

UNIT NAME: WEST HIGH LONESOME UNIT
 OPERATOR: BEACH EXPLORATION, INC.
 COUNTY: EDDY

DATE	OCC CASE NO.	TOTAL	STATE	FEDERAL	INDIAN	SEGREGATION	TERM
APPROVED	OCC ORDER NO.	ACREAGE			FEE	CLAUSE	
EFFECTIVE 03/15/2002	CASE NO. 12684 ORDER NO. R-11673	1,156.60	76.60	1,080.00	0	MODIFIED	5 YEARS SO LONG AS

APPROVALS

SLO--11-02-2001
 OCD--10-19-2001
 BLM--10-31-2001

TOWNSHIP 16 SOUTH, RANGE 29 EAST

SECTION 17: S/2NW/4, SW/4, W/2SE/4
 SECTION 18: LOTS 2, 3, 4, S/2NE/4, SE/4NW/4, E/2SW/4, SE/4
 SECTION 19: E/2NW/4, NE/4
 SECTION 20: W/2NW/4, NE/4NW/4, NW/4NE/4

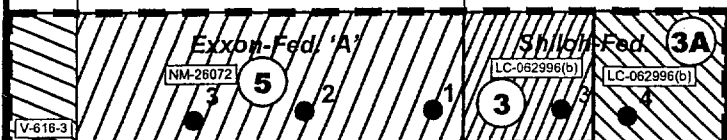
R28E R29E

13



18

17



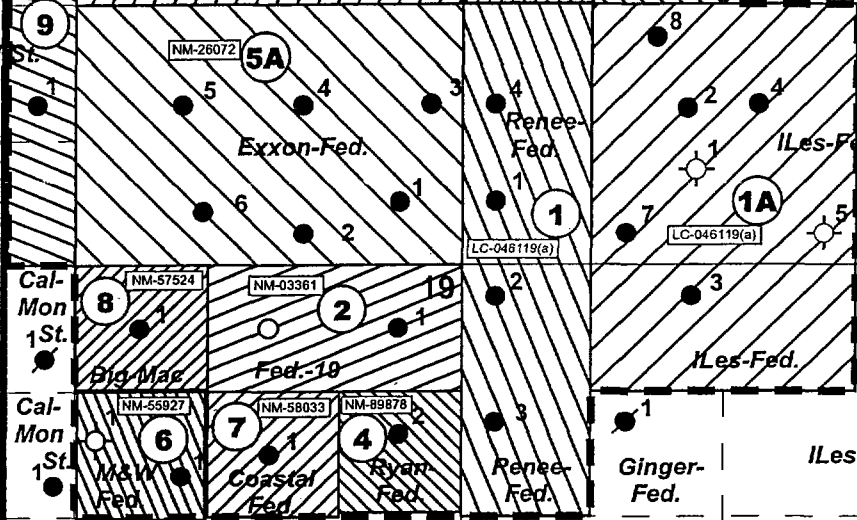
Atkins-Fed.

Skelly-State

Rosewood St.

T
16
S

24



1-A

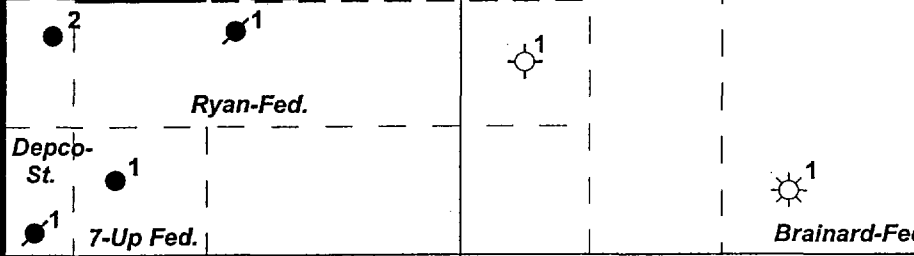


Atkins-State

20

Beach
Red Lake
Unit

25



Brainard-Fed.

