/2" hole.
- Intermediate: 9-5/8" OD, 36 #/ft, K55, STC, new pipe @ 2500 +/- in 12 1/4" hole.
- Production: 5-1/2" OD, 17.0#/ft, N-80, LTC, new pipe @ 10,500' +/- in 8 3/4" hole
5. Cementing programs for the above casing strings are:
- Conductor set @ 40' Cemented to surface utilizing redi-mix cement

Surface @ 400': **Lead Slurry:** 175 sks Class C Lite w/ .25 pps Flocele, 5 pps Gilsonite, yld ~ 1.85 cu ft/sk, mixed @ 12.7 ppg

Tail Slurry: 200 sks Class C w/ 2% CaCl₂, yld 1.34 cuft/sk, mixed @ 14.8 ppg.

The above volume represents 100% excess over calculated hole volume, and will be adjusted to actual setting depth of casing. The slurries will be preceded by a fresh water spacer, and displaced with fresh water.

Intermediate 1 @ 2500':

Lead Slurry: 400 sks Class C Interfill w/ additives, yld ~ 1.59 cu ft/sk

Tail Slurry: 200 sks Class C w/ 2% CaCl₂, yld ~ 1.34 cu ft/sk

The above volume represents 15% excess over calculated hole volume - actual volumes will be adjusted to a fluid caliper run at TD of this hole section with 20% excess added. The cement slurries will be preceded by 20 bbls cement wash for mud removal and displaced with fresh water.

Production 1: 10500 to ~6000'

Lead Slurry: 700 sks Class H Lite with vendor recommended additives

Tail Slurry: 100 sks Class H with vendor recommended additives.

Actual cement type and additives will be determined from hole conditions encountered and prospective zones determined from e-logs. Actual volumes pumped will be determined from an open hole caliper recorded over this interval.

6. It is anticipated that this well will be drilled to TD utilizing the fluids shown below:

0-400': Gel/Lime "spud mud" 8.6-9.0 PPG. Utilize native solids to maintain sufficient viscosity to clean hole. Mix paper as required to control seepage loss.

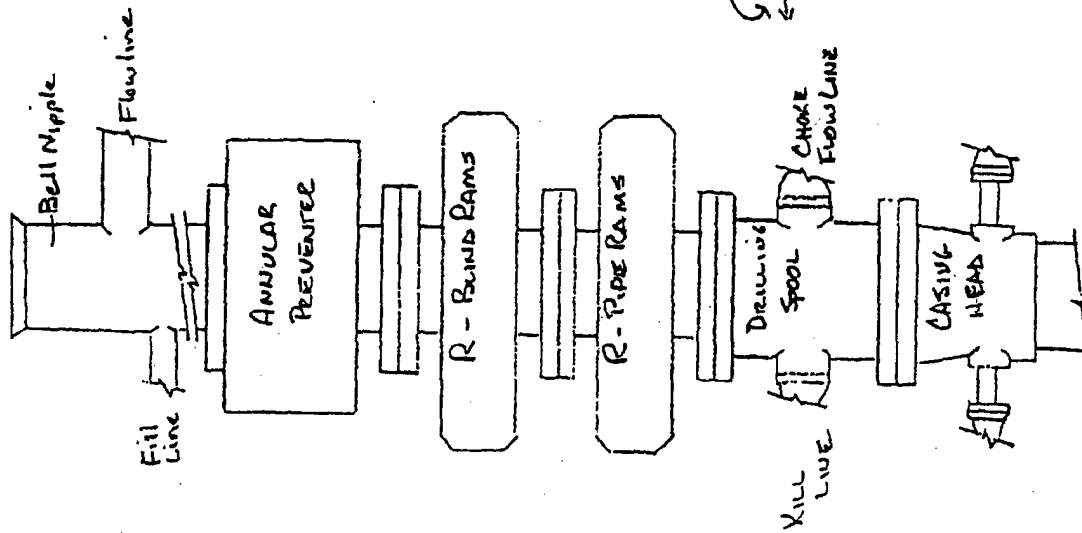
400-2500': 8.4 – 8.6 PPG. Circulate thru reserve pit for gravitational solids removal. Add paper as required to control seepage loss while maintaining pH at 10.0 – 10.5 using Lime.

