

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

SEP 24 2004

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7. If Unit or CA Agreement, Name and No.
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8. Lease Name and Well No. SCB Federal 13 #6
2. Name of Operator RB Operating Company		9. API Well No. 30-015-33777
3a. Address FT Worth TX 76102 777 Main St. Suite 800	3b. Phone No. (include area code) (817) 870-2601	10. Field and Pool, or Exploratory East Loving Delaware
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2310' FNL & 1090' FWL At proposed prod. zone 2310' FNL & 1090' FWL		11. Sec., T. R. M. or Blk. and Survey or Area Sec 13, T23S, R28E
14. Distance in miles and direction from nearest town or post office* 3 Miles Northeast of Loving, NM		12. County or Parish Eddy
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1090' East of West line		13. State NM
16. No. of acres in lease 640		17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1031'		20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2977' GL		22. Approximate date work will start* 10-15-04
		23. Estimated duration 15 Days

24. Attachments **CARLSBAD CONTROLLED WATER BASIN**

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 <i>Michael K. McGinnis</i>	Name (Printed/Typed) Michael K. McGinnis	Date 8-30-04
Title District Engineer		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 2 SEP 2004
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)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DRILLING PROGRAM

WELL: RB Production Company, SCB Federal "13" #6
FIELD: East Loving Delaware
CATEGORY: Development
STATE: New Mexico
COUNTY: Eddy
LOCATION: 2310' FNL & 1090' FWL, Sec. 13, T-23-S, R-28-E
ELEVATION (G.L.): 2977'

1. ESTIMATED FORMATION TOPS: (See Plat #1)

Salt	570'
Delaware	2640'
Cherry Canyon	3510'
Brushy Canyon	4705'
Bone Springs	6265'
Total Depth	6500'

There are no potential drilling problems.

Estimate Time to Drill and Evaluate: 10 days

Hole Size:

0' - 570'	-----	12-1/4"
570' - 6500'	-----	7-7/8"

2. ESTIMATED DEPTH AT WHICH WATER, OIL OR GAS ARE EXPECTED TO BE ENCOUNTERED:

Water:	160' to 180'	
Oil, Gas:	Delaware	2640'
	Cherry Canyon	3700'
	Lower Brushy Canyon	5965'

3. BOP & ACCESSORY EQUIPMENT: (See Plat #2)

0 - 570': None
570' - 6500'

1 set-10" double ram 3000# W.P. BOP's
3000# W.P. choke manifold

Wellhead Equipment:

8-5/8" sow X 11" 2000 psi casing head Larkin Model 92 or equivalent
5-1/2" sow X 2-7/8" 2000 psi tubing head Larkin Model R or equivalent
5000# single master valve

4. CASING PROGRAM: (See Plat #1)

Conductor Casing:

No conductor pipe will be used

Surface Casing:

0' - 570' ----- 8-5/8", 24#, J-55, ST&C

Production Casing:

0' - 6500' ----- 5-1/2", 15.5# & 17#, J-55, LT&C

ACCESSORY EQUIPMENT:

Surface Casing:

1-8-5/8" Texas Pattern Shoe
1-8-5/8" Insert Float Collar
1-8-5/8" x 12-1/4" Centralizer 3-5' above slips
1-8-5/8" x 12-1/4" Centralizer next two joints
1-8-5/8" Stop Ring

Note: Run shoe and insert collar 1 joint apart

Production Casing:

1-5-1/2" Float Shoe
1-5-1/2" Float Collar
2-5-1/2" Stop Rings

1-5-1/2" x 7-7/8" Centralizer 3 - 5' above shoe
1-5-1/2" x 7-7/8" Centralizer around next collar
1-5-1/2" x 7-7/8" Centralizer immediately below float collar
1-5-1/2" x 7-7/8" Centralizer around next 2 collars
1-5-1/2" x 7-7/8" Centralizer alternating collars for next 10 joints (5 centralizers)