30

29



Tracts ① -- ⑧ 1080.0 Acres Federal Lands
 Tract ⑨ 76.6 Acres State Lands
 0.0 Acres Fee Lands
 1156.6 Acres Total Unit

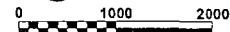


WEST HIGH LONESOME PENROSE SAND UNIT

EXHIBIT "A"

Proposed Unit Outline

Tract # Lease #



Eddy County, New Mexico Scale: 1"=2000'

JMR

July 2001

EXHIBIT "B"
West High Lonesome Unit
Eddy County, New Mexico

Tract Number	Description of Land	Acres	Serial No. & Exp. Date	Basic Royalty Owner and Percentage	Lessees of Record	ORRI and Percentage	WI Owners and Percentage	Participation of Tract in Unit	
1	Renee Federal Section 17: W/2 SW/4 Section 20: W/2 NW/4 T-16-S, R-29-E	160	LC-046119 (a) HBP	USA Schedule C	EOG Resources, Inc. 100%	Cleo Brown & Sue Brown 4-2-2001 Cara Lynn Gant 6-25-2001 Phyllis Iles Estate Robert Iles Carolyn & E Treese Lamson Fred Lennon Jr. 4-23-2004 Jack L & Barbara McClellan Lisa McClellan 4-20-2004 Mark & Paula S. McClellan McClellan Oil Corporation 4-20-2004 Pauline Nicholson 4-4-2001 Paul G. White Suzanne C. & Richard L. Roberts Paul Slayton 4-10-2004 Deloris & Virgil Taylor 4-20-2004 The Toles Company 6-29-2001	0.0003750 0.0023438 0.0046875 0.0023438 0.0002679 0.00093750 0.0037500 0.0007500 0.0007500 0.0371161 0.0093750 0.0093750 0.0007500 0.0125000 0.0007500 0.0053571	Beach Exploration, Inc. 7-6-2001 KNG America, Inc. 4-13-2001 Barbara Walker 0.0026786	17.853191%
1A	Iles Federal Section 17: E/2 SW/4, W/2 SE/4 Section 20: NE/4 NW/4, NW/4 NE/4 T-16-S, R-29-E	240	LC-046119(a) HBP	USA Schedule C	EOG Resources, Inc. 100%	Chase Oil Corporation 4-6-2001 Paul Slayton 4-10-2002 Fred Lennon Jr. 4-23-2001 Pauline Nicholson 4-4-2004 Cara Lynn Gant 6-25-2001 Robert Iles Phyllis Iles Estate	0.1000000 0.0130000 0.0187500 0.0093750 0.0023438 0.0023438 0.0046875	Beach Exploration, Inc. 7-6-2001 KNG America, Inc. 4-18-2001 0.6470425	21.928368%
2	Federal 19 Section 19: N/2 NE/4 T-16-S, R-29-E	80	NM-03361 HBP	USA 12.5%	EOG Resources, Inc. 100%	Elizabeth Hammack 4-16-2001 Sandra Terry 4-11-2001 Susan Terry 4-10-2001 Barbara Frankentfield 4-17-2001 Robert Franklin 5-19-2001 Julie Calvert 4-12-2001 Ben Pior Estate Tena Williamson Sally Leaning 4-12-2001 Paul Hanger Sam E. Hilburn 4-3-2001 Robert E. Morris 4-10-2001 Alexandra C. Morris 4-16-2001	0.0043750 0.0062500 0.0062500 0.0062500 0.0043750 0.0187500 0.0052083 0.0052083 0.0052083 0.0052083 0.0043750 0.0021875 0.0021875	Beach Exploration, Inc. 7-6-2001 KNG America, Inc. 4-18-2001 0.6470425	3.225162%
3	Shiloh Federal #3 Section 17: SW/4 NW/4	40	LC-062996(b)	USA Schedule D	EOG Resources, Inc. 100%	George E. Atkins Jr. 4-3-2001 Jimmy G. Atkins	Beach Exploration, Inc. 7-6-2001 KNG America, Inc. 4-18-2001 0.0006944	0.3775323 0.6024677	5.837284%

