

OCD-HOBBS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM 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. LC 032573B
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Range Operating New Mexico, Inc.		7. If Unit or CA Agreement, Name and No.
3a. Address 777 Main St., Ste. 800 Fort Worth, TX 76102		8. Lease Name and Well No. <u><301545></u> Elliott B Federal #15
3b. Phone No. (include area code) 817-810-1916		9. API Well No. 30-025-37830
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 990' FNL & 1650' FEL At proposed prod. zone 990' FNL & 1650' FEL Unit B		10. Field and Pool, or Exploratory Eunice San Andres Southwest ✓
14. Distance in miles and direction from nearest town or post office* 2 miles SE from Eunice, NM		11. Sec., T. R. M. or Blk. and Survey or Area Sec. 7, T22S, R37E, N.M.P.M.
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 360	12. County or Parish Lea
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 4500	13. State NM
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3436	22. Approximate date work will start* 04/01/2006	17. Spacing Unit dedicated to this well 40
23. Estimated duration 9 days		20. BLM/BIA Bond No. on file NM2399

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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) Paula Hale	Date 03/17/2006
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Approved by (Signature) /s/ James Stovall	Name (Printed/Typed) /s/ James Stovall	Date APR 17 2006
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)

Witness Surface Casing

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

KZ

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. FRANCES DR., SANTA FE, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37830	Pool Code 24180	Pool Name Eunice San Andres Southwest
Property Code 301545	Property Name ELLIOTT "B" FEDERAL	Well Number 15
OGRID No. 227588	Operator Name RANGE OPERATING NEW MEXICO, INC.	Elevation 3436'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	7	22-S	37-E		990	NORTH	1650	EAST	LEA

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 40	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

LOT 1 36.96 AC	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=515005.7 N X=850211.8 E</p> <p>LAT.=32°24'38.71" N LONG.=103°11'54.75" W</p>		<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Paula Hale</i> 3-17-06 Signature Date</p> <p>Paula Hale Printed Name</p> <p>Sr. Reg. Sp.</p>
LOT 2		<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JANUARY 27, 2006</p> <p>Date Surveyed DSR</p> <p>Signature & Seal of Professional Surveyor GARY EIDSON NEW MEXICO 06.11.0223 2/6/06</p> <p>Certificate No. GARY EIDSON 12641</p>	
LOT 3 36.98 AC			
LOT 4 37.00 AC			

United State Department of the Interior

Bureau of Land Management

ROSWELL FIELD OFFICE
2902 West Second Street
Roswell, New Mexico 88201

Statement Accepting Responsibility for Operations

Operator Name: Range Operating New Mexico, Inc.
Street or Box: 777 Main Street, Suite 800
City, State: Fort Worth, TX
Zip Code: 76102

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: LC 032573B
Legal Description of Land: Sec. 7, T22S, R37E
NW/4 NE/4
Formations: Eunice San Andres Southwest
Bond Coverage: (State, Nationwide or Individual) Statewide
BLM Bond File No.: NM2399