Note: Run float shoe and float collar 2 joints apart

1-5-1/2" x 7-7/8" DV Tool @ 3350'
1-5-1/2" x 7-7/8" Centralizer 1 joint above and below DV Tool

5. CEMENTING PROGRAM:

WITNESS Surfing Casing: (based on 100% excess) (circulated to surface)

Spacer: 10 bbls water

Lead Slurry:

350 sx. Class "C" + .25 pps Cello-Seal
Slurry Weight -----14.81 ppg
Slurry Yield ----- 1.33 cu. ft. /sx.
Water Ratio ----- 6.32 gal/sx.

Production Casing:

1st Stage

Lead Slurry:

600 sx 50:50 POZ (Base "C") + 2% Gel + 0.40% TF-4 +
57% water + 0.3% CF-2 + 10 pps Gilsonite
Slurry Weight ----- 13.62 ppg
Slurry Yield ----- 1.33 cu. ft. /sx.
Water Ratio ----- 5.75 gal/sx.

Tail Slurry:

150 sx. Class "C" + 0.2% TF-4 + .3% CF-14 + 56% water
Slurry Weight ----- 14.78 ppg
Slurry Yield ----- 1.33 cu. ft. /sx
Water Ratio ----- 6.32 gal/sx.

2nd Stage (DV Tool @ 3350') (based on 100% excess)

Lead Slurry:

820 sx. 35:65 Poz "C" + 6 % Gel + 10 % salt + 105% water
Slurry Weight ----- 12.67 ppg
Slurry Yield ----- 2.03 cu. ft. /sx.
Water Ratio ----- 10.97 gal/sx.

Tail Slurry:

100 sx. Class "C" + 0.2% CaCl₂ + 56% water
Slurry Weight ----- 14.78 ppg
Slurry Yield ----- 1.33 cu.ft./sx
Water Ratio ----- 6.32 gal/sx.

6. MUD PROGRAM: (See Plat #1)

<u>Specifications</u>	<u>0 - 570'</u>	<u>570' - 6000'</u>	<u>6000' - 6350'</u>
Mud wt (ppg)	8.6 - 9.0	9.0 - 10.0	10.0
Vis (sec)	36 - 45	28 - 31	34 - 38
WL (ml)	N/C	N/C	15 or less
Type System	Gel-Fresh	Gel-Brine	Gel-Brine

Close Mud System: (See Plat #3)

A closed mud system will be used and cuttings and drill fluids will be disposed of as per Section 7 of the Multi-Point Surface Use Plot.

Casing Test:

Before drilling out test surface casing to 1500 psi.

Casing Seat Test:

After drilling out surface casing test to leak off or 11 ppg equivalent, whichever is less.

Deviation Specifications:

Maximum Deviation 5 deg.....1
Maximum Rate of Charge 1.5deg/100'.....1

7. LOGGING & TESTING PROGRAM:

Open Hole: 570' to 6500'

First Run:

Dual Laterolog

Micro Laterolog

Gamma Ray Neutron

Second Run:

Densilog

Compensated Neutron

Gamma Ray Neutron

DST's: None planned

Mud Logging:

2000' to Total Depth

8. No abnormal pressures or temperatures are anticipated. H₂S should not be encountered.
9. Anticipated Starting Date: October 15, 2004