2500-9000': Fresh Water / Cut brine 8.4 – 9.2 Circulate thru reserve pit for gravitational solids removal utilizing sweeps for hole cleaning and LCM as needed for seepage.

9000-10,500': Polymer/Brine 10.0 – 10.1 PPG Utilize polymers and starch to maintain fluid loss 15 to 8 cc range and sufficient mud weights to stabilize shales and minimize any hydrocarbon influx. Utilize sweeps for hole cleaning and LCM as needed for seepage.

7. Auxiliary equipment will include an upper kelly cock valve, safety valve to fit drill pipe and pressure gauges.

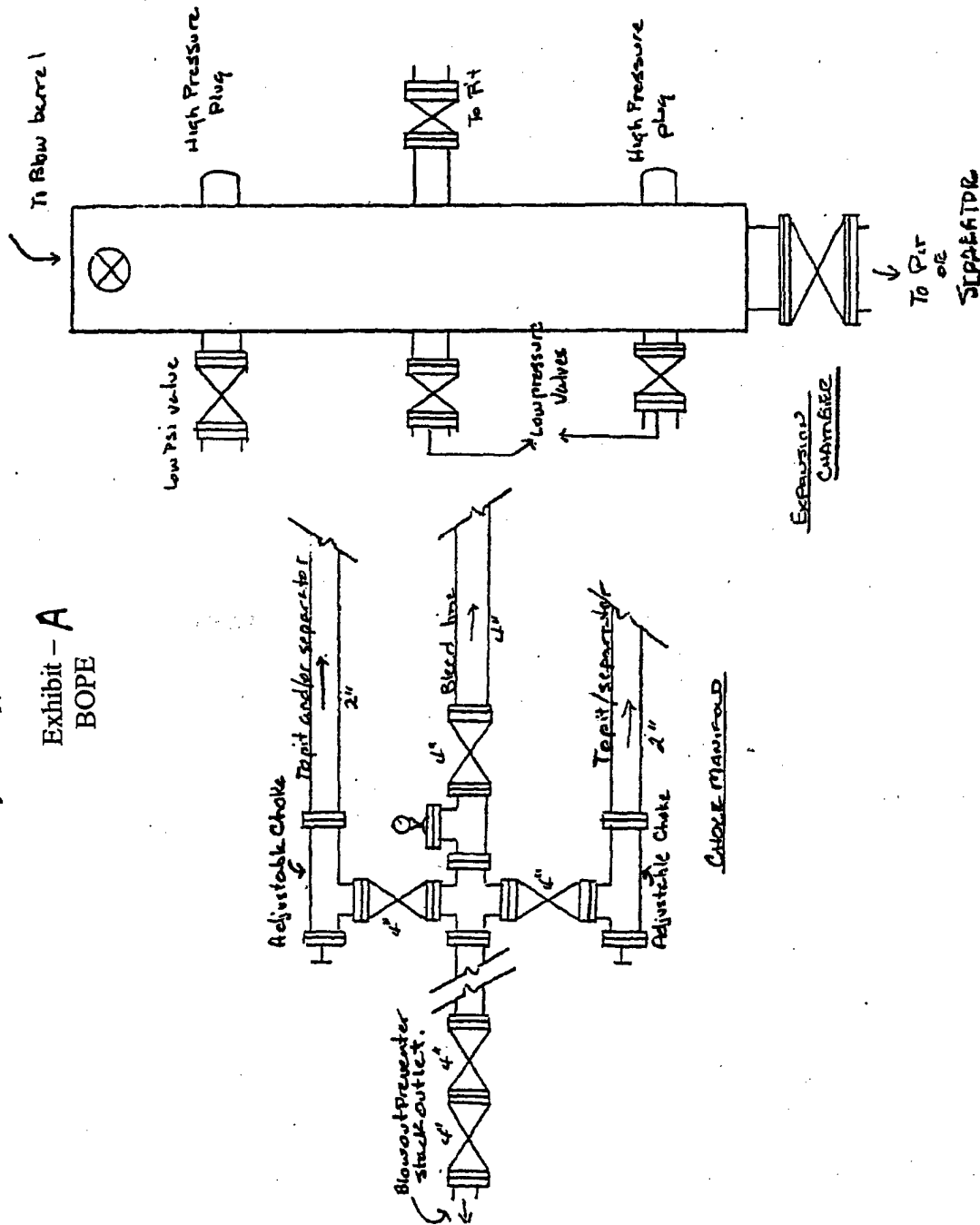
8. No drill stem testing or coring is planned for this wellbore. Mudlogging will commence @ 6000' under the current plan. A Schlumberger Platform Express Triple Combo electric log suite or equivalent will be run at TD.
9. The estimated BHP at TD is not expected to exceed 5100 psi, and a BHT of 175 F is anticipated. There is no H₂S present in the hydrocarbons being produced in this area. Should such unexpected circumstances be encountered the operator and drilling contractor are prepared to take necessary steps to ensure safety of all personnel, and environment. Lost circulation could occur but is not expected to be a serious problem in this area, and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.
10. It is estimated that this well will be drilled and cased in 30 days. Drilling will commence as soon after approval is received and services can be contracted.