Authorized Signature: Bayr Sules

Title: Petroleum Engineer

Date: 3/17/06

NOTICE TO SURFACE OWNER

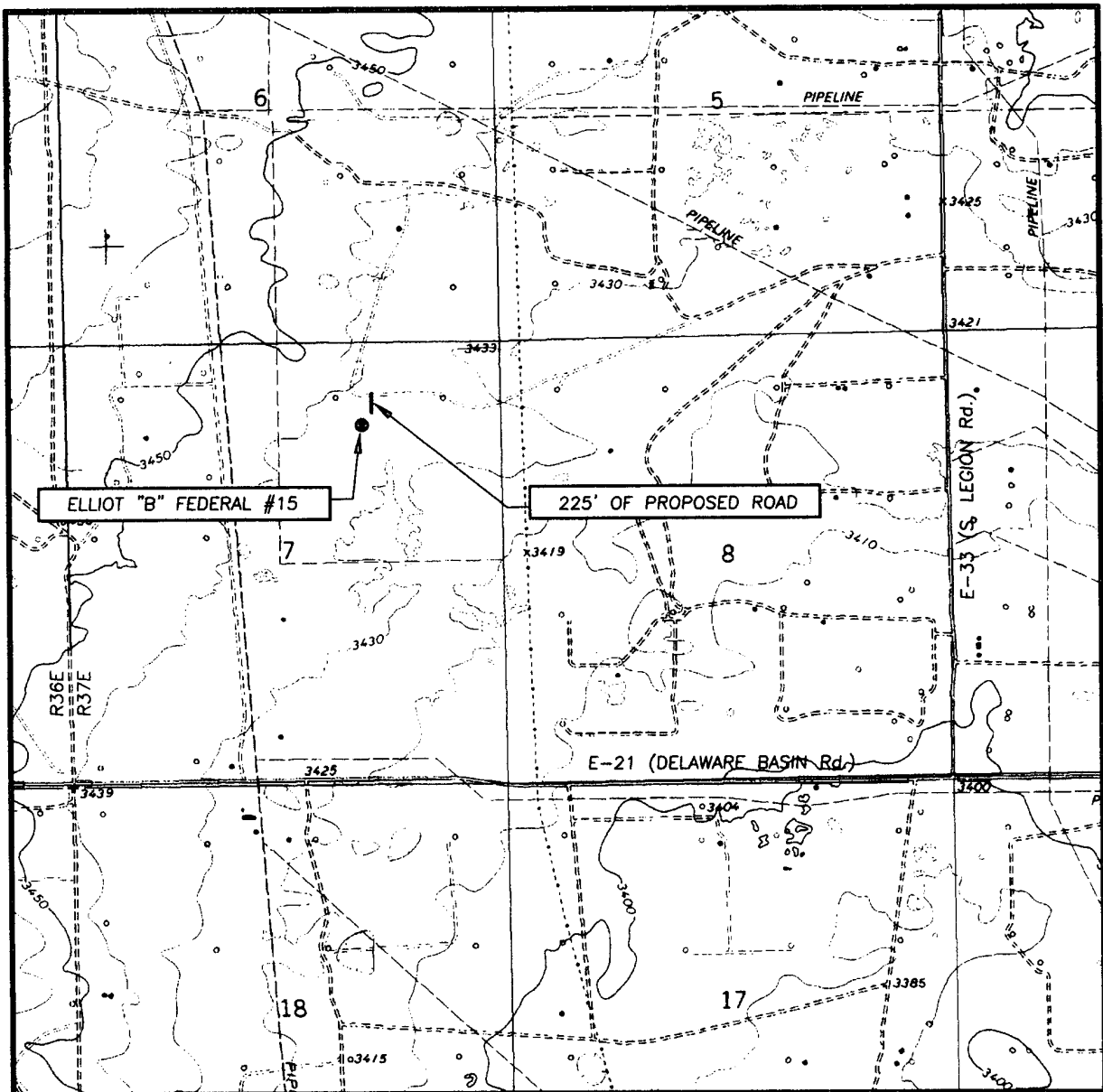
Surface Owner

Range Operating New Mexico, Inc.
777 Main St., Ste. 800
Fort Worth, TX 76102

Notice Date

3-17-06

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
EUNICE, N.M. - 10'

SEC. 7 TWP. 22-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 990' FNL & 1650' FEL

ELEVATION 3436'

OPERATOR RANGE OPERATING
NEW MEXICO Inc.

LEASE ELLIOTT "B" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
EUNICE, N.M.

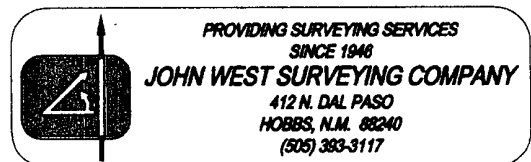
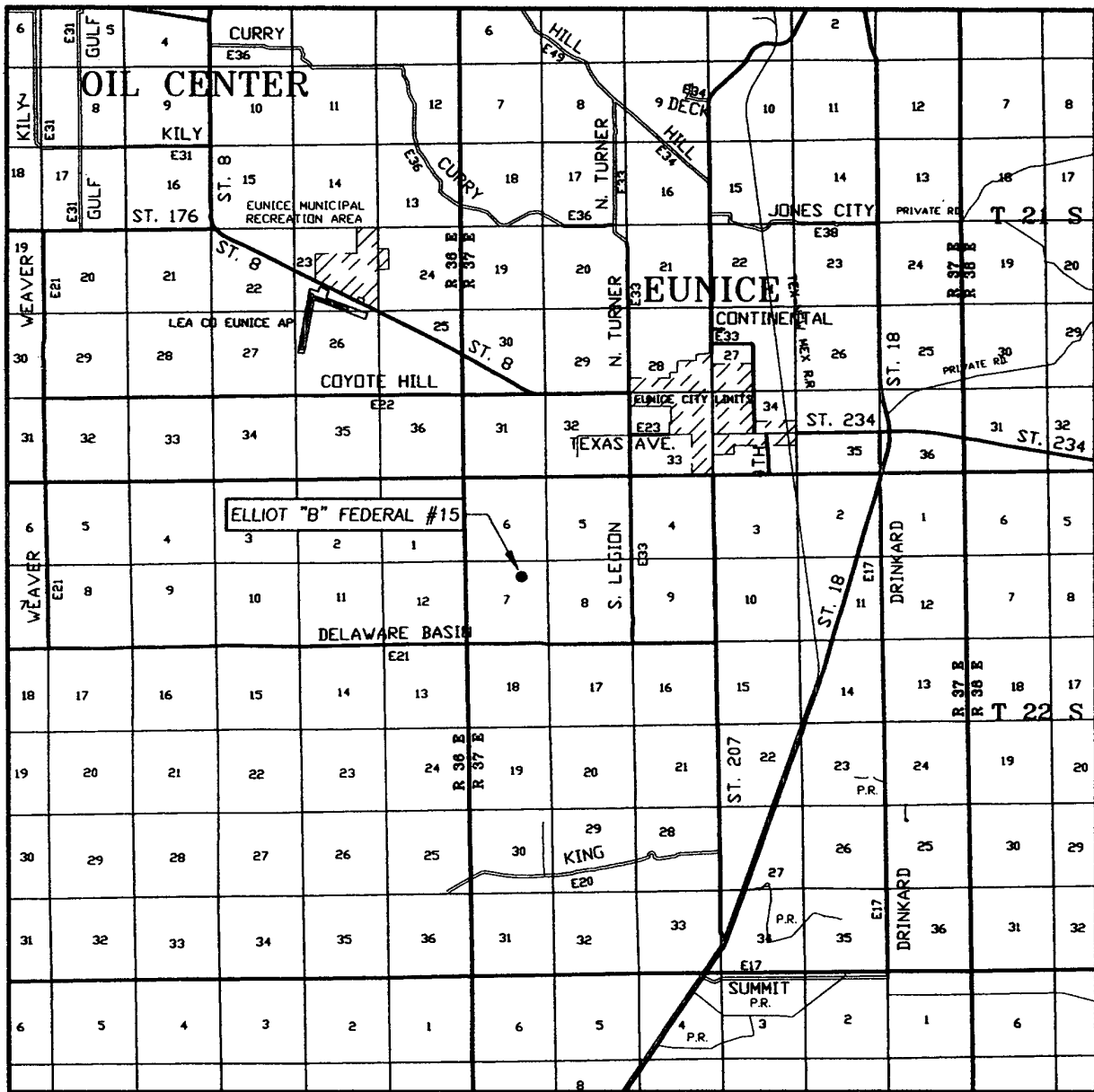


EXHIBIT A

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 7 TWP. 22-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 990' FNL & 1650' FEL

ELEVATION 3436'

OPERATOR RANGE OPERATING
NEW MEXICO, Inc.