RB Operating Company

Well: SCB Federal "13" #6

Field: East Loving Delaware

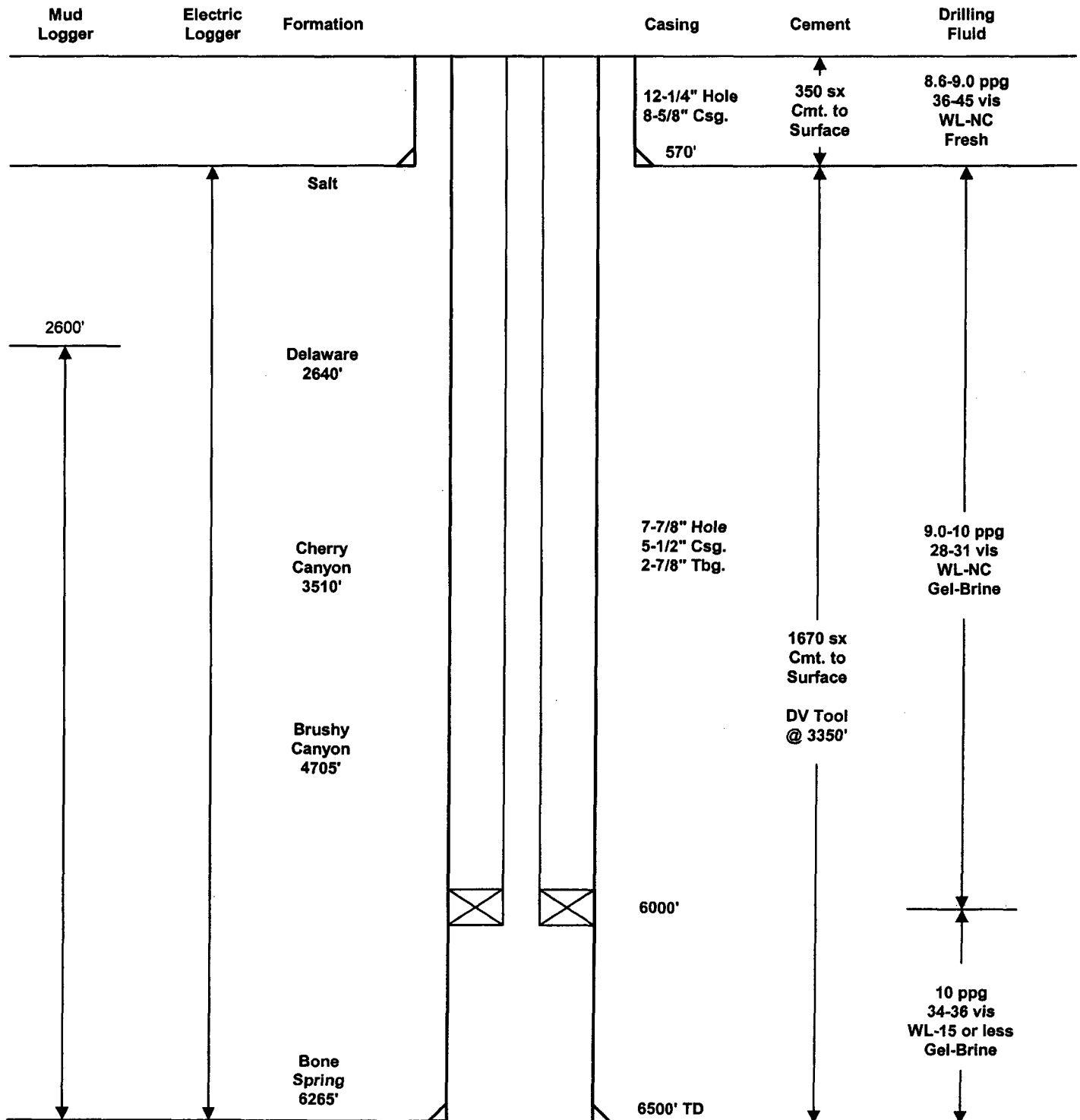
Category: Development

