

STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES 910 State Office Building Portland, OR 97201

APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

(To be accompanied by a \$100 permit fee, a surety bond conditioned as provided by law, and evidence of mineral rights ownership or lease.) This application becomes a permit to drill when signed and dated by DOGAMI in box below.

In compliance with rules and regulations pursuant to ORS 520, application is hereby made for permit to drill

(a gas well) to be known as Atlantic Richfield Company Columbia County #42-9-65 (an oil well) (Company or operator) (Lease) (Well No.) in NE 1/4 of Sec. 9, T. 6N, R. 5W W.B.&M. Directional? No yes XX Survey Coordinates: SHL: 2275.3' S & 101.3' E of NE corner Top C&W: 1950' S & 390' W of NE corner BHL: 1797' S & 620' W of NE corner Wildcat: XX (or) Field Name: Mist Gas Field County: Columbia Elevation of ground above sea level is 767 feet. All depth measurements are taken from kelly bushing, which is +10' above ground.

Lessor (Mineral Owner): Columbia County Address: Columbia County Courthouse, St. Helens, OR 97051 Surface Owner: Longview Fibre Company Address: Main Office and Mills, Longview, WA 98632 Lessee: Atlantic Richfield Company Address: 4550 California Avenue, Bakersfield, CA 93309

We propose to use the following strings of casing and to land or cement them as herein indicated:

Table with 6 columns: Size of hole, Size of casing, Weight in pounds per foot, Grade/Type, Depth, Amount of cement. Rows include 12-1/4" 9-5/8" 36# K-55 STC 450'(TVD) 250 sx and 8-1/2" 5-1/2" 17# K-55 LTC 2991'(TVD) 3150'(MD) 890 sx.

Geologic Objectives Clark and Wilson Sand at 2307' TVD Proposed Depth 3150' TMD, 2991' TVD

Company/Operator ARCO Oil and Gas Company Div. of Atlantic Richfield Co. Signature Kwang U. Park Kwang U. Park Position District Drilling Superintendent Date August 25, 1987 SEND WELL COMMUNICATION TO: Name Kwang U. Park (ARCO) Address P. O. Box 147 Bakersfield, CA 93302 Phone 805-321-4060 (Day) 805-834-4826 (Night)

DOGAMI Approved \_\_\_\_\_, 1987 By \_\_\_\_\_

NOTE: (1) Issuance of this permit is not a finding of compliance with the Statewide Planning Goals or the acknowledged comprehensive plan. (2) Permit expires one year from date of issue. (3) Land use approval must be obtained from the county or city in which the drilling takes place. (4) Unless specifically exempted, permittee is obligated to comply with all current applicable statutes and rules including those adopted after permit issuance.

Form 1 (5-85)

046 #1 383 API # 5-11-87 60920

STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES 910 State Office Building Portland, OR 97201

RECEIVED-PTLD JAN 21 1987 DEPT. OF GEOLOGY & MINERAL IND.

APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

(To be accompanied by a \$100 permit fee, a surety bond conditioned as provided by law, and evidence of mineral rights ownership or lease.) This application becomes a permit to drill when signed and dated by DOGAMI in box below.

In compliance with rules and regulations pursuant to ORS 520, application is hereby made for permit to drill

(a gas well) to be known as Atlantic Richfield Company Columbia County #32-9-65 (an oil well) (Company or operator) (Lease) (Well No.) in NE 1/4 of Sec. 9, T. 6N, R. 5W W.B.&M. Directional? No XX Yes Survey Coordinates: 1980' S & 1980' W of NE Corner Wildcat: yes (or) Field Name: Mist Gas Field County: Columbia Elevation of ground above sea level is ±900 feet. All depth measurements are taken from kelly bushing, which is ±10' above ground.