LEASE ELLIOTT "B" FEDERAL



**PROVIDING SURVEYING SERVICES
SINCE 1946**

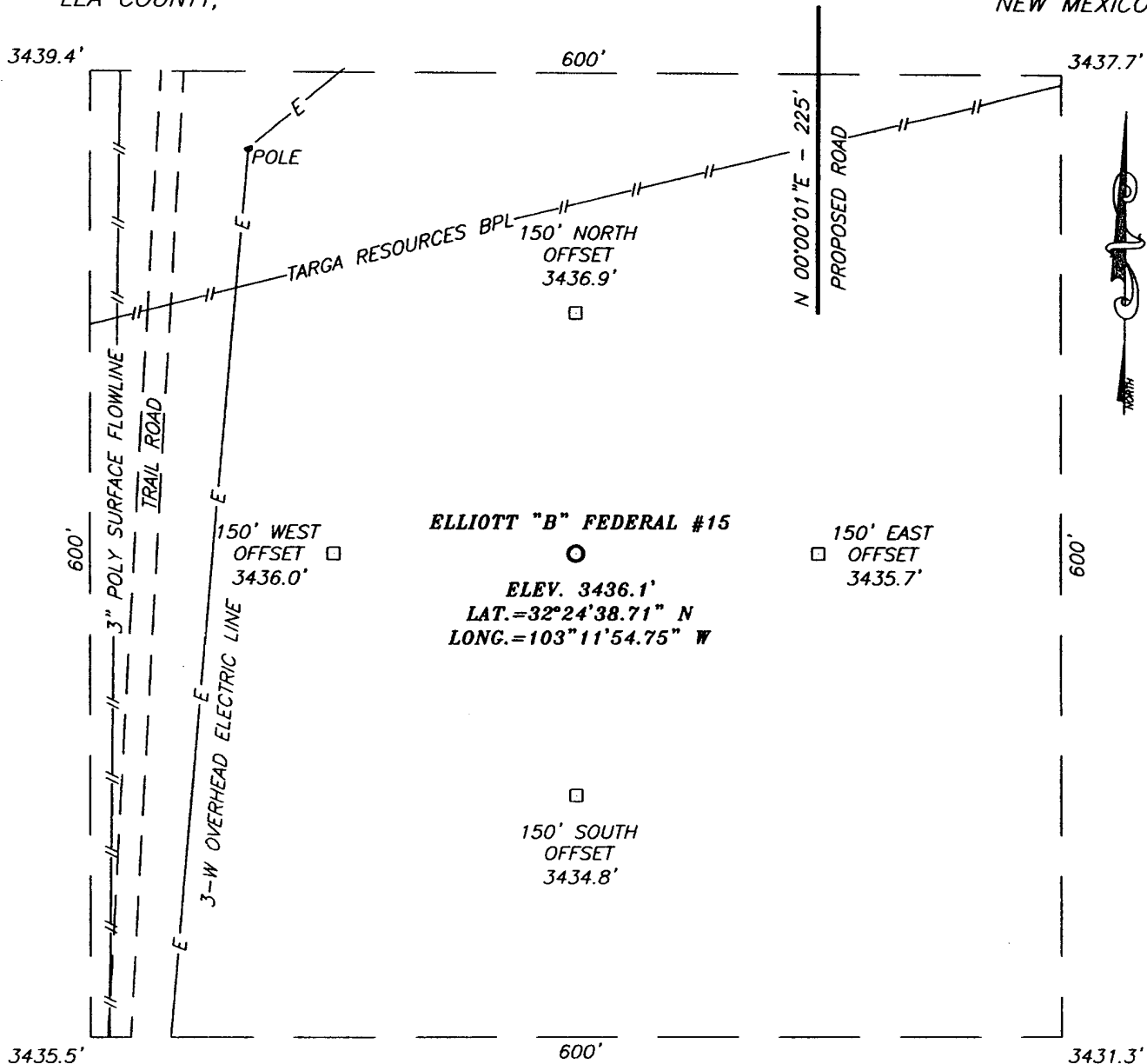
JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

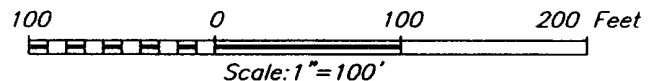
(505) 393-3117

SECTION 7, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO



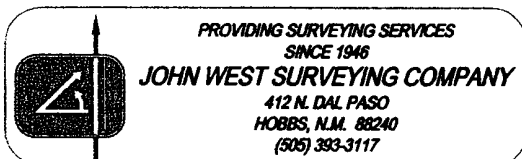
DIRECTIONS TO LOCATION

FROM THE INTERSECTION ST. HWY 207 AND CO. RD. E-21 (DELAWARE BASIN Rd.), 3 MILES SOUTH OF EUNICE. GO WEST ALONG CO. RD. E-21 APPROX. 1.0 MILES. TURN RIGHT ON CO. RD. E-33 (S. LEGION RD.) AND GO NORTH ALONG CO. RD. E-33 APPROX. 1.2 MILES TO A LEASE ROAD. TURN LEFT AND GO WEST-SOUTHWEST 0.16 MILES TO A "Y" IN ROAD. TAKE THE RIGHT FORK AT THE "Y" AND CONTINUE ALONG MEANDERING LEASE ROAD APPROXIMATELY 1.24 MILES. THIS LOCATION IS APPROXIMATELY 380' SOUTH OF LEASE Rd.



RANGE OPERATING NEW MEXICO, Inc.

ELLIOTT "B" FEDERAL #15 WELL
LOCATED 990 FEET FROM THE NORTH LINE
AND 1650 FEET FROM THE EAST LINE OF SECTION 7,
TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



Survey Date: 01/27/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.0223	Dr By: D.S.R.
Date: 01/27/06	Disk: CD#1
06110223	Scale: 1"=100'

