GTLT - \_\_\_\_9\_\_\_

# (12-26)-18N-2E Sunoco Energy Development Corporation (Sandoval County)

9-76-1A-G(PA); 9-76-2-E(PA); 9-76-4-M(PA); 9-76-3-I(PA); 9-76-5-I(PA) & 9-76-6-G(PA)

	,	Adopted 10/1/
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DISTRIBUTION P. O. Box 2088, S	Santa Fe 87501	
File / /		
N. M. B. M. SUNDRY NOTICES	AND REPORTS	
U. S. G. S ON		5. Indicate Type of Lease
Operator ( GEOTHERMAL RES	SOURCES WELLS	State Fee X
Land Office		5.a State Lease No.
	<u> </u>	<del></del>
Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a E For Permit —" (Form G-101) for Such Proposals.)	Different Reservoir. Use "Application	
1. Type of well Geothermal Producer Temp. Observation		7. Unit Agreement Name · ·
Low-Temp Thermal Injection/Disposal		None
2. Name of Operator		8. Farm or Lease Name
Sunoco Energy Development Corporati	on	San Diego Grant
3. Address of Operator		9. Well No.
12700 Park Central Pl., Suite 1500,	Dallas, TX 75251	9-76-1A
4. Location of Well		10. Field and Pool, or Wildcat
Unit Letter G, 1950 Feet From The N.	Line and 2450 Feet From	None
The E. Line, Section 12 Township 18	N. Range 2 E. NMPM	
15. Elevation (Show whether	DF, RT, GR, etc.)	12. County
6550	G.L.	Sandoval
16. Check Appropriate Box To Indicate Nat		
	· •	
NOTICE OF INTENTION TO:  PERFORM REMEDIAL WORK PLUG AND ABANDON X		NT REPORT OF:
	REMEDIAL WORK	☐ ALTERING CASING
TEMPORARILY ABANDON	COMMENCE DRILLING OPNS.	L PLUG & ABANDONMENT
PULL OR ALTER CASING U CHANGE PLANS U	CASING TEST AND CEMENT JOB	
	OTHER Per verbal	permission.
OTHER		
17. Describe Proposed or completed Operations (Clearly state all pertinent of	details, and give pertinenet dates, inclu	ding estimated date of starting any
proposed work) SEE RULE 203.	•	
		•
Hole was abandoned by: a) cuttin	g off 3/4" iron nine	6" helow
ground level; b) filling top 10'	of nine with cement.	c) covering
the pipe with dirt; d) clearing s	eita of all trach and	dehris
and e) restoring site as nearly a	as practical to origin	nal con-
dition. Abandonment operations of		77
and were completed on $9/24/$	77	
and were compreted on		
This conforms with abandonment me	thod prescribed by U	.S. Geological
Survey's Revised Special Stipulat	tions for Shallow Tem	merature Gradient
Holes.		<b>P</b>
,		
CCT 01 4077		
↑ T 31 1977		
		·
Of Sent Along Continue		
Sent -		
18. I hereby certify that the information bove is true and complete to the best	t of my knowledge and belief.	
1 box 10 Sal		-
SIGNED TITLE VIC	e President, Operati	On STE 10/24/77

SENIOR PETROLEUM GEOLOGIST

DATE 12/12/77

APPROVED BY Carl Ulvog

CONDITIONS OF APPROVAL, IF ANY:

TITLE Chief Geologist

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N.M.B.M.		
U.S.G.S.		
Operator		

NEW MEXICO OIL CONSERVATION COMMISSION

P. O. Box 2088, Santa Fe 87501

IAN 24 1977

	•	الأثرار	111		
5.	In	dicate	Type	of	Lease

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK---GEOTHERMAL RESOURCES WELL

Santa State Lease No.

b. Type of Well Geothermal Producer Temp Observation  8. F	777777777777
6. Type of Well	Unit Agreement Name
6. Type of Well	none
Low-Temp Thermal $\square$ Injection/Disposal $\square$ S	Farm or Lease Name
	an Diego Grant
2. Name of Operator . 9. V	Vell No.
Sunoco Energy Development Corporation	9-76-1A
3. Address of Operator , 10.	Field and Pool, or Wildcat
12700 Park Central Pl., Suite 1500, Dallas, TX 75251	none
4. Location of Well** UNIT LETTER G LOCATED 1950 FEET FROM THE North LINE AND 2450 FEET FROM THE East LINE OF SEC. 12 TWP. 18 N RGE. 2 E. NMPM	
***************************************	County Indoval
19A. Formation unknown	20. Rotary or C.T. rotary
21. Elevations (Show whether DF, RT, etc.) contactor see note "A" 21B. Drilling Contractor Geothermal Services 22B. See note "A" 21B. Drilling Contractor Geothermal Services	Oct. 1, 1976 will start

### PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
5-1/8"	3/4"	1.14 lbs.	500 '	1.5	6" BGL

Program - See attached "Standard Shallow Temperature Gradient Hole Drilling Program"

\*\* - All section lines projected

It is requested that this hole be made an addition to the State of New Mexico \$10,000 Multiple-Well Low-Temperature Well or Geothermal Observation Well Bond already in force. The bonding company is Federal Insurance Company and the bond No. is 8071-56-34.

Information is as follows:

Lease - San Diego Grant Well No. - 9-76-1A Unit Letter - G Section - 12 Township - T18N Range - R2E

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. Give blowout preventer program, if any.

I hereby certify that the information above is true an	complete to the best of my knowledge and belief.	
Signed Steel well	Title Chief Geologist	
(This space for State Use)	Geothermal Services,	Inc.
	*	

CONDITIONS OF APPROVAL, IF ANY:

SENIOR PETROLEUM GEOLOGIST

DATE 1/24/77

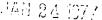
NEW MEXICO OIL CONSERVATION COMMISSION

P. O. BOX 2088 SANTA FE 87501

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section JAM 2.1.1077

		All distances must b	e mosti tile odter bodingan	ies of the Section 5 Paris N. V.	. 1'1/ <i>1</i>
Operator Sunoco En	ergy Devel	opment Corp.	Lease	Grant CONSERVA	Well No. 9-76-1A
Unit Letter	Section 12	Township 18N	Range 2E	County Santal	Fe -
Actual Footage Local		rojected N n	ne and 2450	feet from the East	<sub>line</sub> (projected)
Ground Level Elev. 6550	Producing For non	•	Pool none		Dedicated Acreage:  NONE Acres
1. Outline t	he acreage dedicat	ed to the subject wel	by colored pencil or l	nachure marks on the pla	t below.
2. If more and roya		dedicated to the well	, outline each and ide	ntify the ownership there	eof (both as to working interest
		different ownersip is on, force-pooling, etc?		, have the interests of a	ll owners been consolidated by
☐ Yes	□ No If ar	nswer is "yes," type o	f consolidation		
If answer is necessary.) _	"no," list the ow	ners and tract descrip	otions which have actu	ally been consolidated. (	Use reverse side of this form if
No allowabl forced-poolir	le will be assigning, or otherwise) o	ned to the well un or until a non-standard	til all interests have unit, eliminating such	been consolidated (by interests, has been appro	communitization, unitization, eved by the Commission.
	i I		-		CERTIFICATION
	l l	# 9-76-1A to 4 NE 1/4, sec	be located: c. 12, T. 18N,	contain	by certify that the information ed herein is true and complete to t of my knowledge and belief.
				Name	the first
	1		1		ef Geologist
			1	Date	rmal Services, Inc
				Janu	ary 18, 1977
	1		; 	<b>+</b> I	y certify that the well location on this plat was plotted from field
-				notes o under r	f actual surveys made by me or ny supervision, and that the same and correct to the best of my
	į	•	† {	P	dge and belief.
	1				
	1		Į.	Date Surve	yed
	1		! !		Professional Engineer d Surveyor
	į .		Ì		
				Certificate	No.
0 330 660 8	י ו י פפו, ספטו 1320 סי	0 2310 2640 20	100 1500 1000	500 0	





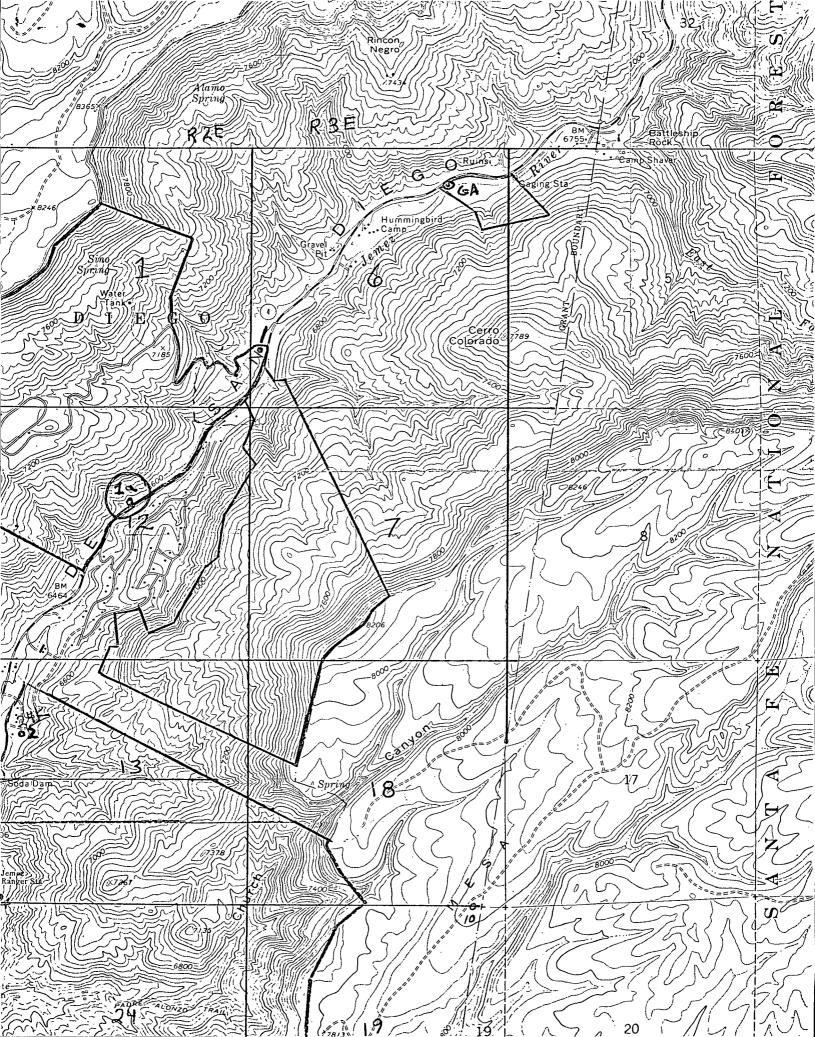
7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712