Lessor (Mineral Owner): Columbia County Address: Columbia County Courthouse, St. Helens, OR 97051 Surface Owner: Longview Fibre Company Address: Main Office and Mills, Longview, WA 98632 Lessee: Atlantic Richfield Company Address: 4201 Stine Road, Bakersfield, CA 93313

We propose to use the following strings of casing and to land or cement them as herein indicated:

Table with 6 columns: Size of hole, Size of casing, Weight in pounds per foot, Grade/Type, Depth, Amount of cement. Rows include 12-1/4" 9-5/8" 36# K-55 STC 450' 250 sx and 8-1/2" 5-1/2" 17# K-55 LTC 2900' 695 sx.

Geologic Objectives Clark and Wilson at 2200' Proposed Depth 2900'

Company/Operator ARCO Oil and Gas Company Div. of Atlantic Richfield Co. Signature Kwang U. Park Kwang U. Park Position Dist. Drlg. Superintendent Date SEND WELL COMMUNICATION TO: Name Kwang U. Park Address P. O. Box 147 Bakersfield, CA 93302 Phone 805-833-4060 (Day) 805-834-4826 (Night)

DOGAMI Approved February 19, 1987 The July 1987 stipulations approved by the State Geologist are conditions of this permit. Notify DOGAMI to witness BOP test. By Dennis L. Olmstead, Petroleum Engineer

NOTE: (1) Issuance of this permit is not a finding of compliance with the Statewide Planning Goals or the acknowledged comprehensive plan. (2) Permit expires one year from date of issue. (3) Land use approval must be obtained from the county or city in which the drilling takes place. (4) Unless specifically exempted, permittee is obligated to comply with all current applicable statutes and rules including those adopted after permit issuance.

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APPLICATION FOR PERMIT TO DRILL AN OIL OR GAS WELL

(To be accompanied by a \$100 permit fee, a surety bond conditioned as provided by law, and evidence of mineral rights ownership or lease.) This application becomes a permit to drill when signed and dated by DOGAMI in box below.

In compliance with rules and regulations pursuant to ORS 520, application is hereby made for permit to drill

(a gas well) to be known as Arco Columbia County 41-9-65 (an oil well) (Company or operator) (Lease) (Well No.) in NE 1/4 of Sec. 9, T. 6N, R. 5W W.B.&M. Directional? No Yes X Survey Coordinates: SHL: 427' S and 497' E F/NW corner Sec. 10, T6N, R5W BHL (at top of Clark & Wilson): 470' S and 200' W F/NE corner Sec. 9, T6N, R5W Wildcat: yes (or) Field Name: Mist Gas Field County: Columbia Elevation of ground above sea level is 700 feet. All depth measurements are taken from KB, which is 10 feet above ground.

Lessor (Mineral Owner): Columbia County Address: 331 Courthouse, St. Helens, OR 97051 Surface Owner: Longview Fibre Company Address: Main office and Mills, Longview, WA 98632 Lessee: ARCO Oil and Gas Company Address: P.O. Box 147, Bakersfield, CA 93302

We propose to use the following strings of casing and to land or cement them as herein indicated:

Table with 6 columns: Size of hole, Size of casing, Weight in pounds per foot, Grade/Type, Depth, Amount of cement. Rows include 12 1/4 9 5/8 36# K55, STC 400' 220 sx and 8 1/2 5 1/2 17# K55, LTC 3320' 850 sx.

Geologic Objectives Clark and Wilson Sand: 2883' MD, 2300' TVD Proposed Depth 3320' MD, 2700' TVD

Company/Operator ARCO Oil and Gas Co. Signature K. U. Park K. U. Park Position District Drilling Superintendent Date 4/24/87 SEND WELL COMMUNICATION TO: Name K. U. Park Address P.O. Box 147 Bakersfield, CA 93302 Phone 805-321-4060 (Day) 805-834-4826 (Night)

DOGAMI Approved \_\_\_\_\_, 1987 By \_\_\_\_\_

NOTE: (1) Issuance of this permit is not a finding of compliance with the Statewide Planning Goals or the acknowledged comprehensive plan. (2) Permit expires one year from date of issue. (3) Land use approval must be obtained from the county or city in which the drilling takes place. (4) Unless specifically exempted, permittee is obligated to comply with all current applicable statutes and rules including those adopted after permit issuance.

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