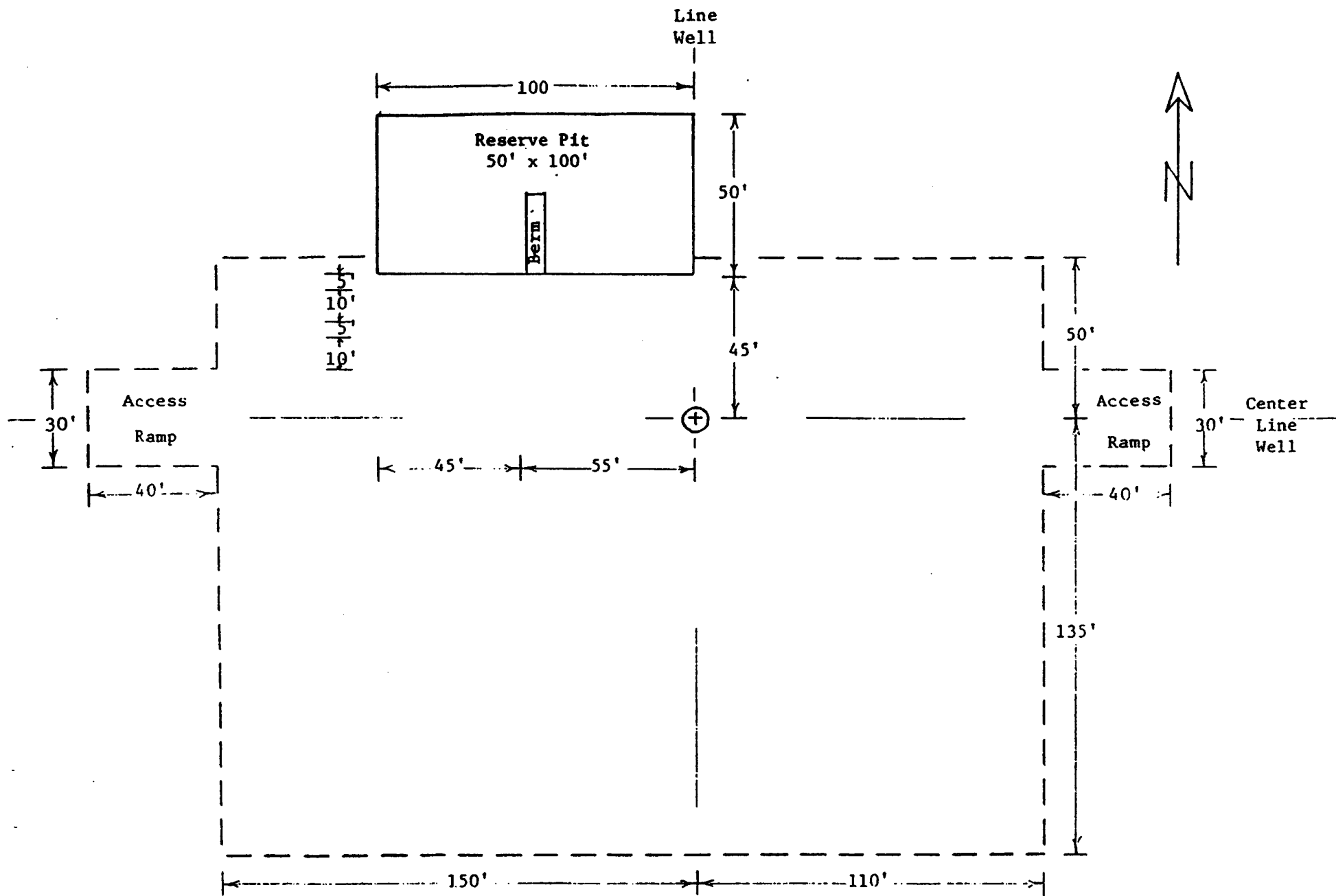


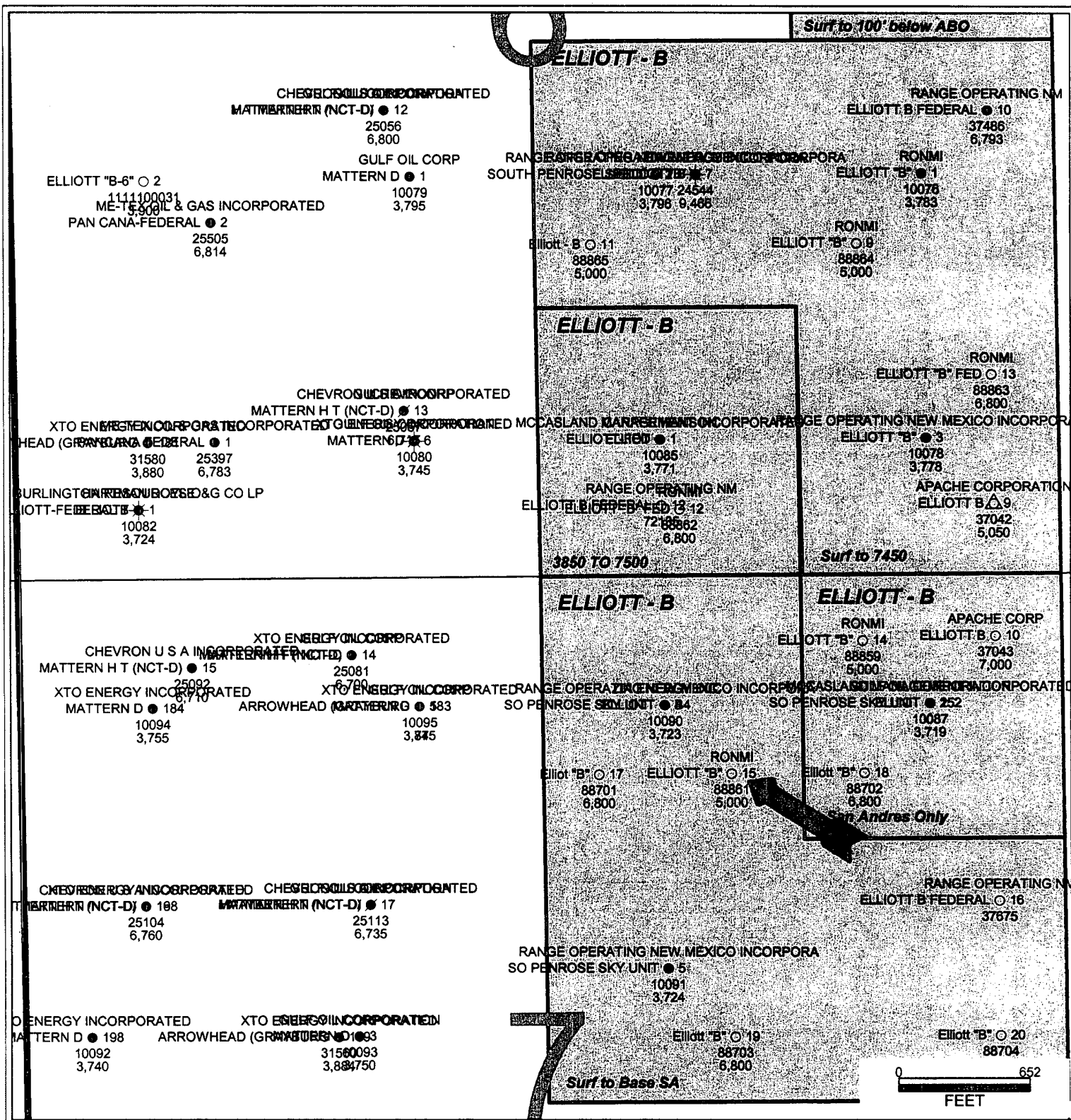
EXHIBIT C

UNITED DRILLING, INC

LOCATION PLAT

RIG 24

Scale: 1"=40'

