

DISTRICT I

1400 N. FRANKLIN DR., SHERBO, NM 86040

DISTRICT II

1001 W. GRAND AVENUE, ALBUQUERQUE, NM 87102

DISTRICT III

1000 Rio Grande Rd., Arco, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico

Geology, Minerals and Natural Resources Department

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

Per Lease - 8 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| | | |
|---------------|---------------------------------|--------------------|
| API Number | Pool Code | Pool Name |
| Property Code | Property Name SCB 23 | Well Number 15 |
| OGED No. | Operator Name R.B. OPERATING | Elevation 2989' |

Surface Location

| UL or lot No. | Section | Township | Range | Lot 1/4 | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| H | 23 | 23-S | 28-E | | 1430' | NORTH | 1150' | EAST | EDDY |

Bottom Hole Location If Different From Surface

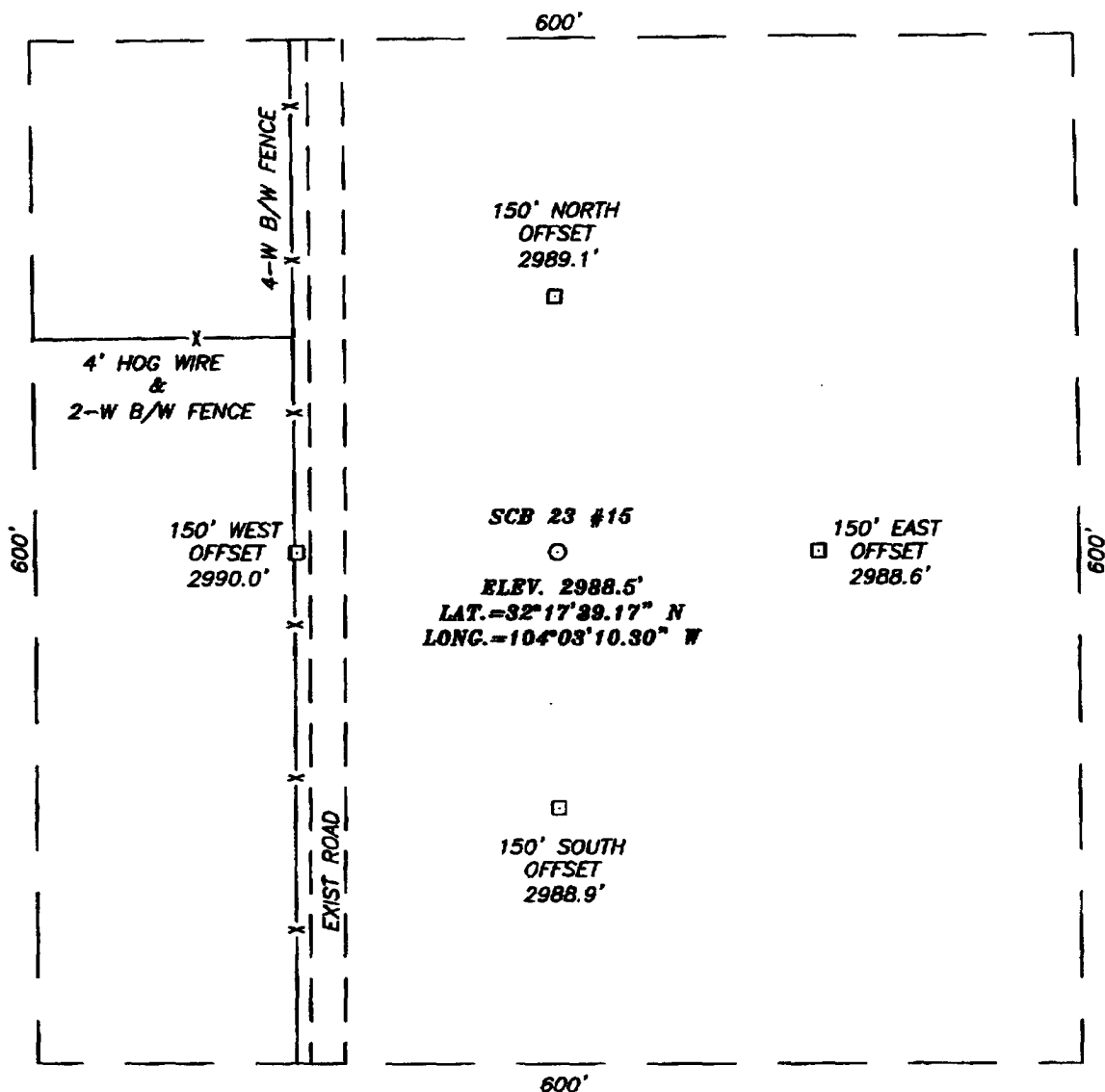
| UL or lot No. | Section | Township | Range | Lot 1/4 | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|-----------------|-----------------|--------------------|-----------|
| 4c | | | |

