

SURFACE USE & OPERATIONS PLAN

WELL NAME AND NO.: Gallegos Canyon Unit Well No. 511

LOCATION: 745' FNL 1080' FWL (NW/NW) Section 26, T29N-R12W

LEASE NO.: SF 079907

1) **EXISTING ROADS:**

- A. See Attached map.
- B. Travel east Highway 64 from stoplight at Browning Parkway for 5.6 miles, turn left into a private driveway, well is on left side of private road adjacent to Amoco Production Company's #145-E well.
- C. Access Roads to Location: See map
- D. Exploratory well: N/A
- E. Development Well: For all applicable access roads within a one (1) mile radius, see attached map.
- F. Plans for Improvement and/or Maintenance: BHP Petroleum, Amoco, and El Paso Natural Gas Company currently maintain the non-county, state or Irrigation Project roads. Maintenance is conducted on an as-needed basis.

2) **PLANNED ACCESS ROADS:**

- A. No new road is required.

3) **LOCATION OF EXISTING WELLS:**

- A. Water Wells: None
- B. Abandoned Wells: None
- C. Temporarily Abandoned Wells: None
- D. Disposal Wells: Gallegos Canyon Unit #328 is the nearest disposal well.
- E. Drilling Wells: None presently.
- F. Producing Wells: Amoco #145-E is the nearest well, approximately 100' away. For additional wells see map.
- G. Shut-in Wells: None.
- H. Injection Wells: None.
- I. Monitoring or Observation Wells: None.

4) **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES OWNED AND/OR CONTROLLED BY BHP:**

- A. Existing facilities: BHP Petroleum currently operates the Pictured Cliffs participating area within the Gallegos Canyon unit.
 - 1. Tank Batteries: No oil or condensate is currently produced from BHP wells in the unit.
 - 2. Production: All wells produce natural gas.
Facilities: Some wells are equipped with rod pumps to remove excess water. Wells are normally equipped with a two (2) phase separator. El Paso Natural Gas Company has a glycol dehy unit upstream of the sales meter.
 - 3. Oil Gathering Lines: N/A
 - 4. Gas Gathering Lines: El Paso Natural Gas Company purchases all gas produced by BHP in this unit. There are two (2) systems in which our wells are introduced depending on the initial wellhead pressure.
 - 5. Injection Lines: N/A
 - 6. Disposal Lines: Each well which produces water is tied into one of four (4) disposal systems.

- B. **New Production Facilities:**
1. **Proposed Tank Battery:** None
 2. **Dimensions of Facilities:** All new facilities are restricted to the existing pad area. New facilities will consist of a separator, dehy unit, meter house and two small earthen pits, unless the well requires a disposal line to remove excess water, in which case a pumping unit will be installed and the separator pit eliminated. All surface equipment to be painted tan. If water disposal pipelines are need, they will be applied for at a later date.
 3. **Construction Methods and Materials:** The site will be leveled with a crawler type dozer. Native soils will be used. Any foundation material such as gravel will be purchased and trucked to the site if a pumping unit is needed.
 4. **Protective Measures and Devices:** Any pits will be fenced to prevent entry by livestock or wildlife.
- 5) **LOCATION AND TYPE OF WATER SUPPLY:**
- A. **Location:** City of Farmington - Sales point
 - B. **Method of Transportation:** Water will be hauled by truck over existing roads.
 - C. **Water Wells to be Drilled:** N/A
- 6) **SOURCE OF CONSTRUCTION MATERIALS:**
- A. **Location:** Only native materials are necessary for the construction of drill site and related facilities.
 - B. **From Federal or Indian Lands:** N/A
 - C. **Additional Materials:** It may be necessary to haul gravel for a pumping unit base. If needed it will be hauled from Farmington.
 - D. **Access Roads on Federal or Indian Lands:** None
- 7) **METHODS OF HANDLING WASTE DISPOSAL:**
- A. **Cuttings and drilling fluids** will be placed in the reserve pit.
 - B. **Same as listed above.**
 - C. **Produced fluids (water)** will be placed in the reserve pit during testing.
 - D. **Sewage** will be contained in a portable chemical toilet.
 - E. **Garbage and other water material** will be place in a small trash cage and disposed of in an approved sanitary landfill.
 - F. **Upon completion of the well** the reserve pit will be backfilled.
- 8) **ANCILLARY FACILITIES:**
- A. **None are planned.**
 - B. **Location and Pits and Stock Piles:** For location of mud tanks, reserve pit, and pipe rack see attached diagram.
 - C. **Pad Orientation:** For rig orientation and access roads, see attached diagram.
 - D. **Lining of Pits:** It is not planned to line the reserve pit.
 - E. **O.S.H.A. Requirements:** The disturbed area requested is sufficient to allow fracturing operations in a safe manner and in accordance with O.S.H.A. standards.
- 9) **PLAN FOR RESTORATION OF THE SURFACE:**
- A. **Revegetation** will be in accordance with BLM stipulations.
- 10) **OTHER INFORMATION:**
- A. **Topography, Soil Characteristics, Geologic Features, Flora and Fauna:**