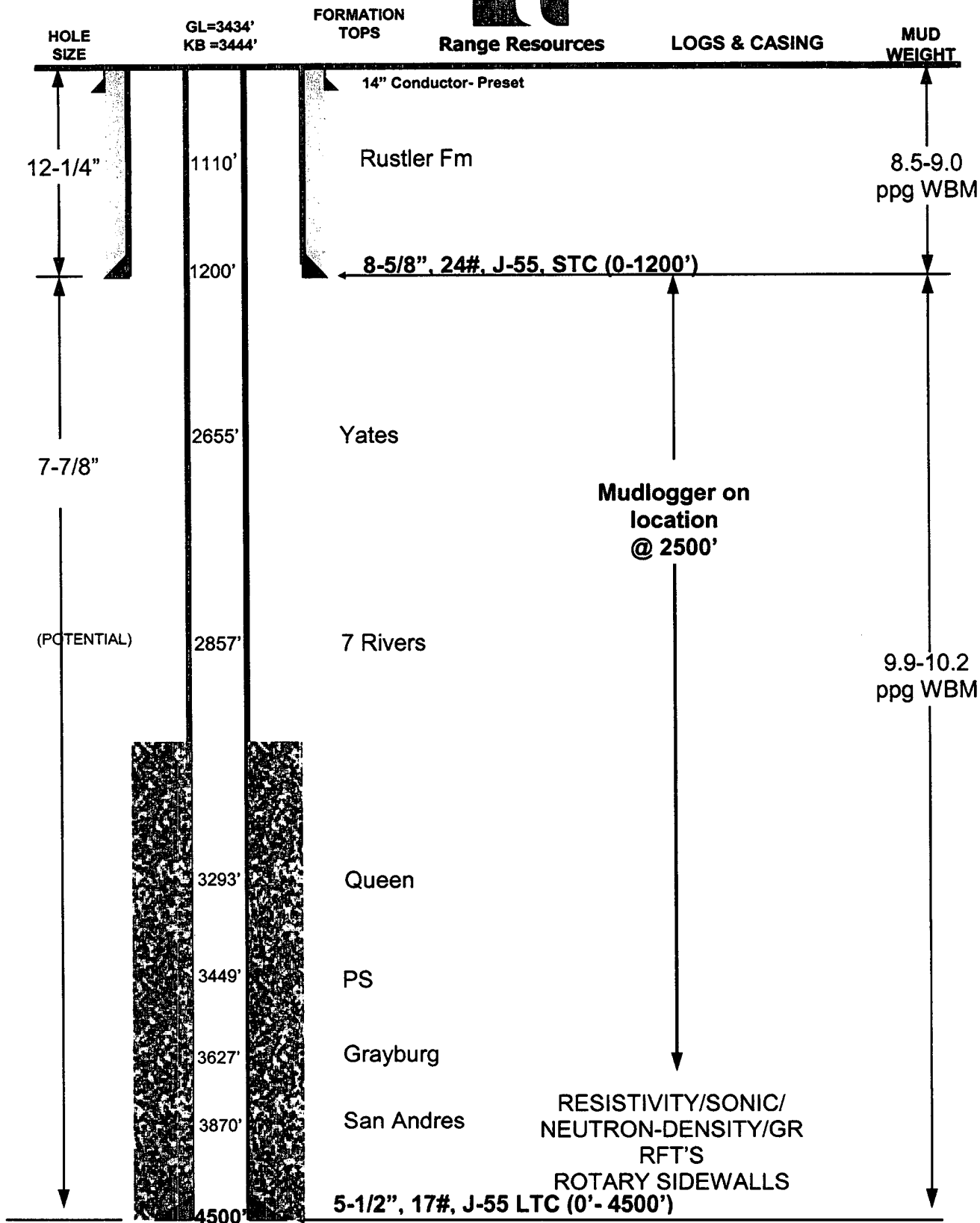


PETRA 3/17/2006 9:51:49 AM

EXHIBIT D

WELL : Elliott B Federal #15
 SL : 990' FNL & 1650' FEL, Sec 7-T22S-R37E
 COUNTY : Lea County
 STATE : New Mexico

FIELD: Eunice San Andres SW
 OBJECTIVE TD: 4500'





Range Operating New Mexico
Elliott B Federal #15
Lea County, NM
Drilling Program
Prepared 3/17/06

PROPOSED DEPTH: 4,500' MD / 4,500' TVD
GROUND ELEVATION: 3,436'
KB: 17'

LOCATION: 990' FNL & 1650' FEL, Section 7-T22S-R37E, Lea County, NM

ANTICIPATED PRODUCTIVE FORMATION: San Andres

API NO:

GENERAL:

The Elliott B Federal #15 will be a 4,500' San Andres test in Lea County, New Mexico drilled on a daywork basis by United Rig #24. An 12-1/4" surface hole will be drilled to +/-1200'. A string of 8-5/8" casing will be run and cemented to surface.

Nipple up BOPs and test same, drilling will continue with a 7-7/8" hole to a total depth of 4,500'. Actual TD will be spaced so that casing will be landed where the casing head can be screwed on. After electric-logging the open-hole interval, a string of 5-1/2" casing will be run and cemented from total depth to 1,000' and the tubing head installed.