5000 PSI
WORKING PRESSURE

Rubicon Oil & Gas, LLC
Twin Peaks 29 Fed No. 1
890 FSL & 990 FWL
Sec. 29, T20S, R26E
Eddy County, New Mexico

Exhibit - A
BOPE



Thirteen Point Plan for Surface Use
(Additional data for form 3160-3)

Rubicon Oil & Gas, LLC

Twin Peaks 29 Federal #1

Section 29, T-20-S, R-26-E

890 FSL & 990 FWL, Unit Ltr M

Lease # : NM 113934 Pool: Undesignated Springs Morrow

Eddy County, NM

1. **EXISTING ROADS - A "VICINITY MAP" and a "LOCATION VERIFICATION MAP"** by John West Surveying are attached which show the location of existing roads and the area topography.
The road log to the location is as follows:
 - a) From intersection of US Hwy 285 and Co. Rd 137, proceed North for 2.2 miles on US Hwy 285.
 - b) Turn west on existing road 3360' and proceed 261' North to location.
2. **PLANNED ACCESS ROAD** — Upgrade 3360' of existing road to facilitate operations and build approximately 261' of new N-S access road to location as depicted on John West Survey.
3. **LOCATION OF EXISTING WELLS - EXHIBIT B** shows the location of other wells within a mile radius of the proposed location.
Sec 30 Nearburg Producing, Willow Draw #1 API 30-015-10605 Status: P&A
Sec 32 Yates Petroleum Corp, State 32 Com #1 API 30-015-23660 Status: Producing (Wolfcamp)
4. **LOCATION OF PROPOSED FACILITIES** – This production well will be tied new facilities built on location.
5. **LOCATION AND TYPE OF WATER SUPPLY** - All water (fresh or otherwise) needed for the drilling and completion of this well will be purchased from a commercial source and trucked to the location via the existing and proposed access road. No water source wells will be drilled, and no surface water will be utilized.
6. **SOURCE OF CONSTRUCTION MATERIALS** - Construction material (caliche) required for the preparation of the drill site is available from a local source. It is not anticipated that a significant amount of material will be required as the terrain is relatively flat. Transportation will be over the existing roads.
7. **METHODS FOR HANDLING WASTE DISPOSAL** -
 - Drill cuttings will be disposed into drilling pits after fluids have evaporated.
 - The drilling pits will be lined with a biodegradable plastic liner, and buried as per regulatory requirements. The pits will be located on the drill site.

- Receptacles for solid wastes (paper, plastic, etc) will be provided and equipped to prevent scattering by wind, animals, etc. This waste will be hauled to an approved landfill site.

