

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

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. 0542015
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		6. If Indian, Allottee or Tribe Name
2. Name of Operator RB Operating Company		7. If Unit or CA Agreement, Name and No.
3a. Address FT Worth TX 76102 777 Main St. Suite 800		8. Lease Name and Well No. SCB Federal 13 #8
3b. Phone No. (include area code) (817) 870-2601 Undes		9. API Well No. 30-015-33645
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface 660' FNL & 2310' FWL At proposed prod. zone 660' FNL & 2310' FWL		10. Field and Pool, or Exploratory East Loving Delaware, North
11. Sec., T. R. M. or Blk. and Survey or Area Sec 13, T23S, R28E		12. County or Parish Eddy
13. State NM		14. Distance in miles and direction from nearest town or post office* 3 Miles Northeast of Loving, NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660' south of North line	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. 1650'	19. Proposed Depth 6500'	20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 2975' 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

DISTRICT I

1625 N. FRENCH DR., HOBBES, 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 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

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
Property Code	Property Name SCB FEDERAL 13		Well Number 8
OGRID No.	Operator Name R.B. OPERATING		Elevation 2975'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	13	23-S	28-E		660	NORTH	2310	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 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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>M.K. McGinnis</i> Signature</p> <p>M.K. McGINNIS Printed Name</p> <p>DISTRICT ENGINEER Title</p> <p>9-10-04 Date</p>
	<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>AUGUST 3, 2004</p> <p>Date Surveyed _____ JR</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Ronald J. Gibson</i> 8/11/04</p> <p>04.11.0987</p> <p>Certificate No. RONALD J. GIBSON 3239</p>
	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=476950.1 N X=590142.1 E</p> <p>LAT.=32°18'39.29" N LONG.=104°02'29.61" W</p>

DRILLING PROGRAM

WELL: RB Production Company, SCB Federal "13" #8
FIELD: East Loving Delaware
CATEGORY: Development
STATE: New Mexico
COUNTY: Eddy
LOCATION: 660' FNL & 2310' FWL, Sec. 13, T-23-S, R-28-E
ELEVATION (G.L.): 2975'

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

Salt	570'
Delaware	2636'
Cherry Canyon	3496'
Brushy Canyon	4693'
Bone Springs	6245'
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	2636'
	Cherry Canyon	3496'
	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)

Specifications	0 - 570'	570' - 6000'	6000' - 6350'
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" #8