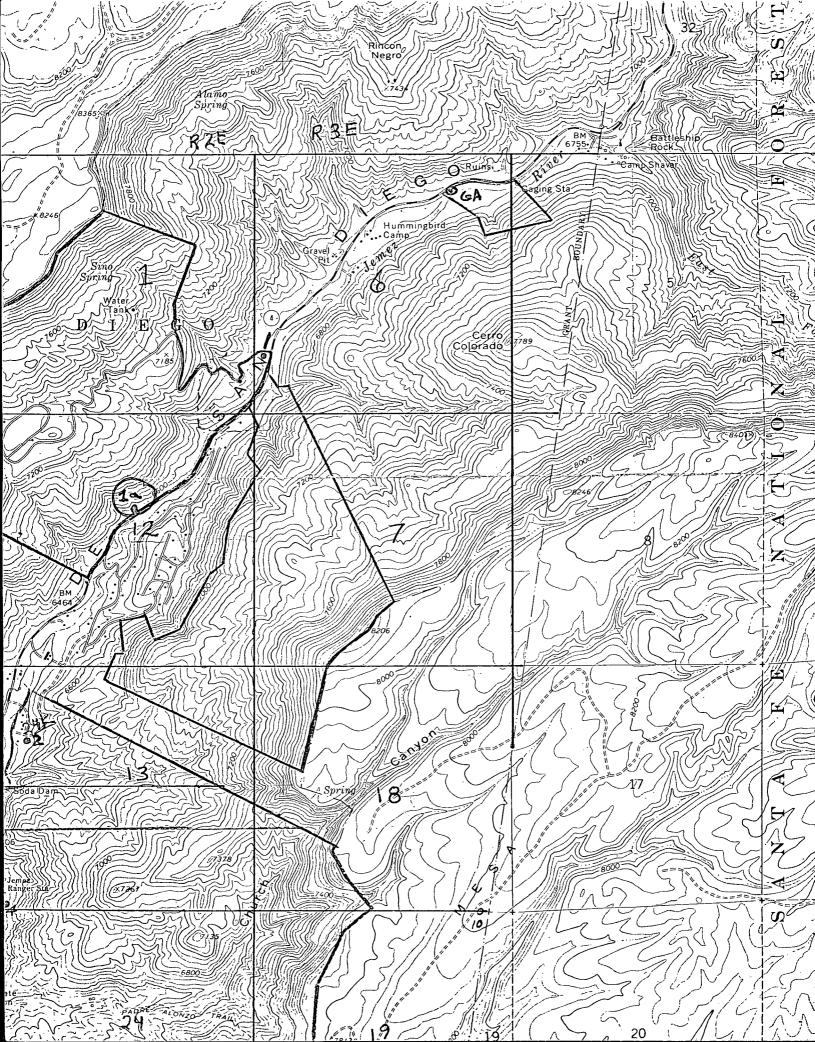


STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
- 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
- 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
  - b. If there is a sudden increase in temperature of the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud return temperature reaches 120°F/50°C.

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/
    15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN</u> <u>WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST</u> <u>NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.





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File		1		
N. M. B. M.	<u> </u>	<u></u> _	SUNDRY NOTICES AND REPORTS	
U. S. G. S	<u> </u>		ON	5. Indicate Type of Lease
Operator	1		GEOTHERMAL RESOURCES WELLS	State Fee X
Land Office			·	5.8 State Lease No.
Do Not Use This Form for P For Permit —" (Form G-101)	ropos ) for :	als to Such l	Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application Proposals.)	
1. Type of well Geothe	ermal	Produ	ucer Temp. Observation	7. Unit Agreement Name
Low-To	emp	Therm	nal Injection/Disposal I	None
2. Name of Operator		_		8. Farm or Lease Name
	erg	<u>y D</u>	evelopment Corporation	San Diego Grant
3. Address of Operator	~		I DI C II ICOO D-II MY DEOFI	9. Well No.
	C	ent:	ral Pl., Suite 1500, Dallas, TX 75251	9-76-2  10. Field and Pool, or Wildcat
4. Location of Well			N COO	1
Unit Letter E, 160	20		Feet From The $N_{ullet}$ Line and $600$ Feet From	None
The W • Lin	ie, Se	ction _	13	
oimmmn	777	777	115. Elevation (Show whether DF, RT, GR, etc.)	12. County
		////		
16.	777		6380 G.L.	Sandoval (\\\\\\\\\\\
			Appropriate Box To Indicate Nature of Notice, Report or Other Da	ita .
		_		NT REPORT OF:
PERFORM REMEDIAL WOR	≀K L	_	PLUG AND ABANDON X REMEDIAL WORK	☐ ALTERING CASING
TEMPORARILY ABANDON	L		COMMENCE DRILLING OPNS.	PLUG & ABANDONMENT
PULL OR ALTER CASING	L.		CHANGE PLANS LA CASING TEST AND CEMENT JOB	ا ا
			OTHER Per verbal	permission.
OTHER				
17. Describe Proposed or co	mple	ted O	perations (Clearly state all pertinent details, and give pertinenet dates, incli	uding estimated date of starting any
proposed work) SEE RUI			, ,,	
				<u>.</u>
TY 3	´ · .		The state of the s	Cll halor
Hole was	al	ban	doned by: a) cutting off 3/4" iron pipe	e p. perom
ground 1	.ev	el;	b) filling top 10' of pipe with cement; dirt; d) clearing site of all trash and	dobrie
tue bibe	: W_	F O M	ing site as nearly as practical to original	nal con-
dition	43	oor.	donment operations commenced on $\frac{9/24}{}$	177
and ware	Ai CO	omi	leted on $9/24/77$	
· alla were		Jing).		
Survey's	nfo R	rms evi	with abandonment method prescribed by t sed Special Stipulations for Shallow Ter	J.S. Geological mperature Gradient
Holes.		-		
•		!		
•		i i		•
•	٠,	, ,	CST 31 1977	
	ť			•
	. د. ا	L CO	CHISETHATION COMM.	
			Santa Conviner.	•
18. I hereby certify that the i	nforn	natigh	bove is true and complete to the best of my knowledge and belief.	
11 /	1	<b>\</b> ^*/		-
SIGNED	_	V	TITLE Vice President, Operati GeoThermal Services, In	ODE 10/24/77
	$\bigvee$	1	Geothermal Services, in	IC.
Cank	17	10.	SENIOR PETROLEUM GEOLOGIST	12/12/17

CONDITIONS OF APPROVAL, IF ANY:

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U.S.G.S.		
Operator	I	

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DISTRIBUTION		P. O. Box 2088,	Santa Fe 87501				
File	1 0	•		_			
N.M.B.M.				5	5. Indicate	Type of Lease	
U.S.G.S.		APPLICATION FOR PER	N.	STATE	FEE X		
Operator		PLUG BACKGEOTHE	•		5.a State Le	ase No.	
Land Office		•					
			,				
1a. Type of Work Drill	X	Deepen	Plug Back 🔲	'	7. Unit Agre	ement Name	
		•	-		. 1	none	
b. Type of Well Geoth	nermal Producer [		Temp Observation	8	3. Farm or L	ease Name	
Low-	Temp Thermal [		njection/Disposal 🗆		San I	Diego Grant	
2. Name of Operator				Ş	. Well No.		
Sunoco Energy	y Developmen	nt Corporation			9-76-2		
3. Address of Operator	1	0. Field and	Pool, or Wildcat				
12700 Park Co	entral Pl.,	Suite 1500, Da	allas, TX 752	51	none		
4. Location of Well * * UNIT L	ETTER E	OCATED 1600 FEET	EROM THE North	LINE			
J 2							
and $600$ feet fro	OM THE West LINI	E OF SEC. 13 TWP. 18	N. RGE. 2 E	- NMPM			
					2. County		
					Sandova	al (((((())))	
			19. Proposed Depth	19A. Formation		20. Rotary or C.T.	
			500 ft.	unknow	n	rotary	
21. Elevations (Show whether		. Kind & Status Plug. Bond	21B. Drilling Contractor	_		. Date Work will start	
6380 ft	• (GL) s	ee note "A"	Geothermal Se	rvices	Oct.	1, 1976	
		PROPOSED CASING A	ND CEMENT PROGRAM	•			
SIZE OF HOLE	SIZE OF CASIN	IG WEIGHT PER FOOT		SACKS OF (	CEMENT	EST. TOP	
5-1/8"	3/4"	1.14 lbs.	500'	1.5		6" BGL	

Program- See attached "Standard Shallow Temperature Gradient Hole Drilling Program"

\*\*- All section lines projected

Note A- Type of bond will be \$10,000 multiple-well low-temperature well or geothermal observation well bond. The bond is in the process of being filed, and a bond number will be furnished as soon as available before operations

Quad 29

OIL CONSERVATION COMM

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive

projecti, i di	
hereby certify that the information above is true and q	amplete to the hort of any brought and to U.S.
nereby certify that any information address true and q	omplete to the best of my knowledge and belief.
	Geothermal

Title Chief Geologist, Services, Ingue July 21, 1976

SENIOR PETROLEUM GEOLOGIST



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
- 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
- 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - a. If temperature reaches 120°F/50°C, <u>STOP DRILLING</u> and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
  - the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud return temperature reaches 120°F/50°C.

JUL 26 1976

O!L CONSERVATION COMIA Santa Fo

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/ 15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

GEOTHERMAL SERVICES, INC. San Diego, California December, 1975

# NEW MEXICO OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE 87501

GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Lease Operator 9-76-2 Sunoco Energy Development Corp. San Diego Grant Section Township Unit Letter 2 E. Sandoval E 13 18 N. Actual Footage Location of Well: 600 W. 1600 feet from the projected N. line and line (projected) feet from the Dedicated Acreage: Ground Level Elev. Producing Formation 6380 ft. none none none 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation ☐ Yes ☐ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION I hereby certify that the information Hole #9 - 76 - 2 to be located: contained herein is true and complete to the best of my knowledge and belief NW1/4SW1/4NW1/4, sec. 13, T. 18N., 2 R. 2E. Steve Ouiett Chief Geologist Geothermal Services, Inc. July 21, 1976 I hereby certify that the well location plotted from field my supervision, and that the s ue and gorrect to the best of my OIL CONSERVATION COMM. Santa Fo Date Surveyed Registered Professional Engineer and/or Land Surveyor Certificate No.

1500

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File	+					•		· · · · · · · · · · · · · · · · · · ·		
N.M.B.M.									Type of Lease	76
U.S.G.S.	+ +					TO DRILL, DEEPI		STATE L		
Operator  Land Office	+++		OR PLU	IG BACKGEOTH	ERM	MAL RESOURCES W	/ELL			
Land Office								111111		7
. •	•	•		•						//
1a. Type of Work Dri	ill 🕱	]		Deepen 🔲		Plug Back 🔲		7. Unit Agr	eement Name	~~
				Boopon					none	
b. Type of Well Geo	otherm	al Produce	•	·		np Observation 🔀		8. Farm or	Lease Name	
Lov	w-Temp	p Thermai			Inje	ction/Disposal 🗆		San	Diego Grant	
2. Name of Operator								9. Well No.		
Sunoco Ener	gy D	evelop	ment (	Corporation				Ç	9-76-2	
3. Address of Operator								10. Field an	d Pool, or Wildcat	
12700 Park							51		none	~
4. Location of Well * * UNIT	LETT	ER E	LOCAT	ED 1600 FEET	FRO	OM THE North	LINE			//
										]]
AND 600 FEET F	ROM T	HEWest	LINE OF	SEC. 13 TWP. 1	777	V. RGE. 2 L	• NMPM	12. County	711711111	7
								•		"
	<i>HH</i>	+++++	4444		H.			Sandov		4
			./////		///					"
	1111	<i>}}}}}</i>	444	<i>}}}}}</i>	7//	. Proposed Depth	19A. Formation	7777777	20. Rotary or C.T.	7
			.//////		7,,	500 ft.	unknov		-	
21. Elevations (Show whether		P.T. ata l	21 A Kind	l & Status Plug. Bond	7		unkno	1	rotary	
6380 f				note "A"	Ge	B. Drilling Contractor cothermal Se	rvices		x. Date Work will start 1, 1976	
				•						
•			P	ROPOSED CASING A	AND	CEMENT PROGRAM	-			
SIZE OF HOLE		SIZE OF C	ASING	WEIGHT PER FOO	Т	SETTING DEPTH	SACKS OF	CEMENT	EST. TOP	
5-1/8"		3/4"		1.14 lbs	•	500'	1.		6" BGL	
						•			·	
· · · · · · · · · · · · · · · · · · ·										
D		C	, 4 4 1	- 3 HCA 3		·		C 1.		
Progr	ram-	see a	ttacne			Shallow Temp		Gradie	nt	
				note pr	TTI	ling Program		٠.		
**_ /	A 1 1 .	saction	n line	es projecte	ď	12				
		SCCULO	11 11110	es projecte	u					
Note	A- '	Type o	f bond	d will be \$	10.	000 multipl	e-well l	ow-tem	nerature	
,						ration well			d is in	
						ed, and a bo				Ь
						re operation			गिरन <b>्</b>	
								TELL IV	125/11	
				•			- HX .11	JL 26 19	VIII	
						•	الالك	12 20 19	/6 <u>}</u> [[]	
							OIL COME	CDIA		
		,					OIL CONS	ERVATION	COMM	
N ABOVE SPACE DESCRIBE	E PROP	OSED PRO	GRAM: If	proposal is to deepen	orp	ilug back, give data on		odnia Ca		tiv
one. Give blowout preventer	program	n, if any.								
hereby certify that the inform	mation :	above is true	and gome	plete to the best of m	y kno		_			
A Kons		/2000	7/	~:· ^ ~	٠	Geothe			2/ .===	
gned	[ X	· me	<del>-</del>	Title Chief Ge	Los	ogist,Servi	ces, Inc	ase Ju	Ly≺¹, 1976	
(This space	for Stat	te Use)				<u>,</u>				
1.	Λi.	, ·			pon s	יי דוווא פרחו חפוכד		0	19/16	
PPROVED BY	v W	luga		TITLE SENIOR P	LIKE	DLEUM GEOLOGIST	_	7)	17/76	