The Gallegos Canyon Unit area topography varies considerably throughout the participating area. The southwest portion is primarily highly eroded sandstone with deep channels and rock outcroppings. The southeast portion is separated by the Gallegos Wash and is mostly within the NAPI farming area. The north portion is separated by the San Juan River. Most

all of the area north of the river is private land consisting of rural business and small farms and residences.

This site is on an existing well pad serving Amoco well #145-E. No significant additional disturbance will be required.

- B. Surface Use: Private Garden.
- C. Surface Ownership: Surface is privately owned.
- D. Proximity of Water, Dwellings, Archaeological, Historical Sites: Closest live water is the San Juan River approximately 1 mile south of the proposed location.
- E. There are 2 occupied dwellings within close proximity to the proposed location.

Archaeology

- F. A cultural inventory report will be mailed directly to the Farmington BLM office.

11) **LESSEE'S OR OPERATOR'S FIELD REPRESENTATIVE:**

BHP Petroleum (Americas) Inc.
Post Office Box 977
Farmington, New Mexico
c/o Fred Lowery

(505) 327-1639 (24 hour answering service)

BHP Petroleum (Americas) Inc.
5847 San Felipe, Suite 3600
Houston, Texas 77057
c/o Chuck Williams

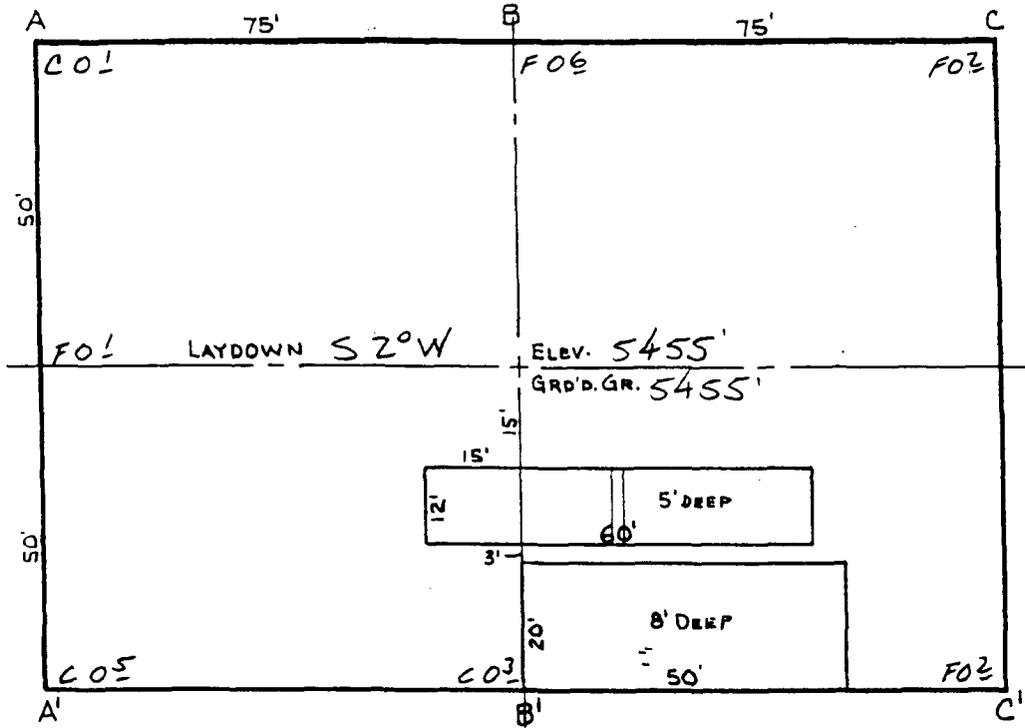
(713) 780-5448

12) **CERTIFICATION:**

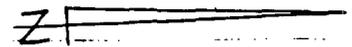
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge true and correct; and that the work associated with the operations proposed herein will be performed by BHP Petroleum (Americas) Inc. and its contractors in conformity with this plan and the terms and conditions under which it is approved.


