

**TIGHT HOLE**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

5. Lease Designation and Serial No.

ML 28294

6. If Indian, Allottee or Tribe Name

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work

DRILL  DEEPEN  PLUG BACK

b. Type of Well

Oil Well  Gas Well  Other  Wildcat Single Zone  Multiple Zone

2. Name of Operator

Amoco Production Company

3. Address of Operator

P. O. Box 17675, Salt Lake City, UT 84117

4. Location of Well (Report location clearly and in accordance with any State requirements.\*)

At surface C-NW/4 SW/4 Section 15 2000' FSL 4600' FEL

At proposed prod. zone

Same

14. Distance in miles and direction from nearest town or post office\*

42 Miles Northwest of Ogden, Utah

15. Distance from proposed\* location to nearest property or lease line, ft. (Also to nearest dtlg. line, if any)

2000'

18. Distance from proposed location\* to nearest well, drilling, completed, or applied for, on this lease, ft.

19. Proposed depth

3500'

20. Rotary or cable tools

Rotary to TD

21. Elevations (Show whether DF, RT, GR, etc.)

4199 Lake Elevation

22. Approx. date work will start\*

When Approved

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
	20"	106# PE	500'	Drive pipe
17 1/2"	13 3/8"	54.5, 61, & 68# K-55	2275'	Cl"G" 2 3/8 CaCl <sub>2</sub> to surf.
12 1/4"	9 5/8"	40 & 47#, K-55	3500'	1500 sx Cl "G"

Propose to delineate the extent of the West Rozel Structure.

Subject well is to be drilled in the Great Salt Lake at a location where the water is approximately 25' deep. The Drilling Contractor will be Parker Drilling Company and their Rig #148 will provide the drilling services. This well is over two miles from shore and is over one mile from any evaporation pits, structures, buildings, platforms, producing wells, State or Federal Waterfowl areas. The well will be drilled in compliance with the State of Utah operating rules and regulations governing drilling procedures in the Great Salt Lake as adopted July 18, 1973, This well will also be drilled under the Oil Spill Contingency Plan as submitted and approved for the previously drilled Salt Lake Wells.

See Attachment

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Signed [Signature] Title Dist. Adm. Supervisor Date May 15, 1979

(This space for Federal or State office use)

Permit No. .... Approval Date .....

Approved by ..... Title ..... Date .....

Conditions of approval, if any:

West Rozel State Unit Well #2

1. Estimated tops of geological markers:

Rozel Point Basalt 2275'

2. Estimated depths anticipated to encounter water, oil, gas or other mineral-bearing formations:

Water, Oil and Gas anticipated at 2275'

3. Casing Program - See Form OGC-1a

4. Operators minimum specifications for pressure control equipment are explained on attached schematic diagram. Testing of such is to be performed daily and noted on the IADC Daily Drilling Report. After running surface casing and prior to drilling out, BOP and other pressure equipment will be tested to the full working pressure rating as shown on the attached diagram. Thereafter, the BOP will be checked daily for mechanical operations only and will be noted on the IADC Daily Drilling Report.

5. Mud Program:

Surface to TD - LSND, 8.5-9.2 #/gal

6. Auxiliary Equipment:

Kelly Cock: floor sub with a full opening valve, 3" choke manifold with remote control choke, 2500 PSI WP.

7. Testing Program:

Drill stem tests will be conducted as warranted by shows and/or as determined appropriate by Amoco's Denver Exploration Dept.

Logging Program

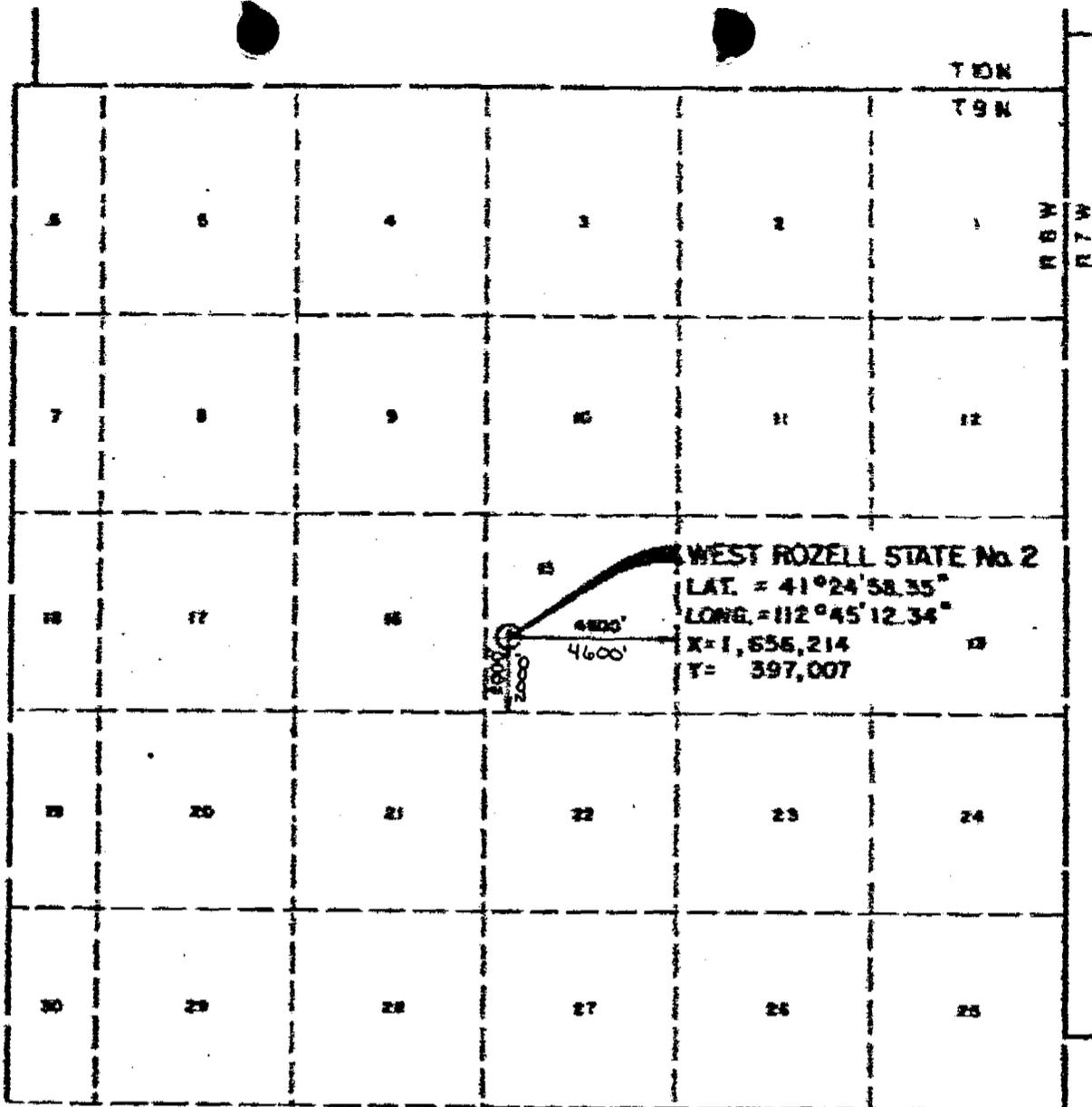
*Dual Injection SFL	Base of conductor pipe to total depth.
Integrated BHC Sonic	Base of conductor pipe to total depth.
CNL-FDC w/GR	Base of conductor pipe to total depth.
High Resolution Dipmeter	Base of conductor pipe to top of Basalt
High Resolution Temperature Survey	Surface to total depth
Borehole gravimeter	Over zones of interest
Velocity Survey	Surface to total depth.