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

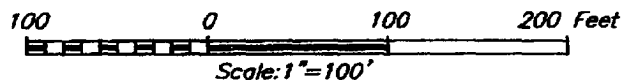
| | |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i> Signature: <u>D K Robinson</u> Printed Name: <u>D K ROBINSON</u> Title: <u>Drilling Manager</u> Date: <u>8-11-04</u> |
| | SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual survey made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Date Surveyed: <u>AUGUST 2, 2004</u> Signature & Seal of Professional Surveyor: <u>JR</u> |
| | <u>04.11.0896</u> |
| | Certificate No. <u>RONALD J. EIDSON 3230</u> |

SECTION 23, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

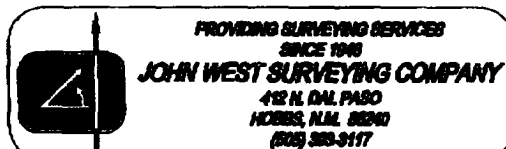
FROM THE INTERSECTION OF EDDY CO. RD. #728 (LONDON RD.) AND EDDY CO. RD. #740 (DONALDSON FARM RD.) GO EAST ON LONDON RD. FOR APPROX. 0.75 MILES TO A DIRT ROAD ON THE RIGHT. TURN RIGHT (SOUTH) AND GO APPROX. 0.25 MILES. PROPOSED LOCATION IS APPROX. 150' EAST IN ALFALFA FIELD.