Signed

BHP Petroleum Inc.
 Gallegos Canyon Unit #511
 745' FNL & 1080' FWL
 Sec. 26, T29N, R12W
 San Juan Co. NM



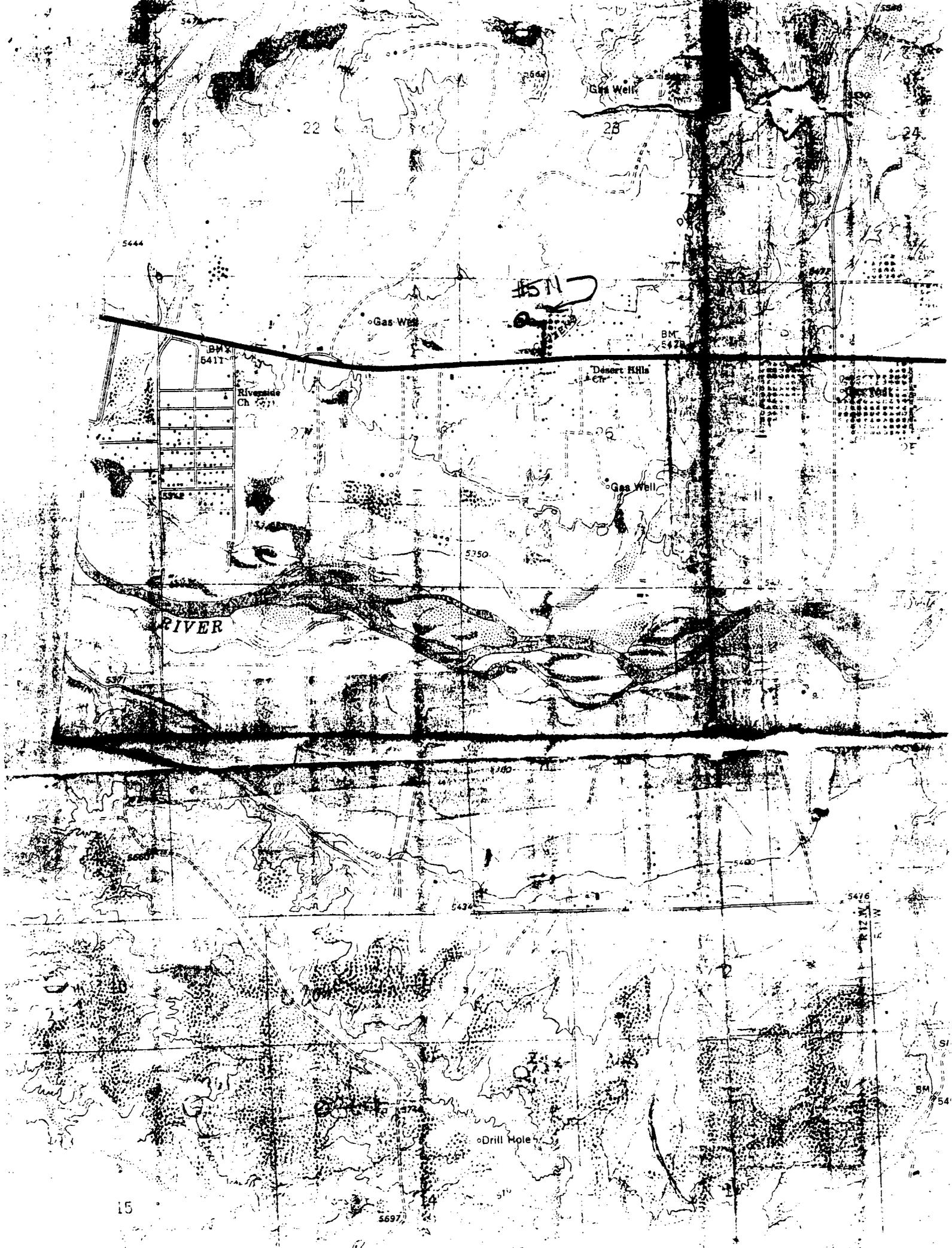
SCALE: 1" = 30'



A-A'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5460'	-----	-----	-----
5450'	-----	-----	-----
	-----	-----	-----

B-B'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5460'	-----	-----	-----
5450'	-----	-----	-----
	-----	-----	-----

C-C'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5460'	-----	-----	-----
5450'	-----	-----	-----
	-----	-----	-----



22

28

24

5444

15N

Gas Well

BM 5476

BM 5411

Riverside Ch

Desert Hills Cr.