\*dual laterolog if mud properties require

Coring Program

Cores will be cut at the discretion of Amoco's Exploration Department geologists.

8. The anticipated starting date will be when approved. The duration of the operations will be approximately sixty days.

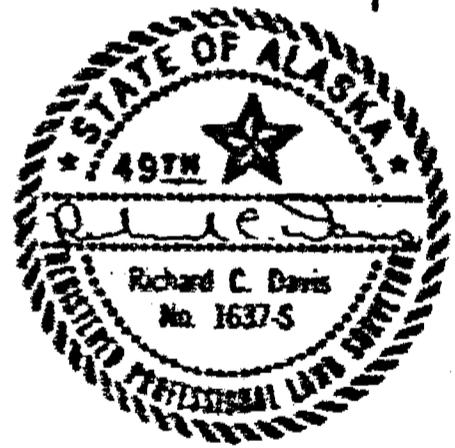


WEST ROZELL STATE No 2  
 LAT. = 41°24'58.35"  
 LONG. = 112°45'12.34"  
 X = 1,656,214  
 Y = 397,007

SCALE 1" = 1 MILE

**CERTIFICATE OF SURVEYOR**

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska and that this plat represents a location survey made by me or under my supervision, and that all dimensions and other details are correct.



May 15, 1979 Richard C. Davis  
 Date Surveyor

Reference: State of Utah Laws regulating the practices of Professional Engineers, Land Surveyors and Engineers in Training section 58-22-21.

**NOTES:**

1. Coordinates are Utah State Plane, North Zone.

Date of Survey May 11, 1979

<b>WEST ROZELL STATE No 2</b>	
Located in the Protracted	
SW 1/4 SEC. 15, T9N, R6W, SALT LAKE MERIDIAN, UTAR	
Surveyed for	
<b>AMOCO PRODUCTION CO.</b>	
Salt Lake City,	Utah
Surveyed by	
<b>F. M. LINDSEY &amp; ASSOC.</b>	
LAND & HYDROGRAPHIC SURVEYORS	
2502 West Northern Lights Boulevard Box 4-1	
Anchorage	Ala

STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: May 18, 1979

Operator: Amoco Production Company

Well No: West Royal State # 2

Location: Sec. 15 T. 8N R. 8W County: Box Elder

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number: 43-003-30009

CHECKED BY:

Administrative Assistant: \_\_\_\_\_

Remarks:

Petroleum Engineer: \_\_\_\_\_

Remarks:

Director: Approved [Signature]

Remarks:

INCLUDE WITHIN APPROVAL LETTER:

Bond Required:

Survey Plat Required:

Order No. \_\_\_\_\_

Surface Casing Change   
to \_\_\_\_\_

Rule C-3(c), Topographic exception/company owns or controls acreage  
within a 660' radius of proposed site

O.K. Rule C-3

O.K. In \_\_\_\_\_ Unit

Other:

Letter Written/Approved



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
*Executive Director,*  
NATURAL RESOURCES

CLEON B. FEIGHT  
*Director*

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

OIL, GAS, AND MINING BOARD

CHARLES R. HENDERSON  
*Chairman*

JOHN L. BELL  
C. RAY JUVELIN  
THADIS W. BOX  
CONSTANCE K. LUNDBERG  
EDWARD T. BECK  
E. STEELE McINTYRE

May 18, 1979

AMOCO PRODUCTION COMPANY  
P O BOX 17675  
SALT LAKE CITY UT 84117

Re: West Rozel State #2, Sec. 15, T. 8N, R. 8W, Box Elder County, UT

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with the Order issued in Cause No. 150-2, dated November 20, 1974; and, the "Operating Rules and Regulations Governing Drilling Procedures in the Great Salt Lake", adopted July 18, 1973, by the Board of Oil, Gas, and Mining.

However, said approval shall be contingent upon the following:

1. The blowout prevention equipment being tested by an independent source after initial installation on the above well;
2. Notification as to the name of the drilling contractor and the number and type of rig to be used prior to commencement of spudding operations;
3. The filing of an "Oil Spill Emergency Contingency Plan";
4. A drilling and plugging bond being filed with the Division of State Lands prior to commencement of operations.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Geological Engineer  
HOME: 876-3001  
OFFICE: 533-5771

AMOCO PRODUCTION COMPANY  
MAY 18 1979  
PAGE TWO

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Finally, it is requested that this Division be notified at least 48 hours prior to spudding.

The API number assigned to this well is 43-003-30009.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

*Cleon B. Feight*  
CLEON B. FEIGHT DIRECTOR

/lw

cc: Division of state Lands

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. ML-28639
2. NAME OF OPERATOR Amoco Production Company		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P. O. Box 17675, Salt Lake City, Utah 84117		7. UNIT AGREEMENT NAME West Rozel State
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  C-NW/4 SW/4 Section 15 2065' FSL (4632 FEL) 648' FWL		8. FARM OR LEASE NAME
14. PERMIT NO. 43-003-30009	15. ELEVATIONS (Show whether DF, RT, OR, etc.) 4199 Lake Elevation	9. WELL NO. 2
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., R., M., OR B.L. AND SURVEY OR AREA Sec. 15, T8N-R8W
		12. COUNTY OR PARISH Box Elder
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Revised Plats</u> <input type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) \*

Propose to revise original application to include attached corrected surveyor plats to replace those on file, and indicate a change of footages within section.