Tract Number	Description of Land	Acres	Serial No. & Exp. Date	Basic Royalty Owner and Percentage	Lessees of Record	ORRI and Percentage	WI Owners and Percentage	Participation of Tract in Unit
3A	Shiloh Federal #4 Section 17, SE/4 NW/4 T-16-S, R-29-E	40	LC-06296(b) HBP	USA	Schedule D	EOG Resources, Inc.	100%	
4	Ryan Federal Section 19, SE/4 NE/4 T-16-S, R-29-E	40	NM-89878 HBP	USA	12.5%	Exxon Company USA	100%	
5	Exxon Federal "A" Section 18, S/2 NE/4, SE/4 NW/4 T-16-S, R-29-E	120	NM-26072 HBP	USA	12.5%	Exxon Company USA	100%	
3A	Shiloh Federal #4 Section 17, SE/4 NW/4 T-16-S, R-29-E	40	LC-06296(b) HBP	USA	Schedule D	EOG Resources, Inc.	100%	
4	Ryan Federal Section 19, SE/4 NE/4 T-16-S, R-29-E	40	NM-89878 HBP	USA	12.5%	Exxon Company USA	100%	
5	Exxon Federal "A" Section 18, S/2 NE/4, SE/4 NW/4 T-16-S, R-29-E	120	NM-26072 HBP	USA	12.5%	Exxon Company USA	100%	
3A	Shiloh Federal #4 Section 17, SE/4 NW/4 T-16-S, R-29-E	40	LC-06296(b) HBP	USA	Schedule D	EOG Resources, Inc.	100%	
4	Ryan Federal Section 19, SE/4 NE/4 T-16-S, R-29-E	40	NM-89878 HBP	USA	12.5%	Exxon Company USA	100%	
5	Exxon Federal "A" Section 18, S/2 NE/4, SE/4 NW/4 T-16-S, R-29-E	120	NM-26072 HBP	USA	12.5%	Exxon Company USA	100%	