conditions of approval, if any:  $ec{V}$ 



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
- 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
- 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
  - b. If there is a sudden increase in temperature of the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid Thuno case shall drilling continue after mudireturn temperature reaches 120°F/50°C.

JUL 26 1976

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/ 15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN</u> <u>WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST</u> <u>NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

# NEW MEXICO OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE 87501

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator 9-76-2 Sunoco Energy Development Corp. San Diego Grant. Range Unit Letter Section Township 13 18 N. 2 E. Sandoval Actual Footage Location of Well: 600 1600 feet from the projected N. line and W. line (projected) feet from the Dedicated Acreage: Ground Level Elev. Producing Formation 6380 ft none none none 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation\_ ☐ Yes ☐ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION I hereby certify that the information Hole #9 - 76 - 2 to be located: contained herein is true and complete to the best of my knowledge and belief. NW 1/4SW 1/4NW 1/4, sec. 13, T. 18N., R R.2E. Steve Quiett Chief Geologist Geothermal Services, Inc. <u>July 21, 1976</u> I hereby certify that the well location shown on this plat was plotted from field notes cof actual surveys made by me or under my supervision and that the same is true and correct to the best of my knowledge and belief. OIL COMS Date Surveyed Registered Professional Engineer and/or Land Surveyor Certificate No.

A Company of the Comp	•	Form G-103
•		Adopted 10/1
NO. OF COPIES RECEIVED	NEW MEXICO OIL CONSERVATION COMMISSION	
DISTRIBUTION	P. O. Box 2088, Santa Fe 87501	131/ CED 0 5077
File *	<del>- </del>	11/ FEB -3 19// 1/11
N. M. B. M.	OUNDRY NOTICES AND DEPORTS	PERSONAL PROPERTY OF PROPERTY OF
	SUNDRY NOTICES AND REPORTS	CONSTANTANT OF Lease
U. s. G. s	ON	State Fee X
Operator	GEOTHERMAL RESOURCES WELLS	S.a State Lease No.
Land Office		310 3101 25037 775.
	to Drill or to Deepen or Plug Back to a Different Reservoir. Use "	Application ()
Far Permit —" (Form G-101) for Such		
1. Type of well Geothermal Pro	• • • • • • • • • • • • • • • • • • • •	7. Unit Agreement Name ·
Low-Temp Ther	mal   Injection/Disposal	None
2. Name of Operator	D. J. G.	8. Farm or Lease Name
	Development Corporation	San Diego Grant
3. Address of Operator	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	9. Well No.
12700 Park Cer	ntral Pl., Suite 1500, Dallas, TX	
4. Location of Well		10. Field and Pool, or Wildcat
Unit Letter // a /OC	Feet From The SOUTH Line and 200	Feet From None
The WEST Line, Section	n	NMPM.
	15. Elevation (Show whether DF, RT, GR, etc.)	12. County
	(1)(1)	Sandoval ()
16. Che	ck Appropriate Box To Indicate Nature of Notice, Report	
	1 · · · · · · · · · · · · · · · · · · ·	•
NOTICE OF INT		SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON LJ REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	COMMENCE DRILLIN	NG OPNS. ABANDONMENT
PULL OR ALTER CASING	CHANGE PLANS CASING TEST AND C	CEMENT JOB .
		•
	OTHER	
OTHER	<b>_ _</b>	
12 D		
	Operations (Clearly state all pertinent details, and give pertinent	et dates, including estimated date of starting any
proposed work) SEE RULE 203.		•
	1/10/77 " " " 0 70 11	8:00 00 00
0n/	1/9/77 Hole No. 9-76-4 was	spudded at <u>0.00</u> an PM
	le was T.D.'d on 1/21/77 @ 33	
The hol	le was T.D.'d on	BGL
	•	
	ected 12/12	
OK- Insp	eded 12/12	
V		
	•	•
<u>.</u> -	•	
	•	
·		
·		
-	·	÷ ,
•		
18. I hereby certify that the information	on above is true and complete to the best of my knowledge and bel	ief.
11/00	have The	1/00/77
SIGNED 1	TITLE Chief Geologist	DATE 1/28/77
	Geothermal Serv	ices, Inc.
		•
	;	•

CONDITIONS OF APPROVAL, IF ANY:

NO. OF COPIES RECEIVED	Τ	2	NEW MEXICO OIL CONSERVATION COMMISSION	
DISTRIBUTION		T	P. O. Box 2088, Santa Fe 87501	
File	1	4		
N. M. B. M.			SUNDRY NOTICES AND REPORTS	•
U. S. G. S			ON	5. Indicate Type of Lease
Operator	1		GEOTHERMAL RESOURCES WELLS	State Fee X
Land Office			,	5.8 State Lease No.
Do Not Use This Form for P For Permit —" (Form G-101			Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application Proposals.)	
1. Type of well Geoth	ermal	Produ	cer Temp. Observation	7. Unit Agreement Name
Low-T	emp	Therm		None
2. Name of Operator				8. Farm or Lease Name
Suno co Ene	erg	y D	evelopment Corporation	San Diego Grant
•			TO DE COSTA DECON DOLLOS MY DECEL	9-76-4
	C	ent	ral Pl., Suite 1500, Dallas, TX 75251	10. Field and Pool, or Wildcat
4. Location of Well	`			None
Unit Letter M, I()	)		Feet From The $S_ullet$ Line and $200$ Feet From	
The W. Lir	ne, Se	ection	13 Township 18 N. Range 2 E. NMPM.	
mmmm	177	1111	15. Elevation (Show whether DF, RT, GR, etc.)	12. County
	///			
16.	777.	Chaol	6310' G.L.  Appropriate Box To Indicate Nature of Notice, Report or Other Da	Sandoval \\\\\\\
			1	
	· _	_	reon l	NT REPORT OF:
PERFORM REMEDIAL WOR	г	亅	PLUG AND ABANDON X REMEDIAL WORK	☐ ALTERING CASING
TEMPORARILY ABANDON	Ĺ		COMMENCE DRILLING OPNS.	PLUG & ABANDONMENT
PULL OR ALTER CASING	L		CHANGE PLANS CASING TEST AND CEMENT JOB	
	~,		OTHER_Per verbal	permission.
OTHER				
17. Describe Proposed or co	mple	ted O	perations (Clearly state all pertinent details, and give pertinenet dates, incl	uding estimated date of starting any
proposed work) SEE RU	LE 2	03.		
Hole was	$\mathbf{a}$	ban	doned by: a) cutting off 3/4" iron pipe	e 6" below
ground l	ev	el:	b) filling top 10' of pipe with cement:	c) covering
the pipe	e w	ith	dirt; d) clearing site of all trash and	d debris
and e) r	es	tor	ing site as nearly as practical to grigi	nal con-
dition.	A'	ban	donment operations commenced on $9/24$	<u> 177                                   </u>
			leted on 9/24/77	
•			<del>,</del>	
Survey!s	nfo s R	rms evi	with abandonment method prescribed by Used Special Stipulations for Shallow Ter	J.S. Geological mperature Gradient
Holes.				•
1				
<u>)</u>	(	~ ^ ~	31 1977	
£".	. (	≠ <i>U.</i> [	311077	
011 6	`\.	٠	~ 13// J	•
	<i>ن\\ن</i>	Ci.	31 1977	
i.	5	Sa,,,	110 V COme	
18. I hereby certify that the i	infori	matign	bove is true and complete to the best of my knowledge and belief.	
Al Port	1	$\vec{\sim}$		
SIGNED	1_	X	TITLE Vice President, Operation GeoThermal Services, Ir	ODSTE 10/24/77
	<b>'</b>	<u></u>	The state of the s	
APPROVED BY Carl	L	lli	TITLE	DATE 12/12/77
CONDITIONS OF APPROVA	E	ΔNV:	$\sigma$	
CONDITIONS OF AFTROVA	۰, ۱۲	AIV T		•

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N.M.B.M.			
U.S.G.S.			
Operator			
Land Office			

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

6310 ft.

(GL)

NEW MEXICO OIL CONSERVATION COMMISSION P. O. Box 2088, Santa Fe 87501

APPLICATION FOR PERMIT TO DRILL, DEEPEN,
OR PLUG BACKGEOTHERMAL RESOURCES WEL

5.	Indicat	е Тур	e of	Lease		
ѕт	ATE [	]			FEE	X
5.3	State I	9359	Ma			

20. Rotary or C.T.

22. Approx. Date Work will start

rotary

Land Office			•		+	
			· · · · · · · · · · · · · · · · · · ·			
la. Type of Work	Drill 🛣	Deepen 🗆	Plug Back		7. Unit Agreement Na	me
b. Type of Well	Geothermal Producer Low-Temp Thermal	·	Temp Observation Injection/Disposal	<b>X</b> I	none 8. Farm or Lease Nam San Diego	
2. Name of Operator Sunoco E	Cnergy Developmen	t Corporati	on		9. Well No. 9-76-4	
3. Address of Operator 12700 Pa	or irk Central Pl., S	Suite 1500,	Dallas, TX	75251	10. Field and Pool, or none	Wildcat
	*UNIT LETTER M LO					
					12. County Sandoval	

### PROPOSED CASING AND CEMENT PROGRAM

21A. Kind & Status Plug. Bond See note "A"

500 ft.

Geothermal

21B. Drilling Contractor

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
5-1/8"	3/4"	1.14 lbs.	500'	1.5	6" BGL
			•		

Program- See attached "Standard Shallow Temperature Gradient Hole Drilling Program"

\*\*- All section lines projected

Note A- Type of bond will be \$10,000 multiple-well low-temperature well or geothermal observation well bond. The bond is in the process of being filed, and a bond humber will be furnished as soon as available before operations commence! Willy

Quad 29

JUL 26 1978 OIL CONSERVATION COM

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new producti

19A. Formation

unknown

Oct.

the information above is true and complete to the best of my knowledge and belief.