Field: East Loving Delaware

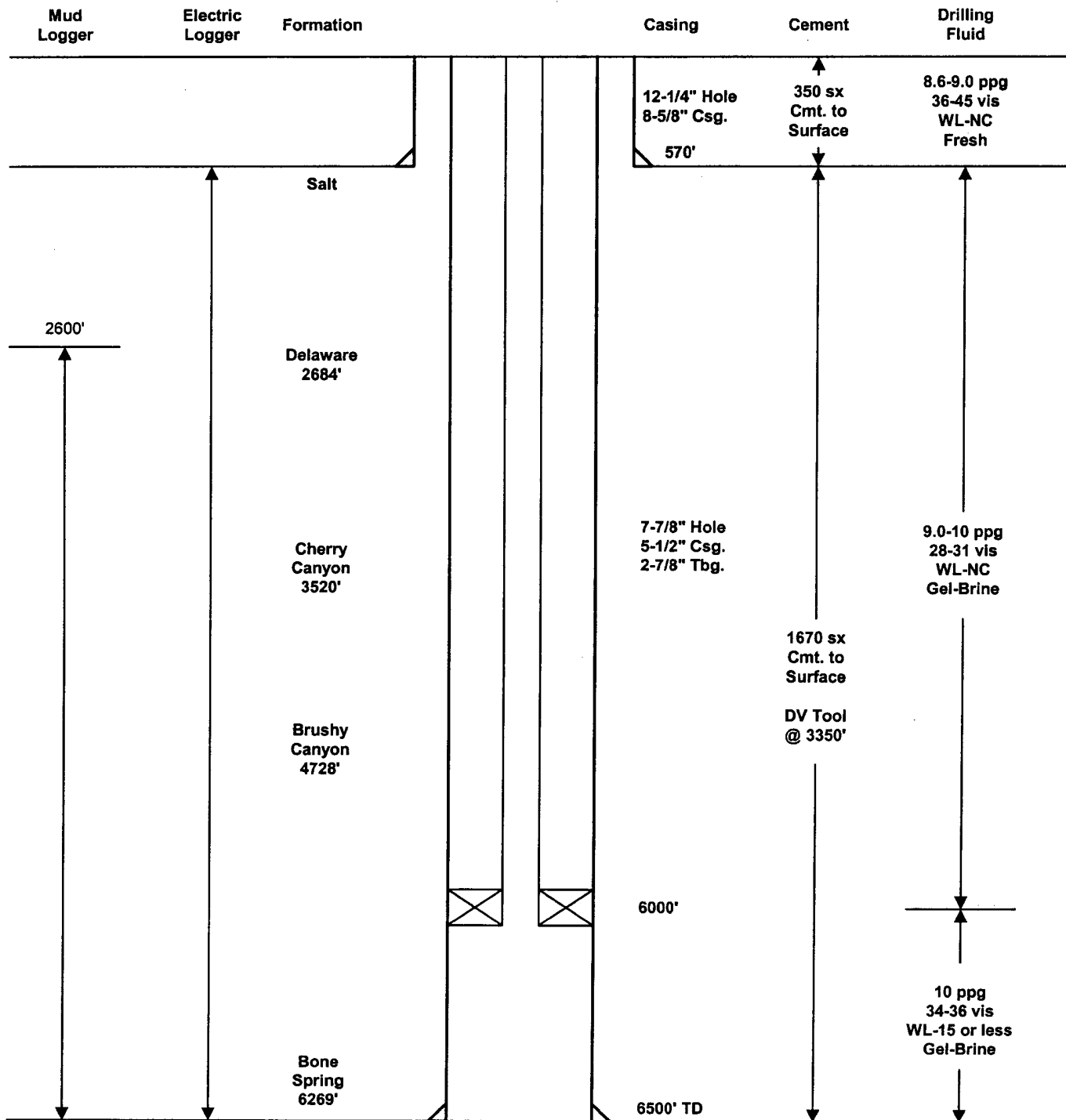
Category: Development

County: Eddy

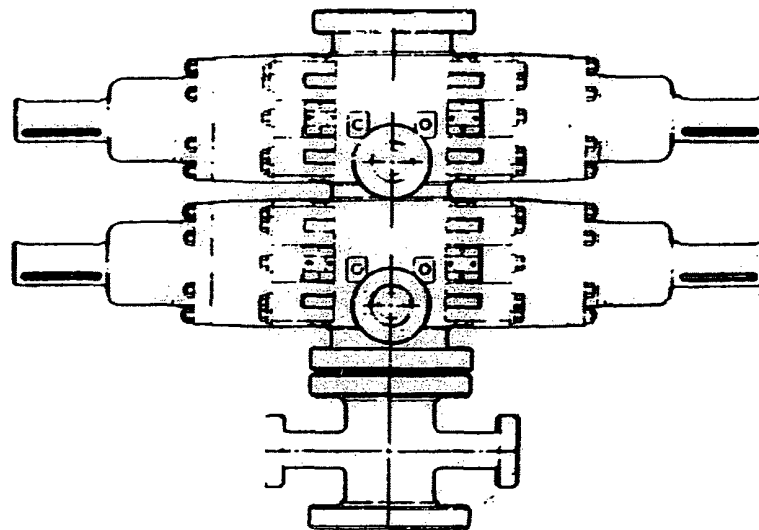
State: New Mexico

Location: 660' FNL & 2310' FWL, Section 13, T23S, R28E

Elevation: 2975'