Tract Number	Description of Land	Acres	Serial No. & Exp. Date	Basic Royalty Owner and Percentage	Lesse of Record	ORRI and Percentage	WJ Owners and Percentage	Participation of Tract in Unit		
5A	Exxon Federal Section 18: SE/4, E/2 SW/4 T-16-S, R-29-E	240	NM-26072 HBP	USA 12.5%	Exxon Company USA 100%	John R. Cammy 4-6-2001 Margaret Irene Dwey 4-11-2001 C. R. Devine 4-10-2001 C. B. & Nancy B. Ellis Trust 4-4-2001 Exxon Corporation 5-30-2001 John W. Gates Mitchell Robert Kirkpatrick 4-18-2001 T. A. Kirkpatrick 4-3-2001 William H. Kirkpatrick Jr. 4-3-2001 Dan R. McGregor 4-6-2001 Sam L. Setterlund 5-25-2001 David G. Tucker 4-5-2001 Steven J. Tucker 4-6-2001 Annie L. Kirkpatrick Williams 4-6-2001	0.0070000 0.0090000 0.0075000 0.0080000 0.0500000 0.0025000 0.0090000 0.0090000 0.0090000 0.0070000 0.0025000 0.0050000 0.0050000 0.0090000 0.0090000 0.0090000 0.0070000 0.0025000 0.0100000 0.0312500 0.3688142 0.0312500 0.0387500 0.0200000 0.0200000	Hazel Sims Baldwin 4-4-2001 Beach Exploration, Inc. 7-6-2001 William N. Beach, LTD 7-6-2001 Brook Oil & Gas Corp. 4-2-2001 Wm & Phyllis Butchitz 4-3-2001 Arnold M. Gaynor 4-11-2001 KNG America, Inc. 4-18-2001 G. K. McDonald 4-9-01 J Norton Company 4-6-2001 S. Howard Norton 4-6-2001 Johnie P. Rose Estate Trust 4-16-01 Judith L. Rose Estate Trust 4-16-01 S & M Oil Operations 4-11-2001 Samir I. Simen Estate 4-11-2001	0.0312500 0.0100000 0.0968750 0.0993750 0.0100000 0.0312500 0.3688142 0.0312500 0.0387500 0.0200000 0.0100000 0.0100000 0.0312500 0.0200000 0.0200000 0.0100000 0.0100000 0.0312500 0.0200000 0.0200000	33.524305%
6	M & W Federal Section 19: SE/4 NW/4 T-16-S, R-29-E	40	NM-55927 HBP	USA 12.5%	Marshall & Winston 100%	Merynne V. Bergstrom Beverly J. Durham 4-4-2001 C R F Eckels 4-26-2001 Eckels Family Trust 4-21-2001 Marshall & Winston Inc. 4-2-2001	0.0010000 0.0030000 0.0050000 0.0400000 0.0750000	Beach Exploration, Inc. Aline H. Amos Rosabelle Malone 6-28-2001 Bill G. Taylor Harvey R. Taylor	0.8100000 0.0100000 0.0100000 0.1300000 0.0200000	4.556324%
7	Coastal Federal Section 19: SW/4 NE/4 T-16-S, R-29-E	40	NM-58033 HBP	USA Schedule B	CEI Bristol Acquisition LP 4-29-2001 Chaparral Oil LLC 4-15-2001	Chaparral Oil Inc. 4-15-2001	Beach Exploration, Inc. KNG America, Inc. 4-18-2001	0.3529575 0.6470425	0.687533%	
8	Big Mac Federal Section 19: NE/4 NW/4 T-16-S, R-29-E	40	NM-57524 HBP	USA 12.5%	K & C Production Co. Inc. 100%	K & C Production Co. Inc. Jack L. & Barbara McCallan 4-6-2001 Lisa C. McCallan 4-30-2001 Mark & Paula S. McCallan 4-20-2001 McCallan Oil Corporation 4-20-2001 Suzanne C. & Richard L. Roberts 4-2-2001	0.0187500 0.0050000 0.0004200 0.0004200 0.0250000 0.0004100	Beach Exploration, Inc. KNG America, Inc. 4-18-2001	0.3529575 0.6470425	2.339880%
9	Rosewood State Section 18: Lots 2,3,4 T-16-S, R-29-E	76.60	V-616-3 HBP	State of NM 16.6667%	Beach Exploration, Inc. 100%	Broughton Petroleum Inc. 4-4-2001 John R. Cammy C. R. Devine C.B. & Nancy B. Ellis Trust 4-4-2001 Dan R. McGregor 4-26-2001 Steven J. Tucker 4-6-2001	0.0180000 0.0070000 0.0037500 0.0080000 0.0070000 0.0100000	Hazel Sims Baldwin Beach Exploration, Inc. 7-6-2001 William N. Beach, LTD 7-6-2001 Brook Oil & Gas Corp. 4-2-2001 Broughton Petroleum Inc. 4-4-2001 Arnold M. Gaynor 4-11-2001 KNG America, Inc. 4-2-2001	0.0312500 0.0452930 0.0968750 0.1093750 0.5000000 0.0312500 0.0247070	0.158523%
TOTAL FEDERAL ACRES		1080 Acres or 93.38%			7-6-2001					
TOTAL STATE ACRES		76.60 Acres or 6.62%								