27

26

Gas Well

5350

RIVER

537

541

5400

5400

5434

5476

12N
R.W

Drill Hole

BM 54

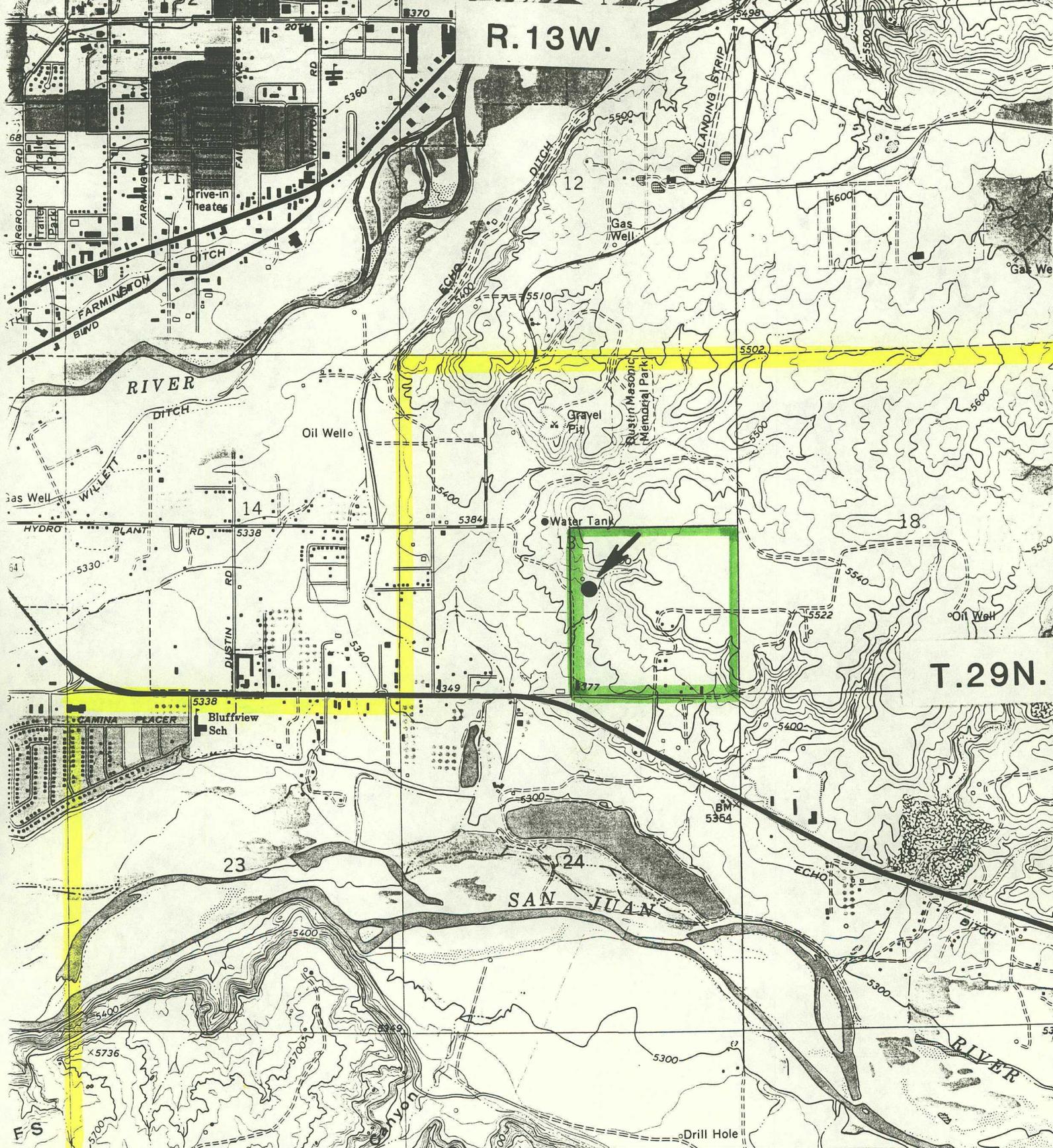
15

5697

51

R. 13W.

T. 29N.

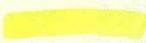


Legend

Proposed Location



Unit Boundary



Proration Unit



<p>Lot 1 19.96</p>		<p>Amoco Prod. Co. Gallegos Canyon Unit #15E 795 fml - 990 feet Spud - 5/10/80 T.D. - 6/22/81 Basin Dakota Pool Producing</p>	<p>(3) 40.11</p>
<p>ERIP Petroleum (Americas) Gallegos Canyon Unit #511 745 fml - 1085 feet W. Kuty Pictured Cliffs Subject well</p>		<p>(2) 40.08</p>	<p>(4) 40.00</p>
			<p>(5) 39.96</p>

122
120
1080
240