**CONFIDENTIAL**

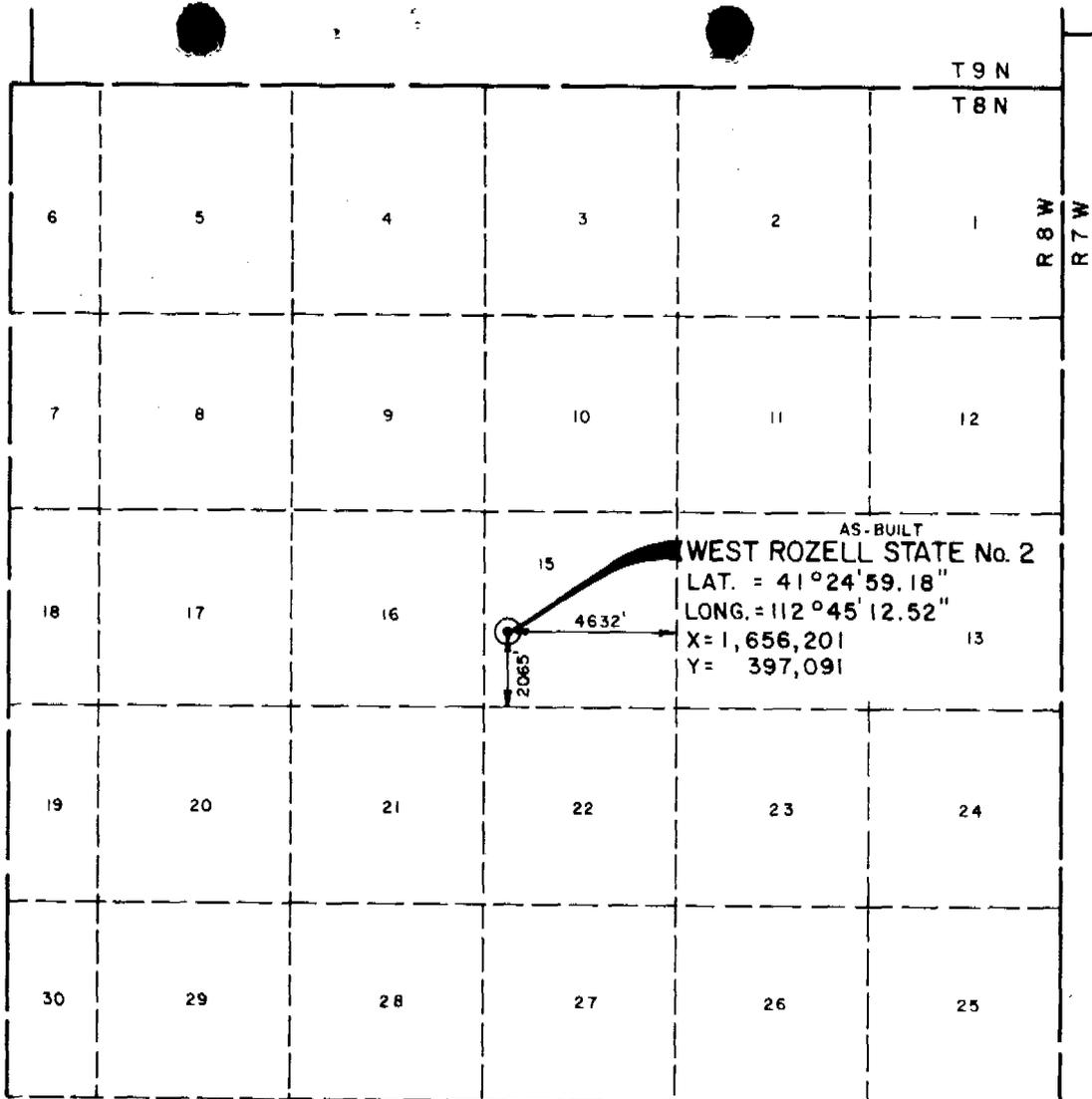
18. I hereby certify that the foregoing is true and correct

SIGNED D. S. Davidson TITLE DIST. ADM. SUPERVISOR DATE June 15, 1979

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

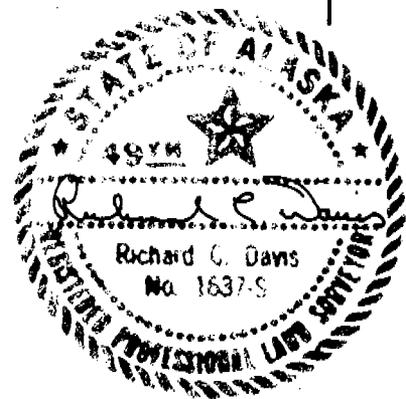
CONDITIONS OF APPROVAL, IF ANY:



SCALE 1" = 1 MILE

**CERTIFICATE OF SURVEYOR**

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska and that this plat represents a location survey made by me or under my supervision, and that all dimensions and other details are correct.



JUNE 4, 1979  
Date

Richard C. Davis  
Surveyor

Date of Survey June 1, 1979

Reference: State of Utah Laws regulating the practices of Professional Engineers, Land Surveyors and Engineers in Training section 58-22-21.

**NOTES:**

- I. Coordinates are Utah State Plane, North Zone.

AS-BUILT <b>WEST ROZELL STATE No. 2</b> Located in the Protracted SW 1/4 SEC. 15, T8N, R8W, SALT LAKE MERIDIAN, UTAH
Surveyed for <b>AMOCO PRODUCTION CO.</b> Salt Lake City, Utah
Surveyed by <b>F. M. LINDSEY &amp; ASSOC.</b> LAND & HYDROGRAPHIC SURVEYORS 2502 West Northern Lights Boulevard Box 4-081 Anchorage Alaska

CONFIDENTIAL

DIVISION OF OIL, GAS, AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: AMOCO (Jim Karnpinski)

WELL NAME: West Rozell State #2

SECTION N<sup>w</sup>S<sup>w</sup> 15 TOWNSHIP 8N RANGE 8W, COUNTY Box Elder

VERBAL APPROVAL GIVEN TO PLUG THE ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 2704'

CASING PROGRAM:

13 3/8" 61# @ 2323'

Open hole 2323' to 2704'

FORMATION TOPS:

2340' basalt

PLUGS SET AS FOLLOWS:

2390' packer set; will place 9 5/8" slotted liner TD to surface

DATE June 18, 1979 2:40 p.m.