Tract Number	Description of Land	Acres	Serial No. & Exp. Date	Basic Royalty Owner and Percentage	Lessee of Record	ORRI and Percentage	WI Owners and Percentage	Participation of Tract in Unit
							<div> <div>4-4-1931</div> <div>G. K. McDonald</div> <div>0.0312500</div> </div>	
							<div> <div>4-5-1931</div> <div>Norton Company</div> <div>0.0387500</div> </div>	
							<div> <div>4-6-1931</div> <div>S. Howard Norton</div> <div>0.0200000</div> </div>	
							<div> <div>4-6-1931</div> <div>Johmie P. Rose Estate Trust</div> <div>0.0100000</div> </div>	
							<div> <div>4-7-1931</div> <div>Judith L. Rose Estate Trust</div> <div>0.0100000</div> </div>	
							<div> <div>4-11-2000</div> <div>IS & M Oil Operations</div> <div>0.0312500</div> </div>	
							<div> <div>4-11-2000</div> <div>Samin I. Simen Estate</div> <div>0.0200000</div> </div>	
TOTAL FEDERAL ACRES		1080.00 Acres or	93.38%					
TOTAL STATE ACRES		76.60 Acres or	6.62%					
TOTAL UNIT ACRES		1156.60 Acres or	100.00%					



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
ROSWELL FIELD OFFICE
2909 West Second Street
Roswell, New Mexico 88201-2019

IN REPLY REFER
NMNM106832X
3180 (06300)

OCT 31 2001

Beach Exploration, Inc.
Attention: Robert N. Hinson
800 N. Marienfeld, Suite 200
Midland, TX 79701-3382

Gentlemen:

One approved copy of the West High Lonesome Unit Agreement, No. NMNM106832X, Eddy County, New Mexico, is enclosed. Such agreement is approved as of the date of approval and is effective March 15, 2002. Your Initial Plan of Operations has also been reviewed and is acceptable.

Approval of the agreement does not warrant or certify that the operator thereof and other working interest owners hold legal or equitable title to the leases which are committed hereto.

You are requested to furnish all interested principals with appropriate evidence of this approval.

Sincerely,

(ORIG. SGD.) ARMANDO A. LOPEZ

FOR

Larry D. Bray
Assistant Field Manager,
Lands and Minerals

Enclosure

CC:
Commissioner of Public Lands, Santa Fe

CERTIFICATION - DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior, under the Act approved February 25, 1920, 41 Stat. 437, as amended, 30 U.S.C. sec 181, et seq., and delegated to the Authorized Officer of the Bureau of Land Management, under the authority of 43 CFR 3183, I do hereby:

- A. Approve the attached agreement for the development and operation of the West High Lonesome Unit Area, State of New Mexico. This approval shall be invalid *ab initio* if the public interest requirement under §3183.4(b) of this title is not met.
- B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.
- C. Certify and determine that the drilling, producing, rental, minimum royalty and royalty requirements of all Federal leases committed to said Agreement are hereby established, altered, changed or revoked to conform with the terms and conditions of this agreement.

Dated: October 31, 2001

(OFFIC. SEC.) ARMANDO A. LOPEZ

(Authorized Officer)
Bureau of Land Management

Contract No.: NMNM106832X

Beach Exploration, Inc.
West High Lonesome Penrose Sand Unit
 High Lonesome Queen Field
 Eddy County, New Mexico