County: Eddy

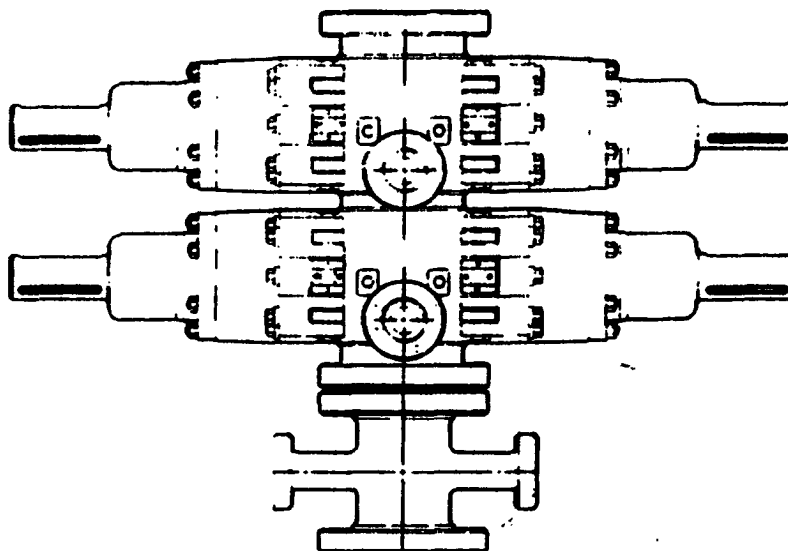
State: New Mexico

Location: 2310' FNL & 1090' FWL, Section 13, T23S, R28E

Elevation: 2977'