- Any other waste generated by the drilling, completion, testing of this well will be removed from the site within 30 days of the completion of drilling or testing operations.

- A Porta-John will be provided for the crews. This will be properly maintained during the drilling operations and removed upon completion of the well.

8. **ANCILLARY FACILITIES** - The drilling, completion, and/or testing of this well will require no ancillary facilities.
9. **WELLSITE LAYOUT** - Attached, as EXHIBITS C & D are plats showing the anticipated orientation of the drilling rig and the pad.
10. **PLANS FOR SURFACE RESTORATION** - Reclamation of the surface location will be in accordance with the requirements set forth by the BLM. As stated earlier all waste generated by this operation will be disposed of in an approved manner, and the site restored as closely as possible to its pre-operation appearance. Due to the topography of the area no problems are anticipated in achieving this status and no erosion or other detrimental effects are expected as a result of this operation.
11. **OTHER INFORMATION** - The surface ownership of the drill site and the access routes are under the control/ownership of:

Bureau of Land Management

P. O. Box 1778

Carlsbad, New Mexico 88221-1778

505-234-5972

The BLM representative for this area is Barry Hunt who can be reached at the above number, or 505-361-4078.

The site was archaeologically surveyed in November, 2005 see attached copy of report. Danny Boone, the registered archeological surveyor, should also forward a copy of that report to the BLM.

12. **OPERATORS REPRESENTATIVE** – Rubicon Oil & Gas, LLC is covered by Statewide Bond No. B 326 446 43, BLM Bond # 2922, Oil & Gas State of NM Blanket Plugging Bond B 326 446 41. Rubicon is represented by:

Brett Smith

Rubicon Oil & Gas, LLC

(432) 687-5100

Agent/Operations Manager:

Hal Lee

Cell (432) 664-9040

Office (432) 684-8006

13. **OPERATORS CERTIFICATION**

I hereby certify that I, Hal Lee-Operations Engineer, have inspected the proposed drill site and access route and that I am familiar with the conditions that currently exist; that the statements made in the APD package are to the best of my knowledge true and correct; and that the work associated with operations herein will be performed by Rubicon Oil & Gas, LLC and it's contractors and subcontractors in conformity with the

terms and conditions of this APD package. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application with bond coverage being provided under a BLM nationwide bond.