Unit Well Number Designation / Original Well Name and Number

<u>ORIGINAL NAME</u>	<u>UNIT DESIGNATION</u>	<u>FOOTAGE</u>	<u>SEC-UNIT</u>	<u>TWP</u>	<u>RNG</u>
Big Mac Federal #1	WHLPSU #19	660 FNL 3,300 FEL	19-C	16S	29E
Brainard 19 Federal #1	WHLPSU #21	660 FNL 660 FEL	19-A	16S	29E
Coastal Federal #1	WHLPSU #25	1,980 FNL 1,980 FEL	19-G	16S	29E
Exxon A Federal #1	WHLPSU # 3	2,310 FNL 330 FEL	18-H	16S	29E
Exxon A Federal #2	WHLPSU # 2	2,310 FNL 1,650 FEL	18-G	16S	29E
Exxon A Federal #3	WHLPSU # 1	2,410 FNL 1,932 FWL	18-F	16S	29E
Exxon Federal #1	WHLPSU #16	660 FSL 660 FEL	18-P	16S	29E
Exxon Federal #2	WHLPSU #15	330 FSL 1,650 FEL	18-O	16S	29E
Exxon Federal #3	WHLPSU #10	1,650 FSL 330 FEL	18-I	16S	29E
Exxon Federal #4	WHLPSU # 9	1,650 FSL 1,650 FEL	18-J	16S	29E
Exxon Federal #5	WHLPSU # 8	1,650 FSL 1,835 FWL	18-K	16S	29E
Exxon Federal #6	WHLPSU #14	560 FSL 2,035 FWL	18-N	16S	29E
Iles Federal #2	WHLPSU #12	1,650 FSL 2,310 FWL	17-K	16S	29E
Iles Federal #3	WHLPSU #23	330 FNL 2,310 FWL	20-C	16S	29E
Iles Federal #4	WHLPSU #13	1,650 FSL 2,310 FEL	17-J	16S	29E
Iles Federal #7	WHLPSU #18	330 FSL 1,650 FWL	17-N	16S	29E
Iles Federal #8	WHLPSU # 6	2,310 FSL 1,950 FWL	17-K	16S	29E
M & W Federal #1	WHLPSU #24	2,210 FNL 1,833 FWL	19-F	16S	29E
Renee Federal #1	WHLPSU #17	660 FSL 330 FWL	17-M	16S	29E
Renee Federal #2	WHLPSU #22	330 FNL 330 FWL	20-D	16S	29E
Renee Federal #3	WHLPSU #27	1,650 FNL 330 FWL	20-E	16S	29E
Renee Federal #4	WHLPSU #11	1,650 FSL 330 FWL	17-L	16S	29E
Rosewood 18 State #1	WHLPSU # 7	1,650 FSL 330 FWL	18-L	16S	29E
Ryan Federal #2	WHLPSU #26	1,780 FNL 660 FEL	19-H	16S	29E
Shiloh Federal #3	WHLPSU # 4	2,310 FNL 988 FWL	17-E	16S	29E
Shiloh Federal #4	WHLPSU # 5	2,210 FNL 1,650 FWL	17-F	16S	29E

*Note: WHLPSU #20 is being reserved for the new producer to be drilled in section 19, unit B



April 25, 2001

#12684

APR 30 2001

Commissioner of Public Lands
Oil, Gas and Minerals Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

ATTENTION: Mr. Jami Bailey


RE: West High Lonesome Penrose Sand Unit
Eddy County, New Mexico

Dear Mr. Bailey:

Please find enclosed Beach Exploration, Inc.'s letter from Mr. Jack Rose, regarding the possible use of fresh water in our proposed West High Lonesome Penrose Sand Unit. This additional information is required pursuant to State Land Office Rule 1.046.1 and was requested in your letter to Beach, dated December 21, 2000.

It is our hope that this letter, together with our letter of December 14, 2000 and our previously resubmitted Unit Agreement will provide you with the information necessary to process our preliminary unit approval request.

Yours very truly,



Julie B. LeMond

/jl

Enclosure

cc: BLM - Roswell Attn: Mr. Armando Lopez
OCD - Santa Fe Attn: Mr. Roy Johnson

April 24, 2001

Commissioner of Public Lands
Oil, Gas and Minerals Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

ATTENTION: Mr. Jami Bailey

RE: Waterflood Source Water Investigation
Eddy County, New Mexico
Proposed West High Lonesome Penrose Sand Unit

Gentlemen:

Beach Exploration, Inc., has previously requested your preliminary approval of the proposed West High Lonesome Penrose Sand Unit in Eddy County, New Mexico. Since Beach is investigating the use of fresh water, you requested additional information that is required pursuant to State Land Office Rule 1.046.1.