SIGNED *W. J. Minder*

# CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794  
Casper, Wyoming

## WATER ANALYSIS REPORT

OPERATOR <u>Amoco Production Company</u>	DATE <u>June 28, 1979</u>	LAB NO. <u>31195-4</u>
WELL NO. <u>West Rozel State #2</u>	LOCATION <u>NW SW 15-8N-8W</u>	
FIELD <u>WC</u>	FORMATION _____	
COUNTY <u>Boxelder</u>	INTERVAL <u>2403-2433</u>	
STATE <u>Utah</u>	SAMPLE FROM <u>DST #3 (5-9-79) Sampler</u>	

REMARKS & CONCLUSIONS:

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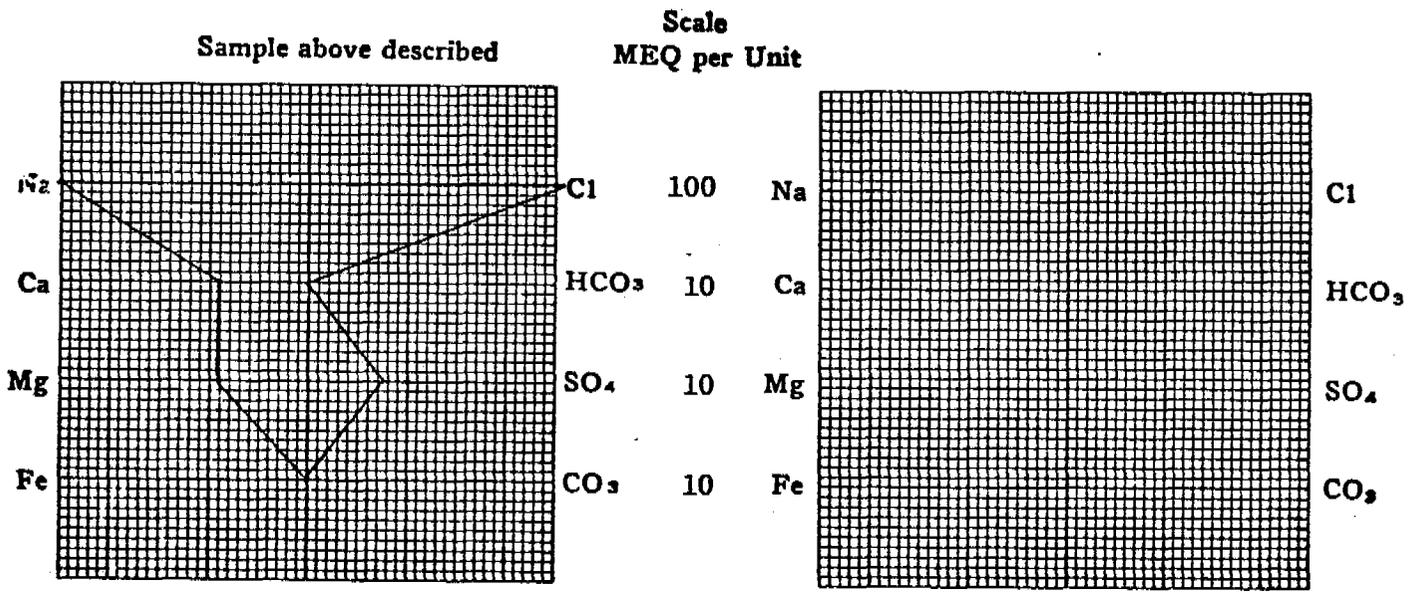


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<u>Cations</u>	<u>mg/l</u>	<u>meq/l</u>	<u>Anions</u>	<u>mg/l</u>	<u>meq/l</u>
Sodium - - - - -	<u>56694</u>	<u>2466.20</u>	Sulfate - - - - -	<u>3650</u>	<u>75.92</u>
Potassium - - - - -	<u>1852</u>	<u>47.41</u>	Chloride - - - - -	<u>93000</u>	<u>2622.60</u>
Lithium - - - - -	_____	_____	Carbonate - - - - -	_____	_____
Calcium - - - - -	<u>1841</u>	<u>91.87</u>	Bicarbonate - - - - -	<u>61</u>	<u>1.00</u>
Magnesium - - - - -	<u>1144</u>	<u>94.04</u>	Hydroxide - - - - -	_____	_____
Iron - - - - -	_____	_____	Hydrogen sulfide - - - - -	_____	_____
<b>Total Cations - - - - -</b>	_____	<u>2699.52</u>	<b>Total Anions - - - - -</b>	_____	<u>2699.52</u>

Total dissolved solids, mg/l - - - - - <u>158211</u>	Specific resistance @ 68°F.:
NaCl equivalent, mg/l - - - - - <u>157424</u>	Observed - - - - - <u>0.074</u> ohm-meters
Observed pH - - - - - <u>6.7</u>	Calculated - - - - - <u>0.059</u> ohm-meters

### WATER ANALYSIS PATTERN.



(Na value in above graphs includes Na, K, and Li)  
NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter  
Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

# CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794  
Casper, Wyoming

## WATER ANALYSIS REPORT

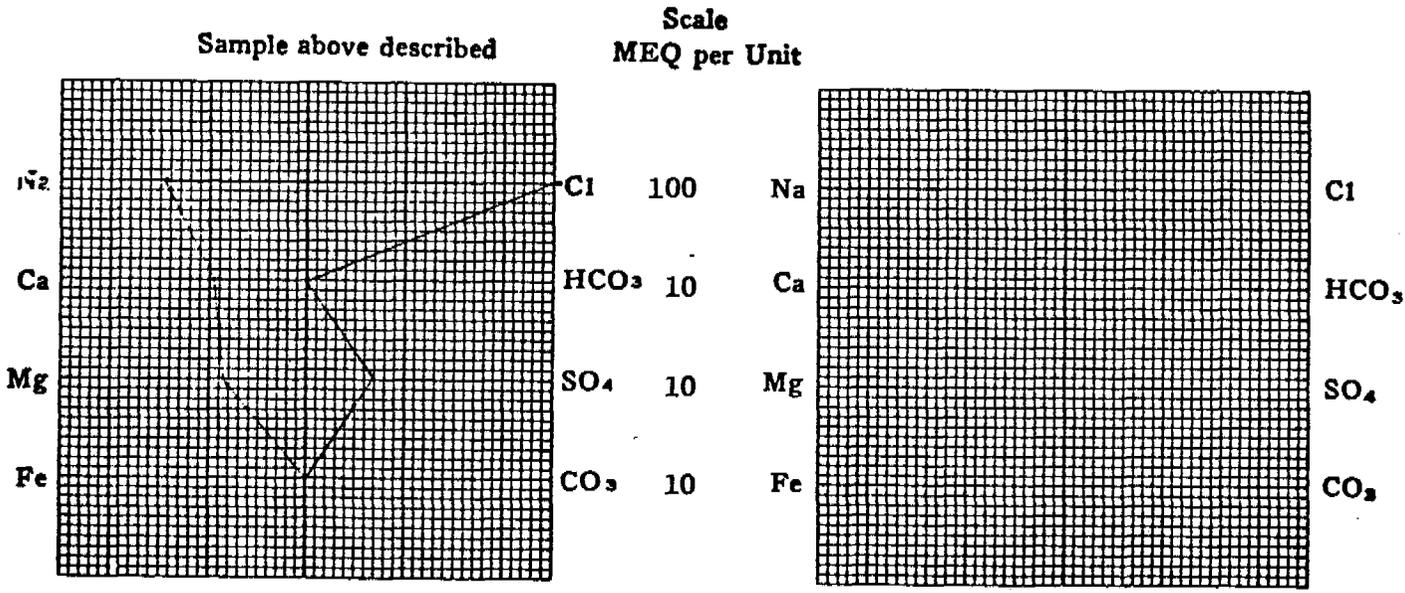
OPERATOR <u>Amoco Production Company</u>	DATE <u>June 28, 1979</u> LAB NO. <u>31195-3</u>
WELL NO. <u>West Rozel State #2</u>	LOCATION <u>NW SW 15-8N-8W</u>
FIELD <u>WC</u>	FORMATION _____
COUNTY <u>Boxelder</u>	INTERVAL <u>2403-2433</u>
STATE <u>Utah</u>	SAMPLE FROM <u>DST #3 (5-9-79) Bottom</u>

REMARKS & CONCLUSIONS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Cations	mg/l	meq/l	Anions	mg/l	meq/l
Sodium - - - - -	55386	2409.30	Sulfate - - - - -	3390	70.51
Potassium - - - - -	1800	46.08	Chloride - - - - -	91000	2566.20
Lithium - - - - -	-	-	Carbonate - - - - -	12	0.40
Calcium - - - - -	1935	96.56	Bicarbonate - - - - -	110	1.80
Magnesium - - - - -	1058	86.97	Hydroxide - - - - -	-	-
Iron - - - - -	-	-	Hydrogen sulfide - - - - -	-	-
Total Cations - - - - -		2638.91	Total Anions - - - - -		2638.91

Total dissolved solids, mg/l - - - - -	154635	Specific resistance @ 68°F.:
NaCl equivalent, mg/l - - - - -	153880	Observed - - - - -
Observed pH - - - - -	8.1	0.073
		ohm-meters
		Calculated - - - - -
		0.060
		ohm-meters

### WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)  
 NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter  
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

# CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794  
Casper, Wyoming

## WATER ANALYSIS REPORT

OPERATOR <u>Amoco Production Company</u>	DATE <u>June 28, 1979</u> LAB NO. <u>31195-2</u>
WELL NO. <u>West Rozel State #2</u>	LOCATION <u>NW SW 15-8N-8W</u>
FIELD <u>WC</u>	FORMATION _____
COUNTY <u>Boxelder</u>	INTERVAL <u>2403-2433</u>
STATE <u>Utah</u>	SAMPLE FROM <u>DST #3 (5-9-79) Middle</u>

REMARKS & CONCLUSIONS: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

<u>Cations</u>	<u>mg/l</u>	<u>meq/l</u>	<u>Anions</u>	<u>mg/l</u>	<u>meq/l</u>
Sodium - - - - -	<u>52325</u>	<u>2276.13</u>	Sulfate - - - - -	<u>3420</u>	<u>71.14</u>
Potassium - - - - -	<u>1793</u>	<u>45.90</u>	Chloride - - - - -	<u>86000</u>	<u>2425.20</u>
Lithium - - - - -	_____	_____	Carbonate - - - - -	<u>24</u>	<u>0.80</u>
Calcium - - - - -	<u>1982</u>	<u>98.90</u>	Bicarbonate - - - - -	<u>85</u>	<u>1.39</u>
Magnesium - - - - -	<u>944</u>	<u>77.60</u>	Hydroxide - - - - -	_____	_____
Iron - - - - -	-	_____	Hydrogen sulfide - - - - -	-	_____
Total Cations - - - - -			Total Anions - - - - -		
2498.53			2498.53		

Total dissolved solids, mg/l - - - - - 146530

NaCl equivalent, mg/l - - - - - 145652

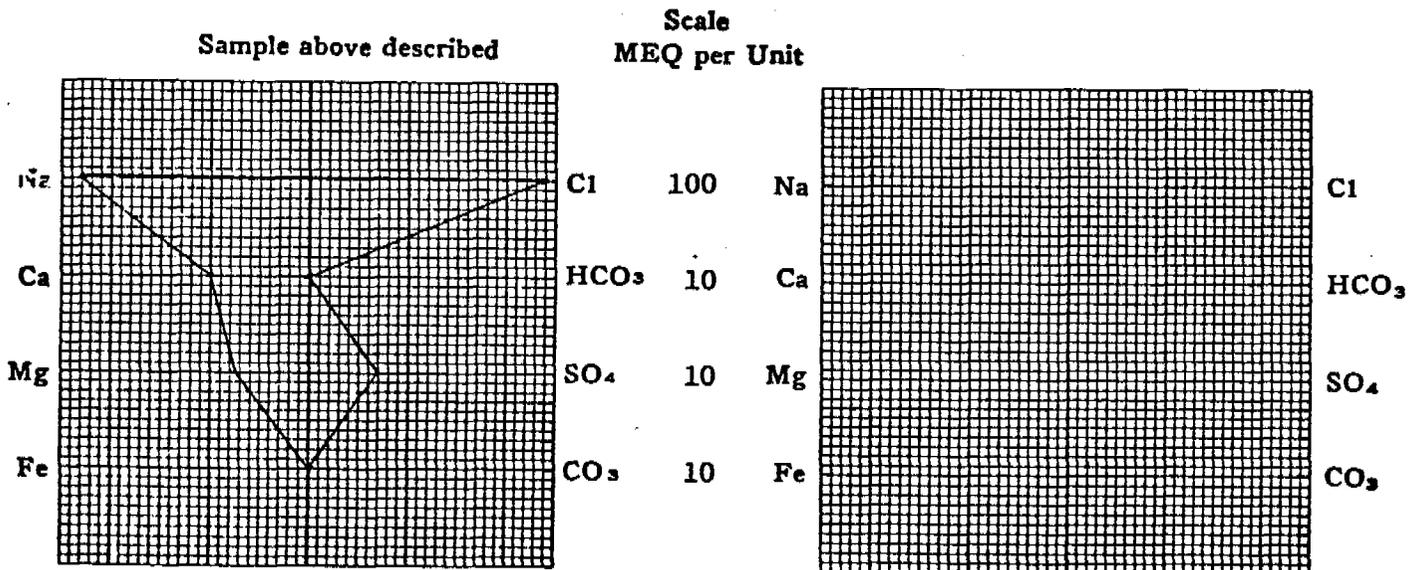
Observed pH - - - - - 8.1

Specific resistance @ 68°F.:

Observed - - - - - 0.080 ohm-meters

Calculated - - - - - 0.062 ohm-meters

### WATER ANALYSIS PATTERN.



(Na value in above graphs includes Na, K, and Li)  
NOTE: Mg/l=Milligrams per liter Meq/l= Milligram equivalents per liter  
Sodium chloride equivalent=by Dunlap & Hawthorns calculation from components

AMOCO PRODUCTION COMPANY DAILY DRILLING WIRE - CUMULATIVE REPORT

DENVER REGION \*\*\* SALT LAKE CITY DISTRICT\*\*\* 06-06-79

\*\*\* COMPANY OPERATED - TIGHT-HOLE \*\*\*

\*\*\* 05-29-79\*\*\*

WEST ROZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TD 3500, DRL-EXP-TIGHT,  
TD 2342

\*\*\* 05-30-79\*\*\*

WEST ROZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TD 3500, DRL-EXP-TIGHT,  
TD 2342

\*\*\* 05-31-79\*\*\*

WEST ROZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TD 3500, DRL-EXP-TIGHT,  
TD 2342

\*\*\* 06-01-79\*\*\*

WEST ROZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TD 3500, DRL-EXP-TIGHT,  
TD 2342

\*\*\* 06-02-79\*\*\*

WEST ROZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TD 3500, DRL-EXP-TIGHT,  
TD 2342

\*\*\* 06-03-79\*\*\*

WEST ROZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TD 3500, DRL-EXP-TIGHT,  
TD 2342

\*\*\* 06-04-79\*\*\*

WEST ROZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TD 3500, DRL-EXP-TIGHT,  
TD 2347

-END-

POOR COPY

AMOCO PRODUCTION COMPANY DAILY DRILLING WIRE - CUMULATIVE REPORT

DEIVER REGIM \*\*\* SALT LAKE CITY DISTRICT \*\*\* 06-14-79

\*\*\* COMPANY OPERATED - TIGHT-HOLE \*\*\*

\*\*\* 06-05-79\*\*\*

WEST WAZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TO 3500, DRL-EXP-TIGHT,  
TD 2373

\*\*\* 06-06-79\*\*\*

WEST WAZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TO 3500, DRL-EXP-TIGHT,  
TD 2406

\*\*\* 06-07-79\*\*\*

WEST WAZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TO 3500, DRL-EXP-TIGHT,  
TD 2416

\*\*\* 06-08-79\*\*\*

WEST WAZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TO 3500, DRL-EXP-TIGHT,  
TD 2426

\*\*\* 06-09-79\*\*\*

WEST WAZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TO 3500, DRL-EXP-TIGHT,  
TD 2433

\*\*\* 06-10-79\*\*\*

WEST WAZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TO 3500, DRL-EXP-TIGHT,  
TD 2540

\*\*\* 06-11-79\*\*\*

WEST WAZEL STATE #2, WILDCAT, PARKER #148,  
IDENT 975847-01-3, AUTH TO 3500, DRL-EXP-TIGHT,  
TD 2530

\*\*\* 06-12-79\*\*\*

POOR COPY

CUMULATIVE REPORT C7- DRL-EXP-TIGHT SALT LAKE CITY PAGE 2  
WEST ROZEL STATE #2, WILDCAT, PARKER #143,  
IDENT 975847-01-3, AITH TO 3500, DRL-EXP-TIGHT,  
TO 2704  
-END-

POOR COPY

# CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 2794  
Casper, Wyoming



## WATER ANALYSIS REPORT

OPERATOR Amoco Production Company DATE June 28, 1979 LAB NO. 11695-1  
 WELL NO. West Rozel State #2 LOCATION NW SW 15-8N-8W  
 FIELD WC FORMATION \_\_\_\_\_  
 COUNTY Boxelder INTERVAL 2403-2433  
 STATE Utah SAMPLE FROM DST #3 (5-9-79) Top

REMARKS & CONCLUSIONS:

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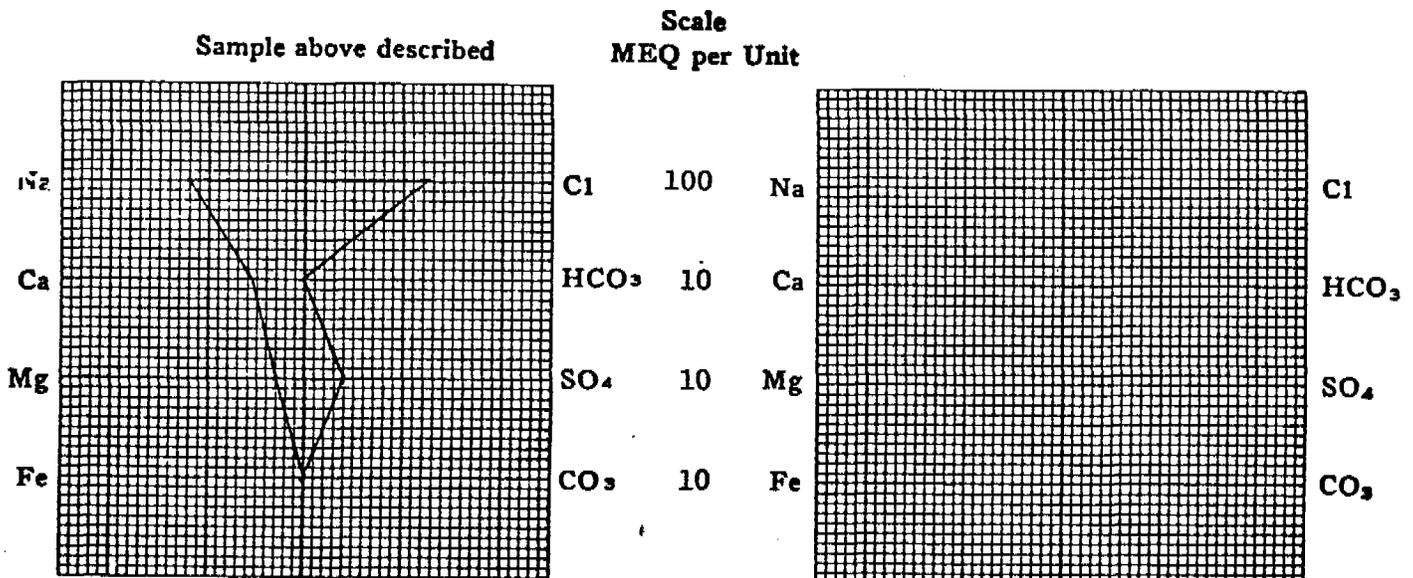