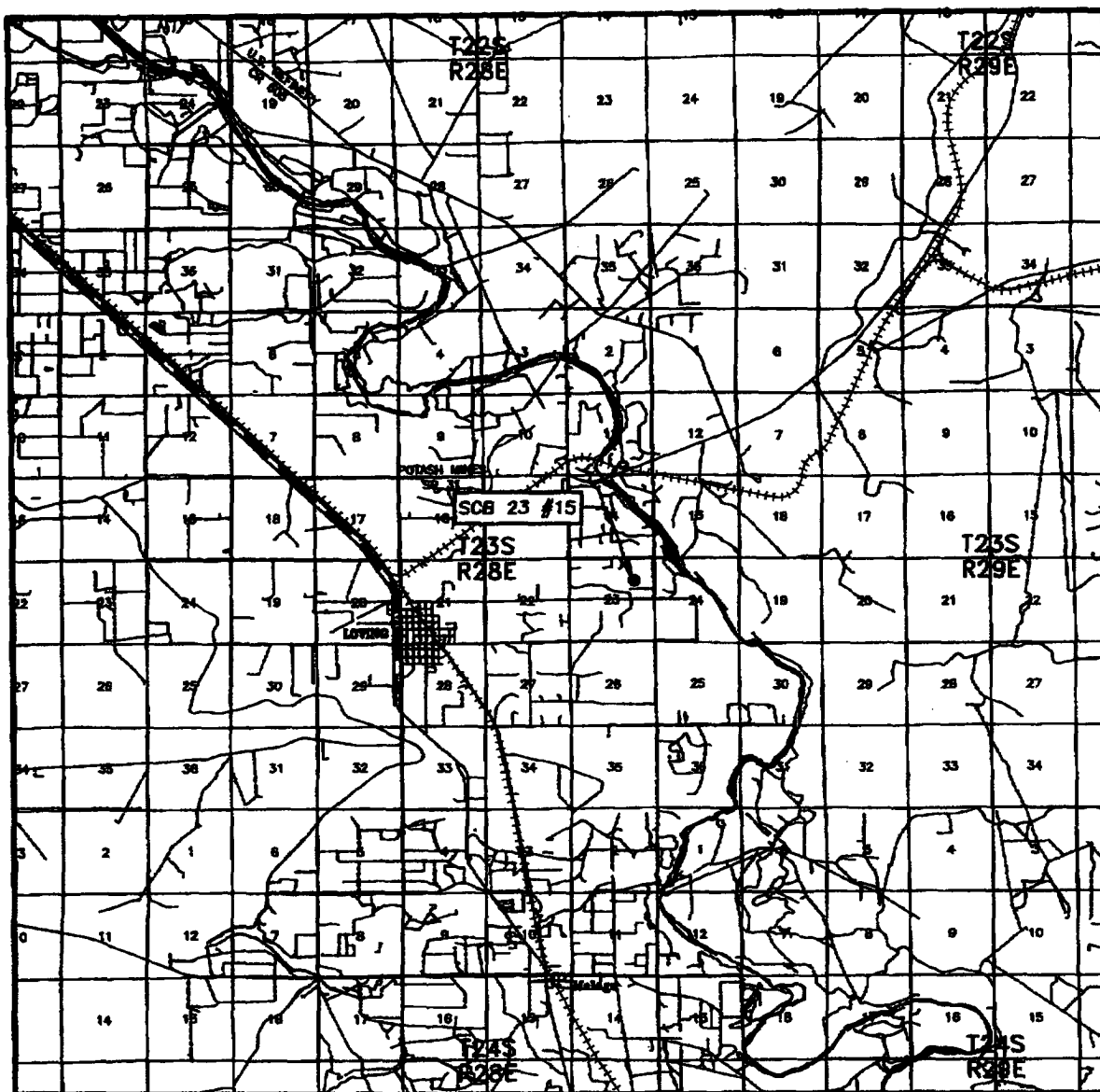
R.B. OPERATING

SCB 23 #15 WELL
LOCATED 1430 FEET FROM THE NORTH LINE
AND 1150 FEET FROM THE EAST LINE OF SECTION 23,
TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

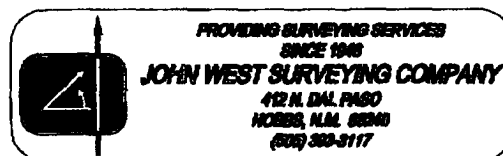
| | |
|-------------------------|---------------------|
| Survey Date: 08/02/04 | Sheet 1 of 1 Sheets |
| W.O. Number: 04.11.0896 | Dr By: J. RIVERO |
| Date: 08/06/04 | Disk: CD#10 |
| 04110896 | Scale: 1"=100' |