Geothermal Title Chief Geologist, Services, Inche July 21, 1976

CONDITIONS OF APPROVAL, IF ANY:

SENIOR PETROLEUM GEOLOGIST



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
  - 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
  - 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
    - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
    - b. If there is a sudden increase in temperature of the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud neturn temperature reaches 120°F/50°C.

OIL CONSERVATION COM-

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/ 15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

# NEW MEXICO OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE 87501

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator 9-76-4 Sunoco Energy Development Corp. San Diego Grant Range Section Township Unit Letter 2 E. Sandoval 18 N. Actual Footage Location of Well: line (projected) feet from the projected S. line and 200 feet from the Dedicated Acreage: Producing Formation Ground Level Elev. none 6310 ft. none none 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation\_ ☐ Yes ☐ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION I hereby certify that the information Hole #9-76-4 to be located: contained herein is true and complete to the best of my knowledge and belief. SW1/4SW1/4SW1/4, sec. 13, T. 18N., R. 2E. Steve Quiett Chief Geologist Geothermal Services, Inc. July 21, 1976 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or lunder my supervision, and that the same true and correct to the best of my owledge and belief 976 OIL CONSERVATION COMM Date SurveyedSanta Fe Registered Professional Engineer and/or Land Surveyor Certificate No. 1320 1980 2310 2000 1500 1650 1000 500

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DISTRIBUTION		P. O. Box 2088, Sar	nta Fe 87501			
File			•			
N,M,B,M,		•		)	5. Indicate	Type of Lease
U.S.G.S.	APPL	ICATION FOR PERMI	T TO DRILL, DEEPE	N,	STATE [	
Operator		IG BACKGEOTHERN			5.a State Le	ease No.
Land Office			•		·····	
			· .			
1a. Type of Work   Drill	K [	Deepen 🗆	Plug Back		7. Unit Agr	eement Name
			· .			none
	mal Producer		np Observation		8. Farm or	Lease Name
Low-Ter	mp Thermal	Inje	ction/Disposal		San	Diego Grant
2. Name of Operator		a		•	9. Well No.	
Sunoco Energy	Development (	corporation				-76-4
3. Address of Operator 12700 Park Cen	tral Pl Su	ita 1500 Dal	las, TX 7525	5.1		d Pool, or Wildcat
				,	mm.	none
4. Location of Well * * UNIT LET	TERLOCAT	ED TOO FEET FR	OM THE South	LINE		
AND 200 FEET FROM	THE Wast LINE OF	SEC. 13 TWP. 18 I	V 2 F	NMPM		
AND 200 FEET FROM	THE MEST FINE OF		N. RGE.	NMPM	12. County	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>
					Sandov	a. (((((()))))
++++++++++++	4444444		++++++++	***	777777	
	444444	444444	D. Proposed Depth	19A. Formatio	u 77777777	20. Rotary or C.T.
			500 ft.	unknow		rotary
21. Elevations (Show whether DF	7. RT. etc.1 21A. Kind	& Status Plug. Bond 21	B. Drilling Contractor		T	x. Date Work will start
			eothermal Ser	vices		1, 1976
	P	ROPOSED CASING AND	CEMENT PROGRAM	-		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	CACKE OF	CENTENT	507 700
5-1/8"	3/4"	1.14 lbs.	500'	1.5		EST. TOP
			000	100		J DGB
· · · · · · · · · · · · · · · · · · ·				<del> </del>		
**- All Note A-	section line Type of bond well or geot the process as soon as a	es projected d will be \$10, thermal observ of being file wailable befo	ling Program"  000 multiple vation well bed, and a bon ore operation	-well lond. Tond. Tond. Tonde s comme	ow-temphe bond	perature d is in be furnished
one. Give blowout preventer progra hereby certify that the information						
gned MHH	····	Title Chief Geol			e_Jul	y <b>2/</b> , 1976
(This space for St.	ate Use)		•			
PPROVED BY Carl (	lluog	TITLE SENIOR PETRO	LEUM GEOLOGIST	DA	ATE 9/	9/76

APPROVED BY LARL WLL
CONDITIONS OF APPROVAL, IF ANY:



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



\*STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- Coordinate "Special Stipulations" or other unusual 1. requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
- If drilling with mud, use regular Bentonite drilling 4. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
- 5. Have a supply of Barite available in case of artesian If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
- ..... ... 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - If temperature reaches 120°F/50°C, STOP DRILLING a. and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
  - If there is a sudden increase in temperature of b. the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud/return temperature reaches 120°F/50°C. JUL 26 1975.

OIL CONSERVATION CO.V.

Santa le

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/ 15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN</u> <u>WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST</u> <u>NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

· 通知的各种性人 是 化分别的 NEW MEXICO OIL CONSERVATION COMMISSION

### Form G-102 Adopted 10/1/7

P. O. BOX 2088 SANTA FE 87501

### GEOTHERMAL RESOURCES WELL LOGATION AND ACREAGE DEDICATION PLAT

	All dist	ances must be from t	the outer bounda	ries of the Secti	on.		
Operator		Leas	e -		,	Well No.	
T	ergy Developmen			Grant :		9-7	6-4
Init Letter Sec	tion Township 18	8 N.	Range 2 E.	1	doval		
ctual Footage Location			000			u. (mma	. do a t a d
100	feet from the projecte Producing Formation	Pool	200	feet from th		line (pro	
6310 ft.	none			none		none	Acres
	acreage dedicated to the s	subject well by col	lored pencil or	hachure mark	s on the plat be	low.	
•	n one lease is dedicated						king inter
	n one lease of different of tion, unitization, force-po	ooling, etc?		•		vners been con	solidated
☐ Yes ☐	No If answer is "ye	es," type of conso	lidation		-		
If answer is "no necessary.)	o," list the owners and to	ract descriptions w	vhich have actu	nally been cor	nsolidated. (Use	reverse side of	this form
No allowable forced-pooling,	will be assigned to the or otherwise) or until a ne	e well until all on-standard unit, e	interests have liminating such	been consol interests, has	idated (by cor been approved	nmunitization, by the Commi	unitizationssion.
		1					
·	1		. 1		1	CERTIFICATION	
· .	Hole #9-76-4	to be loca	ated:		contained he	ertify that the erein is true and	complete t
	SW1/4SW1/4SW	1/4, sec. 13,	T. 18N.,R.	.2E.	the best of the	ny knowledge spi	e beller.
	•		ı		1	7	V
	+	<del></del>		' — —	Name		
	+		 	'	Steve (	uiett	
	+		   		Steve (		
	+		     		Steve ( Position Chief ( Company	Geologist	
	+		         	,	Steve (Position Chief (Company Geothern		ces, ]
			         	,	Steve (Position Chief (Company Geothern Date	ieologist nal Servi	ces, I
				,	Steve (Position Chief (Company Geothern	ieologist nal Servi	ces, I
					Steve (Position Chief (Company Geothern Date July 21	nal Servi	rell location deliby me o
					Steve (Position Chief (Company Geotherm Date July 21  Ill hereby ce shown on the notes of act under my su is true and knowledge an	teologist  al Servi  1976  tity that the was plotte  tis plat was plotte  al surveys mad  pegvision, and the correct to the	rell locatio
					Steve (Position Chief (Company Geothern Date July 21	teologist  al Servi  1976  tity that the was plotte  tis plat was plotte  al surveys mad  pegvision, and the correct to the	rell locatio
					Steve (Position Chief (Company Geotherm Date July 21  Ill hereby ce shown on the notes of act under my su is true and knowledge an	teologist  al Servi  1976  tity that the was plotte  tis plat was plotte  al surveys mad  pegvision, and the correct to the	rell locatio
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DISTRIBUTION P. O. Box 2088, Santa Fe 87501	
File 1 L	
N. M. B. M. CUNIDRY MOTICES AND REPORTS	
SUNDAY NOTICES AND ACTOR'S	5. Indicate Type of Lease
	State Fee 🔀
Operator / GEOTHERMAL RESOURCES WELLS	5.a State Lease No.
Land Office	
·	mmmmmm
Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit" (Form G-101) for Such Proposals.)	
1. Type of well Geothermal Producer Temp. Observation	7. Unit Agreement Name
Low-Temp Thermal Injection/Disposal	None
2. Name of Operator	8. Farm or Lease Name
Sunoco Energy Development Corporation	San Diego Grant
3. Address of Operator	9. Well No.
12700 Park Central Pl., Suite 1500, Dallas, TX 75251	9-76-3
4. Location of Well	10. Field and Pool, or Wildcat
	None
Unit Letter I, 1500 Feet From The S. Line and 350 Feet From	
TO N OF	
The E. Line, Section 14 Township 18 N. Range 2 E. NMPM.	
Show whether DF, RT, GR, etc.)	12. County
All[[]][[]][[]][[]] 6320' G.L.	Sandoval ////////
16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Da	ta · · ·
NOTICE OF INTENTION TO: SUBSEQUE	NT REPORT OF:
PERFORM REMEDIAL WORK PLUG AND ABANDON X REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON COMMENCE DRILLING OPNS.	· D PLUG & ABANDONMENT
PULL OR ALTER CASING CHANGE PLANS CASING TEST AND CEMENT JOB	
CASING TEST AND CEIVENT SOB	
other <u>Per verbal</u>	permission.
OTHER	•
17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, inclu	ding estimated date of starting any
proposed work) SEE RULE 203.	
	,
TI I I I I I I I I I I I I I I I I I I	fil holow
Hole was abandoned by: a) cutting off 3/4" iron pipe	o perow
ground level; b) filling top 10' of pipe with cement;	c) covering
the pipe with dirt; d) clearing site of all trash and	debris
and e) restoring site as nearly as practical to origi	
dition. Abandonment operations commenced on $\frac{9/24}{1000}$	-
and were completed on 9/24/77	•
	I C Coalaniani
This conforms with abandonment method prescribed by U	.s. Geological
Survey's Revised Special Stipulations for Shallow Tem	perature Gradient
Holes.	
$G_{C}$	
3110	
2/2/	
Sun Month	
COT 31 1977 Summing Commy	
''Vy	
18. I hereby certify that the information bove is true and complete to the best of my knowledge and belief.	
1/2/	
SIGNED TITLE Vice President. Operati	ODSTE 10/24/77
decimendar pervices, in	<b>**</b>
APPROVED BY Carl Lilia SENIOR PETROLEUM GEOLOGIST	12 / 1
THE SEMEN PERCEDIA DEULUSISI	DATE 12/12/77

CONDITIONS OF APPROVAL, IF ANY:

* · · · •	÷		25 11/1/1 Form G-103
	NEW MEXICO OU CON	SECOND COMMISSION / FE	Adopted 10/1/74
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N. M. B. M.	<b>⊣</b>	ES THE DEPOSITE	WITTON CO
	•	ES AND REPORTS	S. Indicate Type of Lease
U. S. G. S		ON 50011505011151115	State Fee X
Operator Lond Office	GEOTHERMAL R	ESOURCES WELLS	5.a State Lease No.
Land Office			
Do Not Use This Form for Process	Is to Drill or to Deepen or Plug Back to a	Different Reservoir Lise "Application	
For Permit —" (Form G-101) for S		The second control of	
1. Type of well Geothermal I	Producer Temp. Observation	(X)	7. Unit Agreement Name ··
Low-Temp T	hermal Injection/Disposal		None
2. Name of Operator			8. Farm or Lease Name
	y Development Corpora	ation	San Diego Grant
3. Address of Operator 12700 Park C	Central Pl., Suite 150	00, Dallas, TX 75251	9. Well No. 9-76-3
4. Location of Well		· · · · · · · · · · · · · · · · · · ·	10. Field and Pool, or Wildcat
	500 Feet From The	H Line and 350 Feet From	None
FACT	14.	: 11	
The <u>EAST</u> Line, Sec	tion 14 Township 18	N Range 2E NMPM.	
· · · · · · · · · · · · · · · · · · ·	15. Elevation (Show wheth	han DE DE CE attal	12. County
		mer Dr, K1, GR, etc.)	
	6320'		Sandoval
16. C	neck Appropriate Box To Indicate N	Nature of Notice, Report or Other Da	ta .
NOTICE OF I	NTENTION TO:	SUBSEQUE	NT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON		COMMENCE DRILLING OPNS.	PLUG & ABANDONMENT
PULL OR ALTER CASING	CHANGE PLANS	CASING TEST AND CEMENT JOB	
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		OTHER	· ·
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proposed work) SEE RULE 203	1/20/77 Hole No	details, and give pertinenet dates, included $9-76-\underline{3}$ was spudded	at <u>8:00</u> (AM) PM
The h	ole was T.D.'d on	/22/77 @ 100' BGL	
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11/00			1001-
SIGNED MUCH	Such TITLE C'	hief Geologist	DATE 1/28/27
		hief Geologist cothermal—Services <del>,</del> I	ne.
	· •		
APPROVED BY	TITLE		DATE

CONDITIONS OF APPROVAL, IF ANY:

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Land Office							***	_			
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				•		•			r	none	
b. Type of Well		nal Produc				•	<b>X</b>		8. Farm or L	ease Name	
	Low-Ten	np Thermal			Injed	ction/Disposal [	_]		San I	Diego Gran	ı t.
2. Name of Operator									9. Well No.	orego ara	
Sunoco E	nergy l	Develor	oment (	Corporatio	n			İ	9-	76-3	
3. Address of Operato										Pool, or Wildcat	
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4. Location of Well *									111111		1111
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AND 350 F	EET FROM	THE East	LINE OF	SEC. 14 TWP.	18 N	RGE. 2	E.	NMPM			////
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zone. Give blowout pre	venter progra	am, if any.							nta Fc		
I hereby certify that h	e information	ı abóye is tri	ue and fom	plete to the best of	my kn		ha-	.m.o.1			
Signed A	DOA !	Lue"		mid-Chiof	Cool	Geot			T 1	21 4000	
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7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
- 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
- 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
  - b. If there is a sudden increase in temperature of the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud return temperature reaches 120°F/50°C.

JUL 26 1976

OIL CONSERVATION COMM.
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- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/ 15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN</u> <u>WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST</u> <u>NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

# NEW MEXICO OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE 87501

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Lease Operator Sunoco Energy Development Corp. San Diego Grant 9 - 76 - 3Range Township County Unit Letter Section 2 E. Sandoval Ι 18 N. Actual Footage Location of Well: line (projected) feet from the projected S. line and 350 feet from the Dedicated Acreage: Producing Formation Ground Level Elev. none none 6320 ft. none 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation\_ ☐ Yes ☐ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION I hereby certify that the information contained herein is true and complete to Hole #9-76-3 to be located: the best of my knowledge and belief. SE1/4NE1/4SE1/4, sec. 14, T. 18N., R. 2E. Steve Quiett Chief Geologist Geothermal Services, Inc. July 21. by certify that the well location on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same knowledge and bélief. JON COMM Date Surveyed Registered Professional Engineer and/or Land Surveyor Certificate No. 330 560 1320 1650 1980 2310 2640 2000 1500 1000 500

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Operator	OR PLUG BACKGEOTHERMAL RESOURCES WELL						
Land Office			•	•	111111	mmmm	
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š			Diver Dools	 1	7. Unit Agr	eement Name	
1a. Type of Work Drill 🛣	Ľ	Deepen 🗆	Plug Back 🔲			none	
b. Type of Well Geothermal Producer					8. Farm or Lease Name		
				1 .	Con	Diago Coost	
2. Name of Operator					9. Well No.	Diego Grant	
Sunoco Energy Development Corporation					9.	-76-3	
3. Address of Operator					10. Field and Pool, or Wildcat		
12700 Park Central Pl., Suite 1500, Dallas, TX 75251					none		
4. Location of Well * *UNIT LETTER I LOCATED 1500 FEET FROM THE South LINE					111111		
UNIT LETTER LOCATEDFEET FROM THE LINE							
AND 350 FEET FROM THE East LINE OF SEC. 14 TWP. 18 N. RGE. 2E. NMPM							
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21. Elevations (Show whether DF, 1		& Status Plug. Bond 2			22. Appro	x. Date Work will-start	
6320 ft. (	GL)   see n	note "A" G	Geothermal Se	ervices	Oct.	1, 1976	
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SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF	CEMENT	EST. TOP	
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? IN ABOVE SPACE DESCRIBE PROP	OSED PROGRAM: If	proposal is to deepen or	plug back, give data on	present produc	tive zone and	I proposed new productive	
zone. Give blowout preventer program							
I hereby certify that the information a	above is true and comp	lete to the best of my k					
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Signed	V	Title Chief Geo	rogist, servi	ces, Ing	aseJU_	194', 1976	
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STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

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- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
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- 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
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OIL CONSERVATION COM

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
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  - e. Fill pipe with <u>CLEAN</u> <u>WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST</u> <u>NOT</u> be used) and install cap. Do not seal.
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- 8. Clean up location THOROUGHLY.
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- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

		All distanc	es must be from the	outer boundar	ries of the Sect	on.	
Operator	•		Lease				Well No.
Sunoco	Energy Dev	elopment	Corp. Sa	n Diego	Grant-		9-76-3
Unit Letter	Section	Township	Ra	inge	County		
·I	14	18	N.	2 E.	San	doval	
Actual Footage Loca	ition of Well:						
1500	feet from the P	rojected	S. line and	350	feet from th	re ${f E}_ullet$	line (projected
Ground Level Elev.	Producing For		Pool				Dedicated Acreage:
6320			. 1		none		none Acres
							1
1. Outline	the acreage dedical	ted to the sub	ject well by color	ed pencil or	nachure mark	s on the plat	below.
2. If more and roya		dedicated to	the well, outline	each and ide	ntify the ow	nership there	of (both as to working interes
	than one lease of itization, unitization		_	d to the well	l, have the in	terests of all	owners been consolidated b
☐ Yes	☐ No If ar	nswer is "ves."	" type of consolid	ation			·
		, ,o,	J		-		
If answer is necessary.)	"no," list the ow	ners and trac	t descriptions whi	ich have actu	ally been con	nsolidated. (U	Jse reverse side of this form i
No allowah	le will he assign	ed to the	well until all in	terests have	been conso	lidated (hv	communitization, unitization
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1 .	1			1		contained	d herein is true and complete to
	Hole #9	-76-3 to	be locate	d :'	j	1	of my knowledge and belief.
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	i I	'		1	[	Date Surveye	d
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DATE 12/12/77

	Adopted 10/1//4
NO. OF COPIES RECEIVED NEW MEXICO OIL CONSERVATION COMMISSION	
DISTRIBUTION P. O. Box 2088; Santa Fe 87501	
File 1 V	
N. M. B. M. SUNDRY NOTICES AND REPORTS	
U. S. G. S ON	5. Indicate Type of Lease
Operator / GEOTHERMAL RESOURCES WELLS	State Fee X
Land Office	5.a State Lease No.
·	mmmmmmm
Do Not Use This Form for Proposals to Drill or to Deepen or Plug Back to a Different Reservoir. Use "Application For Permit ~" (Form G-101) for Such Proposals.)	
1. Type of well Geothermal Producer Temp. Observation	7. Unit Agreement Name
Low-Temp Thermal Injection/Disposal	None
2. Name of Operator	8. Farm or Lease Name
Sunoco Energy Development Corporation	San Diego Grant
3. Address of Operator	9. Well No.
12700 Park Central Pl., Suite 1500, Dallas, TX 75251	9-76-5
4. Location of Well	10. Field and Pool, or Wildcat
Unit Letter I, 2150 Feet From The S. Line and 250 Feet From	None
The $E_{ullet}$ Line, Section $23$ Township $18\  ext{N}_{ullet}$ Range $2\  ext{E}_{ullet}$ NMPM.	
15. Elevation (Show whether DF, RT, GR, etc.)	12. County
6280' G.L.	Sandoval
16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Da	
	NT REPORT OF:
PERFORM REMEDIAL WORK   PLUG AND ABANDON   XI   REMEDIAL WORK	ALTERING CASING L
TEMPORARILY ABANDON U COMMENCE DRILLING OPNS.	: L PLUG & ABANDONMENT LX
PULL OR ALTER CASING L CHANGE PLANS L CASING TEST AND CEMENT JOB	
other Per verbal	permission.
OTHER	
17. Describe Proposed or completed Operations (Clearly state all pertinent details, and give pertinenet dates, inch	uding estimated date of starting any
proposed work) SEE RULE 203.	•
	•
Hole was abandoned by: a) cutting off 3/4" iron pipe	6" holow
ground level; b) filling top 10' of pipe with cement;	c) covering
the pipe with dirt; d) clearing site of all trash and	debrie
and e) restoring site as nearly as practical to origi	nal con_
dition. Abandonment operations commenced on 9/24	
and were completed on $9/24/77$	
and were compreted on	
This conforms with abandonment method prescribed by U	L.S. Geological
Survey's Revised Special Stipulations for Shallow Ter	merature Gradient
Holes.	aperature areases
notes.	•
CCT 2.1.1077	
[ O I O I 19//	
OCT 31 1977	•
OF SERVATION FORM	
Sant	
8. I hereby certify that the information bove is true and complete to the best of my knowledge and belief.	
IGNED TITLE Vice President, Operati	
	iC.

TITLE SENIOR PETROLEUM GEOLOGIST

NO. OF COPIES RECEIVED	NEW MEXICO OIL CONS	SERVATION COMMISSION	- J. \$
DISTRIBUTION	:	, Santa Fe 87501 /	•
File		17 JAN 17 107:	
N. M. B. M.	SUNDRY NOTICE	ES AND REPORTS	
U. S. G. S		N STUDON IN MEDIL	State Fee X
Operator ·	GEOTHERMAL RI	ESOURCES WELLS Courts Fo	5.a State Lease No.
Land Office			Side State Bease Mo.
1		·	
Do Not Use This Form for Proposals to E For Permit —" (Form G-101) for Such Pr	Orill or to Deepen or Plug Back to a	Different Reservoir. Use "Application	
1. Type of well Geothermal Produc		[X]	7. Unit Agreement Name
Low-Temp Therma	· —		None
2. Name of Operator	Tilgeetiony Bisposal		8. Farm or Lease Name
	evelopment Corpora	tion	San Diego Grant
3. Address of Operator			9. Well No.
12700 Park Cent	ral Pl., Suite 150	0, Dallas, TX 75251	9-76-5
4. Location of Well	<b>a</b>	0.5-	10. Field and Pool, or Wildcat
Unit Letter I 2150	Feet From The	Line and 250 Feet From	None
TheLine, Section_	23 Township 18	D. Range 2E. NMPM	
***************************************		•	
	15. Elevation (Show wheth		12. County
	<del></del>	0' G.L.	Sandoval
16. Check	Appropriate Box To Indicate N	ature of Notice, Report or Other D	ata
NOTICE OF INTEN	ΓΙΟΝ ΤΟ:	SUBSEQUE	ENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	_	COMMENCE DRILLING OPNS.	PLUG & ABANDONMEN
PULL OR ALTER CASING	CHANGE PLANS	CASING TEST AND CEMENT JOE	3 <b></b>
		OTHER	•
07.155		OTREK	
OTHER			
17. Describe Proposed or completed Ope	erations (Clearly state all pertinent	t details, and give pertinenet dates, inc.	luding estimated date of starting an
proposed work) SEE RULE 203.			
			•
.1.	. 1		
On 1/3	77 Hole No	. 9-76- was spudded	d at <b>9:00 (</b> AM)PM
<del></del>			
		12/77 0 05	
The hole	was T.D.'d on	13/77 @ 95 ' BGI	<b>.</b>
		•	
OK Inspect	ed		
<i>O n</i> . = <i>I</i>		•	•
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			•
8. I hereby certify hat the information	bove is true and complete to the bo	est of my knowledge and belief.	
GIGNED N X DANA	TITLE C	hief Geologist	DATE 1/13/77
		eothermal Services, 1	ine:
1 1 1			
APPROVED BY Carl Ulli	TITLE SE	NIOR PETROLEUM GEOLOGIST	DATE 1/18/77
CONDITIONS OF APPROVAL IS ANY	()		
CONDITIONS OF APPROVAL, IF ANY:	~		