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Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	27739	1206.66	Sulfate	2150	44.72
Potassium	989	25.32	Chloride	45000	1269.00
Lithium			Carbonate	48	1.60
Calcium	1133	56.54	Bicarbonate	85	1.39
Magnesium	343	28.19	Hydroxide		
Iron			Hydrogen sulfide		
<b>Total Cations</b>		<b>1316.71</b>	<b>Total Anions</b>		<b>1316.71</b>

Total dissolved solids, mg/l	77444	Specific resistance @ 68°F.:	
NaCl equivalent, mg/l	76649	Observed	0.110 ohm-meters
Observed pH	8.3	Calculated	0.100 ohm-meters

### WATER ANALYSIS PATTERN



(Na value in above graphs includes Na, K, and Li)  
 NOTE: Mg/l = Milligrams per liter Meq/l = Milligram equivalents per liter  
 Sodium chloride equivalent = by Dunlap & Hawthorne calculation from components

March 21, 1980

Amoco Production Co.  
P.O. Box 17675  
Salt Lake City, Utah 84117

Re: Well No. West Rozel State #2  
Sec. 15, T. 8N, R. 8W.  
Box Elder County, Utah  
Months due: August 1979-February 1980

Gentlemen:

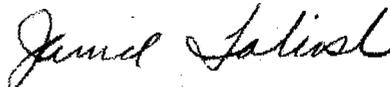
Our records indicate that you have not filed the monthly drilling reports for the months indicated above on the subject well.

Rule C-22, General Rules and Regulations and Rules of Practice and Procedure, requires that said reports be filed on or before the sixteenth (16) day of the succeeding month. This report may be filed on Form OGC-1B, (U.S. Geological Survey Form 9-331) "Sundry Notices and Reports on Wells", or on company forms containing substantially the same information. We are enclosing forms for your convenience.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING



JANICE TABISH  
CLERK TYPIST

April 24, 1980

Amoco Product'on  
P.O. Box 17075  
Salt Lake City, Utah

Re: Well No. West Rozel State #2  
Sec. 15, T. 8N. R. 8W.  
Box Elder County, Utah

Gentlemen:

According to a Plugging Notice dated June 18, 1979, the above mentioned well would be plugged.

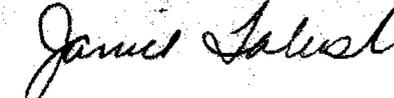
This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING



JANICE TABISH  
CLERK-TYPIST

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

MS-28639

STATE OF UTAH OIL & GAS CONSERVATION COMMISSION

5. LEASE DESIGNATION AND SERIAL NO.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

West Rozel State

9. WELL NO.

#2

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 15, T8N, R8W

12. COUNTY OR PARISH

Box Elder

13. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other Temporarily Abandoned

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other Temporarily Abandoned

2. NAME OF OPERATOR  
Amoco Production Company

3. ADDRESS OF OPERATOR  
P.O. Box 17675, Salt Lake City, UT 84117

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface 2065' FSL & 648' FWL, C NW SW  
At top prod. interval reported below  
At total depth

14. PERMIT NO. 43-003-30009  
DATE 5-18-79

15. DATE SPUDDED 5-25-79  
16. DATE T.D. REACHED 7-12-79  
17. DATE COMPLETION (If no prod.) 2-29-80  
OPERATIONS SUSPENDED  
Temporarily Abandoned  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 4200' lake level  
19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 2704'  
21. PLUG, BACK T.D., MD & TVD 2382'  
22. IF MULTIPLE COMPL., HOW MANY\*  
23. INTERVALS DRILLED BY Surface - TD

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\*  
2323-2382' Open Hole  
25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN  
Dipmeter, DIL-SFL, Directional, CNF, Temperature, Sonic  
27. WAS WELL CORED Yes

29. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"		40'	conductor pipe		
13 3/8"	61#	2323'	17 1/4"		
9 5/8"	40#	2367'	12 1/4"	200 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
None				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
None		

31. PERFORATION RECORD (Interval, size and number)

None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
2385'	Cement Squeeze Packer 600 sx Class G

33.\* PRODUCTION

DATE FIRST PRODUCTION: Test results will be provided upon final completion.

PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)

WELL STATUS (Producing or shut-in)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from available records

SIGNED [Signature] TITLE District Administrative Supervisor DATE 5-1-80

RECEIVED  
MAY 5 1980

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement". Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES		38. GEOLOGIC MARKERS					
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH	
DST #1	2297'	2342'	rec. 300' drilling mud	Basalt	2340'		
#2	2308'	2347'	rec. 2179' gas/oil cut mud				
#3	2403'	2433'	rec. 644' water/cut mud and 1779' saltwater				
Core #1	2347'	2373'	Cut 26' rec. 26' basalt				
#2	2375'	2405'	Cut 31' rec. 25' basalt				
#3	2406'	2416'	Cut 10' rec. 10' basalt				
#4	2426'	2432'	Cut 6' rec. 3' rubble				
#5	2540'	2547'	Cut 7' rec. 7' basalt				
Temporarily Abandoned:			600 sx plug w/packer set at 2390'				
			(received verbal approval from C.B. Feight, 6-18-79 at 2:50 p.m.)				

May 6, 1980

Amoco Production  
P.O. Box 17675  
Salt Lake City, Utah 84117

Re: Well No. West Rozel State #2  
Sec. 15, T. 3N, R. 9W.  
Box Elder County, Utah

Gentlemen:

According to our records, a "Well Completion Report" filed with this office 5-1-80, from above referred to well indicates the following electric logs were run: DIPMETER, DIL-SFL, DIRECTIONAL, CNF, TEMPERATURE, SONIC.