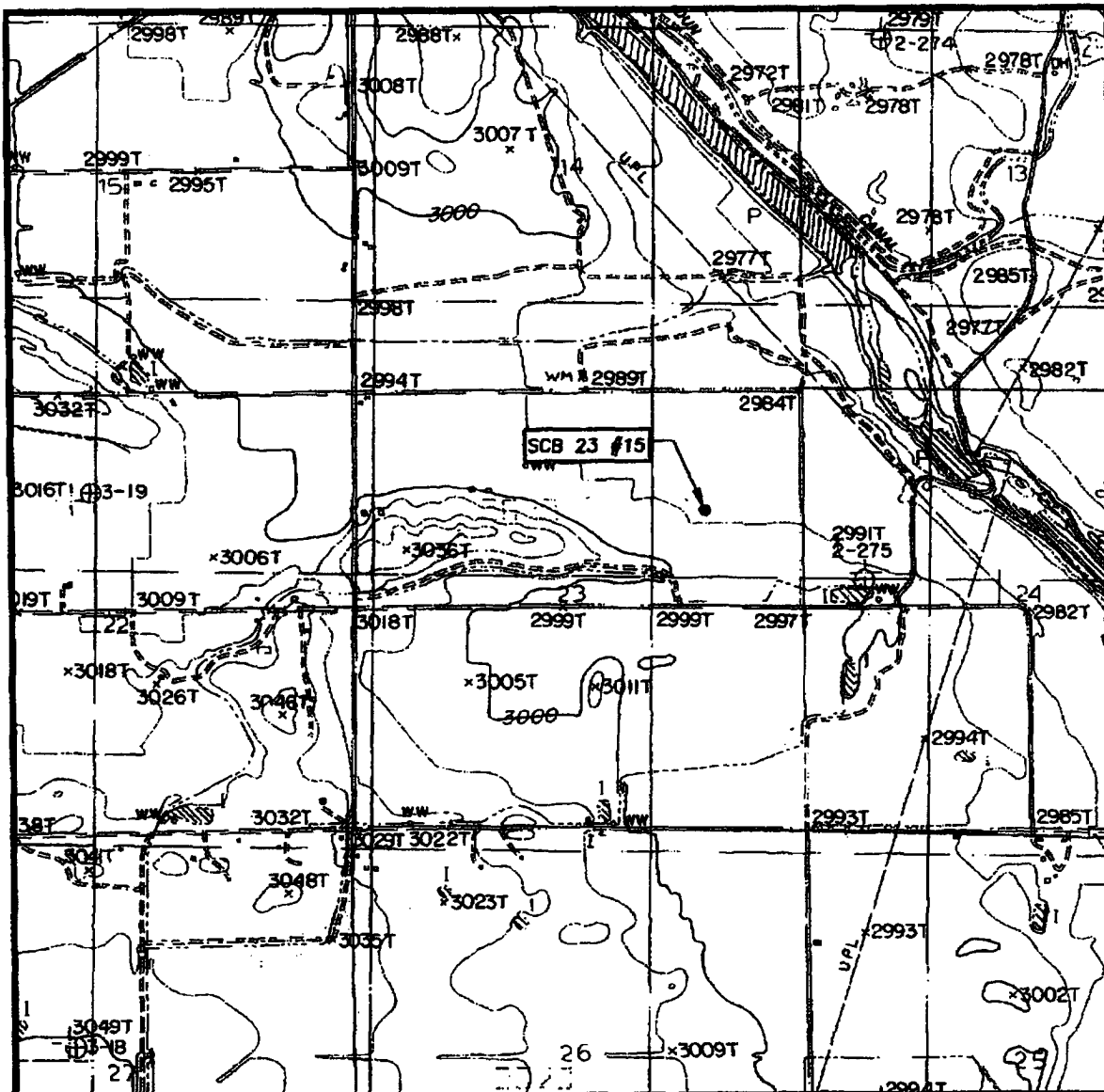
VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 23 TWP. 23-S RGE. 28-ESURVEY N.M.P.M.COUNTY EDDYDESCRIPTION 1430' FNL & 1150' FELELEVATION 2989'OPERATOR R.B. OPERATINGLEASE SCB 23

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 23 TWP. 23-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY

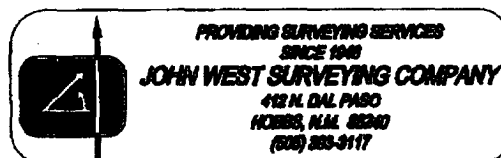
DESCRIPTION 1430' FNL & 1150' FEL

ELEVATION 2989'

OPERATOR R.B. OPERATING

LEASE SCB 23

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



DEC-22-2004 WED 09:57 AM

FAX NO.

P. 02

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL
CONSERVATION DIVISION FOR THE
PURPOSE OF CONSIDERING:**

**CASE NO. 13358
ORDERS NO. R-12246**

**APPLICATION OF RB OPERATING COMPANY FOR TWO UNORTHODOX OIL
WELL LOCATIONS AND SIMULTANEOUS DEDICATION, EDDY COUNTY, NEW
MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on November 4th, 2004 at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 21st day of December 2004, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, RB Operating Company ("RB Operating"), seeks well location exceptions and simultaneous dedication and for each of two proposed oil wells to be located on two separate standard 40-acre proration units within Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, and within the East Loving-Brushy Canyon Pool (40350), as follows.

(a) Carrasco "14" Well No. 4 to be drilled at a unorthodox infill oil well location 2630 feet from the South line and 1330 feet from the East line (Unit J) of Section 14, and to simultaneously dedicate it along with the South Culebra Bluff Well No. 2 (API No. 30-015-22591) to a standard 40-acre proration unit consisting of Unit J of this Section.