BLOW OUT PREVENTION EQUIPMENT



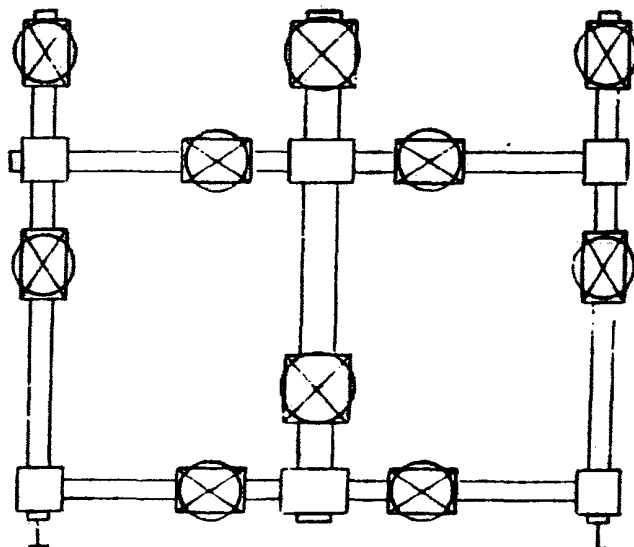
BOP Stack

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

Closing Unit

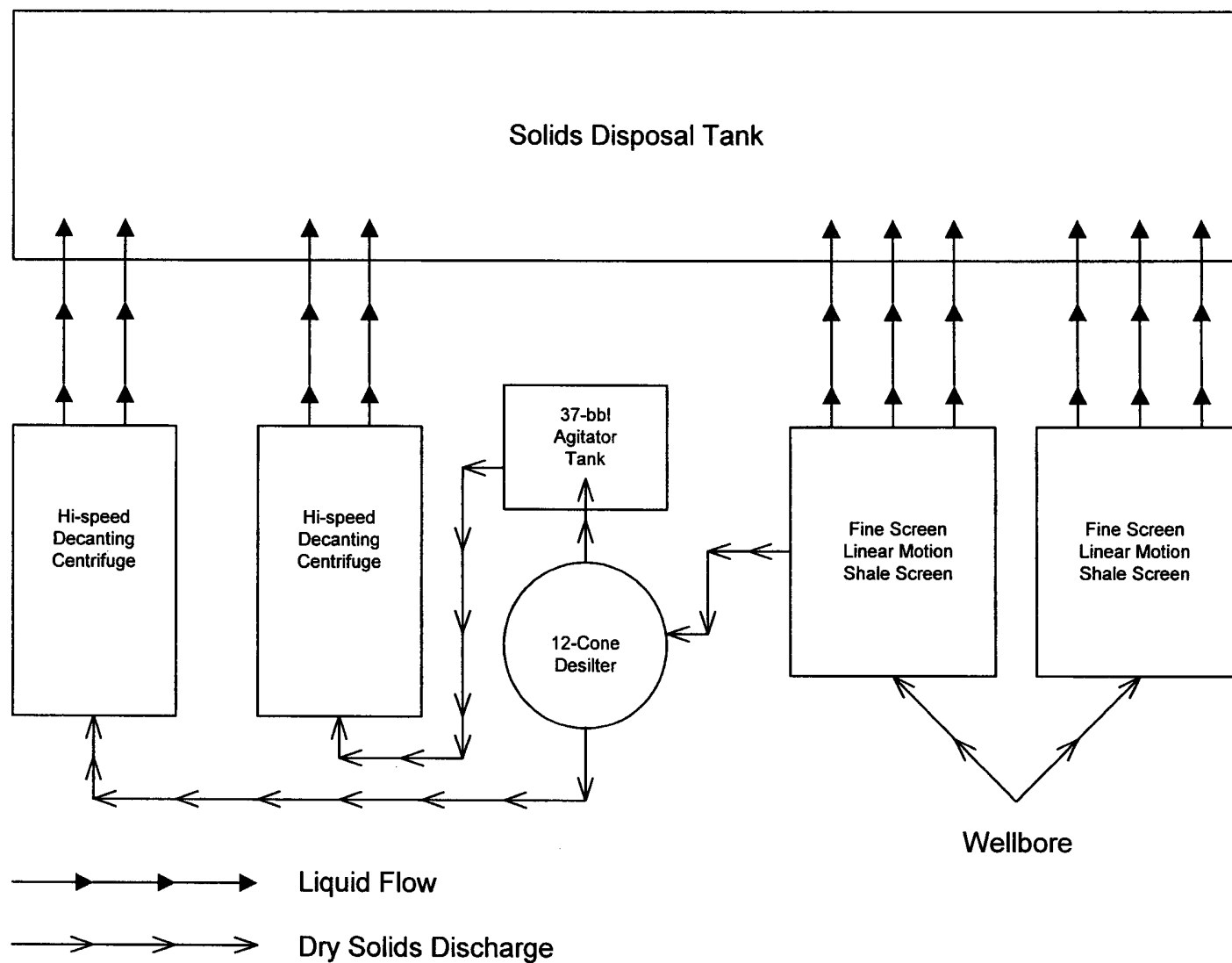
- Hydril model 80 three station
accumulator
- Controls located in accumulator
house and on rig floor