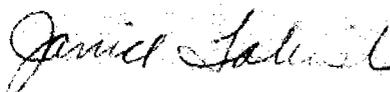
As of todays date this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

  
JANICE TABISH  
CLERK



**Amoco Production Company**

Post Office Box 17675  
Salt Lake City, Utah 84117  
801-272-9253

Martin Zimmerman  
District Superintendent

May 27, 1980

The State of Utah  
Department of Natural Resources  
Division of Oil, Gas, and Mining  
1588 West North Temple  
Salt Lake City, UT 84116

File: MZ-484-031/WF

West Rozel State #2, SW/4, Section 15, T8N, R8W, Box Elder County, Utah

On July 12, 1979, Amoco Production Company "temporarily abandoned" the subject well in accordance with an approved plugging procedure from your office.

At the present time, our plans are to again move the Parker 148 rig and barge to the northern side of the lake and re-enter the subject well. We anticipate re-entry in approximately 60 days.

Amoco Production Company requests all information pertaining to the subject well be held on a "tight hole" status. Prior to commencement of operations, the proper forms will be forwarded for your review and approval.

Thank you for your cooperation relative to this request.

Martin Zimmerman

SW/crj

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

<p>1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER</p> <p>2. NAME OF OPERATOR Amoco Production Company</p> <p>3. ADDRESS OF OPERATOR P.O. Box 17675, Salt Lake City, UT 84117</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface  NW/4 SW/4 Section 15, 2065' FSL &amp; 648' FWL</p>		<p>5. LEASE DESIGNATION AND SERIAL NO. ML - 28639</p> <p>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME West Roze1 State</p> <p>9. WELL NO. #2</p> <p>10. FIELD AND POOL, OR WILDCAT Wildcat</p> <p>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 15, T8N-R8W</p> <p>12. COUNTY OR PARISH Box Elder</p> <p>13. STATE Utah</p>
<p>14. PERMIT NO. 43-003-30009</p>	<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) 4200' Lake Level</p>	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Amoco Production Company has plugged and abandoned the subject well as follows:  
 Set 150 sx plug @ 2367'  
 Set CIBP in 9-5/8" casing @ 263' KB  
 Cut 9-5/8" casing @ 163' KB  
 Cut 13-3/8" & 20" casing 20' below mud line (63' KB)  
 Set 500 sx plug @ 263' to mud line (lake floor)

Verbal approval received by Kurt Unger from Mike Minder, U.O. & G.C. @ 4:30 p.m. on 12/29/80

TD: 2704' PBSD: 2382'

TIGHT  
HOLE

18. I hereby certify that the foregoing is true and correct  
 Original Signed By  
 SIGNED E. R. NICHOLSON TITLE Admin. Supervisor DATE 12/31/80

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

January 5, 1981

Amoco Production Company  
P.O. Box 17675  
Salt Lake City, Utah 84117

RE: Well No. West Rozel State #2  
Sec. 15, T. 8N, R. 8W.,  
Box Elder County, Utah  
Second Request

Gentlemen:

According to our records, a "Well Completion Report" filed with this office May 1, 1980, from above referred to well indicates the following electric logs were run: Dipmeter, DIL-SFL, Directional, CNF, Temperature, Sonic. As of today's date this office has not received these logs.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the electric and radioactivity log.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING

*Barbara Hill*

BARBARA HILL  
WELL RECORDS

/bjh  
enclosures: forms

(See other instructions on reverse side)

STATE OF UTAH  
OIL & GAS CONSERVATION COMMISSION

5. LEASE DESIGNATION AND SERIAL NO.

ML-28639

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  Other \_\_\_\_\_

7. UNIT AGREEMENT NAME

b. TYPE OF COMPLETION: NEW WELL  WORK OVER  DEEP-EN  PLUG BACK  DIFF. RESVR.  Other P & A

8. FARM OR LEASE NAME

West Rozel State

2. NAME OF OPERATOR

Amoco Production Company

9. WELL NO.

#2

3. ADDRESS OF OPERATOR

P.O. Box 17675 Salt Lake City, Utah 84117

10. FIELD AND POOL, OR WILDCAT

Wildcat

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface NW/4 SW/4 Section 15 2065' FSL & 648' FWL

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 15, T8N-R8W

At top prod. interval reported below

At total depth

14. PERMIT NO. 43-003-30009 DATE ISSUED 5-18-79

12. COUNTY OR PARISH Box Elder 13. STATE Utah

15. DATE SPUDDED 5-25-79 16. DATE T.D. REACHED 7-12-79 17. DATE COMPL. (Ready to prod.) 12-29-80 (P&A) 18. ELEVATIONS (DF, R&B, RT, GR, ETC.)\* 4200' Lake Level 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 2704' 21. PLUG, BACK T.D., MD & TVD 2382' 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS Surface-TD

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* None 25. WAS DIRECTIONAL SURVEY MADE Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN Dipmeter, DIL-SEL, Directional, CNF, Temperature, Sonic 27. WAS WELL CORRED Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	106#	317'		Driven	
13 3/8"	61#	2323'	17 1/2"		
9 5/8"	40#	2367'	12 1/4"	200sx	163'

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
		None				None	

31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL (MD)	SIZE	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
			None

33.* DATE FIRST PRODUCTION		PRODUCTION METHOD (Flow lift, pumping—size and type of pump)		WELL STATUS (Producing or shut-in)			
DATE OF TEST	HOURS TESTED	HOOK UP	PROD'N FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS DIVISION OF OIL, GAS & MINING

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED E.R. Nicholson TITLE Administrative Supervisor DATE 1-14-81

\*(See Instructions and Spaces for Additional Data on Reverse Side)

## INSTRUCTIONS

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If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

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**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

### 37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
DST #1	2297'	2342'	Rec. 300' drilling mud
#2	2308'	2347'	Rec. 2179' gas/oil cut mud
#3	2403'	2433'	Rec. 644' water/cut mud and 1779' salt water
Core #1	2347'	2373'	Cut 26' Rec. 26' Basalt
#2	2375'	2405'	Cut 30' Rec. 25' Basalt
#3	2406'	2416'	Cut 10' Rec. 10' Basalt
#4	2426'	2432'	Cut 6' Rec. 3' Rubble
#5	2540'	2547'	Cut 7' Rec. 7' Basalt

### 38.

### GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
Basalt	2340'	