(b) South Culebra Bluff "23" Well No. 15 to be drilled at a unorthodox infill oil well location 1430 feet from the North line and 1150 feet from the East line (Unit E) of Section 23, and to simultaneously dedicate it along with the South Culebra Bluff "23" Well No. 12 (API No. 30-015-26368) to a standard 40-acre proration unit consisting of Unit H of this Section.

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(3) The East Loving-Delaware Pool was created and defined by Division Order No. R-8562 dated December 4, 1987. Statewide rules applied for development, with standard 40-acre spacing and proration units, each having a top unit depth bracket allowable of 142 barrels of oil per day and a limiting gas oil ratio of 2,000 cubic feet of gas per barrel of oil. The discovery well was the Brambley Corn Well No. 1, located in Unit N of Section 23, Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, and had a top perforation depth of 6,210 feet.

(4) On May 10, 1991, in Order No. R-9501, the Division denied an application to raise the limiting gas oil ratio from 2,000 to 5,000 cubic feet per barrel. On October 30, 1991, in Order No. R-9501-A, the Commission also denied an application to raise the limiting gas oil ratio.

(5) On July 9, 1993, in Order No. R-9501-B issued in Case No. 10692, the Division restricted the vertical limits of this Delaware pool to the Brushy Canyon formation, renamed the pool the East Loving-Brushy Canyon Pool (40350), and approved one special pool rule which raised the limiting gas oil ratio to 8,000 cubic feet of gas per barrel of oil produced.

(6) The East Loving-Brushy Canyon Pool is otherwise governed by statewide rules, which include Rule 104 B.(1) requiring oil wells to be located no closer than 330 feet from the boundary of a standard 40-acre spacing unit.

(7) The proposed location for the Carrasco "14" Well No. 4 at 2,630 feet from the South line and 1,330 feet from the East line of Section 14 is within 10 feet of the northern and eastern boundary of the NW/4 SE/4 (Unit J) spacing unit. As such, this well encroaches on Units G, H, and I of Section 14.

(8) The proposed location for the South Culebra Bluff "23" Well No. 15 at 1,430 feet from the North line and 1,150 feet from the East line (Unit E) of Section 23 is within 110 feet of the northern boundary and 170 feet of the western boundary of the SE/4 NE/4 (Unit H) spacing unit. As such, this well encroaches on Units A, B, and G of Section 23.

(9) It appears that RB Operating has provided notice of the application in this case to all affected interest owners in accordance with Division rules.

(10) No affected party or offsetting operator and/or interest owner appeared at the hearing, or otherwise opposed this application.

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(11) RB Operating presented testimony from land, geological, and engineering personnel as follows.

(a) The two proposed wells are to be located at the approximate center of four existing Brushy Canyon oil wells, each of which is located in a 40-acre spacing and proration unit. The effective spacing of the two new wells will be 20 acres per well.

(b) RB Operating has obtained fully executed voluntary agreements from all interest owners affected. Affected owners are all the owners in each of the 40-acre proration units surrounding the two proposed wells: 160 acres in Section 14 and 160 acres in Section 23. All acreage involved and affected by this application is privately owned and all tracts are exactly 40 acres in size.

(c) RB Operating has notified and obtained approval from the surface owners involved to site and drill these two proposed wells at these locations.

(d) For the proposed well in Section 14, ownership interests in the 160 acres, which includes Units G, H, I, J, are identical.

(e) For the proposed well in Section 23, ownership interests in the 160 acres, which includes Units A, B, G, H, are slightly diverse in that the royalty ownership in the west 80 acres varies from the royalty ownership in the east 80 acres. All affected interest owners in Section 23 have signed a communitization agreement and production from the new well in Section 23 will be metered separately.

(f) This action will not affect or require amendments to existing operating agreements, Division orders, or transfer orders.

(g) RB Operating is the operator and 50 percent working interest owner of all 40-acre spacing and proration units involved or affected by this application.

(h) Regulatory allowable will be set, and production reported, based on the 40-acre proration unit that each of these are physically located in. However, in each of the new wells, all revenue will be shared equally by each of the four surrounding 40-acre tracts.