CHOKE MANIFOLD



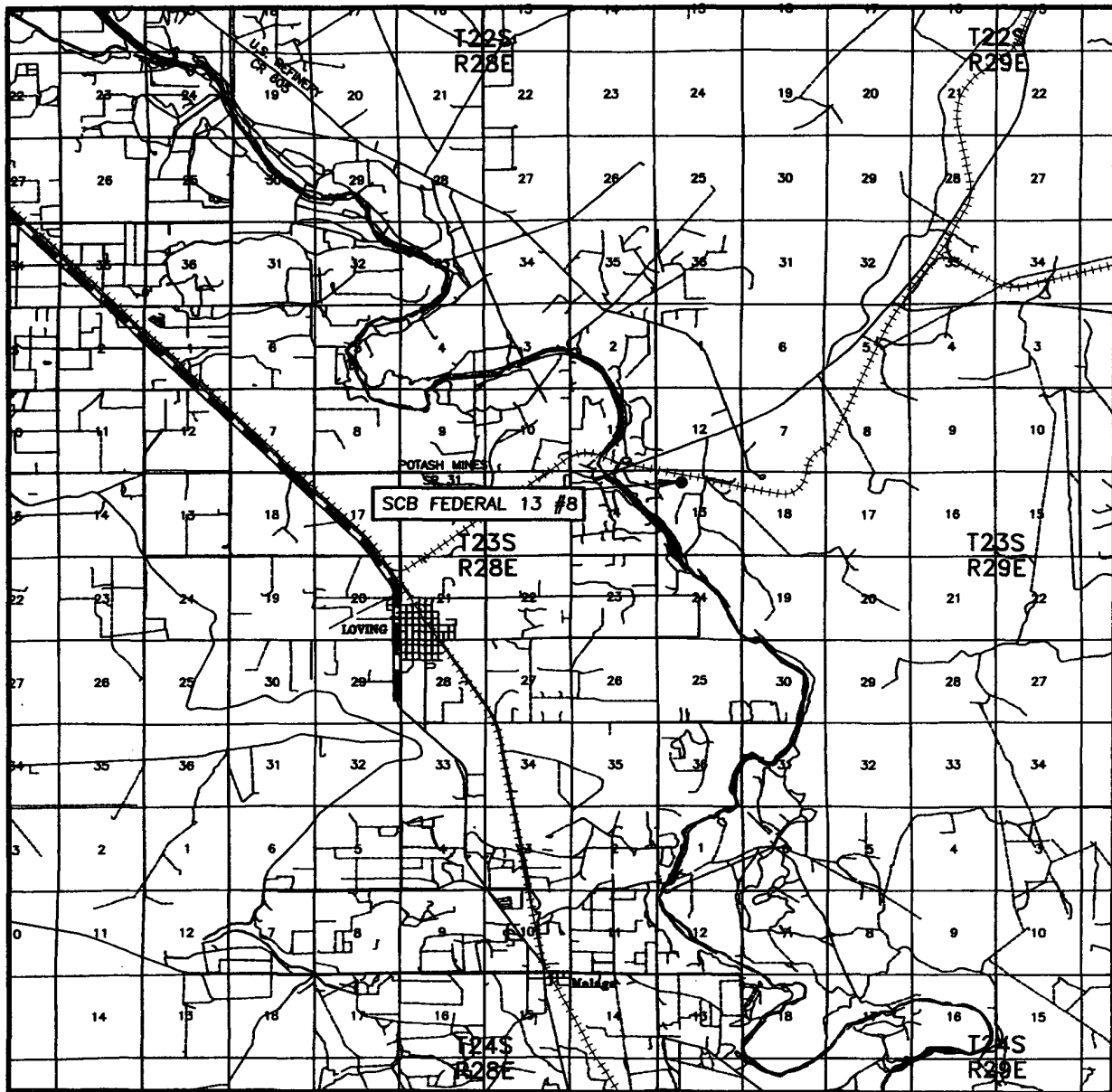
900 Series. 3000 psi WP

PLAT #2



Flow Diagram
Dry Discharge / Closed Loop Mud System

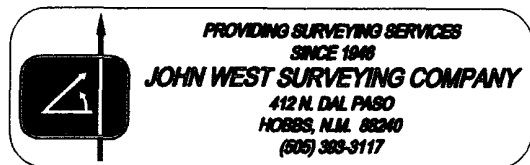
VICINITY MAP



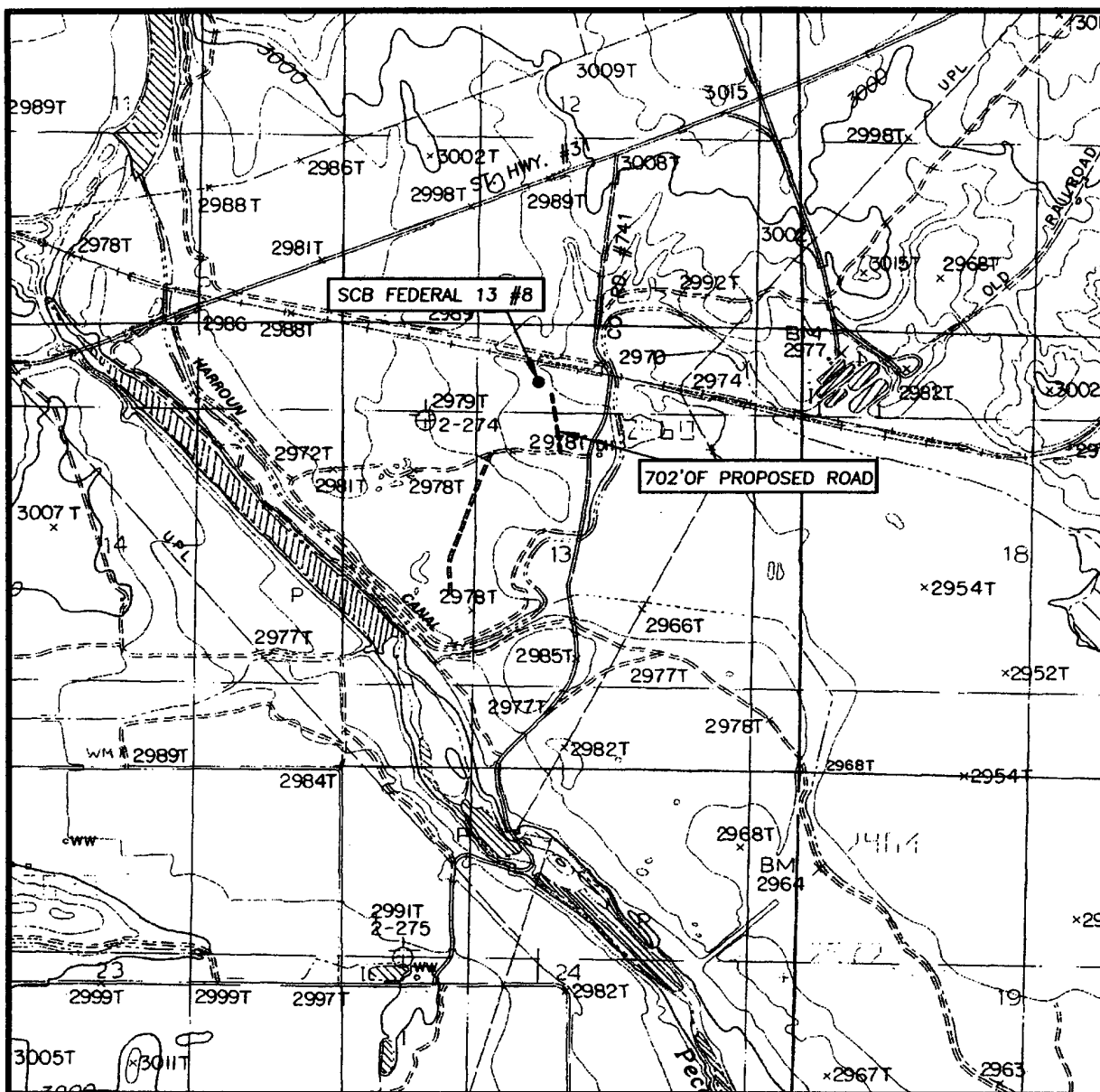
SCALE: 1" = 2 MILES

SEC. 13 TWP. 23-S RGE. 28-E
 SURVEY N.M.P.M.
 COUNTY EDDY
 DESCRIPTION 660' FNL & 2310' FWL
 ELEVATION 75'
 OPERATOR R.B. OPERATING
 LEASE SCB FEDERAL 13

PLAT 4



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 13 TWP. 23-S RGE. 28-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 2310' FWL

ELEVATION 2975'

OPERATOR R.B. OPERATING

LEASE SCB FEDERAL 13

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

PLAT 5