This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

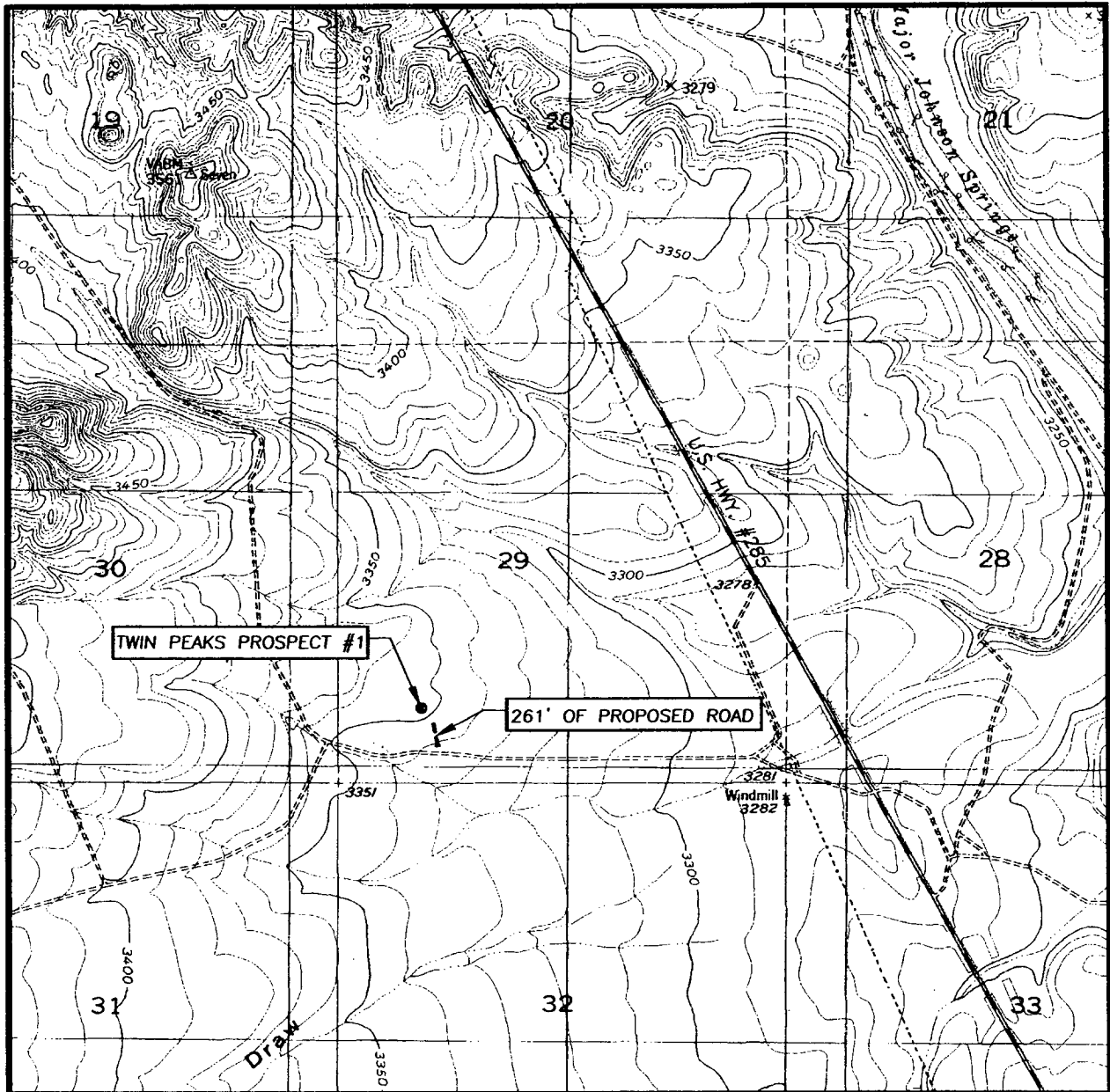
Name and title: Hal Lee, Acting Agent and Operations Manager for Rubicon Oil & Gas,
LLC

Signature: Hal Lee

Date: 1/10/2006

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LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
SEVEN RIVERS, N.M. - 10'

SEC. 29 TWP. 20-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

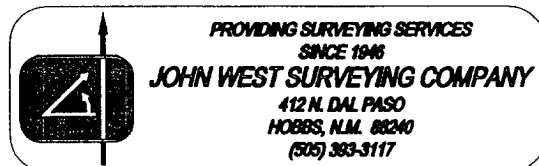
DESCRIPTION 890' FSL & 990' FWL

ELEVATION 3349'

OPERATOR RUBICON OIL
AND GAS, LLC

LEASE TWIN PEAKS PROSPECT

U.S.G.S. TOPOGRAPHIC MAP
SEVEN RIVERS, N.M.



PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO
HOBBS, N.M. 88240
(505) 383-3117

Survey Date: 11/2/05		Sheet 1 of 1 Sheets	
W.O. Number: 05.11.1705		Dr By: LA	Rev 1:N/A
Date: 11/4/05	Disk: CD#4	05111705	Scale: 1"=100'

MINERAL LEASING STIPULATIONS CARLSBAD AND TUCUMCARI PROJECT LANDS

The United States Bureau of Reclamation (Reclamation) is the surface managing agency for approximately 59,800 acres of acquired and withdrawn lands in the Roswell Area Office's Bureau of Land Management mineral jurisdiction. The subject lands are located within and adjacent to three reservoirs of the Carlsbad Project and two reservoirs of the Tucumcari Project, being listed as follows:

Carlsbad Project	-	Brantley Reservoir	=	43,500 acres
Carlsbad Project	-	Avalon Reservoir	=	4,000 acres
Carlsbad Project	-	Sumner Reservoir	=	11,500 acres
Tucumcari Project	-	Hudson Lake	=	160 acres
Tucumcari Project	-	Dry Lake	=	640 acres

With regard to the leasing of the mineral estate(s) within the 59,800 acres, Reclamation will provide specific leasing stipulations for each prospective lease. The general leasing stipulations and requirements for the subject Reclamation managed lands are as follows:

Brantley Reservoir

No surface occupancy will be allowed within one half mile of the Brantley Dam site, drilling between one half mile and one mile of the Brantley dam site will be reviewed on a case by case basis.
No surface occupancy within the Brantley Lake State Park.
No storage facilities will be allowed below contour elevation 3286.
No surface occupancy below natural contour elevation 3271.

Avalon Reservoir

No surface occupancy will be allowed within one half mile of the Avalon Dam site.
No surface occupancy below contour elevation 3190.
No storage facilities below contour elevation 3200.

Sumner Reservoir

No surface occupancy will be allowed within one half mile of the Sumner Dam site.
No surface occupancy within Sumner Lake State Park.
No surface occupancy below contour elevation 4279.
No storage facilities below contour elevation 4300.

Hudson Lake

No surface occupancy within the boundaries of Hudson Lake

Dry Lake

No surface occupancy below contour elevation 4085.

In addition to those restrictions above, Reclamation proposes that the first paragraph of page 3 of MANAGEMENT COMMON TO ALL ALTERNATIVES be omitted. The subject paragraph states that if lands presently managed by Reclamation revert to BLM, they would be leased and managed under appropriate Roswell District Office stipulations or conditions of approval (e.g. stipulations for flood plains). **Once production of all wells permitted are terminated, the permittee shall immediately plug the well hole and reclaim the surface disturbed by the operation**

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Rubicon Oil & Gas, LLC Well No.: 1 - Twin Peaks 29 Federal
Location: 890' FSL & 990' FWL sec. 29, T. 20 S., R. 26 E.
Lease: NM-113934

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 234-5972 in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch

C. BOP tests

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. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

II. CASING:

1. 13-3/8 inch surface casing should be set at approximately 1225 feet, below usable water and circulate cement to the surface. If cement does not circulate to the surface, the Carlsbad Field Office shall be notified at (505) 234-5972, and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string. If the 13-3/8 inch surface casing is set at approximately 400 feet, fresh water mud shall be used to drill the hole for the 9-5/8 inch intermediate casing set at approximately 2500 feet.

2. Minimum required fill of cement behind the 9-5/8 inch intermediate casing is sufficient to circulate to surface. If cement does not circulate to the surface this BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement.

3. Minimum required fill of cement behind the 5-1/2 inch production casing is sufficient to tie back 500 feet above the uppermost perforation in the pay zone.

III. PRESSURE CONTROL:

1. Before drilling below the 13-3/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the 9-5/8 inch intermediate casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Before drilling below the 13-3/8 inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi. Before drilling below the 9-5/8 inch intermediate casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

CONDITIONS OF APPROVAL - DRILLING (CONTINUED)

Operator's Name: Rubicon Oil & Gas, LLC Well No.: 1 – Twin Peaks 29 Federal

Location: 890' FSL & 990' FWL sec. 29, T. 20 S., R. 26 E.

Lease: NM-113934

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III. PRESSURE CONTROL:

3. After setting the 9-5/8 inch intermediate casing string and before drilling into the Wolfcamp formation, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

B. The tests shall be done by an independent service company.

C. The results of the test shall be reported to the BLM Carlsbad Field Office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

D. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

E. Testing must be done in a safe workman like manner. Hard line connections shall be required.

F. The requested variance to test the BOPE to the reduced pressure of 1211 psi using the rig pumps below to drilling below the 13-3/8 inch surface casing is approved.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

A. Recording pit level indicator to indicate volume gains and losses.

B. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.