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(i) Geologically, the concept is that the existing 40-acre wells are not effectively draining these 40-acre spacing and proration units and data will be collected from these two pilot wells for potentially future 20-acre drilling.

(j) The reservoir rock consists of multiple stratigraphic sands. Structure is not a very big factor affecting production. The sand lenses in the older wells have already been effectively stimulated using hydraulic fracturing techniques. Some of the sands have poor reservoir characteristics that may limit the extent of drainage. The sands have some in situ clays, which decrease permeability; but the higher gamma readings are not attributable to uranium.

(k) The intervals prospective in the new wells are limited to the Brushy Canyon and the Bell and Cherry Canyons are considered "wet" in this area.

(l) Sidewall cores will be taken, reservoir pressure tests will be conducted, and fluid samples collected for PVT analysis. PVT analysis will be done to further understand the part that the gas component plays in this reservoir.

(m) Based on an analogous primary recovery factor of 11 percent, the expected volumetric recovery is greater than the expected recovery of the existing 40-acre spaced wells as calculated by decline analysis. The difference is enough to economically drill additional wells.

(n) The production rates of the proposed new wells, when added to the production rates from existing wells in the 40-acre proration units, are not expected to exceed the top allowable.

(12) The drilling of RB Operating's Carrasco "14" Well No. 4 and South Culebra Bluff "23" Well No. 15, both at unorthodox locations centered between existing wells spaced on 40-acres, will result in the recovery of hydrocarbons that will otherwise not be recovered, thereby preventing waste and protecting correlative rights.

(13) Due to diverse ownership, oil and gas production from the proposed South Culebra Bluff "23" Well No. 15, should be metered separately prior to combining with production from other wells for sales.

(14) The application of RB Operating for exceptions to the statewide oil well location requirements contained in Division Rule 104 B.(1) for both wells, should be granted.

(15) The application of RB Operating for simultaneous dedication of these two new wells along with existing wells to the respective proration units should be granted.

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IT IS THEREFORE ORDERED THAT:

(1) As detailed below in (a) and (b), the application of RB Operating Company for two unorthodox oil well locations and simultaneous dedication within the East Loving-Branahy Canyon Pool (40350), and within Township 23 South, Range 28 East, NMPM, Eddy County, New Mexico, is hereby approved.

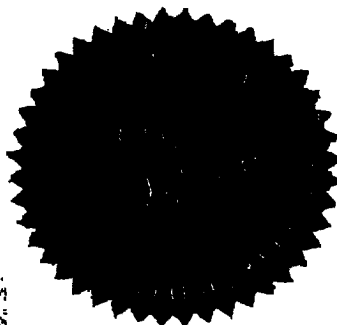
(a) The Carrasco "14" Well No. 4 to be drilled at a unorthodox infill oil well location 2,630 feet from the South line and 1,330 feet from the East line (Unit J) of Section 14, and to simultaneously dedicate it along with the South Culebra Bluff Well No. 2 (API No. 30-015-22591) to a standard 40-acre proration unit consisting of Unit J of this Section.

(b) The South Culebra Bluff "23" Well No. 15 to be drilled at a unorthodox infill oil well location 1,430 feet from the North line and 1,150 feet from the East line (Unit H) of Section 23, and to simultaneously dedicate it along with the South Culebra Bluff "23" Well No. 12 (API No. 30-015-26368) to a standard 40-acre proration unit consisting of Unit H of this Section.

(2) In accordance with 19.15.5.303 NMAC, RB Operating Company shall maintain separate facilities for separation and sale of oil and gas production from the South Culebra Bluff "23" Well No. 15, until such time as it applies for and obtains a surface commingle permit from the Division.