BLOW OUT PREVENTION EQUIPMENT



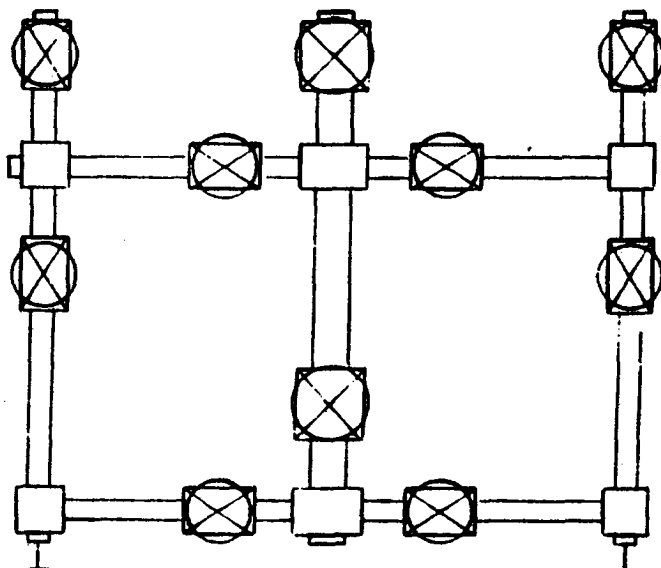
BOP Stack

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

Closing Unit

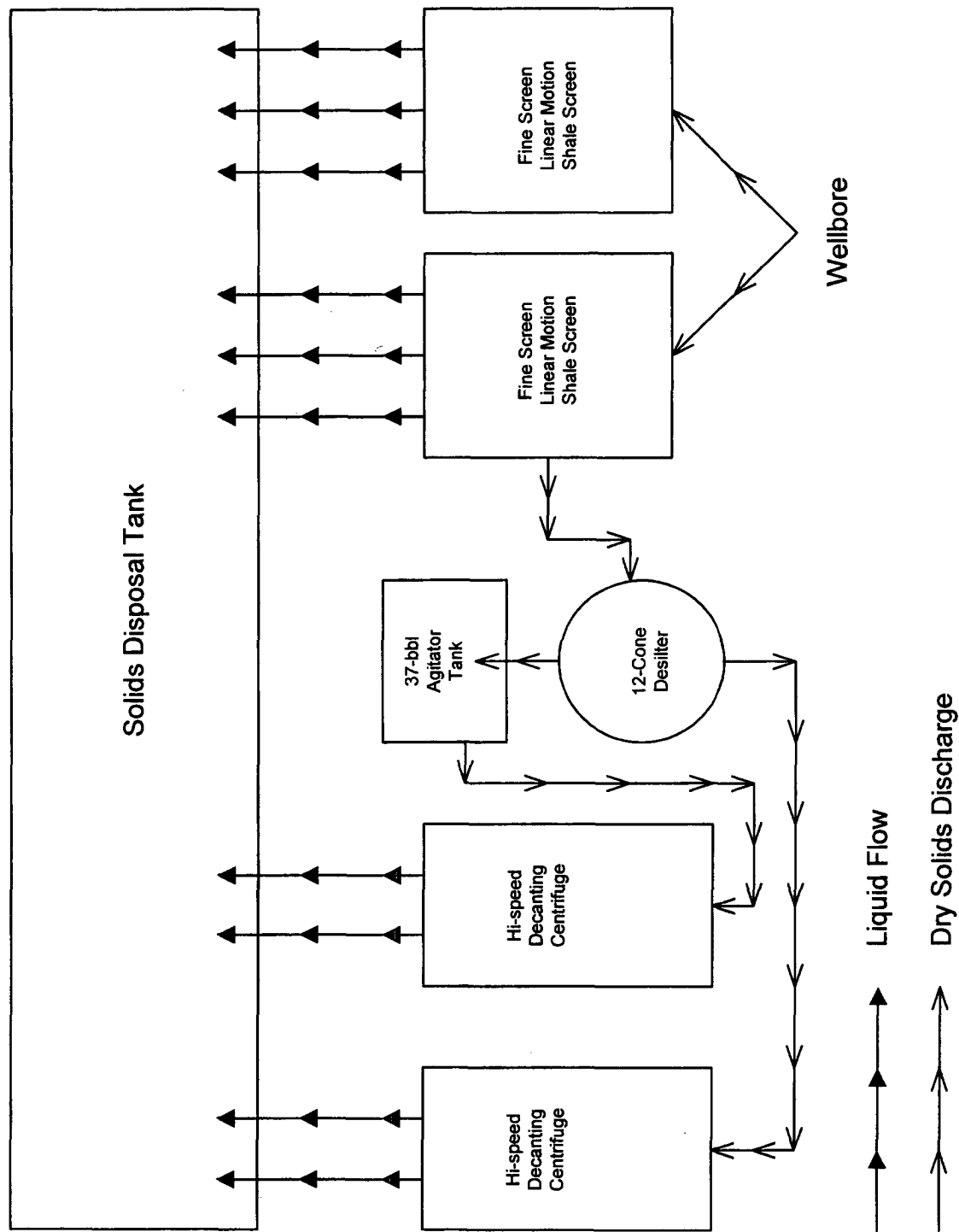
- Hydril model 80 three station accumulator
- Controls located in accumulator house and on rig floor