ESTIMATED FORMATION TOPS: (Log Depths)

Upper Permian Rustler Fm	+2330 ft	1110 ft MD	
Upper Permian Yates Fm	+785 ft	2655 ft MD	
Upper Permian 7 Rivers Fm	+583 ft	2857 ft MD	
Upper Permian Queen Fm	+147 ft	3293 ft MD	
Upper Permian PS Fm	-9 ft	3449 ft MD	+
Upper Permian Grayburg Fm	-187 ft	3627 ft MD	+
Upper Permian San Andres Fm	-430 ft	3870 ft MD	*
PTD	-1060 ft	4500 ft MD	

*= Primary Reservoir Targets

+ = Secondary Reservoir Targets

DETAILED DRILLING PROCEDURE

TIMES AND EVENTS TO NOTE ON DRILLING REPORT:

- A. SPUD (date and time)
- B. TD (each interval date and time)
- C. CEMENT IN PLACE (date and time)
- D. RIG RELEASE (date and time)

BOTTOM HOLE ASSEMBLIES

BHA #1: (0-1200') - Bit, (2) 8" DC, (10) 6.25" DC's

BHA #2: (1200'-4500') - Bit, (24) 6.25" DC's

USE OF RT TOOL

No RT tools in use.

MUD PROGRAM

INTERVAL	MUD WEIGHT	FUNNEL VIS.	API Fluid Loss
0' - 1200'	8.4 – 9.4	32-34	NC
1200' - 4500'	10.0	28	NC

- 1) Level and build an all-weather location and access road.
- 2) MIRU United Rig #24. Perform rig safety inspection and ensure that everything is in proper working order prior to spudding well.
- 3) Notify NMOCD of intent to spud, run casing and cement each 24 hours in advance 505-748-1283.
- 4) Spud well with 12-1/4" mill tooth bit. Drill to +/- 1200' with surveys at 500' and 1000' (Actual depth will be determined by the length of the casing). Circulate hole clean. Sweep and condition hole to run casing. Pull out of hole, lay down BHA.

NOTE: Mud through this interval will be a native spud mud supplemented with Bentonite. Lime may be used to flocculate the mud and increase the yield point to clean the hole. Mix paper for seepage control. Utilize all solids control equipment to control drill solids. Run as fine of mesh shaker screens as possible. Use water to control mud weight and viscosity. Maintain mud weight at 8.4 – 9.0 ppg.

- 5) Rig up casing crew and run 8-5/8", 24#, J-55 casing as follows:

1-8-5/8" Texas Pattern Shoe
1-8-5/8" Insert Float Collar
1-8-5/8" x 11" Centralizer 10' above shoe
1-8-5/8" x 11" Centralizer every other joint
1-8-5/8" Stop Ring

- 6) Circulate for at least bottoms up plus one casing volume with mud prior to cementing. Cement surface casing according to cement recommendation. **NOTE:** Have field bin, cement, and circulating equipment on location prior to casing job.
- a) Review rates, pressures, displacement volumes and casing pressure rating with Service Company and rig personnel. All cement slurries are to be lab tested; both a pilot test and a test of the actual field blend. Report results, including 24 hour compressive strengths, to the office. **(See Cement Testing Requirements below)**. Also keep two samples of each dry cement in the event that a problem is encountered while cementing. Discard this sample if all indications are positive.
 - b) Cement well as follows: Pump 20 bbl fresh water followed by **200** sks of Lead: 35/65 POZ: Class C + 6% D020 + 5% (BWOW) D044 + 1 pps D130, @ 12.8 ppg, followed by **180** sks Tail: Class C + 1% S001 + 0.1 pps D130 @ 14.8 ppg. Displace with fresh water, bump plug with w/ 500 psi over final pump pressure.
 - c) If cement is not circulated to surface, contact the office and the NMOCD and prepare to run 1" pipe and top out cement. Have 1" pipe on location for possible top-out.
 - d) If cement falls, fill 12-1/4" X 8-5/8" annulus with cement.
- 7) Release pressure and check for flow back. Set casing on bottom. If float is holding, base nipple up of wellhead and BOP on the surface cement samples. Well must stand at least 8 hours total before any testing of casing is performed as per NMOCD.
- 8) After cementing casing, weld on 8-5/8" flange type casing head. Test BOP blind rams & choke manifold to 250# low & 3000# high. Pick up Bit #2 (7-7/8") & BHA, trip in hole, test BOP pipe rams to 250# low & 3000#. **Pressure test casing to 1000 psi for 30 minutes prior to drilling out shoe.** Clearly report this test information of the daily drilling report.

MUD NOTES: See Mud Program for details

After cementing 8-5/8" casing circ pit with brine water. Mix paper for seepage control. Utilize pre-hydrated Gel/Lime sweeps for flushing the hole. Run all available solids control equipment to control weight. Add brine water as needed to maintain volume. Add LCM to system only as needed. Use batch LCM treatment if losses occur and maintain as needed.

- 9) Drill ahead with brine water in 7-7/8" hole taking deviation surveys every $\pm 500'$ or nearest bit run per NMOCD rules. Use sweeps as needed to clean hole. Drill to $\pm 4500'$; exact TD will be determined by the length of the casing. Sweep and condition hole in preparation for logging. Spot a 50 bbl, 40-42 visc pill prior to POOH for logs. Strap out of hole.
- 10) RU Wireline Truck and Tools. Log well as instructed by Range Operating NM. Rotary sidewall cores may be required along with RFT's.

- 11) Make a conditioning trip prior to running casing. Trip into hole with BHA and drill pipe, break circulation at 4500'. Ream last two stands to bottom. Circulate and condition hole. Maintain viscosity of 28. TOH laying down 4-1/2" drill pipe and drill collars. Clear floor and prepare to run casing.
- 12) Rig up casing crew and run 5-1/2", 17#, J-55, LT&C as follows:
- a) Float shoe (thread-lock)
 - b) 1 jt. 5-1/2", 17#, J-55, LT&C casing (thread-lock)
 - c) Float collar (thread-lock)
 - d) 5-1/2", 17#, J-55, LT&C Casing to surface.
- The two bottom joints of 5-1/2" casing and the float shoe and float collar should be thread-locked (do not weld pipe). Run 1 centralizer 5' above shoe with limit clamp, one on the next collar, one just below the float collar with limit clamp and one per joint up to 3300'.
- 13) Circulate mud for at least bottoms up plus one casing volume prior to cementing.
- 14) Cement the production casing as follows. Re-figure cement volumes on a basis of: caliper + 20% + 50 sx. Precede cement with 20 bbl fresh water, 500 gals superflush, 20 bbl fresh water.