						•				
NO. OF COPIES RE	CEIVED /	<u>/</u>	NEW	MEXICO OIL CO	ONSÉRV	ATION COMMISSION				
DISTRIBUTIO	N			P. O. Box 2	088, San	ta Fe 87501				
File	1	V	•							
N.M.B.M.				•				5. Indicate	Type of Lease	e
U.S.G.S.			APPL	ICATION FOR I	PERMIT	TO DRILL, DEEPE	N	STATE		FEE 🗶
Operator	J					IAL RESOURCES W		5.a State Le	ase No.	******
Land Office			0	· ·	11121114	IAL HESOONCES W	<b>- L L</b>			
		J								
1. Tues of Wests	Drill 🛭			Deepen 🗆		Plug Back 🗀	· · · · · ·	7. Unit Agre	ement Name	777777
1a. Type of Work	Drill &	<u>ا</u>	L	Deepen $\square$		Flug Back			none	
b. Type of Well	Geother	mal Produce	er 🗀		Ten	np Observation 🗶		8. Farm or I		
J. Type of Well	Low-Ten	np Thermal			Inied	ction/Disposal 🗀				
		———			,-				<u>Diego Gr</u>	<u>cant</u>
2. Name of Operator								9. Well No.		
Sunoco I	Energy	Develor	oment (	Corporati	on			9	<del>-76-5</del>	
3. Address of Operat								10. Field and	d Pool, or Wild	lcat .
12700 Pa	ark Cen	<u>tral Pl</u>	., Su	ite 1500,	Dall	las, TX 752	51	]	none	
4. Location of Well a	* * INIT   FT	TER I	LOCAT	ED 2150 F	FET EDO	OM THE South	LINE			//////
	OMIT EET	,	LOCAT			JIVI 111C				
AND 250 F	FEET FROM	THE EAST	LINE OF	SEC. 23 TWP.	18 N	N. RGE. 2E	• NMPM			
TITITITI	777777	111111	111111		1111		MITTE	12. County	///	77777
								Sandova		//////
<i>HHHHH</i>	<i>}}}}</i>	+++++	+++++	+++++++	<i>HH</i>	<i>HHHHH</i>	<i>HHHH</i>	777777	HH	HHH
444444	<i>HHH</i>	4444	<i>HHH</i>	<del>/////////////////////////////////////</del>	HHI	. Proposed Depth	19A. Formatic	7777777	20. Rotary or	
					//// ,,				1	
7//////////////////////////////////////	7//////	7//////	777777	77777777	7777	500 ft.	unknov	<u>m</u>	rotar	<u> </u>
21. Elevations (Show 6280		, RT, etc.) (GL)		l & Status Plug. B note "A"		B. Drilling Contractor cothermal Se	rvices		x. Date Work v 1, 1976	vill start
•			Р	ROPOSED CASIN	IG AND	CEMENT PROGRAM	٠			
SIZE OF HO	LE	SIZE OF C	CASING	WEIGHT PER F	OOT	SETTING DEPTH	SACKS OF	CEMENT	EST.	TOP
5-1/8	311	3/4"		1.14 1	bs.	500'	1.5			
								0 Bu		
· · · · · · · · · · · · · · · · · · ·										
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<b>.</b>		C		. 3. 1104 3	3 (	N 11 1		C 2:		•
r	rogram	- see a	ııtacıı			Shallow Tempo Ling Program		Gradie	nt	
				note	DLTTI	ting Program				
4	** 411	acatic	n lin	es projec	4 4 4	<b>N</b>				
	- All	section	111 1111	es projec	teu					
N.	Toto 1	Tuno	f hone	d will be	<b>\$</b> 40	000 multiple	100	a. Thomas		_
17	iote A-	Type o	T DOILG	thormal of	φ1U,	rotion wall		ow-rem	jerature	<b>;</b>
		the re	r geo	of bains	oserv e:1a	ation well	Jonu -	me pon		
		the pr	ocess	or being	1116	ed, and a bor	ia numbe	er WIII	-be-iuri	usnea
•		as soo	n as a	avallable	perd	ore operation	is comme	mee 26	1976 YIII	1
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							OIL COL	SERVATIO		
Quad	29							SERVATIC Santa Fe	IN COMM	
Duad	<i>~</i> ·									
. 4		,								
IN ABOVE SPACE DE zone. Give blowout pro			OGRAM: If	f proposal is to de	epen or p	olug back, give data on	present produc	tive zone and	proposed new	/ productive
( hereby certify that the	e informatio	n soove is tru	ie and∕com	plete to the best of	f my kn	owledge and belief.				
1 1		/ =				Geothe				
Signed #	LY X	recet		Title Chief	Geol	ogist,Servi		ase Ju	Ly 21. 19	276
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(Int	is space for Si	are usej								
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APPROVED BY	wy U	Luog	<del> </del>	TITLE SENIU	k reikl	DLEUM GEOLOGIST	D	ATE	19/14	<i></i>



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
  - 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
  - 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
  - 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
  - 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
  - 6. Mud return temperature shall be measured and recorded on "Drilling History" every 104/3m.
    - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
    - b. If there is a sudden increase in temperature of the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud return temperature reaches 120°F/50°C.

OIDICODONSE MANAGE

SOSMITTOR

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/
    15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

		All distances mus		outer bound	ries of the Section	n	
Operator		_	Lease		_		Well No.
Sunoco	Energy Deve	elopment Co	rp.  Sai	n Diego	Grant:		9-76-5
Unit Letter	Section	Township	Ra	nge	County		
I	23	18 N.	1	2 E.	Sand	oval	
Actual Footage Loca	ation of Well:						
2150		rojected S.	line and 2	50	feet from the	<b>E</b> .	line (projected)
Ground Level Elev.	Producing For		Pool				Dedicated Acreage:
6280 ft					none		none Acres
						41 1.4.1	
1. Outline	the acreage dedicat	ed to the subject v	vell by colore	ed pencil or	hachure marks	on the plat	below.
2. If more and roya		dedicated to the w	vell, outline	each and id	entify the owne	ership thereo	f (both as to working interest
	than one lease of nitization, unitization			to the we	ll, have the inte	erests of all	owners been consolidated by
☐ Yes	□ No If an	swer is "yes," type	e of consolida	ation		1111	The same of the sa
		j,jp-				Inte	alguar Morgan
If answer is necessary.) _	"no," list the ow	ners and tract desc	criptions whi	ch have act	ually been cons		se reverse side of this form if
No allowab forced-pooli	ole will be assign ng, or otherwise) o	ed to the well r until a non-stand	until all in ard unit, elin	terests have ninating suc	e been consolic h interests, has	dated; (by cobeen approve	ommunitization, unitization, dSbyzthe, Commission.
ļ						<del></del>	Santa P COM.
	1		· · · · · · · · · · · · · · · · · · ·	!			CERTIFICATION
				1	İ		•
	j			i		I hereby	certify that the information
	i			ſ		contained	herein is true and complete to
	Hole #	9-76-5 to t	e locat	ed:		the best o	f my knowledge and belief.
	1	E1/4SE1/4,s		·	2.2E.	St	af firet
						Name	V
			,	1		Steve Position	Quiett
				 	Ī	Chief	Geologist
1	1			ļ i	1	Company	
	; 			1		Geothe	rmal Services, In
	Ĭ			1	ļ	July	21, 1976
1				1			
	       				•	shown on notes of under my is true a	certify that the well location this plat was plotted from field actual surveys made by me or supervision, and that the same and correct to the best of my and belief.
		+	·	7			
	l t			1		Date Surveye	d
	1 .				l		<del>-</del>
	1			 		Registered Pr and/or Land	ofessional Engineer Surveyor
1			•		1		1
1	1					}	
Carried Thursday		- Design				Certificate No	).
0 230 660	90 1320 1650 198	0 2310 2640	2000 150	1	500 0		

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DISTRIBUTION		P. O. Box 2088, Sa	anta Fe 87501		
File				[=_:::::	
N.M.B.M.	ļ				ate Type of Lease
U.S.G.S.	1 1		IT TO DRILL, DEEPEN	IS a Ctate	Lease No.
Operator	OR PLU	G BACKGEOTHER	MAL RESOURCES WE	LL Sia State	2030 1101
Land Office	<u></u> .	•		11111	aminama.
			•		
			·	. 7 Unit /	Agreement Name
la. Type of Work Drill 🛣		Deepen 🗆	Plug Back	7. 5	none
b. Type of Well Geothers	mal Producer	Te	emp Observation 🛣	8. Farm	or Lease Name
	np Thermal 🔲	lnj	ection/Disposal 🗆	. 1	
<u>;                                      </u>				9. Well N	n Diego Grant
2. Name of Operator	Dorralamment (	Connonation	•	,	9-76-5
Sunoco Energy	peveropment (	Jorporation		10 Field	and Pool, or Wildcat
3. Address of Operator 12700 Park Cen	tral Dl Su	ite 1500 Dal	las, TX 7525		none
				11111	
4. Location of Well * * UNIT LET	TERLOCAT	ED 2130 FEET FI	ROM THE SOUTH	LINE	
050 555 5004	THE TALENT LINE OF	SEC. 23 TWP. 18	N sos 2F	NMPM	
AND 250 FEET FROM	THE END! LINE OF S			12. Coun	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>
				Sando	(11111111
	41111111	HHHHHH			
	444444	411111111	19. Proposed Depth 1	9A. Formation	20. Rotary or C.T.
			500 ft.	unknown	20. Rotary or C.T.
21. Elevations (Show whether DF,	PT ato 1 21A Viol	& Status Plug. Bond	21B. Drilling Contractor	UIIKHOWIFO JA	prox. Date Work will start
		note "A"	Heothermal Ser	vices iii Oct	1976
	X			11 30 2 20	10/0 ////
	P	ROPOSED CASING AND		(1-) (-) (-) (-) (-)	
. SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT		O!L CONSERVATIO	
5-1/8"	3/4"	1.14 lbs.	500'	SACKS OF CEMENT  1.5	6" BGL
0 1/0	0,1	1011 1000	000	1.00	- Julia
			•		
_	- See attache	Hole Dril	Shallow Tempe ling Program"	rature Gradi	ent
:	well or geot the process	thermal obser of being fil	,000 multiple vation well be ed, and a bon ore operation	ond. The bo d number wil	
•					
			•		
* * * * * * * * * * * * * * * * * * *					
N ABOVE SPACE DESCRIBE PRO one. Give blowout preventer progra		proposal is to deepen or	plug back, give data on p	resent productive zone	and proposed new productive
hereby certify that the information	pove is true and comp		nowledge and belief. Geother Logist,Service		uly <b>2!</b> , 1976
(This space for St.	ate Use)				<b>—</b>
<i>~ *</i>	10	ATUAN RET	POLEUM GENLAGIST	G	19/16
APPROVED BY Carl (	wag	TITLE SENIOR PET	VATERW OFFICIAL	DATE	11/14



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m. Take cuttings samples, cores, etc. at direction of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
  - 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
  - 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
    - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
    - the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud return temperature reaches 120°F/50°C.