Our investigation of water sources is ongoing. Our choice for makeup water at this time is the City of Carlsbad Water System 3.24 miles to the east. The possible use of Yeso and Paddock disposal water, from Mack Energy's Big George State #3 disposal well, 5.1 miles to the south, is currently being evaluated for feasibility.

Fresh Water Sources

The City of Carlsbad Water Supply System has several fresh water pipelines in the area that have serviced waterflood operations. Two are possible makeup water sources. The closest is 3.24 miles to the east. This source is capable of delivering more than twice our maximum required daily makeup volume. The delivery point is uphill from our proposed flood and strong enough to flow by gravity to our proposed flood site. The next closest is 4.1 miles to the south-southwest. This source is further away, does not have the capacity of the eastern source and would have to be pumped by mechanical means to the proposed flood site.

State Land Office Rule 1.046.1

- A. Laboratory analyses of water compatibility tests (fresh vs. salt water).
Produced water samples have been taken from our flood area, and are being combined with water samples from the City of Carlsbad Water Supply System (fresh) and Mack Energy's Big George State #3 disposal well for compatibility and treating cost considerations.
- B. Reservoir analyses for swelling clays and soluble salts.
City of Carlsbad fresh water has been successfully used in four Penrose floods in the immediate vicinity of our proposed flood. These floods are listed in Table 4 of the "Waterflood Feasibility Study". This document was included in our initial request.

C. Estimate of monthly make-up water required for operations.

Initially it is estimated that 79,000 barrels of makeup water will be required each month. Under Phase II injection the maximum required could be 110,000 barrels (3,600 BWPD). The makeup water requirements will reduce significantly over time as water is produced from the project and reinjected.

D. Location and depth of area salt water wells or quantities of produced water available for injection.

A four-township area surrounding the proposed flood was investigated for potential sources of makeup water.

1) Area salt and fresh water wells

There are a few water wells in the area. One is indicated to be a saltwater well and the rest are fresh. The State Engineer's office has indicated that these wells are shallow, discontinuous water sources of very limited capacity and unsuitable for our purposes.

2) Produced water available for injection

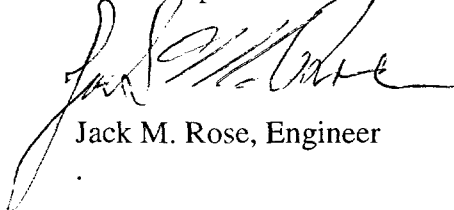
Produced water is scarce in the area of the proposed flood but abundant to the south.

- a) The proposed flood is central to two townships. No saltwater disposal wells exist in these two townships and total water production is 175 barrels of water per day.
- b) Nine disposal wells exist in the north half of the two townships to the south of the proposed flood. Three of the nine wells are handling sufficient volumes of water to be considered as possible sources for makeup water. Two of these three are considered to be cost prohibitive, requiring seven plus miles of large diameter pipeline to be installed. The remaining disposal well, Mack Energy's Big George State #3, handles 6,500 barrels of water per day from Mack operated wells in the Paddock and Yeso. This well is 5.1 miles to the south and would require pumping by mechanical means to reach the proposed flood site. This well is currently being evaluated as a possible source.