Lead (3,500' to 1,000'):

450 sacks

Slurry: 35:65 Poz : Class C + 6% D20 + 5% D44 + 0.3% S1 + 4 pps D42 + 0.1 pps D130
Slurry Weight: 12.5 ppg Slurry Yield: 2.16 cuft/sk Water: 11.6 gals/sk

Tall (4,500' to 3,500'):

250 sacks

Slurry: 50:50 Poz : Class C + 2% D20 + 5% D44
Slurry Weight: 14.2 ppg Slurry Yield: 1.36 cuft/sk Water: 6.33 gals/sk

Review rates, pressures, displacement volumes and casing pressure rating with Service Company and rig personnel. All cement slurries are to be lab tested; both a pilot test and a test of the actual field blend. Report results, including 24 hour compressive strengths, to the office. (**See Cement Testing Requirements below**). Also keep two samples of each dry cement.

- a) Have additional water storage on location as necessary for mixing cement. Have water analyzed by cementing company for compatibility with cement and chemicals.
 - b) Reciprocate pipe during cement job. Take special care to move pipe very slowly on the down stroke. Pump spacer and cement at 7-8 BPM. When the last cement has been pumped, maintain rate at 7-8 BPM. Displace with fresh water. When reaching displacement to shoe joint minus 10 bbls slow pump rate to 2 barrels per minute or less prior to bumping plug. Bump plug with 500 psi over final displacement pressure and hold pressure for 15 minutes.
- 15) Release pressure and check for flow back. If floats are holding, continue to make preparations to hang 5-1/2" casing one (1) foot off bottom. If floats do not hold, wait 12 hours on cement.
- 16) Set 5-1/2" slips in "A" section with full string weight. Nipple down BOP, Nipple up well head.
- 17) Install cap. Clean mud pits and release rig.

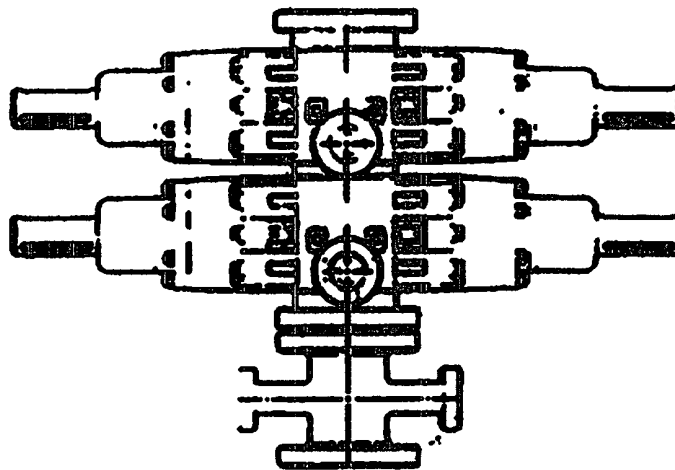
CEMENT TESTING REQUIREMENTS:

- Laboratory Blend:** Obtain thickening time, rheology, water loss, and compressive strengths of the laboratory cement blend with a water sample of the actual water to be used in cementing for each cement slurry to be pumped.
- Field Blend:** Obtain thickening time of the field cement blend with a water sample of the actual water to be used in cementing for each slurry to be pumped. If the thickening time of the field blend is consistent with the thickening time of the laboratory blend, proceed with the cement job. If not, wait on the compressive strength results. Regardless of thickening time results, obtain all of the compressive strengths of field blend to compare with the compressive strengths of the laboratory blend.

Don Robinson	Drilling Manager	(469) 450-2281	(972) 317-8345	(817) 509-1506
George Allen Teer	VP of Operations	(817) 723-1107	(817) 491-3740	(817) 870-2601
Bryan Surles	District Engineer	(817) 360-9663	(817) 346-8188	(817) 810-1971
Martin Emery	Chief Geologist	(817) 366-3693	(817) 430-4861	(817) 870-2601
Paula Hale	Sr. Regulatory Sp.	(817) 773-6002		(817) 810-1916

United Rig Company, Artesia, NM	Rig Company	Angel Salazar	(505) 623-7730
United Rig #24			
Nova Mud, Inc - Hobbs, NM	Drig Mud	Dale Welch	(800) 530-8786
Master Tubulars – Midland, TX	Casing & Tubing	Randy Martin	(800) 682-8996
Suttles Logging, Inc. – Midland, TX	Mudlogging	Sam Samford	(432) 687-3148
Schlumberger-Artesia, NM	Cementing Service	Lynn Northcutt	(505)748-1392 cell (505) 365-7510
National – Hobbs, NM	Well Heads		(505) 393-9928
Weatherford –Artesia, NM	Float Equipment		
Halliburton Logging –Hobbs, NM	Open Hole Logs	Michael Escriva Tommy Johnson	(505) 392-7543
Allen's Casing Crew -Hobbs, TX	Csg Crew		
National –Hobbs, NM	General Supplies		(505) 393-9928
TFH –Hobbs, NM	Fork Lift		(505) 397-3270
Abbot Brothers	Conductor setting		
RTO Sales & Lease	Satellite Internet		(432) 550-5678

BLOW OUT PREVENTION EQUIPMENT



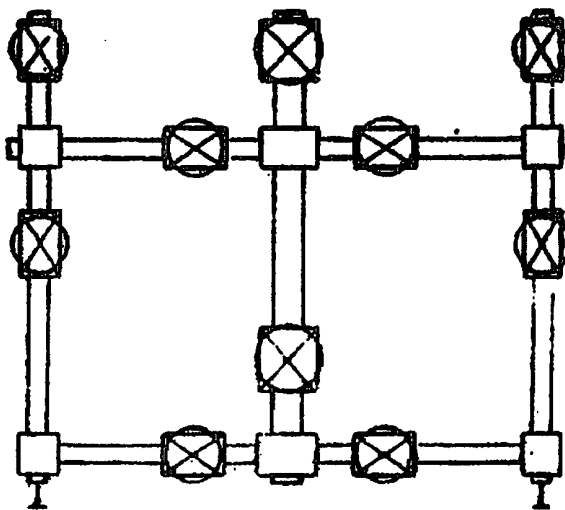
BOP Stack

- 1 Rucker Shaffer "B" double ram
10" - 3000 psi WP

Closing Unit

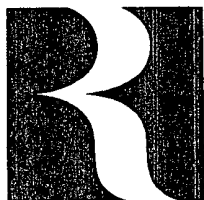
- Hydril model 80 three station accumulator
- Controls located in accumulator house and on rig floor