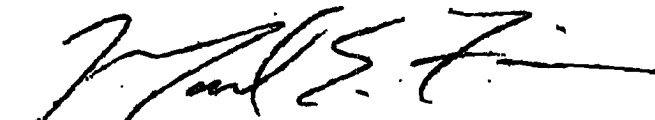
(3) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


MARK R. FESMIRE, P.E.
Director



RB OPERATING COMPANY
SCB #23-15
Drilling Program
Prepared 12/28/2004

WELL: SCB 23-15
COUNTY: Eddy, NM
GROUND ELEVATION: 2988.5'
KB: 13'

PROPOSED DEPTH: 6500' MD
6500' TVD

LOCATION:
1430' FNL & 1150' FEL, Sec. 23-T23S-R28E, Eddy County, NM

ANTICIPATED PRODUCTIVE FORMATION: Brushy Canyon

NMOCD PERMIT #: xxxxxx

API NO: 30-015-xxxxx

DIRECTIONS TO LOCATION:

From the intersection of Eddy County Rd #728 (London Rd) and Eddy County Rd #740, go east on London Road for approximately .75 miles to a dirt road on right, turn right (south) and go approximately .25 miles. Location is approximately 150' east in Alfalfa Field.

GENERAL:

The SCB 23-15 will be a 6400' Brushy Canyon producer in Eddy Co., New Mexico drilled on a daywork basis by Patterson Rig #65. After building the surface location Rig #65 will move in and drill a 12-1/4" surface hole to +/-570. Actual TD will be spaced so that casing will be landed where the casing head can be screwed on. 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 6500'. 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 surface and the tubing head installed.

Well will be drilled on a daywork contract at \$xxxx per day plus fuel.

ESTIMATED FORMATION TOPS: (Log Depths)

Anticipated tops are:

| | |
|-------------|-------|
| Pardue | 4670' |
| BC 'A' | 5905' |
| BC 'B' | 5990' |
| BC 'C' | 6105' |
| BC 'D' | 6170' |
| Total Depth | 6500' |

DETAILED DRILLING PROCEDURE

TIMES AND EVENTS TO NOTE ON DRILLING REPORT:

- A. SPUD
- B. TD
- C. RIG RELEASE

MUD PROGRAM

| INTERVAL | MUD WEIGHT | FUNNEL VIS. | PV/YP | API Fluid Loss |
|-------------|------------|-------------|-------|----------------|
| 0' - 570' | 8.4 - 9.0 | 36-45 | | NC |
| 570'-6000' | 9.9 - 10.1 | 28-32 | | NC |
| 6000'-6500' | 9.9 - 10.2 | 34-38 | | Less than 20 |
| | | | | |

- 1) Level and build an all-weather location and access road.
- 2) MIRU Patterson Rig #65. Perform rig safety inspection and ensure that everything is in proper working order prior to spudding well. In some areas it may be necessary to set a conductor due to sand. The well will be drilled with a closed loop mud system. RU rails and cuttings catch tanks and additional mud cleaning equipment.
- 3) Notify NMOCD of intent to spud, run casing and cement each 24 hours in advance 505-748-1283.
- 4) Spud well with 12.25" mill tooth bit. BHA should consist of 4-8" drill collars and 6" drill collars. Drill to +/- 570' (Actual depth will be determined by the length of the casing). Circulate hole clean. Sweep and condition hole to run casing. Drop a TOTCO prior to POOH (must run 1st survey prior to 500' per NMOCD rules). Pull out of hole, lay down 12.25" 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) Make sure to get mill test papers with surface casing. Rig up casing crew and run 8-5/8", 24.0#, J-55, ST&C as follows:

1-8-5/8" Texas Pattern Shoe
 1-8-5/8" Insert Float Collar
 1-8-5/8" x 12-1/4" Centralizer 10' above shoe
 1-8-5/8" x 12-1/4" Centralizer next two joints
 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. **DO NOT** call for pump truck until needed. Attempt to cut down on hours over minimum.
 - 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.
 - b) Cement well as follows: Pump 10 bbl fresh water, mix 600 sxs class "C" with 2% CcCl₂, 1/4# celloseal mixed @ 14.8ppg & 1.32 ft³/sx Tail, 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" and top out cement. Have 1" pipe on location for top-out.

d) If cement falls, fill 12.25" X 8-5/8" annulus with cement.

- 7) Release pressure and check for flow back. If float is holding WOC six (6) hours before NU wellhead and BOP. Otherwise shut in well, hold & WOC 12 hours. Well must stand at least 8 hours total before any testing of casing is performed per NMOCD.
- 8) After Cementing casing, screw on 8-5/8" Larkin Model 92 style casing head. Test BOP blind Rams & choke manifold 250# low & 3000# high. Pick up bit (Reed TD53B, jetted w/ 3-12's) & BHA, trip in hole, test BOP pipe rams 250# low & 3000#. Pressure test casing to 1000 psi for 30 minutes prior to drilling out shoe.