OIL CONSERVATION COMP

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/
    15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

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## GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

			All distar	nces must be	~		r <b>b</b> ounda	aries of the S	ection.				
Operator			_		Leas					•		Well No.	
Sunoc		rgy Deve		t Corp.		T	iego	Grant.				9-7	6-5
Unit Letter	Sectio		Township			Range		Count	-				
I	23	3	18	N.		2	Е.	Sa	ando	val			
Actual Footage I		Well: t from the <b>pr</b>	o jecte	d S. u.s.	and	250		feet fron	n the	Ε.	i.	ne (nr	ojected
Ground Level Ele		roducing Form		u ~ • iine	Pool			reet HOI				d Acreage	
6280		none						none			no	•	Acres
	L		1	,	1 .				a =1 ·			·-~	Acres
. 1. Outli	ne the act	reage dedicated	a to the su	ibject well b	y co	tored pe	encil or	nachure ma	arks o	ii the plat	pelow.		
	ore than o	one lease is de	edicated to	the well,	outlir	ne each	and id	entify the o	owners	ship therec	of (both	as to wo	orking interes
	nunitizatio	one lease of con, unitization  No If ans	ı, force-poo					ll, have the	inter	ests of all	owners	been co	onsolidated by
If answer	r is "no,"	list the own	ers and tra	act descripti	ons v	which h	ave act	ually been	conso	lidated. (t	- ~ 0 Ise_rever RVATIO	Se side (COM)	of this form i
No allov	vable wil	ll be assigned otherwise) or	d to the	well until	all	interes	ts have	e been con	ısolida	ted (by	cơmmur	itization	i, unitization
		1							$\neg \top$				
J		1	}			1					CERT	FICATIO	 '
		!	1			1			.	I hereby	certify	that the	e information
		; 1				İ					-	•	d complete to
1		   Hole #9	76.5	to bo	اممر	at od.							nd belief.
į.		! пот <b>е</b> #8	,-,0-3	to ne i	LUC	aceq:					1.	67	
		!   NE1/4NE	1/4SE	1/4,sec.	.23	т. ‡8	N.,R	.2E.		St	Def _	Yw	et/
		<b>-</b>				i-			_	Name			٧
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1		j I				i		•	1 1	-			• ~
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DISTRIBUTION	<del> </del>		P. O. Box 2088, Santa Fe 87501		
File	1/_				
N, M. B. M.	<del> </del>		SUNDRY NOTICES AND REPORTS	C.	
U. S. G. S	<del> </del>		ON	[ 5	State Type of Lease
Operator	$\bot \bot$	$\vdash$	GEOTHERMAL RESOURCES WELLS		i.a State Lease No.
Land Office	<u> </u>	LJ			La State Lease 110.
Do Not Use This Form for P For Permit —" (Form G-101)			Drill or to Deepen or Plug Back to a Different Reservoir. Use roposals.)		
1. Type of well Geothe	ermai	Produ		] 7	. Unit Agreement Name
Low-To	emp	Therm	al Injection/Disposal		None
2. Name of Operator		; _		8	. Farm or Lease Name
	rg	y De	evelopment Corporation	·	San Diego Grant
3. Address of Operator	- 0		The Could's 1500 Dollar TV	i -	. Well No.
	<u>: C</u>	enti	cal Pl., Suite 1500, Dallas, TX	75251	9-76-6  0. Field and Pool, or Wildcat
4. Location of Well	<b>5</b> 0		N 9475	t i	None
Unit Letter (1, 200	ענ		Feet From The $N_{ullet}$ Line and $2475$	Feet From	
<b>F</b>			26 Township 18 N. Range 2	E. S	
The Lin	ie, Se	ction _	Township 10 11 Range 2	NMPM.	
	$\overline{T}$	1111	15. Elevation (Show whether DF, RT, GR, etc.)	. 1	2. County
	////				IIIIII Involved
16.	777	Chack	Appropriate Box To Indicate Nature of Notice, Report		Sandoval \\\\\\\
			•		•
	٠ -	_	ITION TO:	SUBSEQUENT	
PERFORM REMEDIAL WOR	₹K L	7	PLUG AND ABANDON X REMEDIAL WORK		☐ ALTERING CASING .
TEMPORARILY ABANDON		_	CHANGE PLANS CASING TEST AND		☐ PLUG & ABANDONMENT
PULL OR ALTER CASING	_		CHANGE PLANS LJ CASING TEST AND	D CEMENT JOB	
			other Per	verbal p	ermission.
OTHER					
				1	
			perations (Clearly state all pertinent details, and give pertin	enet dates, includi	ng estimated date of starting any
proposed work) SEE RUI	LE 20	)3.	•		
					(
Hole was	al	band	doned by: a) cutting off $3/4$ " i	ron pipe	6" below
ground 1	eve	el;	b) filling top 10' of pipe with	cement;	c) covering
			dirt; d) clearing site of all t		
and e) r	'est	tori	ng site as nearly as practical	to origin	al con-
dition.	Al	oand	donment operations commenced on	9/24/	77
and were	; c	Lqmo	eted on 9/24/77	•	
mb:	· · ·		. ith chardenment method amagent	had bee II	Coologian!
Inis con	7 D	rms	with abandonment method prescri sed Special Stipulations for Sha	allow Town	oratura Gradient
Holes.	s Re	evr	sed special surpulations for small	arrow remb	erature dradient
notes.			, , , , , , , , , , , , , , , , , , ,		
			55-04		
•			CT 31 1977		
					·
		<b>C</b> .(	5m		-
			Sent Convince		
18. I hereby certify that the i	nforn	nation	bove is true and complete to the best of my knowledge and	belief.	••
Allan		$\gamma / c$	We are provided to	0	10/04/55
SIGNED	<u></u>		TITLE Vice President, GeoThermal Serv	operation ices. Inc	DATE 10/24/77
consuma ou Carl	2	lle	SENIOR PETROLEUM GEO	LOGIST	12/12/77

54	Form G-	103
	Adopted	10/1/74

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U, S. G. S	
Operator '	
Land Office	

NEW MEXICO OIL CONSERVATION COMMISSION P. O. Box 2088, Santa Fe 87501

SUNDRY NOT	ICES AND	REPORTS
	ON	
SECTIEDMAL	DECOUD	CEC WELLC

IL CONSER	VSATING CHYPM of	Lease
Sa	ntasifie 🗌	Fee 🖎
	5.a State Lease No.	

14. IVI. B. IVI.	SUNDRY NOTICES	S AND REPORTS	AL CONCED	war a market and the first	
U. S. G. S	ON	J	IL CONSER	Vs. Indicate Clype	of Lease
Operator '	GEOTHERMAL RES	SOURCES WELLS	53	าta รโล๊เล	Fee X
Land Office				5.a State Lease N	0.
	•	•			
Do Not Use This Form for Proposals to For Permit —" (Form G-101) for Such	to Drill or to Deepen or Plug Back to a C n Proposals.)	Different Reservoir. Use	"Application		
1. Type of well Geothermal Pro	oducer Temp. Observation	X	-	7. Unit Agreemen	it Name · ·
Low-Temp Ther	rmal 🗆 Injection/Disposal			None	
2. Name of Operator				8. Farm or Lease	
Sunoco Energy D	evelopment Corporatio	on .		San Diego	) Grant
3. Address of Operator				9. Well No.	
12700 Park Cent	ral Pl., Suite 1500,	Dallas, TX	75251	9–76–6	
4. Location of Well				10. Field and Poo	ol, or Wildcat
Unit LetterG	2350 Feet From The North	Line and $=2475$	Feet From	None	
`					
The $ar{ ext{East}}$ Line, Sectio	$_{ m n}$ 26 $_{ m Township}$ 18 N	N. Range 2 B	NMPM.		
		00 D# 00			<i>HHHHH</i>
	15. Elevation (Show whether	r DF, RT, GR, etc.)		12. County	
	6180 ft. (C			Sandoval	M
16. Che	ck Appropriate Box To Indicate Nat	ture of Notice, Repor	rt or Other Dat	ta	
NOTICE OF INT	ENTION TO:		SUBSEQUE	NT REPORT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK		ALTERIN	NG CASING
TEMPORARILY ABANDON		COMMENCE DRILL	ING OPNS.	X PLUG &	ABANDONMENT [
PULL OR ALTER CASING	CHANGE PLANS	CASING TEST AND	CEMENT JOB		
		OTHER			Γ
OTHER					
OTHER			•		
17. Describe Proposed or completed	Operations (Clearly state all pertinent of	details, and give pertine	enet dates, inclu	ding estimated dat	e of starting anv
proposed work) SEE RULE 203.	, -		,	<u> </u>	,,,
· · · · · · · · · · · · · · · · · · ·		•			

On 12/19/76 Hole No. 9-76-6 was spudded at noon.

The hole was T.D.'d on 12/22 @ 340' BGL

OK - Inspected

18. I hereby certify that the information above is true and com	olete to the best of my knowledge and belief.	,
SIGNED Start Swell	TITLE Chief Geologist Geothermal Services,	Inc. DATE 12/28/76
CONDITIONS OF APPROVAL, IF ANY:	TITLE SENIOR PETROLEUM GEOLOGIST	DATE 1/3/17

NO. OF COPIES RECEIVED	4	7	NEW	MEXICO OIL CONSE	ERV	ATION COMMISSION				
DISTRIBUTION				P. O. Box 2088,	San	ta Fe 87501				
File	1	~	·							
N.M.B.M.		$\vdash$							Type of Lease	
U.S.G.S.						TTO DRILL, DEEPE		STATE L		
Operator		$\vdash$	OR PLU	G BACKGEOTHE	RIV	1AL RESOURCES W	ELL	5.a State Le	ase No.	
Land Office	<u> </u>	<u> </u>						100000	mmmm	
						`				
1a. Type of Work Drill	X	]	C	Deepen 🗆		Plug Back 🔲		7. Unit Agre	ement Name	
			d		Ton	np Observation			none	
1		nal Pro	·			·		8. Farm or Lease Name		
Low-	· I em	p Ther	mal 📙		nje	ction/Disposal 🗆		San	Diego Grant	
2. Name of Operator								9. Well No.		
Sunoco Energ	y I	<u>)eve</u> ]	<u>lopment (</u>	<u>Corporation</u>				9-76-6		
3. Address of Operator								10. Field and	d Pool, or Wildcat	
12700 Park C							51	1	none	
4. Location of Well * *UNIT	LETT	TER	GLOCAT	ED 2350 FEET	FRO	OM THE North	LINE			
	•	_								
AND 2475 FEET FR	C MO	THEE a	St LINE OF	SEC. 26 TWP. 18	3 1	N. RGE. 2 E	NMPM		7777777777	
	////	/////			///			12. County		
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					119	· 1	19A. Formati		20. Rotary or C.T.	
	777	7777.			1_	500 ft.	unkno		rotary	
21. Elevations (Show whether 6180 f.t.				& Status Plug. Bond	G 6	B. Drilling Contractor eothermal Se	rvices	0ct.	x. Date Work will start  1, 1976	
			P	ROPOSED CASING A	ND	CEMENT PROGRAM		-		
		I		T			<del></del>			
5-1/8"		ı	OF CASING	1.14 lbs.		SETTING DEPTH		F CEMENT	6" BGL	
3-1/8		- 3/	/ 4	1.14 105.		. 300	1.	<u>.                                    </u>	0 DGL	
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							是是	<b>:</b> ,		
Progr	am-	- Sec	e attache	ed "Standard	3 5	Shallow Tempe	rature	Gradie	nt.	
11082		500	o accacin	Hole Dri	[ ] ]	ling Program		ZRANNA	,	
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**- A	11	sect	tion line	es projected	ì		it consei	RVALONO		
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Note	A-	Туре	e of bond	d will be \$1	Ю,	,000 multiple	e-well	low-tem	perature	
		well	l or geot	thermal obse	rv	vation well	ond.	The bon	d is in	
									be furnished	
•	•	as s	soon as a	available be	efo	ore operation	is comm	ence.		
0 1 79										
Quad 29										
			•							
IN ABOVE SPACE DESCRIBE	PRO	POSED	PROGRAM: If	proposal is to deepen	or	plug back, give data on	present produ	ctive zone and	proposed new productive	
zone. Give blowout preventer p				41.4.4.4.4.6.				·		
I hereby certify that the inform	iation	aboye ;	is true and com	piece to the best of my	Kn	owledge and belief. <b>Geoth</b>	fema			
Signed Allery		1	well	Title Chief Go	ი 1	logist,Servi		e Tu	1v21 1976	
	7					APTRACT AT	erog_III	Sure UU.	J., 10/10	
(This space f	or St	ate Use)	1							
APPROVED BY Carl	U	lua	- <b>A</b>	TITLE SENIOR PI	ETR	OLEUM GEOLOGIST		9	19/76	