CHOKE MANIFOLD



900 Series. 3000 psi WP

PLAT #2



EUNICE SOUTHWEST PROSPECT (San Andres)
Elliott "B" Fed. No. 15
Well Objectives/Prognosis/Evaluation
November 7, 2005

I) GENERAL

Operator:	Range Operating New Mexico, Inc. (100%)	
Partners/WI:	none	
Proposed Well Designation:	Elliott "B" Fed. No. 15	
API No.:	30-025-	
Well Classification:	PUD	
Confidentiality Status:	Restricted, no information release without approval	
PTD (Permit Depth):	4500 ft MD	
Anticipated Spud Date:		
Estimated Days to Drill:	10	
Drilling Contractor:	United Rig No. 24	
Expected Type of Hydrocarbon:	Oil/Gas, Gravity and GOR variable	
Contacts:	Tom Brace, Geol. Mgr.	(817)810-1926
	Martin Emery, Project Geologist	(817)810-1951
	Steve Chapman, Reservoir Engineer	(817)810-1912
	Bobby Ebeier, Landman	(817)810-1987
	Don Robinson, Drilling Mgr.	(817)509-1506
	Bryan Surles, Oper. Eng.	(817)810-1971

II) WELL OBJECTIVES

The objective of the well is to drill and evaluate the Queen - San Andres Formations and complete the well as a San Andres producer. The expected **San Andres EUR** for the well is **XXXX MMCFGE**. The expected **IP** is **XXX MCFG & XX BO/D**.

III) LOCATION

Surface Location:	990 ft FNL 1650 ft FEL Section 7-T22S-R37E Lea County, New Mexico Lat: 32 deg 24' 38.44" Long: 103 deg 11' 54.94"
Bottom-hole Location:	same, vertical
Elevation:	GL: 3430 ft KB: 3440 ft
Directions to Location:	

EUNICE SOUTHWEST PROSPECT (San Andres)
Elliott "B" Fed. No. 15
Well Objectives/Prognosis/Evaluation

V) PRIMARY RESERVOIR TARGETS

Upper Permian **Grayburg DOL**

Rock Type:	DOL
Thickness:	~180 ft
Avg. Porosity:	7%; ranges from 0-14+%
Avg. Perm.:	? md
Est. Reservoir Temp.:	100-110°F
Est. Reservoir Press.:	1400-1450 psi (assuming no pressure depletion)

Upper Permian **San Andres DOL**

Rock Type:	DOL
Thickness:	~250 ft
Avg. Porosity:	10-13%; ranges from 3-20%
Avg. Perm.:	? md
Est. Reservoir Temp.:	100-110°F
Est. Reservoir Press.:	1400-1450 psi (assuming no pressure depletion)

VI) SECONDARY RESERVOIR TARGETS

Upper Permian **Queen &, Penrose-Skelly** Formations

VII) PROPOSED WELL DESIGN

Drilling Fluids/Additives: Brine, 10.1 lbs/gal
Casing Design:

VIII) EVALUATION

Mud-Logging:

Contractor:	None
Basic Requirements:	Cuttings lithology description/comments Oil shows/fluorescence/cut description Gas monitoring, chromatography, gas ratios Penetration rate/depth, rig operations, bit and mud properties One man unit
Correlation:	Please use the following logs for correlation and refer to Section (X) for offset well tops:
Sampling:	
Reporting:	E-mail/WWW or fax daily reports/logs to:

EUNICE SOUTHWEST PROSPECT (San Andres)
Elliott "B" Fed. No. 15
Well Objectives/Prognosis/Evaluation

VIII) EVALUATION (cont)

Conventional Coring: None

Open-Hole DSTs:

DST Contractor: None
DST Program: None
Distribution: see attached distribution

Open-Hole Logging:

Contractor: **BAKER HUGHES** (432)563-1275
Logging Program: 2500-4500 ft MD (TD) DSL-CN-ZDL-DLL-MLL
(log GR-Neutron to surface)

Distribution: see attached distribution

IX) POTENTIAL HAZARDS/PITFALLS

Problematic Drilling Zones:
Abnormal Pressure/Temperature Zones: Possibility of partial depletion within Queen to Grayburg Formations
Fractured/Lost Circulation Zones: See above; **Please tag mud if circulation is lost in primary pay interval**
Presence of H₂S or CO₂: None expected
Faults Intersecting the Wellbore: None expected

X) CORRELATION LOG TOPS:

Correlations	
Upper Permian Rustler Fm	
Upper Permian Yates Fm	
Upper Permian 7 Rivers Fm	
Upper Permian Queen Fm	
Upper Permian PS Fm	
Upper Permian Grayburg Fm	
Upper Permian San Andres	

PETROLEUM ENGINEER

 The sender of this message has requested a read receipt. [Click here to send a receipt.](#)

Mull, Donna, EMNRD

From: Phillips, Dorothy, EMNRD
To: Mull, Donna, EMNRD
Cc:
Subject: RE: Financial Assurance Requirement
Attachments:

Sent: Mon 4/24/2006 9:16 AM

All have blankets and do not appear on Jane's list.

From: Mull, Donna, EMNRD
Sent: Monday, April 24, 2006 9:08 AM
To: Phillips, Dorothy, EMNRD
Cc: Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD
Subject: Financial Assurance Requirement

Dorothy,

Is the Financial Assurance Requirement for these Operators OK?

Capataz Operating Inc (3659)
Chevron USA Inc, (4323)
Range Operating New Mexico Inc (227588)

Please let me know. Thanks Donna.