STATE OF OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1005 State Office Building

Portland, Oregon 97201

DATE PISCR3 In compliance with rules and regulations pursuant to ORS 522 (Chapter 552 OL 1975) application is hear permit to drill a geothermal well: Sandia National Laborative (company or operator) Plant No. 1800-1 in SW/4 of sec. 31 , T. 215 , R. 13E W.B.&M., Field, Deschutes Description of ground above sea level is 6420 feet. All depth measurements are taken from the second of the sec	
compliance with rules and regulations pursuant to ORS 522 (Chapter 552 OL 1975) application is her permit to drill a geothermal well: Sand'a National Laborative (company or operator) (lease)	
r permit to drill a geothermal well: Sand'a National Laborative (company or operator) (lease) 11 No. 1700-1 in SW/4 of sec. 31 , T. 215 , R. 13E W.B.&M., Field, Deschartes rvey Coordinates 1000' N & 1000' E of SW CIMBO Sec. 31	
(company or operator) (leage) 11 No.1700-1 in SW/4 of sec. 31 , T. 215 , R. 136 W.B.&M., Field, Deschates rvey Coordinates 1000' N & 1000' E of SW CIMMO CONTROL C	County.
(company or operator) (leage) 11 No.1800-1 in SW/4 of sec. 31 , T. 215 , R. 136 W.B.&M., Field, Deschutes rvey Coordinates 1000' N & 1000' E of SW CIMMO C	County.
rvey Coordinates 1000' N & 1000' E of SW CINNON of Sec. 71	County.
rvey Coordinates 1000' N & 1000' E OF SW CIVNES	County.
vey Coordinates 1000' N & 1000' E OF SW CIVNES	,
sec. 71	
	1
	om ten
	OIII sop
ground (eve/, which isabove ground.	
sandia National Laboratory	
Iress Albuqueque NM 87185	
7144444 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11 soft and
ress Deschites Nat. Forest, Fort Rock Wistric	1.
iress Weschufes Wat. Forest, Fort Work Wistric	V
Me and band band band	or cemented
hole casing per foot Grade and type second hand Depth No. sac	cks cement
note casing per root state and app	4
15" 103/4" MRW + - Used 32' Wach	Sacks
15" 103/4" MRW or used 32' Wach	
15" 103/4" MRW or used 32' Wack 27/3" 85/8" 28 H-40 or laster new 500' 100	racks
15" 103/4" MRW or Used 32' Wack 27/3" 85/8" 28 H-40 or looken New 500' 100	racks
5" 103/4" WRW or Used 72' Wack 27/3" 85/8" 28 H-40 or loother New 500' 100 6" 442" 9.5 N N N N 2000' 240	
15" 103/4" MRW or well 32' Wack 278" 85/8" 28 H-40 or looken New 500' 100	
5" 107/4" 178" 85/8" 28 1440 or hother New 500' 100 100 240 100 240 100 240 100 240 100 240 100 240 100 240	
5" 107/4" 178" 85/8" 28 1440 or later New 500' 100 100 240 100 240 100 240 100 240 100 240 100 240 100 240	
5" 103/4" Reverused 32' Wack 278" 85/8" 28 H.40 or hother New 500' 100 6" 442" 9.5 n u 2000' 240 posed Depth F. nal depth 5005 or 1255 Objectives Scient: fice	
18" 103/4" 18" 103/4" 18" 28 H.40 or looken new 500' 100 100 un 2000' 240 100 posed Depth final depth 5000 or 1255 Objectives Scientific 100 letter to the second of	
15" 1074" 10" 10" 10" 100 100 100 100 100 100 100	Acre ne
posed Depth final depth sood on less Objectives Scientific Dell Approved September 15, 19 83 except as follows: The January 1983 tipulations approved by the overning Board of this Department Position Reproved September 15, 19 83 Company or operator By Petro William Position	Pere ne
Sing per 1000 wew arrived 72' Wack 107's" 85's" 78' 78 H.40 ar laster New 500' 100	Acre ne
posed Depth final depth 5000 or less Objectives Scientific Approved September 15, 19 83 except as follows: The January 1983 tipulations approved by the overning Board of this Department or conditions of this permit. Send communications regarding well to: Name Dr. C. Lus Ne.	Acre ne
1074" 1074" 1074" 1074" 100' 100 100 100 100 100 100 1	Acre ne

NOTE: This permit expires one year from date of issue. This permit is valid only if land use approval is obtained from the county or city in which the drilling takes place, and provided these authorities make a determination of compliance with statewide goals. Issuance of this permit is not a finding of compliance with the Statewide Planning Goals or the acknowledged comprehensive plan.

(505) 846-1328