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 $\pm 6500'$; 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 Wire line Truck and Tools. Log well as instructed by RB Operating. Rotary sidewall cores may be required along with RFTs.
- 11) Make a conditioning trip prior to running casing. Trip into hole with BHA and drill pipe, break circulation at 2400'. Ream last two stands to bottom. Circulate and condition hole. Maintain viscosity of 38. 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" 15.5#, J-55, LT&C as follows:
- a) Float shoe (thread-lock)
 - b) 2 jts. 5-1/2", 15.5#, J-55, LT&C casing (thread-lock)
 - c) Float collar (thread-lock)
 - d) 5-1/2", 15.5#, J-55, LT&C Casing to 3350'.
 - e) DV tool.
 - f) 5-1/2", 15.5#, 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 4500'. Run 1 centralizer above and below the DV tool.

- 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

Stage One:

Lead: 600 sx 50:50 Poz C + 2% Gel + 0.40% TF-4 + 57% water + 0.3% CF-2 + 10 pps Gilsonite, mixed at 13.6 ppg, 1.48 ft³/sk.

Tail: 150 sx. Class "C" + 0.2% TF-4 + .3% CF-14 + 56% water, mixed at 14.8 ppg, 1.33 ft³/sk.

Release pressure and check for flow back. After bumping plug, drop DV tool opening dart and allow to fall. Open DV tool and circulate 4 to 6 hours. Mix and pump stage two.

Stage Two:

Lead: 820 sx 35:65 Poz C + 10% D44 + 6% D20 + 0.2% D46, mixed at 12.7 ppg, 2.08 ft³/sk.

Tail: 100 sx Class C + 2% CaCl₂, mixed at 14.8 ppg, 1.34 ft³/sk.

- 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.
 - b) Have additional water storage on location as necessary for mixing cement. Have water analyzed by cementing company for compatibility with cement and chemicals.
 - c) Reciprocate pipe during job. 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.
 - d) Bump plug with 500 psi over final displacement pressure and hold pressure for 15 minutes.
 - e) If cement does not circulate notify NMOCD office.
- 15) Release pressure and check for flow back. If floats are holding, continue to make preparations to hang 5-1/2" casing one foot off bottom. If floats do not hold, wait 12 hours on cement.
- 16) Set 5-1/2" slips in "A" section. 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.

| | | | | |
|-------------------|-------------------|----------------|----------------|----------------|
| George Allen Teer | VP of Operations | (817) 723-1107 | (817) 491-3740 | (817) 870-2601 |
| | District Engineer | | | (817) 870-2601 |
| Martin Emery | Chief Geologist | (817) 366-3693 | (817) 430-4861 | (817) 870-2601 |
| | District Engineer | | | |

| | | | |
|-------------------------------------|-------------------|----------------------------------|-------------------------------------|
| Patterson., Midland, TX | Sales | Steve McCoy | (432)-682-9401 |
| Patterson Rig #65 | Rig Floor | | (505) 390-7108 |
| | Tool Pusher | Robert Lambright | (505) 420-0801 |
| | | | |
| | | | |
| 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 |
| Nova Mud, Inc- Hobbs, NM | Drig Mud | Dale Welch | (800) 530-8786 |
| National - Hobbs, NM | Well Heads | | (505) 393-9928 |
| Master Tubulars - Midland, TX | Casing & Tubing | Randy Martin | (800) 682-8996 |
| TFH -Hobbs, NM | Dirt Contractor | | (505) 397-3270 |
| Schlumberger -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 | | |
| CRI -Odessa, TX | Closed Mud System | Larry Parker | (505) 631-6984 |
| I&W- Carlsbad, TX | Water - | | (505) 885-6663 |
| SWACO-Odessa, TX | Mud Cleaning | Keith Solley | (915) 550-2944 |
| National -Hobbs, NM | General Supplies | | (505) 393-9928 |
| TFH -Hobbs, NM | Fork Lift | | (505) 397-3270 |