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500 150m. Take cuttings samples, cores, etc. at directions of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling mud. No toxic additives are to be used in drilling fluids without permission of Project Geologist. Have supply of lost circulation material available. Use portable mud pits unless specifically directed otherwise.
- Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
- 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
  - b. If there is a sudden increase in temperature of the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud return temperature reaches 120°F/50°C.

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/
    15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN</u> <u>WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST</u> <u>NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

#### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section. Well No. Operator 9-76-6 Sunoco Energy Development Corp. San Diego Grant Township Range Section Unit Letter 26 2 E. G Sandoval 18 N. Actual Footage Location of Well: feet from the projected N. line and 2475 - feet from the line (projected) 2350 Dedicated Acreage: Producing Formation Ground Level Elev. 6180 ft. none none none 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownersip is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation\_ ☐ Yes ☐ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use-reverse laide of this form if No allowable will be assigned to the well until all interests have been consolidated (by communitization) viunitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and l Hole #9-76-6 to be located: SW1/4SW1/4NE1/4, sec.26, T, 18N., R.2E. Steve Quiett Chief Geologist Geothermal Services, Inc. July 21, 1976 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed Registered Professional Engineer and/or Land Surveyor Certificate No.

1320 1650

660

2640

2000

1500

DATE 9/9/76

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File	1.		•		
N.M.B.M.	<u> </u>	•	•		icate Type of Lease
U.S.G.S.	APPL	ICATION FOR PERMI	T TO DRILL, DEEPEN	J, STATE	
Operator	OR PLU	G BACKGEOTHERN	MAL RESOURCES WE	LL S.a Stat	e Lease No.
Land Office		•	,	-	
	•				
Ia. Type of Work Drill	] [	Deepen 🗌	Plug Back 📋	7. Unit	Agreement Name none
b. Type of Well Geothers	mal Producer 🔲 -	Ter	mp Observation 🗶	8. Farm	or Lease Name
	np Thermal 🔲	Inje	ection/Disposal 🗆	1	•
				9. Well	n Diego Grant
2. Name of Operator	· ·	~	•	y. Well	
Sunoco Energy	Development (	<u>corporation</u>			9-76-6
3. Address of Operator			1 MV 7505	i i	d and Pool, or Wildcat
12700 Park Cen				1	none
4. Location of Well * * UNIT LET	TER G LOCAT	<sub>ED</sub> <u>2350</u> <sub>FEET FR</sub>	OM THE North	LINE	
·		* **			
AND 2475 FEET FROM	THEEast LINE OF	SEC. 26 TWP. 18 I	N. RGE. 2 E.	4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-	
				12. Cou	
	.111111111111			Sand	oval
<del>/////////////////////////////////////</del>	HHHHH	444444	9. Proposed Depth 1	9A. Formation	20. Rotary or C.T.
			500 ft.	unknown	rotary
21. Elevations (Show whether DF,	RT etc.) 21A Kind	& Status Plug. Bond 21			pprox. Date Work will start
6180 ft.			eothermal Ser	vices Oct	• 1, 1976
	PI	ROPOSED CASING AND	CEMENT PROGRAM	-	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMEN	T EST. TOP
5-1/8"	3/4"	1.14 lbs.	500'	1.5	6" BGL
		L	- <del>'</del>	· · · · · · · · · · · · · · · · · · ·	
Program-	- See attache	ed "Standard S Hole Drill	Shallow Tempe ling Program"	rature Grad	ient
**- All	section line	es projected	<b>16</b>		
Note A-	Type of bond	l will be \$10,	,000 multiple	-well low-to	emperature
		hermal observ			
					ll be furnished
		wailable before			
	as boom as c	Warranio Dore	J.	9 711	7.1
			$\int_{-\infty}^{\infty}$	A Ram	,
				f then and	
•	•		0/2/	VAMP SU 101	$\mathbf{S} = \mathbf{I}^{*}$
			$\Omega \nu$	O Commence	•
: I ABOVE SPACE DESCRIBE PRO ine. Give blowout preventer progra	POSED PROGRAM: If	proposal is to deepen or	پ پینی پر plug back, give data on pr	CONSERVAT	and proposed new productive
hereby certify that the information		lete to the best of my kn	owledge and belief.		
1 to A	1 71		Geothei		
ned NOT		Title Chief Geol	logist,Service	es, Incue	July 21, 1976
(This space for Sta	ate Use)				

TITLE SENIOR PETROLEUM GEOLOGIST



7860 CONVOY COURT, SAN DIEGO, CALIFORNIA 92111 • (714) 565-4712



STANDARD SHALLOW TEMPERATURE GRADIENT HOLE DRILLING PROGRAM (500'/150m; Rubber Tired Equipment; Rotary/Mud)

- 1. Coordinate "Special Stipulations" or other unusual requirements with the Project Geologist prior to set-up and spud.
- 2. Choose location and orientation of drilling rig so as to minimize surface disturbance.
- 3. Drill 4" to 6" hole to maximum depth of 500'/150m, Take cuttings samples, cores, etc. at direction of Project Geologist.
- 4. If drilling with mud, use regular Bentonite drilling RVATION COML.

  mud. No toxic additives are to be used in drilling note fluids without permission of Project Geologist.

  Have supply of lost circulation material available.

  Use portable mud pits unless specifically directed otherwise.
- 5. Have a supply of Barite available in case of artesian flow. If artesian flow is encountered, comply with United States Geological Survey's Stipulations.
- 6. Mud return temperature shall be measured and recorded on "Drilling History" every 10'/3m.
  - a. If temperature reaches 120°F/50°C, STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, run pipe at this depth after logging is completed.
  - b. If there is a sudden increase in temperature of the drilling mud (several degrees in only a few feet) STOP DRILLING and circulate for 30 minutes, monitoring mud temperature and pit volume for possible hot artesian flow. If no flow, continue drilling CAUTIOUSLY, keeping a careful watch on return temperature of drilling fluid. In no case shall drilling continue after mud return temperature reaches 120°F/50°C.

- 7. Run pipe immediately after running electric logs or reaching T.D. (if hole is not logged).
  - a. Install cap on bottom of first length of pipe. (If using steel pipe, seal each joint with teflon tape to ensure watertight).
  - b. Steel pipe must be used when air temperature is 40°F or below, as PVC cement will not adhere.
  - c. Steel pipe must be used if drilling fluid temperature exceeds 100°F/40°C.
  - d. When pipe is landed, top must be 6" to 12"/ 15cm to 30cm below ground level. (Cut and thread as necessary).
  - e. Fill pipe with <u>CLEAN</u> <u>WATER</u> (water that is oily or contains solvents such as gasoline <u>MUST</u> <u>NOT</u> be used) and install cap. Do not seal.
  - f. Set paper, rag or dirt bridge down open annulus at least 10'/3m below ground level. Fill annulus with cement up to base of cap on pipe.
- 8. Clean up location THOROUGHLY.
- 9. Any excavated pits or sumps must be backfilled to conform to the original topography.
- 10. When temperature surveys are completed, fill pipe with cement from 10'/3m to top of pipe, fill excavation to original ground topography and restore location as nearly as possible to original condition.

### GEOTHERMAL RESOURCES WELL LOCATION AND ACREAGE DEDICATION PLAT

		All dista	nces must be from	the outer b	Juliualies o	or the Section	n		
Operator			Lea					Ī	Well No.
Sunoco E	nergy Deve	lopmen	it Corp.	San Di	∍go Gr	ant"			9-76-6
Unit Letter Section Township		Range			County				
G	26	18	8 N	2	£	Sand	loval		
Actual Footage Location			,						
2350	feet from the PY	ojecte	d N. line and	24	75 - f	eet from the	E.	, lin	<pre>(projected)</pre>
Ground Level Elev.	Producing Form	nation	Poo	1				Dedicate	d Acreage:
6180 ft.	none none	;			no	ne .		nor	ne Acres
1. Outline the	acreage dedicate	ed to the si	ubject well by co	lored pend	il or hach	ure marks	on the plat	below.	
• • • • • • • • • • • • • • • • • •	20.02B0 202.020						•		
2. If more the and royalty		ledicated to	o the well, outli	ne each ar	d identify	y the owne	ership therec	of (both	as to working interest
					11 1				
				ated to the	: well, ha	ive the inte	erests of all	owners	been consolidated by
communitiz	ation, unitizatio	n, torce-po	oling, etc?						11. 1.20
	7 M		. 22 4 6	.1:3.4'-				111. 6	11/2/19/19
L Yes L	☐ No If an:	swer is "ye	s," type of conso	olidation		<del></del>		111	15/5
If anomar is "-	o" list the over	ere and to	act descriptions	which have	actually	heen cons	olidated (I-	Ise rever	se side of this form
· ·	o, list the own	iers and tr	act descriptions	WILLCII IIAVO	actually	Deen cons	Didated. (¿	130 GCVCIS	" 6 1970 III
necessary.)							();	- CONO	5/0 11
No allowable	will be assigned	ed to the	well until all	interests	nave bee	en consolic	lated (by	commun	itizațion unitization
forced-pooling,	or otherwise) or	until a no	n-standard unit,	eliminating	such inte	erests, has l	been approv	ed by th	e/Commission MN
									<b>~</b>
1	1 1			i				CERTI	FICATION
i	1			Ì			/ herebu	certify	that the information
1	!			İ				-	s true and complete to
	I .			t					owledge and thelief.
1	Hole #	9-76-6	to be loc	ated:					
	1.						M	Fas	M/11.511
	SW1/4	SW1/4N	E1/4, sec.2	6.T. 18	N. R.2	E.	100		, july
	_ +						Name	V	<b>-</b> /
1		]		1		1	Steve	Quie	tt
1.		. 1	•				Position		
	1			1	•		Chief	<u>Geol</u>	ogist
1	1			. 1			Сотрапу		
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