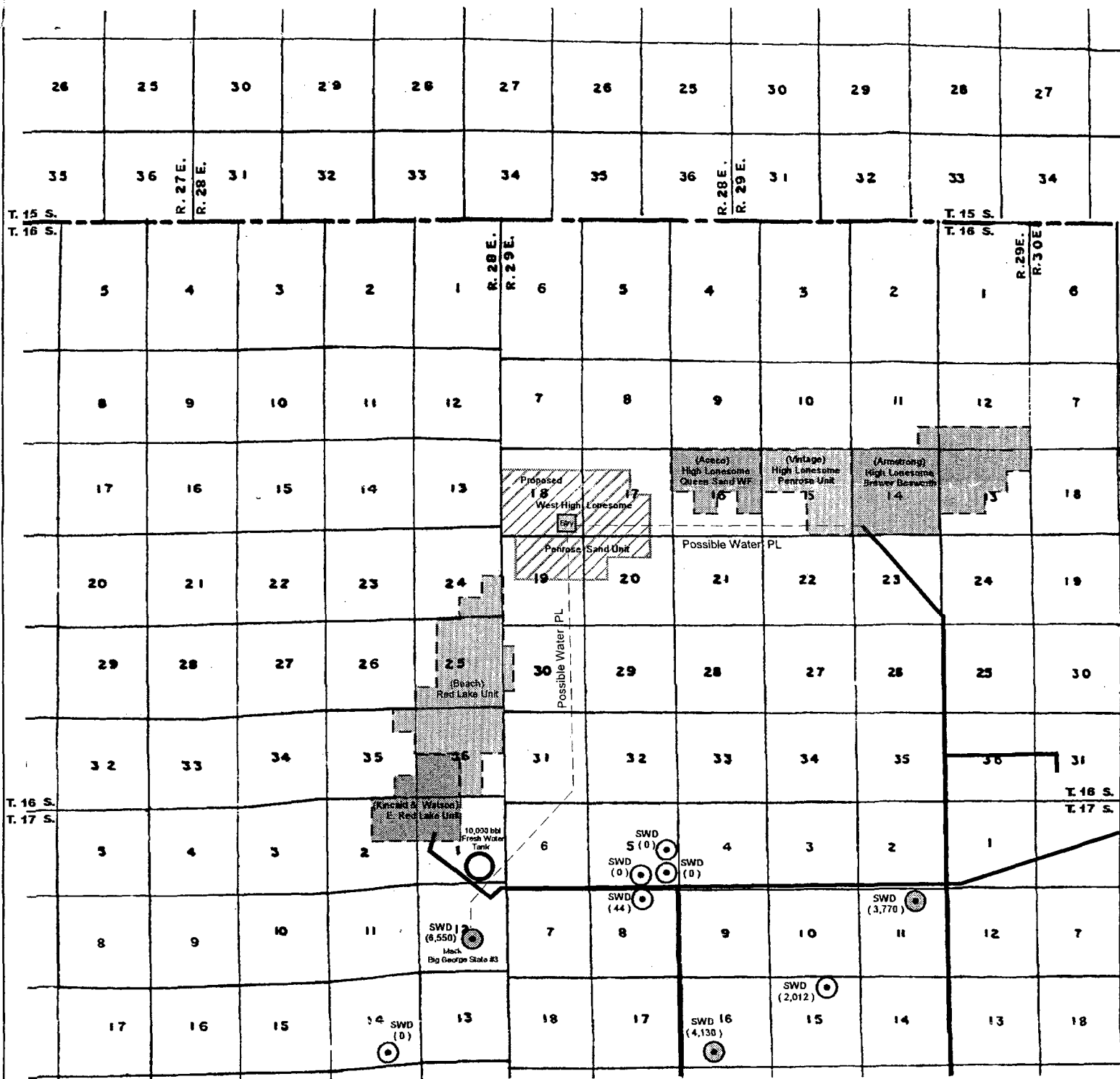
I hope that this is sufficient information for your preliminary approval. If you have any questions concerning this information please call me at (915) 683-6226.

Yours truly,

Beach Exploration, Inc.



Jack M. Rose, Engineer




SWD (bwpd)  Disposal Well > 3600 bwpd

SWD (bwpd)  Disposal Well < 3600 bwpd

 City of Carlsbad Fresh Water Pipeline

 Possible PL route for makeup water

 Proposed Unit Outline



Beach Exploration, Inc.

WEST HIGH LONESOME PENROSE SAND UNIT

Area Makeup Water Source Map

SCALE : 1"=8000'

JMR

April 2001