CHOKE MANIFOLD



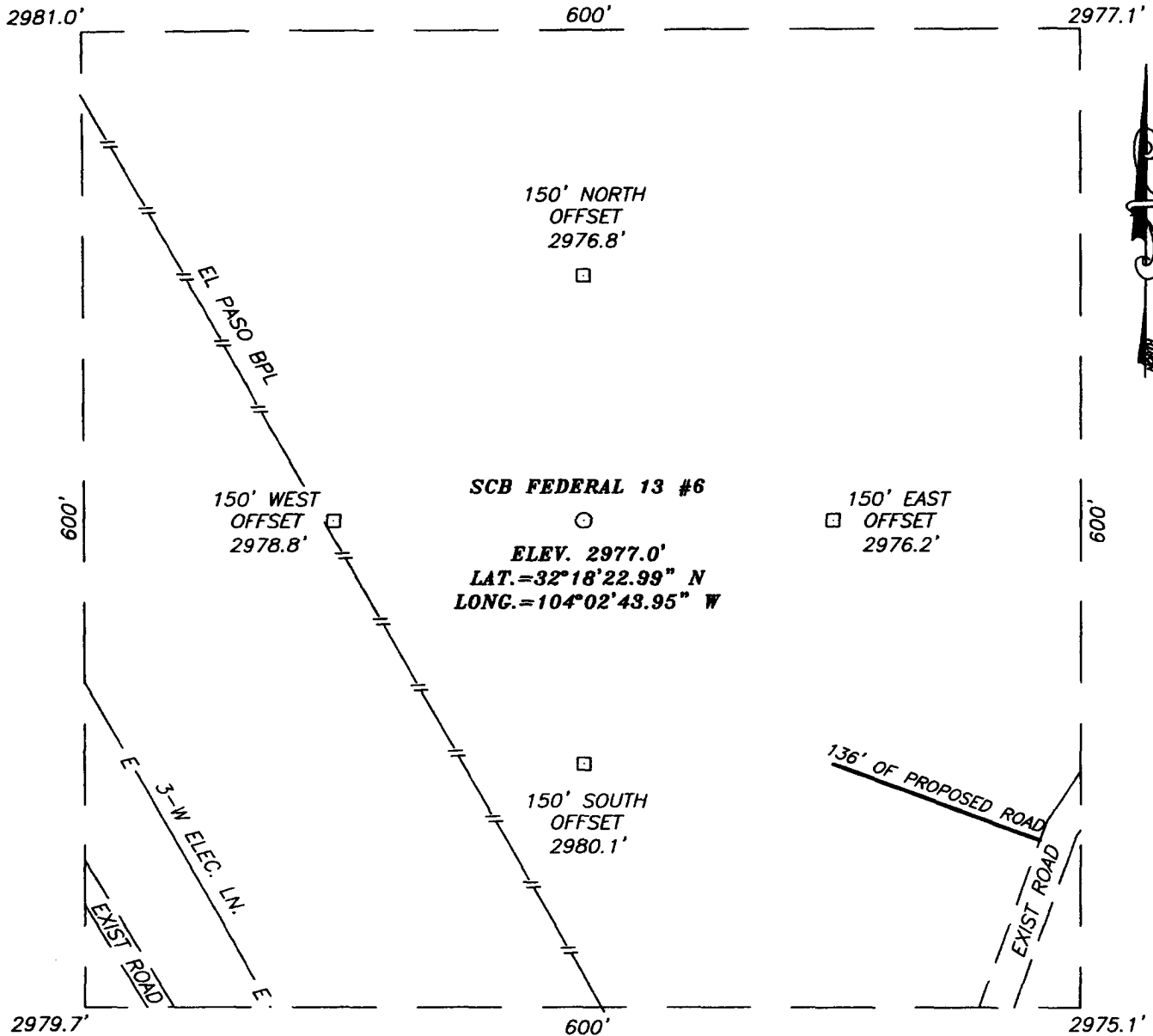
900 Series, 3000 psi WP

PLAT #2



Flow Diagram
Dry Discharge / Closed Loop Mud System

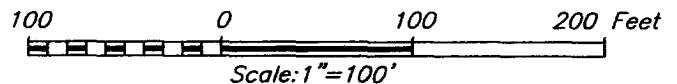
SECTION 13, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY #31 AND
 EDDY CO. RD. #741 (FISHERMAN'S LAKE RD.) GO
 SOUTH ON CO. RD. #741 FOR APPROX. 0.8 MILES
 TO A CALICHE ROAD ON THE RIGHT. TURN RIGHT
 (WEST) AND GO APPROX. 0.3 MILES TO A ROAD
 ON THE LEFT. TURN LEFT (SW) AND GO APPROX.
 0.15 MILES. PROPOSED LOCATION IS APPROX.
 300' WEST.

PLAT 6



PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

R.B. OPERATING

SCB FEDERAL 13 #6 WELL
 LOCATED 2310 FEET FROM THE NORTH LINE
 AND 1090 FEET FROM THE WEST LINE OF SECTION 13,
 TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 08/03/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0967	Dr By: J.R.
Date: 08/09/04	Disk: CD#10
04110967	Scale: 1"=100'